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SHOP 1 General Information Information



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Active: In paired or double doors, the hinged door leaf which is primarily operable.

Air Infiltration: Air passing through a door system when the door is under pressure, usually from wind.

Annealed Glass: Regular glass which has not been heat strengthened or tempered.

Most window glass is annealed.

Astragal: The post-type fitting on the latchside edge of one of a set of paired or double doors, which covers the margin between doors when they are closed, and which houses or contains the weatherstrip.

Backset: For locating a machined hole, recess, or mortise, the distance from an edge or surface to the center or edge of the recess, hole or mortise.

Ball-bearing Hinge: A heavier-duty hinge than the standard hinge, with bearings supporting the pivots. Ball-bearing hinges are usually used for heavy doors that will be in commercial or industrial use.

Barbed: An adjective that describes the feature of a part which inserts into a slot, and which has surface features that enable it to stay firmly inserted into the slot.

Boot: A term used for the rubber part at the bottom or top end of an astragal, which beds the astragal end and seals between the end and the door frame or sill.

Boss, Screw Boss: A feature of a part which enables the fastening of a screw into the feature, thereby allowing assembly of the part with another. Screw bosses are common features of molded plastic lite frames and extruded aluminum door sills.

Box-Framed: In door and sidelite assemblies, a term used to differentiate door and sidelite units which are first framed as separate units, with heads and sills separate

and the width of the door or sidelite panels. Box-framed doors are joined to box-framed sidelites.

Brad: A small nail with a small head, usually used to fasten small trim and moldings.

Brickmould: A molding, used to trim the outside edge of a door frame. Brickmould is most often applied to prehung units.

Buck: A term usually used in masonry construction to describe a door frame or a subframe in a masonry opening, around which a steel door frame wraps and is fastened.

Butt: A type of hinge commonly used to assemble doors. Butt hinges are often referred to as simply butts.

Butyl: An organic compound, used in the door business as a sealant. It is naturally black, and is heated and pumped through nozzles, or pumped cold.

Came, Caming: Formed metal stripping, usually made of brass or zinc plated steel, used between cut-glass pieces to assemble the pieces into a decorative glass panel. Caming is soldered at joints to bond the glass assembly together.

Carpet Shim: A spacer block used under a door sill to raise the sill an appropriate amount if carpet is used, so the door panel clears the carpet when opened.

Casing: A horizontal or vertical molding, which accents or trims edges of doors and windows to the surrounding walls. Casing also covers or accents intermediate posts.

Caulk: To fill or close seams or crevices in order to make watertight, airtight, etc.

Clad: Provided with a facing or jacket which works as a protection against weather, and provides a finished appearance. Cladding may be painted metal, plastic, or a heavy coating applied by the manufacturer.



Clear Jambs: Natural wood door frames, without paint or primer applied, and which are made of full-length pieces of stock, without joints or knots.

Closed-Cell Foam: Sponge-like material, usually used in gaskets and weatherstripping, which compresses into joints, but absorbs little water.

Closer Block: An inside reinforcement, usually placed across the top edge of a door, to enable firm fastening of self-closing hardware to the door.

Continuous Sill: A sill used for a type of door and sidelite unit in which the unit has fullwidth top and bottom frame parts, and an internal post or posts separating sidelites from the door panel.

Core: The center section or part of a door or door part.

Corner Plug, Corner Seal Pad: A small part, usually made of resilient material, used to seal water which gets beyond the bottom ends of weatherstrip in doors, from getting between the door edge and the jambs, adjacent to the bottom gasket.

Cove Molding: A small molded wood lineal piece, usually formed with a scooped face, used to trim and fasten a panel of some type into a frame.

Crossbore: A large through-hole, near the edge of a door panel, usually 2-1/8 inch in diameter, which houses a cylinder lockset or deadbolt latch.

Cylinder Lock, Cylindrical Lock: Lock hardware which mounts into a door which has been prepared with a bored hole or holes through the face, and into the edge.

Dado: A machined or sawn groove, across the width of a part.

Deadbolt: A latch used to secure a door closed, the latch being driven from the door into a receiver in the jamb or frame.

Deflection: The distance a door has moved away from its closed and latched position, usually measured at the top unsupported latch-side corner. Deflection may be caused by wind pressure or heat. Deflection is temporary. The door returns to position when the force is removed.

Desiccant: Moisture absorbing material used inside the spacer in an insulated glass assembly, so as to control moisture levels and prevent moisture from frosting or condensing on the inside glass surfaces of the insulated unit.

Doorlite: An assembly of frame and glass panel, which when fitted to a door in a formed or cut-out hole, creates a door with a glass opening.

Double-Glazed: Outfitted with two panes of glass with a sealed airspace between.

Drip Strip: In exterior doors, a fitting used across the outside face of the door adjacent to the bottom edge, to divert cascading rain away from the door bottom edge and away from the door/sill joint.

Drywall Opening: A rectangular opening in a wall, usually an interior wall, prepared to the size necessary to receive a pre-hung assembly.

DSB Glass: A term no longer used in the glass business, which meant "Double Strength, 'B' quality." DSB glass when furnished by Therma-Tru in doors, is 1/8 inch thick, single pane and not insulated.

Dummy Cylinder: A lock without a latch, typically used for the passive door panel of a double door unit, so that the hardware appears equal to that used on the active panel.



Edge Bore: The hole bored through the edge of a door to allow the latch to pass through, into the strike.

Electric Strike: A mechanism which allows a switch to open the latch of a door.

End Seal Pad: A closed-cell foam piece, about 1/16 inch thick, in the shape of a sill profile, fastened between the sill and the jamb to seal the joint.

Escutcheon: A stamped decorative plate, usually circular to trim the shaft of a door knob or deadbolt latch, to trim the opening where the shaft or latch adjoins the face of a door.

Etched Glass: Glass used for doorlites on which a decorative pattern is engraved by means of chemical action or mechanical sand-blasting.

Extension Unit: A framed fixed door panel, with a full-sized lite of glass, field-installed or shop-installed adjacent to a two-panel patio door, to make the door unit into a three-panel door.

Faceplate: The plated or solid metal trim piece, usually about 1 x 2-1/4 inches, housed flush into the edge of a door, through which projects the latch of a passage lock or deadbolt.

Finger Joint: A way of joining short sections of board stock together, end to end to make longer stock. Door and frame parts are often made using finger-jointed pine stock.

Fire Door: A door of a construction type which has been tested to contain the spread of fire from one room or occupancy area to another. Fire doors are listed and labeled to show their ratings in terms of time, i.e., 20-Minute, 90-Minute, etc.

Flush-Glazed: A type of glazed door which has its glass perimeter moldings flush with or set down from the face of the surrounding door.

Foam: Rigid or flexible plastic, light in weight and cellular in structure, used in door construction. Rigid foam is used as the insulating and binding core for doors. Flexible foam is sometimes used as gasket.

Foot Bolt: A steel pin housed in a door bottom edge or astragal, with a latch mechanism, which can be driven down to project into a receiver socket or hole in the floor or threshold, to better secure the door when closed.

Frame: In door assemblies, the perimeter members at the top and sides, to which the door is hinged and latched. See *jamb*.

Gain: A notch across the end of a board or wood part.

Galvanized: An adjective used to describe steel which has been zinc-coated. Galvanized steel is resistant to corrosion.

Gasket: A strip of flexible material which in an assembly of parts, prevents air and water from penetrating or passing through joints between parts.

Glazing: The elastic material used to seal glass to a surrounding frame.

Grille: For doors with glass lites or inserts, a removable face-mounted assembly of thin wood or plastic pieces, which when in place, gives the lite or insert a patterned multi-pane look.

Grooved Glass: Glass which has been decorated with abrasively-routed recesses. Grooving can give a single piece of glass a multi-paned look.



Handing: A term which describes or determines the direction of swing of a door w hen opening.

Head Bolt: A steel pin housed in a door top edge or astragal. See *foot bolt*.

Head, Head Jamb: The horizontal top frame member of a door assembly.

Hinge: An assembly of metal plates and a cylindrical metal pin, which when fastened to a door edge and to a door frame, allow the door to swing or rotate in its frame.

Hinge Stile: The full-length vertical edge of a door, at the side or edge of the door which fastens to its frame with hinges.

Horned Sill: A sill which has been coped or cut in such a way at its ends, so that the sill projects across the outside face of the bottoms of door jambs, allowing the bottom ends of the brickmould pieces to butt and join to the top of the sill.

IG Unit: Abbreviation for insulated glass unit.

Impact Doors: Doors manufactured with an internal reinforcement (steel plate) to comply with Coastal Building Code (Impace Resistance) requirements.

Impact Glass: Glass lites in either clear or decorative designs manufactured with a reinforcement film laminated between two layers of glass to comply with windborne Coastal Building requirements.

Inactive: A term for a door panel fixed in its frame. Inactive door panels are not hinged and are not operable.

Insulated Glass, Insulating Glass: A glass assembly of multiple full-lite pieces, separated by a perimeter spacer and sealed as a unit. Insulated glass in residential doors is usually made with two thicknesses of 1/8 inch glass, separated by an airspace up to 3/4 inch thick.

Inswing: A term used to describe an exterior entry door unit for which, when the hinged door panel is opened, the panel swings into the building.

Jamb: A vertical perimeter frame part of a door system.

Jamb Jack: A fastener device for fixing a door frame to a wall structure, which allows the space or margin between the frame and the structure opening, to be varied by turning the fastener screw.

Jamb Stop: In exterior door frames, the molded-in rebate surface of a frame member against which door panels close and seal.

Kerf: A thin slot cut into a part with a molder or saw blade. Weatherstrip is inserted into kerfs cut into door jambs.

King Stud: In a wood-framed rough opening, the stud which runs full height from floor plate to ceiling plate, against which trimmer stud attaches.

Knuckle: The feature of a hinge where the hinge leaf is cut for two or three projections which wrap and form a barrel or socket for the hinge pin.

Laminate: A thin face of wood or plastic, adhesively bonded to a core or substrate, which makes up the decorative, wear or weatherable surface of the part.

Latch: A moveable, usually spring-loaded pin or bolt, which is part of a lock mechanism, and engages a socket or clip on a door jamb, retaining the door closed.

Leaf: A term which can apply to a door or hinge and which defines a part of the assembly which can swing on a pivot. Butt hinges have two leaves.

Lite: An assembly of glass and a surrounding frame, which is assembled to a door, or is integrally built into the door at the factory.



Lock Block: A rectangular block of wood or other solid material, placed inside a door assembly at the lock side edge, which reinforces the assembly when the lock hardware is installed.

Lock Bore: For cylindrical locksets, the large through hole, usually 2-1/8 inches in diameter, bored near the door panel's lock edge, into which the lock mechanism is placed and installed.

Lock Stile: In insulated door assemblies, the full-length part, usually wood, which makes up the lock edge of the door panel. In wood stile and rail doors, the full length wood piece, 4 to 6 inches wide, at the lock edge of the door.

Low-E Glass: Glass which has been factory coated with a thin layer of material, nearly clear, which acts to absorb and reflect heat and light energy.

LSL: Abbreviation for laminated strand lumber. LSL is used in the construction and building materials industry as a more cost effective structual support material versus dimensional lumber.

LVL: Abbreviation for laminated veneer lumber. LVL is a manufactured wood product, in which veneer layers are adhesively bonded into a layup of multiple thicknesses. LVL is made to specified strengths and is used for structural purposes.

Miter: An angled cut across the end of a lineal part, usually done to join with a similarly-cut part at a corner.

Mortise: A recess cut into the surface or edge of a part, usually for the purpose of housing hardware such as hinges and lock parts.

Mortise-Type Lock: A lockset which usually has a rectangular-shaped mechanism, which is housed into a deep recess cut into the edge of a door.

Mull: A short term for mullion. Used occasionally as a verb to describe the joining of two door units together, or the joining of a door to a sidelite unit.

Mulled: An adjective describing a door and sidelite unit which has been made up by edge-joining two framed units together.

Mullion: A post or divider which runs from sill to frame top in a multi-panel door, door, or door and sidelite assembly. In stile and rail doors, the vertical wood parts which separate panels.

Multiple Extension Unit: In patio door assemblies, a fixed door panel in a separate frame, edge-joined to a patio door unit to add another glass panel to the installation.

Multi-Point Hardware: Any hardware that has multiple locking points which simultaneously lock into place through the action of a continuous travel drive rail activated by a handle.

Muntins: In glazed lite assemblies, thin vertical and horizontal divider bars, which give the lite a multi-paned look. Muntins may be part of lite frames, and on the outside surface of the glass, or assembled between glass in insulated glass units.

Nailing Fin: A feature of some windows and patio doors which permits installation and fastening to a rough opening by nails or screws driven through the fin at the top and side edges of the unit, into the surrounding frame of the opening.

NFRC: Initials for National Fenestration Ratings Council, an industry association which sets standards for testing, rating, and labeling doors and windows with heat transmission and energy information.

Night Latch: A lever or knob-actuated bolt for fastening a door more securely at night.



Nosing: An edge piece, usually molded with a rounded face or corner, which runs the length of an assembly. Oak adjustable sills have a nosing part along the floor line at the inside edges.

NRP Hinge: An abbreviation for a hinge with a non-removable pivot pin. NRP hinges are used when exterior doors swing out, as a security feature. The fixed pins make it impossible to remove a door by driving out pivot pins.

Open-Cell Foam: A foam material which has passageways between cells. Open-cell foam will absorb and retain water, because the water will penetrate deeply inside the foam.

Outswing: An exterior door assembly in which the door panel swings outside the building.

Panic-proof Lock: A lock and latch device which permits a door to be opened outward by pressure being applied to a bar mounted across the inside face of the door.

Passage Lock: A lockset which will retain a door closed, but which cannot be locked.

Passive: In a double or two-panel door assembly, the door which usually remains closed and fixed by bolts at top and bottom. The other door panel is used for regular passage.

Plant: A decorative molding applied to the surface of a flush door, to give the appearance of a raised-molding design.

Plates: In residential wood-frame construction, the horizontal parts of a wall frame running atop the subfloor, and at the ceiling atop the stud ends, on which framing from above bears.

Positive Pressure Fire Door: A fire door that has been tested with a positive pressure plane 40" above the ground to create pressure that forces smoke, hot gases and flames around the door, and more accurately creates conditions that occur in an actual fire.

PVC: Abbreviation for polyvinyl chloride, a plastic material used to make molded or extruded parts.

R-Value: A number which describes in relative terms, the ability of a material or assembly to resist the flow or transmittance of heat. Assemblies or materials with high R-values are better insulators than those with lower R-values.

Rabbet, Rebate: A rectangular recess cut or formed along the long edge of a part, usually a wood part.

Rail: In insulated door panels, the part, made of wood or a composite material, which runs inside the assembly, across the top and bottom ends, and makes up the top or bottom edge. In stile and rail doors, horizontal pieces at top and bottom edges, and at intermediate points, which connect and frame between the stiles.

Ramp: In a sill or threshold, the horizontal face which is sloped.

Rebate: See rabbet.

Reveal: The offset or margin between edges of parts.

Riser: A term which describes the part of an adjustable sill which can be moved up or down by turning adjusting screws.

Riveted-Pin Hinge: See NRP hinge.

Rough Opening: A structurally-framed opening in a wall which receives a door unit or window.



Saddle: In adjustable sills, another term for riser. Also, a shop-applied label applied around the corner or edge of a door, which provides identification and installation instructions.

Safety Glass: Glass which when broken, shatters into small pieces without sharp edges.

Screen Track: A feature of a door sill or frame head which provides a housing and runner for rollers, to allow a screen panel to slide from side to side in the door.

Scribe: A mark for a cut which has been made by using a template or pattern.

Sealant: Elastic material pumped or troweled into a joint to prevent water penetration.

Self-Cased: A steel frame for which the edge detail finishes to the surrounding wall, without the need for additional applied casing molding.

Self-Locating Hinge: A hinge with indexing or locating tabs to aid in exact placement against a door edge.

Shim: A thin piece of material used between parts of an assembly, to change and fix the distance between parts, when parts are fastened.

Sidelite: A fixed narrow panel, installed next to a door panel, for decorative purposes.

Sidelites almost always contain glass lites.

Sill Saddle: See riser.

Slide Bolt: The part of an astragal assembly which, by means of moving latches at tops and bottoms of astragals, places bolts into frame heads and sills, for fixing passive door panels closed.

Smoke and Draft Door: A door with a listed gasket, that limits smoke leakage to less than 3.0 cfm/ft.

Spacer, Glass Spacer: A lineal part with rectangular cross section, running along the perimeter edges, between the glass pieces of an insulating glass unit.

Spread Mullion: Using two back to back jambs and blocking on a continuous sill to increase the mullion width up to 3" to meet a variety of rough opening requirements.

STC: Abbreviation for sound transmission coefficient. A value which describes in relative terms the ability of a door to dampen the passage of noise. Doors with higher STC values permit less noise to pass through.

Stile: In insulated door panels, the full-length parts, usually wood, which make up the long edges. In stile and rail doors, the vertical edge parts.

Strike: A metal part with a hole or recess for receiving a door latch, also with a curved or ramped face so a spring-loaded latch contacts it when closing. Strikes are fit into mortises in door jambs or mullions, and screw-fastened.

Style: A number or name defining a door design or configuration.

Subfloor: The concrete or wood floor surface lying under the finished floor. Prehung door assemblies are installed atop the subfloor.

Substrate: The base or core material in an assembly of parts. In sills, the full length wood or composite part of the sill, visible only from the bottom side, or ends.





Tempered Glass: Glass sheet which has been strengthened by heat processing. Tempered glass when broken, shatters into small pieces without sharp edges. See *safety glass*.

Template: A pattern or jig used to machinecut a precise hole or recess into a door or frame part.

Thermal Break: A feature of a door or frame assembly which separates metal or glass exposed to outside temperatures, from coming into contact and transmitting heat to or from inside-exposed parts.

Threshold: Another term for sill. The horizontal part of a door assembly, fixed under the door panel and bearing on the floor.

Tinted Glass: Glass made with a green, gray or bronze tint, so as to reduce light transmittance.

TPE: Abbreviation for thermoplastic elastomer. TPEs are used to make weatherstripping and gasketing parts.

Transom: A framed glass assembly mounted atop a door assembly. Transoms are rectangular in shape or have curved or arched tops. One design of a curved top transom has the shape of a half-ellipse.

Transport Clip: A steel piece used to temporarily fasten a prehung door assembly closed for handling and shipping, which maintains the door panel's proper position in the frame.

Trimmer Stud: In a wood-framed rough opening, the stud or framing member which runs vertically from the subfloor to and supporting the structural header member, into which a door frame is fastened.

Triple-Glazed: An insulated glass assembly made of three thicknesses of glass, with air spaces between the outer and inner thicknesses.

U-Value: A number which describes in specific terms, the ability of a material or assembly to transmit heat from outside to inside surfaces. Assemblies with lower U-values transmit less heat than those with higher values. See *R-value*. A U-value is the inverse of an R-value.

Urethane: A plastic material made by reacting two polymers.

Veneer: A thin film or facing, adhesively bonded to a core or substrate, which makes up the exposed and decorative face of an assembly.

Warp: A permanent curvature or deviation from straightness, which can be induced in a part or assembly by a load or force, or by exposure to heat or moisture.

Water Penetration: The unwanted passage of water through a door system.

Wired Glass: Glass made for use in fire doors, which has embedded wires which bind the glass, and permit the glass to remain monolithic when exposed to fire.

Yellow Zinc Dichromate: A brass-look plating to steel parts, which is highly corrosion-resistant.



Display Door Cautions and Policies

Cautions and policies concerning resale and shipment of all display doors.

General: Display doors are just that . . . they are made specifically for display purposes only. They are **not intended for use in an exterior, exposed-to-weather setting.** Because we manufacture them specifically for interior, display use only, components, adhesives and assembly may be different from regular production doors.

Conditions of resale: When a display door is to be resold by you as a regular exterior door, no Therma-Tru product warranty is applicable.

Classic-Craft and Fiber-Classic Finishing*: The finishes used on display doors are not intended for exterior use.

Smooth-Star and Steel Door Finishing*: The paints used on display doors are not intended for exterior use.

*However finished, whether exterior clear coated or painted, the "no Therma-Tru warranty" condition applies to all Display Doors used as an Exterior Door.





SHOP 2 Equipment and Facilities

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Equipment and Facilities

Equipment and Facilities



Below is a recommended list of equipment required for a millwork shop.

Equipment and Facilities

Air Compressor

Assembly Tables (see sketches on following pages)

Caulking Guns (manual or air-powered)

Drill Press (optional)

Miter Saw

Power Drill

Radial-Arm Saw

Screw Guns with torque-adjustable clutch

Shop Hand Tools - hammer, chisel, etc.

Staple Guns (various sizes)

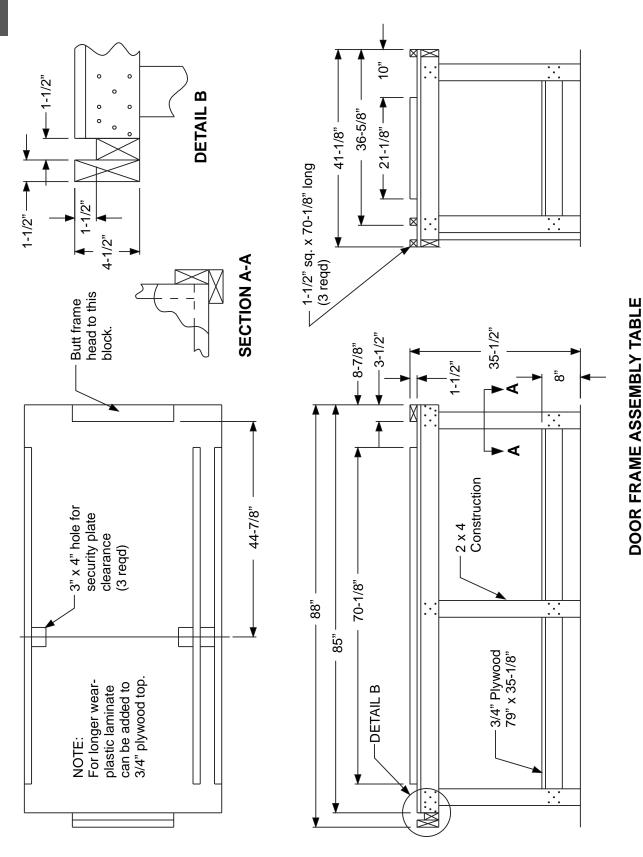
Table Saw (sliding table preferred)

Special-purpose machinery (ex. KVAL, Norfield)

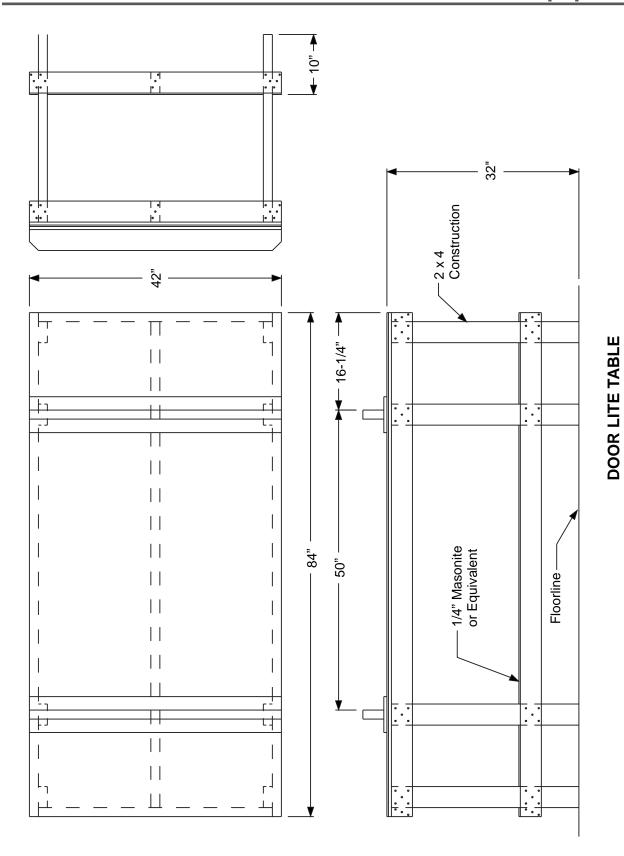
- Jamb lock preparation
- Jamb hinge preparation
- Door lite cutout (RUVO/Triad machines available from Therma-Tru)
- Door lock preparation
- Door edge planing and beveling

THERMA TRU®

Equipment and Facilities



Equipment and Facilities



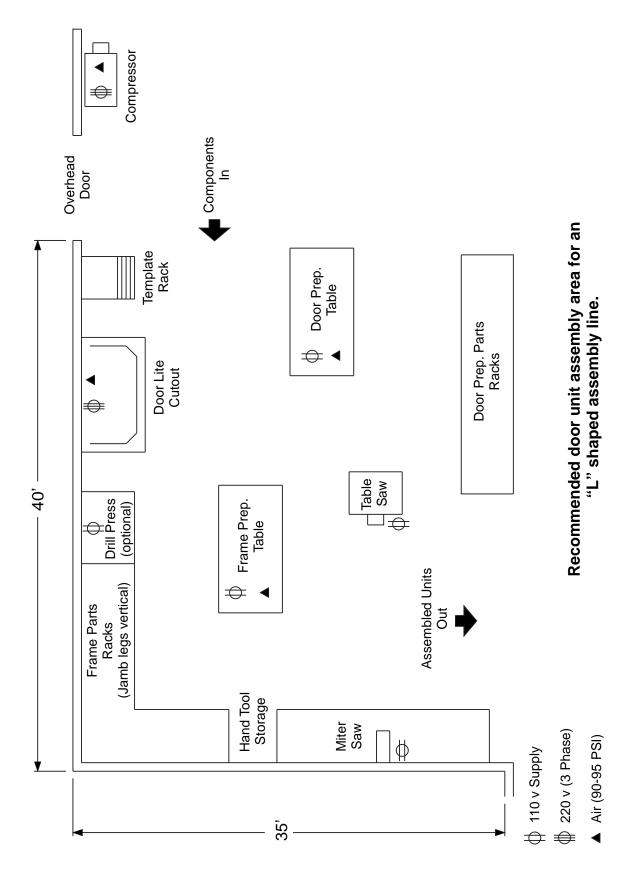
Shop Layout



Equipment and Facilities

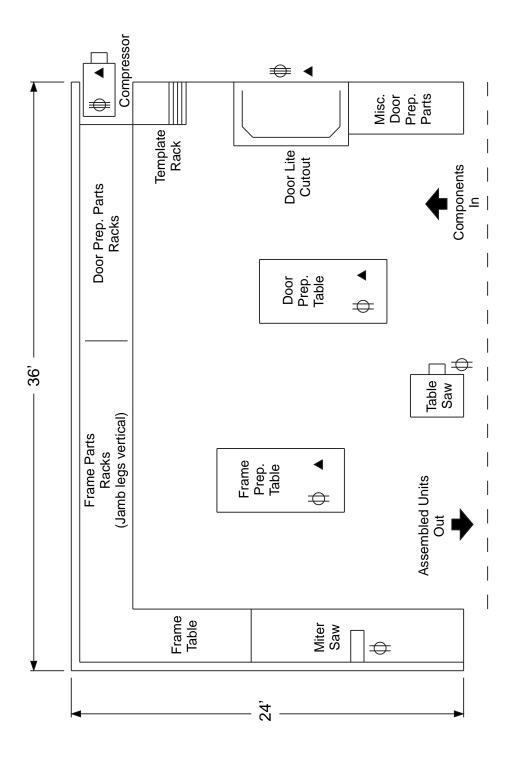
The following pages show three typical shop layouts recommended by Therma-Tru. They are an "L" and "U" shaped and "In-Line" configuration assembly line. Contact Therma-Tru if you need assistance on how your shop should be configured.







Equipment and Facilities

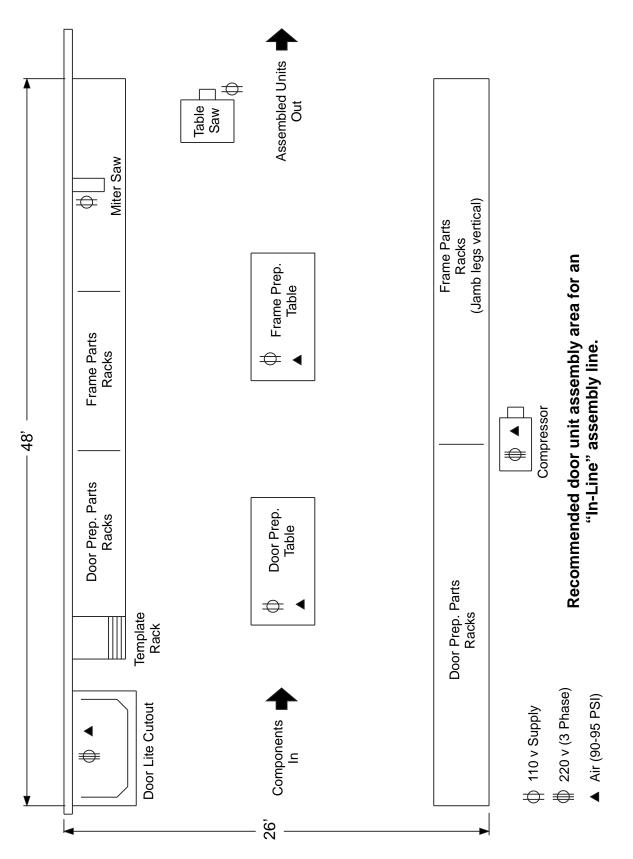


Recommended door unit assembly area for a "U" shaped assembly line.

220 v (3 Phase) Air (90-95 PSI) \Rightarrow

110 v Supply

Equipment and Facilities







SHOP 3 Door Preparation

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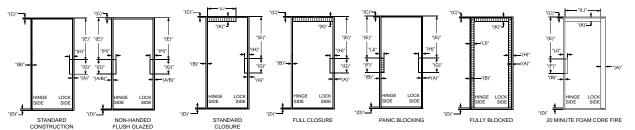
Door Preparation

Special Shop Machining3.112



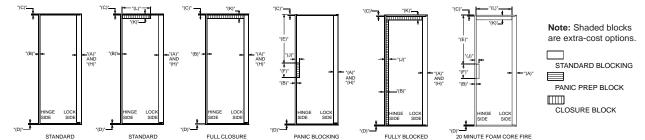
Door Preparation

6/8 AND 7/0 SMOOTH STAR AND FIBER CLASSIC BLOCKING OPTIONS

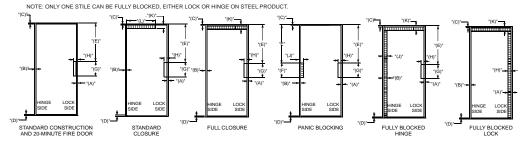


Door Preparation

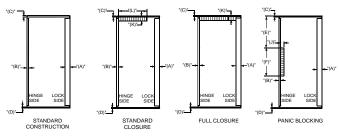
8/0 SMOOTH STAR AND FIBER CLASSIC BLOCKING OPTIONS



STEEL BLOCKING OPTIONS



CLASSIC CRAFT BLOCKING OPTIONS





Note: See Chart for Dimensions on Next Page.

Note: Views above show minimum blocking, some Doors may be supplied with blocking larger than what is depicted.

Note: Closure blocking options are not available for Classic-Craft Mahogany 3-Panel Scroll or Classic Craft Rustic Full Plank Doors.

Stile, Rail and Reinforcement Block Sizes and Locations

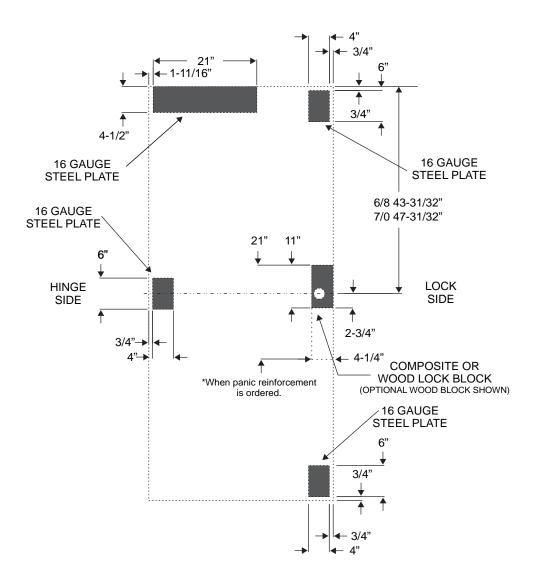


Door Preparation

	A Lock Stile Width [Inches]	B Hinge Stile Width (Inches)	C Top Rail Height (Inches)	D Bottom Rail Height (Inches)	E Lock & Panic Block Location (Inches)	F Panic Block Length (Inches)	6 Lock Block Length Inchesi	H Lock Block Width = Lock Stile Width + Lock Block Width + Inches!	J Panic Block Width = Hinge Stile + Panic Block Width Ilnchesi	K Closure Block Height = Top Rail Height + Closure Height Ilinches)	Closure Block Size Width (Inches)
Classic Craft 6/8 UI Doors 6/8 UI Rustic & Canvas Non-Radius 8/0 UI Doors		1/4	1 15/16		27 5/8	24	Not Required Wide Lock Stile	-ock Stile	3.7/8	4 1/32	24
8/0 UI Rustic Non-Radius 6/8 and 8/0 UI Flush Glazed and Molded Open Doors	3 31/32			1.15/16	Not Available	able	A CHEDOO DOO	-		Not Available	
6/8 UI Arched & Radius Rustic & Canvas Doors		3 7/8	1 1/2	•		-	Not Required Wide Stiles See Columns "A & B"			Not Available Use Non-Radiusable Door	n-Radiusable
Fiber Classic											
6/6 & 6/8 UI Doors	1 3/32	1 3/32			36	12 1/2	22 1/2		3 15/32	4 1/32	28 5/8
6/6 & 6/8 UI Composite Edge Doors		T			36	NOL AVUITUBLE			3 15/32	Not Available 4 1/32	28 5/8
6/6 & 6/8 UI Flush Glazed and Molded Open	1 19/32	1 19/32		•	36	Not Available	25	3 15/32		Not Available	
7/0 UI Doors	1 3/32	1 3/32		•	40		22 1/2	_	3 15/32		
7/0 UI Composite Edge Doors	1 19/32	1 19/32			40	_	25	_	3 15/32		
8/0 UI Doors	3 15/16	1 3/32	15/16	15/16	42	12 1/2			3 15/32	4 1/32	28 5/8
8/0 UI Composite Edge Doors	3 15/16	1/8			42			_	3 1/2		
8/0 UI Flush Glazed and Molded Open Composte Edae Doors	3 15/16	1 3/32			Not Available	able	Not Required Wide Lock Stile	ock Stile		Not Available	
8/0 UI Flush Glazed and Molded Open Doors	4 15/16	8/1 -		•	Not Available	able	See Column "A"	.,Y.,			
6/8 UI Foam Core Fire Doors					36						
7/0 UI Foam Core Fire Doors 8/0 UI Foam Core Fire Doors	3 15/16	3/32		1	40	12 112			3 15/32	4 1/32	Full Width
Smooth Star		1									
6/6 & 6/8 UI Doors	1 200	0010			36	12 1/2			3 15/32	4 1/32	28 5/8
6/6 & 6/8 UI Flush Glazed and Molded Open Doors	1 3/32	3/32		1	36	Not Available		_		Not Available	
6/6 & 6/8 UI Composite Edge Doors				•	36	12 1/2			3 15/32	4 1/32	28 5/8
6/6 % 6/8 UI Flush Glazed and Molded Open Composite Edge Doors	1 19/32	1 19/32			36	Not Available	12 1/2	3 15/32		Not Available	
7/0 UI Doors	\vdash	1 3/32			40				3 15/32		
7/0 UI Composite Edge Doors	_	1 19/32			40	2 2			3 15/32	7 1/20	20 5/0
8/0 UI Doors	3 15/16	1 3/32	91/91	15/16	42	7/1 71		_	3 15/32	4 1132	0/0 07
8/0 UI Composite Edge Doors	3 15/16	11/8			42			_	3 1/2		
8/0 UI Flush Glazed and Molded Open Doors	3 15/16	1 3/32					1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1000			
8/0 UI Flush Glazed and Molded Open Composite	4 15/16	8/1			Not Available	able	Not Required wide Lock Stile See Column "A"	Jock Stille		Not Available	
6/8 UI Foam Core Fire Doors					36			_			
7/0 UI Foam Core Fire Doors	3 15/16	1 3/32			40	12 1/2		_	3 15/32	4 1/32	Full Width
8/0 UI Foam Core Fire Doors					42						
Profiles And Traditions Steel											
6/6 & 6/8 UI Doors 7/0 UII Doors	1 5/32	5/32	2//8	7/8	36	611 61	12 1/2	3.25/32	3 25/32	3 7/8	24
8/0 UI Traditions Doors)))	42	1	24))) :)	

90 Minute Positive Pressure Steel Fire Door Reinforcement Sizes & Locations

Door Preparation



Shaded areas are extra-cost options.



Door Preparation Maximum height and width trims for doors.

Standard	A	В	С	D
Doors a	Top Rail	Bottom Rail	Hinge Stile	Lock Stile
Classic-Craft	1-1/4"	1-1/4"	1/32" ^b	1/32" ^b
Fiber-Classic	1/4"	1/4"	1/32"	1/32"
Smooth-Star	1/4"	1/4"	1/32"	1/32"
Steel Doors	1/4"	1/4"	1/16"	1/16"

^a Standard doors requiring structural product approval or certification cannot be trimmed.

^b Inspect corners to verify hardwood thickness before trimming.

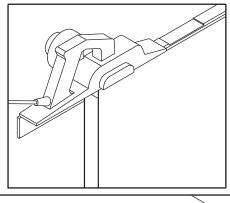
Impact	A	В	С	D
Doors	Top Rail	Bottom Rail	Hinge Stile	Lock Stile
Classic-Craft	1"	1"	N/A	N/A
Fiber-Classic	N/A	N/A	N/A	N/A
Smooth-Star	N/A	N/A	N/A	N/A
Steel Doors ^c	N/A	N/A	N/A	N/A

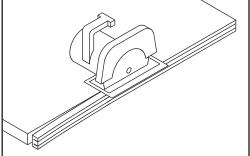
^c Standard steel doors are impact-rated, but cannot be trimmed when requiring an impact product approval, see re-sizing section.

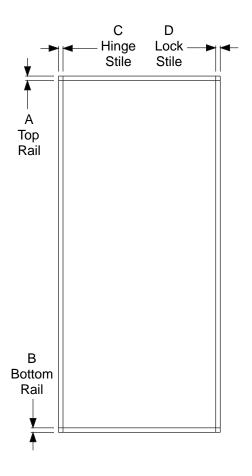
Fire Rated	A	В	C	D
Doors	Top Rail	Bottom Rail	Hinge Stile	Lock Stile
Fiber-Classic ^d	N/A	1/4"	1/32"	1/32"
Smooth-Star d	N/A	1/4"	1/32"	1/32"
Steel Doors ^e	N/A	N/A	1/16"	1/16"

^d Fiberglass 20-minute positive pressure fire doors can only be trimmed by Warnock-Hersey or NAMI certified re-machiners.

^e Standard wood-edge steel doors may be fire-rated (if appropriately labeled), but cannot be trimmed in height when being used as a fire door, see re-sizing section. 90-minute steel edge fire doors cannot be trimmed, see 90-minute fire door re-sizing section.







Trim Slab to Width

- Set planer cutting depth.
- Plane edges of slab.
- Sand smooth if required.
- Paint with primer if required to match original finish.

Trim Slab to Height

- Measure and mark door slab.
- Cut along line with saw, using carbide-tipped blade. If available, use panel saw.
- Touch up edges with a rasp or sandpaper.
- Trimming the bottom rail may prevent the kerf door bottom from fitting properly. A replacement staple-on door bottom may need to be used.



Door Slab Resizing Beyond Maximum Trimming Limits



STOP:

Fiberglass impact doors and 20-minute fiberglass fire doors cannot be re-sized beyond maximum trimming limits. For 90-minute steel edge fire doors, see 90-minute fire door slab re-sizing section.

Height Resizing

Note:

A standard door can be cut down to any size if it is aesthetically acceptable, the following procedure for re-railing is followed, and it conforms to the applicable code requirements. Flush doors and paneled doors may be re-railed. Any height re-sizing beyond maximum trim limits requires rail replacement. 20-minute steel fire doors can only be resized by a Warnock Hersey certified re-machiner.

Width Resizing

Doors cannot be edge-trimmed beyond the limits listed in SHOP 3 - Door Slab Trimming

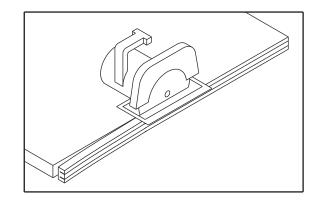
Saw Slab to Length

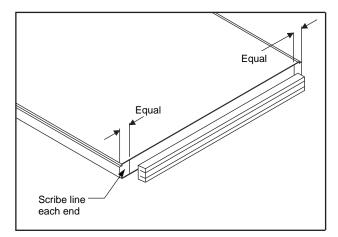
Measure and mark door slab.

Cut along line with saw, using carbide-tipped blade. If available, use panel saw.

Touch up edges with rasp or sandpaper.

Note: For 20-minute steel fire doors, a maximum of 6" may be removed from the bottom of the door.





Mark for New Rail Pocket

Use new rail as a pattern.

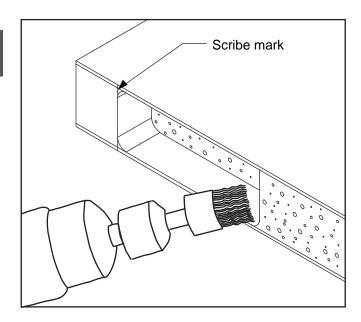
Center rail against cut end of door slab.

Scribe at rail ends to mark limits of cut for rail pocket.

Door Preparation



Door Preparation



Cut New Rail Pocket

Remove core material to desired depth using wire brush on a drill.

Cut to scribe marks at ends.

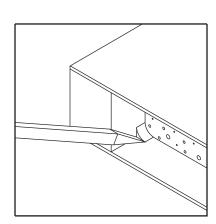
Cut flush to inside skin faces.

Clean Up New Rail Pocket and Test-Fit

Clean up corners and/or fiberglass skin ribs with a chisel.

Scrape skin faces clean to ensure a good adhesive bond.

Test-fit rail in pocket.



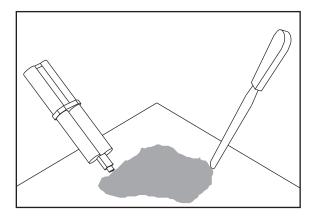
Clean the Rail and Skin



Surface cleanliness is very important.

Using a rag with mineral spirits or lacquer thinner, Clean the surfaces of the skin and rail.

OPTION 1: ADHESIVE



Apply Adhesive

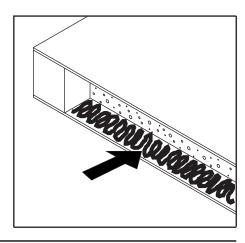
Fully coat inside skin surfaces of rail pocket.

Mix Adhesive

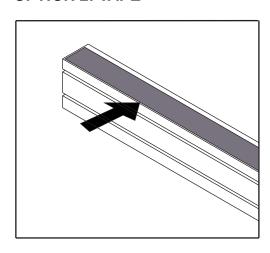
Use a fast-setting epoxy.

Mix thoroughly before applying to door skins.

Note: For 20-minute steel fire doors, only adhesive(s) specified in the applicable fire door listing report may be used.



OPTION 2: TAPE



Apply Tape

Use appropriate pressure sensitive double sided tape Like 3M 4032 tape (5/8" wide) Or Tesa 62505 tape (3/4" wide)

Using one continuous strip, (No splices in the tape)
Apply tape to both sides of the rail.

Remove tape liner.

Preparation



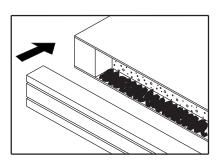
Door Preparation

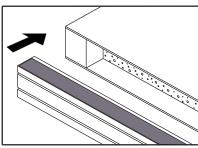
Insert Rail

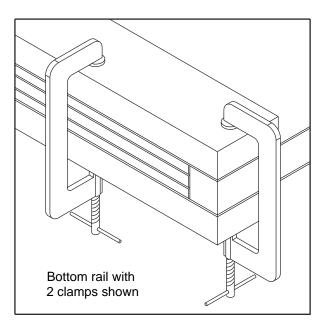
At top of door, insert replacement rail in pocket with kerfed edge facing inward (not shown).

At bottom of door, insert replacement rail in pocket with kerfed edge facing out.

Note: For 20-minute steel fire doors, only the bottom rail may be replaced. The replacement rail must conform to the specifications in the applicable fire door listing report.







Clamp Assembly

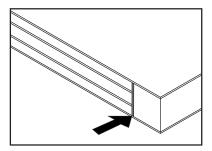
Clamp to ensure uniform pressure.

Use pad boards to protect slab skins.

Allow to set per adhesive/tape instructions.

Caulk Gaps

Use caulk to fill in gaps between end of stiles and rail.





90 Minute Fire Door Slab Resizing



CAUTION:

Only shops licensed by Warnock-Hersey as fire door machiners may perform this resizing procedure. These instructions are for reference only. Please refer to the current Warnock-Hersey machining report for the currently approved procedure.

Door Preparation

Method of "Cutting Down" Steel Doors

NOTE: The maximum total cut down is 4". If the door is to be used in a steel frame, the bottom of the door should be cut off, as it is recommended that steel frames be cut down "from the bottom" when making special height openings. If used in a wood frame, the top of the door can be cut off; the head of the wood frame may be dropped down to fit by cutting down the tops of the side jambs.

Step #1: Cutting Bottom (or top) of Door

Cut bottom (or top) of door off to desired length using a saber saw. (See Detail A). Cut one side of door at a time. If saw blade is too long, break off blade so that length of blade does not project more than 1-1/2" on down stroke.

Step #2: Clean Area for Installation of Channel*

Run an electric drill with 3/16" drill bit along bottom, (or top) of door to remove foam core about 1" deep. (See Detail B). Remove enough core to allow channel to insert between door skin and foam. Thoroughly clean door surfaces that will make contact with tape on channel. A file or sandpaper may be used to clean off foam.

NOTE: Foam tape may not stick if surface is not totally cleaned of insulating foam.

Step #3: Prepare Channel for Installation

Clean channel with paint thinner and allow to dry. Apply double face tape to both sides of channel. (See Detail C). Peel paper off tape. Channel is now ready for installation.

Step #4: Install Channel

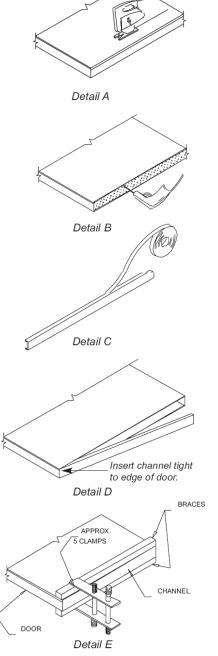
Start by inserting one end of the channel into the door, tight against either the lock or hinge side of the door. (See Detail D). Install remainder of channel. Make sure bottom channel is inserted flush and straight with the cut edge of the door.

Step #5: Apply Clamps

Place a wood strip (or equal) on each side of door. Hold strips 1/16" from edge of door. Apply clamps. (See Detail E). Clamps may be removed after a few minutes.

NOTE: Clamp pressure to be firm, not excessive.

* Top and bottom channels are found in the Components(CPL) section of the Taylor Door Entry Systems Price Manual.





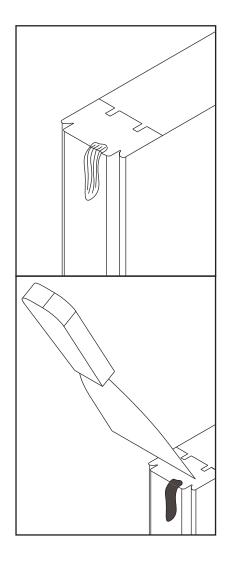
Door Preparation

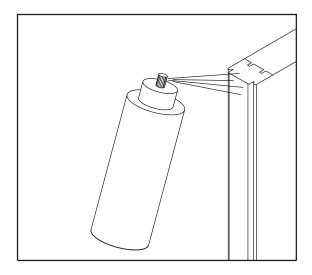
Stile Chips

Fill Chips and Sand Smooth

Fill minor cosmetic damage to wood stiles with a hardening type wood putty.

File and sand smooth.





Reprime Area Using Touch-up Paint

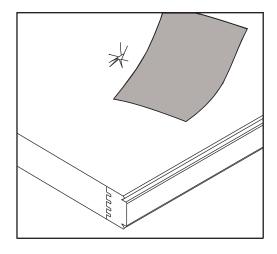
Steel Door Dent Repair

Clean and Roughen Surface

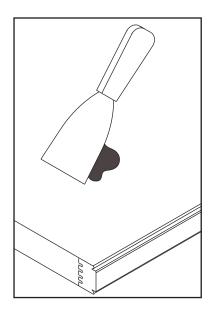
Clean surface surrounding dent.

Roughen using 100 grit sandpaper.

If possible, do not sand through the existing factory-applied primer.



Door Preparation



Fill Dent

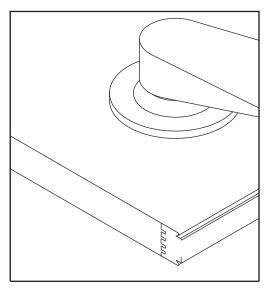
Fill dent using Therma-Tru Dent Repair Kit, (Part Number: MS00DRK), or an automotive body-filler compound.

Smooth using a wide blade putty knife.

Overfill to account for shrinkage and sanding.

Sand Dent Repair

Sand repair, using a large sanding block or orbital power sander, with 220 grit sandpaper.

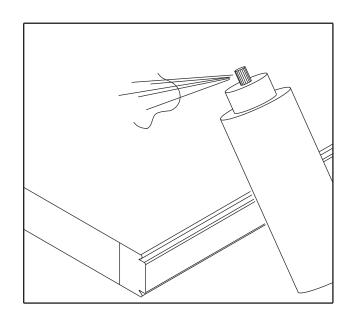




Steel Door Dent Repair - Cont. Reprime Repair Area(s)

If bare metal was exposed, paint entire repair area with a primer containing rust inhibitors.

Reprime repaired area using Therma-Tru touch-up primer. If a rust inhibiting primer was used, let dry thoroughly before applying Therma-Tru touch-up primer.



THERMA-TRU TOUCH-UP PRIMERS

Description	Part Number
Classic-Craft and Fiber-Classic Primer for Buff skins	MSCCAB-01
Classic-Craft Mahogany Primer for Rose skins	MSCCMAB
Smooth-Star Primer	MSWHSABP-03
Steel White Primer	MSWHABP-01
Steel Edge Door Primer	MSWHSED
Steel Frame Primer	MSWHAF2

Classic-Craft, Fiber-Classic and Smooth-Star Skin Repair

- For minor scratches in buff fiberglass skins utilize primer (part #MSCCAB-01) to touch up.
- For minor scratches in rose fiberglass skins utilize primer (part # MSCCMAB) to touch up.
- For minor scratches in white fiberglass skins utilize primer (part # MSWHSABP-03) to touch up.
- For deep scratches, fill with crayon or patch pencil.
- Therma-Tru does not recommend any other repair procedures for composite doors.

Hinge Preparation (Except 90 Minute Steel Fire Door)

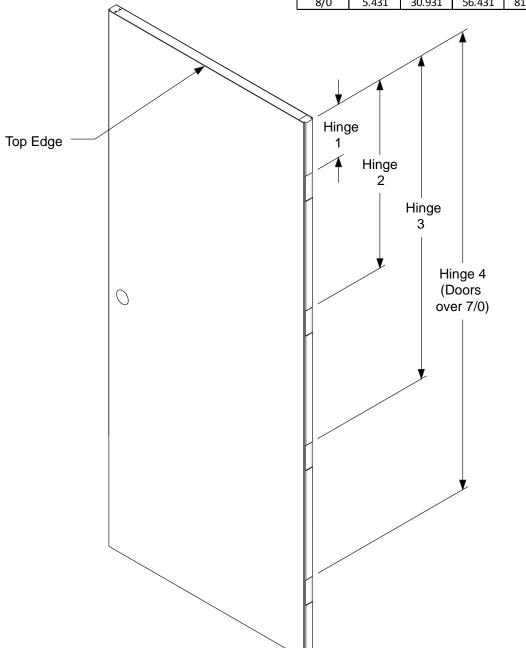
Mark top of hinge mortises. (Index from top edge of door)

ALL DIMENSIONS ARE FROM THE TOP EDGE OF THE DOOR TO TOP OF HINGE MORTISES.

Door				
Height	Hinge 1	Hinge 2	Hinge 3	Hinge 4
6/6	8.250	38.000	67.750	
6/8		38.000	67.750	N/A
7/0		40.000	71.750	
8/0		33.250	58.750	83.750

Preparation

Door	Adjustable Hinge Locations			
Height	Hinge 1	Hinge 2	Hinge 3	Hinge 4
6/6	8.525		37.775 67.025	N/A
6/8		37.775		
7/0				
8/0	5.431	30.931	56.431	81.931

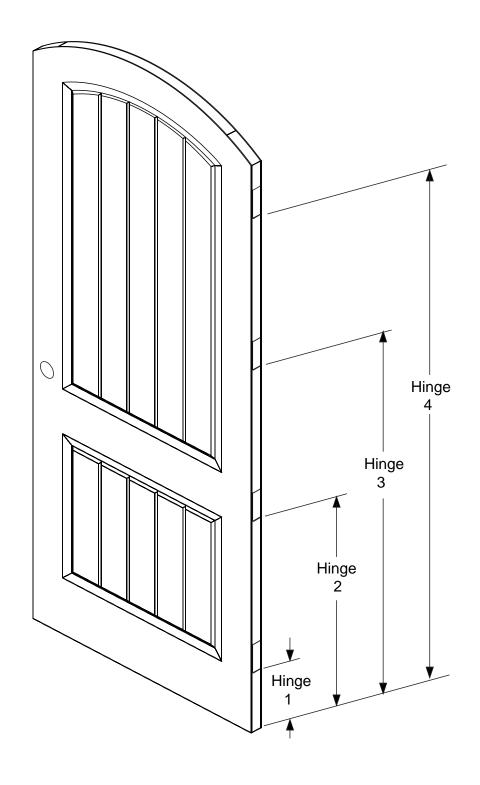


Shop 3



Mark bottom of hinge mortises. (Index from bottom edge of door)

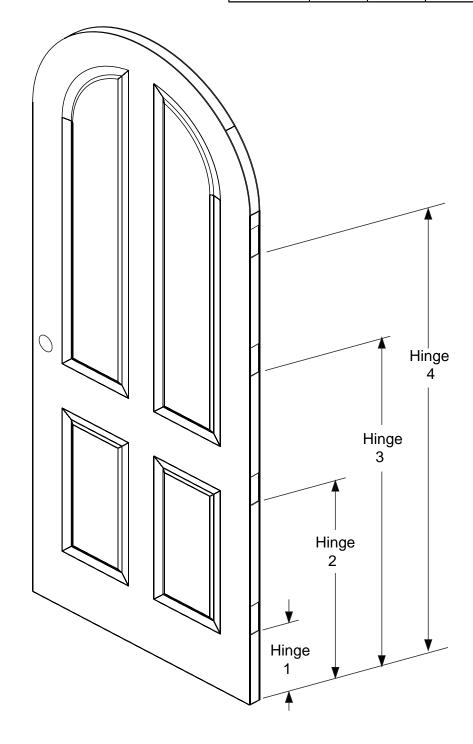
Door	Hinge Locations			
Height	Hinge 1	Hinge 2	Hinge 3	Hinge 4
6/8	8.157	35.594	63.032	N/A
8/0	9.282	32.532	55.782	79.032



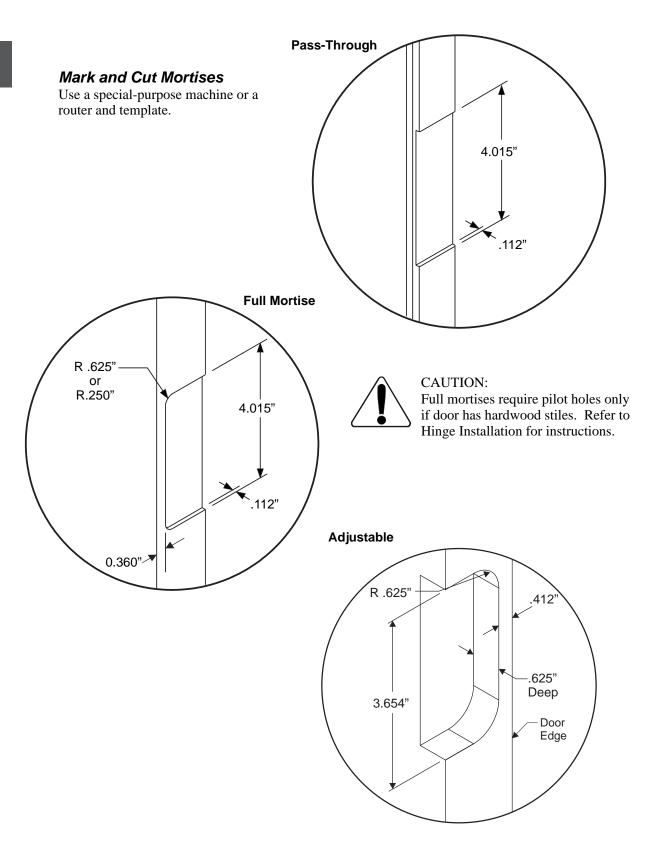
Mark bottom of hinge mortises. (Index from bottom edge of door)

Door Size	Hinge Locations			
D001 3126	Hinge 1	Hinge 2	Hinge 3	Hinge 4
3/0 x 6/8	8.157	31.282	54.407	N/A
3/6 x 6/8	7.157	29.282	51.407	IN/A
3/0 x 8/0	9.282	29.657	50.032	70.407
3/6 x 8/0	9.282	28.657	48.032	67.407

Preparation

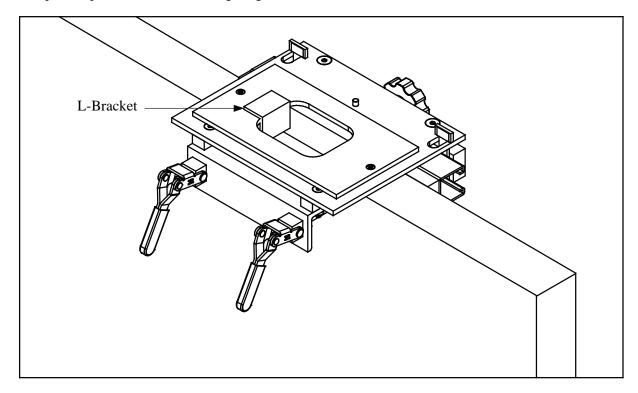






Adjustable Hinge Machining

- 1. Orient panel for proper handing and secure door on edge with hinge stile facing up. Mark the top of the adjustable hinge locations on the edge of the door slab per the Hinge Preparation section.
- 2. Follow the assembly instructions provided with the jig, then place the jig on the hinge stile of the door slab. (Do not clamp door yet.)
- 3. Place the L-bracket piece over the top inside edge of the template and visually align the inside edge of the bracket with the marked hinge location. Clamp jig securely to door, then remove the L-bracket piece.
- 4. Using a 1/2" bit and a 13/16" guide collar, set the depth stop on the plunge router to machine the adjustable hinge pocket depth as specified in the Hinge Preparation section. (Machine in multiple passes to achieve final depth.)
- 5. Repeat steps 3-4 for the remaining hinge locations.



Lock Preparation (Except 90 Minute Steel Fire Door)



Door Preparation NOTE: See 90-Minute Steel Fire Door Lock Preparation.

Mark for Lock Preparation

Preparation shown is for standard cylindrical lock sets. For mortise locks and other types use manufacturer's templates and instructions.

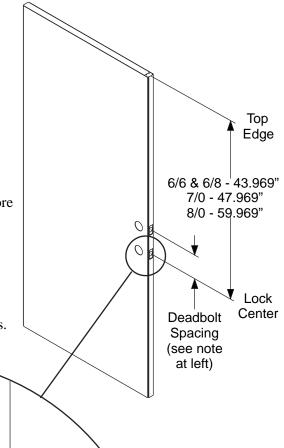


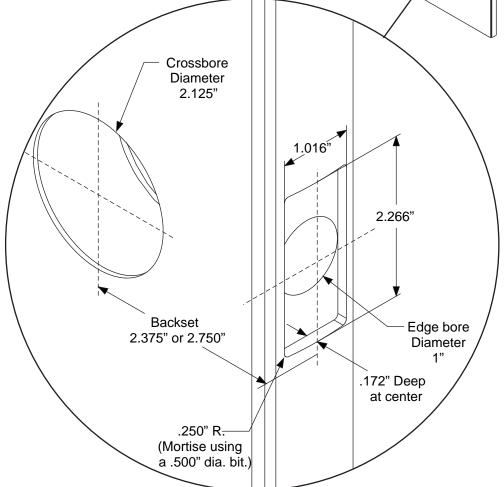
CAUTION:

Due to stile width and lite placement, some door styles have restrictions on lock crossbore and backset. Using the DOOR STYLE manual, (paperback or web site), see if restrictions apply. Deadbolt locations and sizes vary.

NOTE:

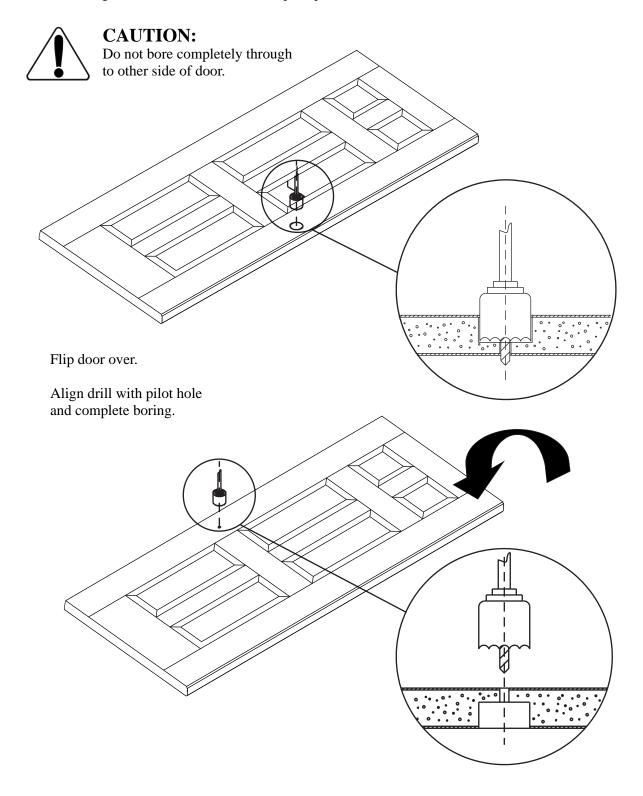
If cutting second prep for deadbolt, spacing should be 7" maximum for Fiber-Classic, Smooth-Star and Steel doors. No restriction applies for Classic-Craft doors.



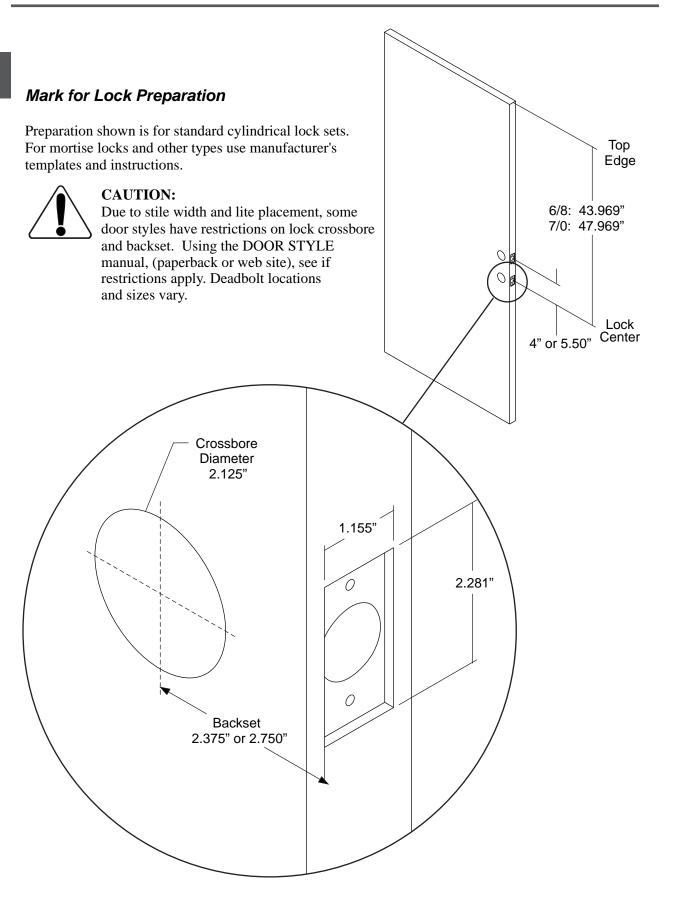


Drill Crossbore When Door Machine Is Not Available

Bore through half of door thickness until pilot pierces other side.











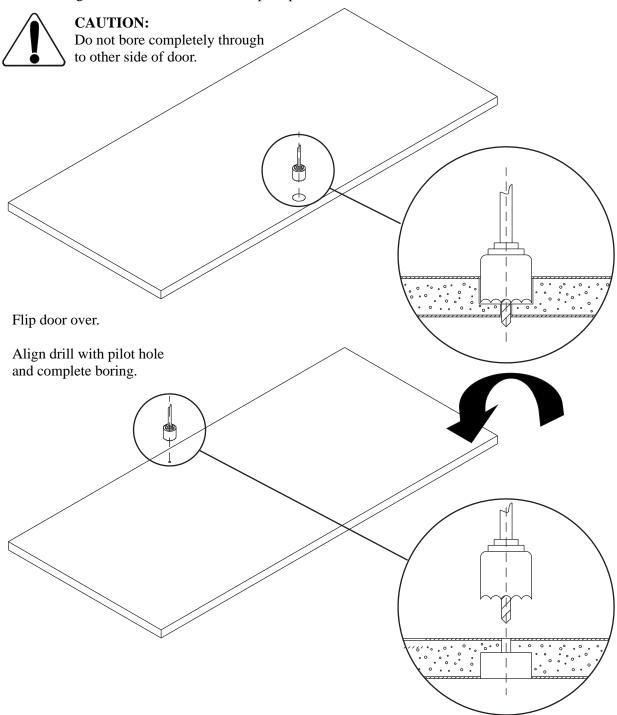
CAUTION:

Only shops licensed as fire door machiners may perform this lock preparation.

Preparation

Drill Crossbore When Door Machine Is Not Available

Bore through half of door thickness until pilot pierces other side.





Door Preparation

Eurogroove Preparation Set Router Bit Depth & Adjust Guide Fence

Set the bit depth using the manufacturer's guide that came with the router. The depth of the route should be 12mm (roughly 15/32").

Note: Test the route depth on a scrap piece of wood.

Adjust the guide fence so that the assembly can slide down the entire length of the door.

Note: If binding occurs, readjust the fence at the thickest section of the door.

Secure Door on Edge & Apply Router & Guide Fixture

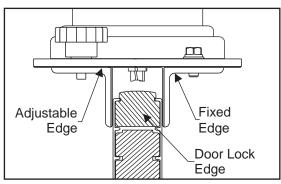
Set assembly on the door panel and move it until the bit reaches the door edge. Move the assembly away from the door edge so that the bit is not in contact when the router is started.

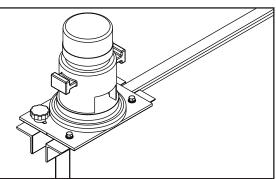
CAUTION: The fixed edge guide for the Eurogroove Router and the fixed edge of the Gear & Handle Mortise Jig must be located on the same side of the door during the preparation. Failure to do so could result in off-center relationship of gear mortise and eurogroove.

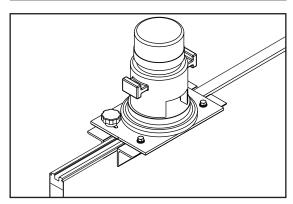
Cut Eurogroove

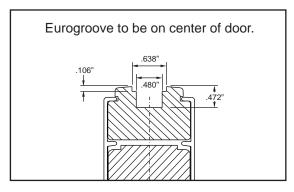
NOTE: For best results, set the router at maximum RPM.

Route the entire length of the door edge. Apply constant pressure against the fixed edge of the router fence for best results. Remove the sawdust after the cut is complete.









Preparation

Gear Mortise Preparation Apply Cross Mortise Fixture

Set the cross mortise jig on the edge of the door and slide up until the lock height setting bolt has contacted the bottom edge of the panel. Carefully tighten the adjustment knob enough to secure the jig to the panel.

NOTE: Over tightening can cause the width of the mortise pocket to be cut improperly.

NOTE: Be sure the jig is flat against the edge of the panel and tight against the bottom to provide proper placement of the handle mechanism.

Set Up Plunge Router

Use a 1/2" cut by 5-1/2" long bit with 13/16" collar. Set the depth of cut using the manufacturer's guide that came with the plunge router. The depth of the route should be; 67mm (approximately 2-5/8") for 45mm handle set 82mm (approximately 3-7/32") for 60mm handle set

Cut Gear Mortise

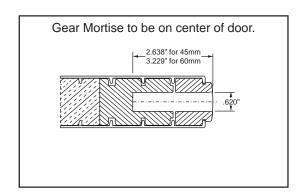


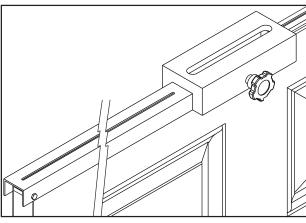
CAUTION: The router bit will extend past the base of the router. Make sure the router is sitting firmly in the jig before starting the router. Let the router come to a complete stop before removing from the jig.

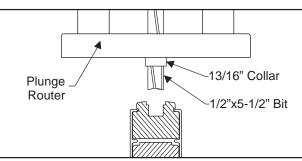
Slide the bit into the opening on the jig and make cut using several passes along the guide to obtain the proper depth.

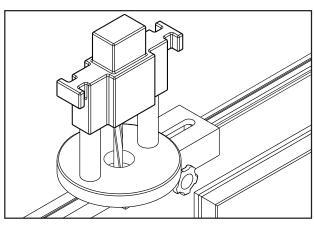
NOTE:

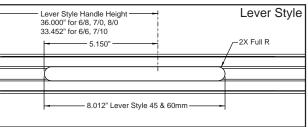
It is recommended to cut 1/4" to 1/2" each pass.

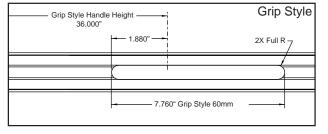














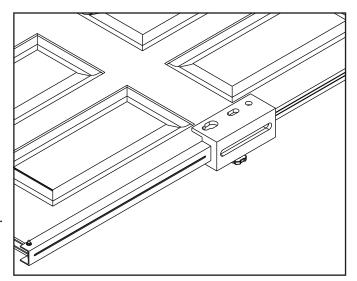
Door Preparation

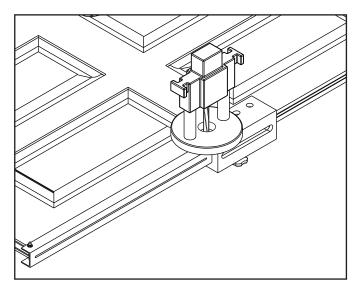
Trim Set Preparation Cut Trim Set Holes

Using the same cross mortise jig set up, place the door laying flat on a table to ease this portion. Reset the plunge router bit to allow the guide to rest completely flat on the face of the jig and route all holes through the face of both sides of the door panel.



CAUTION: The router bit will extend past the base of the router. Make sure the router is sitting firmly in the jig before starting the router. Let the router come to a complete stop before removing from the jig.





Preparation

Lever Style Multipoint Lock Preparation Preparation shown is for Therma-Tru multipoint lock set door preparation only. Jamb preparation is shown in individual unit preparation sections. Use this as a reference guide along with the manufacturer's templates and instructions. Note: Multi-Point Lock Systems recommended only for Fiberglass Products including: Classic-Craft, Fiber-Classic, and Smooth-Star. Deadbolt Spacing Handle Height 6/6, 7/10 - 33.452" 6/8, 7/0, 8/0 - 36.000" Crossbore Diameter 1.750" 45mm .500 Crossbore Slot 2.604 .255" R Handle 1.006" 4.411" Crossbore Slot .406" R 5.281

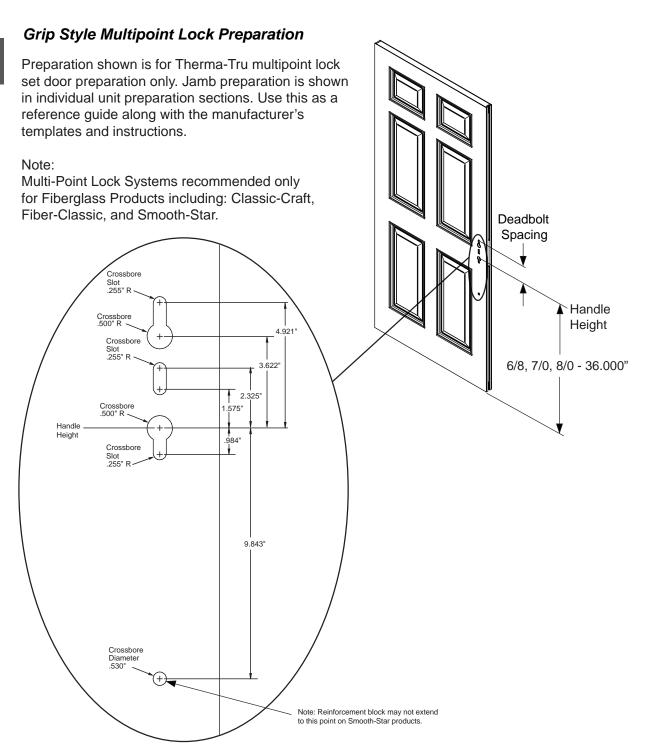
Lever Style Multipoint Lock Preparation

Crossbore Slot .255" R

Note:

No Eurogroove or Gear Mortise for Dummy Lock.





Grip Style Multipoint Lock Preparation

Lever Style Manual Tongue System

Preparation

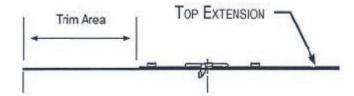
The Lever Style Manual Tongue Bolt system is used for all single and sidelite unit configurations. This system requires a lower gear and a top extension only. The faceplate of these parts is trimmable up to the screw hole above or below the tongue mechanism.

Lever Style Tongue Bolt Trimming Specifications

Door Slab Height	Gear Part Number	Maximum Trim	Top Extension Part Number	Maximum Trim
(6/6) 76.75" - 64.25"	MPDGARTP	2"	MPARTTE68U	8"
(6/8) 79.25" - 66.75"	MPDGART	4.5"	MPARTTE68U	8"
(7/0) 83.25" - 70.75"	MPDGART	4.5"	MPARTTE70U	8"
(8/0) 95.25" - 84.25"	MPDGART	4.5"	MPARTTE80U	6.5"

Notes:

- 1. Trimming of bottom gear will change the handle height on door. Determine the desired handle height before machinging for lockset.
- 2. Trimming of top extension will **not** change handle height on door.
- 3. The extensions can be trimmed as desired as long as there is a screw hole left beyond the tongue mechanism for secure mounting.





Door Preparation Both the Shootbolt System and the Tongue Bolt systems were designed to be easily modified in height for use with cut down doors. Therma-Tru multi-point lock hardware is made from a weather resistant 300 series stainless steel, so the number of parts you need to modify for production will determine what methods you will use to trim them with.

Very Low Volume

- Bolt Cutter
- Hack Saw Carbon steel fine tooth blade
- Grinding Wheel

Moderate Volume

• Band Saw - High Carbon steel fine tooth blade

Manual Shootbolt System - Variable Height Option

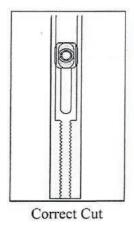
The Variable Height Shootbolt System is used primarily for double door units. This system requires a middle extension (MPMESB) and a trimmable top extension in addition to a standard Shootbolt system gear. The trimmable top extensions and their usage by door height are listed below.

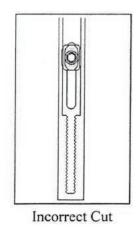
Shootbolt System Trimmable Top Extensions

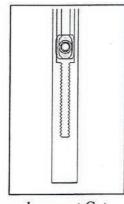
Door Slab	Part Number	Extension Length	Maximum Trim
76.61" - 80.55"	MPTE8611	15.75"	3.94"
82.52" - 86.46"	MPTE8619	21.56"	3.94"
88.43" - 92.36"	MPTE8627	27.56"	3.94"
91.38" - 95.31"	MPTE8631	30.51"	3.94"

Notes:

- 1. When cutting the top Shootbolt extension, the faceplate must be cut to the exact length as the distance from the top of the door to the middle extension faceplate for a precise connection seam.
- 2. Make sure to have at least 1.24 inches of serrations left on the drive rail to make a good connection.
- 3. Be sure to have the end of the drive rail pulled even with the faceplate before cutting the top extension. **See illustration below.**







Incorrect Cut

Grip Style Manual Tongue System

Preparation

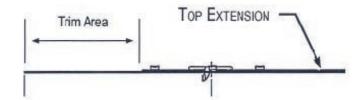
The Grip Style Manual Tongue system is used for all single and sidelite unit configurations. This system requires a lower gear and a top extension only. The faceplate of these parts is trimmable up to the screw hole above or below the tongue mechanism.

Grip Style Manual Tongue Trimming Specifications

Door Slab Height	Gear Part Number	Maximum Trim	Top Extension Part Number	Maximum Trim
(6/8) 79.047" - 65.25"	MPGSGTG	5"	MPGSGTE68	9"
(7/0) 83.047" - 65.25	MPGSGTG	5"	MPGSGTE70	13"
(8/0) 95.047" - 82.75	MPGSGTG	5"	MPGSGTE80	7.5"

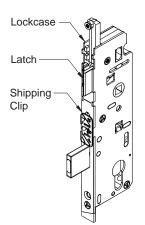
Notes:

- 1. Trimming of bottom gear will change the handle height on door. Determine the desired handle height before machinging for lockset.
- 2. Trimming of top extension will **not** change handle height on door.
- 3. The extensions can be trimmed as desired as long as there is a screw hole left beyond the tongue mechanism for secure mounting.

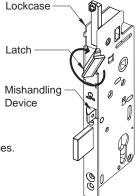




LATCH AND MISHANDLING DEVICE ADJUSTMENT (LEVER STYLE)



- 1. Remove shipping clip.
- Make sure sloped sides of latch and mishandling device are aligned and will engage the strike plate. If they do not, pull them out until they clear the lockcase and spin 180 degrees, then release back into the lockcase, as shown in image below.
- 3. If done in the shop, replace shipping clip over the mishandling device. If done in the field, do not replace shipping clip.

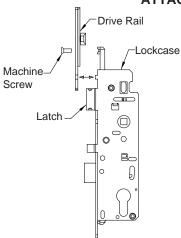




CAUTION:

Do not remove torx screws under any circumstances. They are not a field servicable item.

ATTACHING TOP EXTENSION (LEVER STYLE)



Hook drive rail of top extension into gear linkage just above latch.



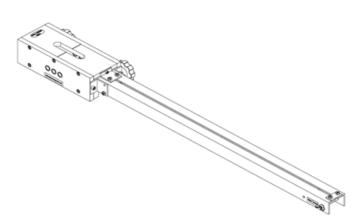
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Step 1- Sidelite Handle/Mortise Jig for the Venting S/L units

Tools Required:

Plunge router with 1/2" bit and 13/16" collar (Provided in door kit) Drill bit 7/16"
Drill bit stop (provided) 1/8" Hex head wrench



Power Tool Notes:

Remember to always follow the safety and operation instructions of the equipment manufacturers.

Using the information given below, determine the handle position. Place the pin in the hole at the bottom that is marked with the correct handle height. Attach the wing nut to the pin to secure it in place.

Set the router plunge depth to 50.5mm (1.988").

Slide the drill stop over the 7/16" drill bit and then rest the bit on the top of the jig. The bit should extend to a depth of 31.75mm (1.250") or 1-1/4" into the sidelite. Tighten the stop with a 1/8" hex head wrench. Adjust if needed after you first use.

Note: With a sidelite system the thumb turn is on the interior side only. As a safeguard the jig has this instruction etched on the top. Drill from the **interior side only.**

Slide the jig over the lock stile of the sidelite such that the locator pin is resting against the bottom rail.

Ensure the base of the jig is sitting flat on the sidelite. The handle placement arm does not sit on the panel. Do not push down on that since it may tip the base slightly. Turn both black knobs until the jig is firmly clamped to the panel. **Do not over tighten**.

Using the 7/16" drill bit with drill stop, bore the 3 handle holes on the inside surface of the door. **Do not drill all the way through the sidelite.**

Plunge route the top slot to a depth of 33.5mm (1.3") or 1-15/16". For best results, use multiple passes to avoid chipping out the wood.

Remove jig, clean out the saw dust, and install multipoint locking hardware and thumbturn.

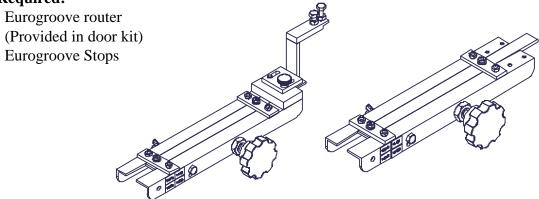
UNIT SIZE	HANDLE HEIGHT
6/6	33.452"
6/8, 7/0, 8/0	36.000"



Step 2 - Sidelite Eurogroove Machining

Preparation

Tools Required:



Power Tool Notes:

Remember to always follow the safety and operation instructions of the equipment manufacturers

Using the information provided below, determine the distance from each end that the Eurogroove should stop.

For lengths less than 5", the wing nut is removed from the two piece jig, which is then clamped to the top surface of the sidelite. The two adjustable nuts are then used for the stop locations.

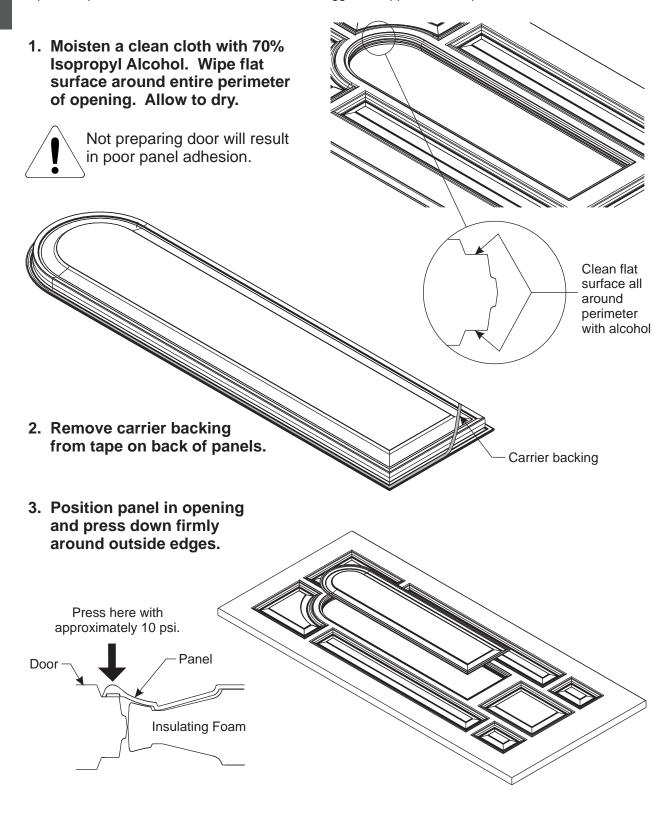
For lengths greater than 5", place the pin with the wing nut in the hole that corresponds with the desired distance. The one piece jig is then clamped to the lock side of the sidelite.

Place the router on the sidelite stile with the bit extending into the hole machined in Step 1. Then machine the Eurogroove, stopping the router when the base plate hits each stop

UNIT	BOTTOM	TOP
SIZE	STOP	STOP
6/6	12.562"	2.394"
6/8	15.110"	2.191"
8/0	15.110"	15.191"

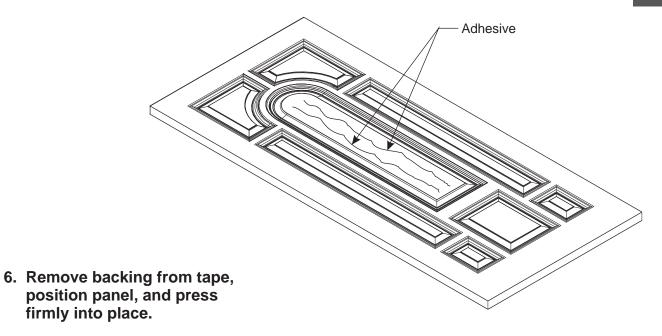


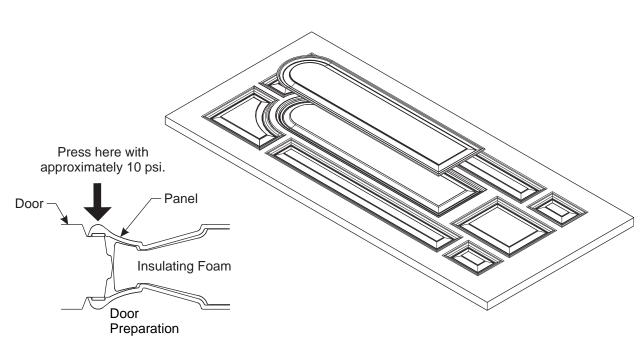
Note: DP300CC used on CC30300 only. DP300CCM used on CCM30300. Temperature range for optimal tape adhesion is 70° to 100°F. Minimum suggested application temperature is 50°F.





- 4. Flip door over.
- 5. Apply two (2) 1/4" 3/8" beads of structural adhesive to back of panel.







Select the correct template to match the door style. Refer to the Cutout Size Reference section.



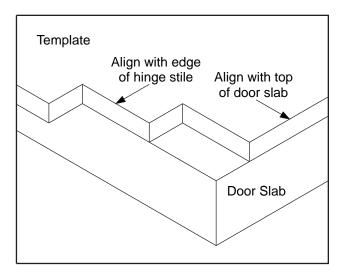
CAUTION:

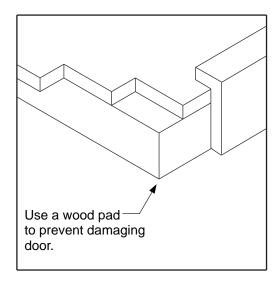
If door was resized, template use may be affected. Template location is referenced from the top of the door and embossed pattern adjustments may be necessary. Template may need to be centered from side-to-side.

Align Template

Place template on door slab.

Align template with top and edges of door using corners or notches in template.





Clamp Template to Door

Clamp mechanism and door support table shown here are typical for Ruvo/Triad door cutout machines.



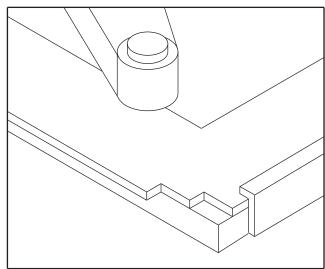
Doorlite and Panel Preparation

Cut Slab for Doorlites or Panels

All templates are designed for use with standard cutout machines. Template openings are offset exactly 1/2" from cutout edges.

Check templates periodically for wear and replace when required. Refer to Door Styles Manual for cutout size specifications.

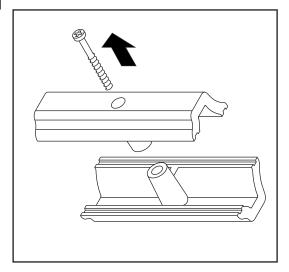
Modify heavily used templates by adding metal or wear-resistant plastic to edges. Relieve template edges to allow for wear plate thickness.







Always place door in HORIZONTAL position before removing lite or panel.



Separate Lite or Panel Frames

Remove screws or staples to separate lite or panel frames.

Apply Glazing Tape to Entire Perimeter of Exterior Frame

If not factory applied, apply foam glazing tape (Part No. RPGLZTP).

DO NOT stretch.

Overlap at corners.

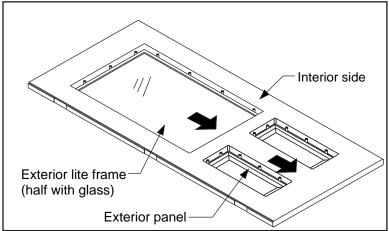
Press on lightly with fingers. Then with a roller tool, fully bond gasket using firm pressure.

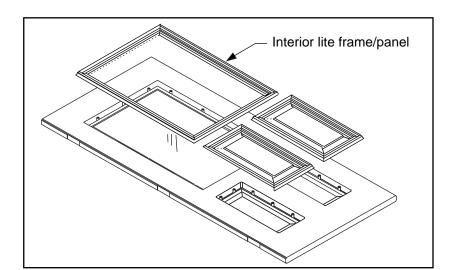


Position Lite/Panel into Opening

Place lites and panels against bottom edge of cutouts to prevent shifting.

Center lites and panels in cutout, side-to-side

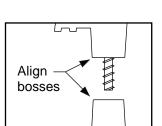




Position Interior Sides of Frames and Panels

Preparation

Ensure correct alignment of screw bosses.



NOTE: When installing multiple lites, use a straight edge to check alignment of lites before securing in place.

Select the Right Screw

Use the correct screw with the appropriate lite frame. (Fasteners are shown actual size.)

For this lite Classic-Craft Doorlite (for molded opening) Part # SCDL000 Classic-Craft Doorlite (for surface mount) Part # SCSMCL Fiber-Classic Doorlite Smooth-Star Doorlite Steel Doorlite



Part # SCDL000

Door Preparation

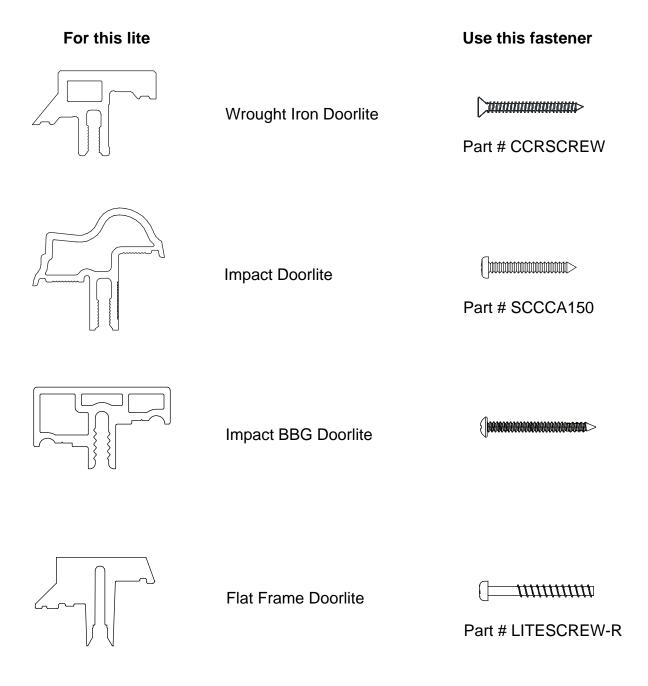
Select the Right Screw

Use the correct screw with the appropriate lite frame.

For this lite Fiber-Classic, Smooth-Star and Steel Doorlites Fiber-Classic, Smooth-Star, Flat Frame, and Steel Doorlites with Screw Bosses and plugs For this panel Use this fastener Part # SCDL000 Use this fastener

Select the Right Screw

Use the correct screw with the appropriate lite frame.



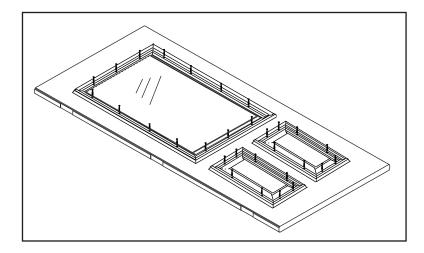


Adjust Screwgun Torque



MAXIMUM AND MINIMUM TORQUE SETTINGS

Doorlite	
Doornte	(in-lbs)
Classic-Craft	9-12
Classic-Craft Wrought Iron & Impact	67-70
Fiber-Classic, Smooth-Star & Steel (with BTS lite frames)	12-14
Fiber-Classic, Smooth-Star & Steel (with PVC lite frames)	7-9



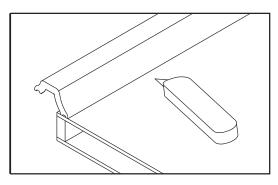
Drive Screws with #2 Phillips Bit

Ensure frame edges are well-seated.

NOTE:

Doorlites may be shipped with only enough screws for safe transport. Additional screws may be made up from bulk supply.

Doorlite Frame Replacement



Remove Glass from Doorlite Frame

Use a heat gun or warm air from a hair dryer to soften glazing compound.

Remove glass by cutting through glazing sealant with utility knife.

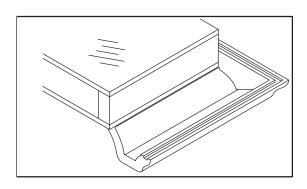
Scrape off glazing sealant as much as possible from glass. Remove the remaining residue *from glass only, the frame should not be reused*, with isopropyl or denatured alcohol.

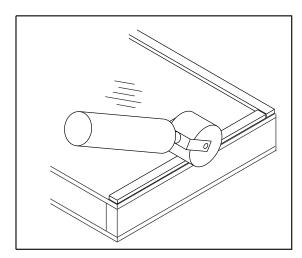
Preparation

Replace Glass and/or Frame

NOTE: Be sure surfaces are clean and dry before applying sealant.

Apply black glazing tape (Part #RPGZGS) directly to the glass edges, taking care to make tight butt joints at corners. **Do not overlap. Do not stretch.**





Remove the protective backing on the black glazing tape.

Align and insert glass onto exterior frame, pressing in place to ensure a good bond.

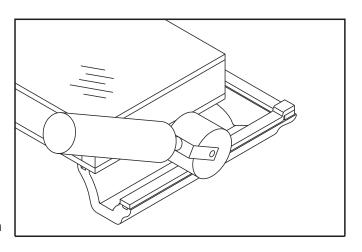
Apply Glazing Tape

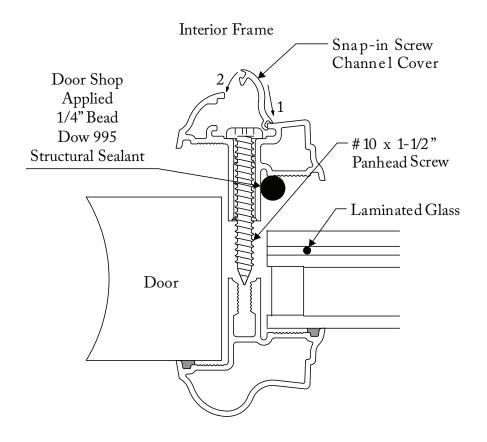
Replace White foam glazing tape if damaged. (Part # RPGLZTP)

DO NOT stretch.

Overlap at corners.

Press on lightly with fingers. Then with a roller tool, fully bond gasket using firm pressure.





Exterior Frame

SCREW CHANNEL COVERS:

- (1) Place short side of miter to inner edge of frame.
- (2) Rotate cover down snapping long side of miter into place.

NOTE: Fine tuning of lengths may be needed to acquire optimal fit.

The <u>interior frame only</u> must be wet glazed to door slab and insulated glass unit as shown with Dow 995 structural sealant. Minimum 1/4" beads are required.

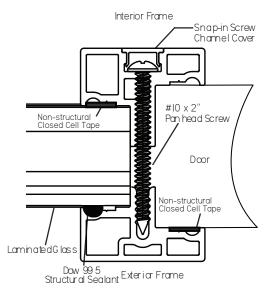
Assemble with #10 x 1-1/2" pan head screws. Screws to be tightened at 70 in the

NOTE: Laminated glass must be facing the interior frame and the structural sealant.



INSTALLATION REQUIREMENTS

THERMA TRU® DOORS



To meet certified Design Pressure Ratings, the exterior frame must be glazed to the insulated glass unit as shown with Dow 995 structural sealant.

Assemble with #10 x 2" pan head sheet metal screws. Screws to be tightened to 70 in-lbs.

Apply a bead of caulk or silicone to tape joint on exterior frame before installation into door.

NOTE: Laminated glass must be facing the exterior frame and the structural sealant.

SCREW CHANNEL COVERS:

- (1) Align one mitered corner.
- (2) Using a rubber mallet, tap in cover evenly along the length.

THERMA-TRU DOORS • Technical Services Department 1750 Indian Wood Circle • Maumee, Ohio 43537 1-800-THERMATRU (1-800-843-7628)• www.thermatru.com

LABEL TO BE REMOVED BY
INSTALLER ONLY

11/12/18 DLLBLHINS

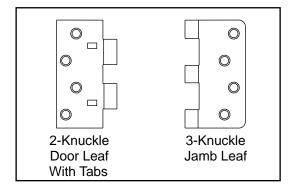
Impact BBG Frame

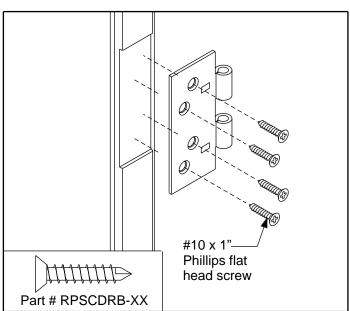


Use the Correct Leaf

Leaves applied to door have 2 knuckles.

Leaves applied to jamb have 3 knuckles.



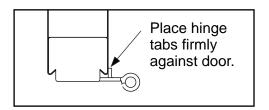


Pass-Through Mortise

Align and Install Hinges

Place tabs firmly against door skin.

Fasten 2-knuckle hinge leaves with proper screws.



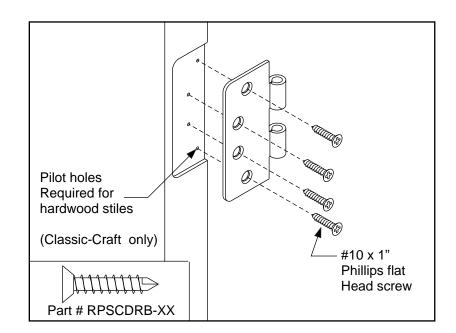
Full Mortise

Align and Install Hinges

Use mortises to properly align 2-knuckle hinge leaves.

Drill 1/8" diameter pilot holes if mounting hinges to hardwood stiles.

Fasten 2-knuckle hinge leaves with proper screws.

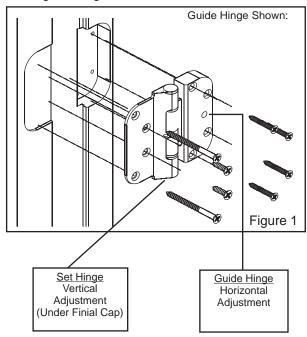




Adjustable Hinges

Required Tools

- **1.** A 3/16" hex wrench is required.
- 2. A small flat head screwdriver is required.
- **3.** A plastic putty knife is recommended to prevent damage to hinge finish.



There are two types of Adjustable Hinges on each door panel:

- **1. <u>Set Hinge</u>**: one per panel. The set hinge provides ± 0.12" vertical adjustment.
- 2. <u>Guide Hinge</u>: Two or three per panel. The guide hinges provide ± 0.12" horizontal adjustment. The two Guide Hinges go in top and bottom locations with the Set Hinge in the center. For 8' door the Set Hinge is located second from top of door. Refer to Figure 2.

Assembly Information

- 1. Insert the thick side of the hinge into the hinge mortise on the door.
- **2.** Pre-drill 3/32" diameter pilot holes through hinge holes.
- 3. Fasten with (4) #8 x 1-1/4" flat head screws refer to Figure 1.
- 4. Place hinges into hinge mortise on the frame.
- 5. Seat hinge to back of machined hinge pocket.
- **6.** Fasten with (2) #10 x 3/4" flat head screws in the middle of each hinge.

Fasten the top & bottom holes with (2) 2-1/2" flat head screws

Adjustable Hinge Placement on Door Guide Guide Set Guide Guide Guide Guide 7/10 to 8/0 height doors Figure 2

Vertical Adjustment (Set Hinge)

With the door closed or open

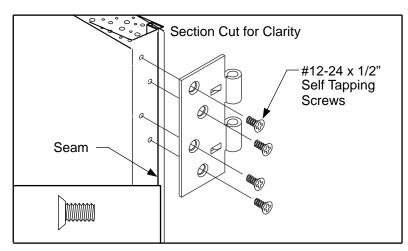
- 1. Remove the press-fit Finial Cap from the bottom of the Set Hinge to expose the adjustment screw. Use the small screwdriver for Set Hinges featuring a plastic Finial Cap. A plastic putty knife is recommended for Set Hinges featuring a brass Finial Cap.
- 2. Insert the hex wrench into the bottom of the Set Hinge. Turn the screw clockwise to raise the panel and counterclockwise to lower the panel.
- 3. Reinstall the Finial Cap.

Horizontal Adjustment (Guide Hinge)

The door must be open to access the adjustment screw.

- 1. Insert a 3/16" hex wrench into the horizontal adjustment screw.
- **2.** Turn clockwise to decrease the margin and counterclockwise to increase the margin on the hinge side.





Surface-Mounted (90-Minute Fire Door)

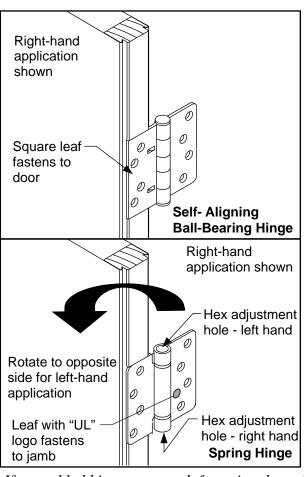
Align and Install Hinges

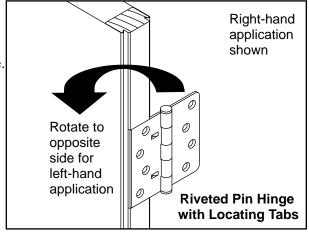
Use pilot holes to align 2-knuckle hinge leaves.

Fasten 2-knuckle hinge leaves with proper screws.

Considerations for Assembled Hinges

Riveted-pin hinges have locating tabs. Fasten to slabs using same method as for unassembled hinges, placing tabs against door face to locate hinge.







For wood-edged doors with pass-through hinge mortises, take care to place correct leaf on door edge, and fasten at correct backset, for alignment. (Backset is 1-3/8")

To apply these hinges to wood-edged doors, use a template and mark screws or bore 3/32" diameter pilot holes.

A standard hinge leaf with locating tabs can also be used as a template, if a vix-bit is used to center the pilot holes in the centers of the hinge holes.

If assembled hinges are used, fastening door slabs to frames will require that the slabs be first fastened to loose hinge jambs, with the rest of the frame and sill then being built around the slab.



Astragal Installation



CAUTION: THIS SECTION APPLIES ONLY TO:



French (Wide Patio Mullion only)



French with Two-Sidelite Units (Wide Patio Mullion only)

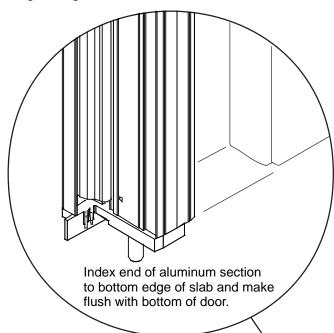


French with
Two Vented Sidelites
(Wide Patio
Mullion only)

Aluminum Astragal

Set Astragal on Door

Align astragal to slab which is to be "fixed".



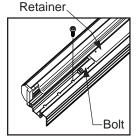
Drill and Secure Astragal

Drill through mounting holes in astragal into fixed door using 1/8" dia. bit.

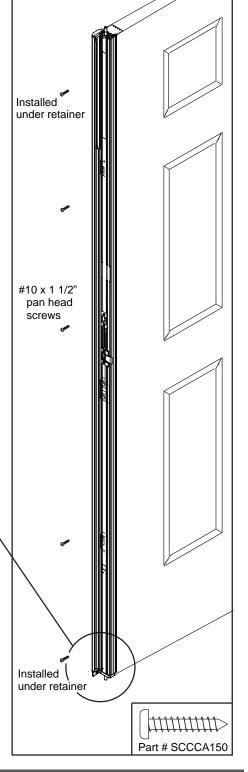
*For astragals with 17" slide bolts:

Slide the bolts and retainers toward the center of the astragal to expose the mounting holes at each end. Install the two #10 x 1-1/2" end mounting screws first (per diagram). Then replace the retainers flush with the astragal ends and tighten set screws.

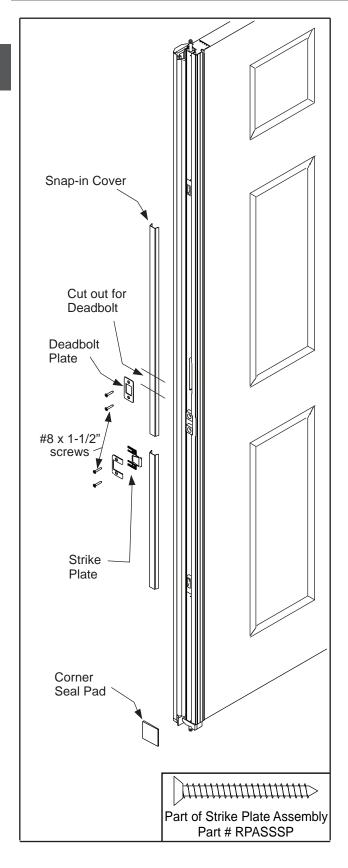
Finish securing astragal to door lock edge through pre-punched mounting holes with three additional (Six for 8/0 astragals) provided #10 x 1 1/2" pan head screws. (Note: upper and lower mounting screws also secure bolt spring clip.)











Aluminum Astragal

Fasten Strike Plate Assembly

Position strike mount at latch centerline.

Tape strike mounts temporarily in place thru strike slot.

Fasten Strike Plates

Fasten strike plate with (2) #8 x 1-1/2" screws Provided.

If deadbolt is used, mark the deadbolt centerline and position deadbolt plate on the astragal.

Holding the deadbolt plate in place, predrill 2 mounting holes using a 3/32" drills.

Fasten the deadbolt plate with (2) #8 x 1-1/2" screws provided.

Apply Snap-in Cover

If deadbolt is used, mark centerline of bolt and cut long snap-in cover to allow bolt to engage in aluminum extrusion.

Place longer snap-in cover with top of strike plate and snap into place.

Align shorter snap-in cover with bottom of strike plate and snap into place.

Apply Corner Seal Pad



CAUTION:

Corner seal pads are only used with inswing units.

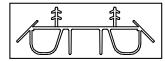
Apply corner seal pad against weatherstrip with bottom edge in line with bottom edge of seal.



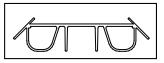
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Select Door Bottom



Dual Bulbed Kerf-Applied Door Bottom



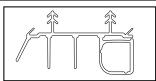
No Kerf

Compatible sill types:

- Any Composite Adjustable
- Hardwood Adjustable
- · Basic Composite Adjustable Inswing Sills



Door Bottom

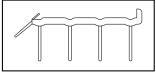


Kerf-Applied

- · Basic Fixed Sill
- Expandable Steel Frame Sill (Inswing & Outswing)



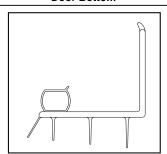
Door Bottom



Sweep/Replacement Door Bottom

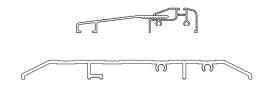
- Any sill
- · Public Access Sill
 - Primarily used as a replacement door bottom
 - Used on cutdown doors when kerfs are trimmed away.

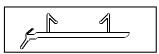




Fire Door Bottom

- Public Access Sill
- Standard Adjusta-Fit 2
- Adjusta-Fit 2 Steel Frame Sill

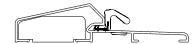




Outswing Kerf-Applied Door Bottom

Recommended

• Outswing Sills with exception of Composite Fixed







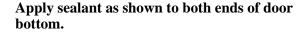
CAUTION:

Outswing units with bumper sills do not require door bottoms.

Kerf Door Bottoms

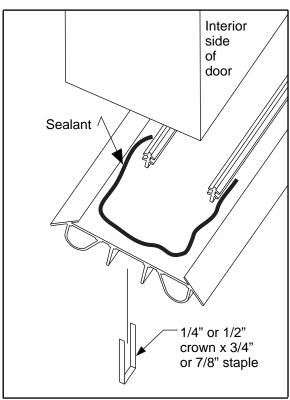
Caulk and Fasten Door Bottom

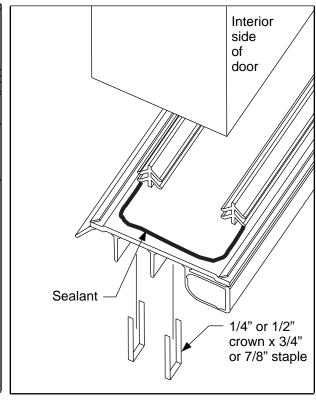
Select a sealant (Elastomeric or Polyurethane) that provides excellent adhesion to both plastic and wood.

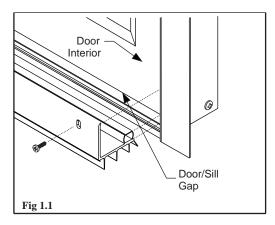


Center door bottom and press into rail kerfs.

Fasten ends of door bottom with (2) 1/4" or 1/2" crown x 3/4" or 7/8" staple on each end.







'90-Minute Fire Door' Door Bottom

Fasten Door Bottom

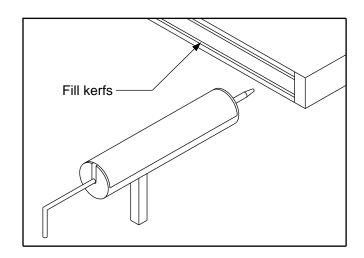
Slide door bottom between door and sill. Align at ends and against inside face with lip. Screw door bottom in place with (5) # 8 x 1/2" self piercing spear tip screws beginning in the center and working out to ends.

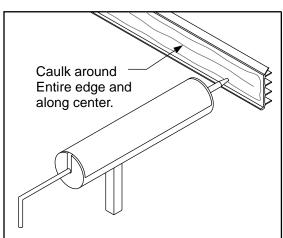


Sweep/Replacement Door Bottom

Fill Kerfs with Sealant

Fill kerfs in bottom rail with sealant (Elastomeric or Polyurethane) if working with trimmed door and shallow kerfs.





Caulk Sweep/Replacement Door Bottom

Select a sealant (Elastomeric or Polyurethane) that provides excellent adhesion to both plastic and wood.

Apply bead of sealant (Elastomeric or Polyurethane) to entire edge and center of the door.

Fasten Door Bottom

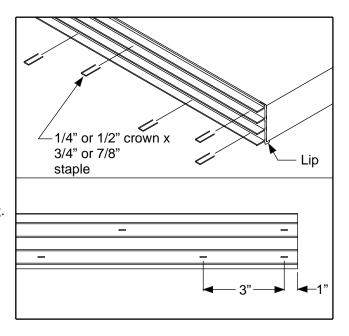
Place door bottom against rail.

Align at ends and against inside face with lip.

Staple in place, beginning at center.

Work toward each end and fasten as shown. Press flat to avoid scalloping.

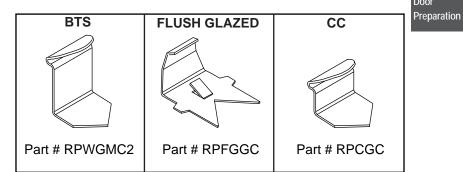
Staple twice at each end as shown.



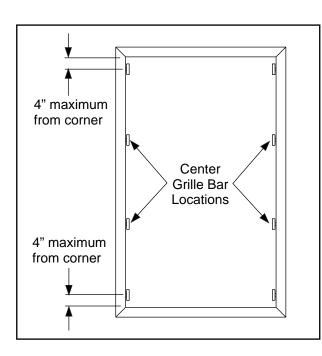


NOTE: Wood Grilles are for internal use only.

Grilles come complete with clips.



SPRING STEEL CLIPS



Position Clips

Locate clips on vertical sides of frames 4" maximum from each corner and at center grille bar locations.

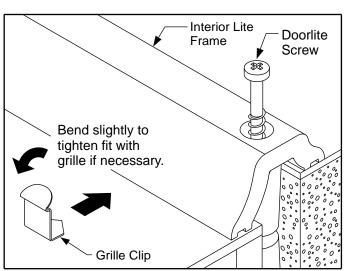
Installation for Lite Frames

Install Clips

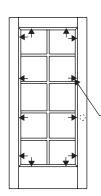
Loosen doorlite screws slightly.

Slide flat side of clips under interior side of doorlite frame.

Retighten screws.





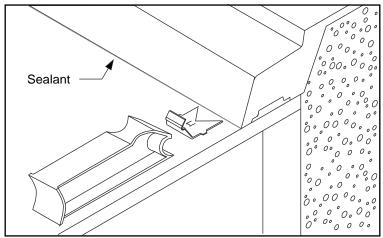


Installation for Flush-Glazed Doors

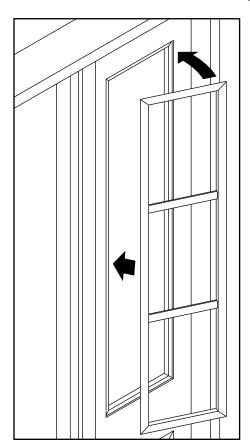
To assure proper installation, carefully remove any excess sealant at glass edge before installing grille clips.

Insert steel spring clips between stop and glass at the locations shown. AVOID PUTTING CLIPS IN LINE WITH MUNTINS HORIZONTAL AND VERTICAL GRILLE BARS. (Note: number of clips may vary from shown due to grille size and door style.

Use the installation tool as shown to push the clip completely into the locked position.



Section Cut for Clarity



With all the clips installed, insert grille against clips on one side. Gently push opposite side of grille against glass, locking all clips into frame. Remember to gently press the top and bottom of the grille against the glass.

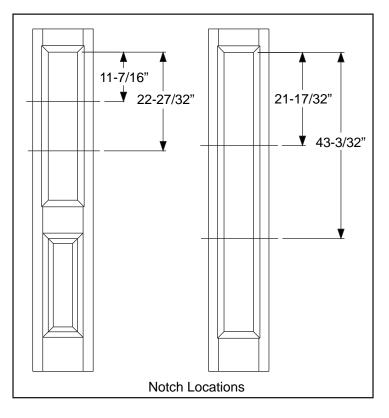
Clips will be hidden when grille is inserted.

To remove, gently pull away from the glass surface at one long side of the grille where the muntins meet the grille frame.

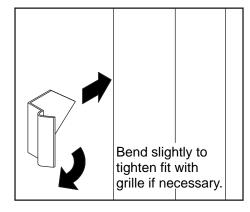


<u>Installation for Flush-Glazed</u> Classic-Craft[®]

Locate grille clips under molding edges where molding meets glass.



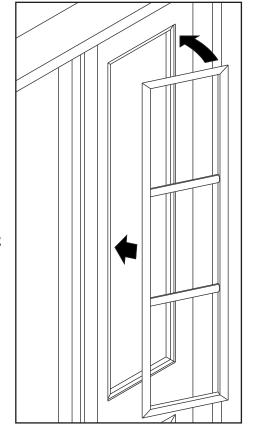
Door Preparation



Insert grille clips by sliding in spade edge of clip under molding and press clip all the way in.

Insert grille into door, placing one long side against hardware.

Snap into place along all other sides.



Lite Divider Installation (Classic-Craft American Style & Canvas)



Door Preparation

NOTE:

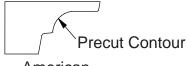
TEMPERATURE RANGE FOR OPTIMUM TAPE ADHESION IS 70 TO 100 F. MINIMUM SUGGESTED APPLICATION TEMPERATURE IS 60 F. THE DOOR AND DIVIDERS ARE TO BE IN THIS TEMPERATURE RANGE. ALLOW 72 HOURS FOLLOWING APPLICATION FOR FULL BOND STRENGTH OF TAPE ADHESIVE.

- **1.** Remove black tape from both sides of the glass (if present), as indicated on the glass label.
- **2.** Moisten a clean cloth with 70% Isopropyl Alcohol. Wipe both sides of glass as shown at right.

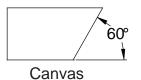


NOT PREPARING THE GLASS OR DOOR PANEL WILL RESULT IN POOR TAPE ADHESION.

3. Bars to be used from precut packs.







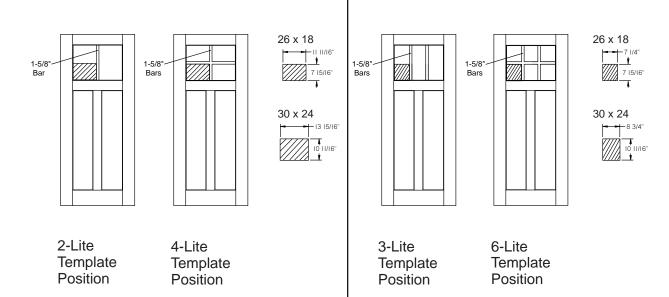
- 4. Lay out dividers in desired pattern in the opening. To allow for expansion or contraction, there should be 0.015" - 0.020" clearance on each side (use a business card as a shim)
- **5.** Position template according to the diagrams in the following pages.
- 6. Working with vertical dividers first, remove carrier backing from the divider. Apply all vertical dividers BEFORE applying horizontal dividers. NOTE: ADHESIVE IS NOT REPOSITIONABLE
- Position divider, adhesive side toward the glass, using the template as a guide for placement.
 You may need to slide template across area to ensure a straight application.
- Press firmly to the glass to secure adhesive.Always use a J-Roller over the fully positioned dividers to meet required adhesion.
- **9.** Apply remaining dividers in the same manner. (Repositioning the template where applicable)
- 10. Repeat the same installation steps for the other side of the door. On units with glass, always work from the same edge of the door. (lock or hinge) for vertical bars to ensure alighment inside and out.

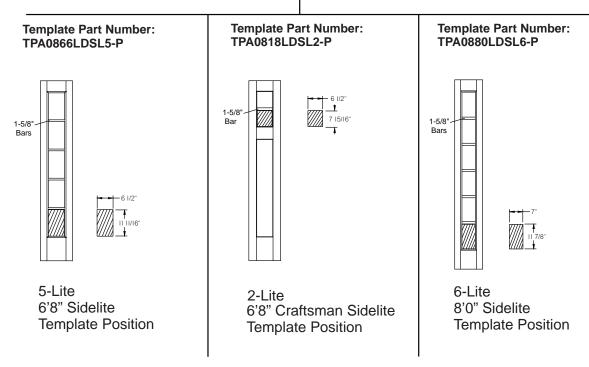


Lite Divider Installation (Classic-Craft American Style & Canvas)

Template Part Number: TPA2618LD2-P for 26 x 18 TPA3024LD2-P for 30 x 24 Template Part Number: TPA2618LD3-P for 26 x 18 TPA3024LD3-P for 30 x 24

Door Preparation







Door Preparation

NOTE:

TEMPERATURE RANGE FOR OPTIMUM TAPE ADHESION IS 70 TO 100 F. MINIMUM SUGGESTED APPLICATION TEMPERATURE IS 60 F. THE DOOR AND DIVIDERS ARE TO BE IN THIS TEMPERATURE RANGE. ALLOW 72 HOURS FOLLOWING APPLICATION FOR FULL BOND STRENGTH OF TAPE ADHESIVE.

- **1.** Remove black tape from both sides of the slab (if present), as indicated on the glass label.
- **2.** Moisten a clean cloth with 70% Isopropyl Alcohol. Wipe both sides of glass or door panel as shown at right.



NOT PREPARING THE GLASS OR DOOR PANEL WILL RESULT IN POOR TAPE ADHESION.

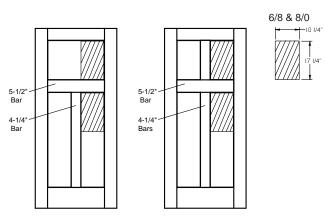
- 3. Horizontal dividers can be used from precut packs or cut from lineals. Vertical or diagonal dividers to be cut from lineals. For best quality, cut tape side down. Fiberglass bars should be trimmed on a dedicated double bevel compound miter saw with an extra fine finish carbide blade. Min. tooth counts as follows:
 - 10" blade = 80 tooth or 12" blade = 96 tooth.
- **4.** Lay out dividers in desired pattern in the opening.

 To allow for expansion or contraction, there should be 0.015" 0.020" clearance on each side (use a business card as a shim)
- **5.** Position template(s) according to the diagrams in the following pages, when applicable.
- 6. Working with horizontal dividers first, remove carrier backing from the divider. Apply all horizontal dividers BEFORE applying vertical or diagonal dividers. Long diagonal dividers must be placed before short diagonal dividers. NOTE: ADHESIVE IS NOT REPOSITIONABLE
- 7. Position divider, adhesive side toward the glass or door panel, using the template as a guide for placement.
 You may need to slide template across area to ensure a straight application.
- **8.** Apply remaining dividers in the same manner. (Repositioning the template where applicable)
- **9.** Press firmly to the glass or door panel to secure adhesive. Always use a J-Roller over the fully positioned dividers to meet required adhesion.
- 10. Repeat the same installation steps for the other side of the door. On units with glass, always work from the same edge of the door. (lock or hinge) for vertical bars to ensure alighment inside and out.

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Template Part Number: TPALD2-P (6/8 and 8/0 Flush Glazed) TPADD2-P (6/8 and 8/0 Opaque)



2-Lite/Panel Craftsman Shaker Template Position

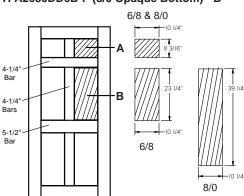
4-Lite/Panel Craftsman Shaker Template Position

Template Part Number:

TPADD6T-P (6/8 and 8/0 Opaque Top) - A TPA2666DD6B-P (6/8 Opaque Bottom) - B

TPA2680DD6B-P (8/0 Opaque Bottom) - B

Preparation

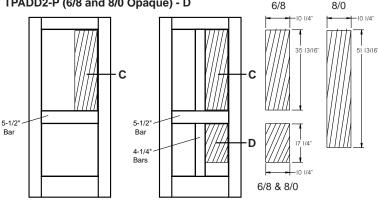


6-Panel Shaker Template Position

Template Part Number:

TPA2666LDST-P (6/8 Flush Glazed) - C TPA2666DDST-P (6/8 Opaque) - C TPA2680LDST-P (8/0 Flush Glazed) - C

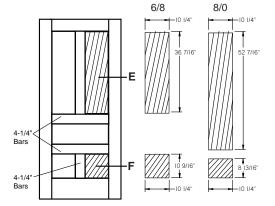
TPA2680DDST-P (8/0 Opaque) - C TPADD2-P (6/8 and 8/0 Opaque) - D



2-Lite/Panel Square Top Shaker 4-Lite/Panel
Square Top Shaker

Template Template Position Position

Template Part Number: TPA2666DD5T-P (6/8 Opaque) - E TPA2680DD5T-P (8/0 Opaque) - E TPA2666DD5B-P (6/8 Opaque) - F TPA2680DD5B-P (8/0 Opaque) - F



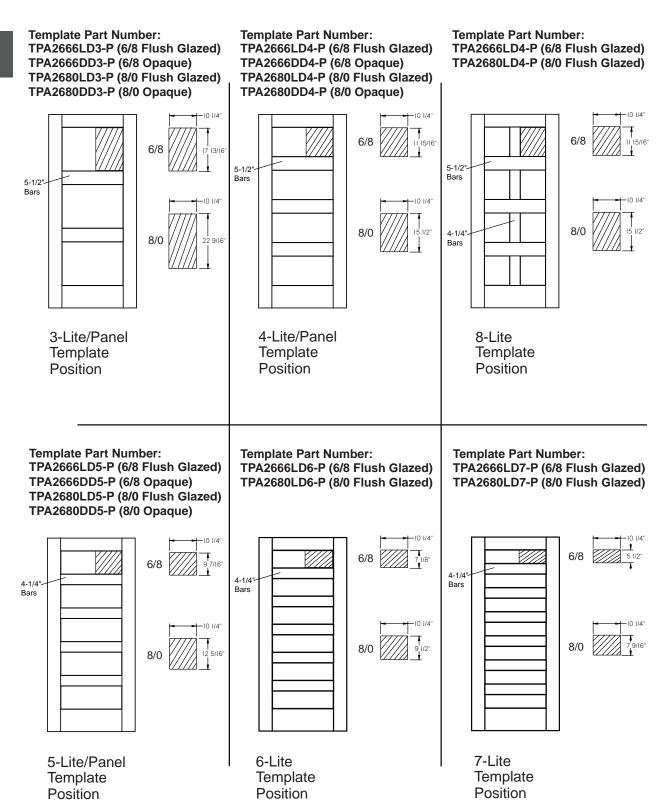
5-Panel

Square Top Shaker

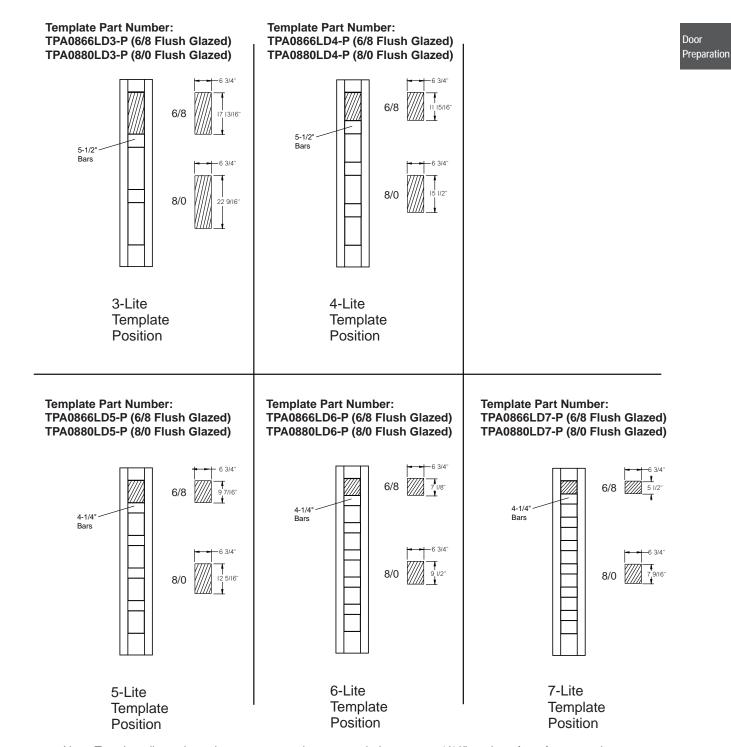
Template Position



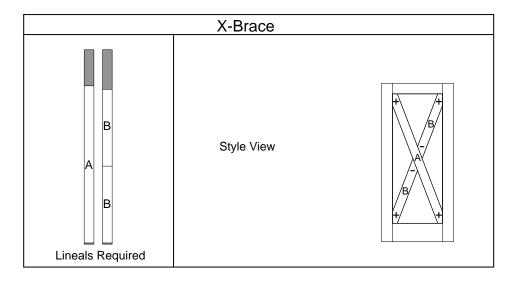
Door Preparation



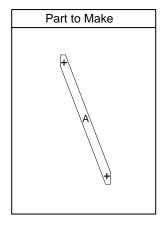


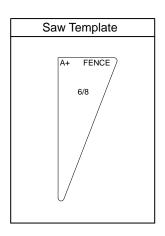


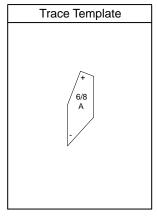


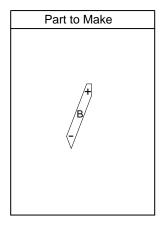


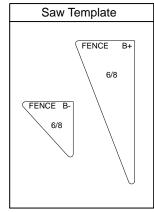
Divider Bars			Width	Length
Long Diagonal	+ A	+	4 - 1/4"	69 - 17/32"
Short Diagonal	+ B -	X2	4 - 1/4"	33 - 15/16"

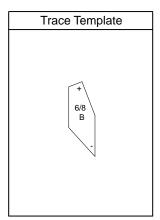






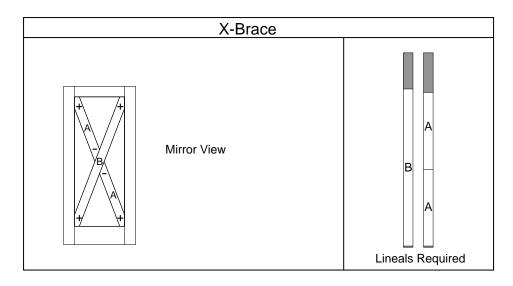




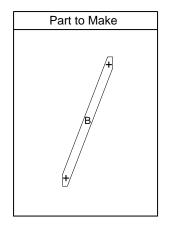


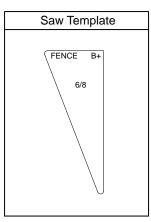


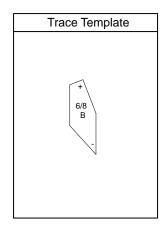
Barn Door Style Reference - Classic Craft American Style Shaker

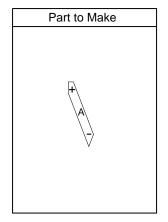


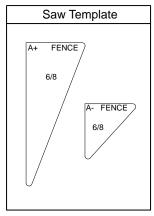
Divider Bars			Width	Length
Long Diagonal	+ B	+	4 - 1/4"	69 - 17/32"
Short Diagonal	+ A -	X2	4 - 1/4"	33 - 15/16"

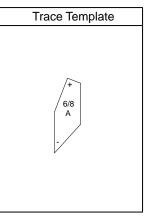




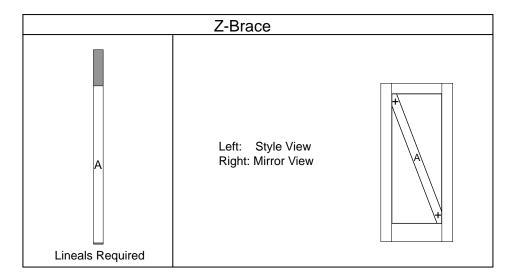




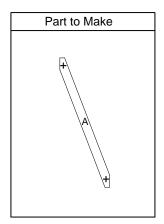


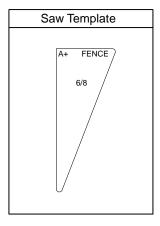


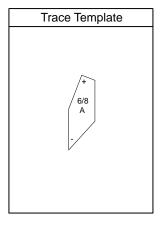




Divider Bars			Width	Length
Long Diagonal	+	A	+ 4 - 1/4"	69 - 17/32"

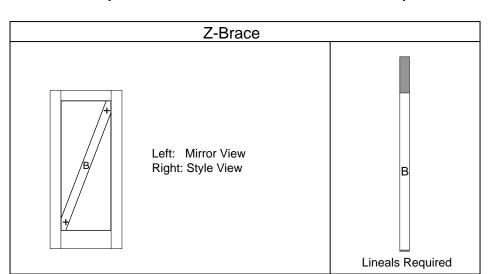




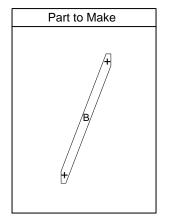


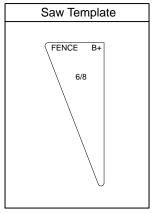


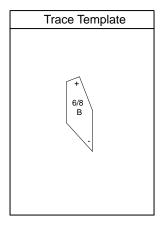
Barn Door Style Reference - Classic Craft American Style Shaker



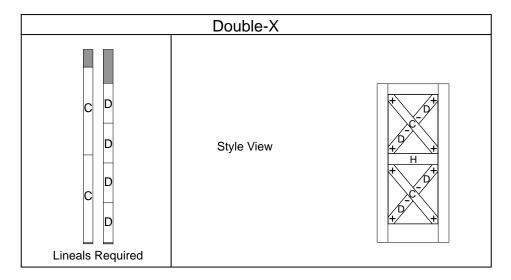
Divider Bars				Width	Length
Long Diagonal	+	В	+	4 - 1/4"	69 - 17/32"



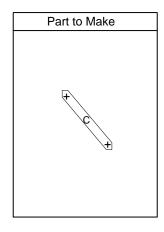


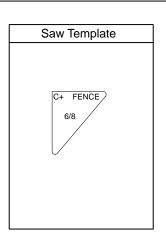


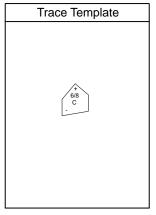


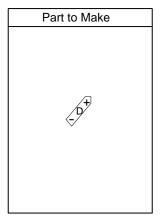


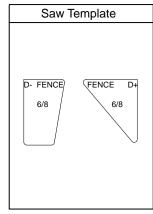
Divider Bars		Width	Length
Long Diagonal	+ C + X2	4 - 1/4"	38 - 27/32"
Short Diagonal	+ D - X4	4 - 1/4"	17 - 5/8"
Horizontal	Н	5 - 1/2"	25 - 1/16"

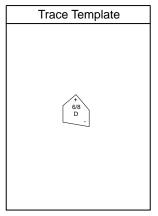






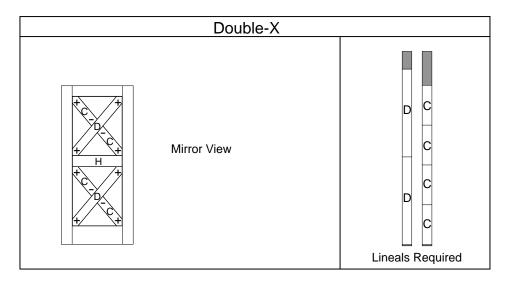




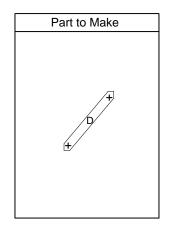


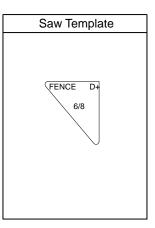


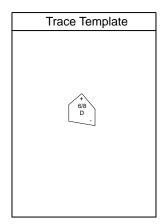
Barn Door Style Reference - Classic Craft American Style Shaker

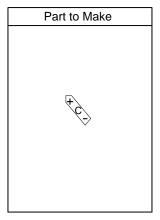


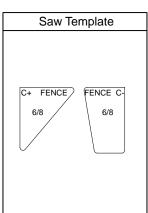
Divider Bars		Width	Length
Long Diagonal	+ D + X2	4 - 1/4"	38 - 27/32"
Short Diagonal	+ C - X4	4 - 1/4"	17 - 5/8"
Horizontal	Н	5 - 1/2"	25 - 1/16"

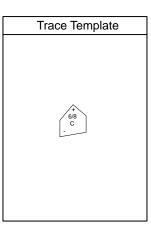




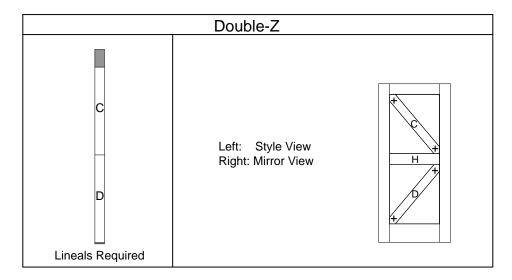




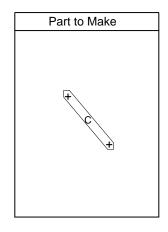


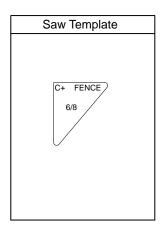




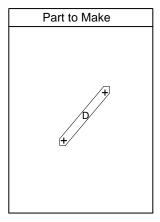


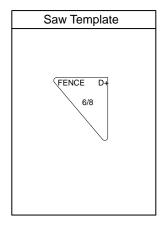
Divider Bars		Width	Length
Long Diagonal	+ C +	4 - 1/4"	38 - 27/32"
Long Diagonal	+ D +	4 - 1/4"	38 - 27/32"
Horizontal	Н	5 - 1/2"	25 - 1/16"

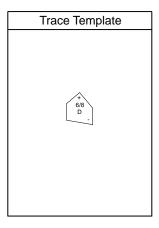






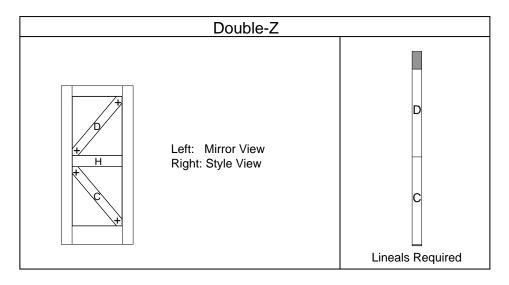




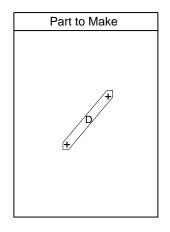


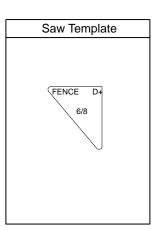


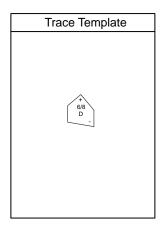
Barn Door Style Reference - Classic Craft American Style Shaker

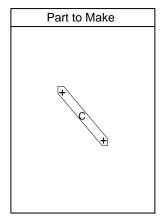


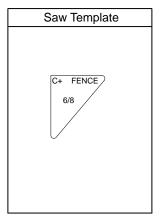
Divider Bars		Width	Length
Long Diagonal	+ D +	4 - 1/4"	38 - 27/32"
Long Diagonal	+ C +	4 - 1/4"	38 - 27/32"
Horizontal	Н	5 - 1/2"	25 - 1/16"

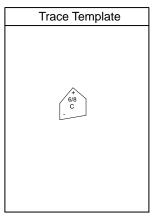




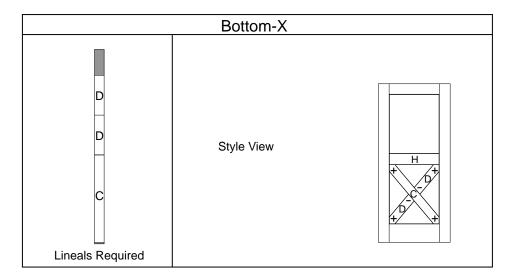




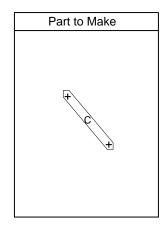


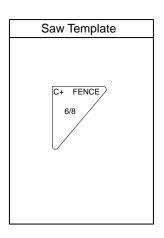


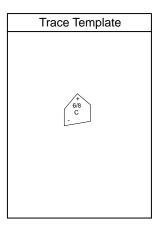


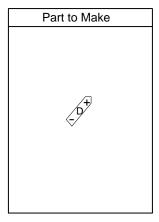


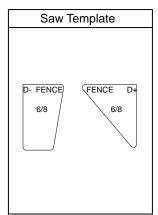
Divider Bars		Width	Length
Long Diagonal	+ C +	4 - 1/4"	38 - 27/32"
Short Diagonal	+ D - X2	4 - 1/4"	17 - 5/8"
Horizontal	Н	5 - 1/2"	25 - 1/16"

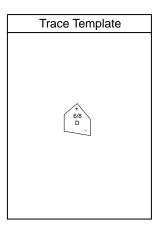






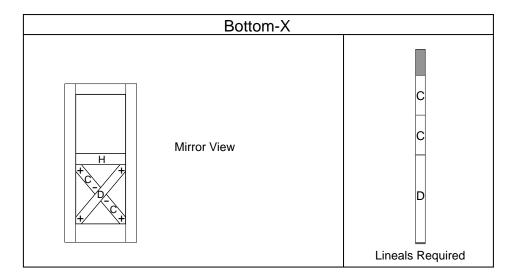




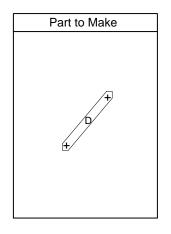


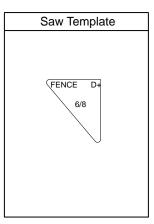


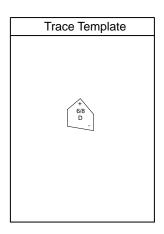
Barn Door Style Reference - Classic Craft American Style Shaker

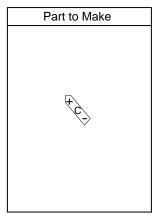


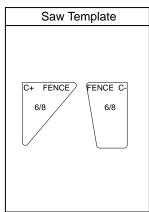
Divider Bars		Width	Length
Long Diagonal	+ D +	4 - 1/4"	38 - 27/32"
Short Diagonal	+ C - X2	4 - 1/4"	17 - 5/8"
Horizontal	Н	5 - 1/2"	25 - 1/16"

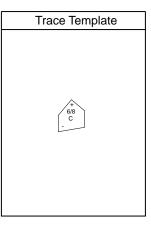




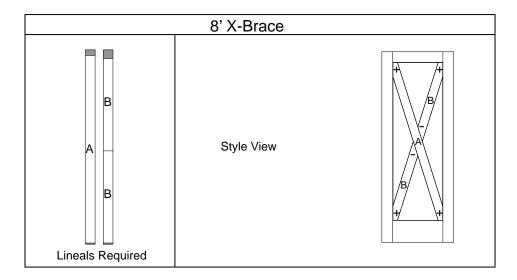




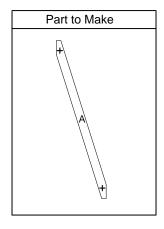


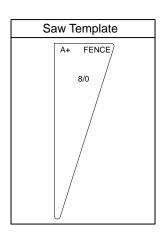


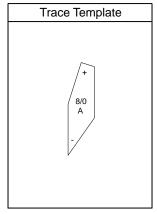


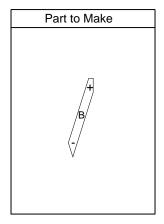


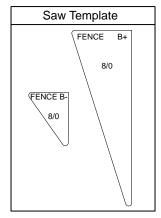
Width	Length
+ 4 - 1/4"	82 - 31/32"
4 - 1/4"	40 - 13/16"
	+ 4 - 1/4"

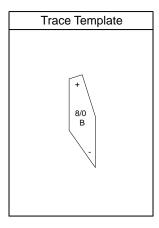






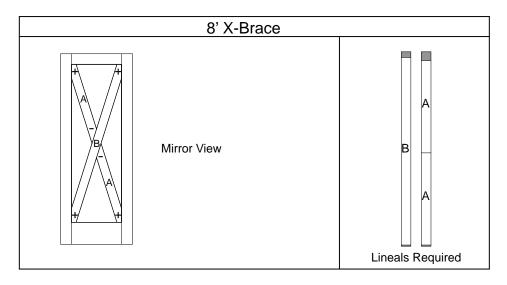




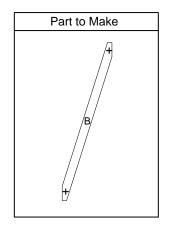


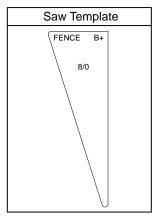


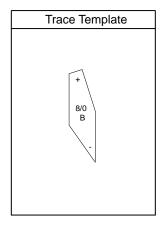


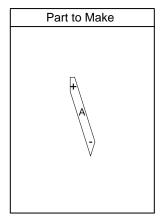


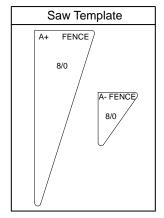
Width	Length
+ 4 - 1/4"	82 - 31/32"
4 - 1/4"	40 - 13/16"
	+ 4 - 1/4"

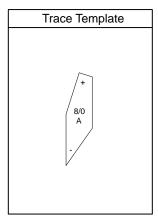




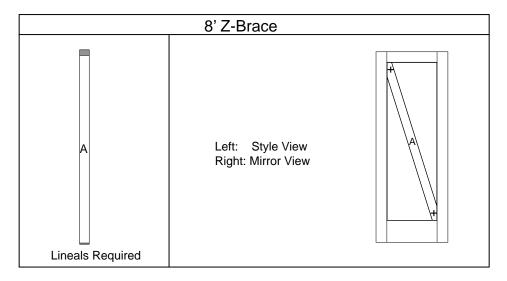




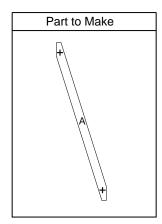


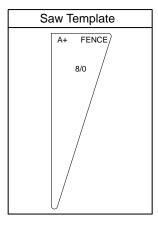


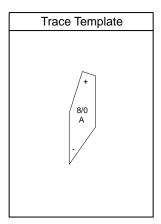




Divider Bars	Width	Length
Long Diagonal + A	+ 4 - 1/4"	82 - 31/32"

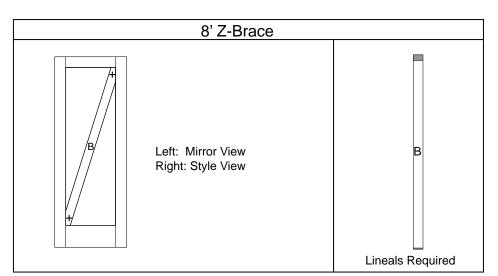




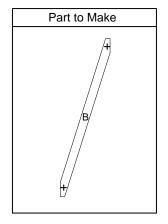


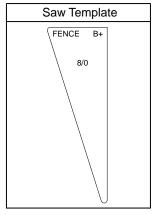


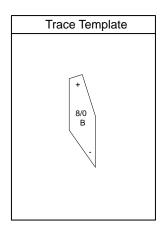
Barn Door Style Reference - Classic Craft American Style Shaker



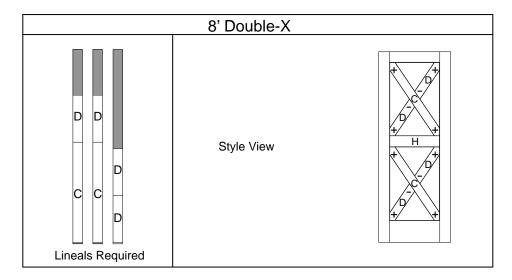
Divider Bars	Width	Length
Long Diagonal + B	+ 4 - 1/4"	82 - 31/32"



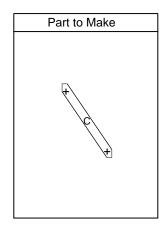


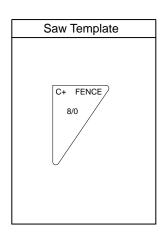


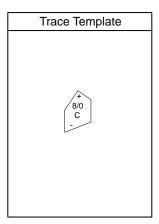


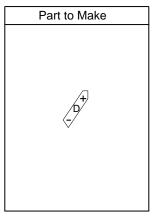


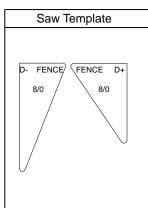
	Width	Length
+ C + X2	4 - 1/4"	44 - 17/32"
+ D - X4	4 - 1/4"	20 - 13/16"
Н	5 - 1/2"	25 - 1/16"
	+ D - X4	+ C + X2 4 - 1/4" + D - X4 4 - 1/4"

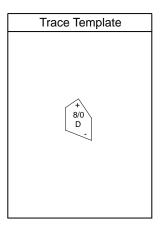






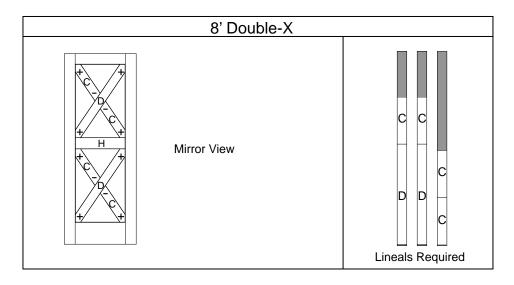




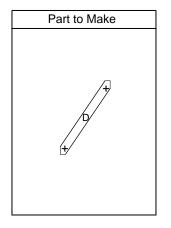


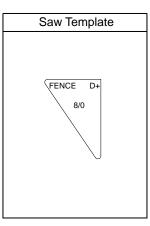


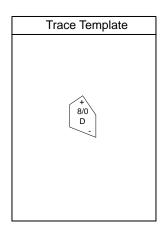
Barn Door Style Reference - Classic Craft American Style Shaker

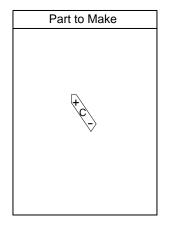


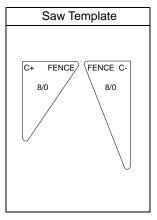
Divider Bars		Width	Length
Long Diagonal	+ D + X2	4 - 1/4"	44 - 17/32"
Short Diagonal	+ C - X4	4 - 1/4"	20 - 13/16"
Horizontal	Н	5 - 1/2"	25 - 1/16"

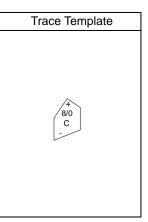




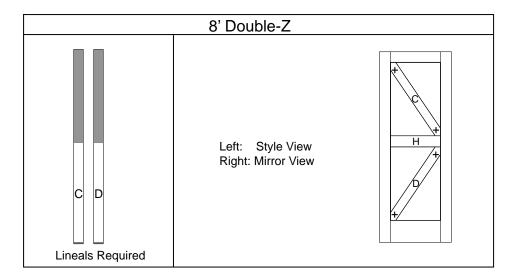




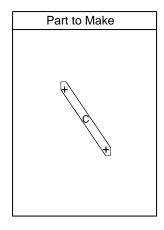


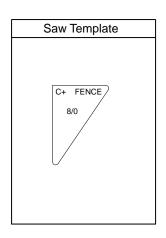


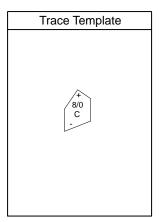


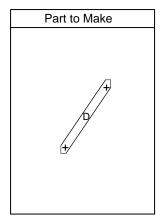


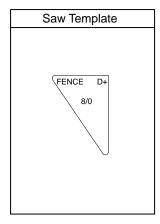
Divider Bars		Width	Length
Long Diagonal		4 - 1/4"	44 - 17/32"
Long Diagonal	+ C +	4-1/4	44 - 17/32
Long Diagonal	+ D +	4 - 1/4"	44 - 17/32"
Horizontal	Н	5 - 1/2"	25 - 1/16"

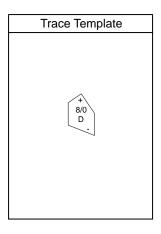






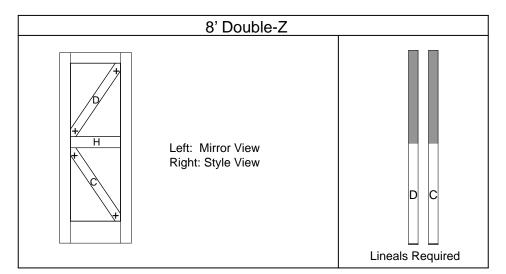




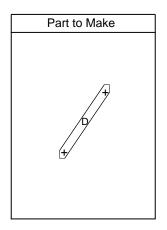


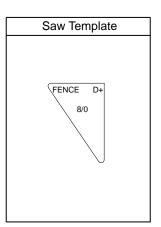


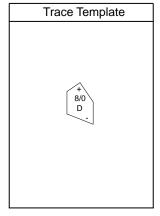
Barn Door Style Reference - Classic Craft American Style Shaker

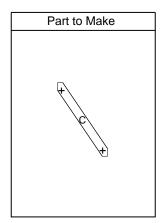


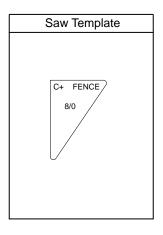
Divider Bars		Width	Length
Long Diagonal	+ D +	4 - 1/4"	44 - 17/32"
Long Diagonal	+ C +	4 - 1/4"	44 - 17/32"
Horizontal	Н	5 - 1/2"	25 - 1/16"

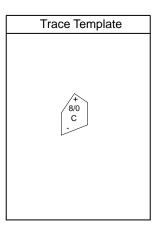




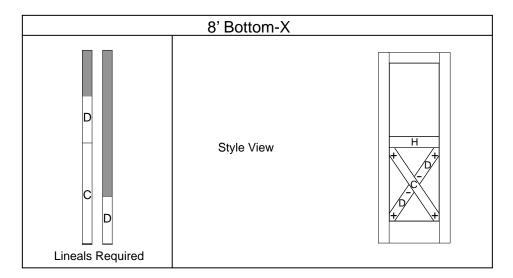




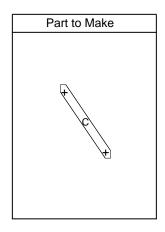


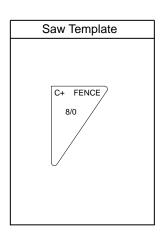


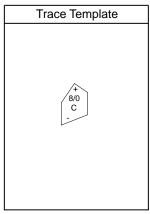


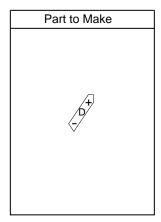


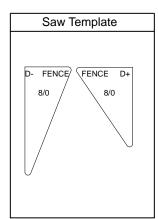
Divider Bars		Width	Length
Long Diagonal	+ C +	4 - 1/4"	44 - 17/32"
Short Diagonal	+ D - X2	4 - 1/4"	20 - 13/16"
Horizontal	Н	5 - 1/2"	25 - 1/16"

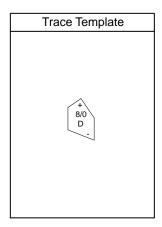








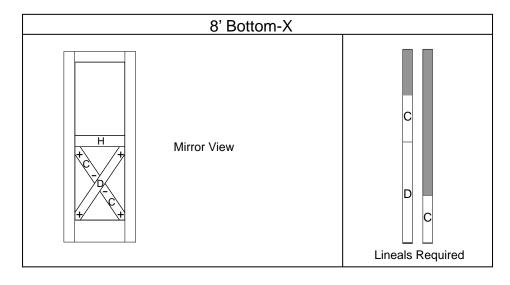




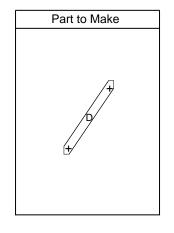


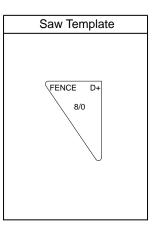
Lite and Door Divider Installation (Classic-Craft American Style Shaker)

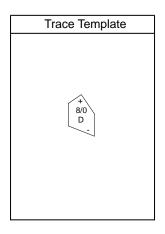
Barn Door Style Reference - Classic Craft American Style Shaker

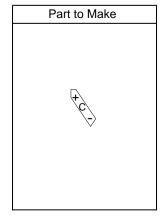


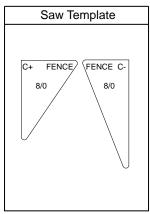
Divider Bars		Width	Length
Long Diagonal	+ D +	4 - 1/4"	44 - 17/32"
Short Diagonal	+ C - X2	4 - 1/4"	20 - 13/16"
Horizontal	Н	5 - 1/ <u>2</u> "	25 - 1/16"

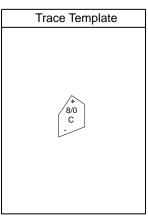






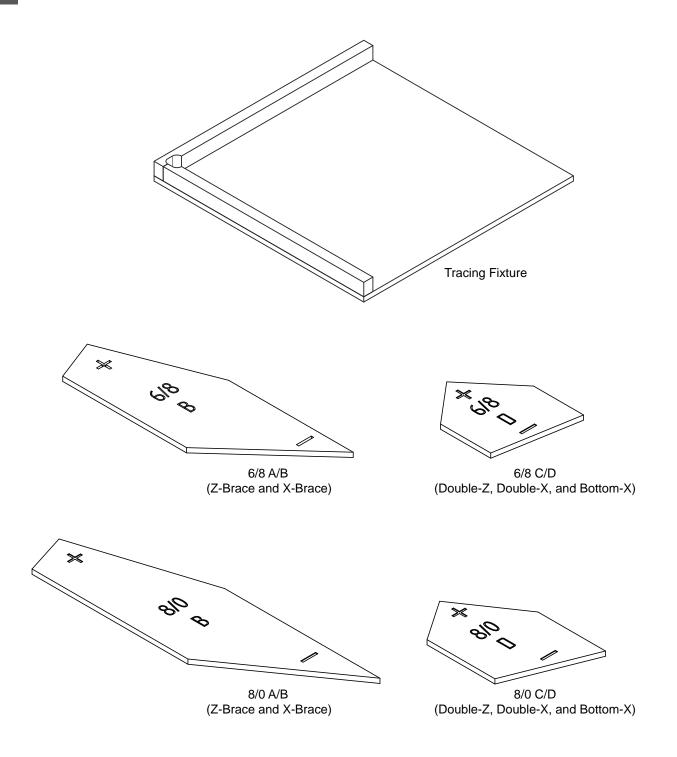








Barn Door Trace Templates - Classic Craft American Style Shaker

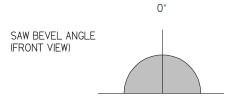


Lite and Door Divider Installation (Classic-Craft American Style Shaker)

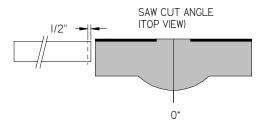
Barn Door Divider Fabrication - Classic Craft American Style Shaker

Preparation

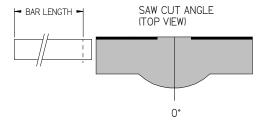
- 1. Refer to Barn Door Style Reference Pages, to identify the quantity of lineal bars, labeling instructions, cut measurements, and templates required to fabricate the required door style.
- 2. Set miter saw cut angle and bevel angle to 0°.



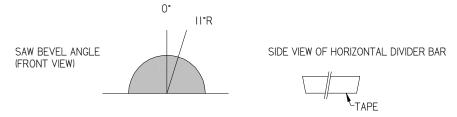
3. Cut ½" from one end of all 4-1/4" lineal bars needed, to remove the molded end. Pull the saw out and then cut back toward the saw fence.



- Measure and mark bar length on the top surface of the divider.
 Mark and cut one piece at a time, measuring from the cut end.
 Use a fine tip pencil or marker, and be precise with your measurements and marks.
- 5. Cut bar to length, tape side down. Verify measurement after cut.



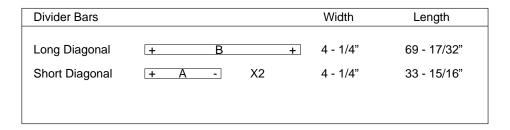
- 6. Measure and cut any remaining bars from lineal, if applicable.
- 7. If the design has a horizontal bar, use a 5-1/2" wide bar and follow the above process, but with the saw bevel angle set to 11°. Cut the bar so each end has an undercut bevel.



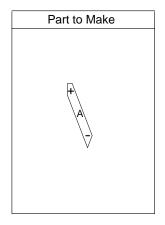


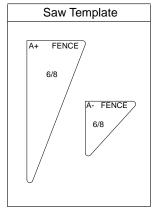
Barn Door Divider Fabrication - Classic Craft American Style Shaker

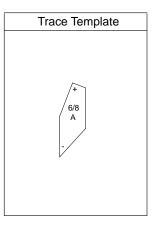
8. Label the bars on the back side, including letter, +, and - (example shown below)



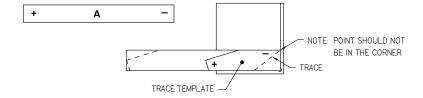
9. Identify the trace template that matches the markings on the back of the bars labeled in the previous step. (example shown below)







Align the bar in the tracing fixture (tape side down)with the trace template on top of it as shown below.With a fine tip pencil or marker, trace the correct end detail on the top of the bar.



Lite and Door Divider Installation (Classic-Craft American Style Shaker)

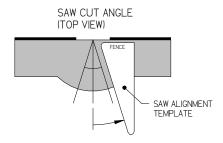
Barn Door Divider Fabrication - Classic Craft American Style Shaker

Preparation

11. Identify the saw alignment template that matches the letter and (+) marking on the back of the bar.

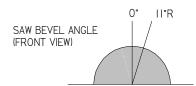
Use the template to set the saw cut angle as shown, with the side labeled FENCE against saw fence.

Align with the base of the saw, not the removeable inserts.

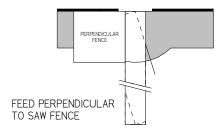


12. Set the saw bevel angle to 11°, to the same side as the saw cut angle.

For example, if the saw cut angle was set to the right, the bevel angle will also be set to the right.



13. Feed the bar in perpendicular to the saw fence, and position it (left to right) so the blade aligns with the trace line. Put a perpendicular fence against the bar and saw fence, and clamp in place. The sides of the fence must be square to each other.

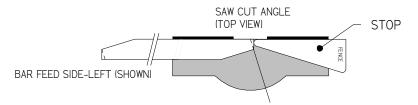


- 14. Cut the first corner of the (+) end of the part.
- 15. Repeat this cut for any other bars with the same letter and (+) end detail.

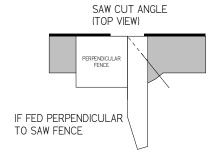


Barn Door Divider Fabrication - Classic Craft American Style Shaker

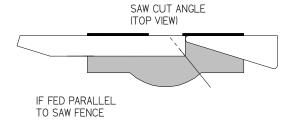
- 16. Remove the perpendicular fence, but DO NOT change the saw settings.
- 17. Feed the bar parallel to the saw fence, and position it (left to right) so the saw blade aligns with the trace line. Put a stop against the end of the bar and saw fence, and clamp the stop in place.



- 18. Cut the second corner of the (+) end of the part.
- 19. Repeat this cut for any other bars with the same letter and (+) end detail.
- 20. Remove the stop.
- 21. For the (-) ends, the cut process will depend on the style.
 - a. For X-Brace designs, follow the process where the part is perpendicular to the saw fence, using the saw alignment template that matches the letter and (-) marking on the back of the bar.



 For Double-X and Bottom-X designs, follow the process where the part is parallel to the saw fence, using the saw alignment template that matches the letter and (-) marking on the back of the bar.





Lite and Door Divider Installation (Classic-Craft American Style Shaker)

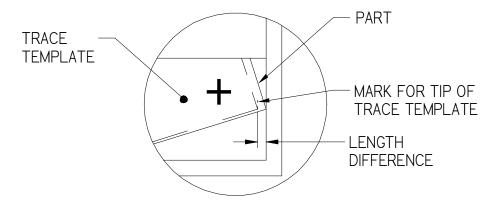
Barn Door Divider Trimming - Classic Craft American Style Shaker

Preparation

- Identify how much length needs to be removed from the bar, and make a mark at the tip of the bar where it should be cut to.
- 2. Align the bar in the tracing fixture (tape side down) with the trace template on top of it as shown below. Align the tip of the trace template with the mark.

With a fine tip pencil or marker, trace the new cut lines.

Note: The amount of material being removed will not be the same on both edges.



3. Set saw angle and perpendicular fence (if necessary) as previously instructed to trim bar as marked.



Door Preparation NOTE: TEMPERATURE RANGE FOR OPTIMUM TAPE ADHESION IS 70° TO 100°F. MINIMUM APPLICATION TEMPERATURE IS 60°F. BOTH THE DOOR AND LITE DIVIDER ARE TO BE IN THIS TEMPERATURE RANGE. ADHESIVE IS NOT REPOSITIONABLE.

Materials Needed:

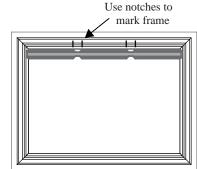
70% Isopropyl Alcohol or adhesion promoting solution Clean rags
½" Masking tape
J-Roller
Shim stock or business card
Pencil
Plastic zip ties or coffee stirrers
Sanding materials

When installing over GBG's only use bronze flat bar patterns

When installing on flush-glazed slabs, remove black tape as indicated on the glass label.

SDL Preparation for Interlocking Bar Patterns:

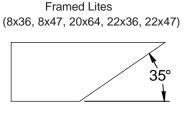
- Starting at the external glass side, take a horizontal divider and place
 it at the top of the glass. Center the bar in the opening and use the
 notch(es) on the divider to mark on the frame the top position of the
 vertical divider(s). Slide the bar to the bottom of the glass and repeat
 for the bottom position of the vertical dividers.
- Take a vertical divider and center between the frame markings. Mark amount of bar to trim (if necessary). There should be 0.015" - 0.020" clearance (use a business card as a shim) on each side to allow for expansion or contraction. Repeat for each vertical divider. Be sure to mark each divider with its location (left/right).

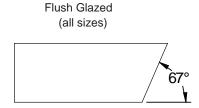


3. Trim bars at appropriate angle (see below) to their correct size. Trimming may be done with a stationary belt sander, disc sander, or sanding block.



Framed Lites



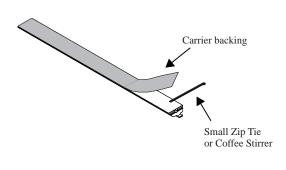


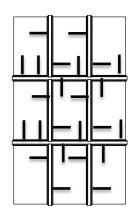
- 4. Place a trimmed vertical bar to one side of the glass and use the notches on the dividers to mark on the frame the position of the horizontal dividers. Repeat on the other side of the glass.
- 5. Assemble the vertical and horizontal bars together and center the bars on the glass at the frame markings without removing the carrier backing tape. Mark amount of bar to trim (if necessary). There should be 0.015" 0.020" clearance on each side. Repeat for each horizontal divider. Be sure to mark each divider with its location (top, bottom, center, etc).
- 6. Disassemble bars. Trim bars at appropriate angle to their correct size.



7. Assemble the horizontal and vertical divider(s). Use masking tape to secure the divider bars together at the joints. Peel off the Carrier Backing from all of the divider pieces. Clean any trimming residue from tape using 70% Isopropyl Alcohol. Lightly place the tips of small zip ties or coffee stirrers roughtly 1/8" onto the adhesive backs as shown. For each of the divider bars, position 1 tie at each end of the divider and each joint, and 1-2 ties in the middle. The ties will keep the adhesive backing off of the glass during final positioning.

Door Preparation





Glass Preparation:

Moisten a clean cloth with 70% Isopropyl Alcohol or use an adhesion promoting solution. Wipe the glass before attaching dividers. Allow to dry.

FAILURE TO PREPARE THE GLASS PROPERLY WILL RESULT IN POOR TAPE ADHESION.
DO NOT USE A GLASS CLEANER TO PERPARE THE GLASS AS THIS WILL PREVENT PROPER ADHESION.

SDL Installation:

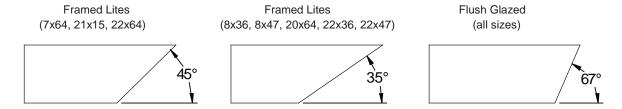
- 1. Position the divider grid back onto the glass using the frame position marks. Check to ensure that, for all of the frame to divider points, there is a 0.015" 0.020" gap between the divider and the frame. Once in position, press down at all of the ends opposite the zip tie to lock the position, and then pull out that zip tie. Once all of the divider ends are attached, pull out the middle zip ties from the dividers. Using a J-Roller, roll firmly along the entire length of the horizontal and vertical dividers. Look through the interior side to confirm all dividers adhere to the glass, particularly around the perimeter and divider joints. Once attached, remove the masking tape.
- 2. Repeat steps for interior frame side.



Door Preparation

SDL Preparation for Non-Interlocking Bar Patterns:

- Make template to the dimensions required for your lite pattern (see subsequent pages).
- Beginning with the exterior, position each divider using the proper template and mark position on the frame. Center bar in opening. Mark amount of bar to be trimmed (if necessary). There should be 0.015" - 0.020" clearance (use a business card as a shim) on each side to allow for expansion or contraction. Repeat for each divider. Be sure to mark each divider with its location (top, middle, bottom, etc).
- Trim bars at appropriate angle (see below) to their correct size. Trimming may be done with a stationary belt sander, disc sander, or sanding block.



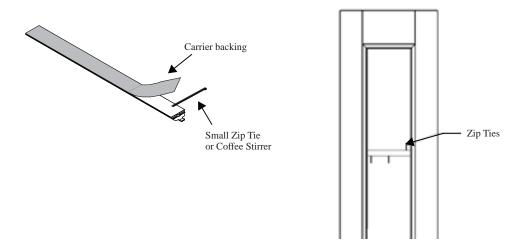
Glass Preparation:

Moisten a clean cloth with 70% Isopropyl Alcohol or use an adhesion promoting solution. Wipe the glass before attaching dividers. Allow to dry.

FAILURE TO PREPARE THE GLASS PROPERLY WILL RESULT IN POOR TAPE ADHESION.
DO NOT USE A GLASS CLEANER TO PERPARE THE GLASS AS THIS WILL PREVENT PROPER ADHESION.

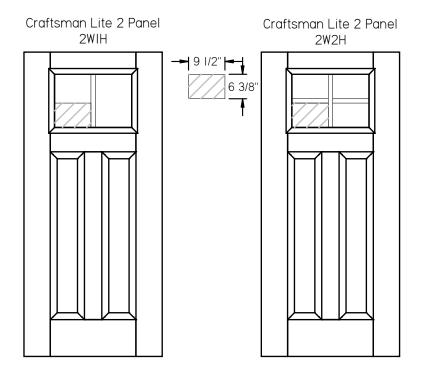
SDL Installation:

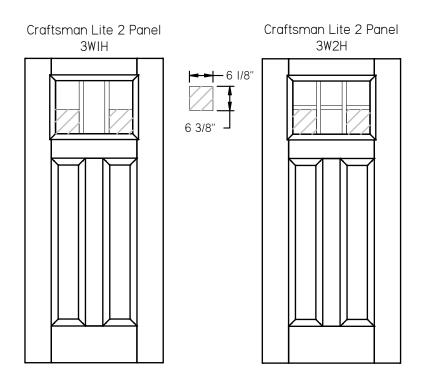
1. Peel off the Carrier Backing from all of the divider pieces. Clean any trimming residue from tape using 70% Isopropyl Alcohol. Lightly place the tips of small zip ties or coffee stirrers roughly 1/8" onto the adhesive backs as shown. For each of the divider bars, position 1 tie at each end of the divider and 1-2 ties in the middle. The ties will keep the adhesive backing off of the glass during final positioning.



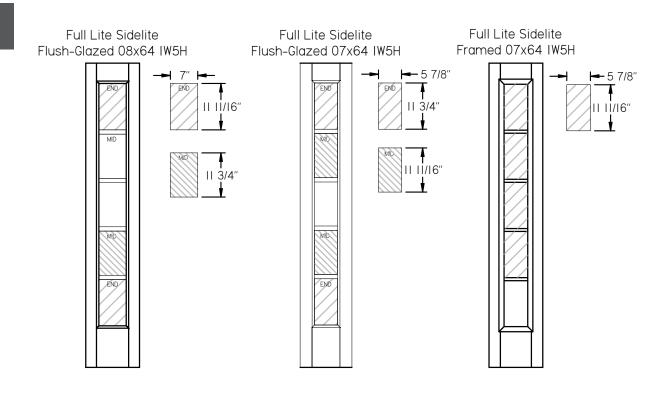
- 2. Position the dividers back onto the glass using the frame marks. Check that the dividers cover the internal GBGs (if present). Press down on each end of the divider to lock the position and remove the zip tie. Repeat for the other end. Remove the remaining zip tie(s). Using a J-Roller, roll firmly along the entire length of the dividers. Look through the interior side to confirm all dividers adhere to the glass, particularly around the perimeter.
- Repeat steps for the interior dividers. Check the alignment of the interior dividers with the exterior dividers before attaching interior dividers.

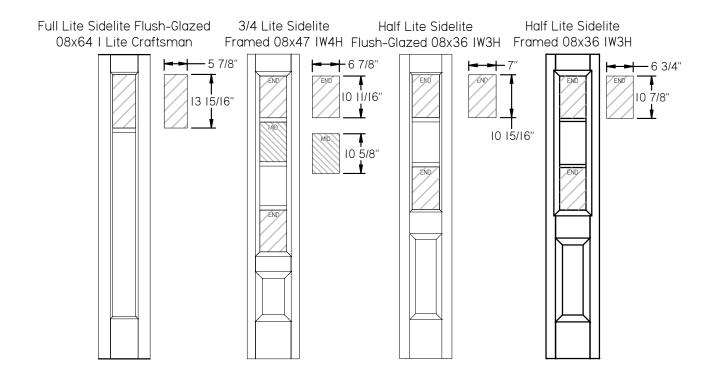










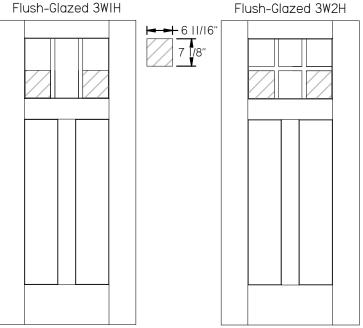




Craftsman Lite 2 Panel Shaker
Flush-Glazed 2W1H
Flush-Glazed 2W2H
Flush-Glazed IW2H

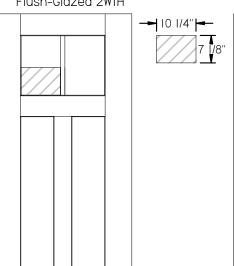
Craftsman Lite 2 Panel Shaker

Craftsman Lite 2 Panel Shaker Flush-Glazed 3WIH

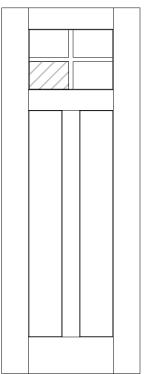


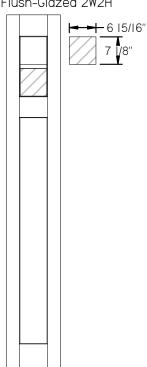


Door Preparation 8' Craftsman Lite2 Panel Shaker Flush-Glazed 2WIH



8' Craftsman Lite2 Panel Shaker 8' Craftsman Lite2 Panel Shaker Flush-Glazed 2W2H Sidelite Flush-Glazed 2W2H

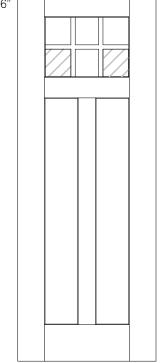




8' Craftsman Lite 2 Panel Shaker Flush-Glazed 3WIH



8' Craftsman Lite 2 Panel Shaker Flush-Glazed 3W2H

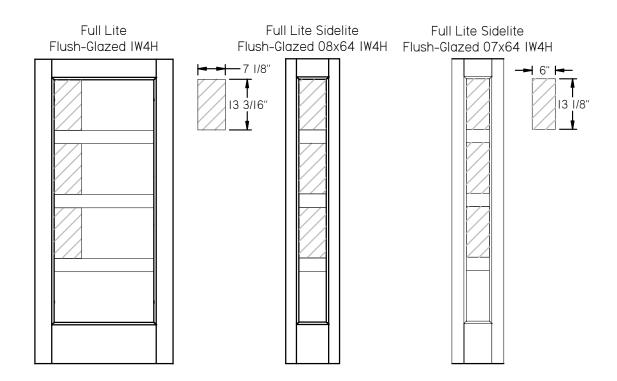




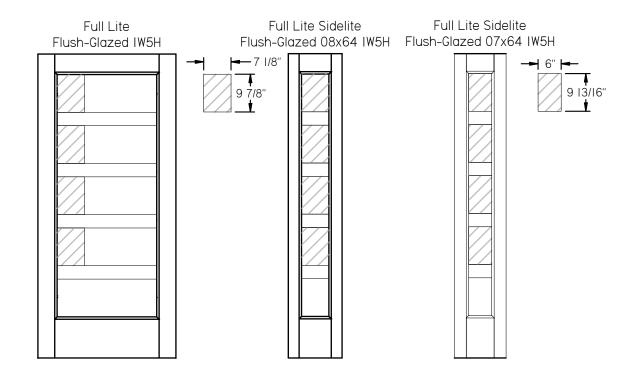
Full Lite
Flush-Glazed IW3H

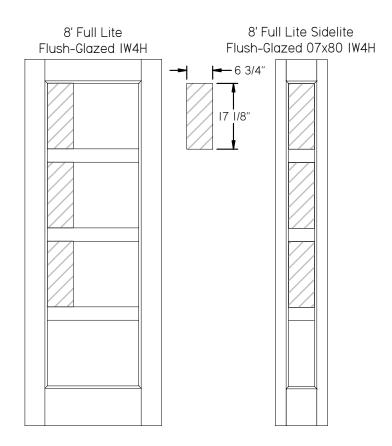
Flush-Glazed 08x64 IW3H

Flush-Glazed 07x64 IW3H





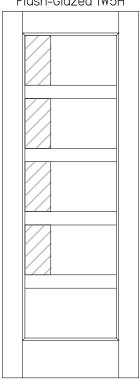


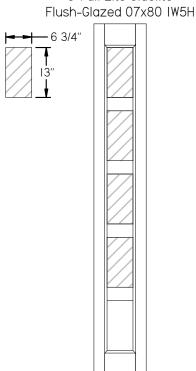




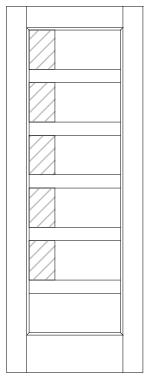
Door Preparation



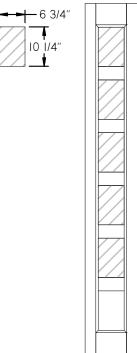




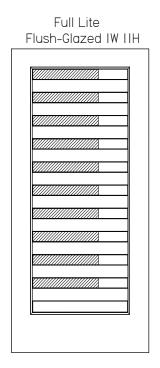
8' Full Lite Flush-Glazed IW6H

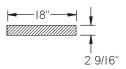


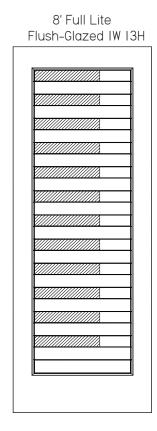


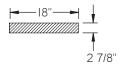






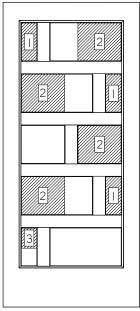




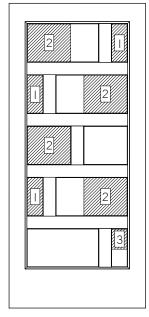




Full Lite Flush-Glazed Contemporary Left

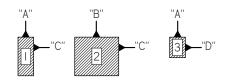


Full Lite Flush-Glazed Contemporary Right

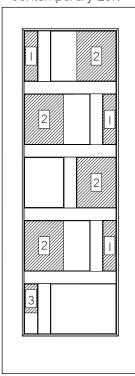


Door Style	DIM "A"	DIM "B"	DIM "C"	DIM "D"
Fiber Classic 6/8 x 2/8 and 2/6	2 3 "	8 1/4"	$9\frac{7}{8}$ "	5 1/4"
Fiber Classic 6/8 x 3/0 and 2/10	4 "	$11\frac{1}{4}$ "	8	
Fiber Classic 8/0 x 2/8 and 2/6	$2\frac{3}{8}$ "	8 \frac{3}{16}"	13 "	7 ½"
Fiber Classic 8/0 x 3/0 and 2/10	$3\frac{3}{8}$ "	$10\frac{3}{16}$ "		
Smooth-Star 6/8 x 2/8 and 2/6	3 3/16"	8 1/4"	9 7/8"	5 1/4"
Smooth-Star 6/8 x 3/0 and 2/10	3 1/2"	$10\frac{5}{16}$ "		
Smooth-Star 8/0 x 2/8 and 2/6	$2\frac{3}{8}$ "	$8\frac{3}{16}$ "	13 "	7 ½"
Smooth-Star 8/0 x 3/0 and 2/10	$3\frac{3}{8}$ "	$10 \frac{3}{16}$ "		

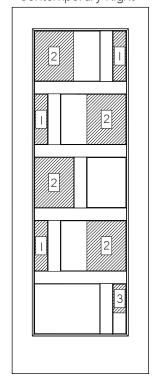
Preparation



8' Full Lite Flush–Glazed Contemporary Left



8' Full Lite Flush–Glazed Contemporary Right





Shop Installation Instructions for Dentil Shelf Attachment

The following instructions should be completed in the door shop or at the job site. Check to see that the shelf shop pack is included with this unit. The pack contains all the necessary hardware and fasteners needed to complete this installation.

Read all instructions before starting.

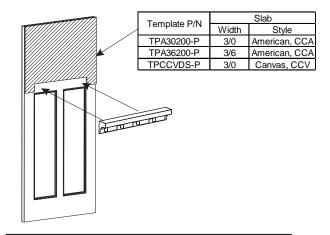


Part Number: MACCASHELFINST REV. D

1 APPLY LOCATING TEMPLATE TO DOOR

Apply shelf locating template to door slab. Align all three sides of the template to ensure it is squared up with the door.

Hold template down with clamps if needed.

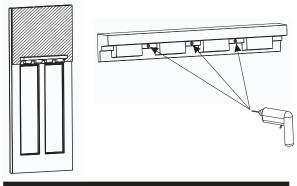


2 DRILL PILOT HOLES

After getting shelf aligned with the template, drill pilot holes with 1/8" drill bit at all three attachment locations into wood block on inside of the door.

Holes to be approximately ¼" to ½" in depth. CAUTION:

DO NOT DRILL THROUGH ENTIRE DOOR.

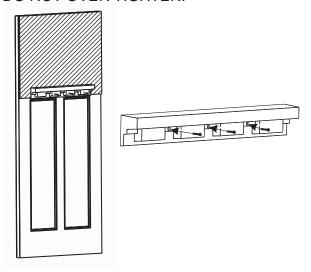


Preparation

3

FASTEN SHELF TO DOOR

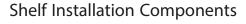
Fasten three screws into door at screw boss locations until shelf becomes tight with door. DO NOT OVER TIGHTEN.

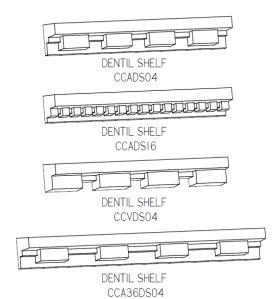


4

INSERT PLUGS

Align grain and insert plugs into holes. Press until plug is flush with shelf surface.



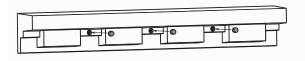




Shelf Screw (3) #10 x 1-1/2" Phillips Pan Head



Shelf Plug (3) Plugs CCAPLUG



DISCLAIMER: SHELF IS NOT INTENDED TO HOLD ANY OBJECTS OR WEIGHT.

THERMA TRU®

P.O. Box 8780 Maumee, Ohio 43537 419-891-7400

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Dentil Shelf Attachment (Smooth Star / Fiber Classic)



Door Preparation

IMPORTANT:

Please read and understand all installation and adhesive instructions prior to opening the adhesive cartridge.

CAUTION: Make sure your work area is well ventilated. Keep adhesive away from heat and flame. Avoid any

contact with the eyes and skin. Read warning label on adhesive box. KEEP OUT OF REACH OF

CHILDREN.

NOTES: - When PAINTING, the door and dentil shelf should be unfinished when applying dentil shelf.

- When STAINING, the door and dentil shelf should be finished before applying the dentil shelf
- To be removed from the opening and placed in a horizontal position for a minimum of twenty-four hours to allow the adhesive to cure.
- Recommended application temperature minimum 40°F.

TOOLS NEEDED: Safety Glasses, Latex Gloves, Mineral Spirits, Isopropyl Alcohol

INSTALLATION:

STEP 1: PREPARE THE DOOR

Protect the underside of the door by laying it flat on padded sawhorses or another padded surface. Position the door with the exterior side facing up. Thoroughly clean the door surface and the dentil shelf with isopropyl alcohol. Surface must be completely dry before going on to Step 2.

STEP 2: LOCATE SHELF

Position the dentil shelf on the door so that it is centered along the width of the door and parallel to the glass opening (suggested location is 3/8" from the bottom of the glass). With a graphite pencil, lightly mark the locations of the top and sides of the shelf on the door face.

STEP 3: APPLY ADHESIVE

Open adhesive cartridge apply a single 1/4" diameter bead of adhesive to the center of the wood core on the underside of the shelf. Be careful not to allow adhesive beyond the wood to help prevent squeeze-out. Carefully press the shelf onto the door face using your pencil lines (from Step 2) as your locating guides. Apply firm pressure to ensure contact with door. You will have approximately 30 minutes to work with the shelf before the adhesive starts to set. Immediately remove any adhesive squeeze-out with mineral spirits and a clean cloth.

STEP 4: CURE TIME

The shelf and door should remain in the horizontal position for a minimum of twenty four (24) hours to allow the adhesive to cure. After this time, the door can be finished and installed.

STEP 5: ADHESIVE DISPOSAL

Wipe tip clean, and recap the product. Refer to MSDS on manufacturer's website.

DISCLAIMERS:

- -- SHELF IS NOT INTENDED TO HOLD ANY OBJECTS OR WEIGHT.
- -- THE SHELF IS NOT RECOMMENDED FOR USE BEHIND A STORM DOOR.

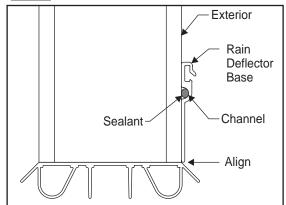


Attach Rain Deflector



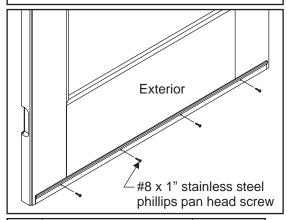
Sealant type must be a paintable or stainable elastomeric or polyurethane.

Door Preparation

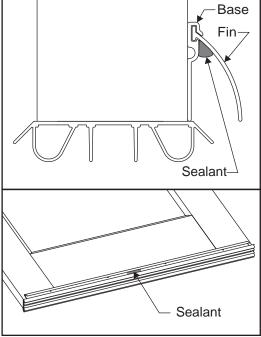


Center rain deflector base on exterior face of panel and align edge of rain deflector base with bottom edge of panel.

Apply bead of sealant in channel on rain deflector base.



Attach rain deflector base to panel with #8 x 1" phillips pan head screws.



Slide rain deflector fin into channel on base.

Apply a 2" long bead of sealant up under the fin at the center of the door to prevent fin from sliding.

Rain Deflector Cut Down Instructions:

3/0 - No cut down required.

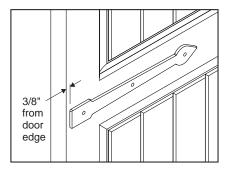
2/10 - Cut 1" off both ends of 3/0 deflector.

2/8 - Cut 2" off both ends of 3/0 deflector.

2/6 - Cut 3" off both ends of 3/0 deflector.

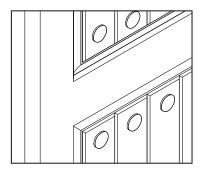
2/4 - Cut 8" off one ends of 3/0 deflector.





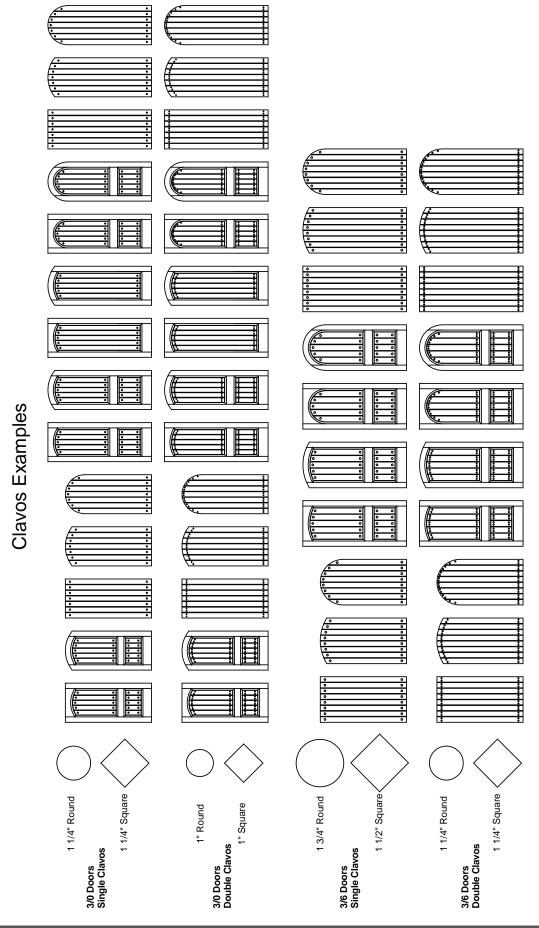
INSTALLATION:

- 1. Locate strap hinges 3/8" from edge of door at desired locations.
- 2. Using masking tape, mark the location of the strap hinges on the door.
- Moisten a clean cloth with 70% Isopropyl Alcohol and clean the area where the hinges will be applied.
- Remove backing tape from the tape on one hinge and attach it to the door.
 NOTE: Hinge cannot be moved once placed on the door.
- Press the hinge firmly in place at the location of each tape backer. 35 pounds of force is required at each location.
- 6. Repeat for each other hinge.

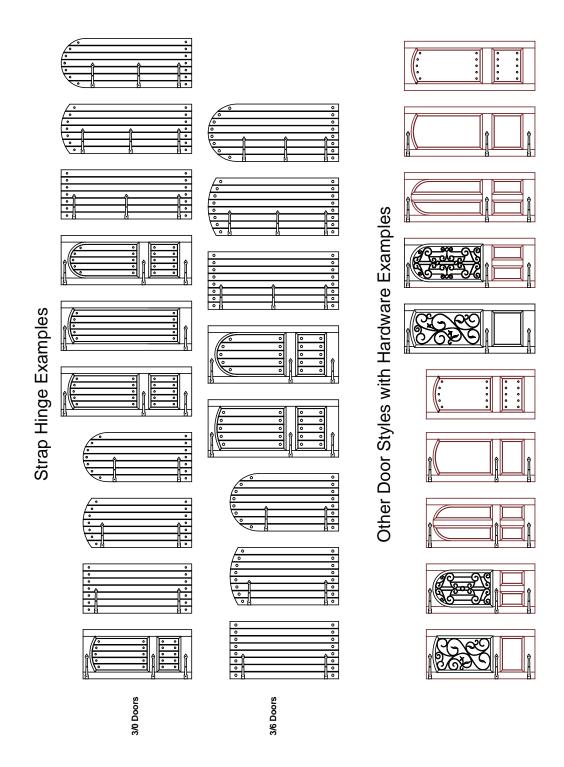


INSTALLATION:

- Locate clavos on door at desired locations.
- 2. Using masking tape, mark the location of the clavos on the door.
- Moisten a clean cloth with 70% Isopropyl Alcohol and clean the area where the clavos will be applied.
- Remove backing tape from the tape on one clavos and attach it to the door.
 NOTE: clavos cannot be moved once placed on the door.
- Press the clavos firmly in place at the location of the tape backer. 35 pounds of force is required.
- 6. Repeat for each clavos.









Therma-Tru products are manufactured for use with high quality, exterior grade house paints. See SITE 2 for standard finishing instructions. For distributor furnished prefinishing, use the following guidelines.

Door Preparation



CAUTION:

Therma-Tru bears no responsibility for the performance of distributor-furnished prefinished doors.

Therma-Tru makes no claims about the compatibility of its primers when coated with special shop applied paints or topcoats.

Finishing With Materials Other Than High Quality, Exterior Grade House Paints

Automotive and industrial paints often contain stronger solvents than house paints. Because Therma-Tru's factory applied primer is intended for use with house paints, these stronger solvents may attack the factory applied primer. For best performance, we recommend:

STEEL

- Use a water-based acrylic paint, instead of an epoxy or urethane.
- If using an epoxy or urethane paint, first apply a primer over the factory applied finish. The primer will act as a barrier between the factory applied finish and the topcoat. The primer must, of course, be compatible with the topcoat being used.

CLASSIC-CRAFT, FIBER-CLASSIC and SMOOTH-STAR DOORS

- Use a water-based acrylic or alkyd-based (oil) paint, instead of an epoxy or urethane.
- Always apply a primer. The primer will act as a barrier between the factory finish and the topcoat. Use primers and topcoats that are compatible.
- Maximum temperature for quick dry should be 200°F or less.

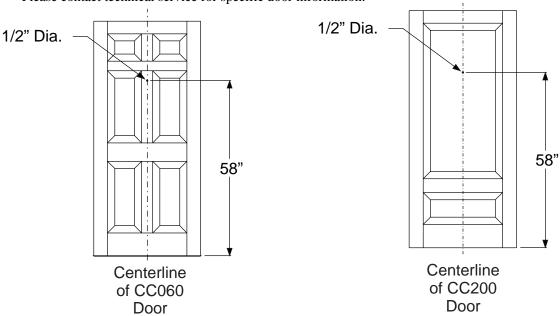


Peep Sights

Two examples of Peep sights are shown below.

Peep sights vary by door style.

Please contact technical service for specific door information.

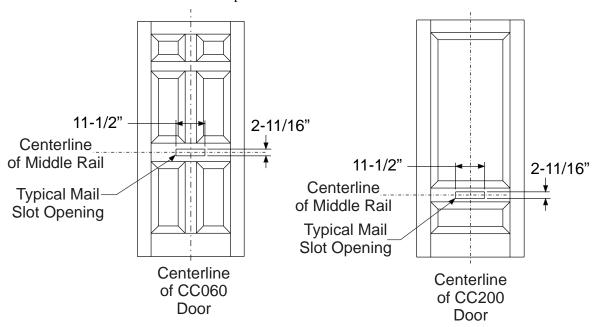


Mail Slots

Two examples of Mail slot machining are shown below.

Mail slot locations vary by door style.

Please contact technical service for specific door information.



Please Note: In the recessed areas of a Shaker door, a mail slot or peep site would not be an available option.



SHOP 4 Standard Frame Details and Machining

Frame Handing	4.3
Mullion Handing	4.5
Astragal Handing	4.7
Head Jamb Machining	
Side Jamb Machining	
Patio Jamb Machining	4.19
Mullion Machining	
5	

Standard Frame Details and Machining

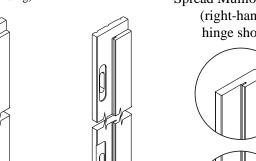


Standard Frame Details and Machining



Handing of Frame Jambs

(view from **INSIDE** building)



Left-Handed Multipoint

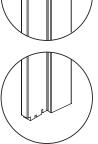
Captured Strike

Spread Mullion Details (right-handed hinge shown)

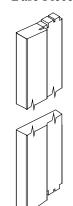
Standard Frame

Details and

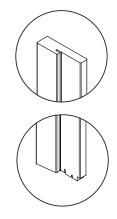
Machining

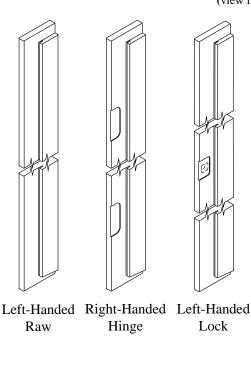


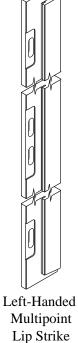
Spread Mullion Base Piece

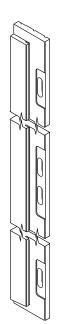


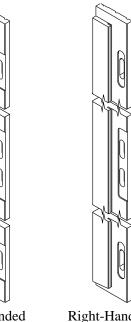
Spread Mullion Details (left-handed hinge shown)













Right-Handed Left-Handed Right-Handed

Hinge

Lock

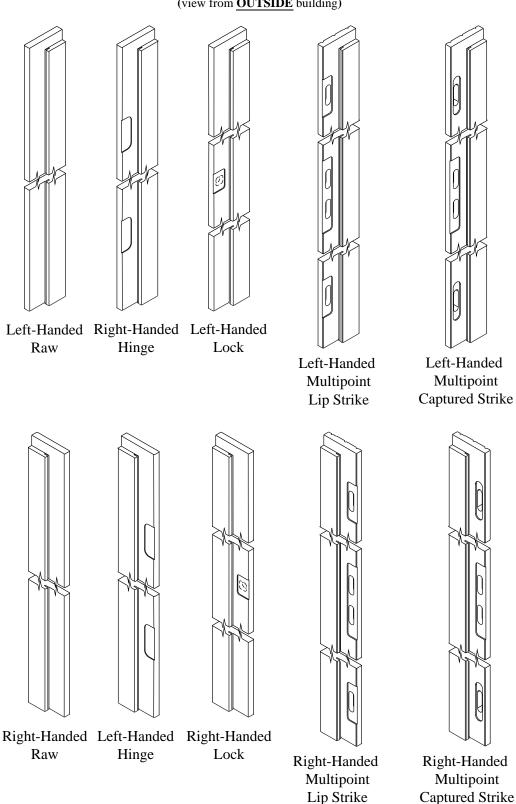
Raw



Handing of Outswing Frame Jambs

(view from **OUTSIDE** building)



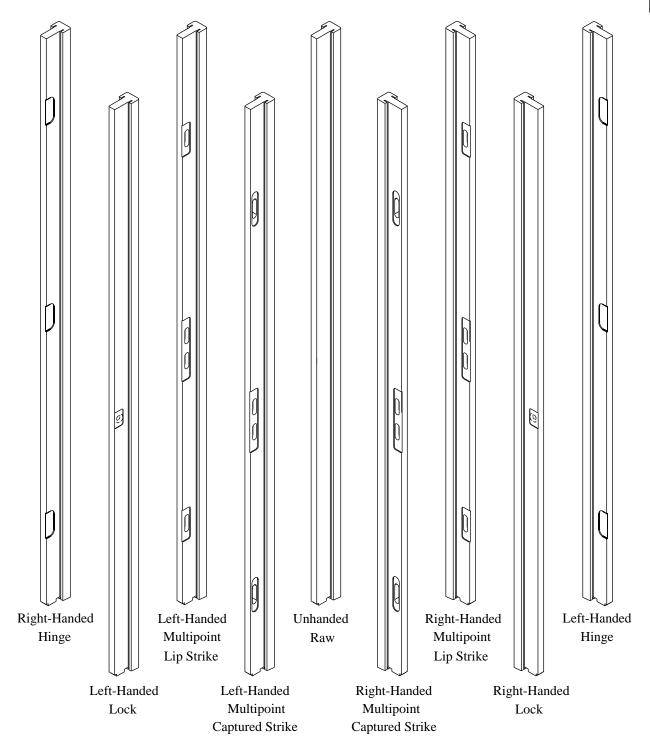




Handing of Mullions

(view from **INSIDE** building)

Standard Frame Details and Machining

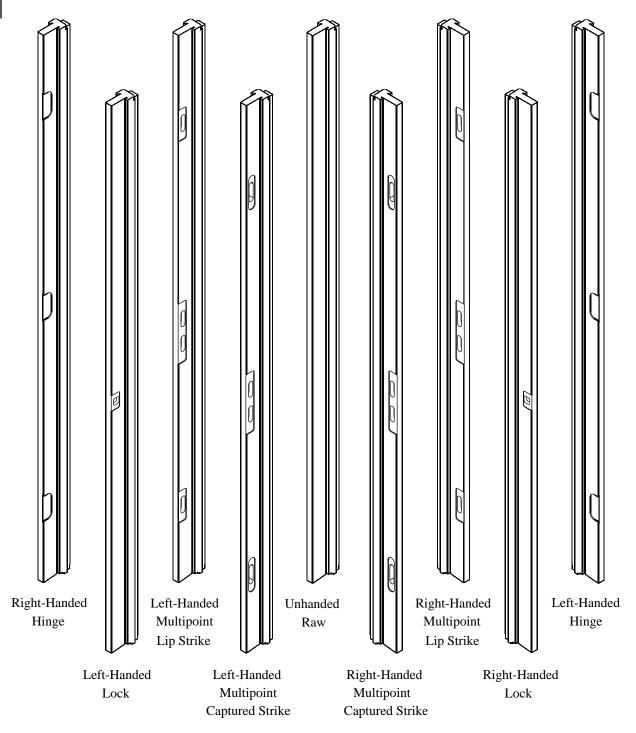


Inswing Mullions



Handing of Outswing Mullions (view from **OUTSIDE** building)

Standard Frame Details and Machining

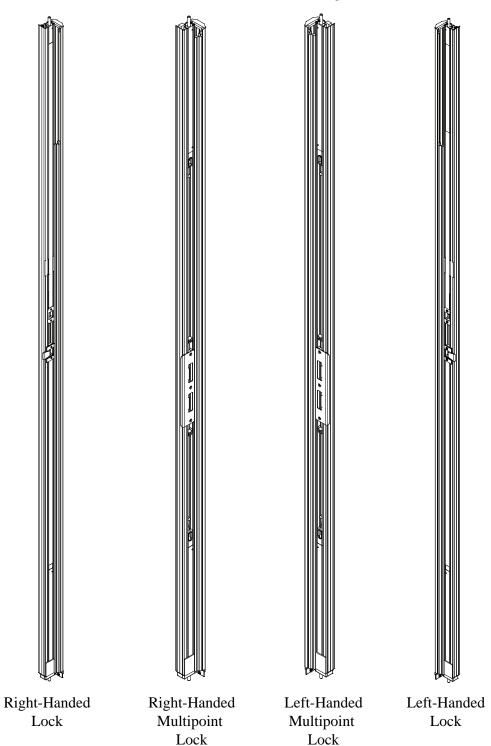


Outswing Mullions



Handing of Astragals

(view from **INSIDE** building)



Inswing Astragals

Standard Frame Details and Machining



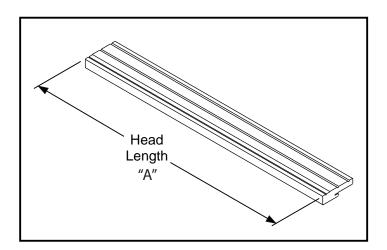
Head Jamb - Standard

Standard Frame Details and Machining

Select Head Jamb

NOTE:

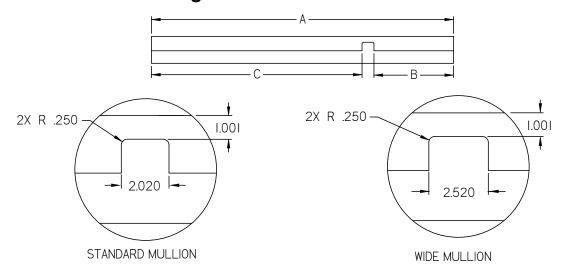
Cut special head if making frame for special width door.



UNIT SIZE	LENGTH
OINT SIZE	"A"
10" SIDELITE	10.000
12" SIDELITE	12.000
14" SIDELITE	14.000
2/0 D00R	24.000
2/4 DOOR	28.000
2/6 DOOR	30.000
2/8 DOOR	32.000
2/10 D00R	34.000
3/0 DOOR	36.000
3/6 DOOR	42.000
4/0 FRENCH 7/8" ASTRAGAL	48.718
4/8 FRENCH 7/8" ASTRAGAL	56.718
5/0 FRENCH 7/8" ASTRAGAL	60.718
5/4 FRENCH 7/8" ASTRAGAL	64.718
5/8 FRENCH 7/8" ASTRAGAL	68.718
6/0 FRENCH 7/8" ASTRAGAL	72.718
7/0 FRENCH 7/8" ASTRAGAL	84.718



Head Jamb - Single with 1 Sidelite and Double Doors



Standard Frame Details and Machining

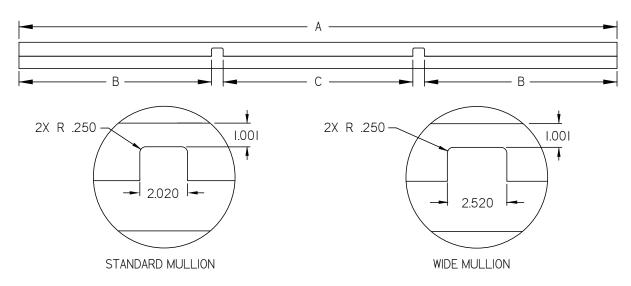
SI	NGLE WITH I	SIDELITE					
	STANDARD	WIDE	STANDA	RD AND			
UNIT DESCRIPTION	MULLION	MULLION	WIDE MULLION				
	А	А	В	С			
2/4 L(R) WI-10" SL	39.000	39.500	9.490				
2/4 L(R) WI-12" SL	41.000	41.500	11.490	27.490			
2/4 L(R) WI-I4" SL	43.000	43.500	13.490				
2/6 L(R) WI-IO" SL	41.000	41.500	9.490				
2/6 L(R) WI-I2" SL	43.000	43.500	11.490	29.490			
2/6 L(R) WI-I4" SL	45.000	45.500	13.490				
2/8 L(R) WI-IO" SL	43.000	43.500	9.490				
2/8 L(R) WI-I2" SL	45.000	45.500	11.490	31.490			
2/8 L(R) WI-I4" SL	47.000	47.500	13.490				
2/10 L(R) WI-10" SL	45.000	45.500	9.490				
2/10 L(R) WI-12" SL	47.000	47.500	11.490	33.490			
2/10 L(R) WI-14" SL	49.000	49.500	13.490				
3/0 L(R) WI-IO" SL	47.000	47.500	9.490				
3/0 L(R) WI-12" SL	49.000	49.500	11.490	35.490			
3/0 L(R) WI-I4" SL	51.000	51.500	13.490				
3/6 L(R) WI-IO" SL	53.000	53.500	9.490				
3/6 L(R) WI-I2" SL	55.000	55.500	11.490	41.490			
3/6 L(R) WI-14" SL	57.000	57.500	13.490				

	DOUBLE MA	CHINING SPEC	CIFICATIONS			
	STANDARD	WIDE	STANDARD AND			
	MULLION	MULLION	WIDE M	ULLION		
	А	А	В	С		
4/8 DOUBLE	57.000	57.500	27.490	27.490		
5/0 DOUBLE	61.000	61.500	29.490	29.490		
5/4 DOUBLE	65.000	65.500	31.490	31.490		
5/8 DOUBLE	69.000	69.500	33.490	33.490		
6/0 DOUBLE	73.000	73.500	35.490	35.490		



Head Jamb - Triple and Single with 2 Sidelites

Standard Frame Details and Machining



TRIPLE	AND SINGLE	WITH 2 SIDEL	ITES	
	STANDARD	WIDE	STANDA	RD AND
UNIT DESCRIPTION	MULLION	MULLION	WIDE M	ULLION
	А	А	В	С
7/0 TRIPLE	86.000	87.000	27.490	26.980
7/6 TRIPLE	92.000	93.000	29.490	28.980
8/0 TRIPLE	98.000	99.000	31.490	30.980
8/6 TRIPLE	104.000	105.000	33.490	32.980
9/0 TRIPLE	110.000	111.000	35.490	34.980
2/4 W/2-I0" SL	50.000	51.000	9.490	
2/4 W/2-I2" SL	54.000	55.000	11.490	26.980
2/4 W/2-I4" SL	58.000	59.000	13.490	
2/6 W/2-I0" SL	52.000	53.000	9.490	
2/6 W/2-I2" SL	56.000	57.000	11.490	28.980
2/6 W/2-I4" SL	60.000	61.000	13.490	
2/8 W/2-I0" SL	54.000	55.000	9.490	
2/8 W/2-I2" SL	58.000	59.000	11.490	30.980
2/8 W/2-I4" SL	62.000	63.000	13.490	
2/10 W/2-10" SL	56.000	57.000	9.490	
2/10 W/2-12" SL	60.000	61.000	11.490	32.980
2/10 W/2-14" SL	64.000	65.000	13.490	
3/0 W/2-I0" SL	58.000	59.000	9.490	
3/0 W/2-I2" SL	62.000	63.000	11.490	34.980
3/0 W/2-I4" SL	66.000	67.000	13.490	
3/6 W/2-I0" SL	64.000	65.000	9.490	
3/6 W/2-I2" SL	68.000	69.000	11.490	40.980
3/6 W/2-I4" SL	72.000	73.000	13.490	



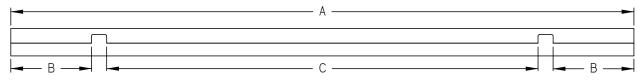
Standard Frame Details and Machining

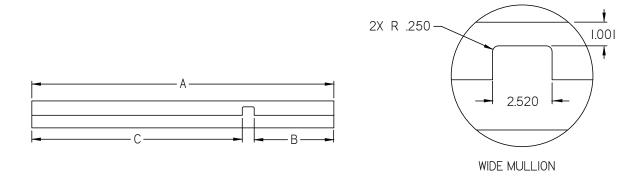
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Head Jamb - Continuous with 1 or 2 Venting Sidelites

Standard Frame Details and Machining

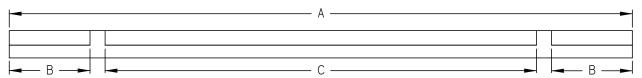




SINGLE/FRENCH - VENTING SIDELITE									
(REQUIRES WIDE MULLION)									
UNIT DESCRIPTION	Α	В	С						
3/0 SINGLE W/I-I2" VENTING SL	49.721	11.677	35.524						
3/0 SINGLE W/I-I4" VENTING SL	51.721	13.677	30.024						
3/0 SINGLE W/2-12" VENTING SL	63.408	11.677	35.014						
3/0 SINGLE W/2-14" VENTING SL	67.408	13.677	35.014						
5/8 FRENCH 7/8 AST W/2-12" VENTING SL	96.126	11.677	C7 700						
5/8 FRENCH 7/8 AST W/2-14" VENTING SL	100.126	13.677	67.732						
6/0 FRENCH 7/8 AST W/2-I2" VENTING SL	100.126	11.677	71732						
6/0 FRENCH 7/8 AST W/2-I4" VENTING SL	104.126	13.677	11.132						

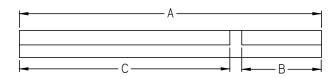


Head Jamb - Spread Mullion

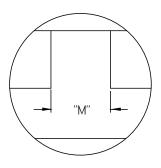


Standard Frame Details and Machining

	SPREAD MULLION														
LENGTH "A"															
UNIT SIZE	"B"	"C"	S000	S025	S050	S075	S100	SI25	S150	SI75	S200	S225	S250	S275	S300
3/0 W/ 2-10" SIDELITES	9.490		59.000	59.500	60.000	60.500	61.000	61.500	62.000	62.500	63.000	63.500	64.000	64.500	65.000
3/0 W/ 2-I2" SIDELITES	11.490	34.980	63.000	63.500	64.000	64.500	65.000	65.500	66.000	66.500	67.000	67.500	68.000	68.500	69.000
3/0 W/ 2-14" SIDELITES	13.490		67.000	67.500	68.000	68.500	69.000	69.500	70.000	70.500	71.000	71.500	72.000	72.500	73.000



SPREAD MULLION															
LENGTH "A"															
UNIT SIZE	"B"	"C"	S000	S025	S050	S075	S100	SI25	SI50	SI75	S200	S225	S250	S275	S300
3/0 W/ I-IO" SIDELITE	9.490		47.500	47.750	48.000	48.250	48.500	48.750	49.000	49.250	49.500	49.750	50.000	50.250	50.500
3/0 W/ I-12" SIDELITE	11.490	35.490	49.500	49.750	50.000	50.250	50.500	50.750	51.000	51.250	51.500	51.750	52.000	52.250	52.500
3/0 W/ I-I4" SIDELITE	13.490		51.500	51.750	52.000	52.250	52.500	52.750	53.000	53.250	53.500	53.750	54.000	54.250	54.500



SPREAD MULLION

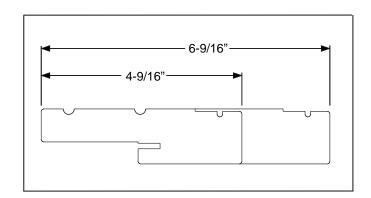
	WIDTH "M" - FULL / SPREAD MULLION											
S000	S025	S050	S075	S100	S125	SI50	SI75	S200	S225	S250	S275	S300
2.520	2.770	3.020	3.270	3.520	3.770	4.020	4.270	4.520	4.770	5.020	5.270	5.520



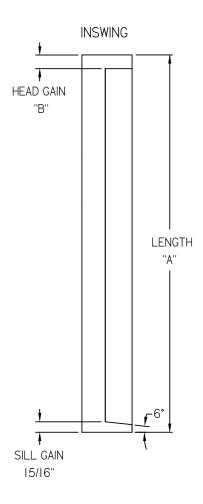
Standard Frame Details and Machining

Select Jamb Width

Two common jamb widths are shown.

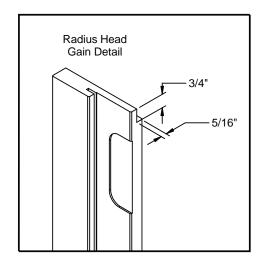


Side Jamb



INSWING SILL MACHINING

	LENGTH	HEAD GAIN
UNIT SIZE	"A"	"B"
6/6	79.280	1.250
6/8	81.625	1.250
7/0	85.625	1.250
8/0	97.625	1.250
6/8 3/0 ARCH	75.948	1.570
6/8 3/6 ARCH	76.182	1.491
8/0 3/0 ARCH	91.948	1.570
8/0 3/6 ARCH	92.182	1.491
6/8 3/0 RADIUS	61.889	
6/8 3/6 RADIUS	58.889	SEE FIGURE
8/03/0 RADIUS	77.889	BELOW
8/0 3/6 RADIUS	74.889	





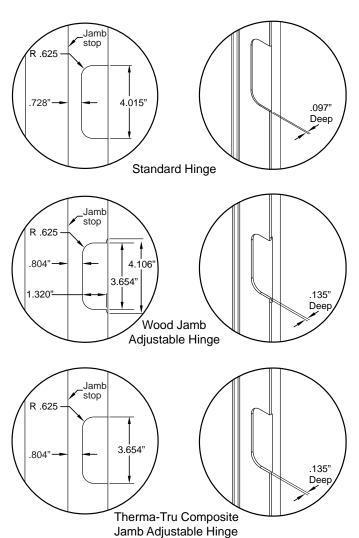
Side Jamb - Hinge Mortise

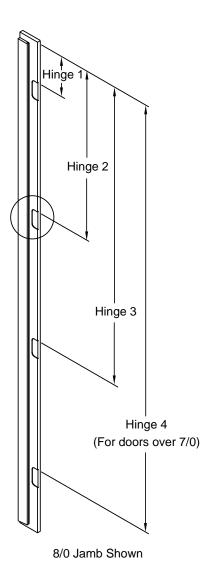
Square Top Doors.

	JAMB HINGE MORTISE LOCATIONS										
	UNIT SIZE	HINGE 1	HINGE 2	HINGE 3	HINGE 4						
Q	6/6		38.875	68.625							
ANDAR	6/8	9.125	36.673	08.025	N/A						
STANDARD	7/0	3.123	40.875	72.625							
ST	8/0		34.125	59.625	84.625						
3LE	6/6										
JUSTAE	6/8	9.400	38.650	67.900	N/A						
ADJUSTABLE HINGE	7/0										
ΑD	8/0	6.306	31.806	57.306	82.806						

Cut Hinge Mortises

Use a special-purpose machine or a router and template. Use a 1-1/4" diameter bit for 5/8" radius mortises.





Standard Frame Details and Machining



Side Jamb - Machining

Frame Machining

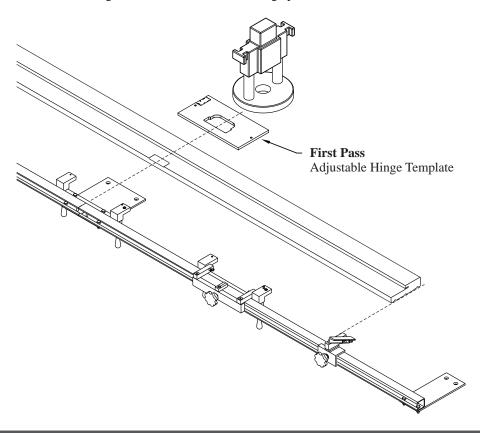
Note: An additional frame template holder and hinge template are provided for use when machining 8' frames, for a total of 4 template holders.

Note: Wood jambs and Therma-Tru composite jambs have different rabbet dimensions and require different templates. Use Adjustable Hinge Machining Template Kit: ADJHGTEMPTD - Wood Jambs ADJHGTEMPCJ - Therma-Tru Composite Jambs

1. Determine the proper handing then set the template stations and stop setting per the locations shown in the table below. Tighten the knobs to secure them in place.

Unit Size	Side Jamb Head Stop	Mullion or Spread Mullion Jamb Head Stop	(Top) Hinge #1	Hinge #2	(6/8 Bottom) Hinge #3	(8/0 Bottom) Hinge #4
6/6 6/8 7/0	1027 mm (40.440")	1008 mm (39.690")	742 mm (29.213")	0 mm	742 mm (29.213")	N/A
8/0	1502 mm (59.145")	1483 mm (58.395")	1296 mm (51.012")	648 mm (25.512")	0 mm	648 mm (25.512")

- 2. Insert jamb or mullion against the stop then tighten the template station clamps to secure the frame. Place the hinge templates on the template holders referenceing the labels (edge of jamb) correctly.
- 3. Set the depth stop on the plunge router to machine adjustable hinge pockets to the depth as specified in the Side Jamb Machining section, then machine the hinge pockets.





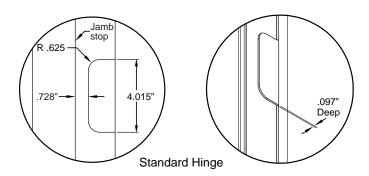
Side Jamb - Hinge Mortise

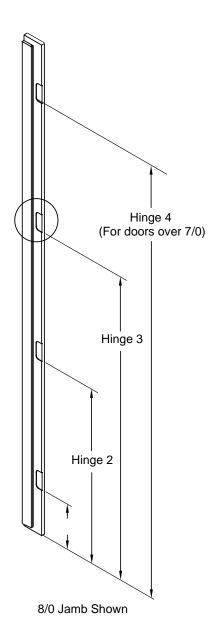
Arch & Radius Top Doors.

		HINGE MORTISE LOCATIONS									
	UNIT HEIGHT	UNIT WIDTH	HINGE 1	HINGE 2	HINGE 3	HINGE 4					
ARCH	6/8	3/0 or 3/6	9.860	37.297	64.735	N/A					
AR	8/0	3/0013/6	10.985	34.235	57.485	80.735					
10	6/8	3/0	9.860	32.985	56.110	N/A					
))	0/0	3/6	8.860	30.985	53.110	N/A					
RADIUS	8/0	3/0	10.985	31.360	51.735	72.110					
_	8/0	3/6	10.965	30.260	49.735	69.110					

Cut Hinge Mortises

Use a special-purpose machine or a router and template. Use a 1-1/4" diameter bit for 5/8" radius mortises.





Standard Frame Details and Machining



Side Jamb - Lock Mortise

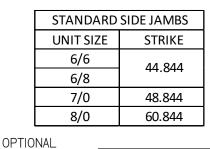


DISTANCE

Lock Center THIS PAGE APPLIES ONLY TO:

Single Units





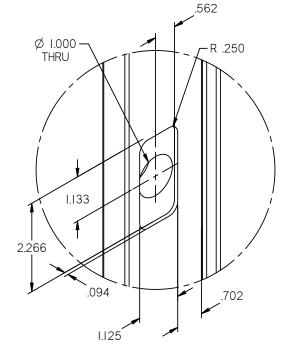
COMMON DOUBLE BORE (DEADBOLT) SPACING						
DESCRIPTION	SPACING					
5 1/2" ON CENTER	5.500					
12" ON CENTER	12.000					

	ARCH & RADIUS SIDE JAMBS					
	UNIT HEIGHT	UNIT WIDTH	STRIKE			
	6/8	3/0	39.167			
ARCH	0/8	3/6	39.401			
AR	8/0	3/0	55.167			
		3/6	55.401			
5	6/8	3/0	25.108			
100	0/0	3/6	22.110			
RADIUS	8/0	3/0	41.108			
	6/0	3/6	38.110			

Cut Lock Mortises

Use a special-purpose machine or a router and template and drill.

Discrete to the special of th



LATCH MACHINING

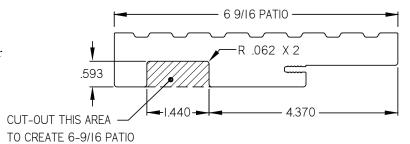
OPTIONAL DEADBOLT MACHINING



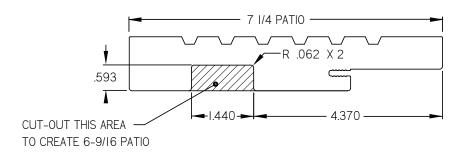
Patio Jamb Groove

Patio Jamb Groove

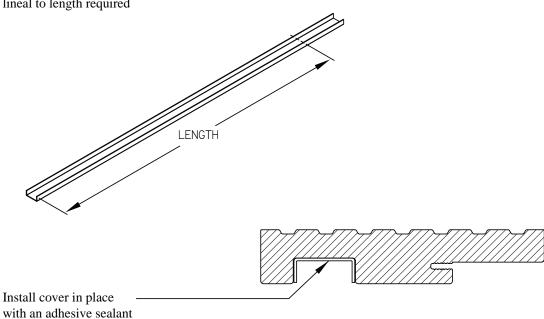
Route out jamb as shown for patio track screen cover



Standard Frame Details and Machining



Cut patio track screen cover lineal to length required





Mullion - Hinge Mortise



THIS PAGE APPLIES ONLY TO:

Continuous
One-Sidelite Units
Hinged at Mullion

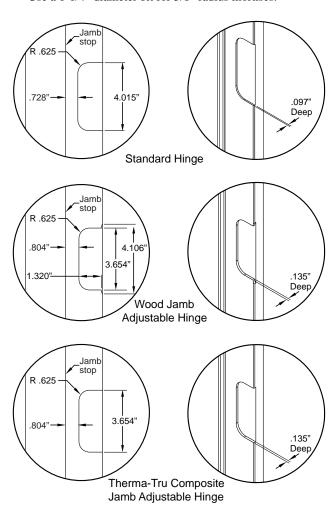
	Continuous
1	Two-Sidelite Units

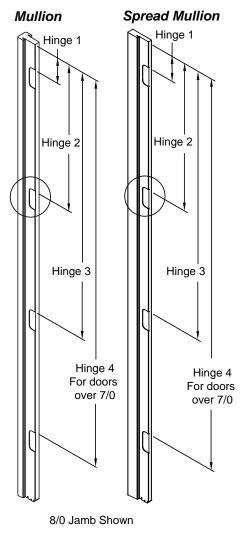
Standard Frame Details and Machining

	HINGE MORTISE LOCATIONS					
	UNIT SIZE	HINGE I	HINGE 2	HINGE 3	HINGE 4	
Q	6/6		38.125	67.875	N/A	
ANDAF	6/8	0.075				
STANDARD	7/0	8.375	40.125	71.875		
S	8/0		33.375	58.875	83.875	
빌	6/6		8.650 37.900	67.150	N/A	
ADJUSTABLE HINGE	6/8	8.650				
	7/0					
AD.	8/0	5.556	31.056	56.556	82.056	

Cut Hinge Mortises

Use a special-purpose machine or a router and template. Use a 1-1/4" diameter bit for 5/8" radius mortises.







Mullion - Lock Mortise



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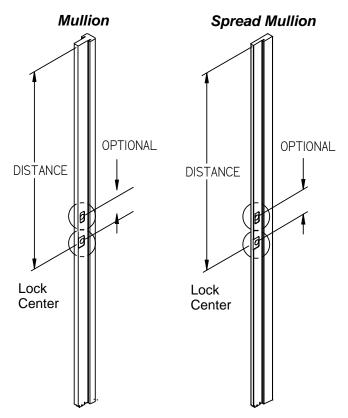
Continuous One-Sidelite Units Lock at Mullion



Continuous Two-Sidelite Units

> Standard Frame Details and

Machining

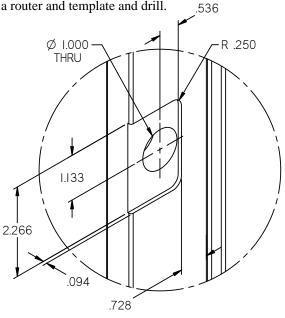


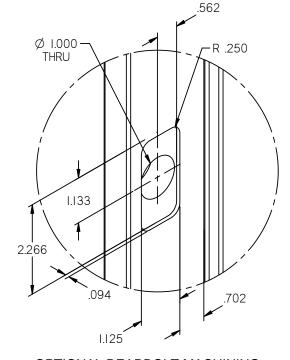
MULLION LOCK MACHINING					
UNIT SIZE STRIKE					
6/6	44.094				
6/8	44.034				
7/0	48.094				
8/0	60.094				
· · · · · · · · · · · · · · · · · · ·					

COMMON DOUBLE BORE (DEADBOLT) SPACING				
DESCRIPTION SPACING				
5 1/2" ON CENTER 5.500				
12" ON CENTER	12.000			

Cut Lock Mortises

Use a special-purpose machine or a router and template and drill. Ø 1.000



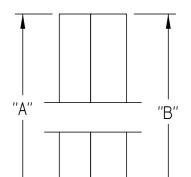


LATCH MACHINING

OPTIONAL DEADBOLT MACHINING

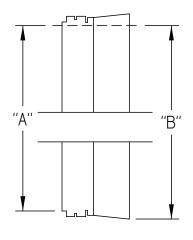
Shop 4



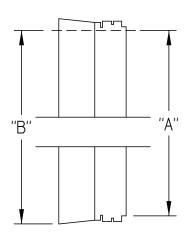


INSWING HEAD/SILL GAIN

Spread Mullion



INSWING SILL/SILL GAIN LEFT RAW CUTDOWN



INSWING SILL/SILL GAIN RIGHT RAW CUTDOWN

WOOD SPREAD MULLION - HEAD AND SILL GAIN					
UNIT SIZE	LENGTH	"B"			
UNIT SIZE	"A"	4-9/16"	5-1/4"	6-9/16"	
6/6	77.291	77.834	77.906	78.044	
6/8	79.636	80.179	80.251	80.389	
7/0	83.636	84.179	84.251	84.389	
8/0	95.636	96.179	96.251	96.389	

COMPOSITE SPREAD MULLION - HEAD AND SILL GAIN						
LINUT CIZE	LENGTH		"B"			
UNIT SIZE	"A"	4-1/8"	4-9/16"	5-1/4"	6-9/16"	7-1/4"
6/6	77.291	77.788	77.834	77.906	78.044	78.116
6/8	79.636	80.133	80.179	80.251	80.389	80.461
7/0	83.636	84.133	84.179	84.251	84.389	84.461
8/0	95.636	96.133	96.179	96.251	96.389	96.461



SHOP 5 Multipoint Lock Machining

Multi-Point Head Jambs	5.3
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MPLS Strike Installation Instructions - Captured Strike	5.47
MPLS Strike Installation Instructions - Grip Style	5.50

Multipoint Lock Machining

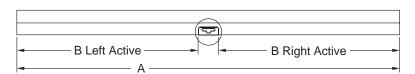


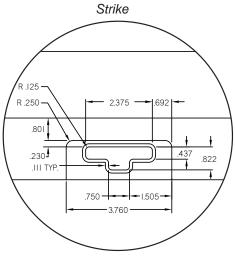


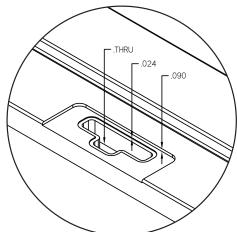
Multi-Point Head Jambs

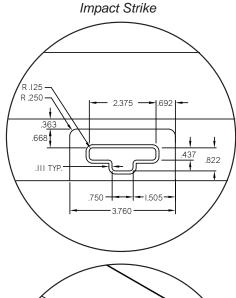
Head Jamb Machining French 7/8" Astragals

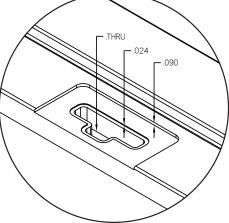
NOTE: For Multipoint Lock Shootbolt System with Astragals.











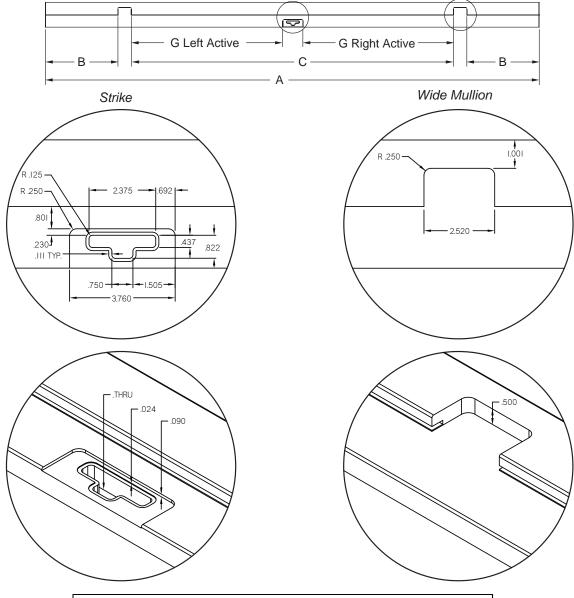
FRENCH MULTI-POINT 7/8" ASTRAGAL SYSTEM				
UNIT SIZE	А	В		
4/0 FRENCH 7/8 ASTRAGAL	48.718	21.583		
4/8 FRENCH 7/8 ASTRAGAL	56.718	25.583		
5/0 FRENCH 7/8 ASTRAGAL	60.718	27.583		
5/4 FRENCH 7/8 ASTRAGAL	64.718	29.583		
5/8 FRENCH 7/8 ASTRAGAL	68.718	31.583		
6/0 FRENCH 7/8 ASTRAGAL	72.718	33.583		
7/0 FRENCH 7/8 ASTRAGAL	84.718	39.583		



Multi-Point Head Jambs

Head Jamb Machining French with Venting Sidelites

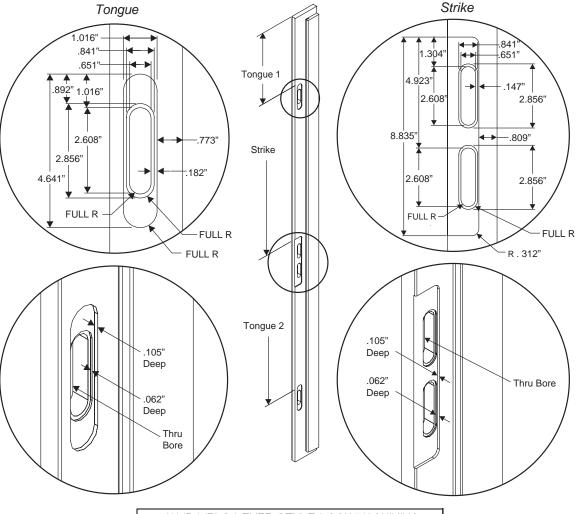
NOTE: For Multipoint Lock Shootbolt System with Astragals.



FRENCH MULTI-POINT WITH 2 VENTING SIDELITES (REQUIRES WIDE MULLION)					
UNIT SIZE A B C G					
5/8 FR. 7/8 AST. W/2 I2" VENTING SL	96.126	11.677	67732	31106	
5/8 FR. 7/8 AST. W/2 I4" VENTING SL	100100	13.677	61.132	31.100	
6/0 FR. 7/8 AST. W/2 I2" VENTING SL	100.126	11.677	71732	22106	
6/0 FR. 7/8 AST. W/2 I4" VENTING SL	104.126	13.677	11.132	33.106	



Lever-Style Multi-Point Lock Jambs (Captured Strike)



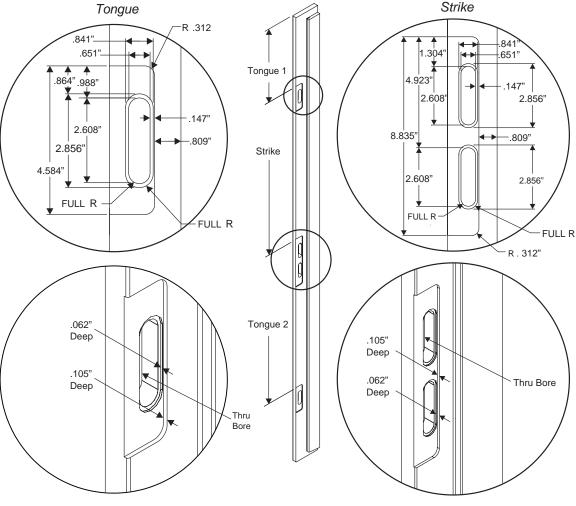
JAMB MPLS LEVER STYLE LOCK MACHINING UNIT SIZE **STRIKE** TONGUE I TONGUE 2 6/6 40.851 12.585 68.254 CAPTURED STRIKE 6/8 40.648 12.382 68.051 7/0 44.648 16.382 72.051 8/0 56.648 10.664 84.051

Cut Lock Mortises

Use MPLS Frame Jig, templates and router system designed for multipoint lock machining. Refer to appropriate Strike Preparation and Strike Preparation template pages.



Lever-Style Multi-Point Lock Jambs (Lip Strike)



JAMB MPLS LEVER STYLE LOCK MACHINING UNIT SIZE STRIKE TONGUE I TONGUE 2 6/6 40.851 12.614 68.283 LIP STRIKE 6/8 40.648 12.411 68.080 7/0 44.648 16.411 72.080 8/0 56.648 10.693 84.080

Cut Lock Mortises

5.6

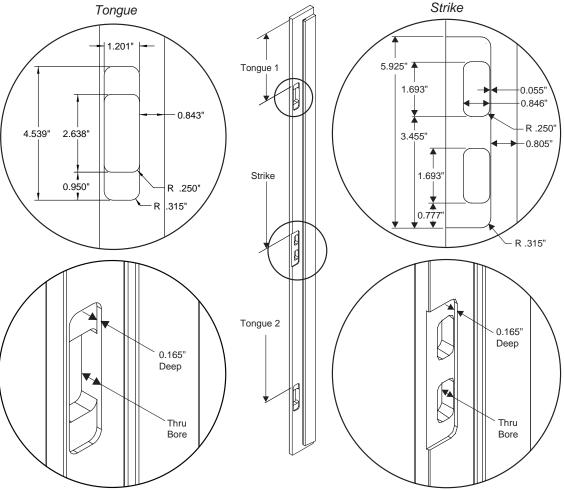
Use MPLS Frame Jig, templates and router system designed for multipoint lock machining. Refer to appropriate Strike Preparation and Strike Preparation template pages.

Multipoint Lock

Machining



Grip-Style Multi-Point Lock Jambs



 JAMB MPLS GRIP STYLE LOCK MACHINING

 UNIT SIZE
 STRIKE
 TONGUE I
 TONGUE 2

 6/8
 38.539
 12.082
 67.752

 7/0
 42.539
 16.082
 71.752

54.539

Cut Lock Mortises

8/0

Use MPLS Frame Jig, templates and router system designed for multipoint lock machining. Refer to appropriate Strike Preparation and Strike Preparation template pages.

10.372

83.752



Lever-Style Multi-Point Lock Mullions/Spread Mullions (Captured Strike)

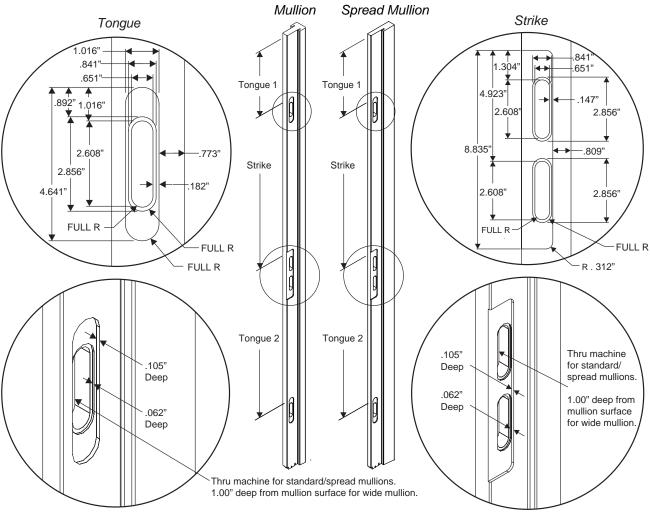


THIS PAGE APPLIES ONLY TO:

Continuous
One-Sidelite Units
Lock at Mullion

Continuous Two-Sidelite Units





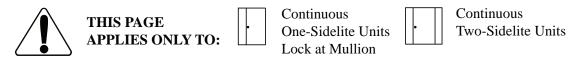
MPLS LEVER STYLE LOCK MACHINING						
	UNIT SIZE	STRIKE	TONGUE I	TONGUE 2		
	6/6	40.101	11.836	67.506		
SAPTURED STRIKE	6/8	39.898	11.633	67.303		
NPT STF	7/0	43.898	15.633	71.303		
Ö	8/0	55.898	9.915	83.303		

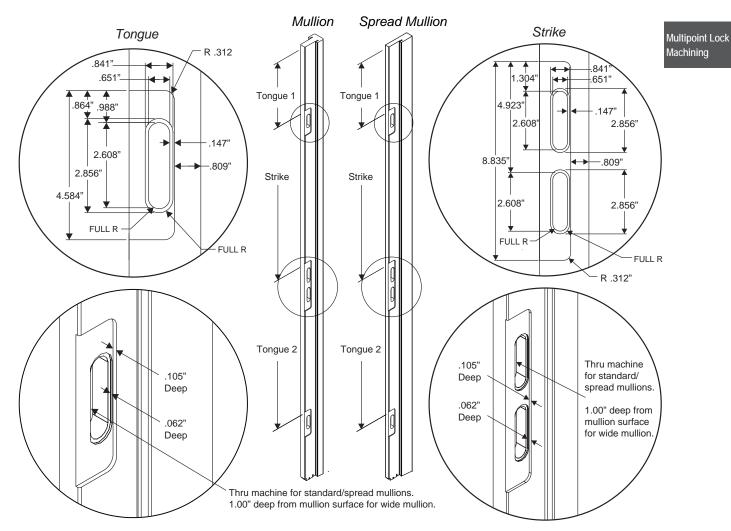
Cut Lock Mortises

Use MPLS Frame Jig, templates and router system designed for multipoint lock machining. Refer to appropriate Strike Preparation and Strike Preparation template pages.



Lever-Style Multi-Point Lock Mullions/Spread Mullions (Lip Strike)





MPLS LEVER STYLE LOCK MACHINING						
UNIT SIZE STRIKE TONGUE I TONGUE 2						
	6/6	40.101	11.865	67.535		
LP N N N	6/8	39.898	11.662	67.332		
L STF	7/0	43.898	15.662	71.332		
	8/0	55.898	9.944	83.332		

Cut Lock Mortises

Use MPLS Frame Jig, templates and router system designed for multipoint lock machining. Refer to appropriate Strike Preparation and Strike Preparation template pages.



Grip-Style Multi-Point Lock Mullions/Spread Mullions

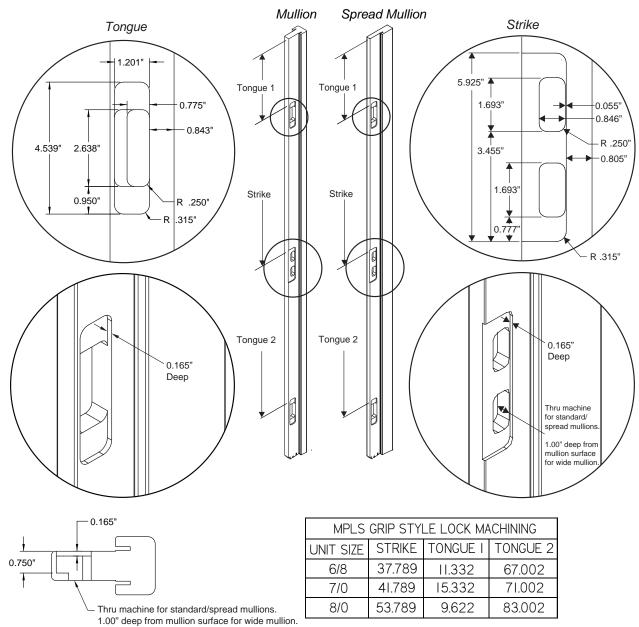


THIS PAGE APPLIES ONLY TO:

Continuous
One-Sidelite Units
Lock at Mullion

Continuous
Two-Sidelite Units



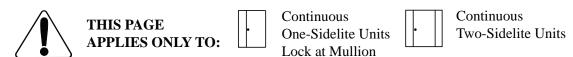


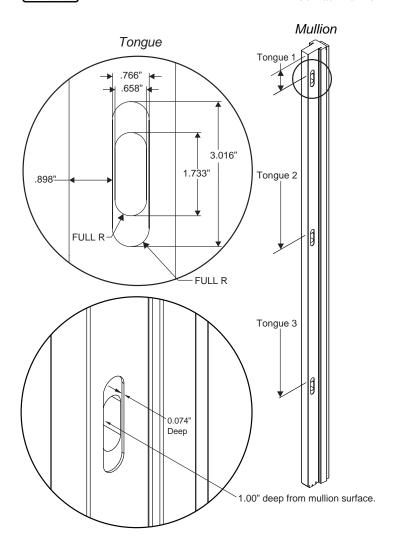
Cut Lock Mortises

Use MPLS Frame Jig, templates and router system designed for multipoint lock machining. Refer to appropriate Strike Preparation and Strike Preparation template pages.



Venting Sidelite Multi-Point Lock Mullions





MPLS VENTING SIDELITE LOCK MACHINING				
UNIT SIZE	TONGUE I	TONGUE 2	TONGUE 3	
6/6	3.489	32.989	60.491	
6/8	3.286	32.786	60.288	
8/0	16.286	48.786	76.288	

Cut Lock Mortises

Use MPLS Frame Jig, templates and router system designed for multipoint lock machining. Refer to appropriate Strike Preparation and Strike Preparation template pages.



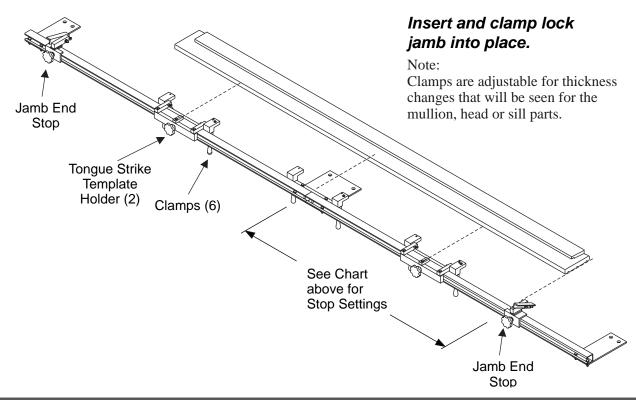
Lever Style Multi-Point Lock Jamb Strike Preparation

Lock Jamb Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the jambs when inserted.

Multipoint Lock Machining NOTE: Position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted. Insert and clamp the jamb into place.

Lever Style MPLS Machining								
	Lock Jamb							
Unit Size	Head End Stop	Inswing Sill Stop Setting	Composite Outswing Sill Stop Setting	Aluminum Outswing Sill Stop Setting	Lower Tongue Setting	Upper Tongue Setting		
6/6	45.269"	34.012"	33.353"	32.778"	25.306"	30.364"		
0/0	1150 mm	864 mm	847 mm	833 mm	643 mm	771 mm		
6/8	45.066"	36.560"	35.901"	35.326"	25.306"	30.364"		
0/8	1145 mm	929 mm	912 mm	897 mm	643 mm	771 mm		
7/0	49.066"	36.560"	35.901"	35.326"	25.306"	30.364"		
7/0	1246 mm	929 mm	912 mm	897 mm	643 mm	771 mm		
8/0	61.066"	36.560"	35.901"	35.326"	25.306"	48.082"		
6/0	1551 mm	929 mm	912 mm	897 mm	643 mm	1221 mm		





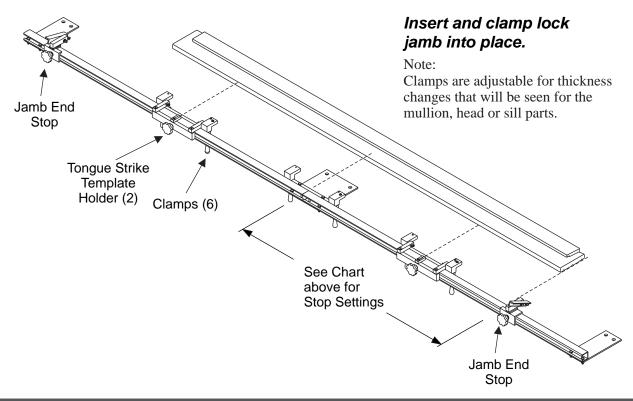
Grip Style Multi-Point Lock Jamb Strike Preparation

Lock Jamb Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the jambs when inserted.

NOTE: Position the top end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted. Insert and clamp the jamb into place.

	GRIP STYLE MPLS MACHINING					
			SILL END STOP			
UNIT	HEAD END	CTDIVE	CTDIVE O	INSWING	OUTSWING	OUTSWING
HEIGHT	STOP	STRIKET	STRIKE 2	IINZWIING	COMPOSITE	ALUMINUM
C/O	41.502"					
6/8	1054 mm	27.150"				
7/0	45.502"	690 mm	28.520"	40.124"	39.465"	38.890"
7/0	1156 mm		724 mm	1019 mm	1002 mm	988 mm
0.10	57.502"	44.858"				
8/0	1461 mm	1139 mm				





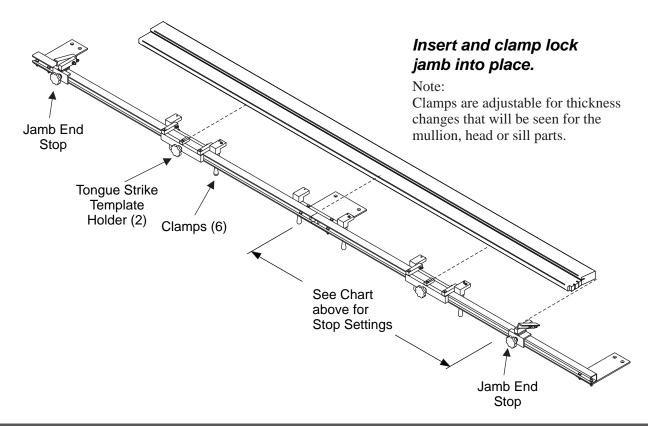
Lever Style Multi-Point Spread Mullion Strike Preparation

Spread Mullion Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the jambs when inserted.

Multipoint Lock Machining NOTE: Position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted. Insert and clamp the jamb into place.

Lever Style MPLS Machining							
	Spread Mullion						
Unit Size	Head End Stop	Inswing Sill Stop Setting	Lower Tongue Setting	Upper Tongue Setting			
6/6	44.519"	34.762"	25.306"	30.364"			
0/0	1131 mm	883 mm	643 mm	771 mm			
6/8	44.316"	37.310"	25.306"	30.364"			
0/8	1126 mm	948 mm	643 mm	771 mm			
7/0	48.316"	37.310"	25.306"	30.364"			
//0	1227 mm	948 mm	643 mm	771 mm			
8/0	60.316"	37.310"	25.306"	48.082"			
6/0	1532 mm	948 mm	643 mm	1221 mm			





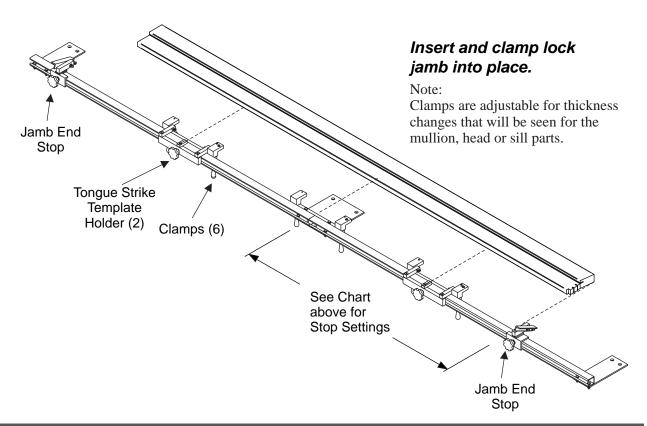
Grip Style Multi-Point Spread Mullion Strike Preparation

Spread Mullion Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the jambs when inserted.

NOTE: Position the top end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted. Insert and clamp the jamb into place.

GRIP STYLE MPLS MACHINING				
	HEAD END	CTDIVE	STRIKE 2	
UNIT HEIGHT	STOP	STRIKE I		
610	40.752"			
6/8	1035 mm	27.150"		
7/0	44.752"	690 mm	28.520"	
770	1137 mm		724 mm	
8/0	56.752"	44.860"		
6/0	1442 mm	1139 mm		





Lever Style Multi-Point Patio Mullion Strike Preparation

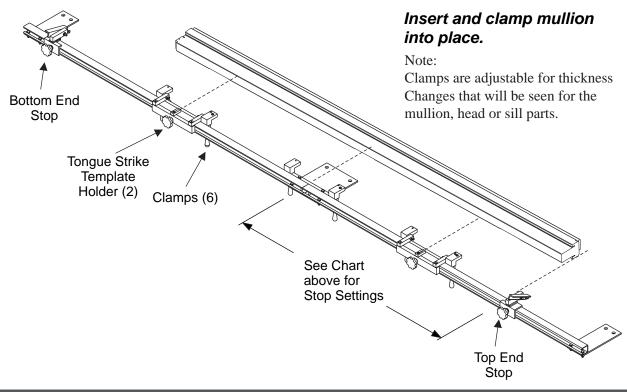
Patio Mullion Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the mullions when inserted.

Multipoint Lock Machining

NOTE: Position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the mullions when inserted. Insert and clamp the mullion into place.

Lever Style MPLS Machining					
		Patio	Mullion		
Unit Size	Head End Stop	Inswing Sill Stop Setting	Outswing Sill Stop Setting	Lower Tongue Setting	Upper Tongue Setting
6/6	44.519"	33.304"	32.659"	25.306"	30.364"
0/0	1131 mm	846 mm	830 mm	643 mm	771 mm
6/8	44.316"	35.852"	35.207"	25.306"	30.364"
0/8	1126 mm	911 mm	894 mm	643 mm	771 mm
7/0	48.316"	35.852"	35.207"	25.306"	30.364"
//0	1227 mm	911 mm	894 mm	643 mm	771 mm
8/0	60.316"	35.852"	35.207"	25.306"	48.082"
6/0	1532 mm	911 mm	894 mm	643 mm	1221 mm





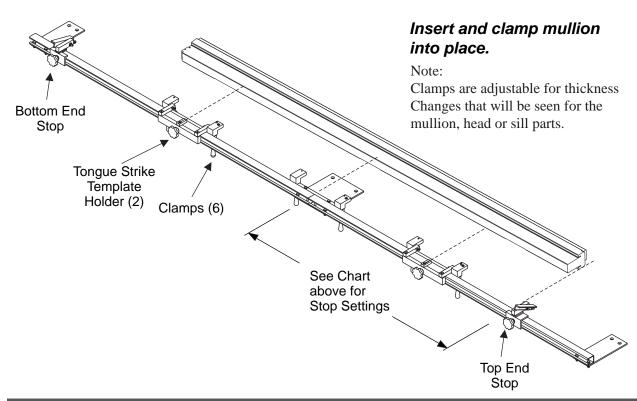
Lever Style Multi-Point Entry Mullion Strike Preparation

Entry Mullion Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the mullions when inserted.

NOTE: Position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the mullions when inserted. Insert and clamp the mullion into place.

Lever Style MPLS Machining					
		Entry Mulli	on		
Unit Size	Head End Stop	Inswing Sill Stop Setting	Lower Tongue Setting	Upper Tongue Setting	
6/6	44.519"	33.423"	25.306"	30.364"	
0/0	1131 mm	849 mm	643 mm	771 mm	
6/8	44.316"	35.971"	25.306"	30.364"	
0/8	1126 mm	914 mm	643 mm	771 mm	
7/0	48.316"	35.971"	25.306"	30.364"	
7/0	1227 mm	914 mm	643 mm	771 mm	
8/0	60.316"	35.971"	25.306"	48.082"	
0/0	1532 mm	914 mm	643 mm	1221 mm	





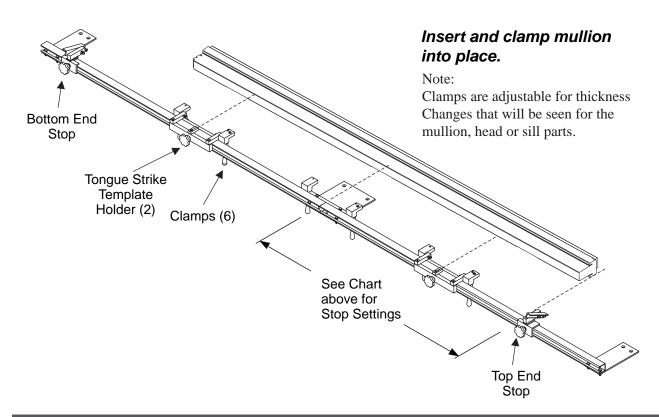
Grip Style Multi-Point Entry Mullion Strike Preparation

Mullion Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the jambs when inserted.

Multipoint Lock Machining NOTE: Position the top end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted. Insert and clamp the jamb into place.

GRIP STYLE MPLS MACHINING					
UNIT HEIGHT	HEAD END STOP	STRIKE I	STRIKE 2		
6/8	40.752" 1035 mm	27.150"			
7/0	44.752"	690 mm	28.520"		
770	1137 mm		724 mm		
8/0	56.752"	44.860"			
0/0	1442 mm	1139 mm			





Lever Style Multi-Point Strike Preparation Templates

INSTALL TEMPLATES FOR LEVER STYLE MPLS

Install the required templates (see below) on the holder with the label side up and to the left. Set the bit depth to 2.67 mm (1/8) and mortise the jamb.

Router will need to be set for three route depths. One for the strike thickness, the second for the optional dust cups and the third to plunge through the jamb.

NOTE:

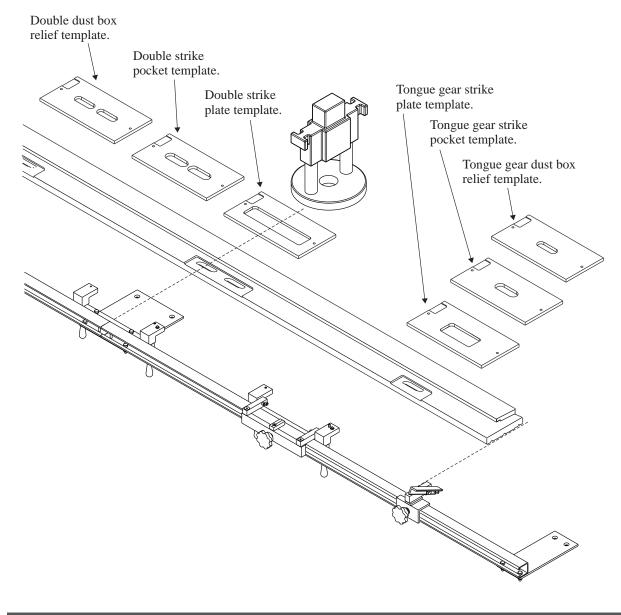
To remove the templates from the holders, lift slightly on one end and then gently lift on the opposite end. The template will slip easily off the pins if not bound by too much force applied at one end only.

NOTE:

Wood jambs and Therma-Tru composite jambs have different rabbet dimensions and require different templates. Use a Frame Prep Template Kit (MPLSTEMPTD - wood jambs, MPLSTEMPCJ - Therma-Tru Composite Jambs) and router system designed for multipoint lock machining.



Multipoint Lock





Grip Style Multi-Point Strike Preparation Templates

INSTALL TEMPLATES FOR GRIP STYLE MPLS

Install the required templates (see below) on the holder with the label side up and to the left. Set the bit depth to 4.20 mm (.165") and mortise the jamb or mullion for the strike.

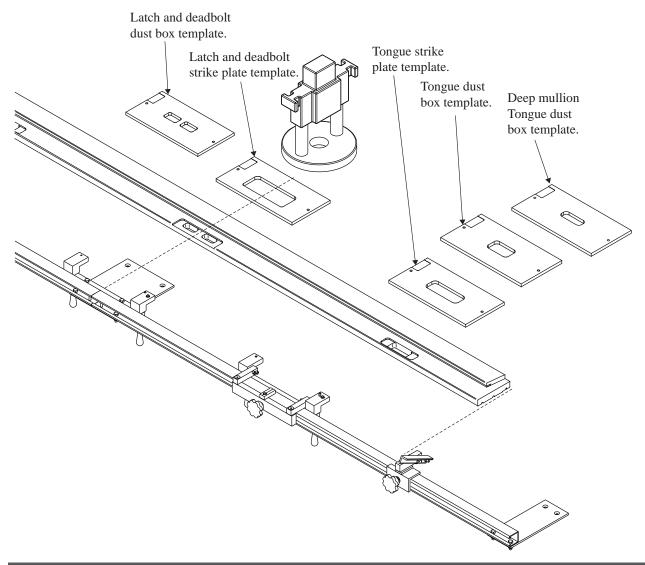
Multipoint Lock Machining Router will need to be set for two route depths on jambs, and three route depths on mullions. For Jambs: one for the strike thickness and one for the dust box templates (3/4" or thru the jamb). For Mullions: one for the strike thickness, one for the dust box templates (3/4"), and a third for the deep mullion tongue dust box template (1" for wide mullion or thru the standard mullion).

NOTE:

To remove the templates from the holders, lift slightly on one end and then gently lift on the opposite end. The template will slip easily off the pins if not bound by too much force applied at one end only.

NOTE:

Wood jambs and Therma-Tru composite jambs have different rabbet dimensions and require different templates. Use a Frame Prep Template Kit (MPGSGTJAMBTEMP - wood jambs, MPGSGTCTEMP - Therma-Tru Composite Jambs) and router system designed for multipoint lock machining.





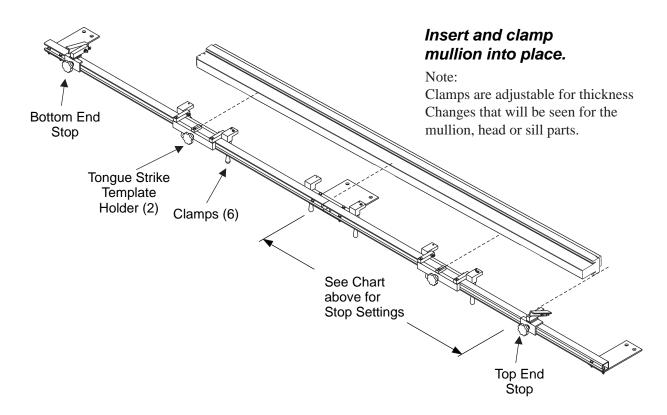
Venting Sidelite Multi-Point Mullion Strike Preparation

Venting Sidelite Mullion Strike Preparation

Based on the chart, position the end stop and template holders at the proper locations. Pivot the stop arms so the stop bolt will contact the end of the mullions when inserted.

NOTE: Position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the mullions when inserted. Insert and clamp the mullion into place.

MPLS Machining						
	Venting Sidelite Mullion					
Unit Size	Inswing Sill Stop Setting	Upper Tongue Setting	Lower Tongue Setting			
6/6	43.365"	29.500"	27.500"			
0/0	1101 mm	749 mm	699 mm			
6/8	45.913"	29.500"	27.500"			
0/8	1166 mm	749 mm	699 mm			
8/0	45.913"	32.500"	27.500"			
6/0	1166 mm	826 mm	699 mm			





Venting Sidelite Multi-Point Strike Preparation Templates

INSTALL TEMPLATES FOR VENTED SIDELITES

Install the required templates (see below) on the holder with the label side up and to the left. Set the bit depth to 2.67 mm (3/32") and mortise the mullion.

Router will need to be set for two depths. One for the strike thickness. The second to the pocket depth in mullion (1")

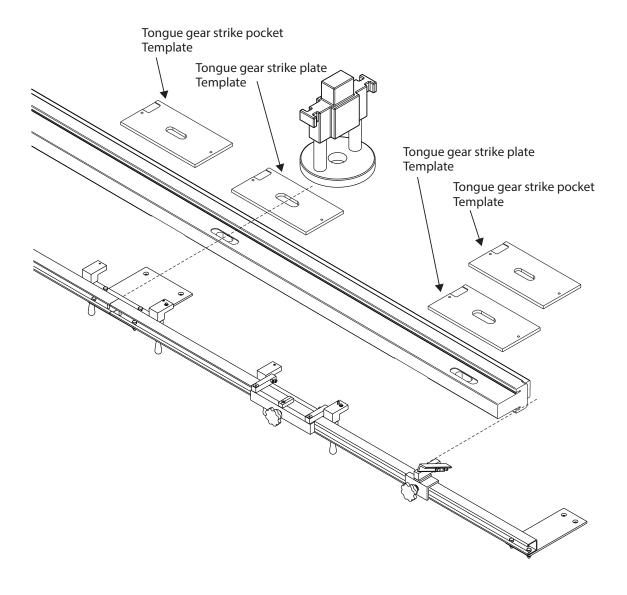
Multipoint Lock Machining

NOTE:

To remove the templates from the holders, lift slightly on one end and then gently lift on the opposite end. The template will slip easily off the pins if not bound by too much force applied at one end only.

NOTE:

Wood jambs and Therma-Tru composite jambs have different rabbet dimensions and require different templates. Use a Frame Prep Template Kit (MPLSTEMPVSL - wood jambs, MPLSTEMPVSLCJ - Therma-Tru Composite Jambs) and router system designed for multipoint lock machining.





French-Astragal with Vented Sidelites Head Jamb Strike Preparation

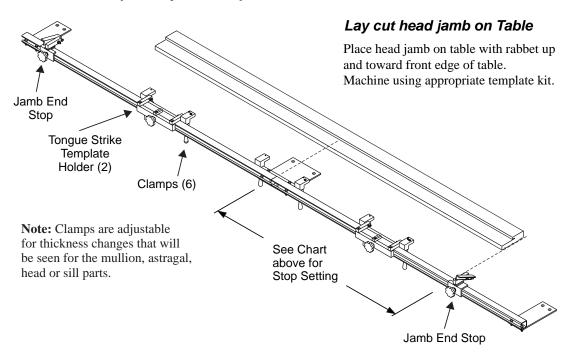
French-Astragal with Vented Sidelites Head Jamb Strike Preparation.

Based on the chart position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted.

MPLS Machining							
7/8" Astragal with 2 Vented Sidelites Head Jamb Strike							
Unit Size	Left Stop		Right Stop				
	LH Header	RH Header	LH Header	RH Header			
5/8 w/ 2-12" VSL	47.167"	48.959"	48.959"	47.167"			
	1198 mm	1244 mm	1244 mm	1198 mm			
5/8 w/ 2-14" VSL	49.167"	50.959"	50.959"	49.167"			
	1249 mm	1294 mm	1294 mm	1249 mm			
6/0 w/ 2-12" VSL	49.167"	50.959"	50.959"	49.167"			
	1249 mm	1294 mm	1294 mm	1249 mm			
6/0 w/ 2-14" VSL	51.167"	52.959"	52.959"	51.167"			
	1300 mm	1345 mm	1345 mm	1300 mm			

Multipoint Lock Machining

Insert and clamp head jamb into place.





French-Astragal Head Jamb Strike Preparation

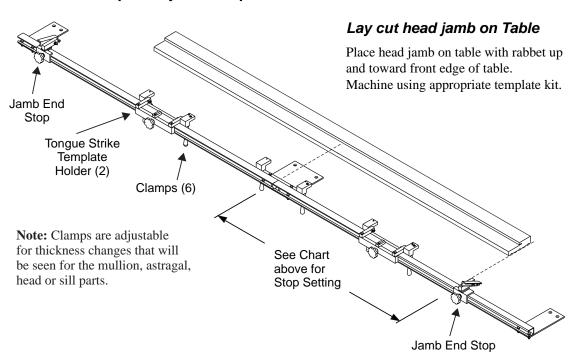
French-Astragal Head Jamb Strike Preparation

Based on the chart position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted.

Multipoint Lock Machining

MPLS Machining 7/8" Astragal Head Jamb Strike						
Unit Size	LH Header	RH Header	LH Header	RH Header		
4/8	27.463"	29.255"	29.255"	27.463"		
4/0	698 mm	743 mm	743 mm	698 mm		
5/0	29.463"	31.255"	31.255"	29.463"		
5/0	748 mm	794 mm	794 mm	748 mm		
5/4	31.463"	33.255"	33.255"	31.463"		
5/4	799 mm	845 mm	845 mm	799 mm		
F /O	33.463"	35.255"	35.255"	33.463"		
5/8	850 mm	895 mm	895 mm	850 mm		
C/0	35.463"	37.255"	37.255"	35.463"		
6/0	901 mm	946 mm	946 mm	901 mm		
7/0	41.463"	43.255"	43.255"	41.463"		
	1053 mm	1099 mm	1099 mm	1053 mm		

Insert and clamp head jamb into place.





French-Astragal Head Jamb Strike Preparation Templates

INSTALL TEMPLATES FOR MPLS HEAD JAMBS

Install the required templates (see below) on the holder with the label side up and to the left. Set the bit depth to 2.67 mm (1/8) and mortise the jamb.

Router will need to be set for three route depths. One for the strike thickness, the second for the optional dust cups and the third to plunge through the jamb.

NOTE:

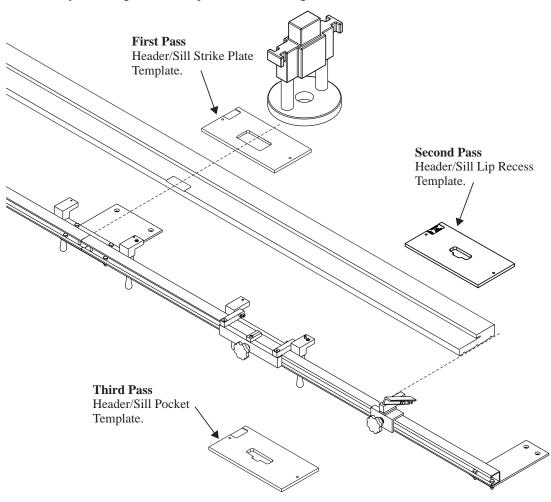
To remove the templates from the holders, lift slightly on one end and then gently lift on the opposite end. The template will slip easily off the pins if not bound by too much force applied at one end only.

NOTE: LEVER STYLE MPLS

Wood jambs and Therma-Tru composite jambs have different rabbet dimensions and require different templates. Use a Frame Prep Template Kit (MPLSTEMPTD - wood jambs, MPLSTEMPCJ - Therma-Tru Composite Jambs) and router system designed for multipoint lock machining.

NOTE: GRIP STYLE MPLS

Wood jambs and Therma-Tru composite jambs have different rabbet dimensions and require different templates. Use a Frame Prep Template Kit (MPGSGTJAMBTEMP - wood jambs, MPGSGTCTEMP - Therma-Tru Composite Jambs) and router system designed for multipoint lock machining.





Multipoint Lock Machining

MPLS Strike Installation Instructions Standard Inswing Shootbolt

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

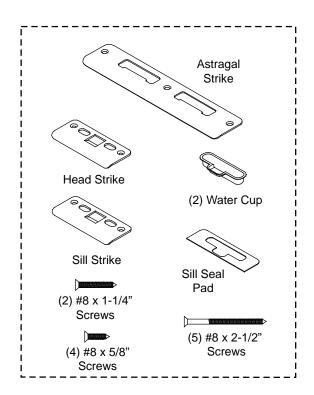
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSSTDIS

Standard Inswing Shootbolt Pack Contents:





1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400



MPLS Strike Installation Instructions - Standard Inswing Shootbolt

All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:



ASTRAGAL STRIKE ASSEMBLY.

Insert astragal strike into the machined pocket on the astragal.

Fasten with (3) #8 x 2-1/2" screws. See Figure 1.

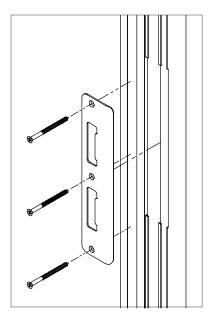


Figure 1

2

HEAD STRIKE ASSEMBLY.

Insert cup into head strike machining.

Seat head strike into head strike machining and attach with (2) #8 x 5/8" screws. See Figure 2.

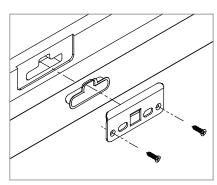


Figure 2

MPLS Strike Installation Instructions - Standard Inswing Shootbolt



3

SILL STRIKE ASSEMBLY.

Insert cup into sill strike machining.

Multipoint Lock Machining Place sill seal pad over the top of the cup, aligning it with the machined pocket on the sill. Seat the sill strike in the sill machining on top of the sill seal pad.

Attach with (2) #8 x 5/8" screws. See Figure 3.

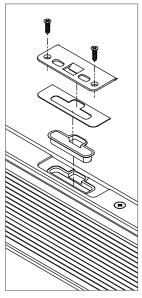


Figure 3

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



HEAD STRIKE ASSEMBLY.

Remove the screws from the head strike and replace with $(2) \#8 \times 2-1/2$ " screws.

Use temporary shims as shown in the Therma-Tru Installation Instructions. See Figure 4.

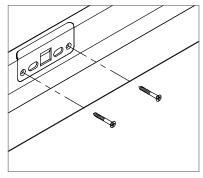


Figure 4

2

SILL STRIKE ASSEMBLY.

For added strength and security, remove the screws from the sill strike and replace with (2) #8 x 1-1/4" screws. See Figure 5

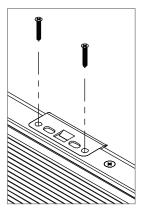


Figure 5

MPLS Strike Installation Instructions Impact Inswing Shootbolt

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

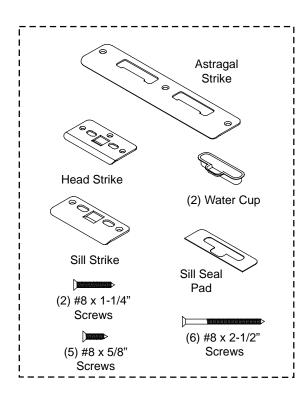
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSIMPIS

Impact Inswing Shootbolt Pack Contents:



Multipoint Lock Machining



1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400

MPLS Strike Installation Instructions - Impact Inswing Shootbolt



All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:



Multipoint Lock

Machining

ASTRAGAL STRIKE ASSEMBLY.

Insert astragal strike into the machined pocket on the astragal.

Fasten with (3) #8 x 2-1/2" screws. See Figure 1.

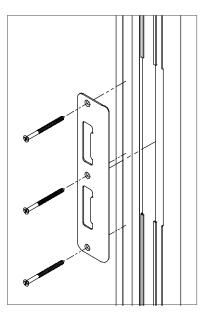


Figure 1

HEA

HEAD STRIKE ASSEMBLY.

Insert cup into head strike machining.

Seat head strike into head strike machining and attach with (3) #8 x 5/8" screws. See Figure 2.

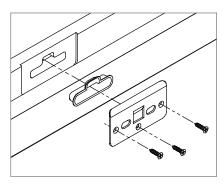


Figure 2

MPLS Strike Installation Instructions - Impact Inswing Shootbolt

3

SILL STRIKE ASSEMBLY.

Insert cup into sill strike machining.

Place sill seal pad over the top of the cup, aligning it with the machined pocket on the sill. Seat the sill strike in the sill machining on top of the sill seal pad.

Attach with (2) #8 x 5/8" screws. See Figure 3.

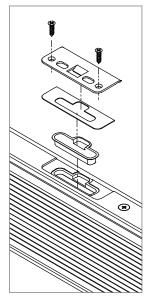


Figure 3

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



HEAD STRIKE ASSEMBLY.

Remove the screws from the head strike and replace with (3) #8 x 2-1/2" screws.

Multipoint Lock

Machining

Use temporary shims as shown in the Therma-Tru Installation Instructions. See Figure 4.

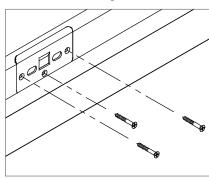
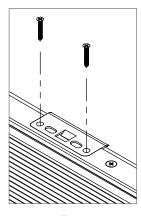


Figure 4

2

SILL STRIKE ASSEMBLY.

For added strength and security, remove the screws from the sill strike and replace with (2) #8 x 1-1/4" screws. See Figure 5.



igure 5



Multipoint Lock Machining

MPLS Strike Installation Instructions Standard Outswing Shootbolt

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

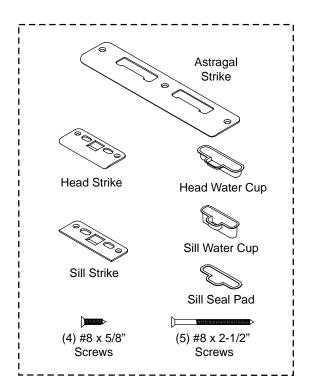
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSSTDOS

Standard Outswing Shootbolt Pack Contents:





1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400

MPLS Strike Installation Instructions - Standard Outswing Shootbolt

All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:



ASTRAGAL STRIKE ASSEMBLY.

Insert astragal strike into the machined pocket on the astragal.

Fasten with (3) #8 x 2-1/2" screws. See Figure 1.

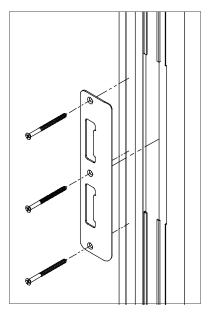


Figure 1

2

HEAD STRIKE ASSEMBLY.

Insert cup into head strike machining.

Seat head strike into head strike machining and attach with (2) #8 x 5/8" screws. See Figure 2.

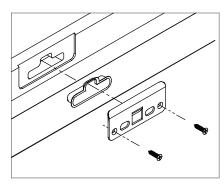


Figure 2

MPLS Strike Installation Instructions - Standard Outswing Shootbolt



3

Multipoint Lock Machining

SILL STRIKE ASSEMBLY.

Place sill seal pad around the bottom lip of the sill cup. Insert sill cup into sill strike machining. Align the sill strike with the pre-drilled holes in the sill.

Attach with (2) #8 x 5/8" screws. See Figure 3.

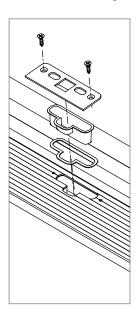


Figure 3

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



HEAD STRIKE ASSEMBLY.

Remove the screws from the head strike and replace with (2) #8 x 2-1/2" screws.

Use temporary shims as shown in the Therma-Tru Installation Instructions. See Figure 4.

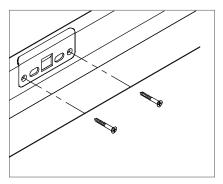


Figure 4

MPLS Strike Installation Instructions Impact Outswing Shootbolt

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

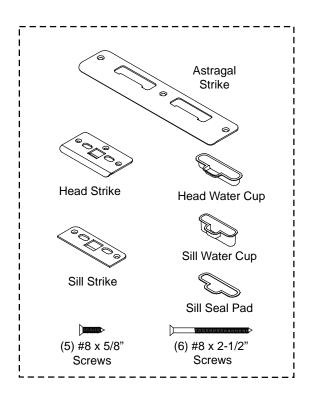
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSIMPOS

Impact Outswing Shootbolt Pack Contents:



Multipoint Lock Machining



1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400

MPLS Strike Installation Instructions - Impact Outswing Shootbolt



All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:



Multipoint Lock

Machining

ASTRAGAL STRIKE ASSEMBLY.

Insert astragal strike into the machined pocket on the astragal.

Fasten with (3) #8 x 2-1/2" screws. See Figure 1.

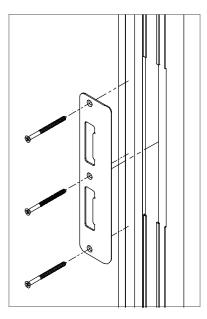


Figure 1

2

HEAD STRIKE ASSEMBLY.

Insert cup into head strike machining.

Seat head strike into head strike machining and attach with (3) $\#8 \times 5/8$ " screws. See Figure 2.

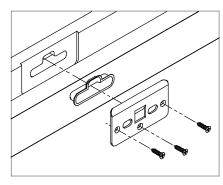


Figure 2

MPLS Strike Installation Instructions - Impact Outswing Shootbolt

3

SILL STRIKE ASSEMBLY.

Place sill seal pad around the bottom lip of the sill cup. Insert sill cup into sill strike machining. Align the sill strike with the pre-drilled holes in the sill.

Attach with (2) #8 x 5/8" screws. See Figure 3.

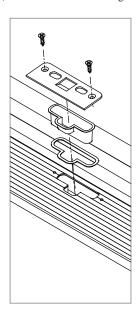


Figure 3

Ship all remaining screws with unit for Site Installation purposes.

AT THE SITE:



HEAD STRIKE ASSEMBLY.

Remove the screws from the head strike and replace with $(3) #8 \times 2-1/2$ " screws.

Use temporary shims as shown in the Therma-Tru Installation Instructions. See Figure 4.

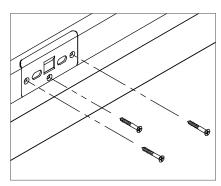


Figure 4



Multipoint Lock Machining

MPLS Strike Installation Instructions Aluminum Outswing Shootbolt

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

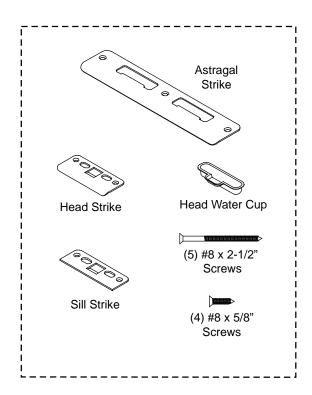
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSALOS

Aluminum Outswing Shootbolt Pack Contents:





1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400

MPLS Strike Installation Instructions - Aluminum Outswing Shootbolt

All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:



ASTRAGAL STRIKE ASSEMBLY.

Insert astragal strike into the machined pocket on the astragal.

Fasten with (3) #8 x 2-1/2" screws. See Figure 1.

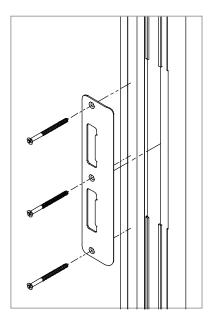


Figure 1

2

HEAD STRIKE ASSEMBLY.

Insert cup into head strike machining.

Seat head strike into head strike machining and attach with (2) #8 x 5/8" screws. See Figure 2.

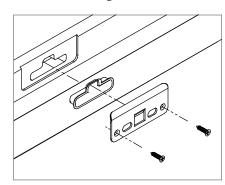


Figure 2

MPLS Strike Installation Instructions - Aluminum Outswing Shootbolt



3

Multipoint Lock Machining SILL STRIKE ASSEMBLY.

Align the sill strike with the pre-drilled holes in the sill.

Attach with (2) #8 x 5/8" screws. See Figure 3.

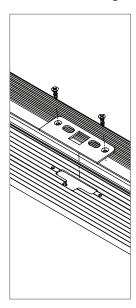


Figure 3

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



HEAD STRIKE ASSEMBLY.

Remove the screws from the head strike and replace with (2) $\#8 \times 2-1/2$ " screws.

Use temporary shims as shown in the Therma-Tru Installation Instructions. See Figure 4.

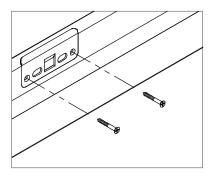


Figure 4

MPLS Strike Installation Instructions Universal Shootbolt

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

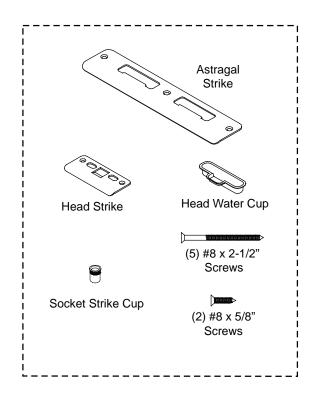
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSUNIV

Universal Shootbolt Pack Contents:



Multipoint Lock Machining



1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400



All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:



Multipoint Lock

Machining

ASTRAGAL STRIKE ASSEMBLY.

Insert astragal strike into the machined pocket on the astragal.

Fasten with (3) #8 x 2-1/2" screws. See Figure 1.

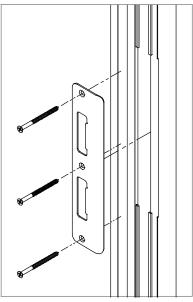


Figure 1

2

HEAD STRIKE ASSEMBLY.

Insert cup into head strike machining.

Seat head strike into head strike machining and attach with (2) $\#8 \times 5/8$ " screws. See Figure 2.

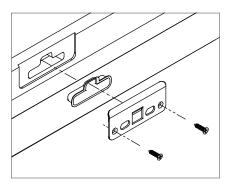


Figure 2

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



HEAD STRIKE ASSEMBLY.

Remove the screws from the head strike and replace with $(2) #8 \times 2-1/2$ " screws.

Use temporary shims as shown in the Therma-Tru Installation Instructions. See Figure 3.

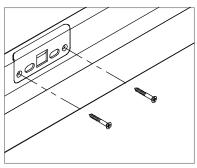


Figure 3

2

STRIKE CUP ASSEMBLY.

Mark the hole location in the sill using the tip of the shootbolt as a guide. Drill 9/16" hole through the sill.

Insert the socket strike cup into the hole. See Figure 4.

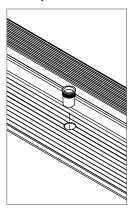


Figure 4



Multipoint Lock Machining

MPLS Strike Installation Instructions Lip Tongue

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

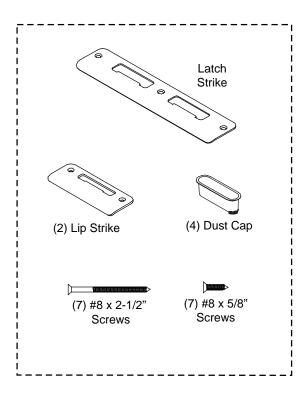
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSLT

Lip Tongue Pack Contents:





1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400

MPLS Strike Installation Instructions - Lip Strike

All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:

1a

STANDARD MULLION AND JAMB LATCH STRIKE ASSEMBLY.

Insert (2) dust covers into the machined pockets in the latch strike machining.

Seat latch strike into the machined pocket.

Fasten with (3) #8 x 2-1/2" screws for a **mullion** or with (3) # 8 x 5/8" screws for a **jamb**. See Figure 1a.

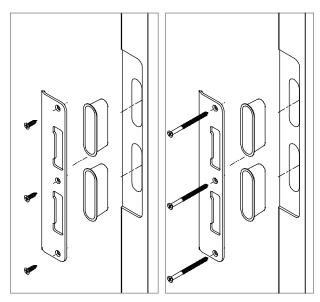


Figure 1a - Jamb

Figure 1a - Mullion

1b SPREAD MULLION LATCH STRIKE ASSEMBLY.

Insert (2) dust covers into the machined pockets in the latch strike machining.

Seat latch strike into the machined pocket.

Fasten with (2) #8 x 2-1/2" screws and (1) # 8 x 5/8" screws for a **spread mullion**. See Figure 1b.

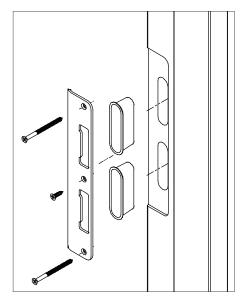


Figure 1b - Spread Mullion



2

Multipoint Lock

Machining

TONGUE STRIKE ASSEMBLY.

Insert dust cover into the machined pocket for the tongue strike.

Seat tongue strike into machining.

Fasten with (2) #8 x 2-1/2" screws for a **mullion** or **spread mullion**. Fasten with (2) #8 x 5/8" screws for a **jamb**. See Figure 2.

Repeat for other tongue strike.

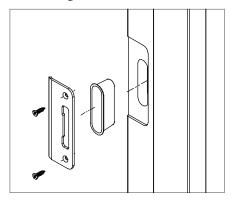


Figure 2 - Jamb

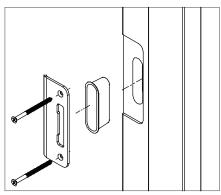


Figure 2 - Mullion and Spread Mullion

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



LIP TONGUE ASSEMBLY.

If the multi-point strike is installed in the jamb, remove the screws from each strike and replace with #8 x 2-1/2" screws.

Shims as shown in the Therma-Tru Installation Instructions. See Figure 3 and 4.

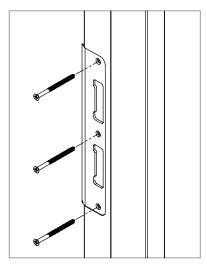


Figure 3

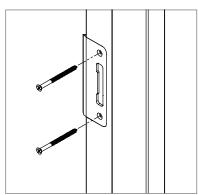


Figure 4

MPLS Strike Installation Instructions Captured Tongue

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

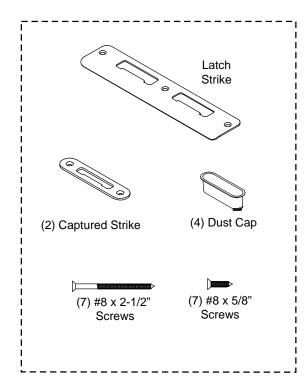
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSCPT

Captured Tongue Pack Contents:



Multipoint Lock Machining



1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400



All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:

1a

Multipoint Lock

Machining

STANDARD MULLION AND JAMB LATCH STRIKE ASSEMBLY.

Insert (2) dust covers into the machined pockets in the latch strike machining.

Seat latch strike into the machined pocket.

Fasten with (3) #8 x 2-1/2" screws for a **mullion** or with (3) # 8 x 5/8" screws for a **jamb**. See Figure 1a.

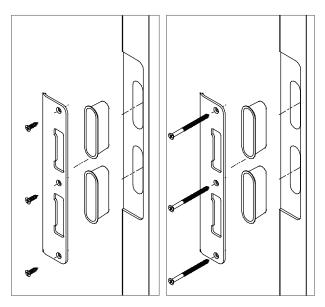


Figure 1a - Jamb

Figure 1a - Mullion

1b SPREAD MULLION LATCH STRIKE ASSEMBLY.

Insert (2) dust covers into the machined pockets in the latch strike machining.

Seat latch strike into the machined pocket.

Fasten with (2) #8 x 2-1/2" screws and (1) # 8 x 5/8" screws for a **spread mullion**. See Figure 1b.

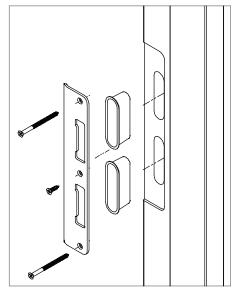


Figure 1b - Spread Mullion

MPLS Strike Installation Instructions - Captured Strike

2

TONGUE STRIKE ASSEMBLY.

Insert dust cover into the machined pocket for the tongue strike.

Seat tongue strike into machining.

Fasten with (2) #8 x 2-1/2" screws for a **mullion** or **spread mullion**. Fasten with (2) #8 x 5/8" screws for a **jamb**. See Figure 2.

Repeat for other tongue strike.

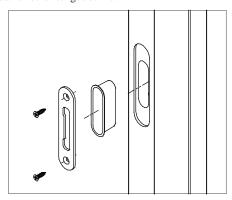


Figure 2 - Jamb

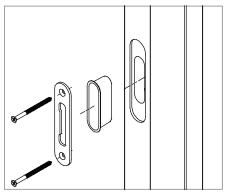


Figure 2 - Mullion and Spread Mullion

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



CAPTURED TONGUE ASSEMBLY.

If the multi-point strike is installed in the jamb, remove the screws from each strike and replace with #8 x 2-1/2" screws.

Shim as shown in the Therma-Tru Installation Instructions. See Figure 3 and 4.

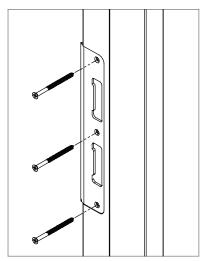


Figure 3

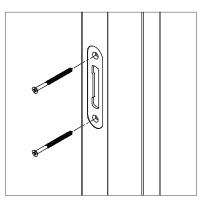


Figure 4



Multipoint Lock Machining

Grip Style MPLS Strike Installation Instructions

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

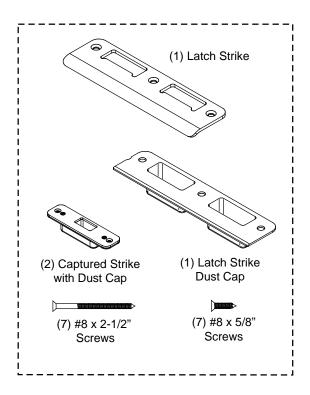
Read all instructions before starting.



Rev. A 3/6/17

P/N: MPGSGTCSINST

Grip Style MPLS Pack Contents:





1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400

All holes should be pre-drilled with 1/8" drill to the appropriate depth.

IN THE SHOP:

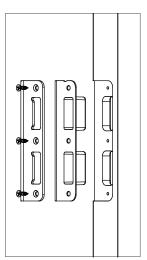


STANDARD MULLION AND JAMB LATCH STRIKE ASSEMBLY.

Insert dust cover into the machined pockets in the latch strike machining.

Seat latch strike into the machined pocket.

Fasten with (3) $\#8 \times 2-1/2$ " screws for a **mullion** or with (3) $\#8 \times 5/8$ " screws for a **jamb**. See Figure 1a.



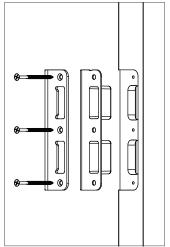


Figure 1a - Jamb

Figure 1a - Mullion

1b SPREAD MULLION LATCH STRIKE ASSEMBLY.

Insert dust cover into the machined pockets in the latch strike machining.

Seat latch strike into the machined pocket.

Fasten with (2) $\#8 \times 2-1/2$ " screws and (1) $\#8 \times 5/8$ " screws for a **spread mullion**. See Figure 1b.

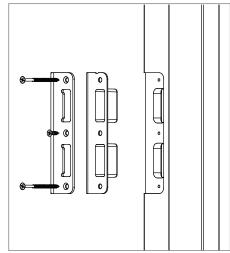


Figure 1b - Spread Mullion

2

Multipoint Lock

Machining

TONGUE STRIKE ASSEMBLY.

Seat tongue strike into machining, ensuring that the roller is closest to the jamb edge (pushing toward the weatherstrip).

Fasten with (2) #8 x 2-1/2" screws for a **mullion** or **spread mullion**. Fasten with (2) #8 x 5/8" screws for a **jamb**. See Figure 2.

Repeat for other tongue strike.

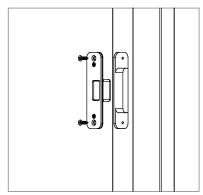


Figure 2 - Jamb

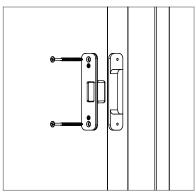


Figure 2 - Mullion and Spread Mullion

Ship all remaining parts with unit for Site Installation purposes.

AT THE SITE:



CAPTURED TONGUE ASSEMBLY.

If the multi-point strike is installed in the **jamb**, remove the screws from each strike and replace with #8 x 2-1/2" screws.

Shim as shown in the Therma-Tru Installation Instructions. See Figure 3 and 4.

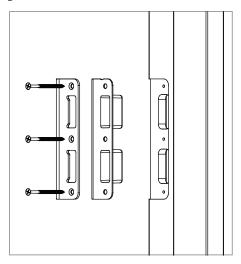


Figure 3

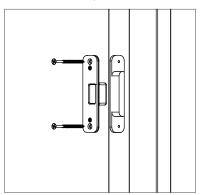


Figure 4

MPLS Strike Installation Instructions Vented Sidelite

The hardware pack contains all the necessary hardware and fasteners needed to complete this installation.

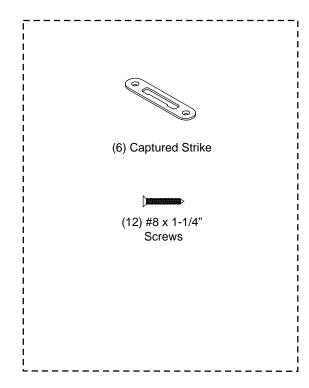
Read all instructions before starting.



Rev. A 10/1/14

P/N: MPLSVSL

Vented Sidelite Pack Contents:



Multipoint Lock Machining



1750 Indian Wood Circle Maumee, Ohio 43537 419-891-7400

MPLS Strike Installation Instructions - Venting Sidelites



IN THE SHOP:



STRIKE ASSEMBLY.

Seat latch strike into the machined pocket.

Fasten with (2) #8 x 1-1/4" screws.

Repeat for other strike.

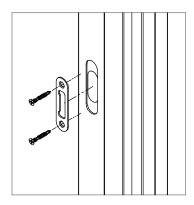


Figure 2



SHOP 6 Sill Selection and Frame Modification

Composite Sills	6.3
Basic Composite Adjustable Sill	6.4
Basic Fixed Sill	6.5
Outswing Sill - Thermal Break	6.6
Outswing Sill - No Thermal Break	6.7
Composite Outswing Sill	6.8
Public Access Sills	6.9
Basic Fixed Sill Cover	6.12
nswing Adjustable Sill Cover	6.13
Outswing Sill Cover	6.14
Sill Modification	6.15
Astragal Modification	6.30

Sill Selection and Frame Modification



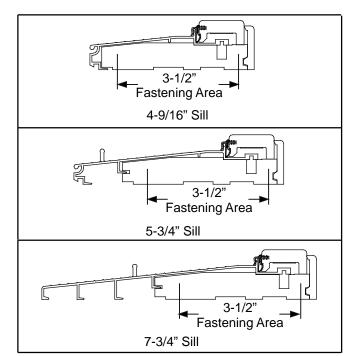
Sill Selection and Frame Modification



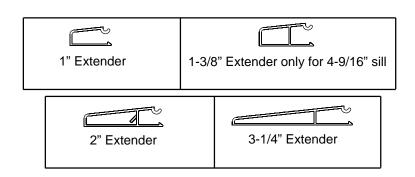
Composite Adjustable Sill

- Inswing jambs.
- · Fasten to frame with staples or screws.
- End seal pad (Part # MSISSEAL-TD)

Available for use in: Single Units French Units Continuous Units Vented Sidelite Units Patio Units



Sill Selection and Frame Modification

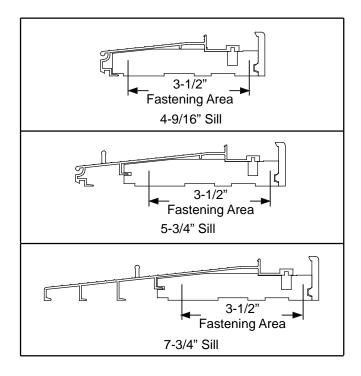


Note: Extenders apply to both sills shown.

Composite Sill (for inactive panels)

- Inswing jambs.
- Fasten to frame with staples or screws.
- End seal pad (Part # MSISSEAL-TD).

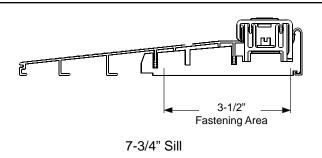
Available for use in: Boxed Units



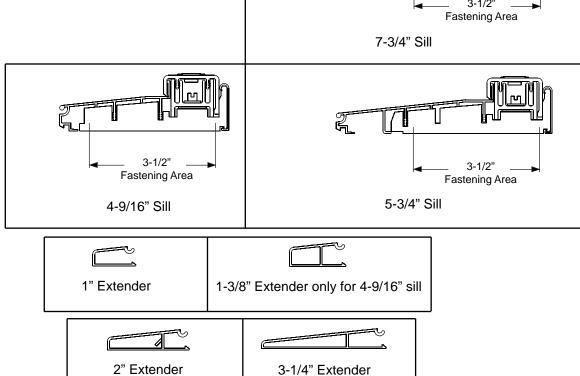


Basic Composite Adjustable Sill

- · Inswing jambs.
- Fasten to frame with staples or screws.
- End seal pad (Part # MSISSEAL-TD)



Sill Selection and Frame Modification



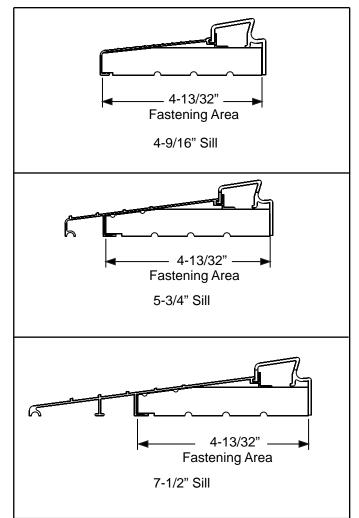
Available for use in: Single Units



Basic Fixed Sill

- Inswing jambs.
- Fasten to frame with staples or screws.

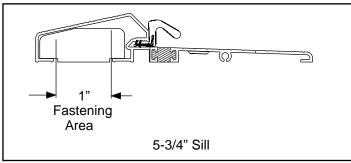
Available for use in: Single Units French Units

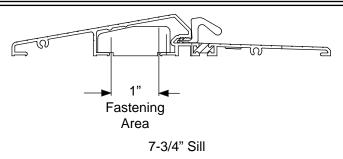




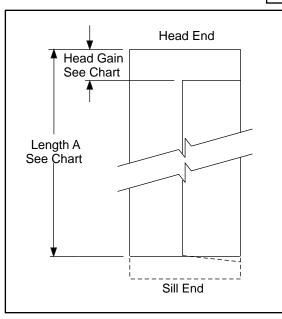
Outswing Sill - Thermal Break

- · Requires jamb modification.
- Fasten to frame with staples and (1) #8 x 2" flat head screw.









Cut Inswing Jambs Down

SIDE JAMB LENGTHS			
		OUTSWING	
UNIT SIZE	HEAD GAIN	ALUMINUM	
		LENGTH "A"	
66 = 6/6	1.250"	78.046"	
68 = 6/8	1.250"	80.391"	
70 = 7/0	1.250"	84.391"	
80 = 8/0	1.250"	96.391"	

Drill Screw Hole

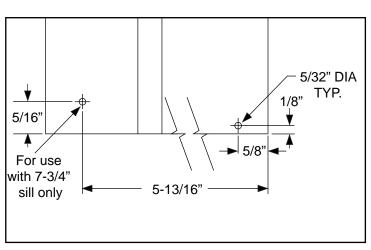
Mark jambs for screw hole.

Drill hole.

NOTE:

Make and use a template if doing this often.

Available for use in: Single Units French Units

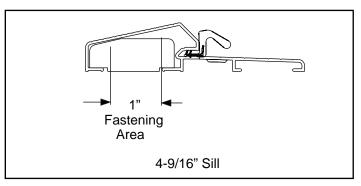


Outswing Sill - No Thermal Break

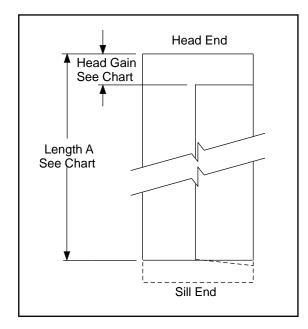
Outswing Sill - No Thermal Break

Staple-On Application

- Requires jamb modification.
- Fasten to frame with staples.



Sill Selection and Frame Modification

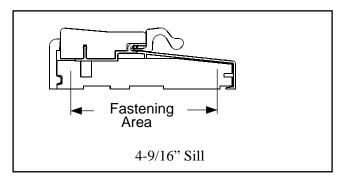


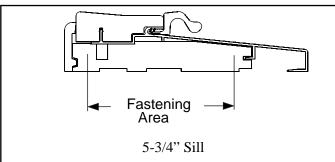
Cut Inswing Jambs Down

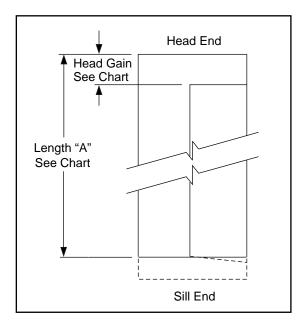
SIDE JAMB LENGTHS			
		OUTSWING	
UNIT SIZE	HEAD GAIN	ALUMINUM	
		LENGTH "A"	
66 = 6/6	1.250"	78.046"	
68 = 6/8	1.250"	80.391"	
70 = 7/0	1.250"	84.391"	
80 = 8/0	1.250"	96.391"	

Available for use in: Single Units French Units









Available for use in: Single Units French Units Boxed Units Continuous Units Patio Units

Composite Outswing Sill

- · Requires jamb modification.
- Fasten to frame with staples or #8 x 2" flat head screws.
- End seal pad (Part # MSOSSEAL-TD)

Cut Inswing Jambs Down

Measure and cut. See chart below.

SIDE JAMB LENGTHS			
LINUT CITE	HEAD	OUTSWING	
UNIT SIZE GAIN	GAIN	COMPOSITE LENGTH "A"	
66 = 6/6	1.250"	78.621"	
68 = 6/8	1.250"	80.966"	
70 = 7/0	1.250"	84.966"	
80 = 8/0	1.250"	96.966"	

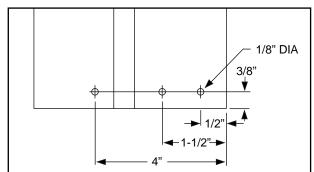
Drill Screw Hole

Mark jambs for screw hole.

Drill hole.

NOTE:

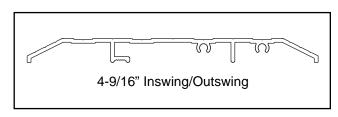
Make or use template TDSBSTRDRLFXT if doing this often.

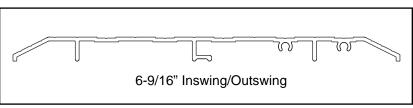




Public Access Sills - No Thermal Break

- Require jamb modifications.
- Fasten to frame with #10 x 2" Phillips pan head self-tapping screws.
- Sill is 1/2" in height.
- Used as inswing or outswing.

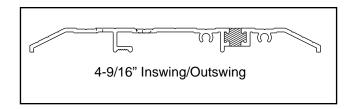


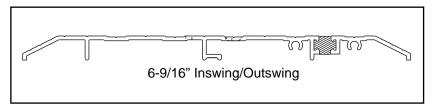


Sill Selection and Frame Modification

Public Access Sills - Thermal Break

- Require jamb modifications.
- Fasten to frame with #10 x 2" Phillips pan head self-tapping screws.
- Sill is 1/2" in height.
- Used as inswing or outswing.

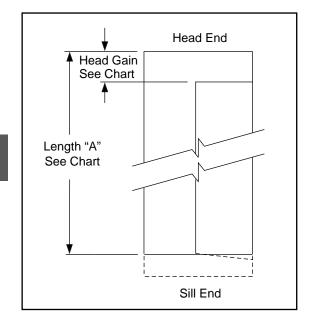




Available for use in: Single Units French Units



Jamb Modification for Public Access Sills - Thermal Break & No Thermal Break



Cut Inswing Jambs Down

SIDE JAMB LENGTHS			
UNIT SIZE OVERALL LENGTH "A"		HEAD GAIN	
6/6	78.452	1.250	
6/8	80.797	1.250	
7/0	84.797	1.250	
8/0	96.797	1.250	

Cut New Sill Gain & Drill Screw Holes

Mark jambs for screw holes.

Drill holes.

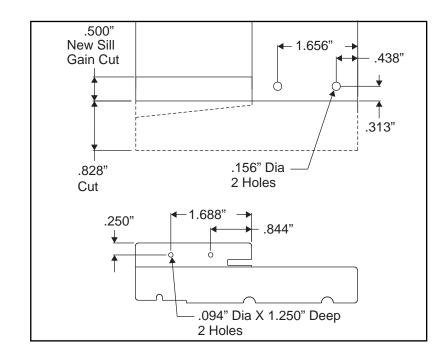
NOTE:

Sill Selection

and Frame

Modification

Make and use a template if doing this often.

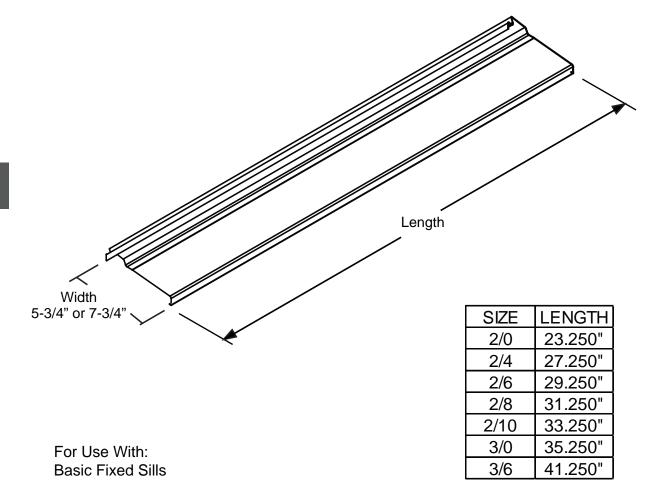




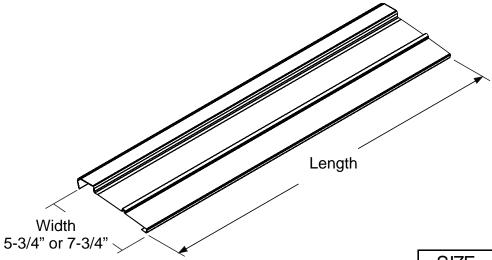
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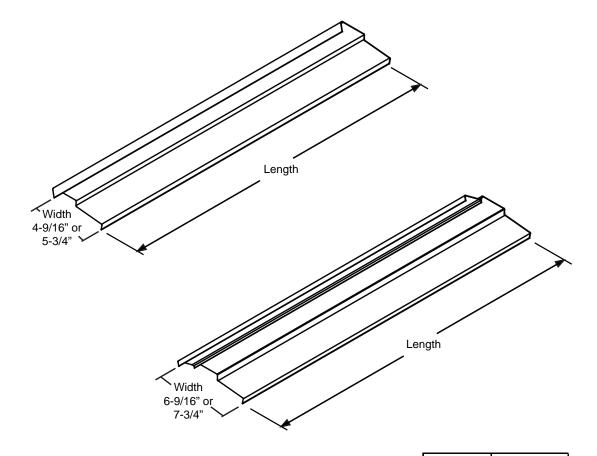


SIZE	LENGTH
2/2	24.500"
2/4	26.500"
2/6	28.500"
2/8	30.500"
2/10	32.500"
3/0	34.500"

For Use With: Composite Adjustable Sills Basic Composite Adjustable Sills Hardwood Adjustable Sills

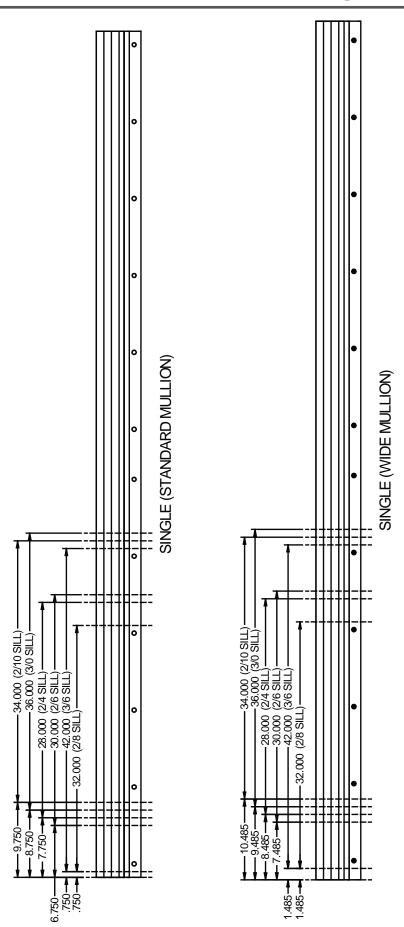




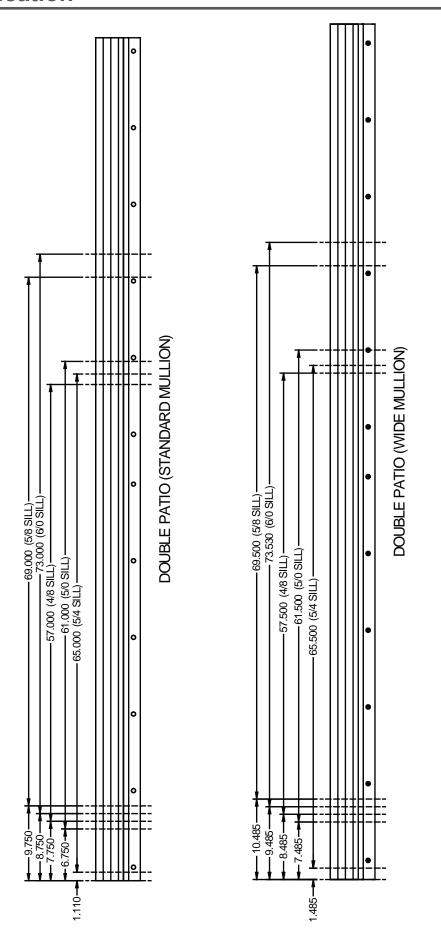


For Use With: Outswing Sills

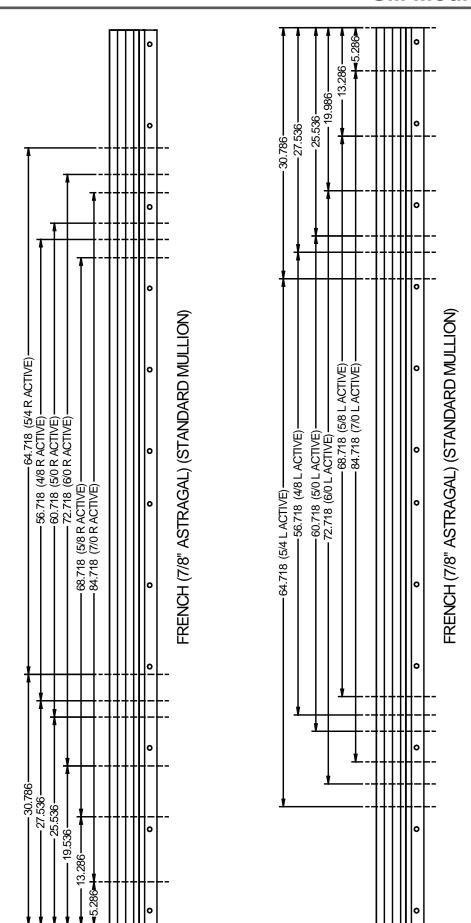
SIZE	LENGTH
2/2	24.500"
2/4	26.500"
2/6	28.500"
2/8	30.500"
2/10	32.500"
3/0	34.500"

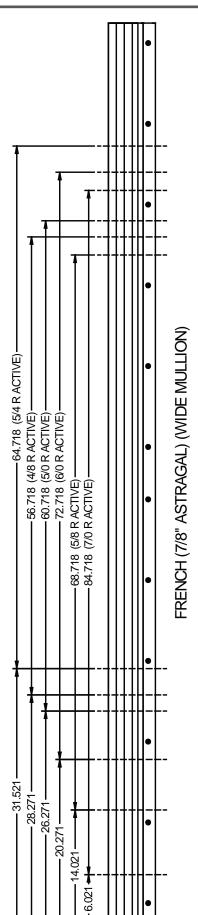


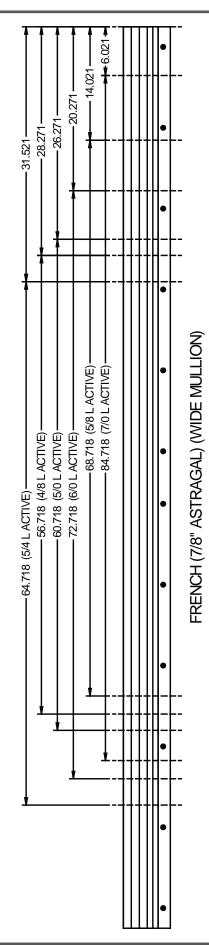




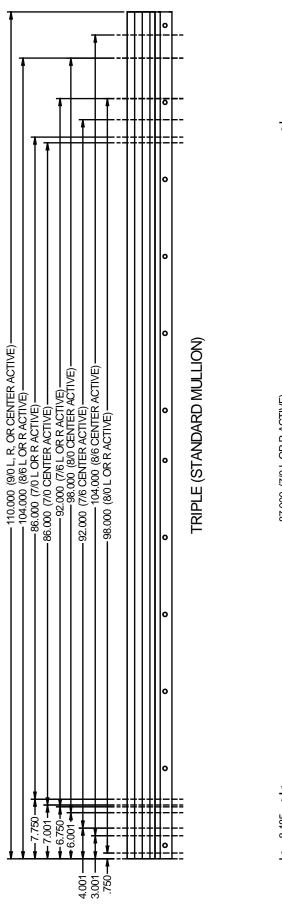


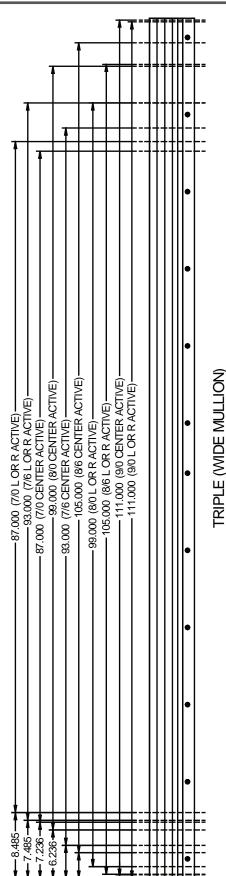








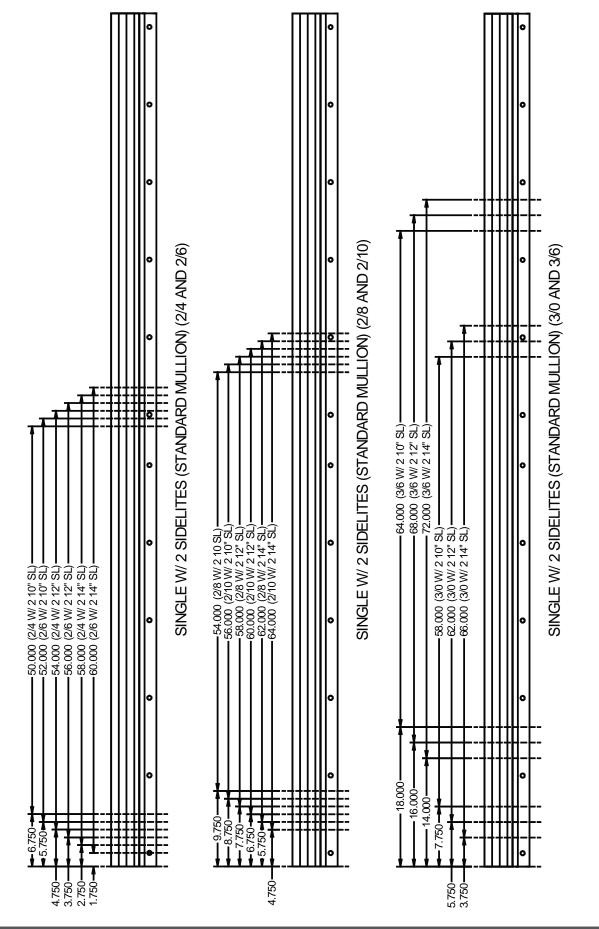




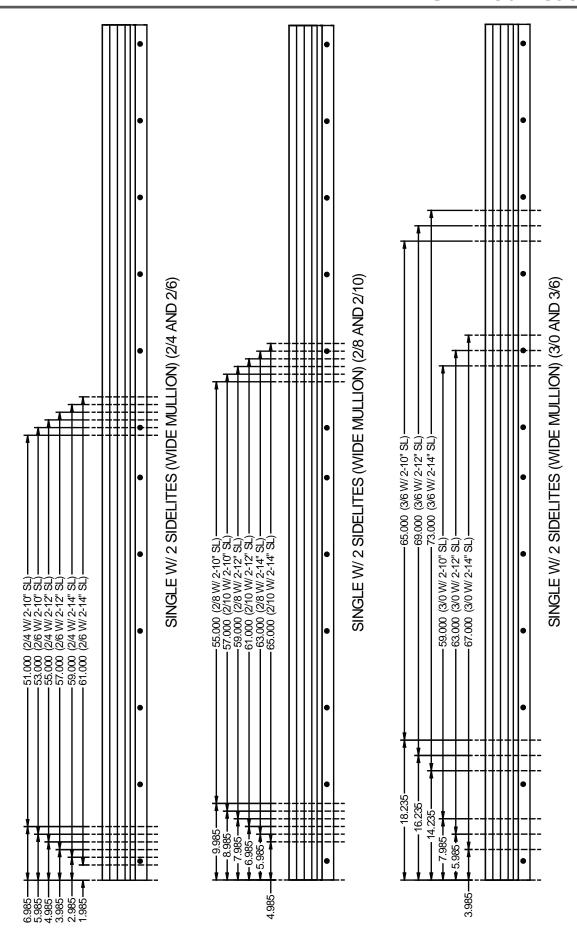
1.485

4.236– 3.286–





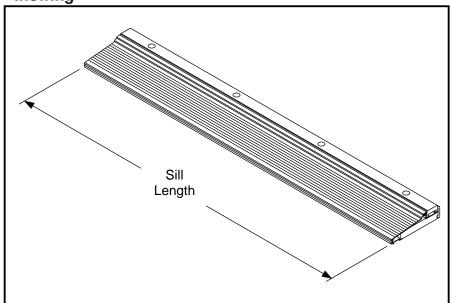






Select Sill or Cut from Larger Size To Match Head Jamb Length

Inswing



Sill Selection and Frame Modification

Single Doors:

Lengths for Sizes		
2/0	24.000"	
2/4	28.000"	
2/6	30.000"	
2/8	32.000"	
2/10	34.000"	
3/0	36.000"	
3/6	42.000"	

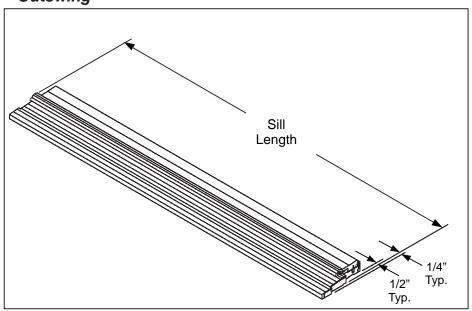
7/8" Astragal/French Doors & Coastal Astragal/French Doors:

Lengths for Sizes		
4/0	48.718"	
4/8	56.718"	
5/0	60.718"	
5/4	64.718"	
5/8	68.718"	
6/0	72.718"	
7/0	84.718"	

Sidelites:

Lengths for sizes		
10" 10.000"		
12"	12.000"	
14" 14.000"		

Outswing



Note: See ALPG for sill availibility.

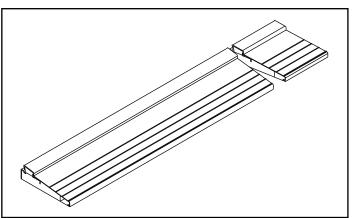


Shop-Cutting Sills from Longer Stock

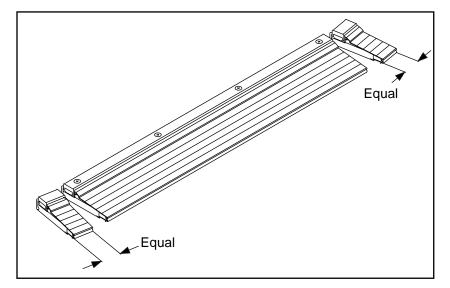
Mark Sill and Cut to Length

NOTE:

Head and sill length always match. All sills without adjustable screws or mounting screw holes can be cut from longer stock by cutting one end ONLY.



Sill Selection and Frame Modification



Adjustable sills and sills with mounting holes require end-trim cuts be made equally at both ends.

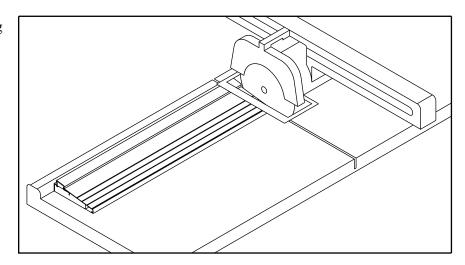


CAUTION:

6/0 adjustable sill cannot be cut down to 5/4 and 5/0 lengths.

Cut to length with saw, using triple chip carbide blade.

Deburr or sand until smooth.





Multi-Point Lock Machining to Sill INSTALL TEMPLATES AND MORTISE

Install the required templates (see below) on the holder with the label side up and to the left. Router will need to be set to plunge through the wood sill saddle.

NOTE: To remove the templates from the holders, lift slightly on one end and then gently lift on the opposite end. The template will slip easily off the pins if not bound by too much force applied at one end only.

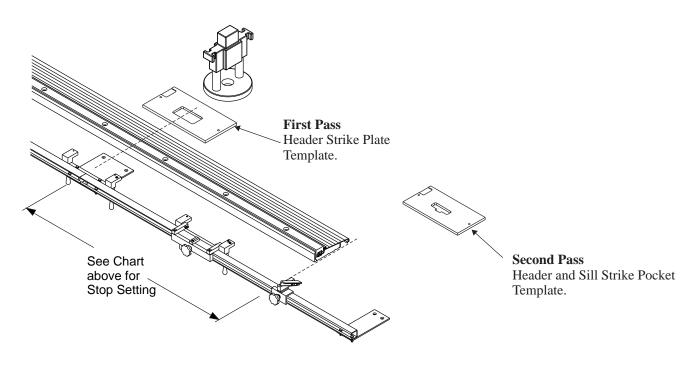
Shootbolt Sill Strike Positions

The sill strikes are located .877"(7/8") off of the midpoint of the sill. Therefore the center of the

strike will be: (Sill Stop Setting = Sill length/2 \pm 22.3mm (.877").

NOTE: The strike must be shifted toward the side jamb of the active panel. Position the end stop and template holder at the proper location. Pivot the stop arm so the stop bolt will contact the end of the jamb when inserted. Insert and clamp the jamb into place.

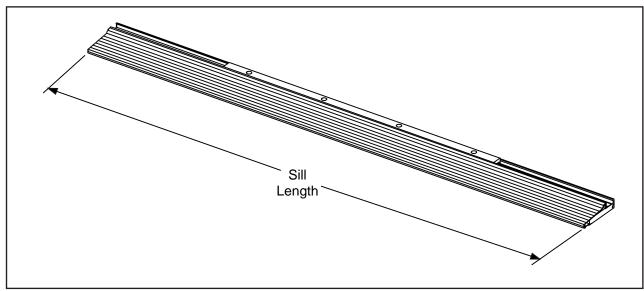
7/8" Astragal					
		INSWING - LEFT HAND STOP		INSWING - RIGHT HAND STOP	
DOOR	ACTUAL	LH SILL	RH SILL	LH SILL	RH SILL
SIZE	SIZE	LH 2ILL	KH SILL	LH SILL	KH SILL
4/0	48 11/16	641mm (25.254)	596mm (23.464)	596mm (23.464)	641mm (25.254)
4/8	56 11/16	743mm (29.254)	698mm (27.464)	698mm (27.464)	743mm (29.254)
5/0	60 11/16	794mm (31.254)	748mm (29.464)	748mm (29.464)	794mm (31.254)
5/4	64 11/16	845mm (33.254)	799mm (31.464)	799mm (31.464)	845mm (33.254)
5/8	68 11/16	895mm (35.254)	850mm (33.464)	850mm (33.464)	895mm (35.254)
6/0	72 11/16	946mm (37.254)	901mm (35.464)	901mm (35.464)	946mm (37.254)







THIS PAGE APPLIES ONLY TO: Continuous Systems



Sill Selection and Frame Modification

Select Sill or Cut One or Both Ends to Match Head Size

Lengths for sizes:

3/0 w/(2) 14" Sidelites 66.000" 3/0 w/(2) 12" Sidelites 62.000"

Refer to cut size specifications on next page.

AVAILABLE SILL WIDTHS FOR CONTINUOUS SILL SIDELITE UNITS

Sill Type	
Composite/Hardwood Inswing Sills w/ (2) - 12" or 14" Sidelites	•
Composite Outswing Sill w/ (2) - 12" or 14" Sidelites	
Basic Fixed Continuous Sill w/ (2) - 14" Sidelites	





THIS PAGE APPLIES ONLY TO: Continuous Systems

Shop-Cutting Sills from Longer Stock

Mark Sill and Cut to Length

Cut to length with saw,

using triple chip carbide blade.

Deburr or sand until smooth.

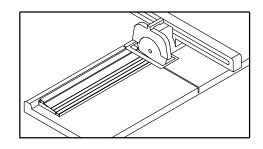
NOTE:

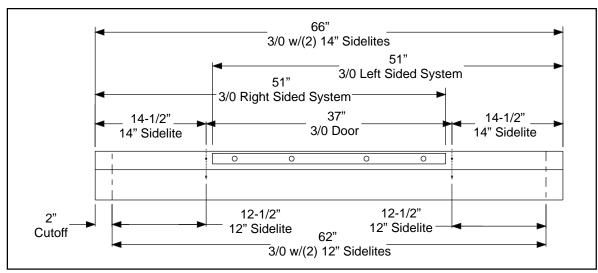
Head and sill length always match.

Dimensions shown are for Entry mullions.

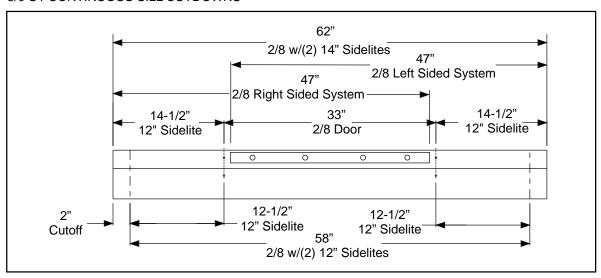
Outswing sills should not be modified or cutdown from longer sills.

NOTE: Template only for Entry Mullions.





3/0 U1 CONTINUOUS SILL CUTDOWNS



2/8 U1 CONTINUOUS SILL CUTDOWNS

6.26





THIS PAGE APPLIES ONLY TO: Patio Systems

Length

Select Sill or Cut and Fabricate One End To Match Head Size

Inswing

Sill Selection and Frame Modification

Lengths for sizes:

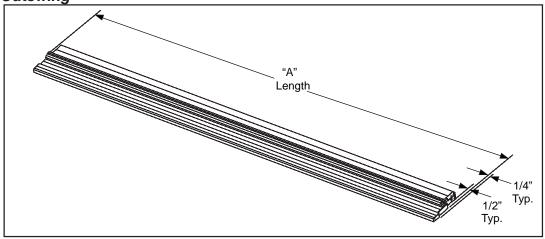
Lengths for sizes.				
* ACTIVE PANEL:			DOUBLE PATIO	
		L = LEFT; R = RIGHT	"A" OVERALL	
(AS V	IEWED FROM OUTSIDE)	LENGTH	
	Ë	48U* = 4/8 2-PANEL PATIO	57.000"	
AR ON	SIZ	50U* = 5/0 2-PANEL PATIO	61.000"	
STANDARD	UNDERSIZE	54U* = 5/4 2-PANEL PATIO	65.000"	
Ϋ́Α	MU ND	58U* = 5/8 2-PANEL PATIO	69.000"	
0)	_	60U* = 6/0 2-PANEL PATIO	73.000"	
	Е	48WU* = 4/8 2-PANEL PATIO	57.500"	
"WIDE" MULLION UNDERSIZE	50WU* = 5/0 2-PANEL PATIO	61.500"		
	54WU* = 5/4 2-PANEL PATIO	65.500"		
	58WU* = 5/8 2-PANEL PATIO	69.500"		
_ ⊃		60WU* = 6/0 2-PANEL PATIO	73.500"	



CAUTION:

Due to adjustment screw locations on the adjustable sill, sill cut-downs are not recommended. Cut-down and end fabrication is only shown here for self-adjusting sill.

Outswing



Note: See ALPG for sill availibility.





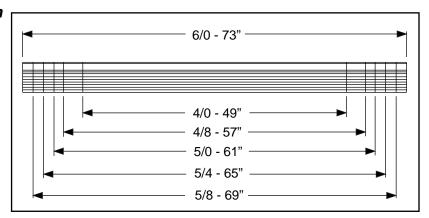
THIS PAGE APPLIES ONLY TO: Patio Systems

Shop-Cutting Sills from Longer Stock

Mark Sill and Cut to Length

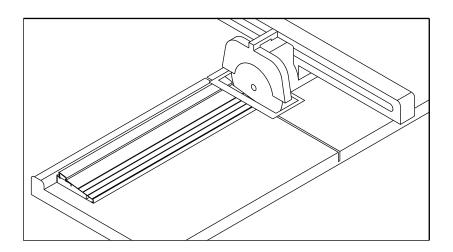
NOTE:

Sill Selection and Frame Modification Head and sill length always match.



Cut to length with saw, using triple chip carbide blade.

Deburr or sand until smooth.



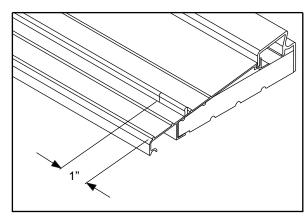




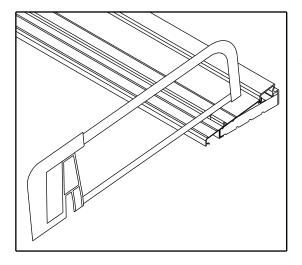
THIS PAGE APPLIES ONLY TO: Patio Systems

Removing Screen Track from Cutdown Sill

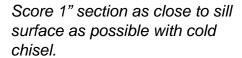
Measure in 1" from each end of sill on screen track.

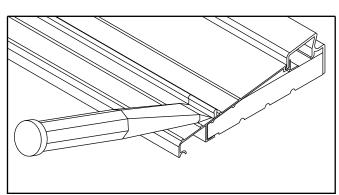


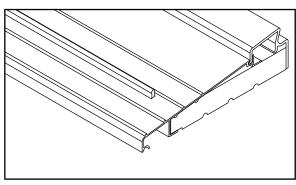
Sill Selection and Frame Modification



Cut vertically with a hacksaw as close to sill surface as possible.







Remove 1" section by using nippers or by bending back and forth with pliers unit track snaps off.



Astragal Resizing for Cut-Down Doors

Determine Size and Cut of Astragal

Measure the door to which the astragal will be attached. The astragal length must match the door height.

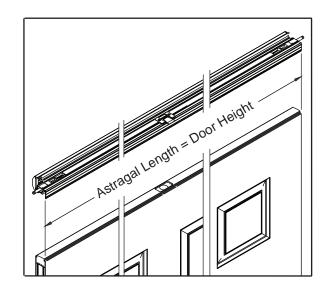
Sill Selection

and Frame

Modification

Determine which end of the door was cut down. The astragal must be cut down on the same end(s) as the door to maintain the correct latch position.

Note: if door is cut down at the top <u>and</u> bottom, the astragal must be cut down at the top and bottom.



Inswing/Outswing Inswing Only

Remove Astragal Boots

Determine which boot(s) need to be removed.

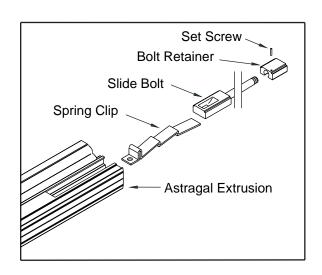
Pull the astragal boot(s) side to side several times to loosen the adhesive between the boot and aluminum.

Carefully pull the astragal boot(s) out of the assembly.

Remove Slide Bolt Hardware

Remove the set screw from the bolt retainer at the end(s) of the astragal that will be cut. Use the hex key provided in the astragal site installation hardware pack.

Slide the bolt retainer, slide bolt, and spring clip out of the astragal.





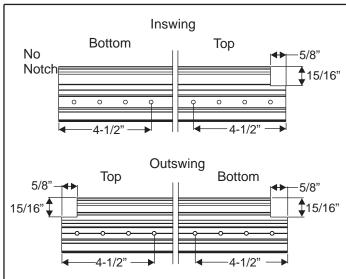
Modify the Astragal Ends

Cut the astragal to the proper length.

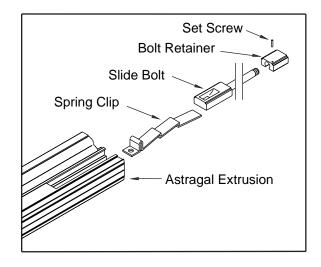
Determine which of the diagrams to the right represents the astragal being cut.

Notches the astragal end(s) per the dimensions shown in the diagram to the right.

Mark and drill 3/16" (.188") diameter mounting hole(s) at the location(s) shown.



Sill Selection and Frame Modification



Install Astragal Boots

Locate replacement boot(s) for installation.

Insert boot(s) into astragal extrusion to check for proper fit and note the mating surfaces.

Remove boot(s), add a drop of adhesive to each mating surface, and insert boot(s) back into astragal extrusion.

Hold boot(s) in place and allow adhesive to set up.

Note: 3M[®]CA-9 is a recommended adhesive.

Install Slide Bolt Hardware

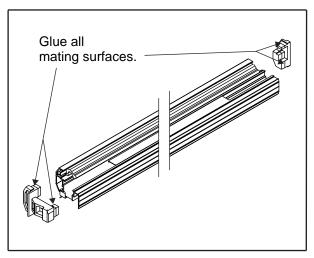
Place the spring clip into the astragal and align the hole with the astragal mounting hole.

Insert slide bolt into astragal extrusion, over spring clip.

Insert bolt retainer into astragal extrusion and around the bolt.

Tighten the set screw to fasten the slide bolt assembly in place.

Note: keep the spring clip hole aligned with the astragal mounting hole.







SHOP 7 Weatherstrip Installation

Weatherstrip Installation



Weatherstrip Installation



Apply Weatherstrip to Frame Parts

Press in kerf with hand.

Head Jambs Side Jambs

Align starting end with head gain.

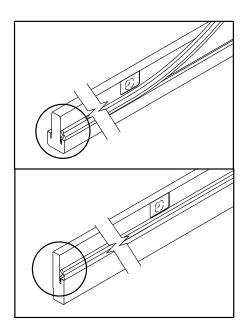
Align starting end with

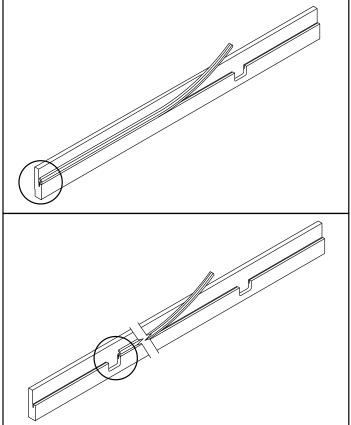
head gain.

Press in place along full length. Press in place along full length.

Trim finish end to end

of jamb.













	Hinge Side	Lock Side	Head Jamb	Astragal
Classic Craft	Medium	Medium	Medium	Medium*
FC/SS	Medium	Long	Long	Long
Steel Wood Edge	Medium/Magnetic	Long/Magnetic	Long/Magnetic	Long/Magnetic
Steel Edge (Wood Frame)	Medium	Medium	Medium	
Steel Edge (Steel Frame)	Shorter	Shorter	Shorter	
Noise Reduction	Medium	Long	Long	

^{*}For Classic Craft doors, replace long reach astragal weatherstrip with medium reach.

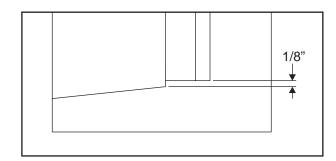
Note: For 20-Minute Fire Door application, additional edge sealing may be required behind weatherstrip. Refer to Fire Door listing reports for additional information.

Weatherstrip Installation



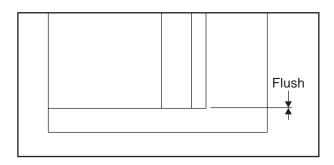
Trim Bottom End According to Sill Type

Basic Fixed

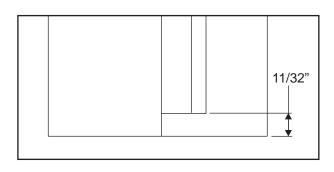


Weatherstrip Installation

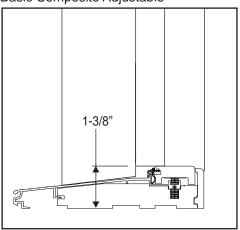
Public Access

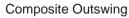


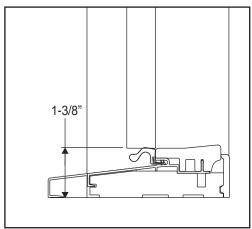
Outswing



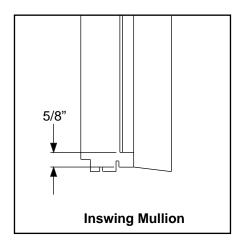
Composite Adjustable, Hardwood Adjustable, Basic Composite Adjustable

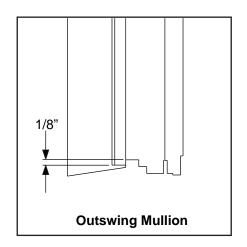








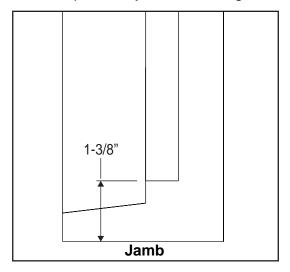


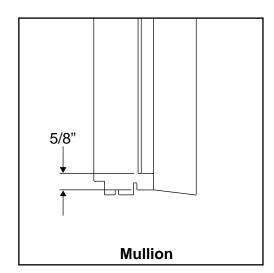


Weatherstrip Installation

Trim Bottom End of Weatherstrip According to Detail Below for Vented Sidelites

Composite Adjustable, Hardwood Adjustable, Basic Composite Adjustable Inswing Sills









SHOP 8 Brickmould Selection

Brickmould Selection



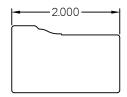
Brickmould Selection

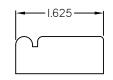


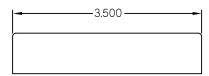


Brickmould application may optionally be done after frame assembly, but before door installation.

Select Brickmould Type







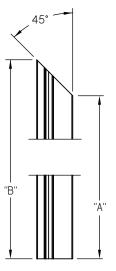
STANDARD BRICKMOULD

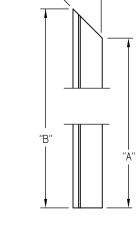
FLORIDA BRICKMOULD

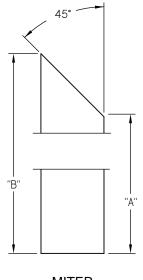
FLAT CASING

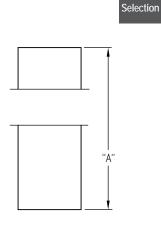
Cut Brickmould to Size

Side Brickmould Machining









Brickmould

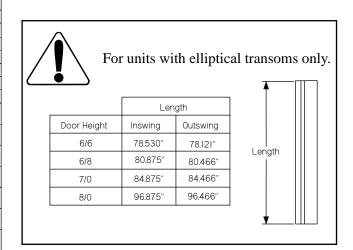
STANDARD BRICKMOULD

FLORIDA BRICKMOULD

MITER FLAT CASING

NO-MITER FLAT CASING

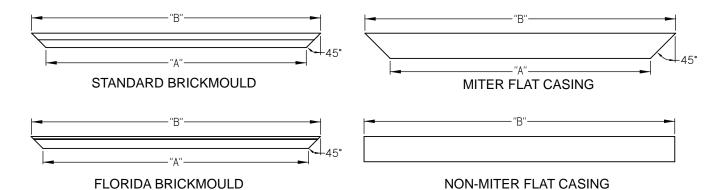
		UNIT SIZE	ALL STANDARD		FLORIDA	FLAT CASING
			"A"	"B"	"B"	"B"
		6/6	78.530	80.530	80.155	82.030
	2	6/8	80.875	82.875	82.500	84.375
14	DNIM CNI	7/0	84.875	86.875	86.500	88.375
2	2	8/0	96.875	98.875	98.500	100.375
		6/6 WITH 14" TRANSOM	91.999	93.999	93.624	95.499
		6/8 WITH 14" TRANSOM	94.344	96.344	95.969	97.844
	SILL	6/6	77.546	79.546	79.171	81.046
	IS W	6/8	79.891	81.891	81.516	83.391
	ALUMINUM	7/0	83.891	85.891	85.516	87.391
OUTSWING	AL	8/0	95.891	97.891	97.516	99.391
OUTS	SILL	6/6	78.121	80.121	79.746	81.621
		6/8	80.466	82.466	82.091	83.966
	COMPOSITE	7/0	84.466	86.466	86.091	87.966
	8	8/0	96.466	98.466	98.091	99.966





Cut Brickmould to Size

Head Brickmould Machining



Brickmould Selection

		SINGLE AND FRENCH HEAD FABRICATION								
				INSWING				OUTSWING		
		UNIT SIZE	ALL	STANDARD	FLORIDA	FLAT CASING	ALL	STANDARD	FLORIDA	FLAT CASING
			"A"	"B"	"B"	"B"	"A"	"B"	"B"	"B"
		2/0	24.000	28.000	27.250	31.000	24.500	28.500	27.750	31.500
SS		2/4	28.000	32.000	31.250	35.000	28.500	32.500	31.750	35.500
DOORS	•	2/6	30.000	34.000	33.250	37.000	30.500	34.500	33.750	37.500
SINGLE DI		2/8	32.000	36.000	35.250	39.000	32.500	36.500	35.750	39.500
		2/10	34.000	38.000	37.250	41.000	34.500	38.500	37.750	41.500
S		3/0	36.000	40.000	39.250	43.000	36.500	40.500	39.750	43.500
		3/6	42.000	46.000	45.250	49.000	42.500	46.500	45.750	49.500
		4/0	48.718	52.718	51.968	55.718	49.218	53.218	52.468	56.218
□		4/8	56.718	60.718	59.968	63.718	57.218	61.218	60.468	64.218
RENCH ASTRAGALI		5/0	60.718	64.718	63.968	67.718	61.218	65.218	64.468	68.218
FRENCH	- 1	5/4	64.718	68.718	67.968	71.718	65.218	69.218	68.468	72.218
ш.		5/8	68.718	72.718	71.968	75.718	69.218	73.218	72.468	76.218
(7/8′		6/0	72.718	76.718	75.968	79.718	73.218	77.218	76.468	80.218
		7/0	0/1710	88718	07.060	01710	85.218	80.218	88.468	02210

		HEAD FABRICATION - SINGLE WITH I SIDELITE								
			INSWING				OUTSWING			
		UNIT SIZE	ALL	STD	FLA	FLAT CASING	ALL	STD	FLA	FLAT CASING
			"A"	"B"	"B"	"B"	"A"	"B"	"B"	"B"
		2/4 W/I 10" SL	39.000	43.000	42.250	46.000	39.500	43.500	42.750	46.500
		2/4 W/I 12" SL	41.000	45.000	44.250	48.000	41.500	45.500	44.750	48.500
		2/4 W/I 14" SL	43.000	47.000	46.250	50.000	43.500	47.500	46.750	50.500
		2/6 W/I 10" SL	41.000	45.000	44.250	48.000	41.500	45.500	44.750	48.500
		2/6 W/I 12" SL	43.000	47.000	46.250	50.000	43.500	47.500	46.750	50.500
ш		2/6 W/I 14" SL	45.000	49.000	48.250	52.000	45.500	49.500	48.750	52.500
1 5	8	2/8 W/I 10" SL	43.000	47.000	46.250	50.000	43.500	47.500	46.750	50.500
SINGLE WITH I SIDELITE	STANDARD MULLION	2/8 W/I 12" SL	45.000	49.000	48.250	52.000	45.500	49.500	48.750	52.500
=	∑ .	2/8 W/I 14" SL	47.000	51.000	50.250	54.000	47.500	51.500	50.750	54.500
¥	NA NA	2/10 W/I 10" SL	45.000	49.000	48.250	52.000	45.500	49.500	48.750	52.500
ᄖ	¥	2/10 W/I 12" SL	47.000	51.000	50.250	54.000	47.500	51.500	50.750	54.500
2	ST	2/10 W/I 14" SL	49.000	53.000	52.250	56.000	49.500	53.500	52.750	56.500
0,		3/0 W/I 10" SL	47.000	51.000	50.250	54.000	47.500	51.500	50.750	54.500
		3/0 W/I 12" SL	49.000	53.000	52.250	56.000	49.500	53.500	52.750	56.500
		3/0 W/I 14" SL	51.000	55.000	54.250	58.000	51.500	55.500	54.750	58.500
		3/6 W/I 10" SL	53.000	57.000	56.250	60.000	53.500	57.500	56.750	60.500
		3/6 W/I 12" SL	55.000	59.000	58.250	62.000	55.500	59.500	58.750	62.500
		3/6 W/I 14" SL	57.000	61.000	60.250	64.000	57.500	61.500	60.750	64.500
		2/4 W/I 10" SL	39.500	43.500	42.750	46.500	40.000	44.000	43.250	47.000
		2/4 W/I 12" SL	41.500	45.500	44.750	48.500	42.000	46.000	45.250	49.000
		2/4 W/I 14" SL	43.500	47.500	46.750	50.500	44.000	48.000	47.250	51.000
		2/6 W/I 10" SL	41.500	45.500	44.750	48.500	42.000	46.000	45.250	49.000
		2/6 W/I 12" SL	43.500	47.500	46.750	50.500	44.000	48.000	47.250	51.000
Ш	9	2/6 W/I 14" SL	45.500	49.500	48.750	52.500	46.000	50.000	49.250	53.000
SINGLE WITH I SIDELITE	MIDE MULLION / BOXED	2/8 W/I 10" SL	43.500	47.500	46.750	50.500	44.000	48.000	47.250	51.000
S	/ B	2/8 W/I 12" SL	45.500	49.500	48.750	52.500	46.000	50.000	49.250	53.000
<u> </u>	NO NO	2/8 W/I 14" SL	47.500	51.500	50.750	54.500	48.000	52.000	51.250	55.000
×	╡	2/10 W/I 10" SL	45.500	49.500	48.750	52.500	46.000	50.000	49.250	53.000
빌	×	2/10 W/I 12" SL	47.500	51.500	50.750	54.500	48.000	52.000	51.250	55.000
N N	9	2/10 W/I 14" SL	49.500	53.500	52.750	56.500	50.000	54.000	53.250	57.000
0,	_	3/0 W/I 10" SL	47.500	51.500	50.750	54.500	48.000	52.000	51.250	55.000
		3/0 W/I 12" SL	49.500	53.500	52.750	56.500	50.000	54.000	53.250	57.000
		3/0 W/I 14" SL	51.500	55.500	54.750	58.500	52.000	56.000	55.250	59.000
		3/6 W/I 10" SL	53.500	57.500	56.750	60.500	54.000	58.000	57.250	61.000
		3/6 W/I 12" SL	55.500	59.500	58.750	62.500	56.000	60.000	59.250	63.000
ldot	L	3/6 W/I 14" SL	57.500	61.500	60.750	64.500	58.000	62.000	61.250	65.000

Brickmould Selection

		HEAD FABRICATION - SINGLE WITH 2 SIDELITES								
			INSWING			OUTSWING				
		UNIT SIZE	ALL	STD	FLA	FLAT CASING	ALL	STD	FLA	FLAT CASING
			"A"	"B"	"B"	"B"	"A"	"B"	"B"	"B"
		2/4 W/2 IO" SL	50.000	54.000	53.250	57.000	50.500	54.500	53.750	57.500
		2/4 W/2 I2" SL	54.000	58.000	57.250	61.000	54.500	58.500	57.750	61.500
		2/4 W/2 I4" SL	58.000	62.000	61.250	65.000	58.500	62.500	61.750	65.500
		2/6 W/2 IO" SL	52.000	56.000	55.250	59.000	52.500	56.500	55.750	59.500
		2/6 W/2 I2" SL	56.000	60.000	59.250	63.000	56.500	60.500	59.750	63.500
S		2/6 W/2 I4" SL	60.000	64.000	63.250	67.000	60.500	64.500	63.750	67.500
SINGLE WITH 2 SIDELITES	STANDARD MULLION	2/8 W/2 IO" SL	54.000	58.000	57.250	61.000	54.500	58.500	57.750	61.500
99	∣∃	2/8 W/2 I2" SL	58.000	62.000	61.250	65.000	58.500	62.500	61.750	65.500
2	2	2/8 W/2 I4" SL	62.000	66.000	65.250	69.000	62.500	66.500	65.750	69.500
픋	AR.	2/10 W/2 10" SL	56.000	60.000	59.250	63.000	56.500	60.500	59.750	63.500
É,	N N	2/10 W/2 12" SL	60.000	64.000	63.250	67.000	60.500	64.500	63.750	67.500
JS JS	ST	2/10 W/2 14" SL	64.000	68.000	67.250	71.000	64.500	68.500	67.750	71.500
IS		3/0 W/2 IO" SL	58.000	62.000	61.250	65.000	58.500	62.500	61.750	65.500
		3/0 W/2 I2" SL	62.000	66.000	65.250	69.000	62.500	66.500	65.750	69.500
		3/0 W/2 I4" SL	66.000	70.000	69.250	73.000	66.500	70.500	69.750	73.500
		3/6 W/2 I0" SL	64.000	68.000	67.250	71.000	64.500	68.500	67.750	71.500
		3/6 W/2 I2" SL	68.000	72.000	71.250	75.000	68.500	72.500	71.750	75.500
		3/6 W/2 14" SL	72.000	76.000	75.250	79.000	72.500	76.500	75.750	79.500
		2/4 W/2 I0" SL	51.000	55.000	54.250	58.000	51.500	55.500	54.750	58.500
		2/4 W/2 12" SL	55.000	59.000	58.250	62.000	55.500	59.500	58.750	62.500
		2/4 W/2 14" SL	59.000	63.000	62.250	66.000	59.500	63.500	62.750	66.500
		2/6 W/2 IO" SL	53.000	57.000	56.250	60.000	53.500	57.500	56.750	60.500
		2/6 W/2 I2" SL	57.000	61.000	60.250	64.000	57.500	61.500	60.750	64.500
V2		2/6 W/2 I4" SL	61.000	65.000	64.250	68.000	61.500	65.500	64.750	68.500
Ë	빛	2/8 W/2 I0" SL	55.000	59.000	58.250	62.000	55.500	59.500	58.750	62.500
30	8	2/8 W/2 I2" SL	59.000	63.000	62.250	66.000	59.500	63.500	62.750	66.500
2 SIDELITES	Š	2/8 W/2 I4" SL	63.000	67.000	66.250	70.000	63.500	67.500	66.750	70.500
픋	Ě	2/10 W/2 10" SL	57.000	61.000	60.250	64.000	57.500	61.500	60.750	64.500
≥	₹	2/10 W/2 12" SL	61.000	65.000	64.250	68.000	61.500	65.500	64.750	68.500
SINGLE WITH	MIDE MULLION / BOXED	2/10 W/2 14" SL	65.000	69.000	68.250	72.000	65.500	69.500	68.750	72.500
S	-	3/0 W/2 IO" SL	59.000	63.000	62.250	66.000	59.500	63.500	62.750	66.500
		3/0 W/2 I2" SL	63.000	67.000	66.250	70.000	63.500	67.500	66.750	70.500
		3/0 W/2 I4" SL	67.000	71.000	70.250	74.000	67.500	71.500	70.750	74.500
		3/6 W/2 IO" SL	65.000	69.000	68.250	72.000	65.500	69.500	68.750	72.500
		3/6 W/2 I2" SL	69.000	73.000	72.250	76.000	69.500	73.500	72.750	76.500
		3/6 W/2 I4" SL	73.000	77.000	76.250	80.000	73.500	77.500	76.750	80.500
-		0.0 m2 14 0L	, 5.000		. 0.200	55.000	, 0.000		7 0.7 00	55.566

			INSWING				OUTSWING				
		UNIT SIZE	ALL	STD	FLA	FLAT CASING	ALL	STD	SWING FLA	FLAT CASING	
			"A"	"B"	"B"	"B"	"A"	"B"	"B"	"B"	
		3/0 W/I IO" SPREAD 0.000"	47.500	51.500	50.750	54.500	N/A	N/A	N/A	N/A	
		3/0 W/I IO" SPREAD 0.250"	47.750	51.750	51.000	54.750	N/A	N/A	N/A	N/A	
		3/0 W/I IO" SPREAD 0.500"	48.000	52.000	51.250	55.000	N/A	N/A	N/A	N/A	
		3/0 W/I IO" SPREAD 0.750"	48.250	52.250	51,500	55.250	N/A	N/A	N/A	N/A	
		3/0 W/I IO" SPREAD I.000"	48.500	52.500	51.750	55.500	N/A	N/A	N/A	N/A	
		3/0 W/I IO" SPREAD I.250"	48.750	52.750	52.000	55.750	N/A	N/A	N/A	N/A	
		3/0 W/I IO" SPREAD I.500"	49.000	53.000	52.250	56.000	N/A	N/A	N/A	N/A	
		3/0 W/I IO" SPREAD I.750"	49.250	53.250	52.500	56.250	N/A	N/A	N/A	N/A	
		3/0 W/I 10" SPREAD 0.000"	49.500	53.500	52.750	56.500	N/A	N/A	N/A	N/A	
		3/0 W/I 12" SPREAD 0.000"	49.500	53.750	53.000	56.750	N/A	N/A	N/A	N/A	
ш		3/0 W/I 12" SPREAD 0.500"	50.000	54.000	53.250	57.000	N/A	N/A	N/A	N/A	
5	Z	3/0 W/I 12" SPREAD 0.750"	50.250	54.250	53.500	57.250	N/A	N/A	N/A	N/A	
=	3	3/0 W/I 12" SPREAD I.000"	50.500	54.500	53.750	57.500	N/A	N/A	N/A	N/A	
=	₹	3/0 W/I 12" SPREAD I.250"	50.750	54.750	54.000	57.750	N/A	N/A	N/A	N/A	
Ė	SPREAD MULLION	3/0 W/I 12" SPREAD I.500"	51.000	55.000	54.250	58.000	N/A	N/A	N/A	N/A	
É.	씵	3/0 W/I 12" SPREAD I.750"	51.250	55.250	54.500	58.250	N/A	N/A	N/A	N/A	
SINGLE WITH I SIDELITE	쌍	3/0 W/I 14" SPREAD 0.000"	51.500	55.500	54.750	58.500	N/A	N/A	N/A	N/A	
S		3/0 W/I 14" SPREAD 0.250"	51.750	55.750	55.000	58.750	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD 0.500"	52.000	56.000	55.250	59.000	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD 0.750"	52.250	56.250	55.500	59.250	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD I.000"	52.500	56.500	55.750	59.500	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD I.250"	52.750	56.750	56.000	59.750	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD I.500"	53.000	57.000	56.250	60.000	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD I.750"	53.250	57.250	56.500	60.250	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD 2.000"	53.500	57.500	56.750	60.500	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD 2.250"	53.750	57.750	57.000	60.750	N/A	N/A	N/A	N/A	
		3/0 W/I I4" SPREAD 2.500"	54.000	58.000	57.250	61.000	N/A	N/A	N/A	N/A	
		3/0 W/I 14" SPREAD 2.750"	54.250	58.250	57.500	61.250	N/A	N/A	N/A	N/A	
		3/0 W/I I4" SPREAD 3.000"	54.500	58.500	57.750	61.500	N/A	N/A	N/A	N/A	
		3/0 W/2 IO" SPREAD 0.000"	59.000	63.000	62.250	66.000	N/A	N/A	N/A	N/A	
		3/0 W/2 10" SPREAD 0.250"	59.500	63.500	62.750	66.500	N/A	N/A	N/A	N/A	
		3/0 W/2 IO" SPREAD 0.500"	60.000	64.000	63.250	67.000	N/A	N/A	N/A	N/A	
		3/0 W/2 IO" SPREAD 0.750"	60.500	64.500	63.750	67.500	N/A	N/A	N/A	N/A	
		3/0 W/2 10" SPREAD 1.000"	61.000	65.000	64.250	68.000	N/A	N/A	N/A	N/A	
		3/0 W/2 IO" SPREAD I.250"	61.500	65.500	64.750	68.500	N/A	N/A	N/A	N/A	
		3/0 W/2 10" SPREAD 1.500"	62.000	66.000	65.250	69.000	N/A	N/A	N/A	N/A	
		3/0 W/2 IO" SPREAD I.750"	62.500	66.500	65.750	69.500	N/A	N/A	N/A	N/A	
		3/0 W/2 12" SPREAD 0.000"	63.000	67.000	66.250	70.000	N/A	N/A	N/A	N/A	
						70.500	N/A	N/A N/A	N/A N/A	N/A	
		3/0 W/2 I2" SPREAD 0.250" 3/0 W/2 I2" SPREAD 0.500"	63.500 64.000	67.500 68.000	66.750 67.250	71.000	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
S											
5	Z.	3/0 W/2 12" SPREAD 0.750"	64.500	68.500	67.750	71.500	N/A	N/A	N/A	N/A	
SINGLE WITH 2 SIDELITES	SPREAD MULLION	3/0 W/2 12" SPREAD 1.000"	65.000	69.000	68.250	72.000	N/A	N/A	N/A	N/A	
2 5	₹	3/0 W/2 12" SPREAD 1.250"	65.500	69.500	68.750	72.500	N/A	N/A	N/A	N/A	
픋	Ş.	3/0 W/2 12" SPREAD 1.500"	66.000	70.000	69.250	73.000	N/A	N/A	N/A	N/A	
≶	씵	3/0 W/2 12" SPREAD 1.750"	66.500	70.500	69.750	73.500	N/A	N/A	N/A	N/A	
9	쌍	3/0 W/2 I4" SPREAD 0.000"	67.000	71.000	70.250	74.000	N/A	N/A	N/A	N/A	
S		3/0 W/2 14" SPREAD 0.250"	67.500	71.500	70.750	74.500	N/A	N/A	N/A	N/A	
		3/0 W/2 14" SPREAD 0.500"	68.000	72.000	71.250	75.000	N/A	N/A	N/A	N/A	
		3/0 W/2 14" SPREAD 0.750"	68.500	72.500	71.750	75.500	N/A	N/A	N/A	N/A	
		3/0 W/2 14" SPREAD 1.000"	69.000	73.000	72.250	76.000	N/A	N/A	N/A	N/A	
		3/0 W/2 14" SPREAD 1.250"	69.500	73.500	72.750	76.500	N/A	N/A	N/A	N/A	
		3/0 W/2 14" SPREAD 1.500"	70.000	74.000	73.250	77.000	N/A	N/A	N/A	N/A	
		3/0 W/2 14" SPREAD 1.750"	70.500	74.500	73.750	77.500	N/A	N/A	N/A	N/A	
		3/0 W/2 14" SPREAD 2.000"	71.000	75.000	74.250	78.000	N/A	N/A	N/A	N/A	
			71.500	75.500	74.750	78.500	N/A	N/A	N/A	N/A	
		3/0 W/2 I4" SPREAD 2.250"	71.500								
				76.000	75.250	79.000	N/A	N/A	N/A	N/A	
		3/0 W/2 I4" SPREAD 2.250" 3/0 W/2 I4" SPREAD 2.500" 3/0 W/2 I4" SPREAD 2.750"	72.000 72.500	76.000 76.500	75.250 75.750	79.000 79.500	N/A N/A	N/A N/A	N/A N/A	N/A N/A	



			BRICATION -		H TWO SIDE	LITES WIDE N	/ULL/BOXED	OI IT	SWING	
		UNIT SIZE	ALL	STD	FLA	FLAT CASING	ALL	STD	FLA	FLAT CASIN
			"A"	"B"	"B"	"B"	"A"	"B"	"B"	"B"
		4/8 W/2 IO"	79.718	83.718	82.968	86.718	80.218	84.218	83.468	87.218
		4/8 W/2 12"	83.718	87.718	86.968	90.718	84.218	88.218	87.468	91.218
_		4/8 W/2 14"	87.718	91.718	90.968	94.718	88.218	92.218	91.468	95.21
FRENCH WITH 2 SIDELITES 17/8" ASTRAGALI		5/0 W/2 10"	83.718	87.718	86.968	90.718	84.218	88.218	87.468	91.218
72		5/0 W/2 12"	87.718	91.718	90.968	94.718	88.218	92.218	91.468	95.21
AS		5/0 W/2 14"	91.718	95.718	94.968	98.718	92.218	96.218	95.468	99.21
7/8		5/4 W/2 IO"	87.718	91.718	90.968	94.718	88.218	92.218	91.468	95.21
ES	WIDE MULL / BOXED	5/4 W/2 12"	91.718	95.718	94.968	98.718	92.218	96.218	95.468	99.21
5	j	5/4 W/2 14"	95.718	99.718	98.968	102.718	96.218	100.218	99.468	103.21
용	₹	5/8 W/2 10"	91.718	95.718	94.968	98.718	92.218	96.218	95.468	99.21
2	JG	5/8 W/2 I2"	95.718	99.718	98.968	102.718	96.218	100.218	99.468	103.21
₽	>	5/8 W/2 I4"	99.718	103.718	102.968	106.718	100.218	104.218	103.468	107.21
동		6/0 W/2 10"	95.718	99.718	98.968	102.718	96.218 100.218	100.218	99.468	103.21
Ä		6/0 W/2 12"	99.718	103.718	102.968	106.718		104.218	103.468	107.21
Œ		6/0 W/2 14"	103.718	107.718	106.968	110.718	104.218	108.218	107.468	111.21
		7/0 W/2 I0" 7/0 W/2 I2"	107.718	111.718 115.718	110.968	114.718	108.218	112.218	111.468 115.468	115.21
			_							
		7/0 W/2 14"	115.718	119.718	118.968	122.718	116.218	120.218	119.468	123.21
					FABRICATION FABRICATION	N - DOUBLE			•	
			-		WING	FLAT		OUT	SWING	FLAT
		UNIT SIZE	ALL	STD	FLA	CASING	ALL	STD	FLA	CASIN
			"A"	"B"	"B"	"B"	"A"	"B"	"B"	"B"
	Z	4/8	57.000	61.000	60.250	64.000	57.500	61.500	60.750	64.50
щ	101	5/0	61.000	65.000	64.250	68.000	61.500	65.500	64.750	68.50
DOUBLE	STD MULLION	5/4	65.000	69.000	68.250	72.000	65.500	69.500	68.750	72.50
8	101	5/8	69.000	73.000	72.250	76.000	69.500	73.500	72.750	76.50
	S	6/0	73.000	77.000	76.250	80.000	73.500	77.500	76.750	80.50
	z	4/8	57.500	61.500	60.750	64.500	58.000	62.000	61.250	65.00
щ	MULLION	5/0	61.500	65.500	64.750	68.500	62.000	66.000	65.250	69.00
DOUBLE	Į	5/4	65.500	69.500	68.750	72.500	66.000	70.000	69.250	73.00
2	WIDE	5/8	69.500	73.500	72.750	76.500	70.000	74.000	73.250	77.00
	M	6/0	73.500	77.500	76.750	80.500	74.000	78.000	77.250	81.000
		UNIT SIZE		INSWIN	G MITER	FLAT		UUISWI	ING MITER	FLAT
		01111 0122	ALL	STD	FLA	CASING	ALL	STD	FLA	CASIN
			"A"	"B"	"B"	"B"	"A"	"B"	"B"	"B"
EU.	N N									
		4/8 + 2/4 MEU	86.500	90.500	89.750	93.500	87.000	91.000	90.250	
Ā	là	5/0 + 2/6 MEU	92.500	96.500	95.750	99.500	93.000	97.000	96.250	100.00
JS MEI) MULLION	5/0 + 2/6 MEU 5/4 + 2/8 MEU	92.500 98.500	96.500 102.500	95.750 101.750	99.500 105.500	93.000 99.000	97.000 103.000	96.250 102.250	100.00
PLUS M.E.I	STD MULLI	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU	92.500 98.500 104.500	96.500 102.500 108.500	95.750 101.750 107.750	99.500 105.500 111.500	93.000 99.000 105.000	97.000 103.000 109.000	96.250 102.250 108.250	100.00 106.00 112.00
TIO PLUS MEI	STD MULLIN	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU	92.500 98.500 104.500 110.500	96.500 102.500 108.500 114.500	95.750 101.750 107.750 113.750	99.500 105.500 111.500 117.500	93.000 99.000 105.000 111.000	97.000 103.000 109.000 115.000	96.250 102.250 108.250 114.250	100.00 106.00 112.00 118.00
. PATIO PLUS MEI	STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU	92.500 98.500 104.500 110.500 87.000	96.500 102.500 108.500 114.500 91.000	95.750 101.750 107.750 113.750 90.250	99.500 105.500 111.500 117.500 94.000	93.000 99.000 105.000 111.000 87.500	97.000 103.000 109.000 115.000 91.500	96.250 102.250 108.250 114.250 90.750	100.00 106.00 112.00 118.00 94.50
BLE PATIO PLUS MEI	STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU	92.500 98.500 104.500 110.500 87.000 93.000	96.500 102.500 108.500 114.500 91.000 97.000	95.750 101.750 107.750 113.750 90.250 96.250	99.500 105.500 111.500 117.500 94.000 100.000	93.000 99.000 105.000 111.000 87.500 93.500	97.000 103.000 109.000 115.000 91.500 97.500	96.250 102.250 108.250 114.250 90.750 96.750	100.00 106.00 112.00 118.00 94.50
DOUBLE PATIO PLUS MEI	STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU	92.500 98.500 104.500 110.500 87.000 93.000 99.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250	99.500 105.500 111.500 117.500 94.000 100.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750	100.00 106.00 112.00 118.00 94.50 100.50
DOUBLE PATIO PLUS MEI	WIDE MULLION STD MULLI	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU	92.500 98.500 104.500 110.500 87.000 93.000 99.000 105.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 109.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250	99.500 105.500 111.500 117.500 94.000 100.000 106.000 112.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750	100.00 106.00 112.00 118.00 94.50 100.50 106.50
DOUBLE PATIO PLUS MEI	WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU	92.500 98.500 104.500 110.500 87.000 93.000 99.000 105.000 111.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 109.000 115.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250 114.250	99.500 105.500 111.500 117.500 94.000 100.000 106.000 112.000 118.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 115.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750	100.00 106.00 112.00 118.00 94.50 100.50 106.50 112.50
DOUBLE PATIO PLUS MEI	WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0	92.500 98.500 104.500 110.500 87.000 93.000 99.000 105.000 111.000 86.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 109.000 115.000 90.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250 114.250 89.250	99.500 105.500 111.500 117.500 94.000 100.000 106.000 112.000 118.000 93.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 115.500 90.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750	100.00 106.00 112.00 118.00 94.50 100.50 106.50 112.50 118.50 93.50
DOUBLE PATIO PLUS MEI	WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6	92.500 98.500 104.500 110.500 87.000 93.000 99.000 105.000 111.000 86.000 92.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 109.000 115.000 96.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250 114.250 89.250 95.250	99.500 105.500 111.500 117.500 94.000 100.000 106.000 112.000 118.000 93.000 99.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500 92.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 115.500 90.500 96.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750	100.00 106.00 112.00 118.00 94.50 100.50 106.50 112.50 118.50 93.50
	WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0	92.500 98.500 104.500 110.500 87.000 93.000 99.000 105.000 111.000 86.000 92.000 98.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 109.000 115.000 96.000 102.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250 114.250 89.250 95.250 101.250	99.500 105.500 111.500 117.500 94.000 100.000 106.000 112.000 118.000 93.000 99.000 105.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500 92.500 98.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 115.500 90.500 96.500 102.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 114.750 89.750 95.750 101.750	100.00 106.00 112.00 118.00 94.50 100.50 106.50 112.50 93.50 99.50
	STD	5/0 + 2/6 MEU 5/8 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 104.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 108.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250 114.250 89.250 95.250 101.250	99.500 105.500 111.500 117.500 94.000 106.000 112.000 118.000 93.000 99.000 105.000 111.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500 92.500 98.500 104.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 105.500 90.500 90.500 90.500 102.500 108.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 114.750 89.750 95.750 101.750	100.000 106.000 112.000 118.000 94.500 100.500 112.500 118.500 93.500 105.500 111.500
	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0	92.500 98.500 104.500 110.500 87.000 93.000 99.000 105.000 111.000 86.000 92.000 98.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 109.000 115.000 96.000 102.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250 114.250 89.250 95.250 101.250	99.500 105.500 111.500 117.500 94.000 100.000 106.000 112.000 118.000 93.000 99.000 105.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500 92.500 98.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 115.500 90.500 96.500 102.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 114.750 89.750 95.750 101.750	100.00 106.00 112.00 118.00 94.50 100.50 112.50 118.50 93.50 105.50 111.50
TRIPLE PATIO DOUBLE PATIO PLUS MEI	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0	92.500 98.500 104.500 110.500 87.000 93.000 99.000 105.000 111.000 92.000 98.000 104.000 110.000	96.500 102.500 108.500 114.500 91.000 103.000 109.000 115.000 90.000 90.000 102.000 108.000 114.000 91.000	95.750 101.750 107.750 107.750 90.250 90.250 102.250 108.250 114.250 89.250 95.250 101.250 101.250 107.250 113.250 90.250	99.500 105.500 111.500 117.500 94.000 100.000 112.000 118.000 93.000 99.000 105.000 111.000 117.000 94.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 92.500 98.500 104.500	97.000 103.000 109.000 115.000 97.500 103.500 109.500 115.500 90.500 102.500 108.500 114.500 91.500	96.250 102.250 108.250 108.250 114.250 90.750 102.750 108.750 114.750 89.750 95.750 101.750 107.750 113.750 90.750	100.00 106.00 112.00 118.00 94.50 100.50 112.50 118.50 93.50 99.50 105.50 111.50 94.50
	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/16	92.500 98.500 104.500 110.500 87.000 99.000 110.500 111.000 86.000 92.000 98.000 104.000 110.000 87.000 93.000	96.500 102.500 108.500 114.500 91.000 103.000 109.000 115.000 90.000 102.000 104.000 114.000 91.000 97.000	95.750 101.750 107.750 107.750 90.250 90.250 102.250 108.250 114.250 89.250 95.250 101.250 107.250 113.250 90.250 96.250	99.500 105.500 111.500 94.000 100.000 106.000 112.000 118.000 93.000 99.000 105.000 111.000 117.000 94.000 100.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500 92.500 98.500 104.500 110.500 87.500 93.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 115.500 90.500 102.500 104.500 114.500 91.500 91.500	96.250 102.250 108.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 95.750 101.750 107.750 107.750 107.750 107.750 90.750 90.750 90.750	100.00 106.00 112.00 118.00 94.50 100.50 112.50 93.50 99.50 111.50 117.50 94.50
	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/0	92.500 98.500 104.500 110.500 87.000 99.000 105.000 111.000 86.000 92.000 98.000 104.000 110.000 87.000	96.500 102.500 108.500 114.500 91.000 103.000 109.000 115.000 90.000 90.000 102.000 108.000 114.000 91.000	95.750 101.750 107.750 107.750 90.250 90.250 102.250 108.250 114.250 89.250 95.250 101.250 101.250 107.250 113.250 90.250	99.500 105.500 111.500 117.500 94.000 100.000 112.000 118.000 93.000 99.000 105.000 111.000 117.000 94.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500 92.500 98.500 104.500 110.500 87.500	97.000 103.000 109.000 115.000 97.500 103.500 109.500 115.500 90.500 102.500 108.500 114.500 91.500	96.250 102.250 108.250 108.250 114.250 90.750 102.750 108.750 114.750 89.750 95.750 101.750 107.750 113.750 90.750	100.00 106.00 112.00 118.00 94.50 100.50 112.50 118.50 93.50 93.50 105.50 111.50 117.50 94.50 100.50
	WIDE MULLION STD	5/0 + 2/6 MEU 5/8 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/6 8/0 8/6	92.500 98.500 104.500 110.500 93.000 93.000 99.000 111.000 92.000 98.000 104.000 110.000 93.000 93.000 93.000 93.000 93.000 93.000	96.500 102.500 108.500 114.500 97.000 103.000 109.000 115.000 96.000 102.000 108.000 114.000 97.000 97.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 108.250 114.250 89.250 101.250 107.250 107.250 103.250 90.250 90.250 90.250 90.250	99.500 105.500 111.500 117.500 94.000 100.000 106.000 112.000 118.000 99.000 105.000 111.000 117.000 94.000 100.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 111.500 86.500 92.500 98.500 104.500 110.500 87.500 93.500 93.500 93.500 93.500	97.000 103.000 109.000 115.000 97.500 97.500 103.500 109.500 115.500 96.500 102.500 108.500 114.500 97.500 97.500 103.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 95.750 101.750 107.750 113.750 90.750 96.750	100.00 106.00 112.00 118.00 94.50 100.50 112.50 118.50 93.50 93.50 105.50 117.50 94.50 100.50 110.50 110.50 110.50 110.50
	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/16 8/0 8/6 8/0 8/6	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 104.000 110.000 93.000 93.000 93.000 93.000 110.000 110.000 110.000 110.000 110.000 110.000	96.500 102.500 108.500 114.500 91.000 97.000 103.000 109.000 115.000 96.000 102.000 104.000 114.000 97.000 97.000 103.000 109.000 109.000	95.750 101.750 107.750 107.750 90.250 96.250 102.250 108.250 114.250 89.250 101.250 101.250 107.250 113.250 90.250 102.250 108.250 108.250	99.500 105.500 111.500 111.500 117.500 94.000 100.000 112.000 118.000 93.000 99.000 105.000 111.000 117.000 106.000 112.000 112.000 112.000 112.000	93.000 99.000 105.000 111.000 87.500 93.500 93.500 105.500 111.500 86.500 92.500 104.500 110.500 93.500 93.500 93.500 105.500 111.500	97.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 105.500 102.500 108.500 114.500 97.500 103.500 103.500 103.500 103.500 103.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 101.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750	100.00 106.00 112.00 118.00 94.50 100.50 112.50 118.50 93.50 93.50 105.50 117.50 94.50 100.50 110.50 110.50 110.50 110.50
	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/16 8/0 8/6 8/0 8/6	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 104.000 110.000 93.000 93.000 93.000 93.000 110.000 110.000 110.000 110.000 110.000 110.000	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 103.000 114.000 91.000 103.000 103.000 103.000 103.000 103.000 103.000 115.000	95.750 101.750 107.750 107.750 90.250 96.250 102.250 108.250 114.250 89.250 101.250 101.250 107.250 113.250 90.250 102.250 108.250 108.250	99.500 105.500 111.500 111.500 117.500 94.000 100.000 112.000 118.000 93.000 99.000 105.000 111.000 117.000 106.000 112.000 112.000 112.000 112.000	93.000 99.000 105.000 111.000 87.500 93.500 99.500 105.500 86.500 92.500 98.500 104.500 110.500 87.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 93.500 94.500 95.500 96.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 9	97.000 103.000 109.000 115.000 91.500 97.500 103.500 115.500 90.500 103.500 102.500 108.500 114.500 97.500 103.500 103.500 103.500 103.500 103.500 103.500 103.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 101.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750 107.750	100.00 106.00 112.00 112.00 94.50 100.50 112.50 112.50 99.50 99.50 105.50 117.50 94.50 100.50 100.50 112.50
TRIPLE PATIO DOUBLE PATIO PLUS MEU	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/16 8/0 8/6 8/0 8/6	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 104.000 110.000 93.000 93.000 93.000 93.000 110.000 110.000 110.000 110.000 110.000 110.000	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 103.000 114.000 91.000 103.000 103.000 103.000 103.000 103.000 103.000 115.000	95.750 101.750 107.750 107.750 113.750 90.250 96.250 102.250 101.250 101.250 101.250 101.250 102.250 102.250 102.250 102.250 102.250 102.250 103.250 104.250 104.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 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104.750	100.00 106.00 112.00 94.50 100.50 106.50 112.50 113.50 94.50 115.50 117.50 117.50 116.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 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	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/8 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/6 8/0 8/6 9/0 9/0 8/6 9/0	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 104.000 110.000 87.000 99.000 105.000 111.000 111.000 111.000 111.000 111.000 111.000 111.000 111.000 111.000 111.000 111.000 111.000 111.000	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 102.000 103.000 114.000 97.000 103.000 103.000 109.000 115.000 115.000	95.750 101.750 107.750 113.750 90.250 96.250 102.250 103.250 104.250 89.250 95.250 101.250 107.250 113.250 90.250 102.250 102.250 102.250 103.250 104.250 104.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 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102.750 103.750 101.750 101.750 101.750 103.750 102.750 103.750 104.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750	100.00 106.00 112.00 94.50 100.50 106.50 112.50 113.50 94.50 115.50 117.50 117.50 116.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 117.50 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TRIPLE PATIO	WDE MULLION STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/8 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 6/0 + 3/0 MEU 7/0 7/16 8/0 8/6 9/0 7/10 7/16 8/0 8/6 9/0 7/10 T/16 8/0 8/16 9/0 T/10 T/16 8/10 B/16 B/10 B/16 B/16 B/10 B/16 B/16 B/10 B/16 B/16 B/16 B/16 B/16 B/16 B/16 B/16	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 104.000 110.000 87.000 99.000 105.000 111.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 102.000 103.000 103.000 103.000 114.000 91.000 97.000 103.000 109.000 115.000 115.000 SRICATION - INS	95.750 101.750 101.750 113.750 90.250 96.250 102.250 102.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250	99.500 105.500 111.500 111.500 94.000 100.000 106.000 112.000 118.000 99.000 105.000 111.000 111.000 111.000 112.000 112.000 118.000 112.000 112.000 113.000 113.000 114.000 115.000 115.000 115.000 115.000 115.000 115.000	93.000 99.000 105.000 111.000 87.500 93.500 93.500 105.500 111.500 86.500 92.500 104.500 110.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500 97.500	97.000 103.000 103.000 109.000 115.000 91.500 97.500 103.500 109.500 115.500 90.500 102.500 108.500 114.500 97.500 103.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 115.500	96.250 102.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 95.750 101.750 107.750 113.750 90.750 102.750 108.750 104.750 114.750	94.00 100.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.00 112.
TRIPLE PATIO	WDE MULLION STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/8 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/0 7/6 8/0 8/6 9/0 0 UNIT SIZE	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 110.000 110.000 110.000 110.000 HEAD FAI ALL "A" 49.721	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 102.000 103.000 114.000 97.000 103.000 103.000 109.000 115.000 103.000 109.000 115.000 SRICATION - INS STD "B" 53.721	95.750 101.750 101.750 113.750 90.250 96.250 102.250 103.250 104.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 103.250 104.250 104.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 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105.500 105.500 105.500 105.500 105.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 103.750 101.750 101.750 101.750 101.750 102.750 102.750 104.750 104.750 105.750 104.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750	100.000 106.000 112.000 112.000 94.500 100.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 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TRIPLE PATIO	WDE MULLION STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/8 + 2/16 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/6 8/0 8/6 9/0 0 UNIT SIZE 3/0 W/I-12" VENTING SL	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 110.000 110.000 110.000 110.000 HEAD FAI ALL "A" 49.721 51.721	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 102.000 103.000 114.000 97.000 103.000 115.000 103.000 105.000 115.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 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109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500	96.250 102.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 101.750 101.750 107.750 103.750 102.750 108.750 102.750 104.750 104.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 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TRIPLE PATIO	WDE MULLION STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/8 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/0 7/6 8/0 8/6 9/0 0 UNIT SIZE	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 110.000 110.000 110.000 110.000 HEAD FAI ALL "A" 49.721	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 102.000 103.000 114.000 97.000 103.000 103.000 109.000 115.000 103.000 109.000 115.000 SRICATION - INS STD "B" 53.721	95.750 101.750 101.750 113.750 90.250 96.250 102.250 103.250 104.250 101.250 101.250 101.250 101.250 101.250 101.250 101.250 103.250 104.250 104.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 105.250 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105.500 105.500 105.500 105.500 105.500	96.250 102.250 108.250 114.250 90.750 96.750 102.750 103.750 101.750 101.750 101.750 101.750 102.750 102.750 104.750 104.750 105.750 104.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750	100.000 106.000 112.000 112.000 112.000 118.000 94.500 100.550 110.550 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 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TRIPLE PATIO	STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/8 + 2/16 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/10 7/6 8/0 8/6 9/0 0 UNIT SIZE 3/0 W/I-12" VENTING SL	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 110.000 110.000 110.000 110.000 HEAD FAI ALL "A" 49.721 51.721	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 102.000 103.000 114.000 97.000 103.000 115.000 103.000 105.000 115.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 105.000 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109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500 109.500	96.250 102.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 101.750 101.750 107.750 103.750 102.750 108.750 102.750 104.750 104.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 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SINGLE WITH SIDELITES	WIDE MULLION STD MULLION STD MULLION STD	5/0 + 2/6 MEU 5/8 + 2/16 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 6/0 + 3/0 MEU 7/0 7/16 8/0 8/6 9/0 7/0 7/6 8/0 8/6 9/0 0 UNIT SIZE 3/0 W/I-12" VENTING SL 3/0 W/2-12" VENTING SL	92.500 98.500 104.500 110.500 87.000 93.000 99.000 111.000 86.000 92.000 98.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 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91.500 97.500 103.500 115.500 90.500 103.500 102.500 103.500 103.500 103.500 103.500 103.500 103.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500	96.250 102.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 101.750 101.750 107.750 102.750 108.750 102.750 108.750 104.750 105.750 104.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 105.750 10	100.000 106.000 112.000 112.000 112.000 118.000 94.500 94.500 110.550 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 112.500 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SINGLE WITH SIDELITES	WIDE MULLION STD MULLION STD MULLION STD	5/0 + 2/6 MEU 5/8 + 2/16 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/0 7/6 8/0 8/6 9/0 0 UNIT SIZE 3/0 W/1-12" VENTING SL 3/0 W/2-12" VENTING SL 3/0 W/2-14" VENTING SL	92.500 98.500 104.500 104.500 110.5000 87.000 93.000 99.000 111.000 86.000 98.000 104.000 110.000 87.000 99.000 105.000 111.000 44.000 110.000 87.000 99.000 105.000 111.000 44.000 111.000 44.000 110.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000 67.000	96.500 102.500 102.500 108.500 114.500 91.000 97.000 103.000 115.000 96.000 102.000 108.000 114.000 91.000 97.000 103.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 115.000 109.000 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103.000 109.000 115.000 91.500 97.500 103.500 109.500 105.500 102.500 102.500 103.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500 105.500	96.250 102.250 102.250 108.250 114.250 90.750 96.750 102.750 108.750 114.750 89.750 95.750 101.750 107.750 113.750 102.750 108.750 104.750 104.750 105.750 114.750 107.750 114.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750 108.750	100.000 106.000 112.000 112.000 94.500 94.50 100.505 118.500 93.50 93.50 105.505 111.50 105.505 111.50 105.505 111.50 105.505 111.50 105.505 111.50 105.505 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 111.50 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TRIPLE PATIO	WDE MULLION STD MULLION WIDE MULLION STD	5/0 + 2/6 MEU 5/4 + 2/8 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 4/8 + 2/4 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/0 + 2/6 MEU 5/8 + 2/10 MEU 6/0 + 3/0 MEU 7/0 7/6 8/0 8/6 9/0 7/0 7/6 8/0 8/6 9/0 7/0 7/6 8/0 8/6 9/0 7/0 7/6 3/0 W/1-12" VENTING SL 3/0 W/2-12" VENTING SL 3/0 W/2-14" VENTING SL	92.500 98.500 104.500 104.500 110.5000 87.000 93.000 99.000 111.000 86.000 92.000 93.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 110.0000 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SHOP 9 Single Door Unit Assembly

Exploded View and Part Identification	
Strike Installation	
Hinge Installation	
Spacer Shim Application	
System Frame Assembly	9.7
Brickmould Application	9.16
Door Slab Installation	9.19
Assembled Unit Packaging	9.23

Single Door Unit Assembly



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

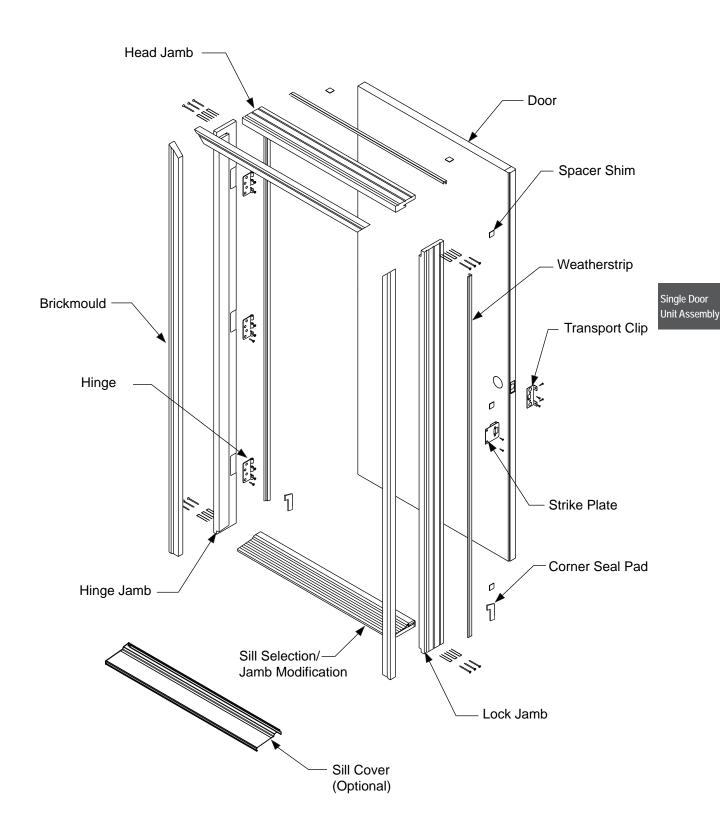
Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area. For volume production of prehung door units, there is a choice of methods. The method we show is one in which the frame is built without the slab, with unassembled hinge leaves fastened to the jamb. The door slab, also with unassembled hinge leaves attached, is then fit to the frame, and doors are fastened to frames with hinge pins.

In the other method, door slabs are first fastened to loose hinge jambs using assembled hinges. This can be done using a specialized door machine which holds a door and hinge jamb in precise registration while assembled hinges are fastened to both components. Door-with-hinge-jamb subassemblies are then laid on an assembly table, and the rest of the frame and sill are placed around the door and fastened.



Exploded View and Part Identification

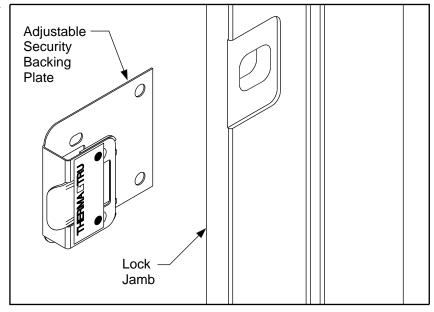
This section describes one method of assembling a door unit. Special machinery can be used to assemble door units.



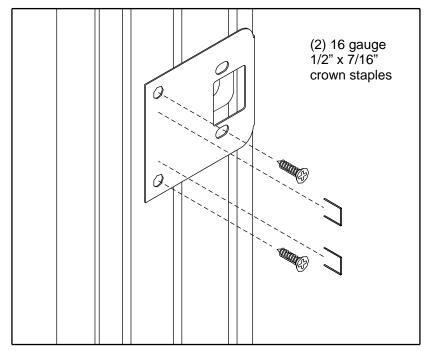


Slide Adjustable Security Strike Assembly onto Lock Jamb

Lightly bend tongue area of security backing plate inward to allow for a snug fit.



Single Door Unit Assembly



Fasten Security Strike Assembly to Lock Jamb

Fasten with (2) #10 x 3/4" flat head screws or (2) 16 gauge 1/2" x 7/16" crown staples through strike plate on back side of jamb.

NOTE:

Do not staple through screw holes when using staples in place of screws.

Jambs

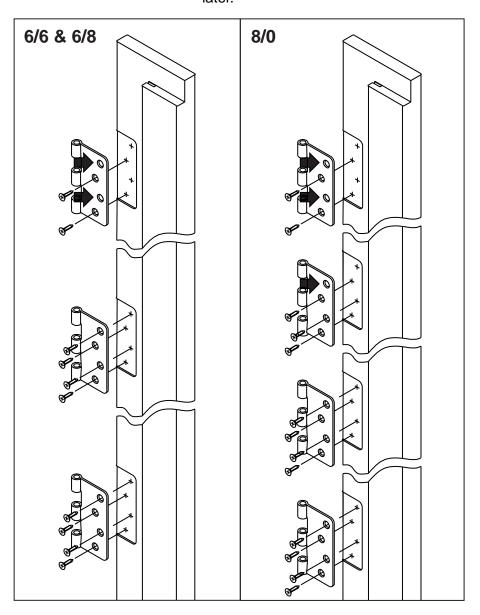
Place hinges into hinge mortise.

Seat hinge to back of machined hinge pocket.

Fasten with (2) #10 x 3/4" flat head screws in each hinge.



Leave holes vacant. These are for 2 1/2" screws to be installed later.

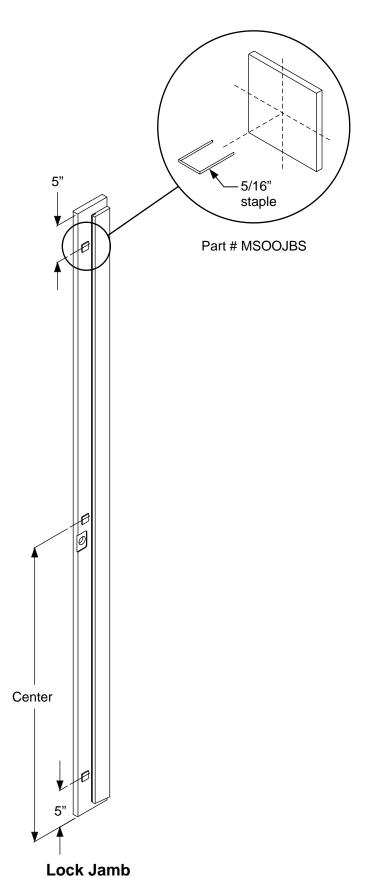


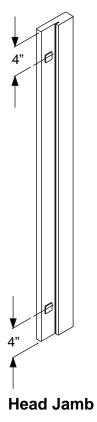


Apply Spacer Shims to Jambs

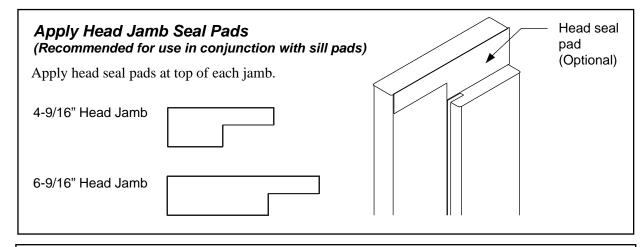
Fasten 2 spacer shims to head jamb with 5/16" galvanized staples, 4" from each end.

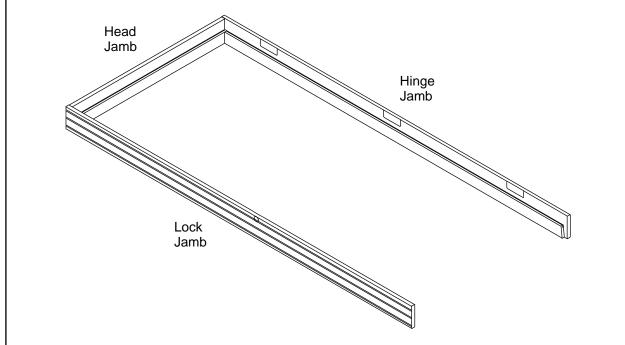
Fasten 3 spacer shims to lock jamb with 5/16" galvanized staples, 5" from each end and one at the center.











Single Door Unit Assembly

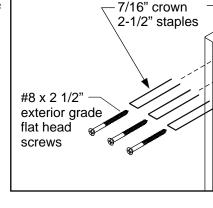
Fasten Side Jambs to Head Jamb

Fasten side jambs to head jamb with staples or screws through lock and hinge jamb into head jamb.

If using staples fasten 1 staple through the top of head jamb into each side jamb, be careful to keep head and side jamb rabbet stops flush.

If using screws drill 1/8" dia. pilot holes.

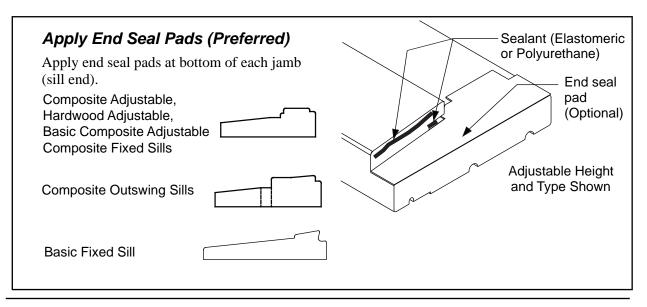
Attach with (3) #8 x 2-1/2" exterior grade flat head screws. If doing this often use drill fixture TDSBSTRDRLFXT.



3 staples here for 4-9/16" frames

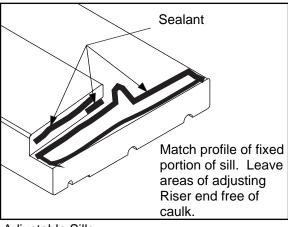
4 staples here for 6-9/16" frames





Caulk Only Assembly Method

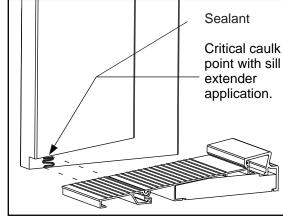
Apply a 1/4" bead of sealant (Elastomeric & Polyurethane) to sill gain, jamb kerf, and a bead that matches the profile the sill. (Except for adjustable sills, see note on figures.)



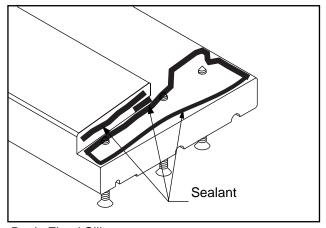


Single Door

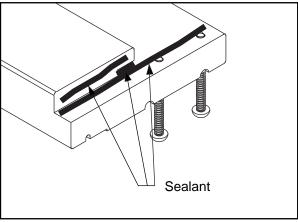
Unit Assembly



Sills With Sill Extender

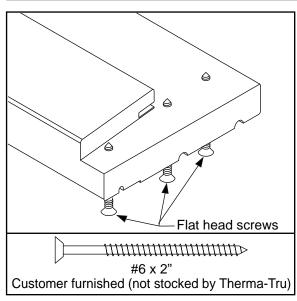


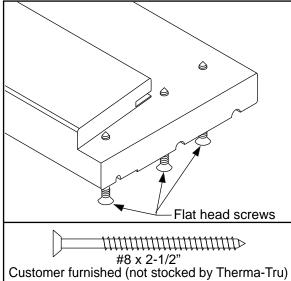
Basic Fixed Sill



Public Access Sill

Outswing Thermal Break Sill





Partially Set Sill Screws in Jambs

Basic Fixed Sill

Drive (3) #6 x 2" flat head exterior grade screws through holes in both side jambs until tips barely protude through jamb face.

Or

Fasten into substrate with 2-1/2" staples or screws.

Composite/Hardwood Inswing Sill

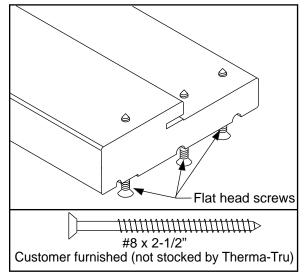
Drive (3) #8 x 2-1/2" flat head exterior grade screw through pilot holes in both jambs until tips barely protrude through jamb face.

Or

Fasten into substrate with 2-1/2" staples or screws.



Partially Set Sill Screws in Jambs



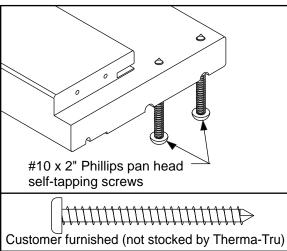
Composite Outswing System Sill

Drive (3) #8 x 2-1/2" flat head exterior grade screw through pilot holes in both jambs until tips barely protrude through jamb face.

Or

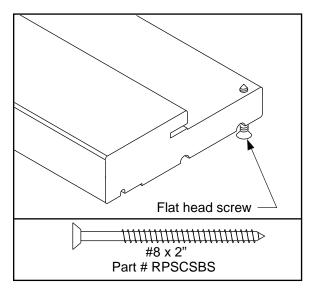
Fasten with (3) 2-1/2" inch staples.

Single Door Unit Assembly



Public Access Sills

Drive (2) #10 x 2" Phillips pan head self-tapping screws through holes in both side jambs until tips barely protrude through jamb face.



Outswing Aluminum Sill

Drive (1) #8 x 2" flat head exterior grade screw through holes in both side jambs until tips barely protrude through jamb face.

Or

Fasten into substrate with 2-1/2" staples.



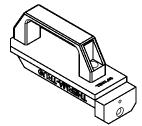


CAUTION:

If fastening with screws into sills made with composite substrates drill 1/8" dia. pilot holes for #8 exterior grade screws or 5/32" dia. pilot holes for #10 screws.

Note:

If doing this often use TDSBSTRDRLFXT drill fixture.

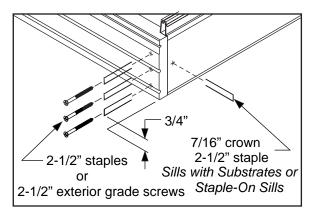


Fasten Sill to Side Jambs

Sills with Substrates or Staple-on Sills

Fasten each jamb to sill with 2-1/2" staples or 2-1/2" Exterior grade screw through side jamb.

Fasten sill to each side jamb using 1 staple or screw through bottom of sill into 1-1/4" part of side jamb.



Single Door Unit Assembly

Screw-On Sills

Use screw points and index sill in place by aligning screw points.

Drive screws using bit sized properly for screw head.

Outswing Sills

Public Access Sills

Use screw points and index sill in place by aligning screw points.

Drive (2) #10 x 2" Phillips pan head screws up through bottom of sill into jamb.

Drive screws using bit sized properly for screw head.





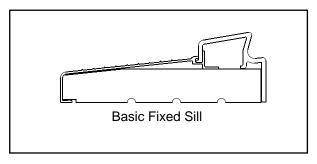
Select the Correct Corner Seal Pad



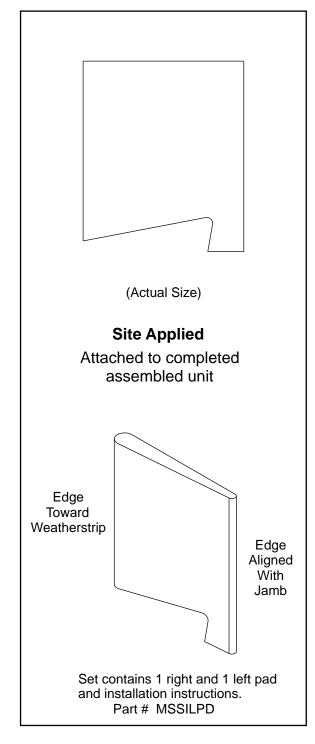
CAUTION:

Outswing sills with bumper gaskets require NO corner seal pads.

For This Sill



Use This Pad





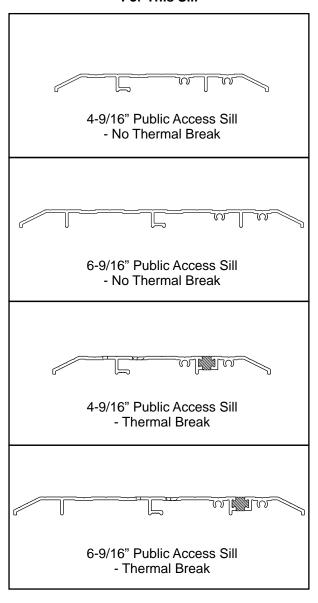
Select the Correct Corner Seal Pad



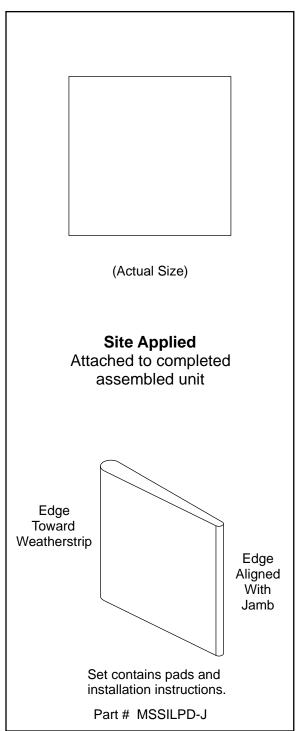
CAUTION:

Outswing sills with bumper gaskets require NO corner seal pads.

For This Sill

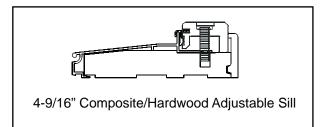


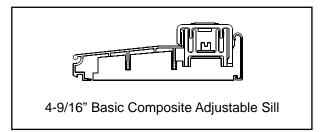
Use This Pad



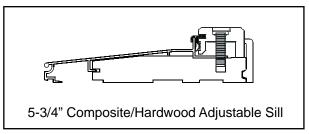


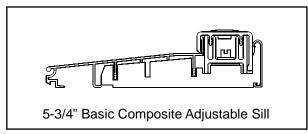
Select the Correct Corner Seal Pad

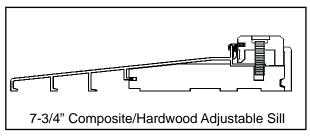


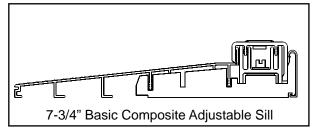


Single Door Unit Assembly







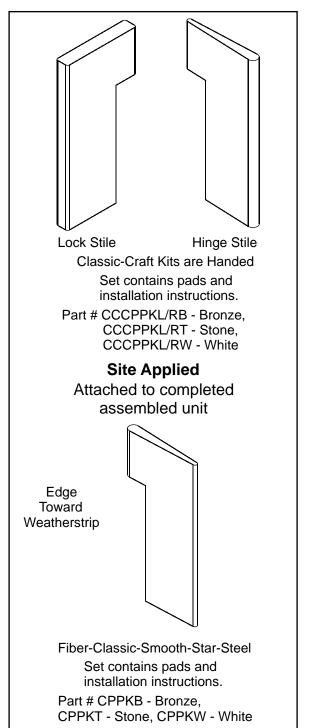




CAUTION:

Outswing sills with bumper gaskets require NO corner seal pads.

Use This Pad





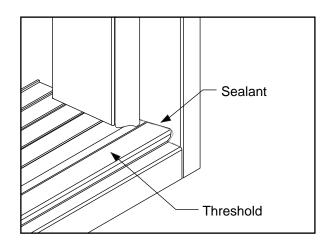
Apply Corner Seal Pad (If Shop Application is Required)

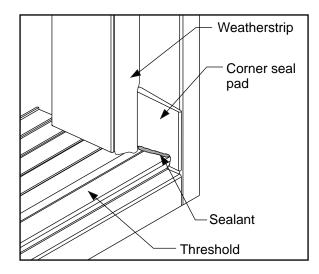
Note:

Follow Corner Seal Pad Instructions included with Pads as they may vary for different sills & pads.

Seal Joint

Place a 1/4" bead of (Elastomeric or Polyurethane) sealant at corners where threshold meets side jambs.





Remove paper backing from pad.

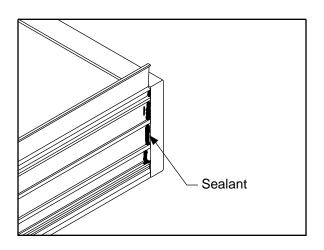
Align corner seal pad tightly to each face of threshold tucking leading edge behind weatherstrip.

Apply one pad at each side.

Single Door Unit Assembly

Backseal Sill Joint (All sills without substrates)

Apply a bead of caulk at underside of joint here sill meets jamb. Public access Outswing



Attach Sill Cover (Optional)

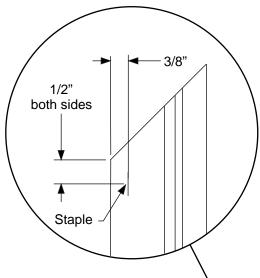


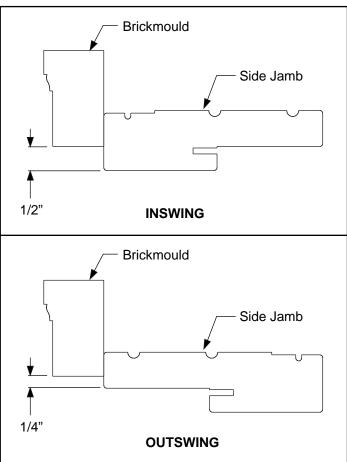
Fasten Brickmould to Side Jambs

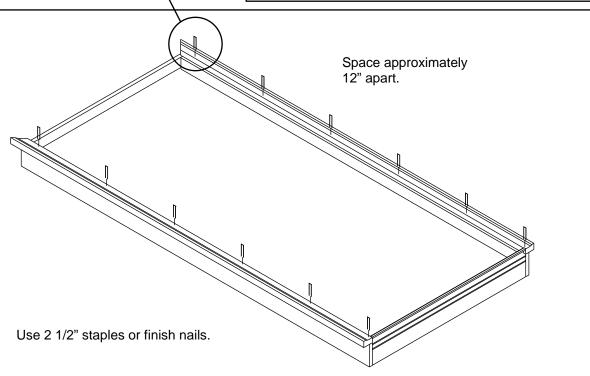
Locate and attach brickmould jamb pieces.

Fasten brickmould with 2-1/2" staples or finish nails. Starting 1/2" in from end and spaced approximately 12" apart.

Composite jambs may alternatively use the hidden fastening system.







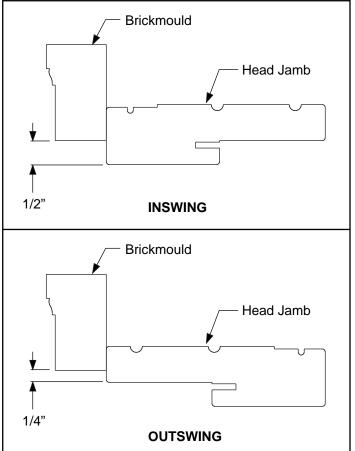


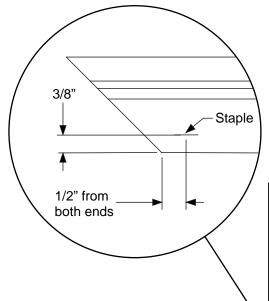
Fasten Brickmould to Frame Head

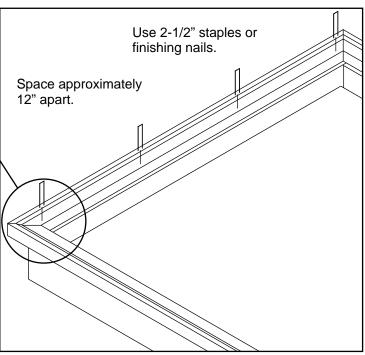
Align brickmould head at corner miters. Fasten near ends to jambs with 2-1/2" staples or finishing nails.

Composite jambs may alternatively use the hidden fastening system.

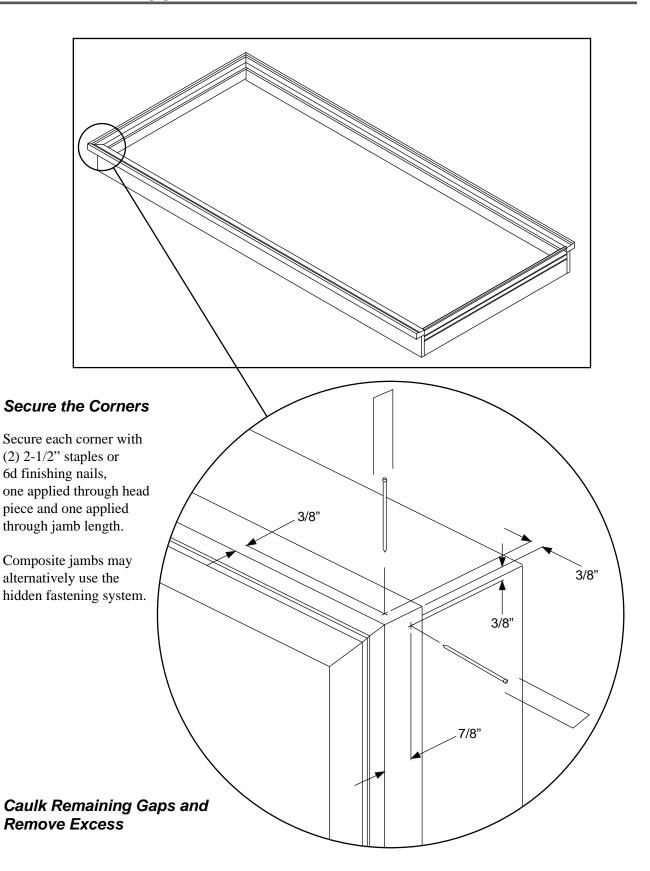
Hold proper 1/2" or 1/4" reveal and fasten to jamb across length at approximately 12" spacing







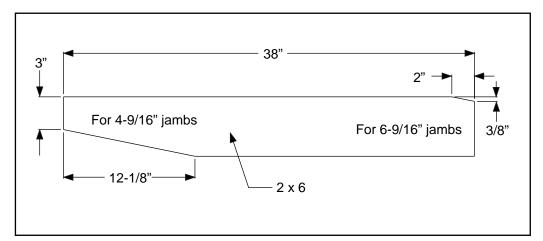






Make Two "Insert Skids"

Make from 2 x 6.

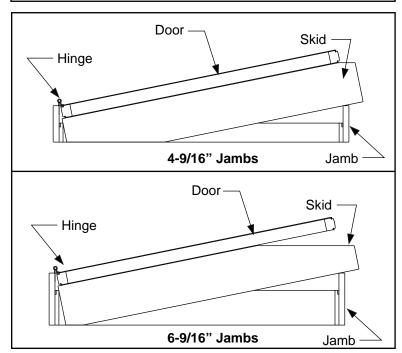


Hinge Skid (2)

Place Door into Frame

Lay frame on table with hinges on jamb pointed up as shown.

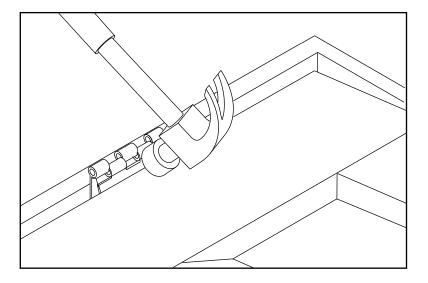
Slide door down on top of skids



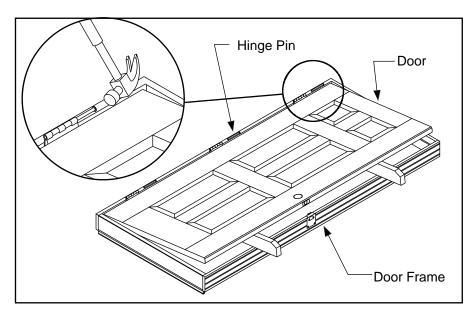


Engage Hinge Knuckles

Tap with hammer as required to line up hinge knuckles and engage.



Single Door Unit Assembly



Install Hinge Pins

Tap in pins. Be certain to insert so heads are on top edges of hinges.

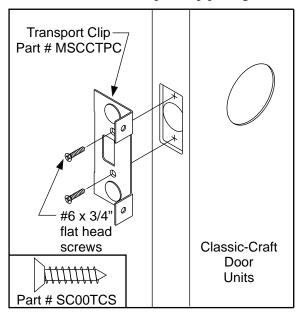


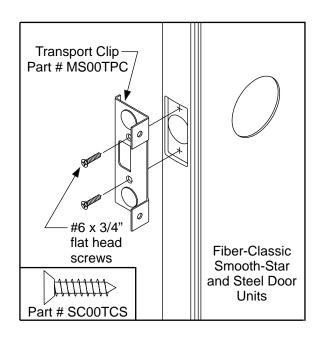
Attach Transport Clip to Door

Insert tab into latch bore.

Position reference lip at edge of stile against exterior side of door.

Fasten with (2) #6 x 3/4" flat head screws (included in transport clip package).



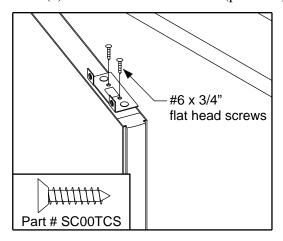


Single Door Unit Assembly

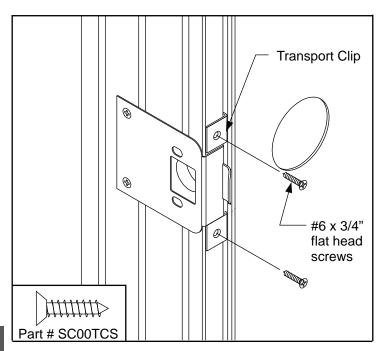
Attach Transport Clip to Door (MPLS)

Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).





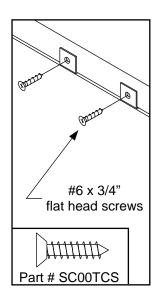


Attach Transport Clip to Frame

Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with (2) #6 x 3/4" flat head screws (included in transport clip package).

Single Door Unit Assembly



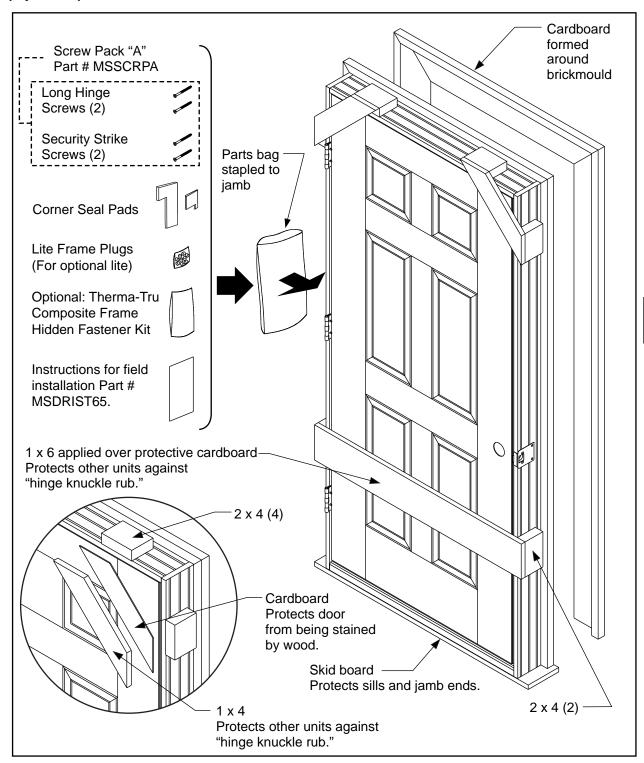
Attach Transport Clips to Head Jamb (MPLS)

Close door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with (2) #6 x 3/4" flat head screws.



(Optional) Assemble the Unit as Shown







SHOP 10 French Door Unit Assembly

Exploded View and Part Identification	10.3
Hinge Installation	10.8
Spacer Shim Application	10.9
System Frame Assembly	10.10
Brickmould Application	10.35
Assembled Unit Packaging	10.38

French Door Unit Assembly



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

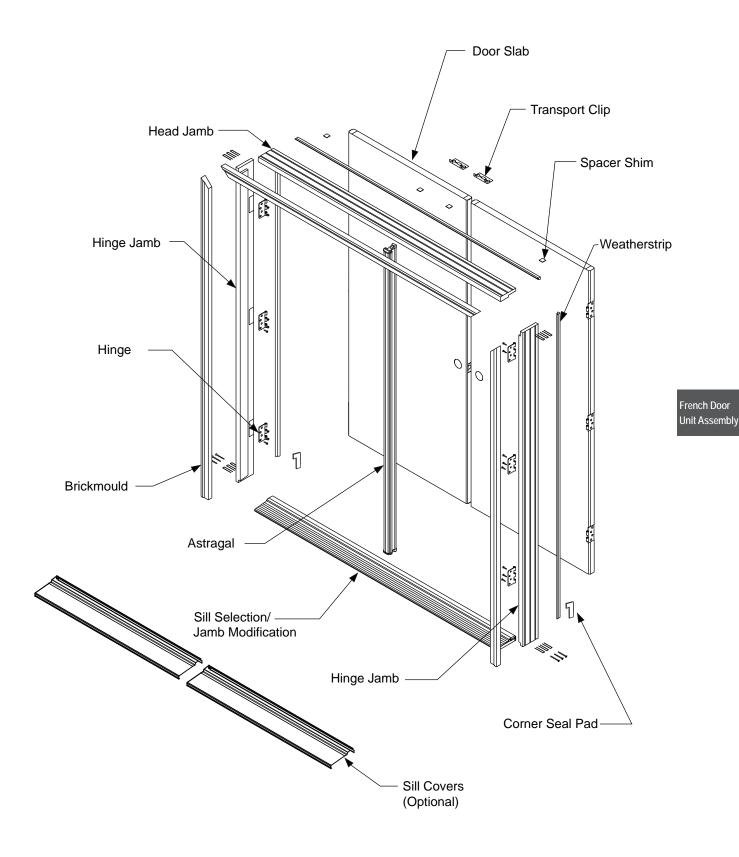
Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area. For volume production of prehung door units, there is a choice of methods. The method we show is one in which the frame is built without the slab, with unassembled hinge leaves fastened to the jamb. The door slab, also with unassembled hinge leaves attached, is then fit to the frame, and doors are fastened to frames with hinge pins.

In the other method, door slabs are first fastened to loose hinge jambs using assembled hinges. This can be done using a specialized door machine which holds a door and hinge jamb in precise registration while assembled hinges are fastened to both components. Door-with-hinge-jamb subassemblies are then laid on an assembly table, and the rest of the frame and sill are placed around the door and fastened.



French Door Unit Assembly

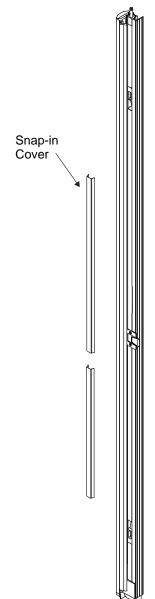
Exploded View and Part Identification



Shop 10



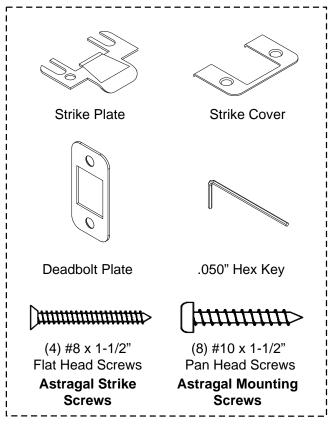
7/8" Paintable or Stainable Astragal Inswing & Outswing



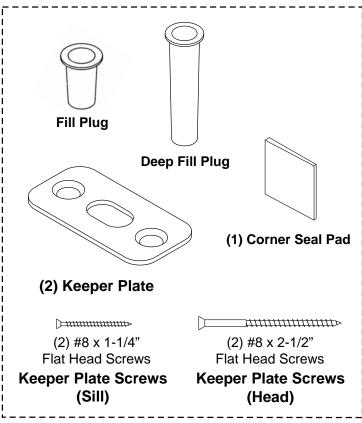
French Door

Unit Assembly

Astragal Shop Pack

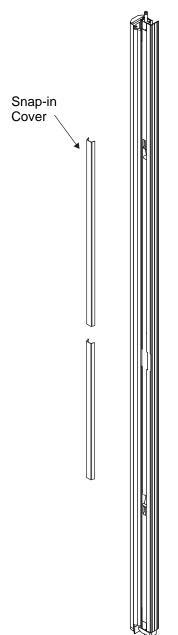


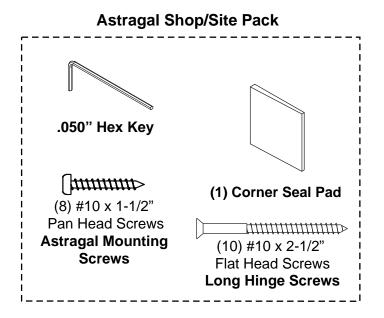
Astragal Site Pack





7/8" Paintable or Stainable Astragal with Shootbolt Multipoint Lock Prep Inswing & Outswing





French Door Unit Assembly



French Door Unit Assembly This Page Intentionally Left Blank



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French Door Unit Assembly



Jambs

Place hinges into hinge mortise.

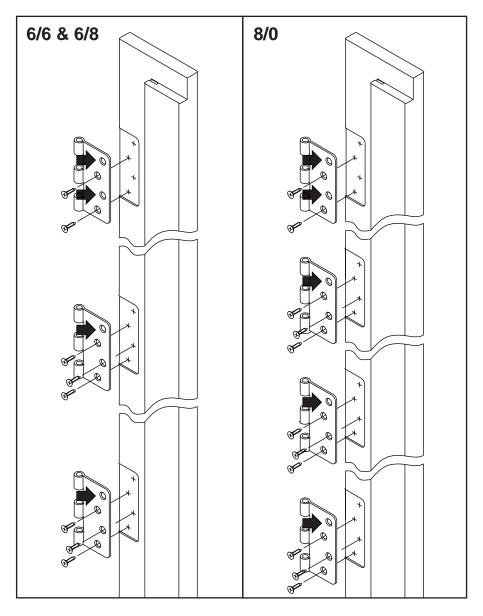
Seat hinge to back of machined hinge pocket.

Fasten with #10 x 3/4" flat head screws

in each hinge.

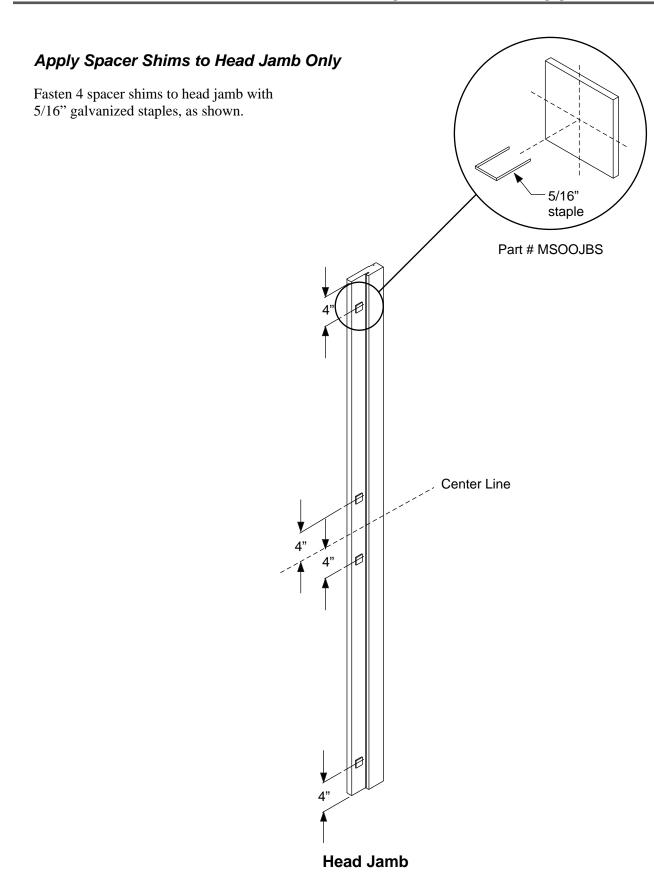


Leave holes vacant. These are for 2 1/2" screws to be installed later.



French Door Unit Assembly



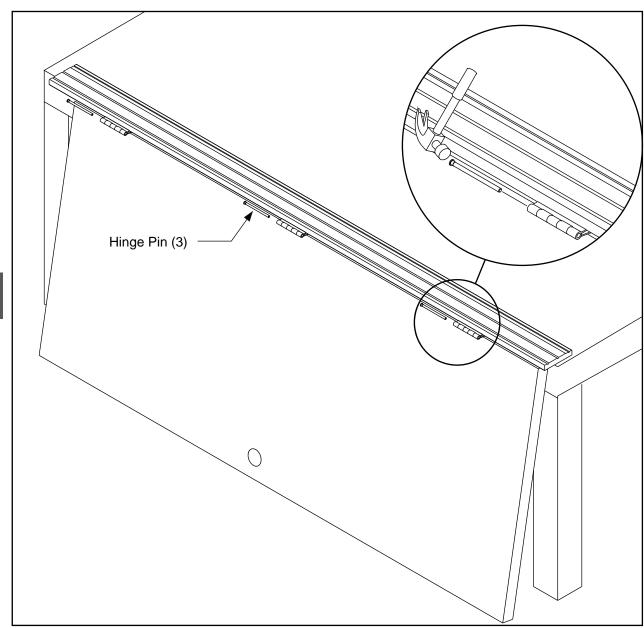




Fasten Hinge Jambs to Door Slabs

Align jamb hinge knuckles to slab hinge knuckles.

Fasten with 3 hinge pins, inserted at tops of hinges.



Shop Installation Instructions for Aluminum Astragal Double Bore

The following instructions should be completed in the door shop. Check to see that the astragal shop pack and astragal site pack are included with this unit. The packs contain all the necessary hardware and fasteners needed to complete this installation and the site pack should be sent along with the unit to the job site.

Read all instructions before starting. Wear proper PPE while working with astragals.



Rev. J 2/4/16

P/N: ALASTDBASMINST-R



Align the bottom of the aluminum astragal body to the bottom of the door slab.

For inswing units, the boot will overhang the door to align with the door sweep.

For outswing units, the boot will sit subflush to the end of the door.

Align the exterior edge tight to the outside surface of the door.





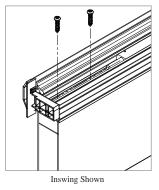
Inswing

Outswing

French Door Unit Assembly

2

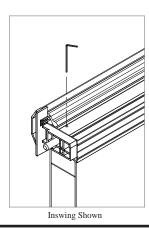
Pre-drill the two end holes with a 1/8" bit. Fasten in place with two pan head screws.



3

Loosen both set screws to allow the hardware to slide freely.

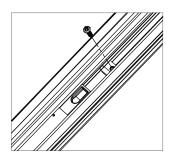
Move the retainer, bolt, and spring clip together as one unit and align the end of the retainer to the end of the astragal. Tighten the set screw closest to the end.



French Door Unit Assembly

4

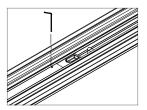
Align the hole in the spring clip with the hole in the astragal. Pre-drill this hole with a 1/8" bit. Fasten in place with one pan head screw.



5



Tighten the set screw closest to the slide bolt handle. This step is critical to the performance of the astragal in the field.



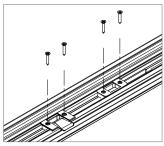
6

Repeat steps 2-5 to fasten the top slide bolt assembly.



7

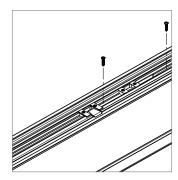
Align the strike plate and strike cover and lower strike boss with the machined pocket in the astragal. Pre-drill the holes with a 1/8" bit. Fasten in place with two flat head screws. Align the deadbolt plate and upper strike boss at the desired deadbolt location. Pre-drill the holes with a 1/8" bit. Fasten in place with two flat head screws.



See other side for next step.

8

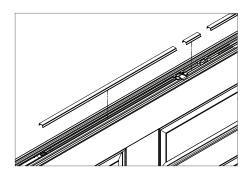
Pre-drill through remaining two holes with a 1/8" bit. One hole will be just above the latch strike and one will be below the top retainer. Fasten astragal to door though these holes with two pan head screws.



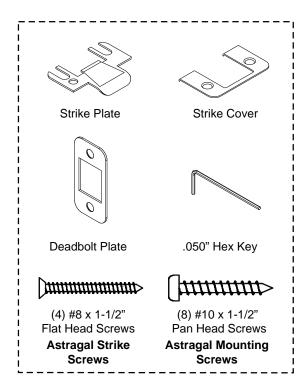
9

Cut and fit trim strips to fit between the two strikes and between each strike and the astragal slide bolt assemblies while in the retracted position.

Press pieces firmly to snap in place.



Astragal Shop Pack Contents:



French Door Unit Assembly



1750 Indian Wood Circle Maumee, Ohio 46537 419-891-7400

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Shop/Site **Installation Instructions** for Aluminum **Astragal Multi-Point**

The following instructions should be completed in the door shop. Check to see that the astragal shop/site pack are included with this unit. The pack contains all the necessary hardware and fasteners needed to complete this installation. Send corner seal pad, flat head screws, and

instructions along with the unit to the job site.

Read all instructions before starting. Wear proper PPE while working with astragals.



French Door **Unit Assembly**

P/N: ALASTMPLSASMINST-R

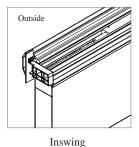
AT THE SHOP

Align the bottom of the aluminum astragal body to the bottom of the door slab.

For inswing units, the boot will overhang the door to align with the door sweep.

For outswing units, the boot will sit subflush to the end

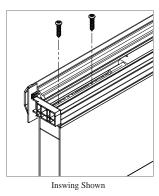
Align the exterior edge tight to the outside surface of the door.





Outswing

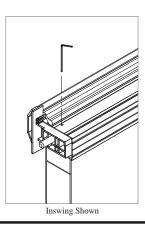
Pre-drill the two end holes with a 1/8" bit. Fasten in place with two pan head screws.



3

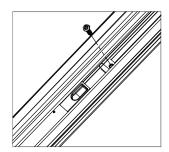
Loosen both set screws to allow the hardware to slide freely.

Move the retainer, bolt, and spring clip together as one unit and align the end of the retainer to the end of the astragal. Tighten the set screw closest to the end.



4

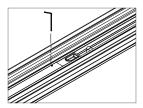
Align the hole in the spring clip with the hole in the astragal. Pre-drill this hole with a 1/8" bit. Fasten in place with one pan head screw.



5

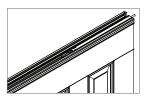


Tighten the set screw closest to the slide bolt handle. This step is critical to the performance of the astragal in the field.



6

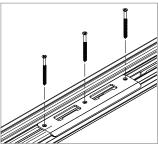
Repeat steps 2-5 to fasten the top slide bolt assembly.



7

Remove the long strike plate and three #8 x 2 1/2" flat head screws from the strike pack.

Align the strike plate with the machined pocket in the astragal. Pre-drill the holes with a 1/8" bit. Fasten in place with the flat head screws.



See other side for next step.

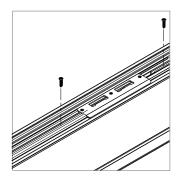
French Door

Unit Assembly



8

Pre-drill through remaining two holes with a 1/8" bit. One hole will be just above the strike and one will be just below. Fasten astragal to door though these holes with two pan head screws.



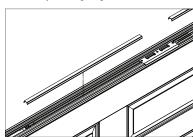
9

French Door

Unit Assembly

Cut and fit trim strips to fit between the strike and each astragal slide bolt assembly while in the retracted position.

Press pieces firmly to snap in place.



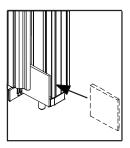
10

AT THE SITE

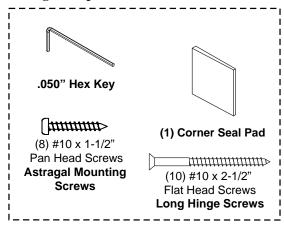
With the doors open, drill 1/8" diameter pilot holes in the open hinge holes (8 total for 6/6 and 6/8, 10 total for 7/0 and 8/0). Then install the flat head screws through the hinges, into the stud, to anchor the door frame and prevent sagging.

11

Remove paper backing from corner seal pad. Align the pad with the bottom of the boot and the inside edge of the astragal. Apply the pad by pressing it against the astragal.



Astragal Shop/Site Pack Contents:





1750 Indian Wood Circle Maumee, Ohio 46537 419-891-7400

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French Door Unit Assembly This Page Intentionally Left Blank



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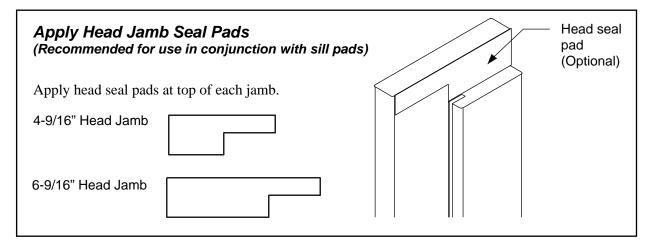


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French Door Unit Assembly This Page Intentionally Left Blank



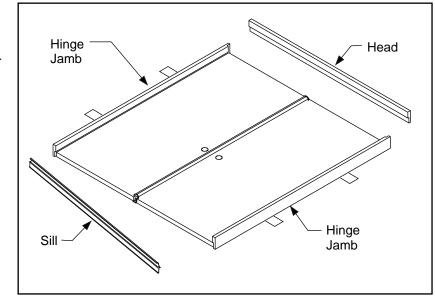


Assemble French Door Unit

On table, using two pieces of 3/4" boards by 6' long as blocks so hinge knuckles don't interfere, lay jambs/doors/astragal subassemblies together.



For Coastal Applications consult local building codes.



French Door Unit Assembly

3 staples here for 4-9/16" frames 4 staples here for 6-9/16" frames 7/16" crowns 2-1/2" staples

Fasten Hinge Jambs to Head Jamb

Fasten side jambs to head jamb with staples or screws through lock and hinge jamb into head jamb.

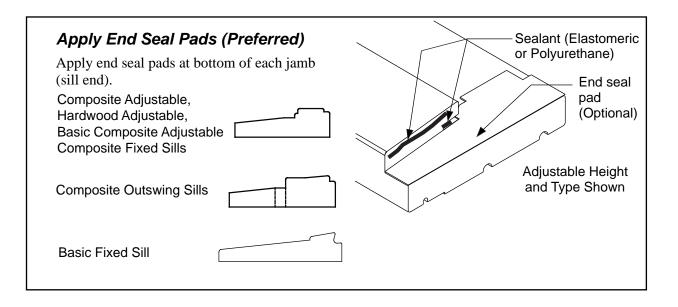
If using staples fasten 1 staple through the top of head jamb into each side jamb, be careful to keep head and side jamb rabbet stops flush.

If using screws drill 1/8" dia. pilot holes. Attach with (3) #8 x 2-1/2" exterior grade flat head screws. If doing this often use TDSBSTRDRLFXT drill fixture.

exterior grade flat head

screws

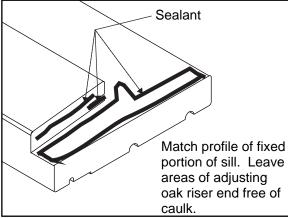




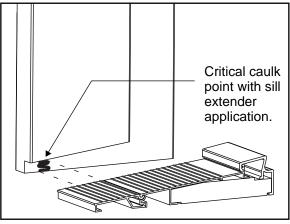


Caulk Only Assembly Method

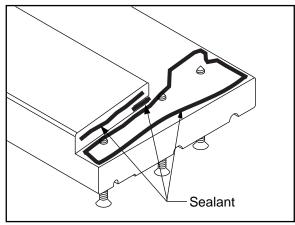
Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) to sill gain, jamb kerf, and a bead that matches the profile the sill. (except for adjustable sills, see note on figures.)



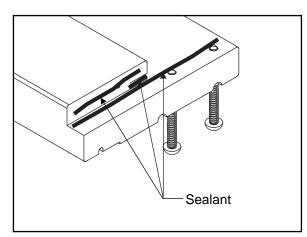
Adjustable Sills



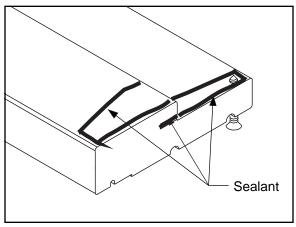
Sills With Sill Extender



Basic Fixed Sill



Public Access Sill



Outswing Thermal Break Sill



Partially Set Sill Screws in Jambs

Basic Fixed Sill

Drive (3) #6 x 2" flat head screws through holes in both side jambs until tips barely protrude through jamb face.

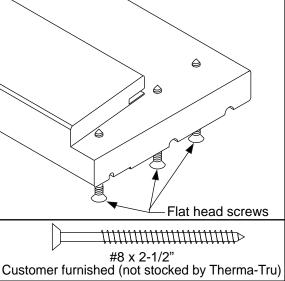
Or

Fasten into substrate with 2-1/2" staples or screws.

Flat head screws #6 x 2" Customer furnished (not stocked by Therma-Tru)

Composite/Hardwood Inswing Sill

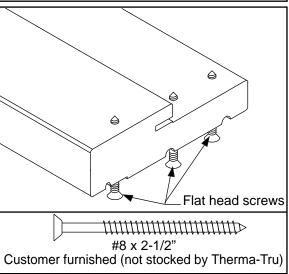
Drive (3) #8 x 2-1/2" flat head exterior grade screw through pilot holes in both jambs until tips barely protrude through jamb face.



French Door Unit Assembly

Composite Outswing Sill

Drive (3) #8 x 2-1/2" flat head exterior grade screw through pilot holes in both jambs until tips barely protrude through jamb face.

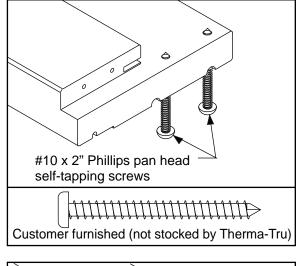




Partially Set Sill Screws in Jambs

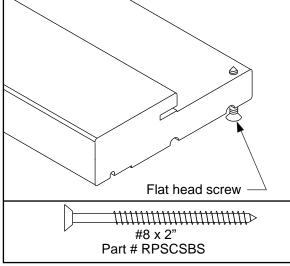
Public Access Sills

Drive (2) #10 x 2" Phillips pan head self-tapping screws through holes in both side jambs until tips barely protrude through jamb face.



Aluminum Outswing Sill

Drive (1) #8 x 2" flat head exterior grade screw through holes in both jambs until tips barely protrude through jamb face.







CAUTION:

If fastening with screws into sills made with composite substrates, drill 1/8" dia. pilot holes for #8 screws or 5/32" dia. pilot holes for #1- screews.

Note:

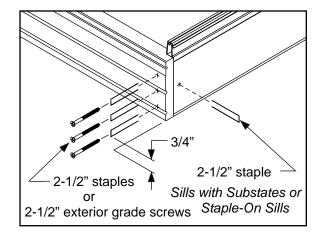
if doing this often use TDSBSTRDRLFXT drill fixture.

Fasten Sill to Side Jambs

Sills with Substrates or Staple-on Sills

Fasten each jamb to sill with 2-1/2" staples or 2-1/2" exterior grade screw through side jamb.

Fasten sill to each side jamb using 1 staple or screw through bottom of sill into 1-1/4" part of side jamb.

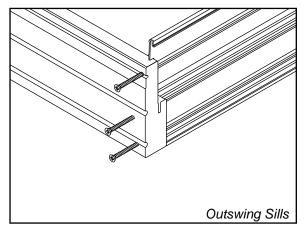


French Door Unit Assembly

Screw-On Sills

Use screw points and index sill in place by aligning screw points.

Drive screws using bit sized properly for screw head.

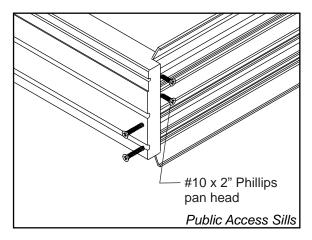


Public Access Sills

Use screw points and index sill in place by aligning screw points.

Drive (2) #10 x 2" Phillips pan head screws up through bottom of sill into jamb.

Drive screws using bit sized properly for screw head.





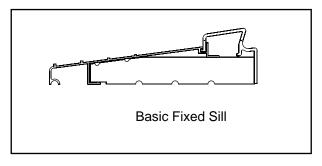
Select the Correct Corner Seal Pad



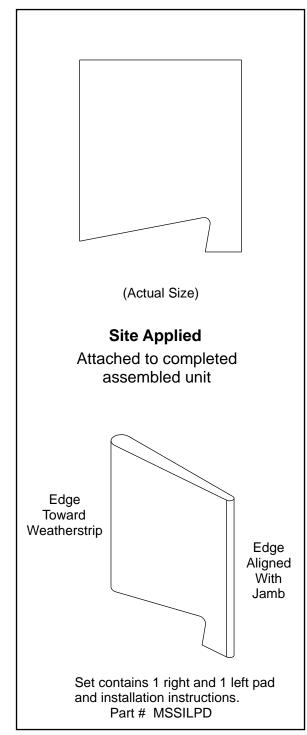
CAUTION:

Outswing sills with bumper gaskets require NO corner seal pads.

For This Sill



Use This Pad





Select the Correct Corner Seal Pad

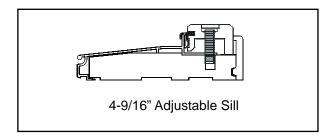
For Composite/Hardwood Inswing Sills

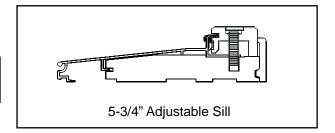


CAUTION:

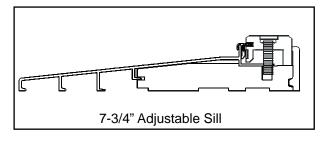
Outswing sills with bumper gaskets require NO corner seal pads.

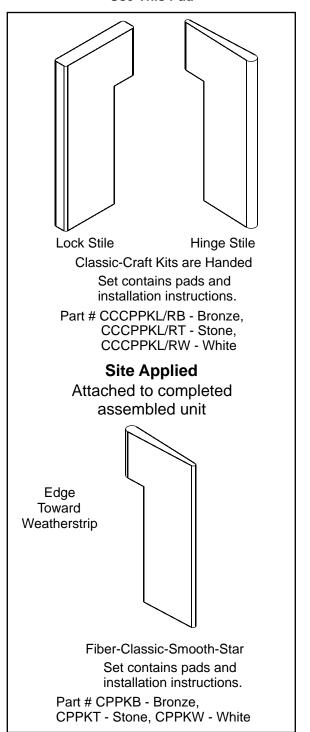
Use This Pad













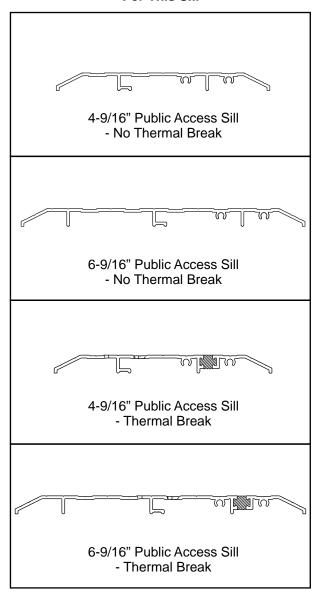
Select the Correct Corner Seal Pad



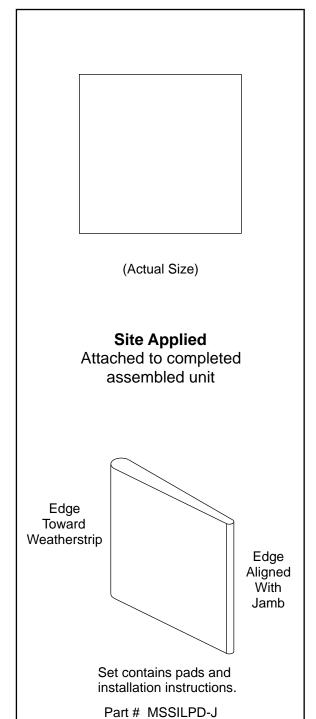
CAUTION:

Outswing sills with bumper gaskets require NO corner seal pads.

For This Sill



Use This Pad





Apply Corner Seal Pad

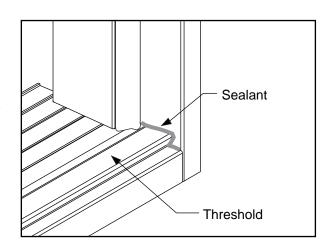
(If Shop Application is Required)

Note:

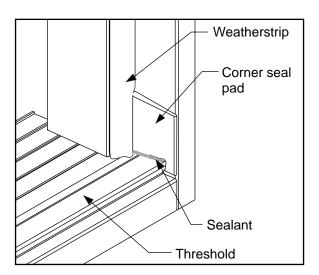
Follow Corner Seal Pad Instructions included with Pads as they may vary for different sills & pads.

Seal Joint

Place a 1/4" bead of (Elastomeric or Polyurethane) sealant at corners where threshold meets side jambs.



French Door Unit Assembly



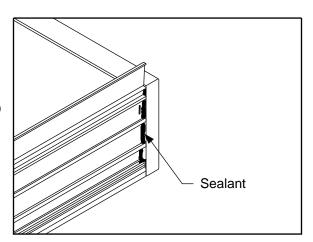
Remove paper backing from pad.

Align corner seal pad tightly to each face of threshold tucking leading edge behind weatherstrip.

Apply one pad at each side.

Backseal Sill Joint (All sills without substrates)

Apply a bead of (Elastomeric or Polyurethane) sealant at underside of joint where sill meets jamb.
Public access
Outswing



Attach Outswing Astragal Security Cover (Optional)

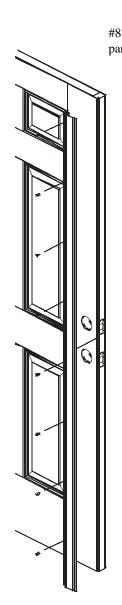
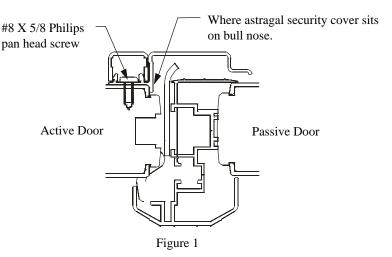


Figure 2



- * Line up the top of the astragal security cover with the top of the active door, ensuring the lip is sitting correctly on the bull nose of the door (See Figure 1).
- *Fasten the security cover to the active door with #8 X 5/8" Phillips pan head stainless steel screws (supplied) As shown in Figure 2.
- *Attach the screw channel cover by lining up the outside of the security cover first, then rotate towards the wall of the adjacent wall of the security cover. (see Figure 3)
- *Make sure the top of the screw channel cover is aligned with the top of the astragal security cover.
- *It may be becessary to use a rubber mallet to fully seat the channel cover.

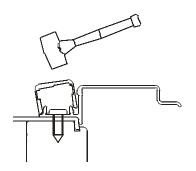
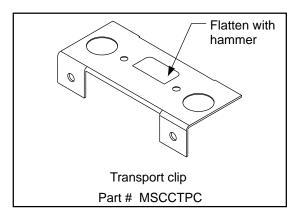


Figure 3



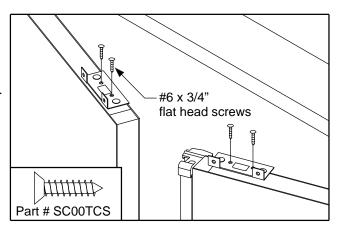
Attach Transport Clips to Door Slabs

Flatten lock tabs with hammer.

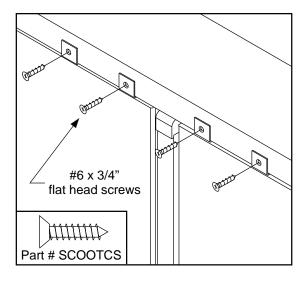


Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).



French Door Unit Assembly



Attach Transport Clips to Head Jamb

Close inactive door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with (2) #6 x 3/4" flat head screws.

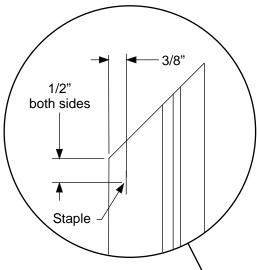


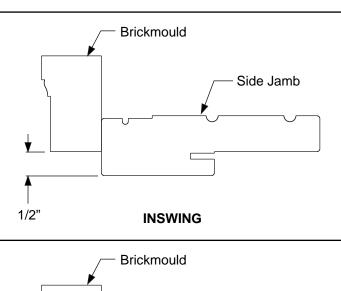
Fasten Brickmould to Side Jambs

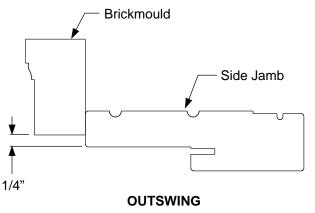
Locate and attach brickmould jamb pieces.

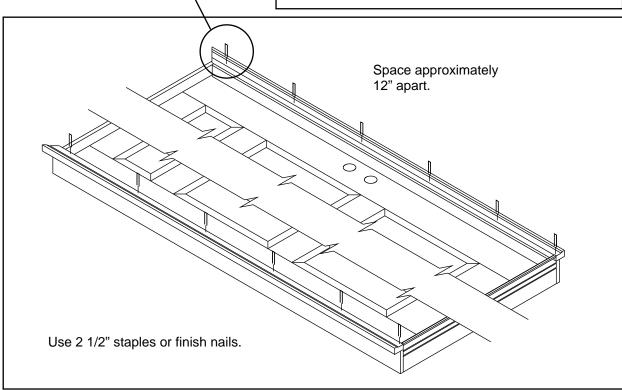
Fasten brickmould with 2-1/2" staples or finish nails. Starting 1/2" in from end and spaced approximately 12" apart.

Composite jambs may alternatively use the hidden fastening system.









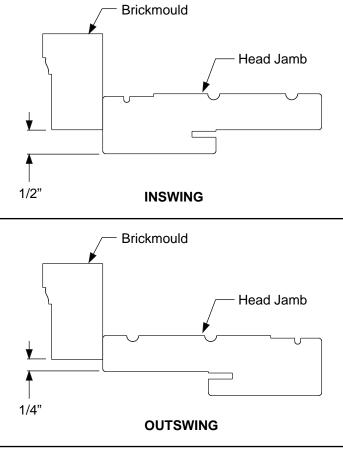


Fasten Brickmould to Frame Head

Align brickmould head at corner miters. Fasten near ends to jambs with 2-1/2" staples or finishing nails.

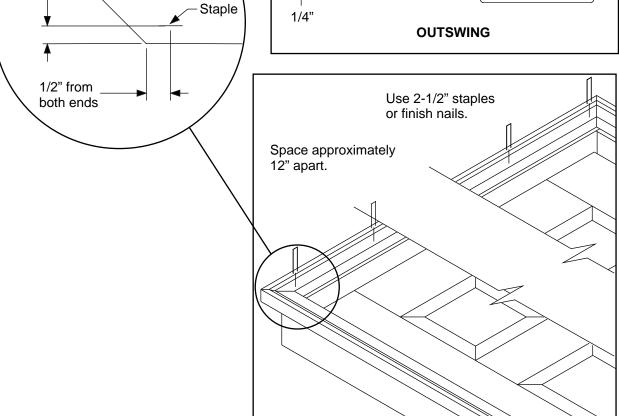
Composite jambs may alternatively use the hidden fastening system.

Hold proper 1/2" or 1/4" reveal and fasten to jamb across length at approximately 12" spacing

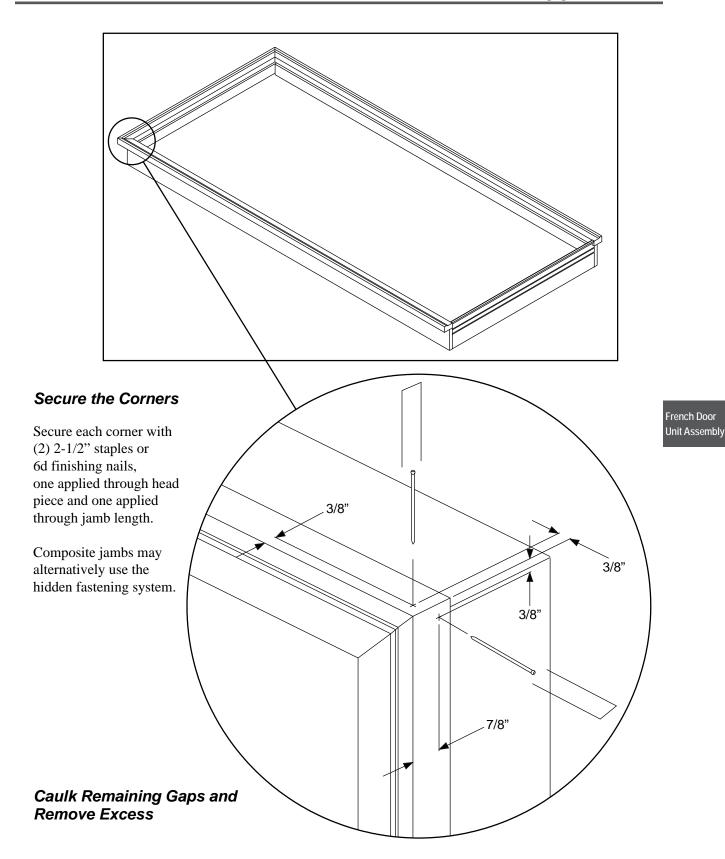




3/8"

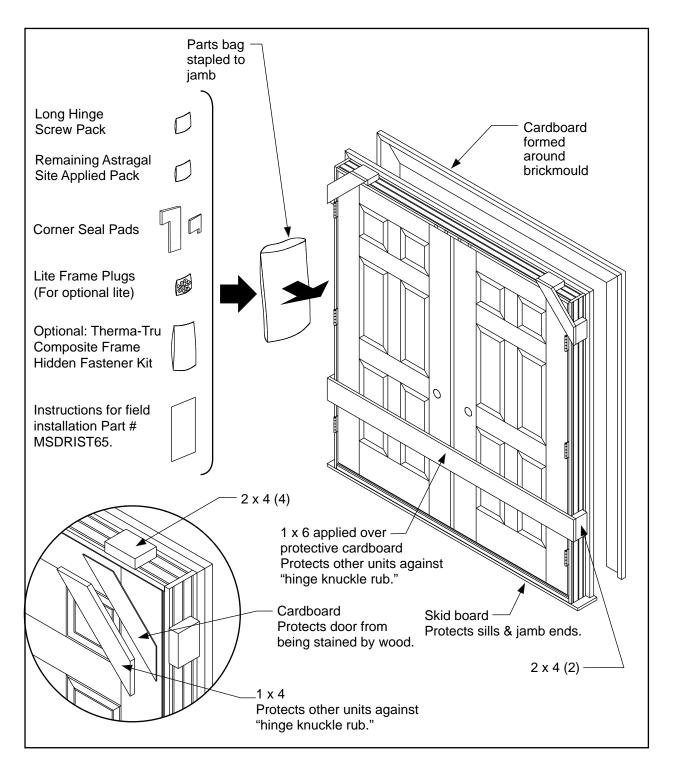








(Optional) Assemble the Unit as Shown





SHOP 11 Boxed Frame Sidelite/ Door Unit Assembly

Exploded View and Part Identification	11.3
System Frame Assembly	11.4
Inactive Slab/ Sidelite Installation	11.6
Direct Set Glass Sidelite Installation	11.12
Fiber-Classic & Smooth-Star Universal Sidelite	11.18
Inactive Slab/ Sidelite Attachment	11.19
Brickmould Application	11.20
Mull Casing Application	11.23
Assembled Unit Packaging	11.24

Box Frame Sidelite/Door Unit Assembly



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area.



CAUTION

DOOR UNITS WITH ALL-GLASS SIDELITES MAY **NOT** BE REINFORCED WITH 2 1/2" LONG HARDWARE SCREWS.

DO NOT SCREW THROUGH JAMB OR MULLIONS INTO OR NEAR GLASS EDGES.

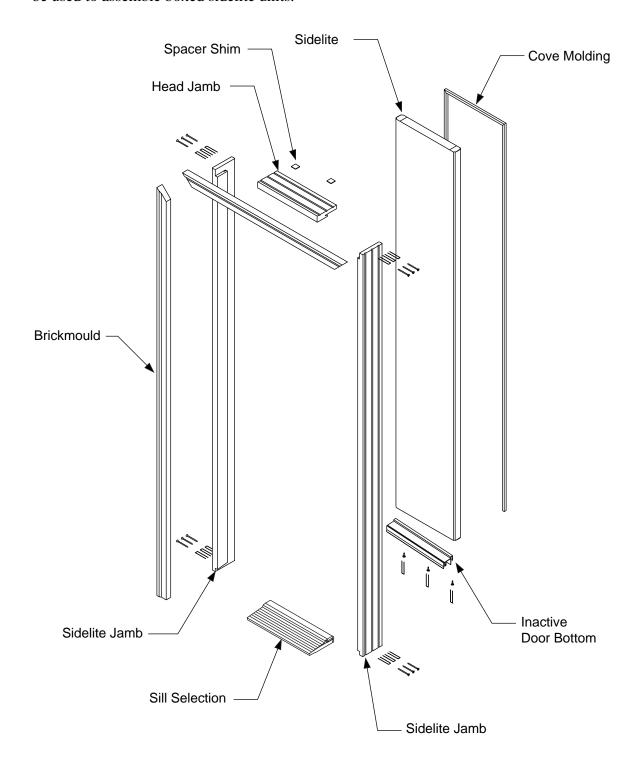
<u>DO NOT</u> FURNISH REINFORCED SCREWS (SCREW PACK "A") WITH THESE UNITS.



Box Frame Sidelite/Door Unit Assembly

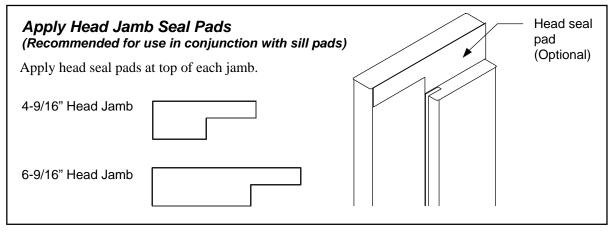
Exploded View and Part Identification

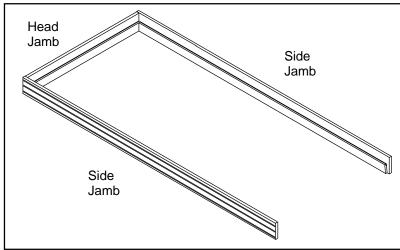
This section describes one method of assembling a boxed sidelite unit. Special machinery can be used to assemble boxed sidelite units.



Box Frame Sidelite/Door Unit Assembly







Box Frame Sidelite/Door Unit Assembly

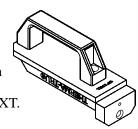
Fasten Side Jambs to Head Jamb

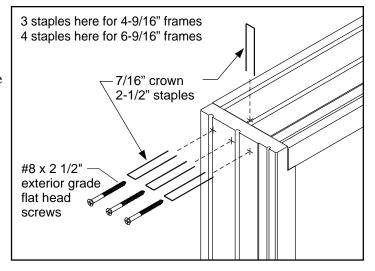
Fasten side jambs to head jamb with staples or screws through lock and hinge jamb into head jamb.

If using staples fasten 1 staple through the top of head jamb into each side jamb, be careful to keep head and side jamb rabbet stops flush.

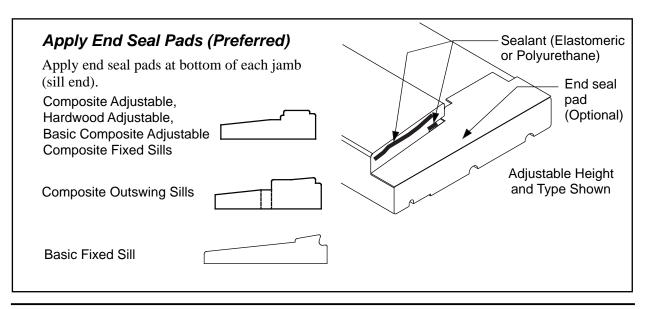
If using screws drill 1/8" dia. pilot holes.

Attach with (3) #8 x 2-1/2" exterior grade flat head screws. If doing this often use drill fixture TDSBSTRDRLFXT.



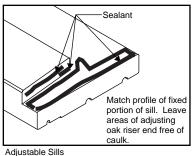


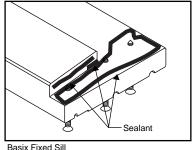




Caulk Only Assembly Method

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) to sill gain, jamb kerf, and a bead that matches the profile of sill.





Critical caulk point with sill extender application. Sills With Sill Extender

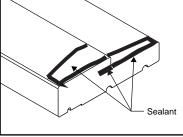
Box Frame Sidelite/Door Unit Assembly



CAUTION:

If fastening with screws into sills made with composite substrates, drill 1/8" dia. pilot holes

for #8 screws or 5/32" dia. pilot holes for #10 screws.



Outswing Sills

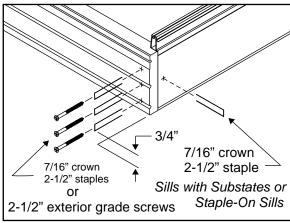
Align and Fasten Sill to Side Jambs

Align sill with jamb end. Sill should be flush up to jamb gain, and back face should be flush with jamb face.

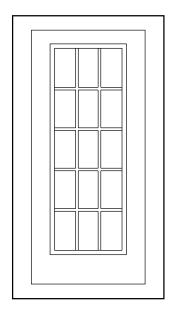
Fasten each side jamb to sill with (1) 2-1/2" staple or 2-1/2" exterior grade screw through side jamb approximately 3/4" from inside edge.

Fasten sill to each side jamb using 1 staple through bottom of sill into 1-1/4" part of side jamb.

Fasten with 2 additional staples or exterior grade screws through each side jamb into sill.





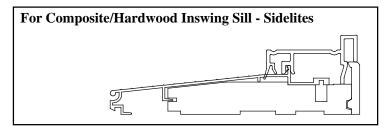


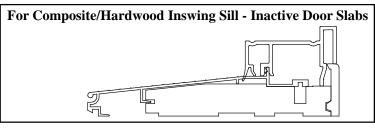
Install Doorlites and Panels

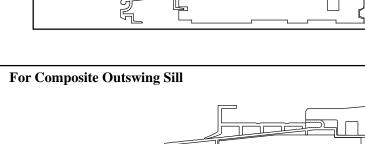
Install desired doorlites and/or panels into sidelite slab.

Select Inactive Door Bottom to Match Sill

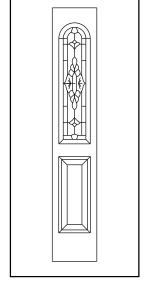
Cut inactive door bottom, as necessary to match frame opening width at sill.

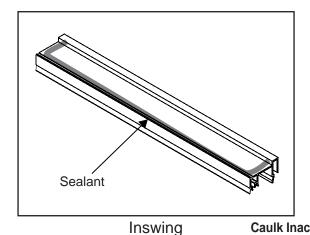


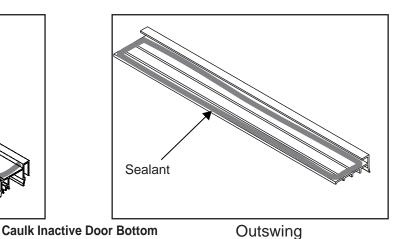






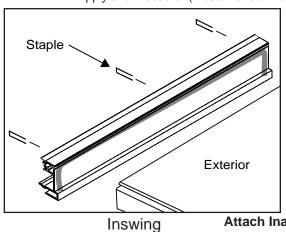


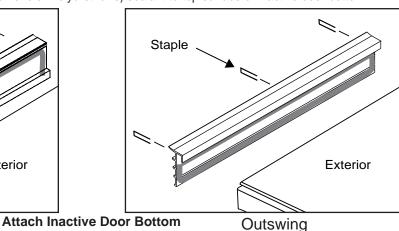




Select a (Elastomeric or Polyurethane) sealant that provides excellent adhesion to both plastic and wood.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant to top surface of inactive door bottom.



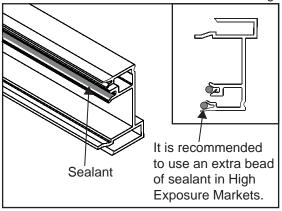


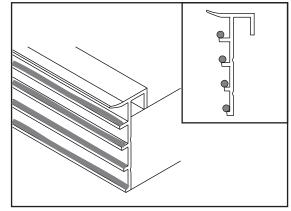
Box Frame Sidelite/Door Unit Assembly

Fasten door bottom to sidelite slab with 1" staples.

Note:

For 14" and larger slabs use 5 or more fasteners.





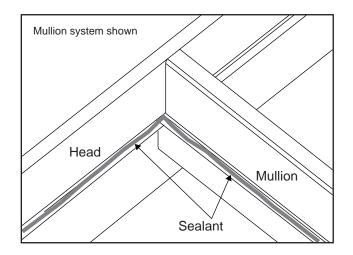
Inswing

Caulk Inactive Door Bottom

Outswing

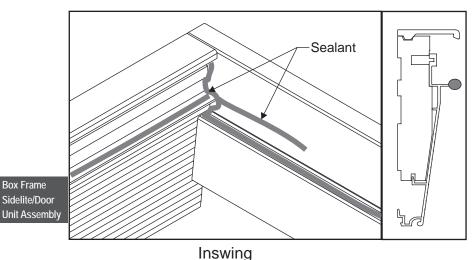
Apply (Elastomeric or Polyurthane) sealant along channel on bottom of inactive door bottom.





Seal Perimeter

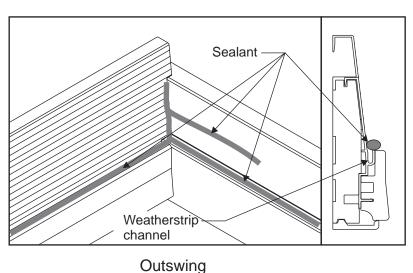
Apply 1/4" bead of (Elastomeric or Polyurethane) sealant around entire perimeter on jamb and/or mullion stops.



Inswing Sill

Apply a generous amount of (Elastomeric or Polyurethane) sealant at joints where sill and jamb/mullion meet.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant approximately 1" above weatherstrip kerf, 6" long.



Outswing Sill

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant on saddle surface that contacts door face.

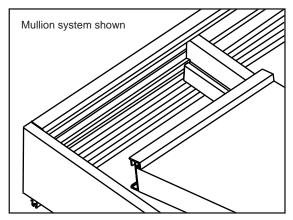
Apply a generous amount of sealant at joints where sill and iamb/mullion meet.

Apply a 1/4" bead of (Elastomeric or Polyurethane)sealant approx. 1" above weatherstrip kerf, 6" long.

Box Frame

Sidelite/Door

Inswing

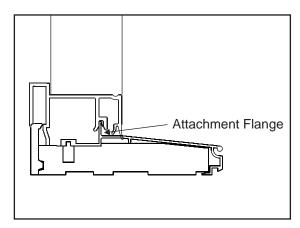


Install Sidelite Into Frame

Place sill end first, mating plastic bottom to sill, if necessary.

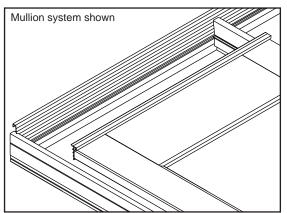
Use putty knife blade at top to aid insertion of slab in frame.

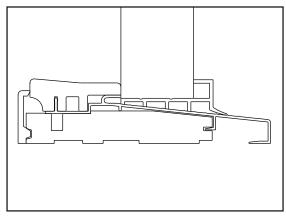
Sidelite panels are nominally 1/16" narrower than frame opening, for 1/32" clearance on each side.



Inswing - Install inactive fixed panel by tilting bottom edge of panel so inactive door bottom aligns with sill attachment flange.

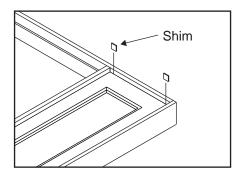
Outswing





Box Frame Sidelite/Door Unit Assembly

Shim Inactive Fixed Panel



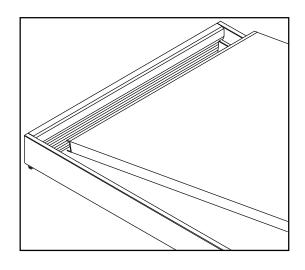
To ensure proper seal of inactive door bottom against sill, shim head of inactive fixed panel.

Locate shims near corners and slide shims between head jamb and inactive panel.

A putty knife may be required for this operation.

Careful not to damage face of panel.





Install Slab into Frame

Place sill end in first, mating inactive door bottom to sill.

If necessary, use a putty knife blade at top to aid inserting slab into frame.

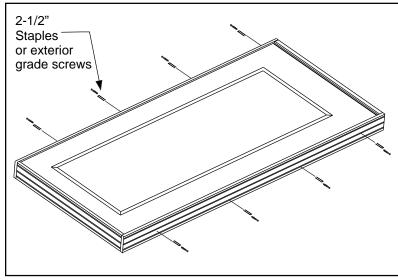
Align inside surface of door with inside edge of jamb. Door should be flush with jamb and head.

Check door bottom for proper seal.



CAUTION:

Press down firmly on inactive slab to ensure proper seal against frame stops (not required for outswing units).



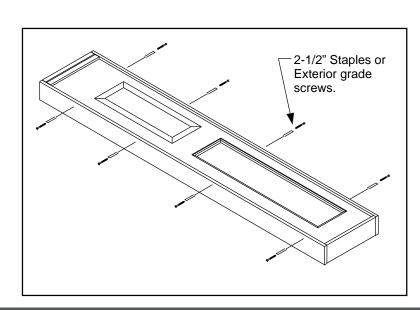
Fasten Sidelite to Jambs

Fasten through side jambs into slab.

Place a group of 2 or 3 2-1/2" staples or exterior grade screws at approximate locations of hinges on doors.



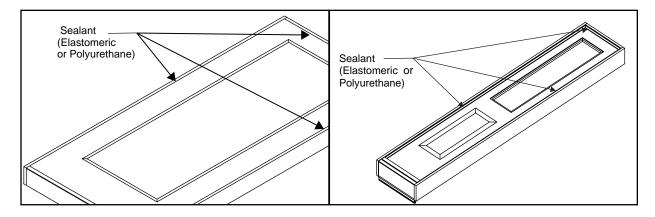
Box Frame



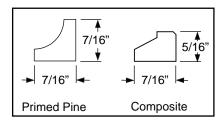


Outswing Only

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant around perimeter of sidelite/inactive panel on the exterior side of unit.

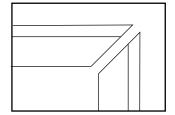


Apply Cove Molding

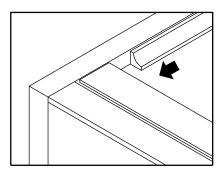


Cove Molding.

Miter top corners with 45° angle cuts.

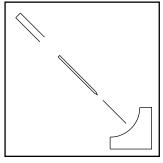


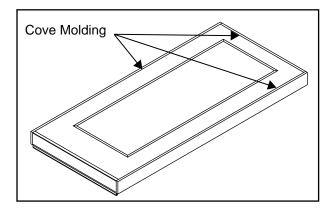
Box Frame Sidelite/Door Unit Assembly

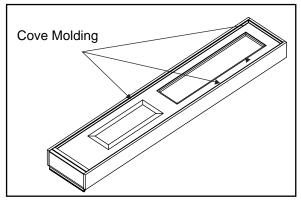


Butt-join bottom ends to plastic inactive door bottom ledge with square cuts.

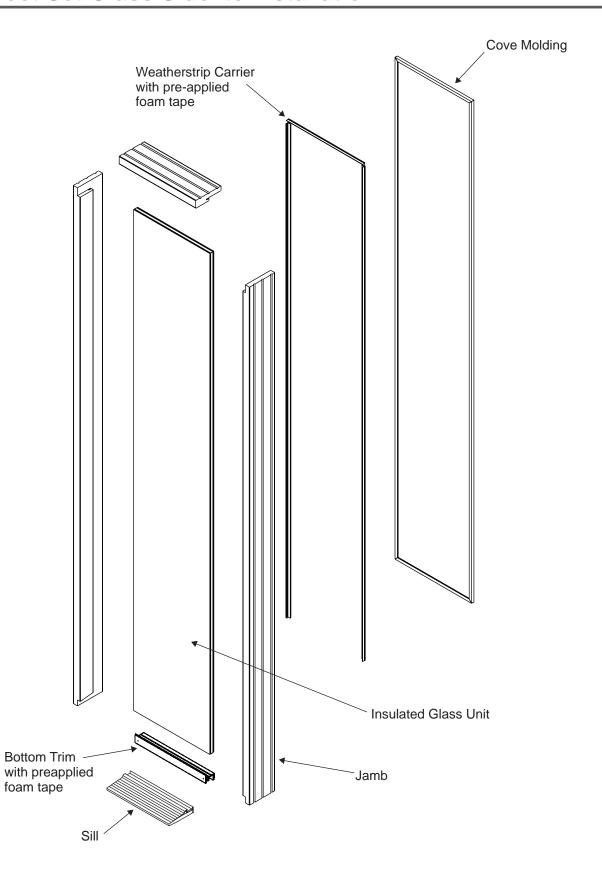
Fasten with small staples or finishing nails.



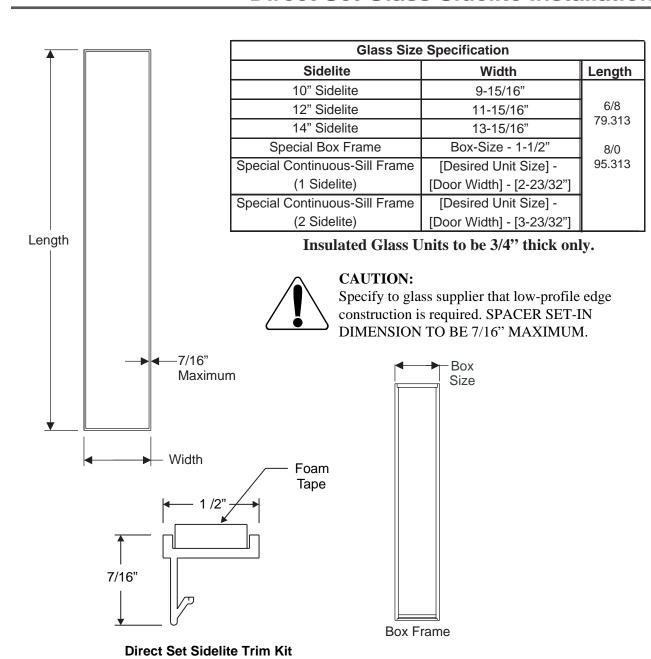




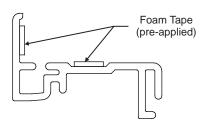




Direct Set Glass Sidelite Installation



Box Frame Sidelite/Door Unit Assembly



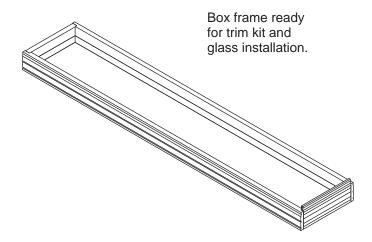
Length = 78-1/4"

Composite Adjustable, Hardwood Adjustable, Inswing Sill Bottom Trim

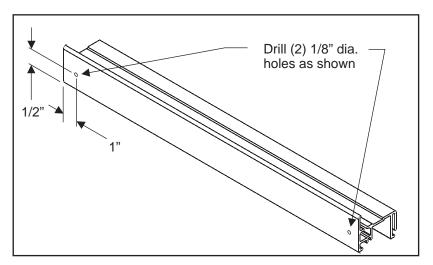


Prepare Sidelite Frame as Done for Slab Panel, Noting Only That:

• No caulk is required at jamb and head stops.



Direct Set Glass Sidelite Installation

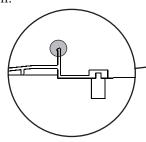


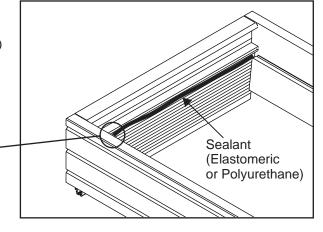
Drill Weep Holes

Drill two (2) 1/8" diameter holes into inactive door bottom trim as shown.

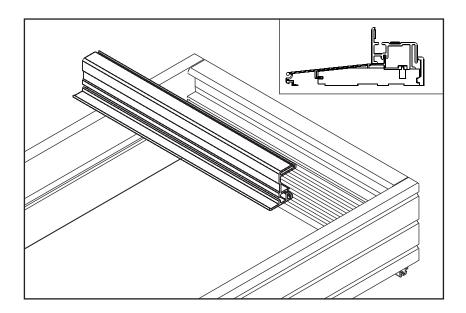
Caulk Sill Where Inactive Door Bottom Meets

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant along length of sill where inactive bottom trim makes contact with sill.





Box Frame Sidelite/Door Unit Assembly



Lay in Bottom Trim

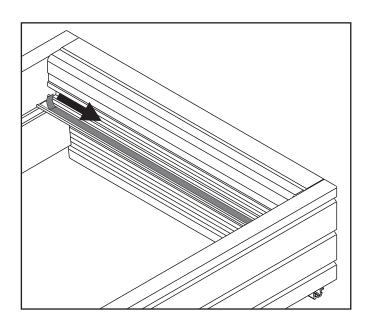
Insert inactive door bottom trim over sill.



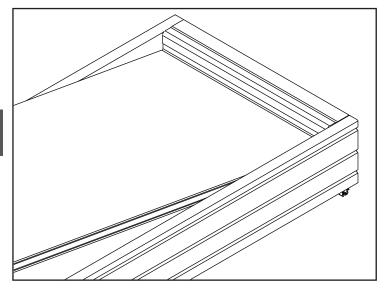
Prepare Bottom Trim

Remove colored carrier tape from foam tape on bottom trim.

CAUTION: Only remove the carrier tape on the piece of foam tape shown. DO NOT remove the other piece of carrier tape at this time.



Box Frame Sidelite/Door Unit Assembly



Install Glass Into Frame

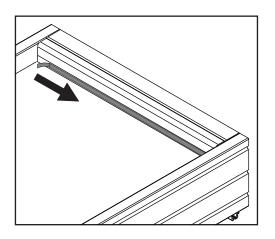
Place sill end first, mating end of glass to bottom trim.

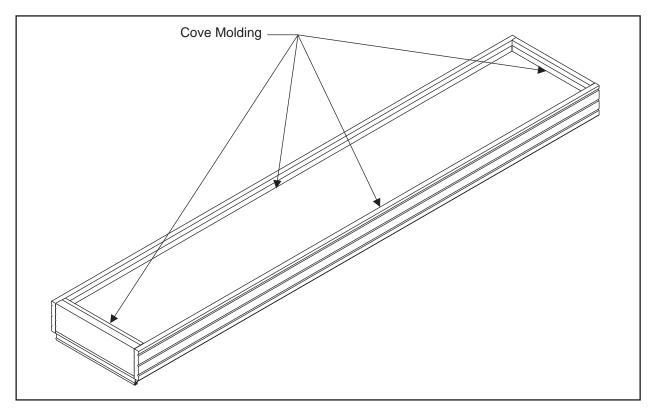
If necessary, use putty knife blade at top to aid insertion into frame.

Press down firmly along edges of glass to ensure proper seal against foam tape.

Remove Carrier Tape from Bottom Trim

Remove colored carrier tape from bottom trim.





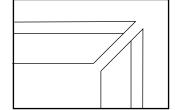
5/8"

Apply Cove Molding

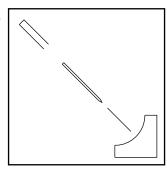
5/8" x 5/8" cove molding is furnished with sidelite frame kit.

Miter top and bottom corners with 45° angle cuts.

Locate and place bottom molding first.
Press in place against tape.
DO NOT NAIL.



Fasten with small staples or finishing nails.



Box Frame

Sidelite/Door

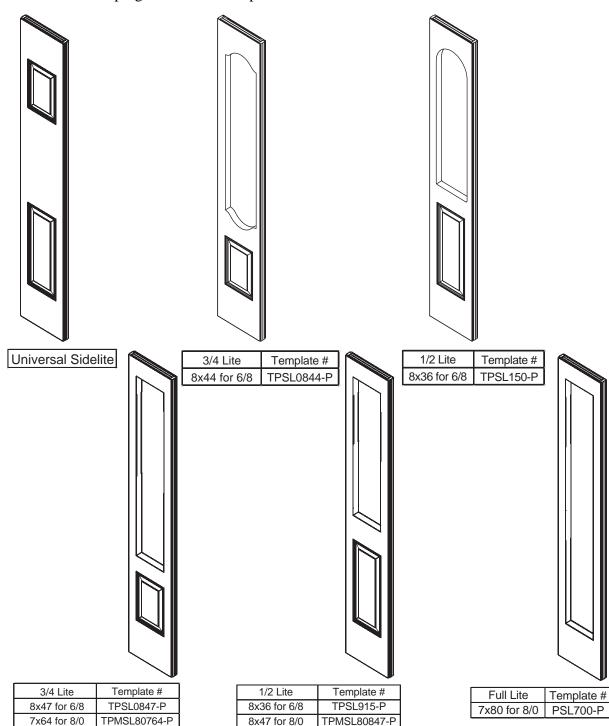
Fiber-Classic & Smooth-Star Universal Sidelite



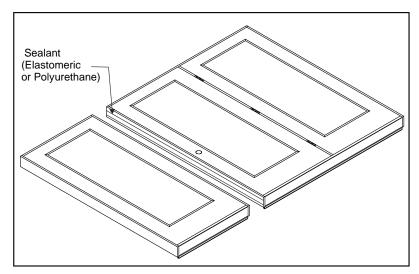
The universal sidelites are designed to be able to be cutout for 1/2 lites, 3/4 lites, and full lites (8/0 only). The sidelite must be flipped in the correct orientation and the corresponding template must be used, as shown below.

NOTE:

Box Frame Sidelite/Door Unit Assembly The foam plug can be on the top or bottom for these sidelites.



Inactive Slab/ Sidelite Attachment

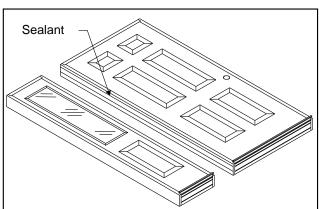


Place Siedlite/ Extension Unit and Patio Unit on Floor, Hinges Up

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) the entire length between units as shown.

Check frame flushness.

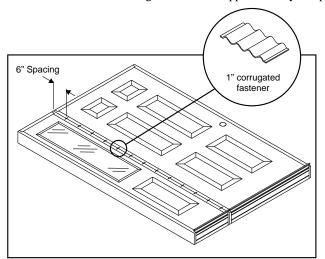
Draw units together.

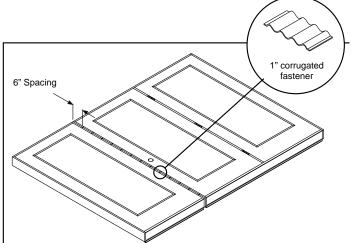


Box Frame Sidelite/Door Unit Assembly

Fasten Sidelite/ Extension Unit to Patio Unit

Fasten units with 1" corrugated fasteners approximately 6" apart. Turn unit over and fasten other side with 1" corrugated fasteners.







Side Jamb

Brickmould

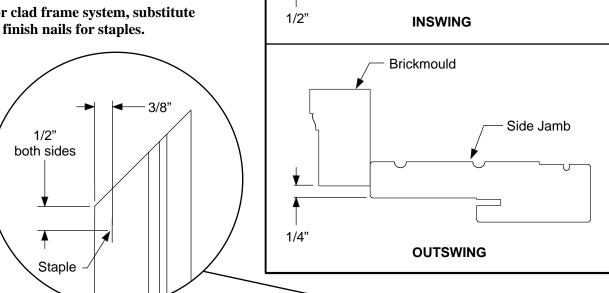
Fasten Brickmould to Side Jambs

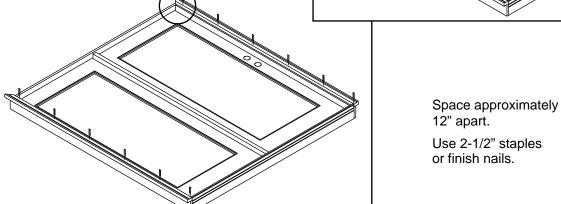
Locate and attach brickmould jamb pieces.

Fasten brickmould with 2-1/2" staples or finish nails. Starting 1/2" in from end and spaced approximately 12" apart.

Composite jambs may alternatively use the hidden fastening system.

For clad frame system, substitute 2" finish nails for staples.







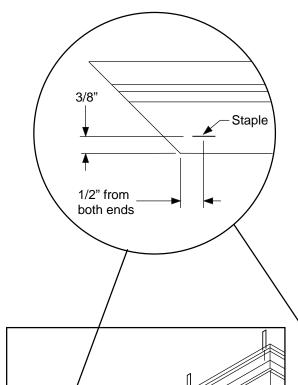
Fasten Brickmould to Frame Head

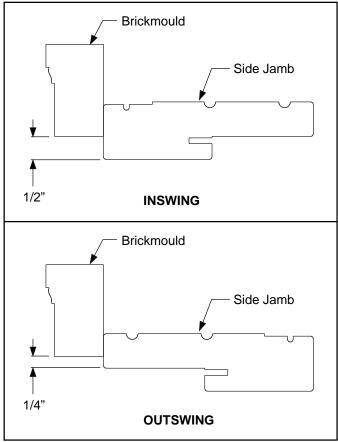
Align brickmould head at corner miters. Fasten near ends to jambs with 2-1/2" staples or finishing nails.

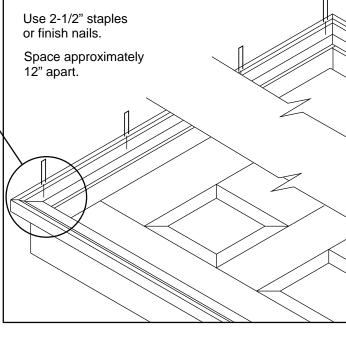
Composite jambs may alternatively use the hidden fastening system.

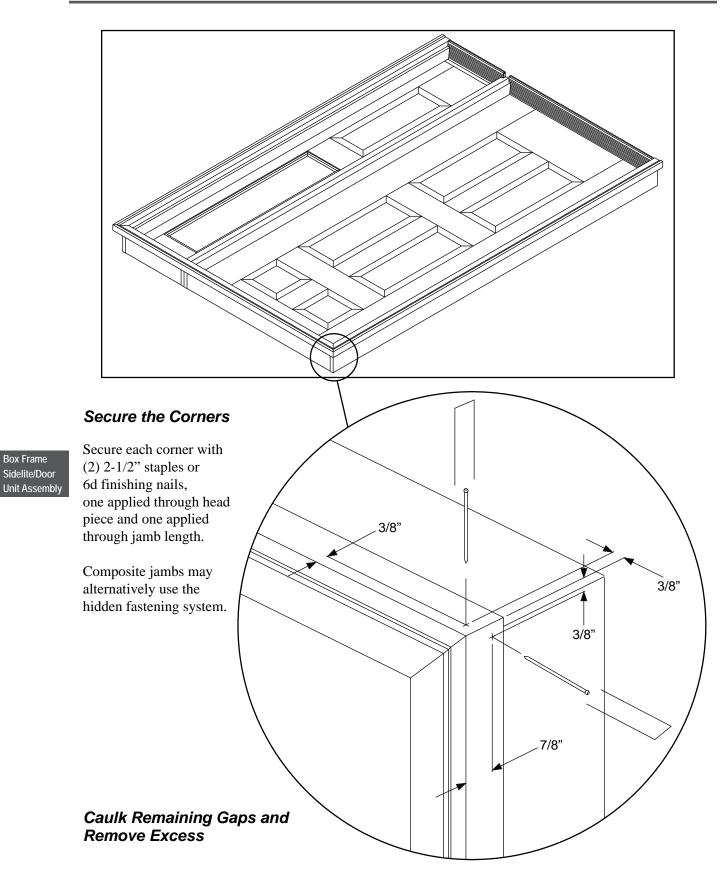
Hold proper 1/2" or 1/4" reveal and fasten to jamb across length at approximately 12" spacing

For clad frame system, substitute 2" finishish nails for staples.

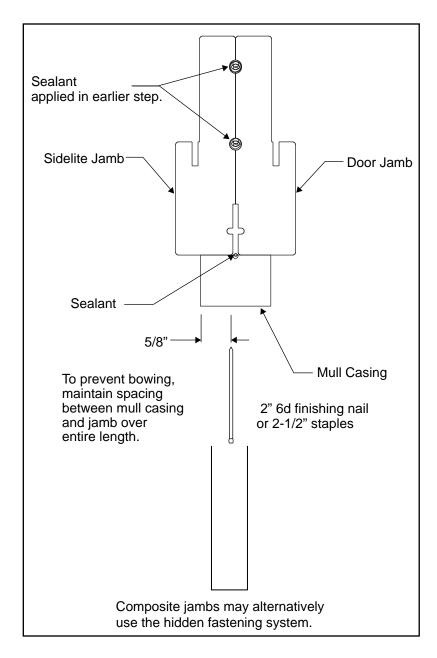






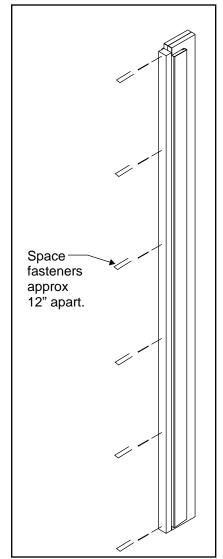






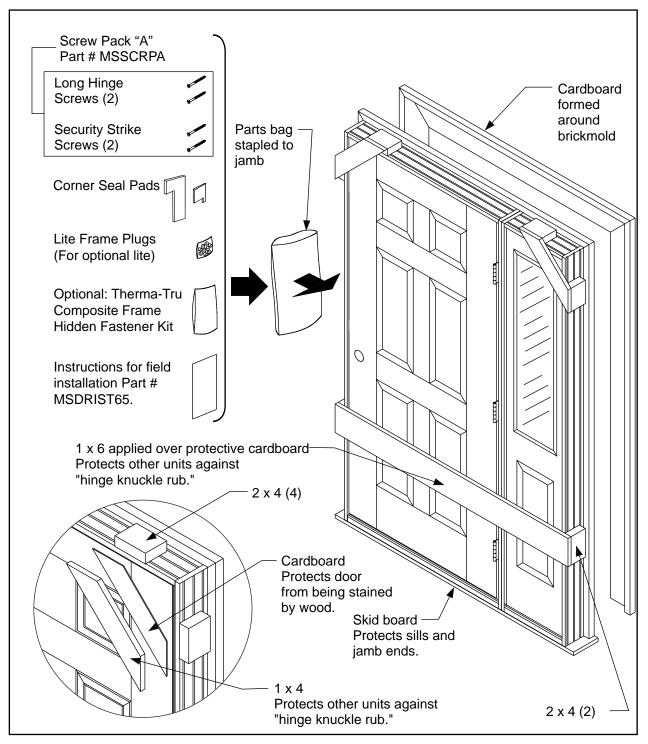
Apply Mull Casing

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) entire length between mull casing and units joint as shown.





(Optional) Assemble the Unit as Shown





SHOP 12 Continous Sill Sidelite Unit Assembly

Exploded View and Part Identification	12.3
Hinge Installation	12.9
Spacer Shim Application	12.11
System Frame Assembly	12.12
Sidelite Installation	12.30
Strike Installation	12.37
Final Installation of Hinges	12.40
Door Slab Installation	12.41
Brickmould Application	12.47
Assembled Unit Packaging	12.50

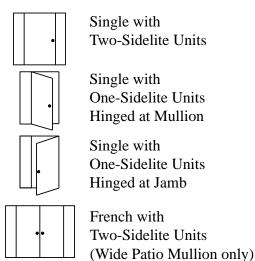


Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area.

KEY TO SHOP 12



For volume production of prehung door units, there is a choice of methods. The method we show is one in which the frame is built without the slab, with unassembled hinge leaves fastened to the jamb. The door slab, also with unassembled hinge leaves attached, is then fit to the frame, and doors are fastened to frames with hinge pins.

In the other method, door slabs are first fastened to loose hinge jambs using assembled hinges. This can be done using a specialized door machine which holds a door and hinge jamb in precise registration while assembled hinges are fastened to both components. Door-with-hinge-jamb subassemblies are then laid on an assembly table, and the rest of the frame and sill are placed around the door and fastened.

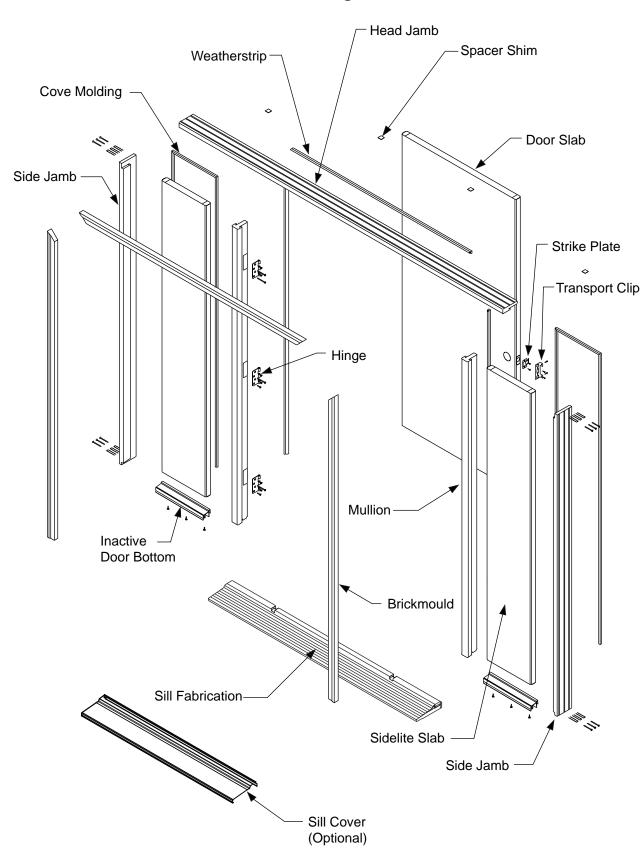
NOTE:

This type of unit has four possible configurations, denoted by the following symbols. Throughout this section, the symbols show instructions for each of the four configurations. Where there is no symbol designation, the instructions are applicable to all four configurations. Take note of the symbols accompanying the instructions to construct the correct frame assembly.



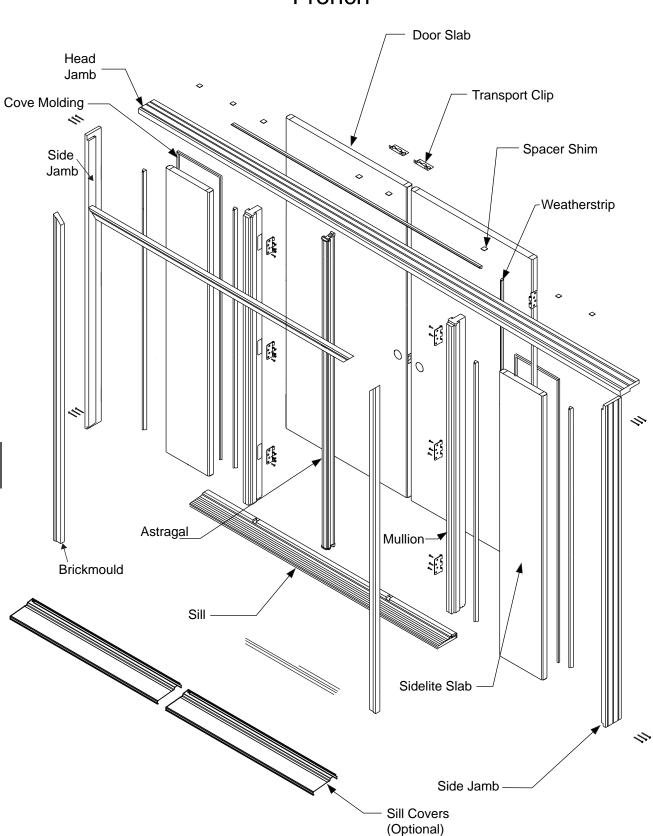


Single



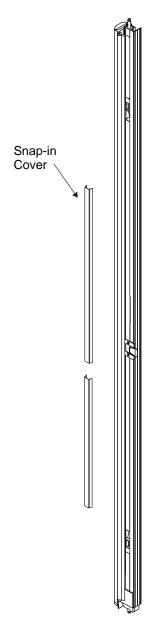


French

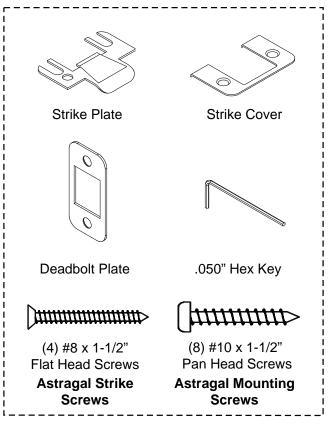




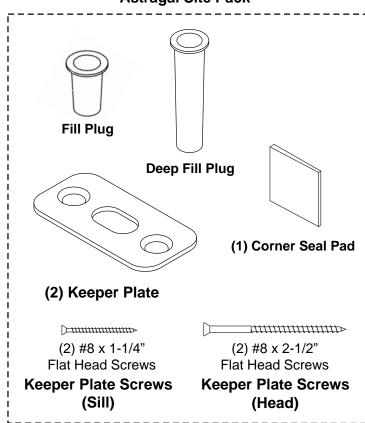
7/8" Paintable or Stainable Astragal Inswing & Outswing



Astragal Shop Pack

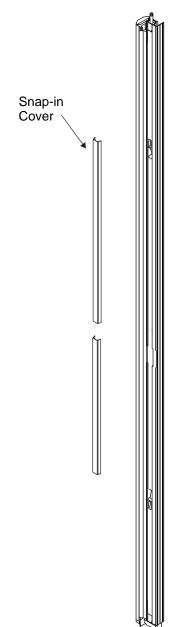


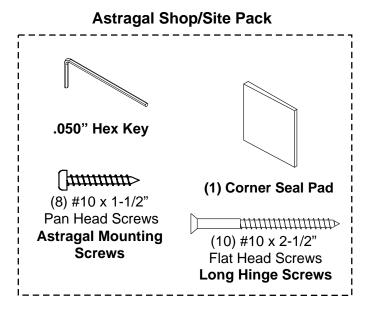
Astragal Site Pack





7/8" Paintable or Stainable Astragal with Shootbolt Multipoint Lock Prep Inswing & Outswing







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CAUTION: THIS PAGE APPLIES ONLY TO:



Single with Two-Sidelite Units



Single with One-Sidelite Units Hinged at Mullion



French with Two-Sidelite Units (Wide Patio Mullion only) Place hinges into hinge mortise.

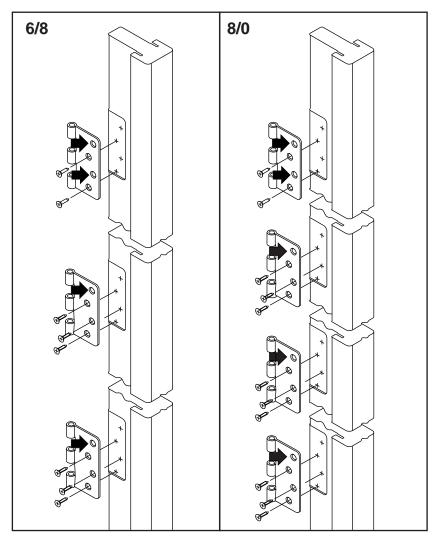
Seat hinge to back of machined hinge pocket.

Pre-drill 1/8" pilot hole and fasten with #10 x 3/4" flat head screws in each hinge as specified below.



•

Leave holes vacant. These are for 2 1/2" screws to be installed later in the Shop.



(Standard Mullion shown)





CAUTION: THIS PAGE APPLIES ONLY TO:



Single with One-Sidelite Units Hinged at Jamb

6/8

Place hinges into hinge mortise.

Seat hinge to back of machined hinge pocket.

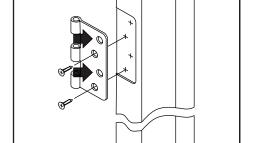
Pre-drill 1/8" pilot hole and fasten with #10 x 3/4" flat head screws in each hinge as spedified below.

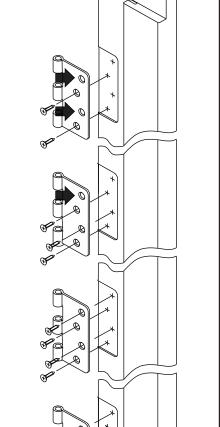


8/0

→

Leave holes vacant. These are for 2 1/2" screws to be installed later in the field.



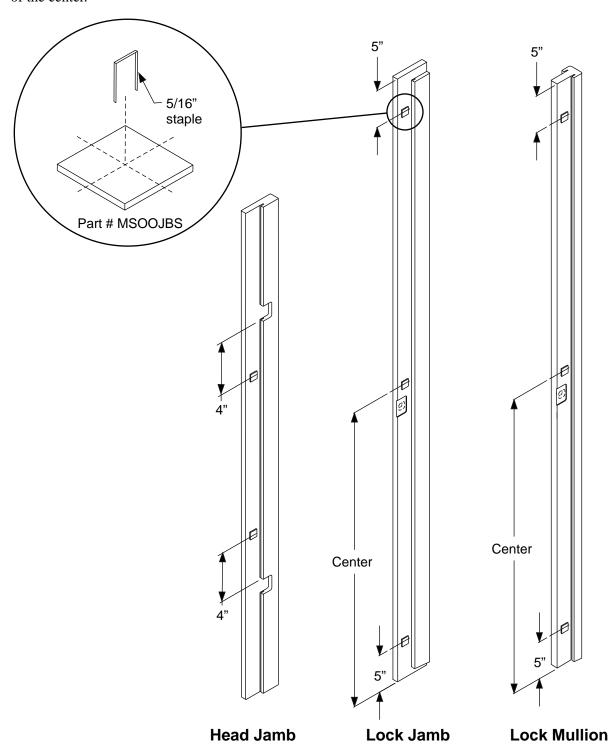




Apply Spacer Shims to Head Jamb and Mullion (if lock prepped) or Jamb (if lock prepped)

Fasten 2 spacer shims to head jamb and 3 to lock mullion or lock jamb with 5/16" galvanized staples, as shown.

NOTE: For French systems, add 2 additional spacer shims to the head jamb 4" from each side of the center.





Shop Installation Instructions for Aluminum Astragal Double Bore

The following instructions should be completed in the door shop. Check to see that the astragal shop pack and astragal site pack are included with this unit. The packs contain all the necessary hardware and fasteners needed to complete this installation and the site pack should be sent along with the unit to the job site.

Read all instructions before starting. Wear proper PPE while working with astragals.



Rev. J 2/4/16

Continuous Sill

Sidelite Unit

Assembly

P/N: ALASTDBASMINST-R

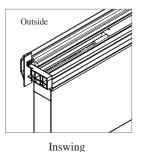
1

Align the bottom of the aluminum astragal body to the bottom of the door slab.

For inswing units, the boot will overhang the door to align with the door sweep.

For outswing units, the boot will sit subflush to the end of the door.

Align the exterior edge tight to the outside surface of the door.

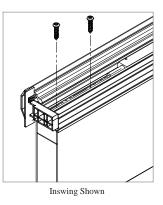




Outswing

2

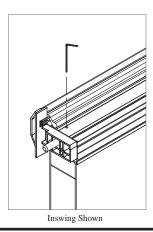
Pre-drill the two end holes with a 1/8" bit. Fasten in place with two pan head screws.



3

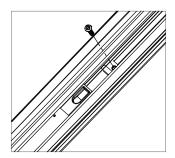
Loosen both set screws to allow the hardware to slide freely.

Move the retainer, bolt, and spring clip together as one unit and align the end of the retainer to the end of the astragal. Tighten the set screw closest to the end.



4

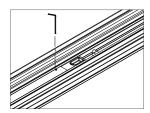
Align the hole in the spring clip with the hole in the astragal. Pre-drill this hole with a 1/8" bit. Fasten in place with one pan head screw.



5

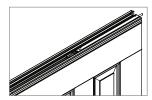


Tighten the set screw closest to the slide bolt handle. This step is critical to the performance of the astragal in the field.



6

Repeat steps 2-5 to fasten the top slide bolt assembly.

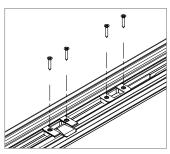


7

Align the strike plate and strike cover and lower strike boss with the machined pocket in the astragal. Pre-drill the holes with a 1/8" bit. Fasten in place with two flat head screws. Align the deadbolt plate and upper strike boss at the desired deadbolt location. Pre-drill the holes with a 1/8" bit. Fasten in place with two flat head screws.

Sill Sidelite Unit Assembly

Continuous

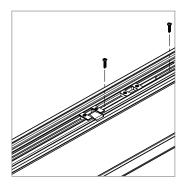


See other side for next step.



8

Pre-drill through remaining two holes with a 1/8" bit. One hole will be just above the latch strike and one will be below the top retainer. Fasten astragal to door though these holes with two pan head screws.

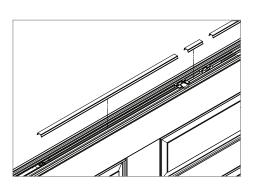


9

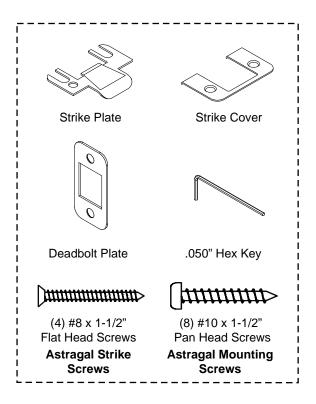
Cut and fit trim strips to fit between the two strikes and between each strike and the astragal slide bolt assemblies while in the retracted position.

Press pieces firmly to snap in place.

Continuous Sill Sidelite Unit Assembly



Astragal Shop Pack Contents:





1750 Indian Wood Circle Maumee, Ohio 46537 419-891-7400

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Shop/Site Installation Instructions for Aluminum Astragal Multi-Point

The following instructions should be completed in the door shop. Check to see that the astragal shop/site pack are included with this unit. The pack contains all the necessary hardware and fasteners needed to complete this installation. Send corner seal pad, flat head screws, and instructions along with the unit to the job site.

Read all instructions before starting. Wear proper PPE while working with astragals.



Rev. E 2/4/16

P/N: ALASTMPLSASMINST-R

1

AT THE SHOP

Align the bottom of the aluminum astragal body to the bottom of the door slab.

For inswing units, the boot will overhang the door to align with the door sweep.

For outswing units, the boot will sit subflush to the end of the door.

Align the exterior edge tight to the outside surface of the door.



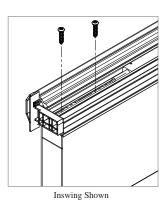


Inswing

Outswing

2

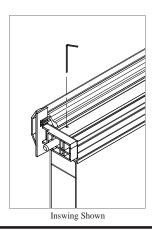
Pre-drill the two end holes with a 1/8" bit. Fasten in place with two pan head screws.



3

Loosen both set screws to allow the hardware to slide freely.

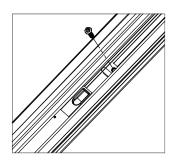
Move the retainer, bolt, and spring clip together as one unit and align the end of the retainer to the end of the astragal. Tighten the set screw closest to the end.



4

Continuous Sill Sidelite Unit Assembly

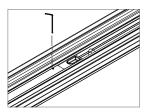
Align the hole in the spring clip with the hole in the astragal. Pre-drill this hole with a 1/8" bit. Fasten in place with one pan head screw.



5



Tighten the set screw closest to the slide bolt handle. This step is critical to the performance of the astragal in the field.



6

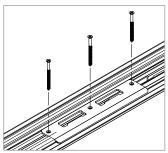
Repeat steps 2-5 to fasten the top slide bolt assembly.



7

Remove the long strike plate and three $\#8 \times 2 \ 1/2$ " flat head screws from the strike pack.

Align the strike plate with the machined pocket in the astragal. Pre-drill the holes with a 1/8" bit. Fasten in place with the flat head screws.

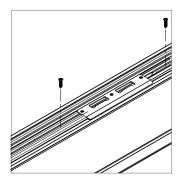


See other side for next step.





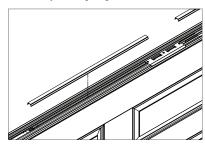
Pre-drill through remaining two holes with a 1/8" bit. One hole will be just above the strike and one will be just below. Fasten astragal to door though these holes with two pan head screws.



9

Cut and fit trim strips to fit between the strike and each astragal slide bolt assembly while in the retracted position.

Press pieces firmly to snap in place.



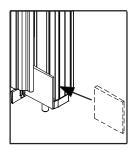
10 AT

AT THE SITE

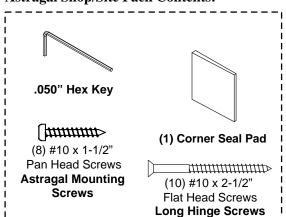
With the doors open, drill 1/8" diameter pilot holes in the open hinge holes (8 total for 6/6 and 6/8, 10 total for 7/0 and 8/0). Then install the flat head screws through the hinges, into the stud, to anchor the door frame and prevent sagging.



Remove paper backing from corner seal pad. Align the pad with the bottom of the boot and the inside edge of the astragal. Apply the pad by pressing it against the astragal.



Astragal Shop/Site Pack Contents:



Continuous Sill Sidelite Unit Assembly



1750 Indian Wood Circle Maumee, Ohio 46537 419-891-7400

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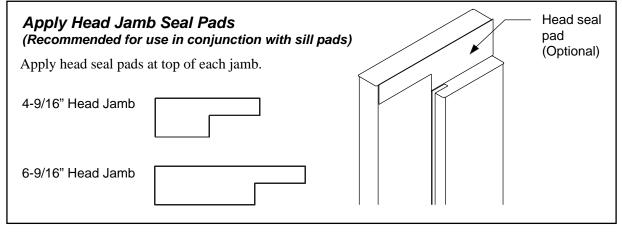


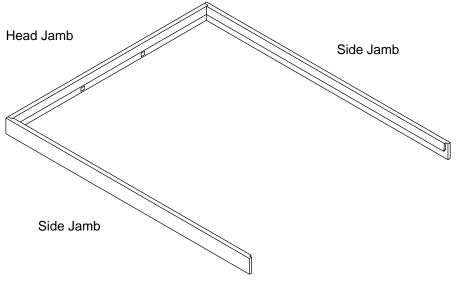












Continuous Sill Sidelite Unit Assembly

Continuous Sill Sidelite Frame Assembly with two sidelites shown.

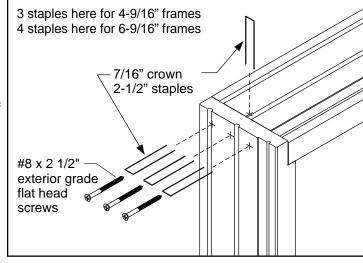
Fasten Side Jambs to Head Jamb

Fasten side jambs to head jamb with staples or screws through lock and hinge jamb into head jamb.

If using staples fasten 1 staple through the top of head jamb into each side jamb, be careful to keep head and side jamb rabbet stops flush.

If using screws drill 1/8" dia. pilot holes.

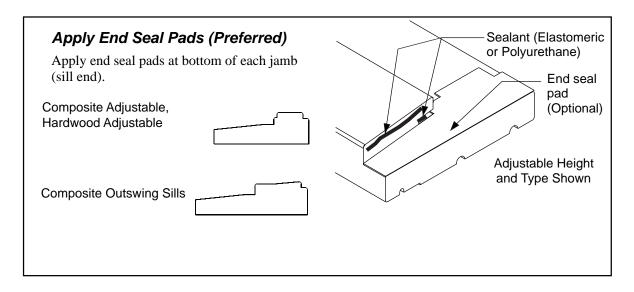
Attach with (3) #8 x 2-1/2" exterior grade flat head screws. If doing this often use drill fixture TDSBSTRDRLFXT.





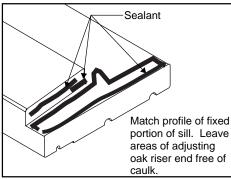
Only use screws for French systems.



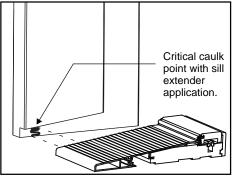


Caulk Only Assembly Method

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) to sill gain, jamb kerf and a bead that matches the profile of sill.



Adjustable Sills

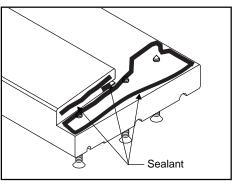


Sills With Sill Extender

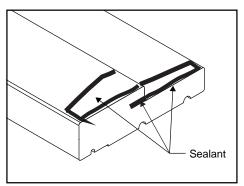


CAUTION:

If fastening with screws into sills made with composite substrates, drill 1/8" dia. pilot holes for #8 screws or 5/32" dia. pilot holes for #10 screws.



Basic Fixed Sills



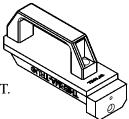
Outswing Sills



Partially Set Sill Screws in Jambs

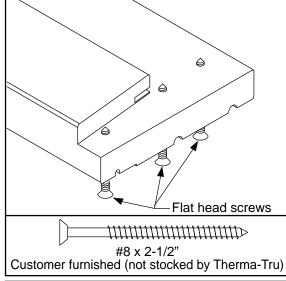
Note:

If doing this often use drill fixture TDSBSTRDRLFXT.



Composite/Hardwood Inswing Sill

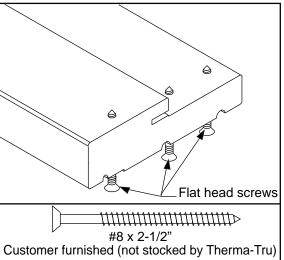
Drive (3) #8 x 2-1/2" flat head exterior grade screw through pilot holes in both jambs until tips barely protrude through jamb face.



Continuous Sill Sidelite Unit Assembly

Composite Outswing Sill

Drive (3) #8 x 2-1/2" flat head exterior grade screw through pilot holes in both jambs until tips barely protrude through jamb face.







CAUTION:

If fastening with screws into sills made with composite substrates, drill 1/8" dia. pilot holes for #8 screws or 5/32" dia. pilot holes for #10 screws.

Note:

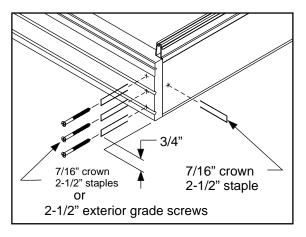
If doing this often use TDSBSTRDRLFXT drill fixture.

Fasten Sill to Side Jambs

Sills with Substrates or Staple-on Sills

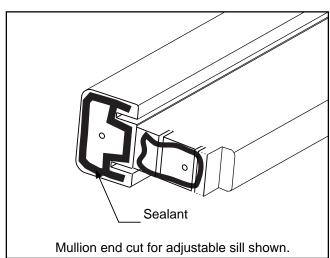
Fasten each side jamb to sill with 2-1/2" staples or #8 2-1/2" exterior grade screw through side jamb approximately 3/4" from inside edge.

Fasten sill to each side jamb using 1 staple or screw through bottom of sill into 1-1/4" part of side jamb.





Only use screws for French systems.



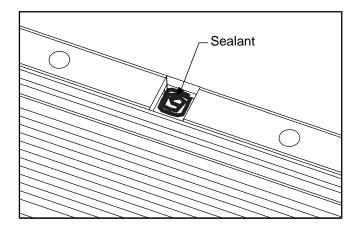
Apply Sealant to Bottom End of Mullion(s)

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant around bottom of each mullion.

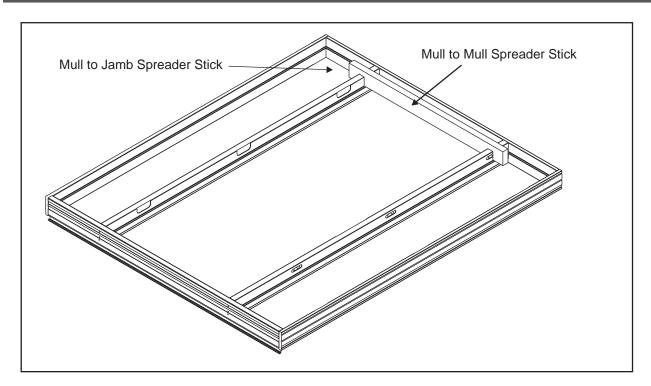
Continuous Sill Sidelite Unit Assembly

Apply Sealant to Sill

Apply a generous amount of (Elastomeric or Polyurethane) sealant inside cutout sections(s) of sill saddle.







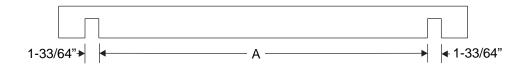
The use of spreader sticks is recommended to help square and position mullions properly.



Spreader sticks should be made from 2x4 or 2x6 lumber.

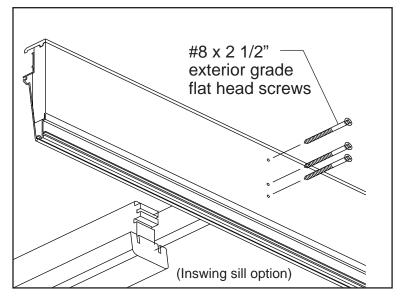
Position spreader sticks in the active opening, near the top of the unit, as shown above, while fastening mullions to head jamb. Then move spreader sticks near the bottom while fastening mullions to sill.





Mull to Mull Spreader Stick	
Door Size	"A"
2/0 Single	26"
2/4 Single	28"
2/6 Single	30"
2/8 Single	32"
2/10 Single	34"
3/0 Single	36"
3/6 Single	42"
6/0 French	73"





Fasten Mullion(s) to Sill

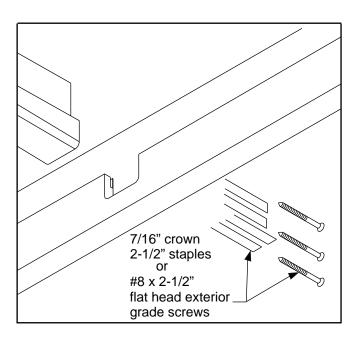
Pre-drill 1/8" dia. pilot holes into mullion thru pre-drilled holes in sill.

Attach with (3) #8 x 2 1/2" exterior grade flat head screws.

Fasten Mullion(s) to Head Jamb

Insert each mullion into head jamb mortise.

Fasten with (4) 2-1/2" staples or (3) #8 x 2-1/2" exterior grade screw through head jamb into mullion.

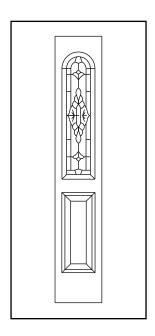


Continuous Sill Sidelite Unit Assembly



Only use screws for French systems.



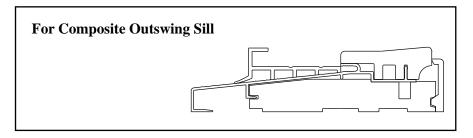


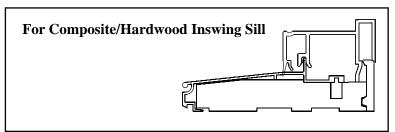
Install Doorlites and Panels

Install desired doorlites and/or panels into sidelite slab.

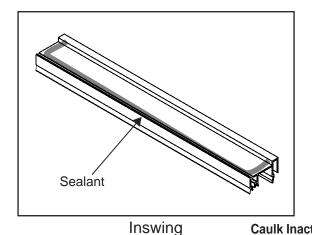
Select Inactive Door Bottom to Match Sill

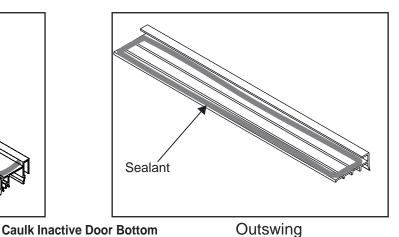
Cut inactive door bottom, as necessary to match frame opening width at sill.





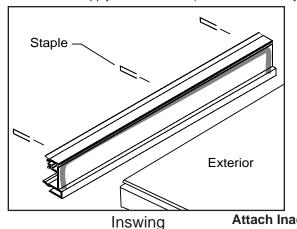


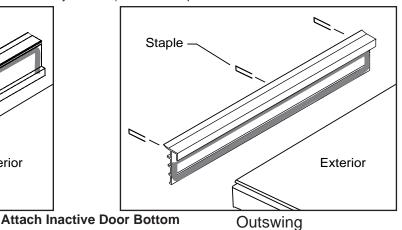




Select a (Elastomeric or Polyurethane) sealant that provides excellent adhesion to both plastic and wood.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant to top surface of inactive door bottom.



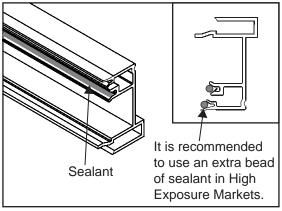


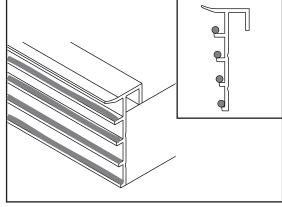
Continuous Sill Sidelite Unit Assembly

Fasten door bottom to sidelite slab with 1" staples.

Note:

For 14" and larger slabs use 5 or more fasteners.





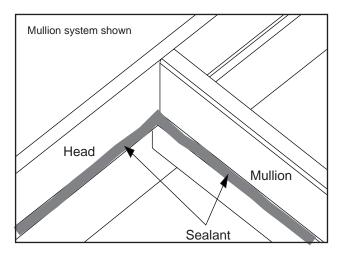
Inswing

Caulk Inactive Door Bottom

Outswing

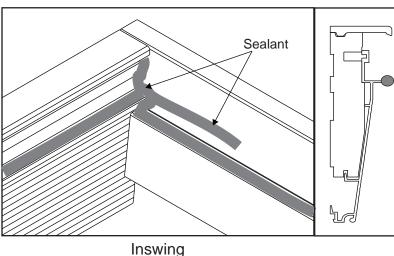
Apply (Elastomeric or Polyurthane) sealant along channel on bottom of inactive door bottom.





Seal Perimeter

Apply 1/4" bead of (Elastomeric or Polyurethane) sealant around entire perimeter on jamb and/or mullion stops.

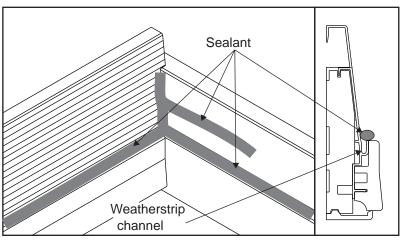


Inswing Sill

Apply a generous amount of (Elastomeric or Polyurethane) sealant at joints where sill and jamb/mullion meet.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant approximately 1" above weatherstrip kerf, 6" long.

Continuous Sill Sidelite Unit Assembly



Outswing

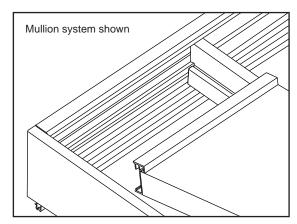
Outswing Sill

Apply a 1/4" bead of (Elastomeric or Polyurethane) that contacts door face.

Apply a generous amount of sealant at joints where sill and jamb/mullion meet.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant approx. 1" about weatherstrip kerf, 6" long.

Inswing

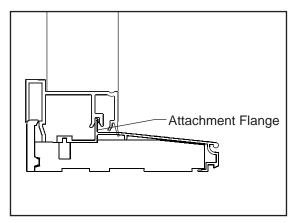


Install Sidelite Into Frame

Place sill end first, mating plastic inactive bottom to sill, if necessary.

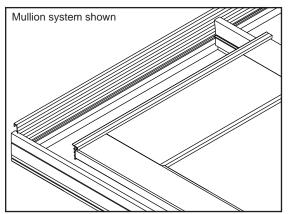
Use putty knife blade at top to aid insertion of slab in frame.

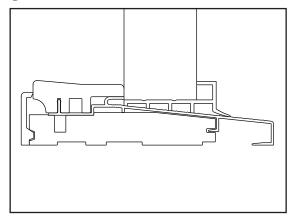
Sidelite panels are nominally 1/16" narrower than frame opening, for 1/32" clearance on each side.



Inswing - Install inactive fixed panel by tilting bottom edge of panel so inactive door bottom aligns with sill attachment flange.

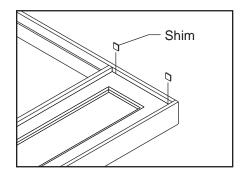
Outswing





Continuous Sill Sidelite Unit Assembly

Shim Inactive Fixed Panel



To ensure proper seal of inactive door bottom against sill, shim head of inactive fixed panel.

Locate shims near corners and slide shims between head jamb and inactive panel.

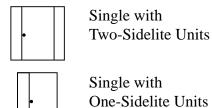
A putty knife may be required for this operation.

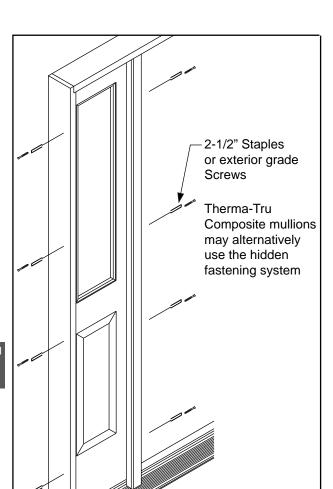
Careful not to damage face of panel.





CAUTION: THIS PAGE APPLIES ONLY TO:





Fasten Sidelite to Lock Mullion and Outside Jamb

Align sidelite with jamb and lock side mullion.

Fasten sidelite to lock mullion with (4) 2-1/2" staples or exterior grade screws, beginning 8" from top and 8" from bottom and evenly spaced.

Hinged at Jamb

Therma-Tru Composite Mullions may alternatively use the hidden fastener system.

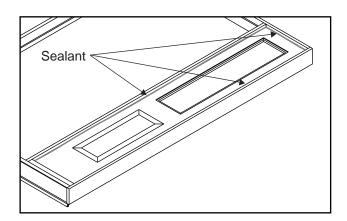
Align sidelite with outside jamb.

Fasten sidelite to outside jamb with (4) 2-1/2" staples or exterior grade screws, beginning 8" from top and 8" from the bottom and evenly spaced.

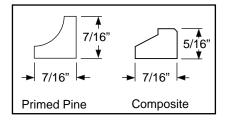


Outswing Only

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant around perimeter of sidelite/inactive panel on the exterior side of unit.

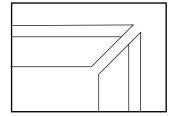


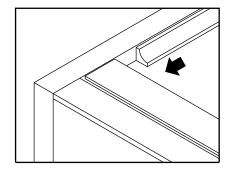
Apply Cove Molding



Cove Molding.

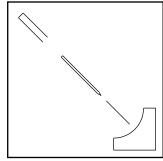
Miter top corners with 45° angle cuts.

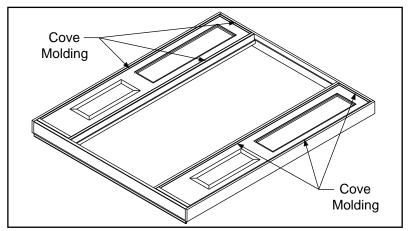




Butt-join bottom ends to plastic inactive door bottom ledge with square cuts.

Fasten with small staples or finishing nails.

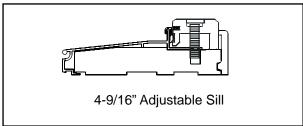


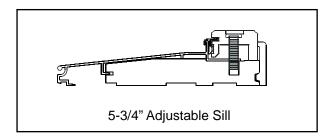


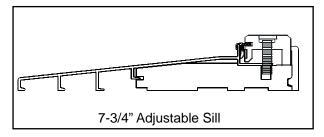


Select the Correct Corner Seal Pad

For Composite/Hardwood Inswing Sills







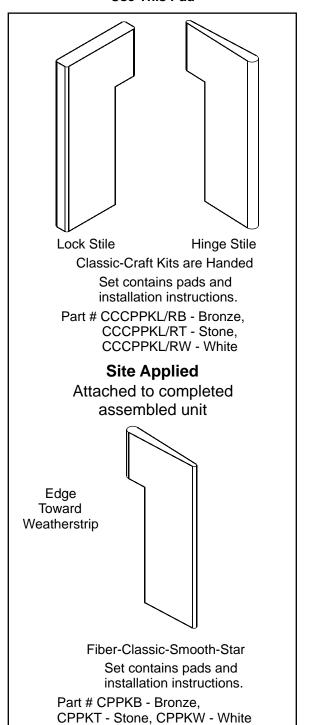
Continuous Sill Sidelite Unit Assembly



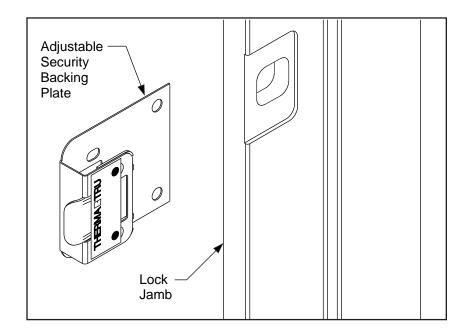
CAUTION:

Outswing sills with bumper gaskets require NO corner seal pads.

Use This Pad









CAUTION: APPLIES ONLY TO:



Single with One-Sidelite Units Hinged at Mullion

Slide Security Strike Assembly onto Lock Jamb

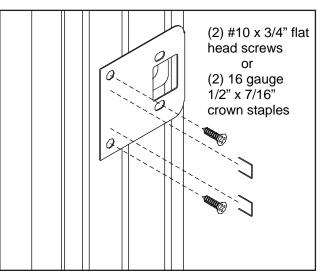
Lightly bend tongue area of security backing plate inward to allow for a snug fit.

Fasten Security Strike Assembly to Lock Jamb

Fasten with (2) #10 x 3/4" screws or (2) 16 gauge 1/2" x 7/16" crown staples through strike plate on back side of jamb.

NOTE:

Do not staple through screw holes when using staples in place of screws.









Single with
Two-Sidelite Units



Single with One-Sidelite Units Hinged at Jamb

Mount Strike to Mullion

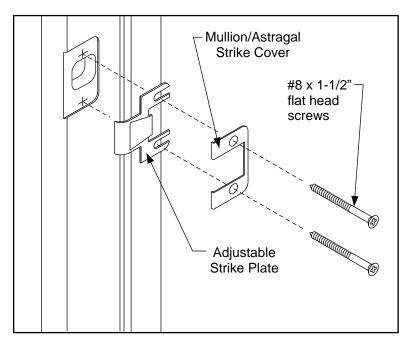
Use strike cover as template.

Drill 1/8" pilot holes, as shown through mullion.

Place security strike onto mullion.

Fasten to mullion with (2) #8 x 1-1/2" flat head screws.

Drive screws through mullion into sidelite slab.

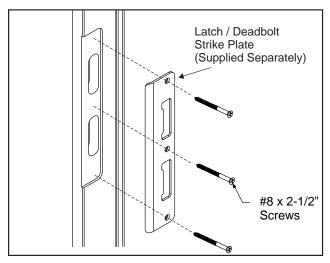


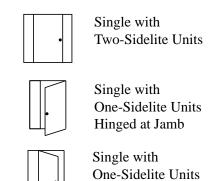




CAUTION: THIS PAGE APPLIES ONLY TO: MULTIPOINT LOCK APPLICATIONS

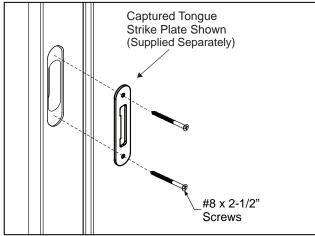
NOTE: Refer to Multipoint Lock Machining for alternate MPLS strike options.



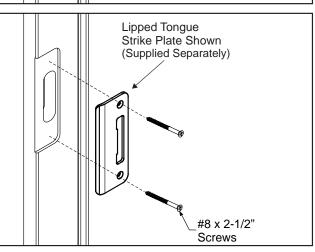


Hinged at Mullion

CENTER STRIKE installation Tongue and Shootbolt Systems



TOP & BOTTOM STRIKE installation Tongue Systems





For Single with One-Sidelite Hinged at Mullion, Shop to use #8 x 5/8" screws.





CAUTION: THIS PAGE APPLIES ONLY TO:



Single with Two-Sidelite Units



Single with One-Sidelite Units Hinged at Mullion

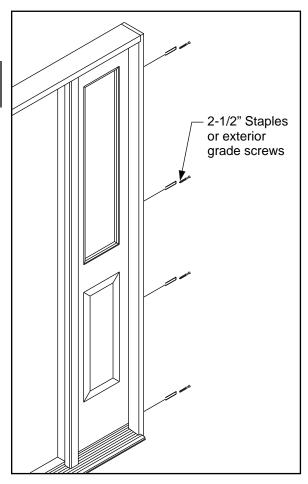


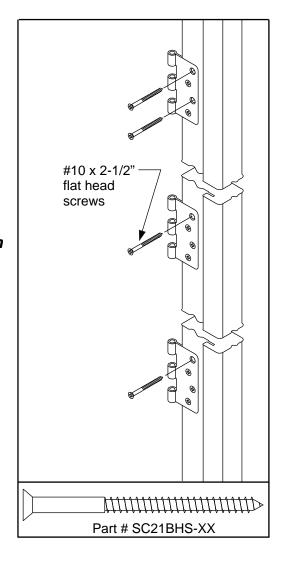
French with Two-Sidelite Units (Wide Patio Mullion only)

Fasten Sidelite to Hinge Mullion

Drill 1/8" pilot holes through mullions at each vacant holes.

Fasten sidelite with #10 x 2-1/2" flat head screws through unused holes in hinges.





Fasten Sidelite to Outside Jamb (Hinge Mullion Side)

Align sidelite with outside jamb.

Fasten sidelite with 2-1/2" staples or exterior grade screws.

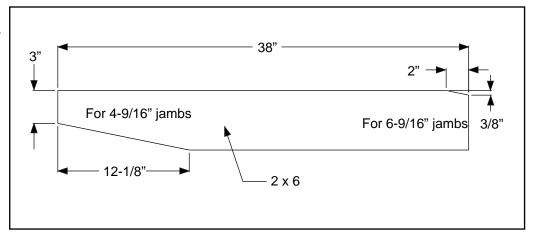


Only use screws for French systems.



Make Two "Slab Insert Skids"

Make from 2 x 6.

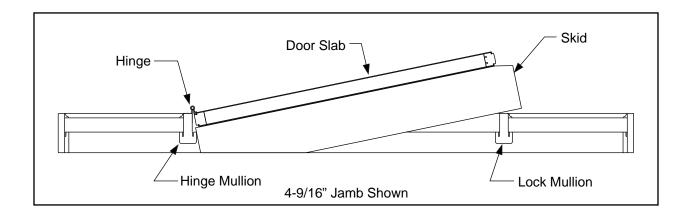


Hinges (3) Door Frame

Place Door Slab into Frame

Lay frame on table with hinges on jamb pointed up as shown.

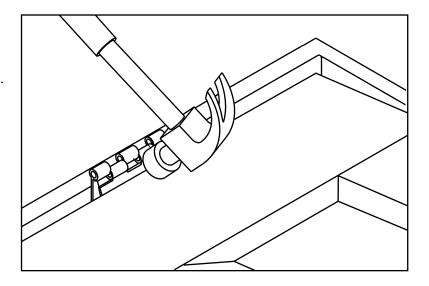
Slide door down on top of skids



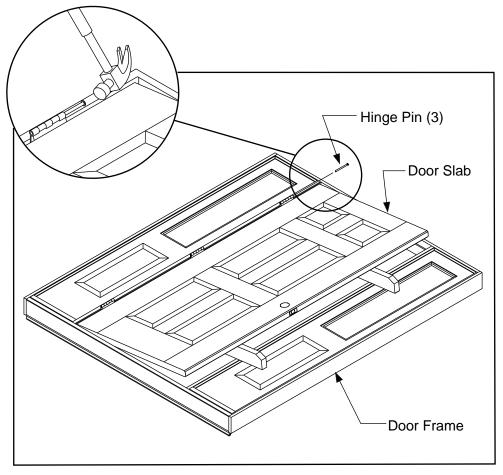


Engage Hinge Knuckles

Tap with hammer as required to line up hinge knuckles and engage.





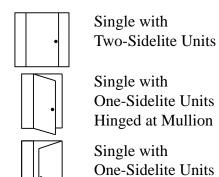


Install Hinge Pins

Tap in pins. Be certain to insert so heads are on top edges of hinges.







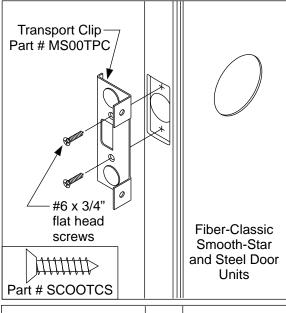
Hinged at Jamb

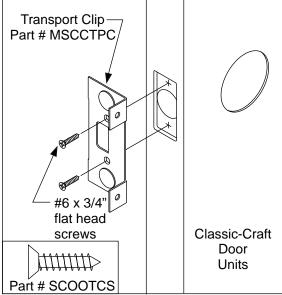
Attach Transport Clip to Door

Insert tab into latch bore.

Position reference lip at edge of stile against exterior side of door.

Fasten with (2) #6 x 3/4" flat head screws.





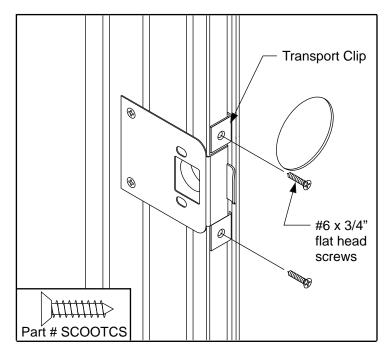




CAUTION: THIS APPLIES ONLY TO:



Single with One-Sidelite Units Hinged at Mullion



Attach Transport Clip to Jamb

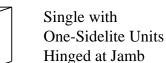
Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with (2) #6 x 3/4" flat head screws.









Single with

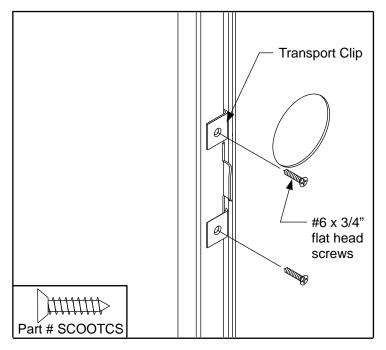
Two-Sidelite Units



Attach Transport Clip to Mullion

Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with $(2) \#6 \times 3/4$ " flat head screws.

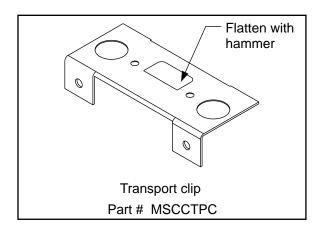








French with Two-Sidelite Units (Wide Patio Mullion only)

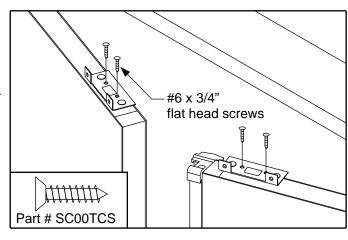


Attach Transport Clips to Door Slabs

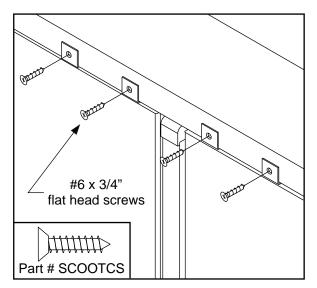
Flatten lock tabs with hammer.

Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).



Continuous Sill Sidelite Unit Assembly



Attach Transport Clips to Head Jamb

Close inactive door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with $(2) \#6 \times 3/4$ " flat head screws.





CAUTION:

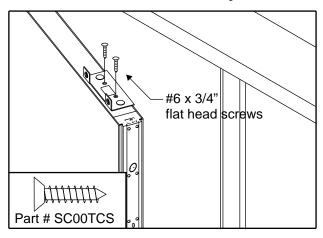
THIS APPLIES TO ALL MULTIPOINT LOCK HARDWARE APPLICATIONS.

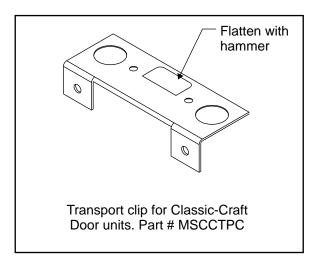
Attach Transport Clip to Door Slab

Flatten lock tabs with hammer.

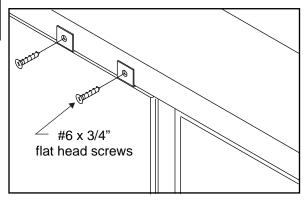
Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).





Continuous Sill Sidelite Unit Assembly



Attach Transport Clips to Head Jamb

Close inactive door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with $(2) \#6 \times 3/4$ " flat head screws.

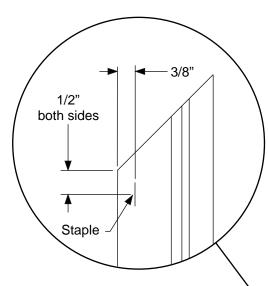


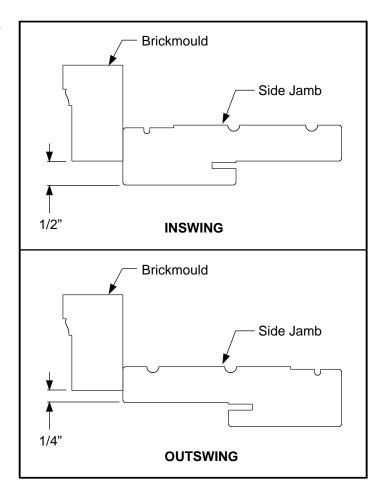
Fasten Brickmould to Side Jambs

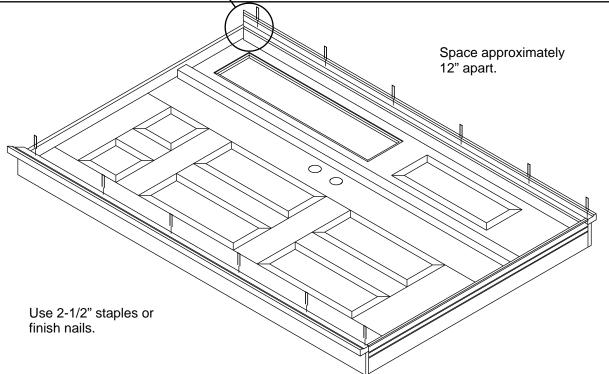
Locate and attach brickmould jamb pieces.

Fasten brickmould with 2-1/2" staples or finish nails. Starting 1/2" in from end and spaced approximately 12" apart.

Composite jambs may alternatively use the hidden fastening system.







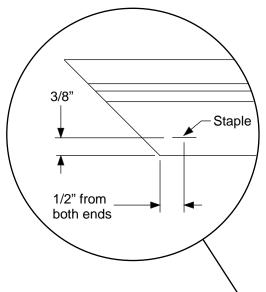


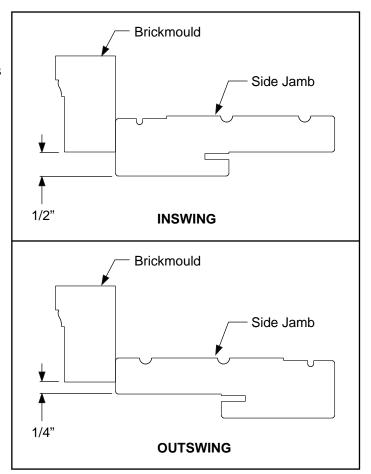
Fasten Brickmould to Frame Head

Align brickmould head at corner miters. Fasten near ends to jambs with 2-1/2" staples or finishing nails.

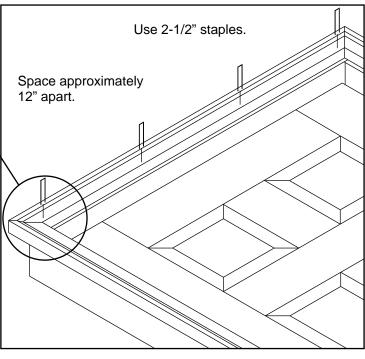
Composite jambs may alternatively use the hidden fastening system.

Hold proper 1/2" or 1/4" reveal and fasten to jamb across length at approximately 12" spacing

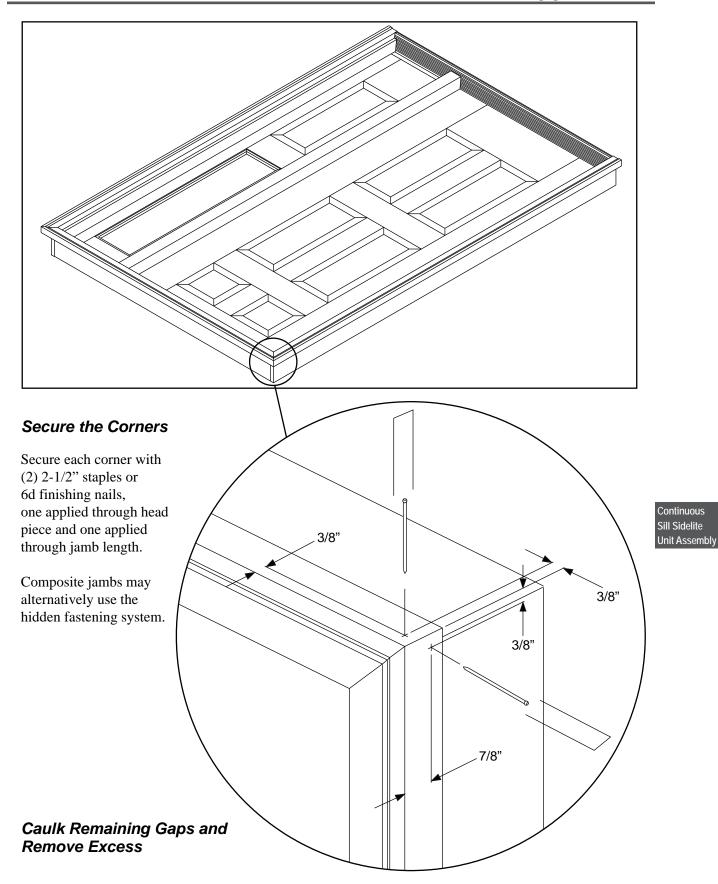






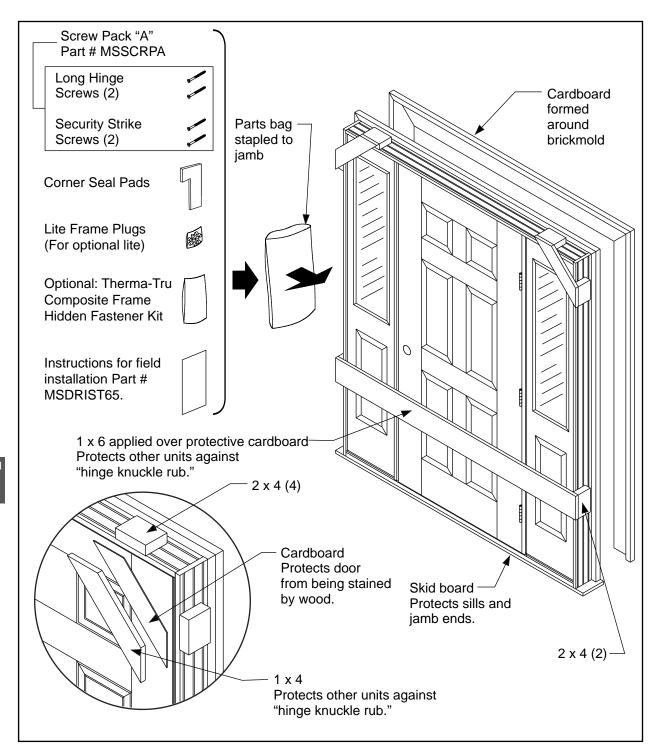






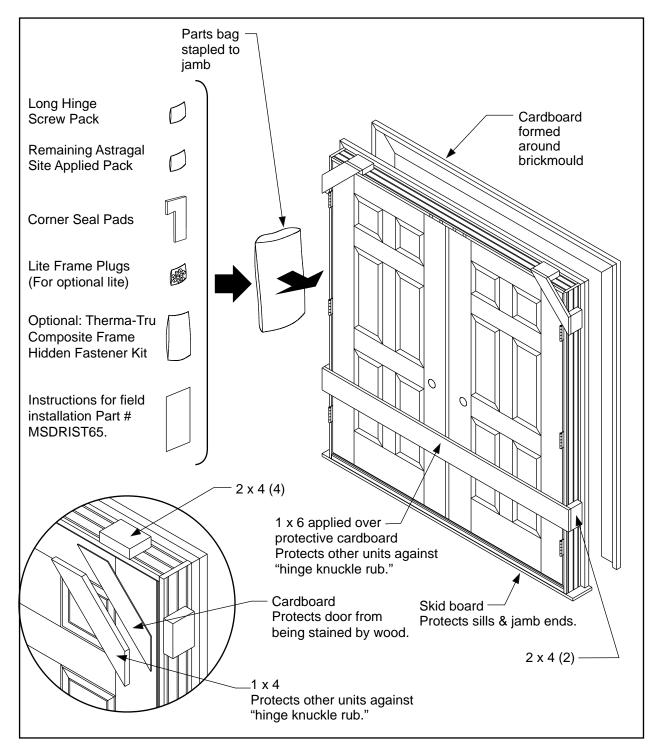


(Optional) Assemble the Unit as Shown





(Optional) Assemble the Unit as Shown







SHOP 13 Vented Sidelite Unit Assembly

Exploded View and Part Identification	13.3
Hinge Installation	
Spacer Shim Application	13.11
System Frame Assembly	
Strike Installation	13.32
Door Slab Installation	
Brickmould Application	
Assembled Unit Packaging	



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area.

For volume production of prehung door units, there is a choice of methods. The method we show is one in which the frame is built without the slab, with unassembled hinge leaves fastened to the jamb. The door slab, also with Unit Assembly unassembled hinge leaves attached, is then fit to the frame, and doors are fastened to frames with hinge pins.

Vented Sidelite

KEY TO SHOP 13



Single With Two Vented Sidelites (Wide Patio Mullion only)



French With Two Vented Sidelites (Wide Patio Mullion only)



Single with One Vented Sidelite Hinged at Jamb (Wide Patio Mullion only)

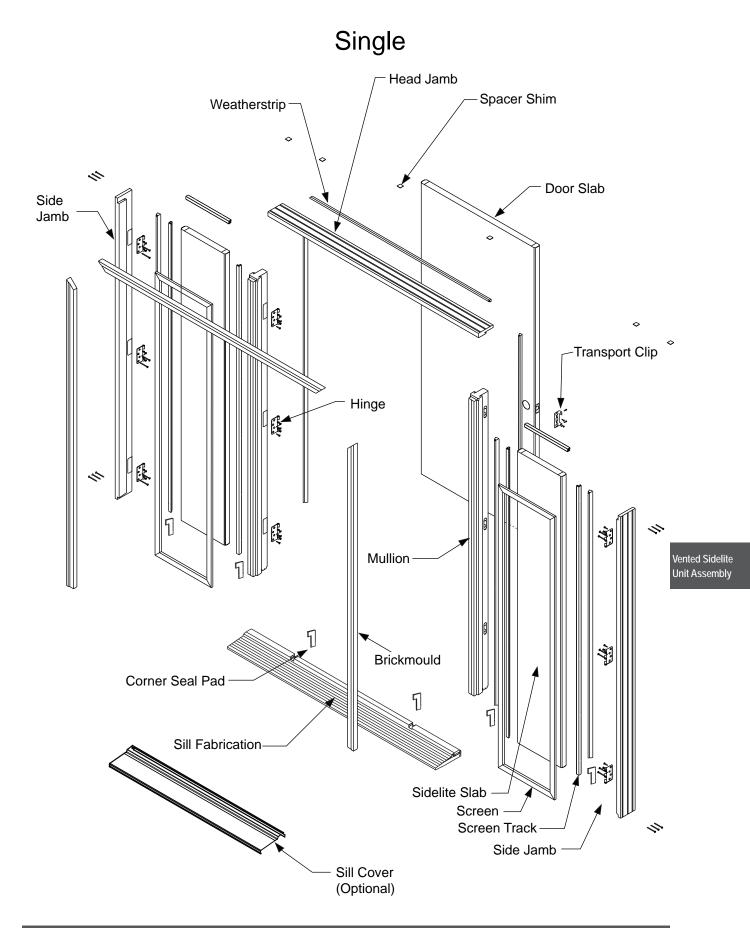
NOTE:

This type of unit has three possible configurations, denoted by the following symbols. Throughout this section, the symbols show instructions for each of the three configurations. Where there is no symbol designation, the instructions are applicable to all three configurations. Take note of the symbols accompanying the instructions to construct the correct frame assembly.



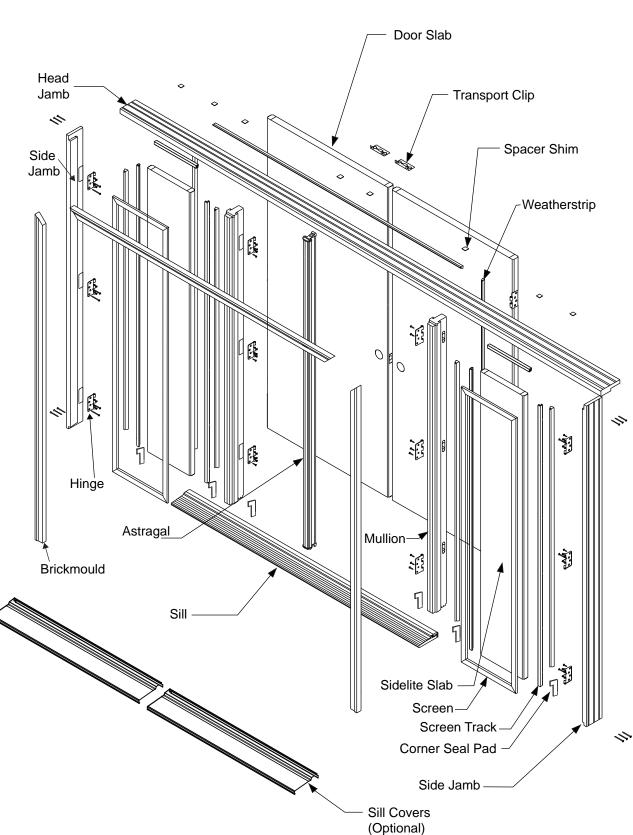
Vented Sidelite
Unit Assembly





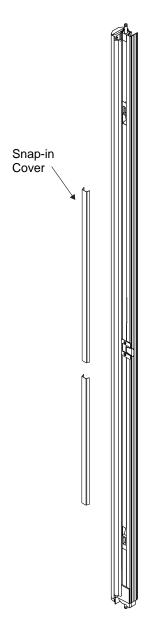


French

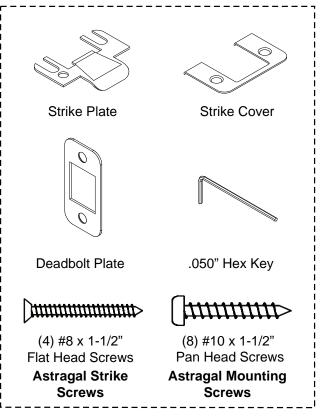




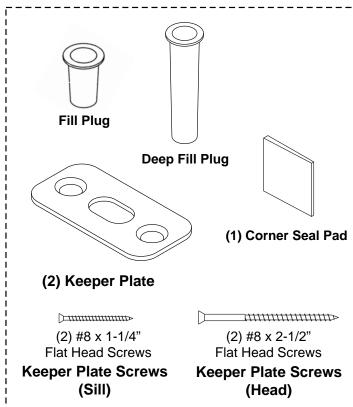
7/8" Paintable or Stainable Astragal Inswing & Outswing



Astragal Shop Pack

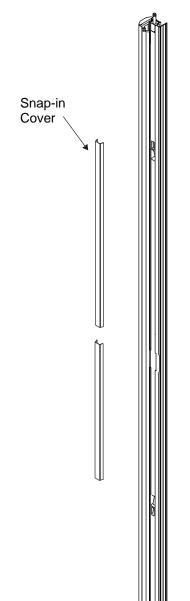


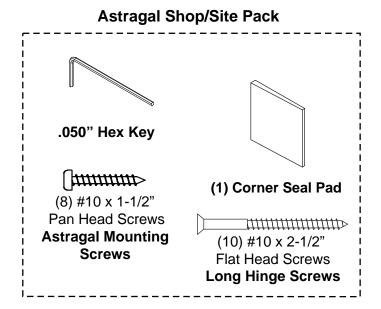
Astragal Site Pack





7/8" Paintable or Stainable Astragal with Shootbolt Multipoint Lock Prep Inswing & Outswing













CAUTION: THIS PAGE APPLIES ONLY TO:



Single with One Vented Sidelite Hinged at Jamb (Wide Patio Mullion only)

Place hinges into hinge mortise.

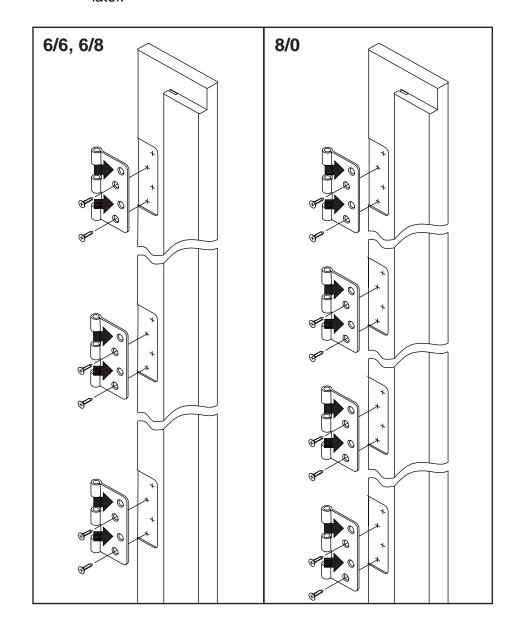
Seat hinge to back of machined hinge pocket.

Fasten with (2) #10 x 3/4" flat head screws in each hinge.



•

Leave holes vacant. These are for #10 X 2-1/2" screws to be installed later.







CAUTION: THIS PAGE APPLIES ONLY TO:





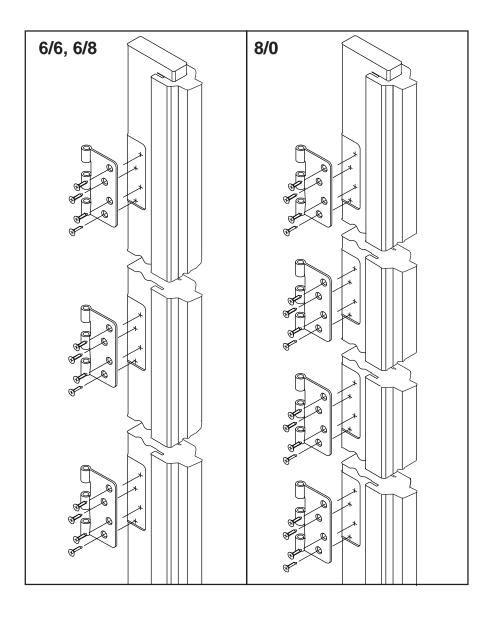
Single with Two Vented Sidelites (Wide Patio Mullion only)

French with
Two Vented Sidelites
(Wide Patio Mullion only)

Place hinges into hinge mortise.

Seat hinge to back of machined hinge pocket.

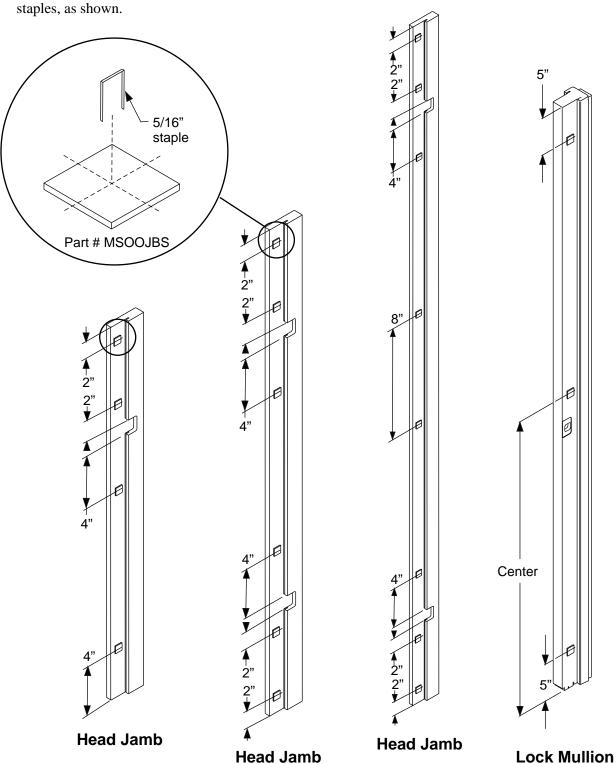
Fasten with (4) #10 x 1" flat head screws.





Apply Spacer Shims to Head Jamb and Mullion (if lock prepped).

Fasten 6 spacer shims to head jamb and 3 to lock mullion with 5/16" galvanized staples, as shown





Shop **Installation Instructions** for Aluminum **Astragal Double Bore**

The following instructions should be completed in the door shop. Check to see that the astragal shop pack and astragal site pack are included with this unit. The packs contain all the necessary hardware and fasteners needed to complete this installation and the site pack should be sent along with the unit to the job site.

Read all instructions before starting.

Wear proper PPE while working with astragals.



Vented Sidelite **Unit Assembly**

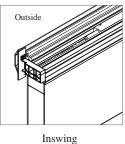
P/N: ALASTDBASMINST-R

Align the bottom of the aluminum astragal body to the bottom of the door slab.

For inswing units, the boot will overhang the door to align with the door sweep.

For outswing units, the boot will sit subflush to the end

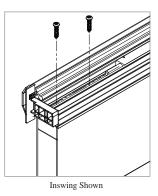
Align the exterior edge tight to the outside surface of the door.





Outswing

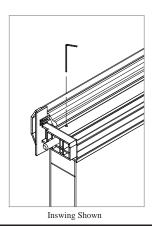
Pre-drill the two end holes with a 1/8" bit. Fasten in place with two pan head screws.



3

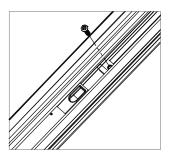
Loosen both set screws to allow the hardware to slide freely.

Move the retainer, bolt, and spring clip together as one unit and align the end of the retainer to the end of the astragal. Tighten the set screw closest to the end.



4

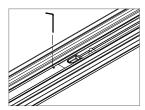
Align the hole in the spring clip with the hole in the astragal. Pre-drill this hole with a 1/8" bit. Fasten in place with one pan head screw.



5

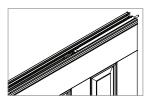


Tighten the set screw closest to the slide bolt handle. This step is critical to the performance of the astragal in the field.



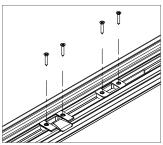
6

Repeat steps 2-5 to fasten the top slide bolt assembly.



7

Align the strike plate and strike cover and lower strike boss with the machined pocket in the astragal. Pre-drill the holes with a 1/8" bit. Fasten in place with two flat head screws. Align the deadbolt plate and upper strike boss at the desired deadbolt location. Pre-drill the holes with a 1/8" bit. Fasten in place with two flat head screws.

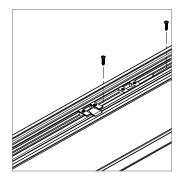


See other side for next step.



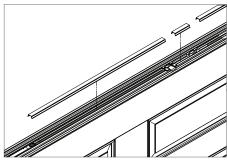
8

Pre-drill through remaining two holes with a 1/8" bit. One hole will be just above the latch strike and one will be below the top retainer. Fasten astragal to door though these holes with two pan head screws.

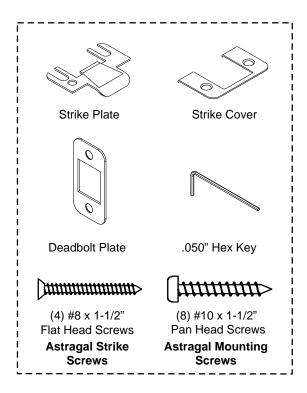


Cut and fit trim strips to fit between the two strikes and between each strike and the astragal slide bolt assemblies while in the retracted position.

Press pieces firmly to snap in place.



Astragal Shop Pack Contents:



Vented Sidelite **Unit Assembly**



1750 Indian Wood Circle Maumee, Ohio 46537 419-891-7400

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13.14



Shop/Site Installation Instructions for Aluminum Astragal Multi-Point

The following instructions should be completed in the door shop. Check to see that the astragal shop/site pack are included with this unit. The pack contains all the necessary hardware and fasteners needed to complete this installation. Send corner seal pad, flat head screws, and instructions along with the unit to the job site.

Read all instructions before starting. Wear proper PPE while working with astragals.



Rev. E 2/4/16

P/N: ALASTMPLSASMINST-R

1

AT THE SHOP

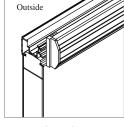
Align the bottom of the aluminum astragal body to the bottom of the door slab.

For inswing units, the boot will overhang the door to align with the door sweep.

For outswing units, the boot will sit subflush to the end of the door.

Align the exterior edge tight to the outside surface of the door.



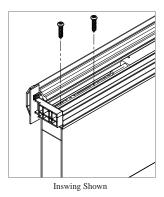


Inswing

Outswing



Pre-drill the two end holes with a 1/8" bit. Fasten in place with two pan head screws.

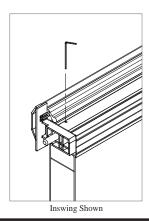




3

Loosen both set screws to allow the hardware to slide freely.

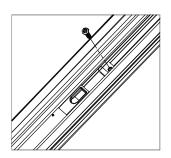
Move the retainer, bolt, and spring clip together as one unit and align the end of the retainer to the end of the astragal. Tighten the set screw closest to the end.



4

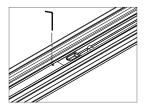
Align the hole in the spring clip with the hole in the astragal. Pre-drill this hole with a 1/8" bit. Fasten in place with one pan head screw.

Vented Sidelite Unit Assembly



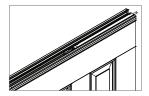


Tighten the set screw closest to the slide bolt handle. This step is critical to the performance of the astragal in the field.



6

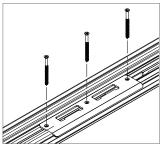
Repeat steps 2-5 to fasten the top slide bolt assembly.



7

Remove the long strike plate and three #8 x 2 1/2" flat head screws from the strike pack.

Align the strike plate with the machined pocket in the astragal. Pre-drill the holes with a 1/8" bit. Fasten in place with the flat head screws.

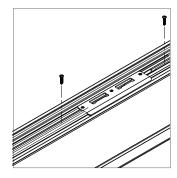


See other side for next step.





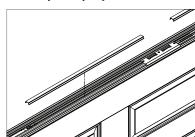
Pre-drill through remaining two holes with a 1/8" bit. One hole will be just above the strike and one will be just below. Fasten astragal to door though these holes with two pan head screws.



9

Cut and fit trim strips to fit between the strike and each astragal slide bolt assembly while in the retracted position.

Press pieces firmly to snap in place.



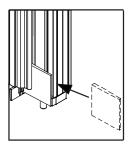
10

AT THE SITE

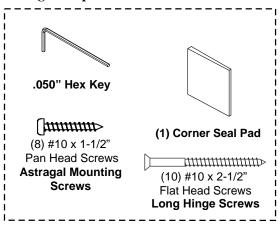
With the doors open, drill 1/8" diameter pilot holes in the open hinge holes (8 total for 6/6 and 6/8, 10 total for 7/0 and 8/0). Then install the flat head screws through the hinges, into the stud, to anchor the door frame and prevent sagging.

11

Remove paper backing from corner seal pad. Align the pad with the bottom of the boot and the inside edge of the astragal. Apply the pad by pressing it against the astragal.



Astragal Shop/Site Pack Contents:



Vented Sidelite
Unit Assembly



1750 Indian Wood Circle Maumee, Ohio 46537 419-891-7400

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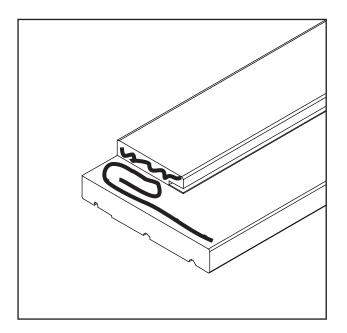












Apply Sealant to Jamb At Head Gain

Apply 1/8" bead of (Elastomeric or Polyurethane) sealant on both sides of head gain.



Install Side Screen Tracks

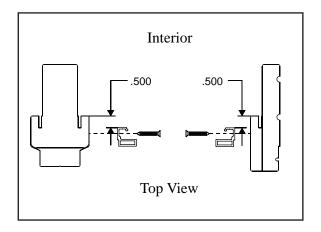
Assemble the left and right screen tracks.

Remove weatherstrip prior to installation.

From the interior, position screen track 1/2" back from the side jamb stop, making sure to center.

Using a 3/32" drill bit, drill two holes approximately 3/4" deep into the side jamb using the pre-punched holes in the screen track as a guide.

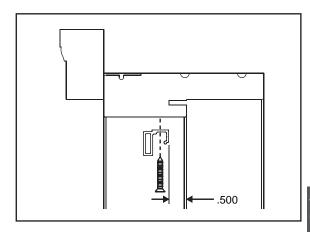
Fasten screen track to jamb using two #6 x 3/4" screws.



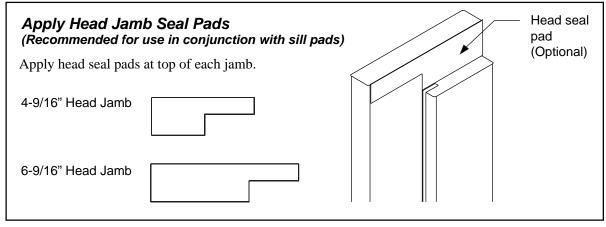
Install Top Screen Track

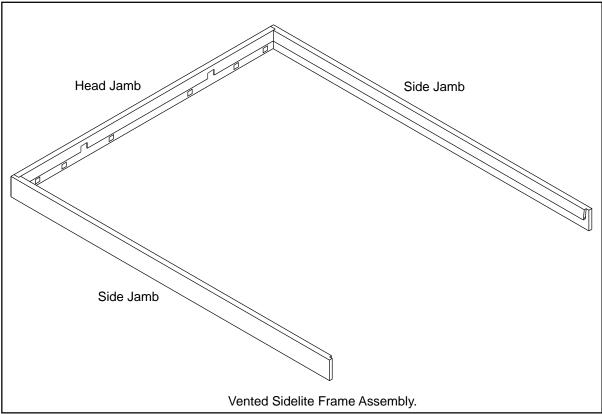
Assemble the top screen track following the same steps as installing the side screen tracks, positioning as shown below.

Make sure to position flush with the side screen tracks.









Vented Sidelite Unit Assembly

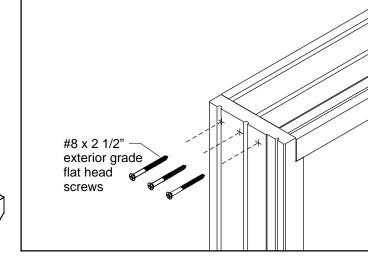
Fasten Side Jambs to Head Jamb

Fasten side jambs to head jamb with screws through lock and hinge jamb into head jamb.

Drill 1/8" dia. pilot holes. Attach with (3) #8 x 2-1/2" exterior grade

If doing this often use drill fixture TDSBSTRDRLFXT.

flat head screws.





Apply End Seal Pads (Preferred) Apply end seal pads at bottom of each jamb (sill end). Composite Adjustable, Hardwood Adjustable, Basic Composite Adjustable Composite Fixed Sills Adjustable Height and Type Shown

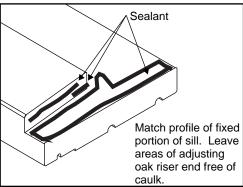
Caulk Only Assembly Method

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) to sill gain, jamb kerf and a bead that matches the profile of sill.

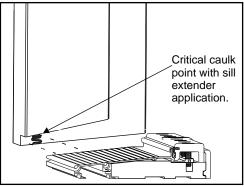


CAUTION:

If fastening into sills made with composite substrates, drill 1/8" dia. pilot holes for #8 screws.



Adjustable Sills



Sills With Sill Extender

System Frame Assembly





CAUTION:

If fastening into sills made with composite substrates, drill 1/8" dia. pilot holes for #8 screws.

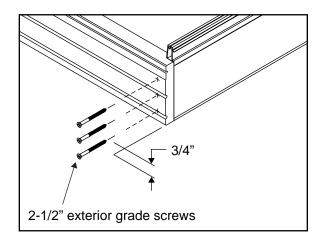
Note:

If doing this often use TDSBSTRDRLFXT drill fixture.

Fasten Sill to Side Jambs

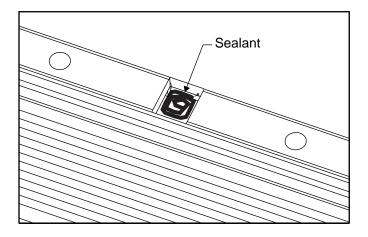
Fasten each side jamb to sill with #8 2-1/2" exterior grade screw through side jamb approximately 3/4" from inside edge.

Fasten sill to each side jamb using 1 screw through bottom of sill into 1-1/4" part of side jamb.

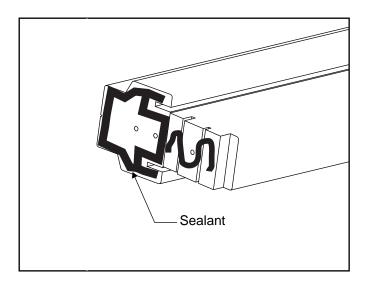


Apply Sealant to Sill

Apply a generous amount of (Elastomeric or Polyurethane) sealant inside cutout sections(s) of sill saddle.





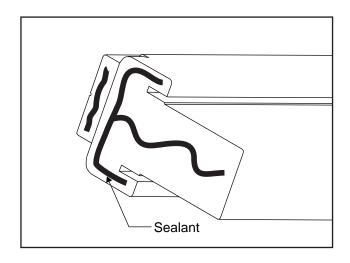


Apply Sealant to Bottom End of Mullions

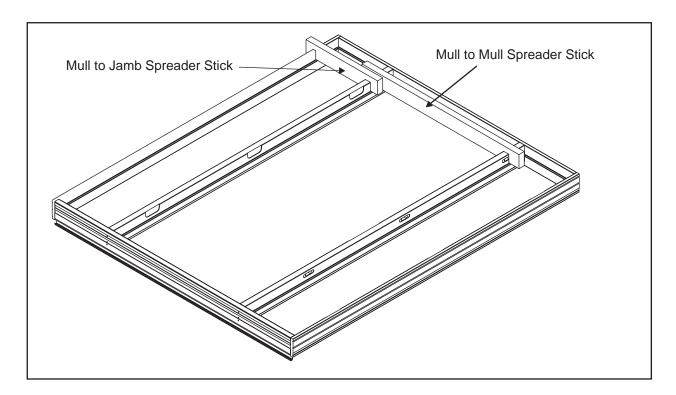
Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant around bottom of each mullion.

Apply Sealant to Top End of Mullions

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant around top of each mullion.





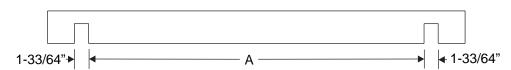


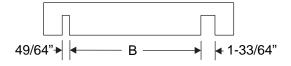
The use of spreader sticks is recommended to help square and position mullions properly.



Spreader sticks should be made from 2x4 or 2x6 lumber.

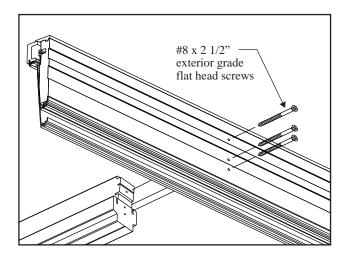
Position spreader sticks in the active opening, near the top of the unit, as shown above, while fastening mullions to head jamb. Then move spreader sticks near the bottom while fastening mullions to sill.





Mull to Jamb Spreader Stick	
	"B"
Sidelite Size	Standard
12"	12-11/64"
14"	14-11/64"

Mull to Mull Spreader Stick	
	"A"
Door Size	Standard
2/6	30"
2/8	32"
2/10	34"
3/0	36"
4/8	56-23/32"
5/0	60-23/32"
5/4	64-23/32"
5/8	68-23/32"
6/0	72-23/32"



Fasten Mullion(s) to Sill

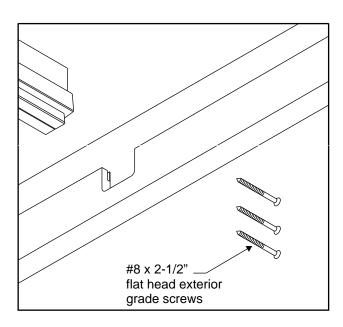
Pre-drill 1/8" dia. Pilot holes into mullion thru pre-drilled holes in sill.

Attach with (3) #8 x 2 1/2" exterior grade flat head screws.

Fasten Mullion(s) to Head Jamb

Insert each mullion into head jamb mortise.

Fasten with (3) #8 x 2-1/2" exterior grade screw through head jamb into mullion.











Single with
Two Vented Sidelites
(Wide Patio Mullion only)
Single with One
Vented Sidelite
Hinged at Jamb
(Wide Patio Mullion only)

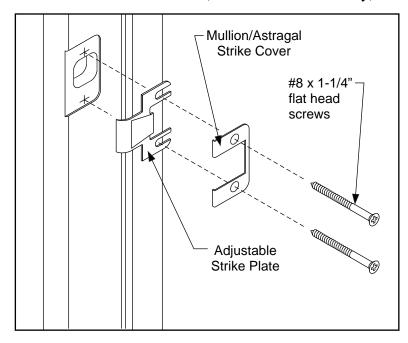
Mount Strike to Mullion

Use strike cover as template.

Drill 1/8" pilot holes, as shown into mullion.

Place security strike onto mullion.

Fasten to mullion with (2) #8 x 1-1/4" flat head screws.



Strike Installation

Single with

Two Vented Sidelites

Single with One Vented Sidelite

Hinged at Jamb

(Wide Patio Mullion only)

(Wide Patio Mullion only)



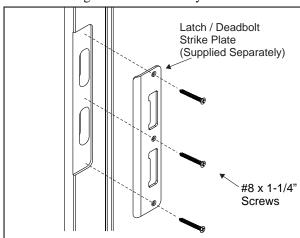
CAUTION: APPLIES ONLY TO:

MULTIPOINT LOCK APPLICATIONS

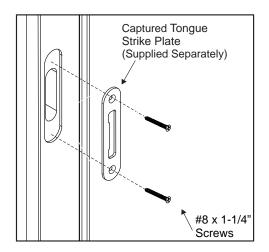
NOTE: Refer to Multipoint Lock Machining for alternate MPLS strike options.

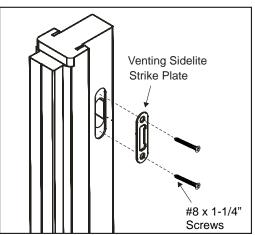


CENTER STRIKE INSTALLATION Tongue and Shootbolt Systems



TOP & BOTTOM STRIKE INSTALLATION

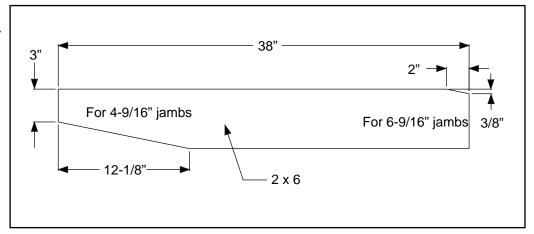






Make Two "Slab Insert Skids"

Make from 2 x 6.



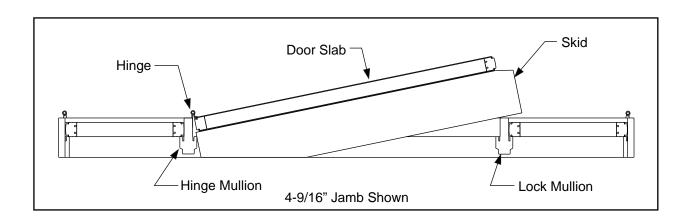
Hinges (3) Door Frame

Place Door Slab and Sidelites Into Frame.

Lay frame on table with hinges on jamb pointed up as shown.

While placing door slab, slide door down on top of skids

While placing sidelites, do not use skids.

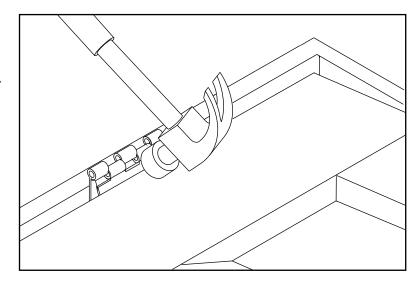


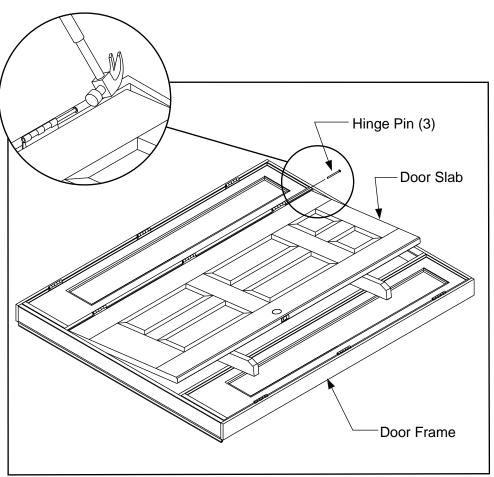


Engage Hinge Knuckles

Tap with hammer as required to line up hinge knuckles and engage.

Repeat for sidelites.





Install Hinge Pins

Tap in pins. Be certain to insert so heads are on top edges of hinges.

Repeat for sidelites.

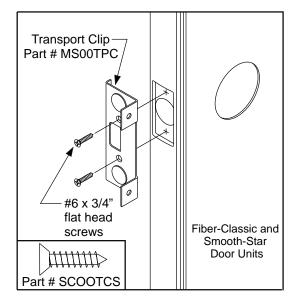


Attach Transport Clip to Door

Insert tab into latch bore.

Position reference lip at edge of stile against exterior side of door.

Fasten with (2) #6 x 3/4" flat head screws.





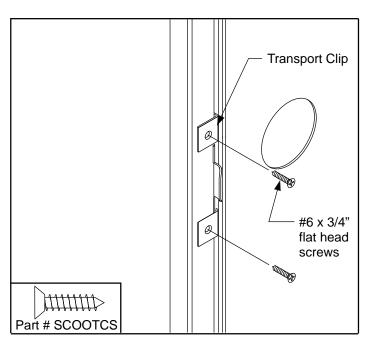




Single With Two Vented Sidelites (Wide Patio Mullion only)



Single with One Vented Sidelite Hinged at Jamb (Wide Patio Mullion only)



Attach Transport Clip to Mullion

Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with $(2) \#6 \times 3/4$ " flat head screws.





CAUTION:

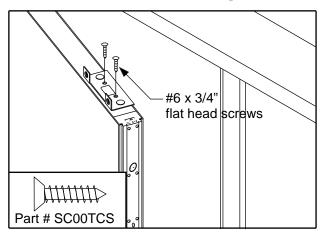
THIS APPLIES TO ALL MULTIPOINT LOCK HARDWARE APPLICATIONS:

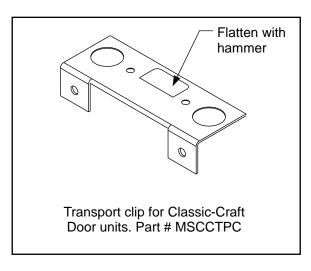
Attach Transport Clip to Door Slab

Flatten lock tabs with hammer.

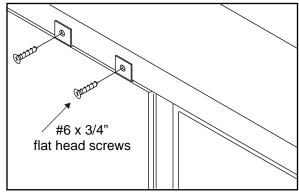
Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).









Attach Transport Clips to Head Jamb

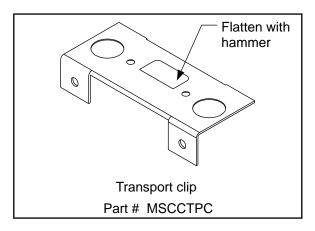
Close inactive door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with (2) #6 x 3/4" flat head screws.



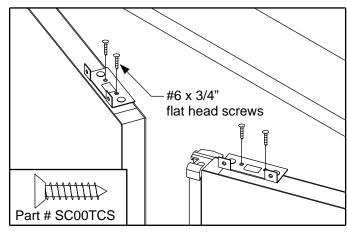
Attach Transport Clips to Door Slabs

Flatten lock tabs with hammer.

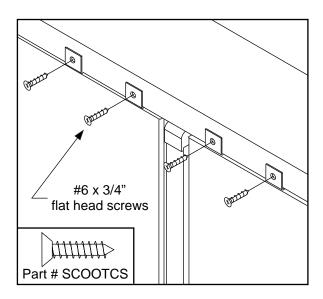


Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).







Attach Transport Clips to Head Jamb

Close inactive door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with $(2) \#6 \times 3/4$ " flat head screws.

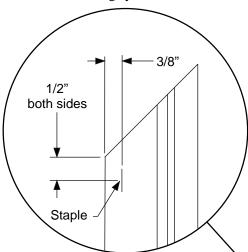


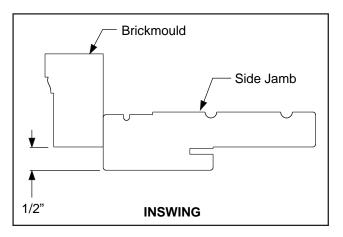
Fasten Brickmould to Side Jambs

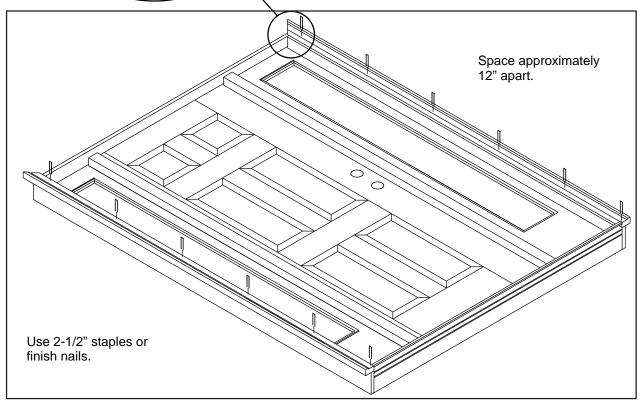
Locate and attach brickmould jamb pieces.

Fasten brickmould with 2-1/2" staples or finish nails. Starting 1/2" in from end and spaced approximately 12" apart.

Composite jambs may alternatively use the hidden fastening system.







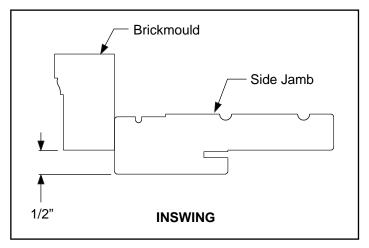


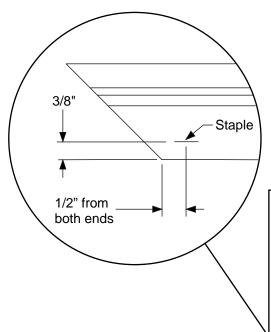
Fasten Brickmould to Frame Head

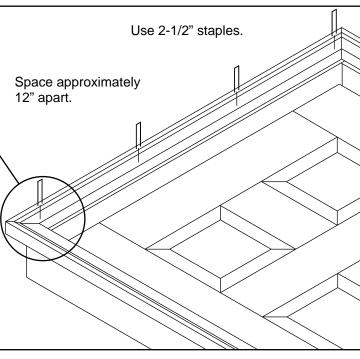
Align brickmould head at corner miters. Fasten near ends to jambs with 2-1/2" staples or finishing nails.

Composite jambs may alternatively use the hidden fastening system.

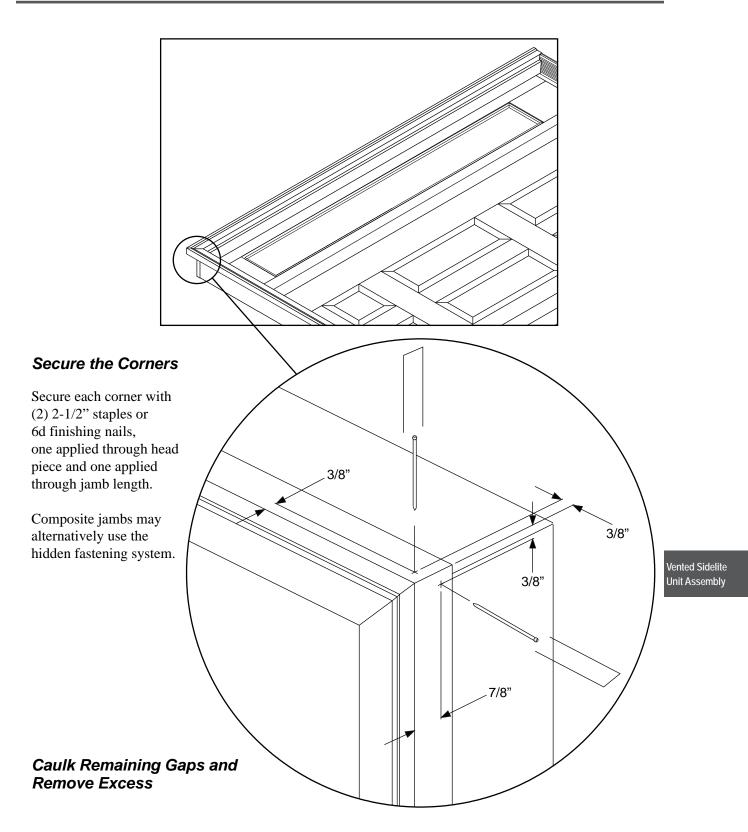
Hold proper 1/2" or 1/4" reveal and fasten to jamb across length at approximately 12" spacing





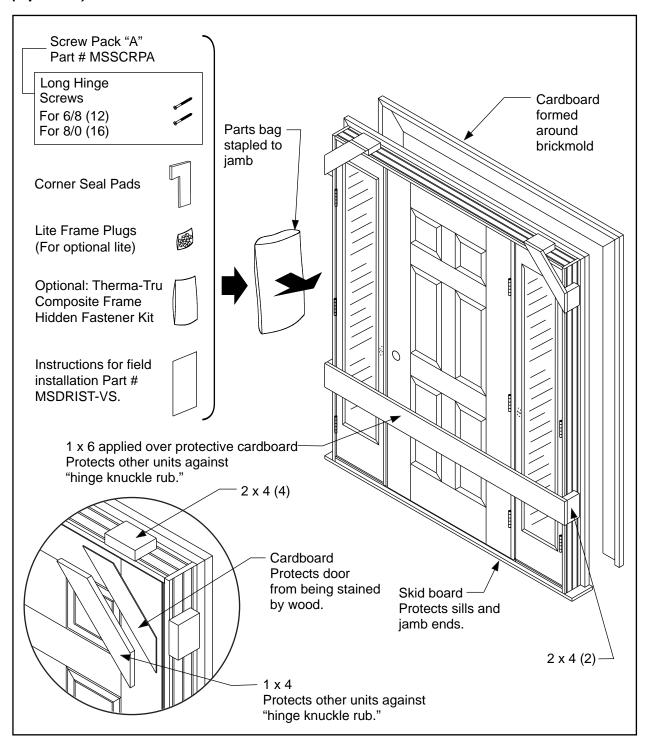








(Optional) Assemble the Unit as Shown





SHOP 14 Spread Mullion Unit Assembly

Exploded View	14.3
Hinge Installation	14.4
Spacer Shim Application	14.6
System Frame Assembly	14.7
Strike Installation	14.27
Cove Molding Application	14.30
Mull Casing Application (Interior)	14.31
Door Slab Installation	14.32
Brickmould Application	14.38
Mull Casing Application (Exterior)	14.40
Assembled Unit Packaging	14.41



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

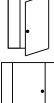
require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area.

For volume production of prehung door units, there is a choice of methods. The method we show is one in which the frame is built without the slab, with unassembled hinge leaves fastened to the jamb. The door slab, also with unassembled hinge leaves attached, is then fit to the frame, and doors are fastened to frames with hinge pins.

> **Spread Mullion Unit Assembly**

KEY TO SHOP 14



Single with **One-Sidelite Units** Hinged at Jamb



Single with Two-Sidelite Units



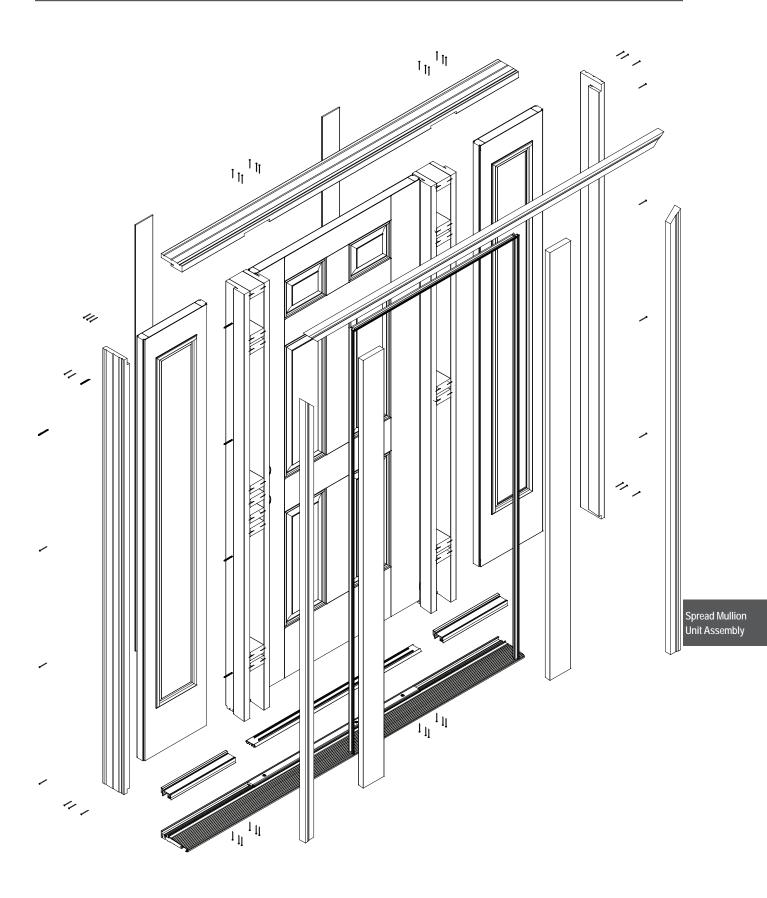
Single with **One-Sidelite Units** Hinged at Mullion

NOTE:

This type of unit has three possible configurations, denoted by the following symbols. Throughout this section, the symbols show instructions for each of the three configurations. Where there is no symbol designation, the instructions are applicable to all three configurations. Take note of the symbols accompanying the instructions to construct the correct frame assembly.











CAUTION: THIS PAGE APPLIES ONLY TO:

Place hinges into hinge mortise.



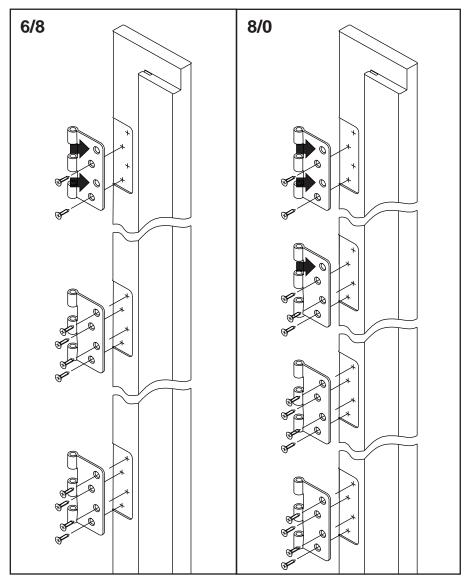
Single with One-Sidelite Units Hinged at Jamb Seat hinge to back of machined hinge pocket.

Pre-drill 1/8" pilot hole and fasten with #10 x 3/4" flat head screws in each hinge as specified below.





Leave holes vacant. These are for 2-1/2" screws to be installed later.







CAUTION: THIS PAGE APPLIES ONLY TO:



Single with Two-Sidelite Units



Single with One-Sidelite Units Hinged at Mullion Place hinges into hinge mortise.

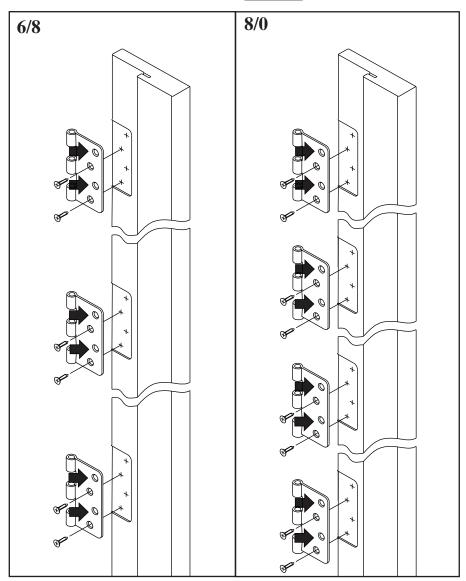
Seat hinge to back of machined hinge pocket.

Pre-drill 1/8" pilot hole and fasten with #10 x 3/4" flat head screws in each hinge as specified below.



→

Leave holes vacant. These are for 2-1/2" screws to be installed later.

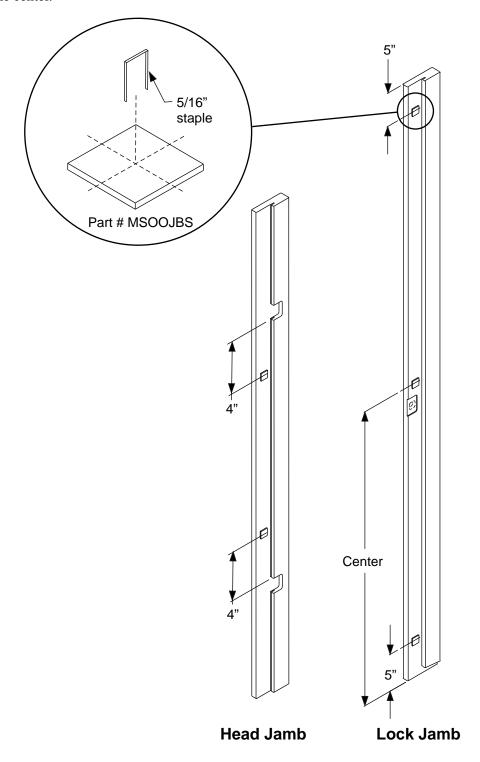


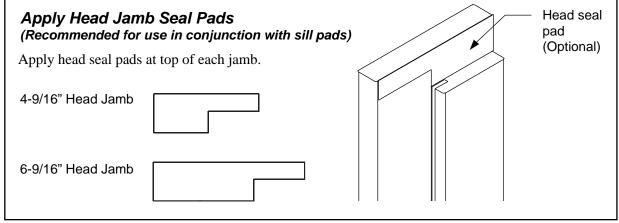


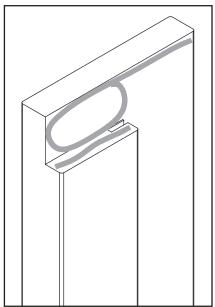
Apply Spacer Shims to Head Jamb and Mullion (if lock prepped) or Jamb (if lock prepped)

Fasten 2 spacer shims to head jamb and 3 to lock mullion or lock jamb with 5/16" galvanized staples, as shown.

NOTE: For French systems, add 2 additional spacer shims to the head jamb 4" from each side of the center.

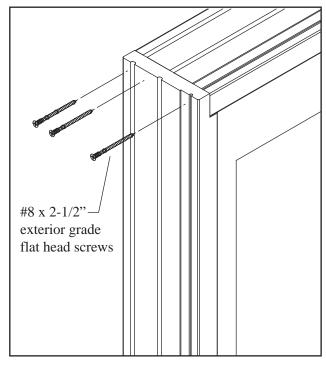






Apply Sealant to Side Jambs

Apply 1/16" bead of sealant on both side jambs.

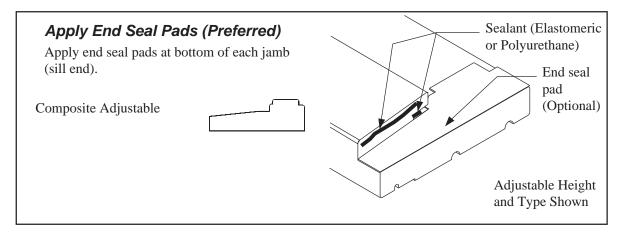


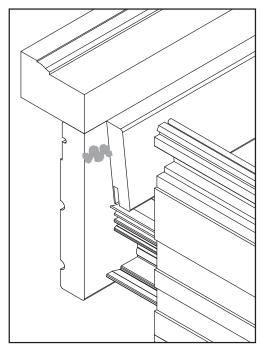
Fasten Side Jambs to Head Jamb

Fasten side jambs to head jamb with screws through lock and hinge jamb into head jamb.

Drill 1/8" diameter pilot holes. Attach with (3) #8 x 2-1/2" exterior grade flat head screws. If doing this often, use drill fixture TDSBSTRDRLFXT.





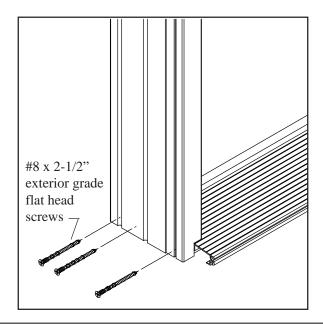


Apply Sealant to Side Jambs

Apply 1/8" bead of sealant on both side jambs.

If sill extender is applied, sealant to be applied on jamb where sill and extender meet.

Spread Mullion Unit Assembly

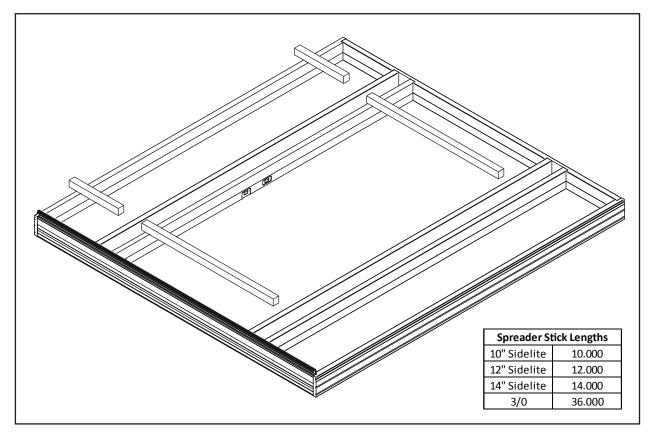


Fasten Sill to Side Jambs

Fasten each side jamb to sill with screws through side jamb approximately 3/4" from inside edge.

Drill 1/8" diameter pilot holes. Attach with (3) #8 x 2-1/2" exterior grade flat head screws. If doing this often, use drill fixture TDSBSTRDRLFXT.



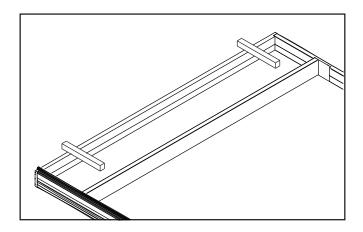


The use of spreader sticks is recommended to help square and position jamb mullions properly.



Spreader sticks should be made from hardwood. Ends to be square and free of sharp edges.



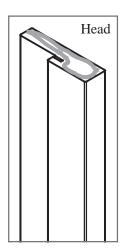


Pre-drill for Fixed Panel Jamb(s)

Dry fit fixed panel jambs using spreader sticks.

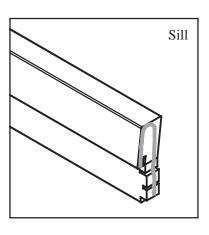
Use a clamp to loosely clamp fixed panel jambs in place. Pre-drill 1/8" pilot holes through sill and head jamb into the fixed panel jamb. If doing this often, use drill fixture TDSBSTRDRLFXT.

Remove spreader sticks and fixed panel jambs.

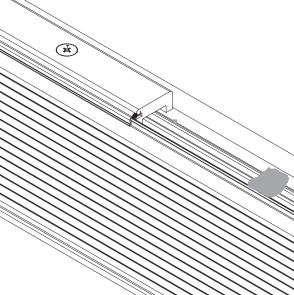


Apply Sealant to Fixed Panel Jamb(s)

Apply 1/8" bead of sealant around sill end and head end of Fixed Panel Jamb(s).

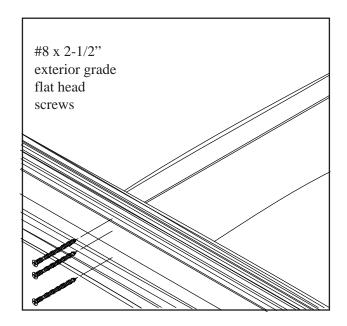






Apply Sealant to Sill

Apply a generous amount of sealant inside will where Fixed Panel Jamb will sit.



Fasten Fixed Panel Jamb(s) to Sill

Using spreader sticks, fasten each Fixed Panel Jamb to sill with screws through Fixed Panel Jamb approximately 3/4" from inside edge.

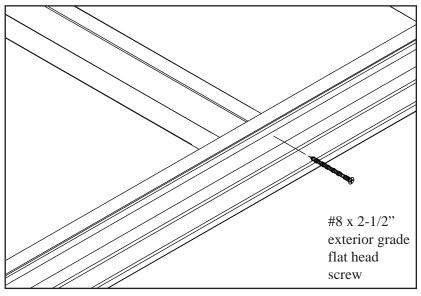
Attach with (3) #8 x 2-1/2" exterior grade flat head screws.

When fastening into sills made with composite substrates, drill 1/8" pilot holes for #8 exterior grade flat head screws.

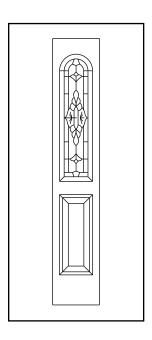
Fasten Fixed Panel Jamb(s) to Head

Fasten each Fixed Panel Jamb to head with one screw through Fixed Panel Jamb approximately 3/4" from inside edge.

Attach with (1) #8 x 2-1/2" exterior grade flat head screw.





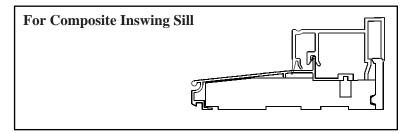


Install Doorlites and Panels

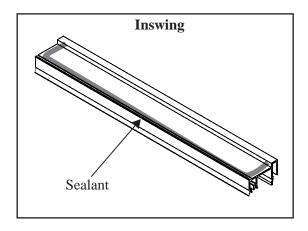
Install desired doorlites and/or panels into sidelite slab.

Select Inactive Door Bottom to Match Sill

Cut inactive door bottom, as necessary, to match frame opening width at sill.



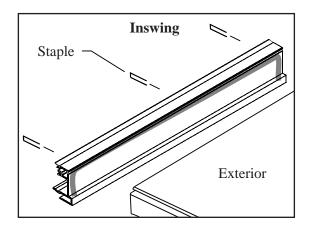




Caulk Inactive Door Bottom

Select a (Elastomeric or Polyurethane) sealant that provides excellent adhesion to both plastic and wood.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant to top surface of inactive door bottom.

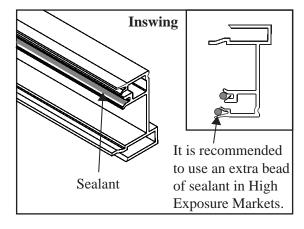


Attach Inactive Door Bottom

Fasten door bottom to sidelite slab with 1" staples.

Note:

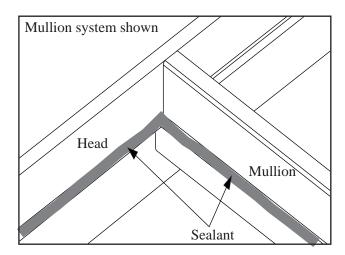
For 14" and larger slabs, use 5 or more fasteners.



Caulk Inactive Door Bottom

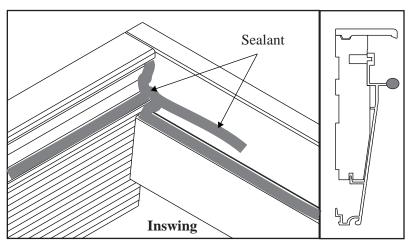
Apply (Elastomeric or Polyurethane) sealant along channel on bottom of inactive door bottom.





Seal Perimeter

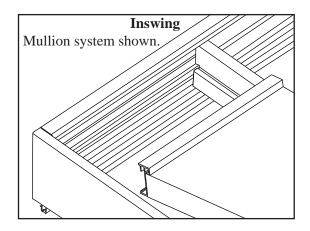
Apply 1/4" bead of (Elastomeric or Polyurethane) sealant around entire perimeter on jamb and/or jamb mullion stops.



Inswing Sill

Apply a generous amount of (Elastomeric or Polyurethane) sealant at joints where sill and jamb/jamb mullion meet.

Apply 1/4" bead of (Elastomeric or Polyurethane) sealant approximately 1" above weatherstrip kerf, 6" long.

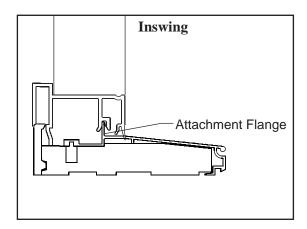


Install Sidelite into Frame

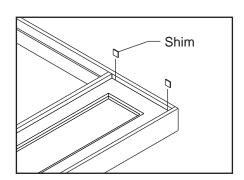
Place sill end first, mating plastic inactive bottom to sill, if necessary.

Use putty knife blade at top to aid insertion of slab in frame.

Sidelite panels are nominally 1/16" narrower than frame opening, for 1/32" clearance on each side.



Install inactive fixed panel by tilting bottom edge of panel so inactive door bottom aligns with sill attachment flange.



Shim Inactive Fixed Panel

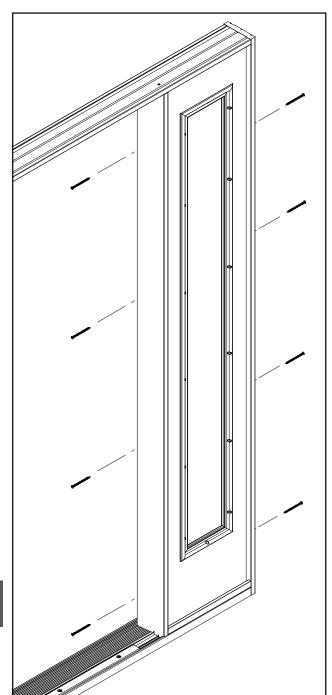
To ensure proper seal of inactive door bottom against sill, shim head of inactive panel.

Locate shims near corners and slide shims between head jamb and inactive panel.

A putty knife may be required for this operation.

Be careful not to damage the face of the panel.





Fasten Sidelites to Frame

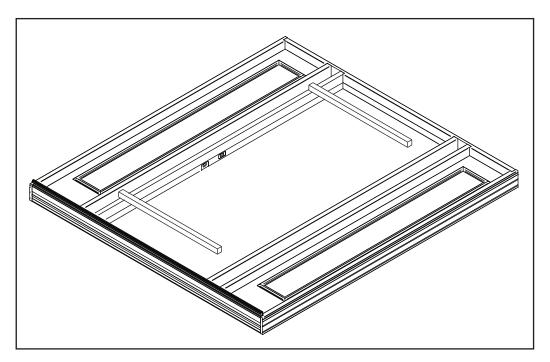
Center sidelite in the opening. Use spacer shims if necessary.

Ensure the Fixed Panel Jamb is straight.

Drill 1/8" diameter pilot holes in side jamb.

Fasten sidelites to frame with screws. Attach with (8) #8 x 2-1/2" screws (4 on each side).





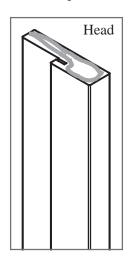
Pre-drill for Active Panel Jambs

Dry fit Active Panel Jambs using spreader sticks at the top and bottom of the active opening.

Note: it may be necessary to back out the single screw on the head of the Fixed Panel Jamb.

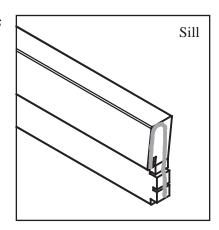
Center Active Panel Jambs on sill cap. Use a clamp to loosely clamp Active Panel Jambs in place. Pre-drill 1/8" pilot holes through sill and head jamb into the Active Panel Jamb. If doing this often, use drill fixture TDSBSTRDRLFXT.

Remove spreader sticks and Active Panel Jambs.

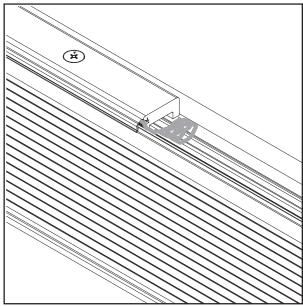


Apply Sealant to Active Panel Jambs

Apply 1/8" bead of sealant around sill end and head end of Active Panel Jambs.

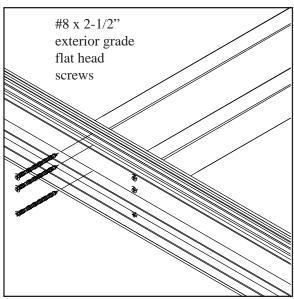






Apply Sealant to Sill

Apply a generous amount of sealant inside will where Active Panel Jamb will sit.



Fasten Active Panel Jamb(s) to Sill

Using spreader sticks, fasten each Active Panel Jamb to sill with screws through Active Panel Jamb approximately 3/4" from inside edge.

Attach with (3) #8 x 2-1/2" exterior grade flat head screws.

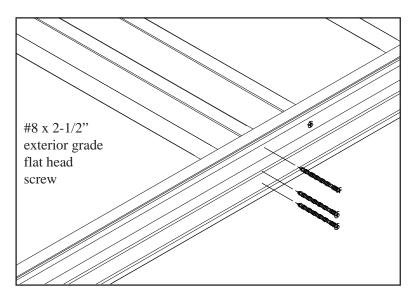
When fastening into sills made with composite substrates, drill 1/8" pilot holes for #8 exterior grade flat head screws.

Spread Mullion Unit Assembly

Fasten Active Panel Jamb(s) to Head

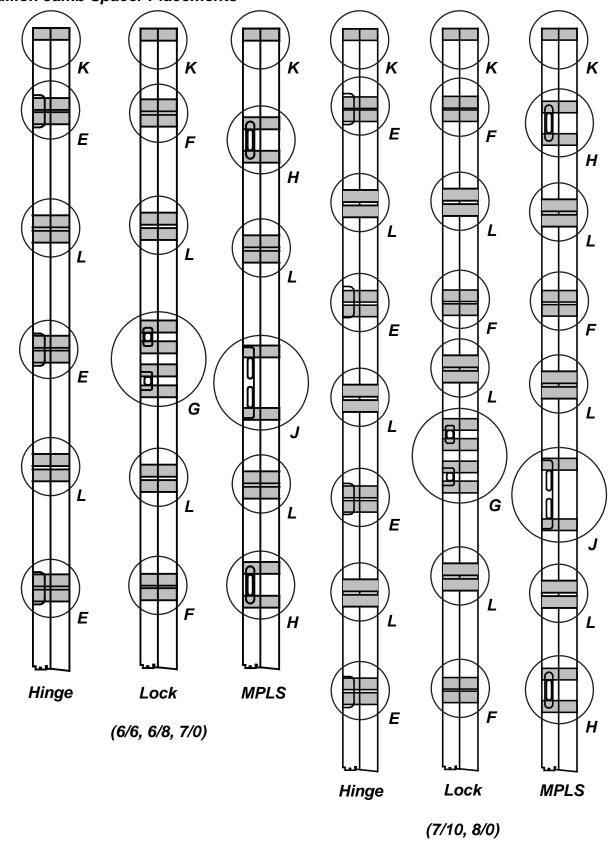
Fasten each Active Panel Jamb to head with screws through Active Panel Jamb approximately 3/4" from inside edge.

Attach with (3) #8 x 2-1/2" exterior grade flat head screw.



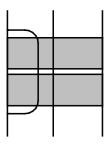


Mullion Jamb Spacer Placements





Mullion Jamb Spacer Placement Details

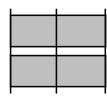


Place 2 spacers behind long hinge screws in leafs.

Typical for all hinge mortises.

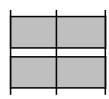
Typical for all hinge jambs.

Detail E



Place 2 spacers directly across from hinge on lock mullion when no other hardware is present.

Detail F

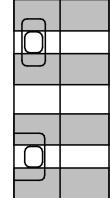


Added when using Therma-Tru Composite jambs

Place 2 spacers between hinge locations on hinge mullions.

Place 2 spacers matching locations between hinges on lock mullions.

Detail L



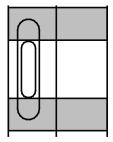
Place 2 spacers directly behind mounting holes on top and bottom of lock prep.

Typical for handleset and deadbolt.

Ensure spacers do not protrude into bore hole.



Mullion Jamb Spacer Placement Details

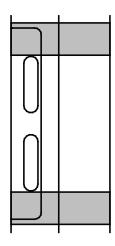


Place 2 spacers directly behind mounting holes of MPLS strike. Typical for each strike.

Ensure spacers do not protrude into bore holes.

Dust boxes may be used as a gauge to check clearance.

Detail H



Place 2 spacers directly behind top and bottom mounting holes of MPLS strike.

Ensure spacers do not protrude into bore holes.

Dust boxes may be used as a gauge to check clearance.

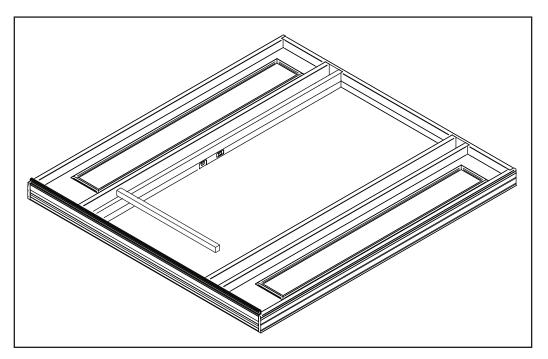
Detail J



Place 1 spacer flush with the top of the mullion. Typical for each mullion.

Detail K





Insert Spreader Sticks

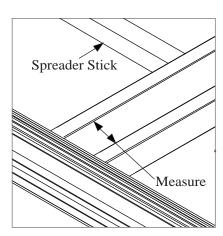
Place spreader stick in the active opening near mullion jamb spacer location nearest the bottom of the unit and loosely clamp.

Do not place the spreader stick in the area where the spacer is to be placed. (Review Mullion Jamb Spacer Placement.)

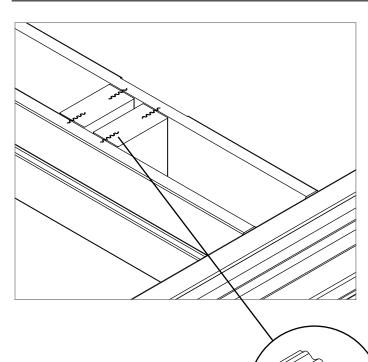
Measure and Cut Spacer

Measure the distance between the Fixed Panel Jamb and the Active Panel Jamb on the hinge side.

Cut a 2 x 4 or other structural material to size.



System Frame Assembly



Fasten Spacers on the Hinge Side

Insert spacer in the bottom-most location shown on the Mullion Spacer Placement pages.

Ensure that the jamb is straight.

For spreads greater than 1/2", apply 2 corrugated fasteners across spacer. Stagger corrugated fasteners if necessary.

For spreads 1/2" or less, apply 1 corrugated fastener across both jambs and the spacer.

Repeat for remaining Mullion Spacer Placement locations, working from the bottom up.

Spread Mullion Unit Assembly

1" corrugated fastener





CAUTION: THIS PAGE APPLIES ONLY TO:



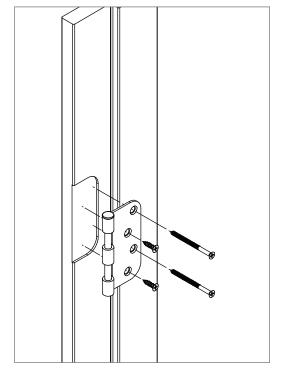
Single with Two-Sidelite Units



Single with One-Sidelite Units Hinged at Mullion



If hinges are located on an Active Panel Jamb, install $2 \# 10 \times 2 1/2$ " screws in the holes closest to the weatherstrip and $2 \# 10 \times 3/4$ " screws in the remaining two holes.



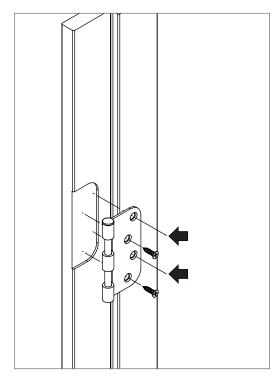


CAUTION: THIS PAGE APPLIES ONLY TO:



Single with One-Sidelite Units Hinged at Jamb





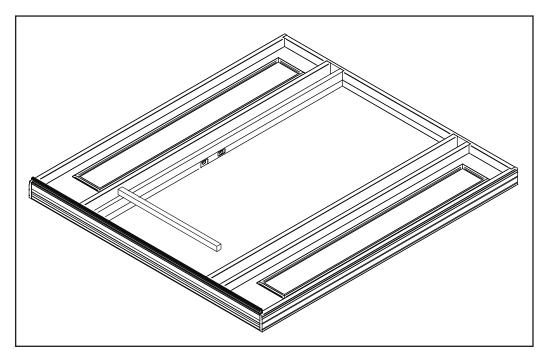
Install Hinges

If hinges are located on a Side Jamb, leave the holes closest to the weatherstrip open and install 2 #10 x 3/4" screws in the other two holes. 2 #10 x 2 1/2" screws will be installed at the site in the remaining holes.



Leave holes vacant. These are for 2-1/2" screws to be installed later.





Insert Spreader Sticks

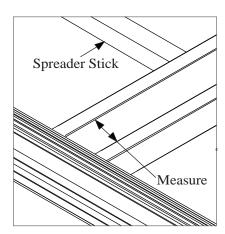
Place spreader stick in the active opening near mullion jamb spacer location nearest the bottom of the unit and loosely clamp.

Do not place the spreader stick in the area where the spacer is to be placed. (Review Mullion Jamb Spacer Placement.)

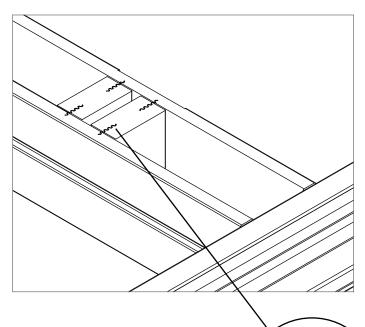
Measure and Cut Spacer

Measure the distance between the Fixed Panel Jamb and the Active Panel Jamb on the lock side.

Cut a 2 x 4 or other structural material to size.







Fasten Spacers on the Lock Side

Insert spacer in the bottom-most location shown on the Mullion Spacer Placement pages.

Ensure that the jamb is straight.

For spreads greater than 1/2", apply 2 corrugated fasteners across spacer. Stagger corrugated fasteners if necessary.

For spreads 1/2" or less, apply 1 corrugated fastener across both jambs and the spacer.

Repeat for remaining Mullion Spacer Placement locations, working from the bottom up.

Spread Mullion Unit Assembly 1" corrugated fastener





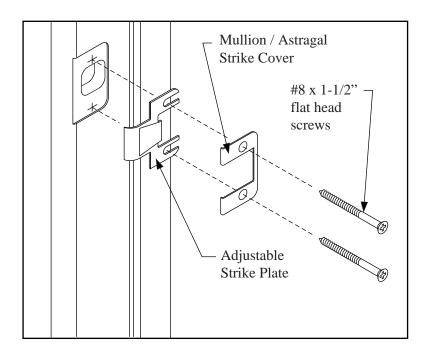
Use strike cover as template.

Drill 1/8" pilot holes, as shown, through mullion jamb.

Place security strike onto mullion jamb.

Fasten to mullion jamb with (2) #8 x 1-1/2" flat head screws.

Drive screws through mullion jamb into spacer or adjacent jamb.

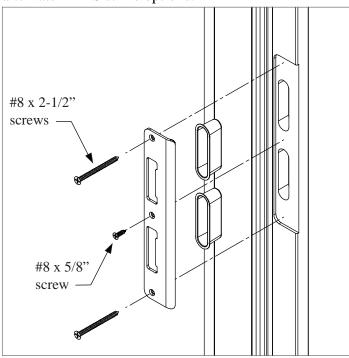






CAUTION: THIS PAGE APPLIES ONLY TO: MULTIPOINT LOCK APPLICATIONS

NOTE: Refer to Multipoint Lock Machining for alternate MPLS strike options.





Single with One-Sidelite Units Hinged at Jamb



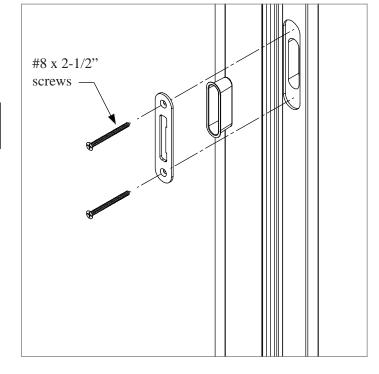
Single with **Two-Sidelite Units**

If Installing Strikes in the Fixed Panel Jamb

Center Strike Installation

Using the strike as a template, pre-drill 1/8" pilot holes.

Fasten with wood screws as shown.



Top and Bottom Strike Installation

Using the strike as a templae, pre-drill 1/8" pilot holes.

Fasten with wood screws as shown.

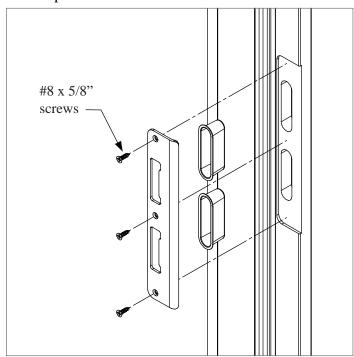




CAUTION: THIS PAGE APPLIES ONLY TO: MULTIPOINT LOCK APPLICATIONS

Single with One-Sidelite Units Hinged at Mullion

NOTE: Refer to Shop 5 for alternate MPLS strike options.

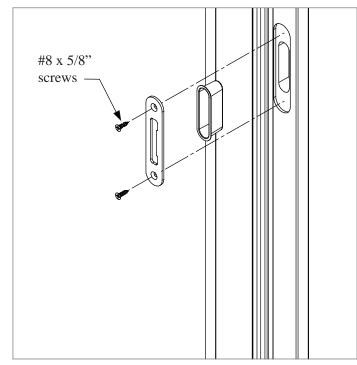


If Installing Strikes in the Side Jamb

Center Strike Installation

Using the strike as a template, pre-drill 1/8" pilot holes.

Fasten with wood screws as shown.



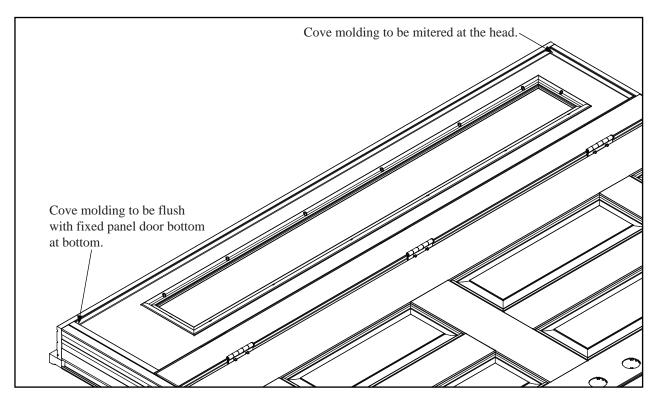
Top and Bottom Strike Installation

Using the strike as a templae, pre-drill 1/8" pilot holes.

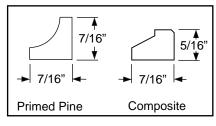
Fasten with wood screws as shown.

Ship remaining screws with the unit to the site.

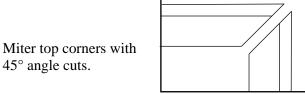




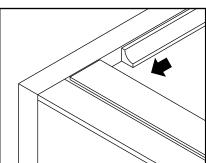
Apply Cove Molding



Cove Molding.

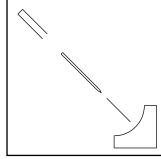


Spread Mullion Unit Assembly

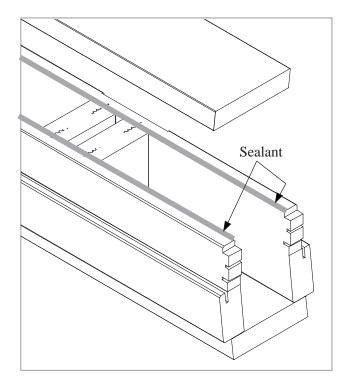


Butt-join bottom ends to plastic inactive door bottom ledge with square cuts.

Fasten with small staples or finishing nails.

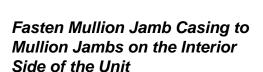




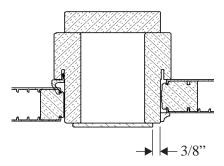


Apply Sealant to Mullion Jamb Casing on the Interior Side of the Unit

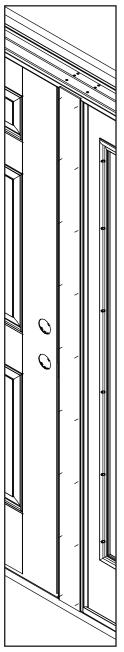
Apply 1/8" bead of sealant to full length of mull casing and mullion jamb joint under mullion casing on all sides.



Choose mullion casing to match interior trim. Leave a 3/8" clearance on each side.

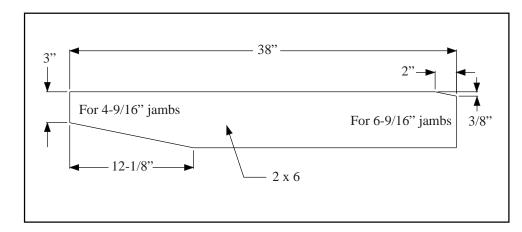


Fasten approximately 12" apart with finish or pin nails.



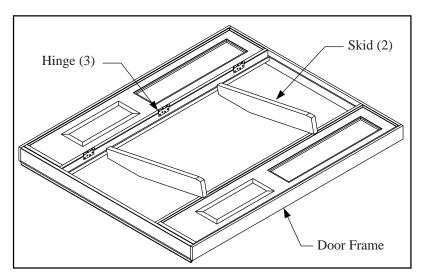
Interior





Make Two "Slab Insert Skids"

Make from 2" x 6".

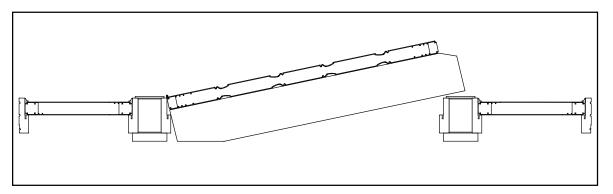


Place Door Slab into Frame

Lay frame on table with hinges on jamb pointed up as shown.

Slide door down on top of skids.

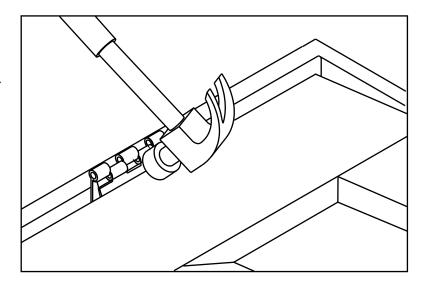


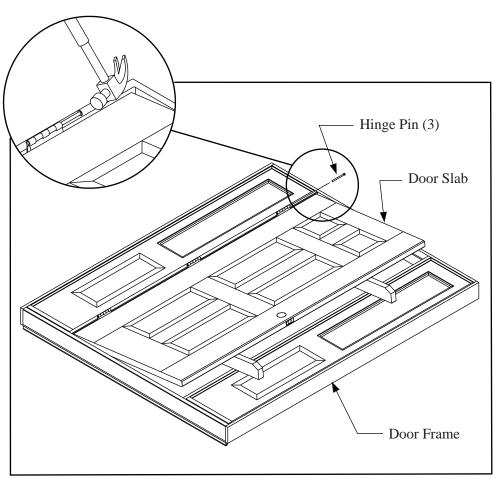




Engage Hinge Knuckles

Tap with hammer as required to line up hinge knuckles and engage.



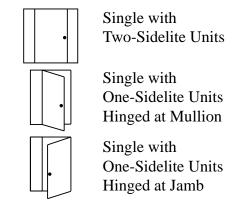


Install Hinge Pins

Tap in pins. Be certain to insert so heads are on top edges of hinges.





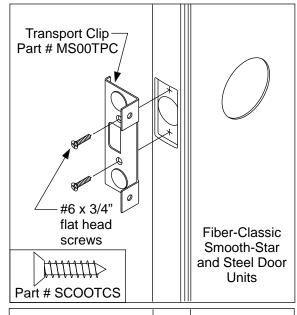


Attach Transport Clip to Door

Insert tab into latch bore.

Position reference lip at edge of stile against exterior side of door.

Fasten with (2) #6 x 3/4" flat head screws.



Transport Clip
Part # MSCCTPC

#6 x 3/4"
flat head
screws

Classic-Craft
Door
Units

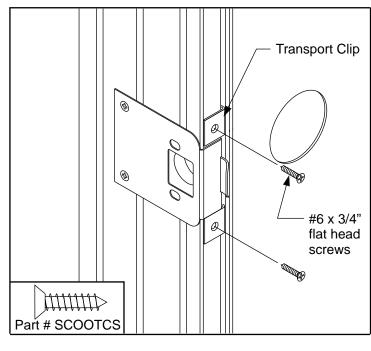
Part # SCOOTCS







Single with One-Sidelite Units Hinged at Mullion



Attach Transport Clip to Jamb

Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with $(2) \#6 \times 3/4$ " flat head screws.

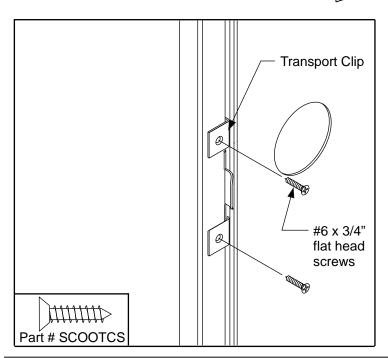






Single with Two-Sidelite Units

Single with One-Sidelite Units Hinged at Jamb



Attach Transport Clip to Mullion

Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with (2) #6 x 3/4" flat head screws.





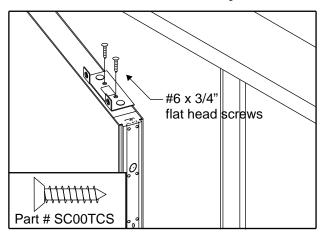
THIS APPLIES TO ALL MULTIPOINT LOCK HARDWARE APPLICATIONS.

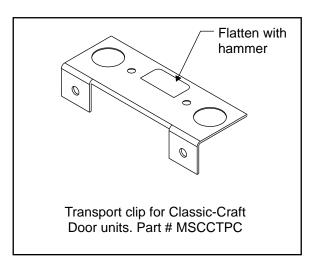
Attach Transport Clip to Door Slab

Flatten lock tabs with hammer.

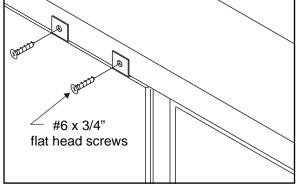
Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).







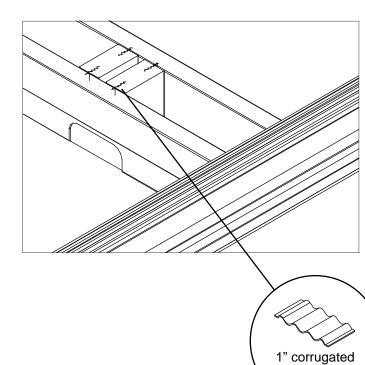


Attach Transport Clips to Head Jamb

Close inactive door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with (2) #6 x 3/4" flat head screws.





Fasten Spacers on Exterior Side

Flip the unit onto 2x4 blocks to avoid damaging the interior casing.

Apply corrugated fasteners to lock and hinge sides.

For spreads greater than 1/2", apply 2 corrugated fasteners across spacer. Stagger corrugated fasteners if necessary.

For spreads 1/2" or less, apply 1 corrugated fastener across both jambs and the spacer.

Repeat for remaining Mullion Spacer Placement locations, working from the bottom up.

Spread Mullion Unit Assembly

fastener

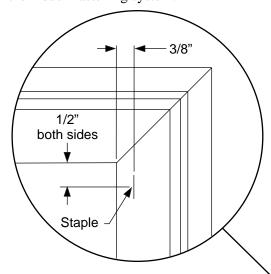


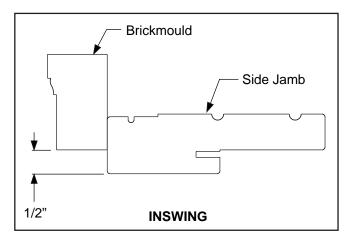
Fasten Brickmould to Side Jambs and Head Jamb

Locate and attach brickmould jamb pieces.

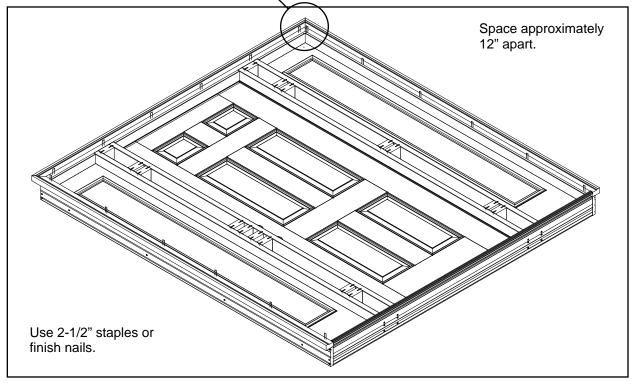
Fasten brickmould with 2-1/2" staples or finish nails. Starting 1/2" in from end and spaced approximately 12" apart.

Composite jambs may alternatively use the hidden fastening system.

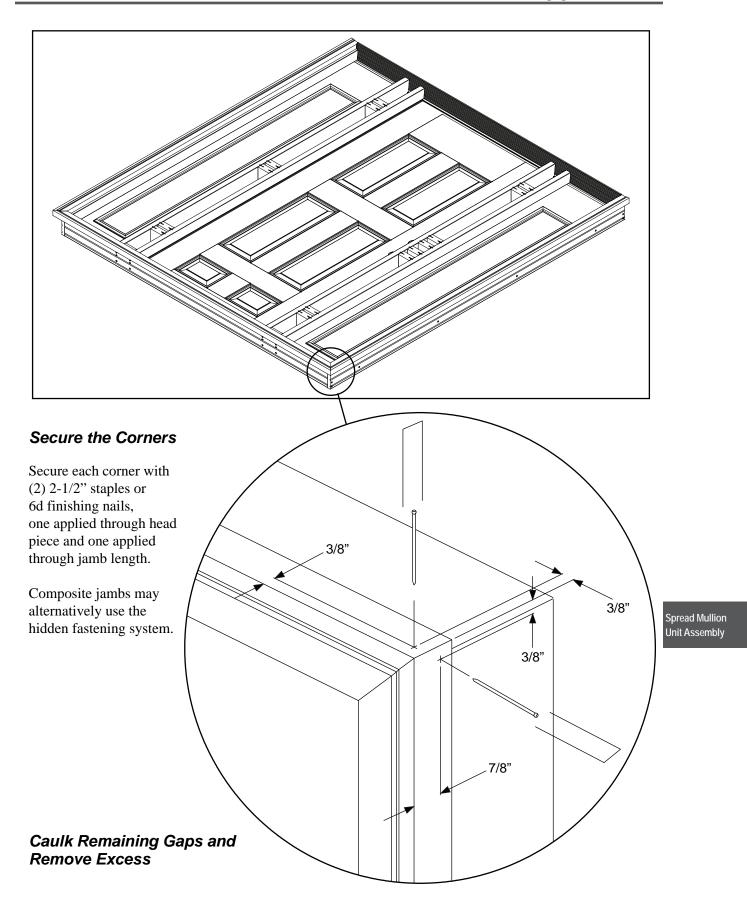




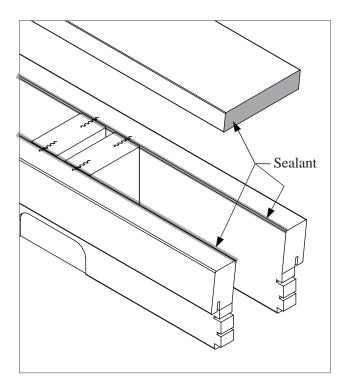






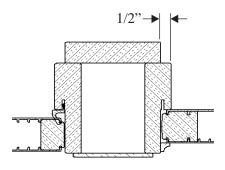






Fasten Mullion Jamb Casing to Mullion Jambs on the Exterior Side of the Unit

Leave 1/2" clearance on each side.



Fasten approximately 12" apart with 2" 6d finish nails or 2-1/2" staples.

Fill Spread Mullion Gap

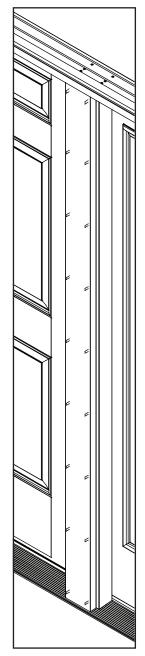
Flip the unit.

Fill the gap between the Fixed Panel Jamb(s) and the Active Panel Jamb(s) with fiberglass insulation.

Apply Sealant to Mullion Jamb Casing on the Exterior Side of the Unit

Apply 1/8" bead of sealant to bottom of mull casing end grain and wet out with finger.

Apply sealant full to full length of mull casing and mullion jamb joint under mullion casing on all sides.

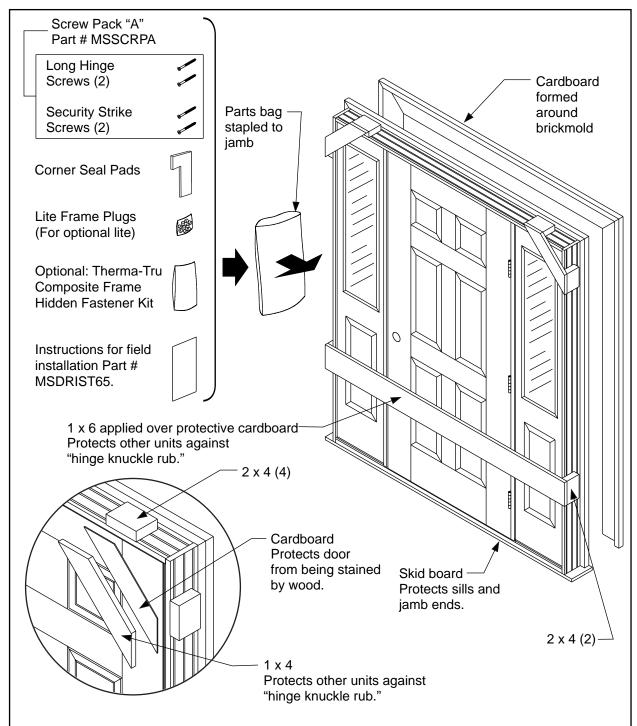


Exterior





(Optional) Assemble the Unit as Shown







SHOP 15 Transom Installation

Transom Specifications	15.3
Jamb Extensions	
Width-Matching Mulled Units	15.7
Transom Attachment to Door Unit	15.10
Brickmould Application	15.11
Mull Casing Application	15.15
Final Transom Attachment to Door Unit	15.16
Transom Grille Installation (Optional)	15.17



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area.



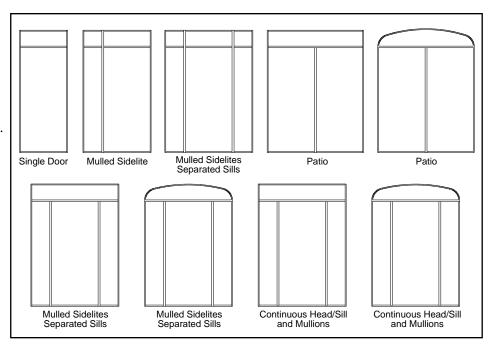


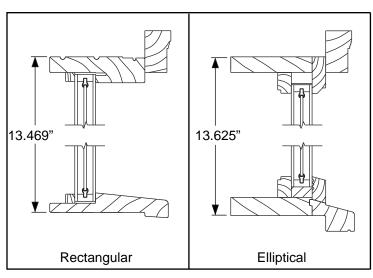
Width

Frame widths match various system widths.

Not all systems have matching transom sizes.

Review price book carefully and discuss with Customer Service.





Height

Frame heights for all rectangular transoms are 13.469".

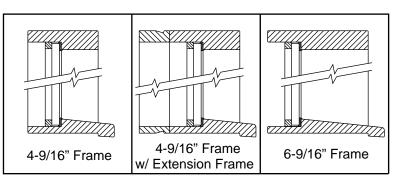
Frame heights for all elliptical transoms are 13.625"

Depth

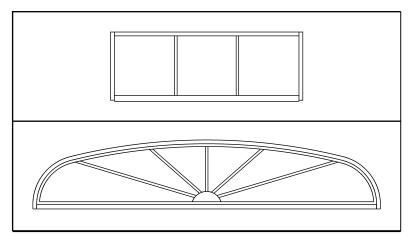
Some transoms are offered in 4-9/16" and 6-9/16" frames.

Some transoms are offered in 4-9/16" frames and can be extended to 6-9/16" with extension frames.

Review catalog carefully and discuss with Customer Service.







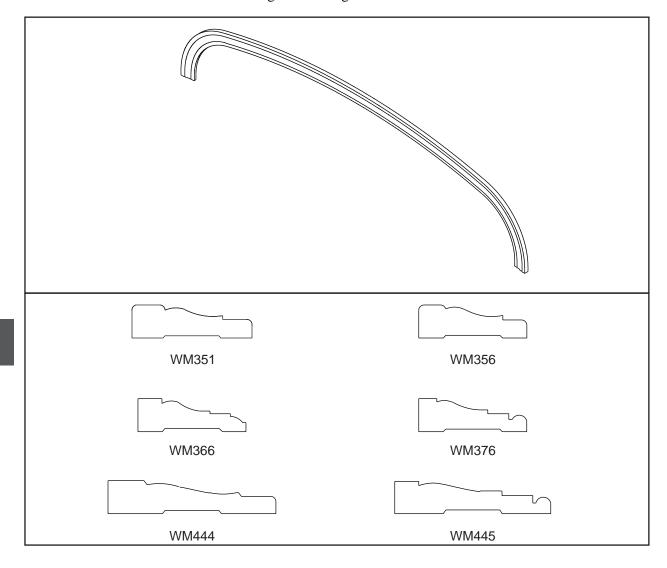
Grilles

Rectangular transoms with clear glass are given a divided look by adding optional grille bars.

Elliptical transoms with clear glass are given a divided look by adding optional grille bars.

Optional Elliptical Transom Interior Casings

Therma-Tru does not offer interior casings for rectangular transoms.





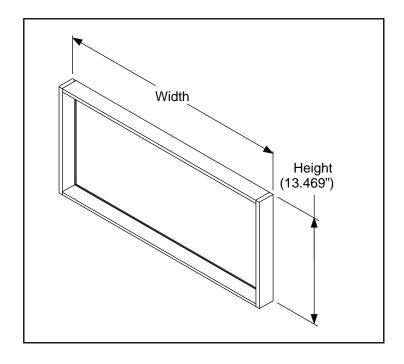
Determine Transom Width and Height

The following are recommended height and width dimensions.

Use actual measurements to determine correct jamb extender frame required.

Height: 13-15/32"

Door/Sidelite Slab	Width
14" Sidelite	15.500"
12" Sidelite	13.500"
3/0	37.656"
5/0 Patio	62.813"
5/4 Patio	66.813"
5/8 Patio	70.813"
6/0 Patio	74.813"
3/0 w/12" S/L, Cont.	63.656"
3/0 w/12" S/L, Mulled	64.656"
3/0 w/14" S/L, Cont.	67.656"
3/0 w/14" S/L, Mulled	68.656"

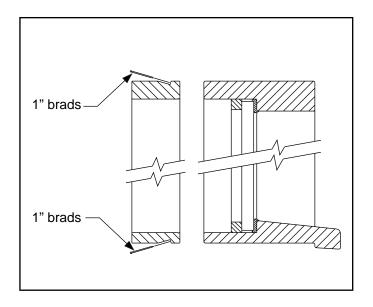


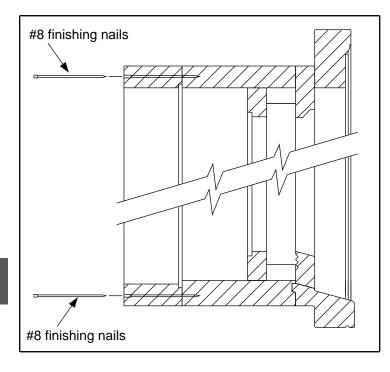


Attach Extender to Rectangular Transom

Align extender with transom. Orient so V-groove for fastening is closer to transom frame.

Fasten entire perimeter, as shown, through V-groove. Use 1" brads on 6" centers.





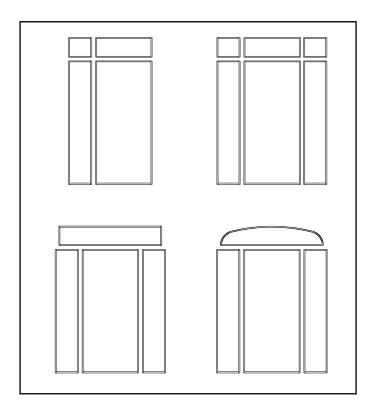
Attach Extender to Elliptical Transom

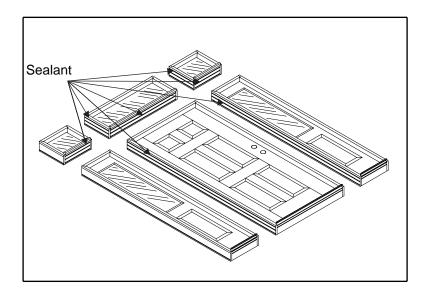
Align extension jamb with transom jamb so inside surface of extension jamb is flush with inside surface of transom jamb, and relief notch is against transom jamb.

Nail and countersink extension jamb to transom jamb with #8 finishing nails in pre-drilled holes.



When jamb-stitched ("mulled") and then stacked with transoms, units require special attention. Width and thickness tolerances can work against the assembler. Width checking is required and shimming may be necessary.





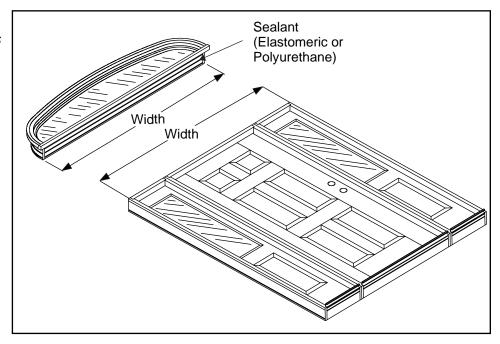
Place Units Together To Check Fit

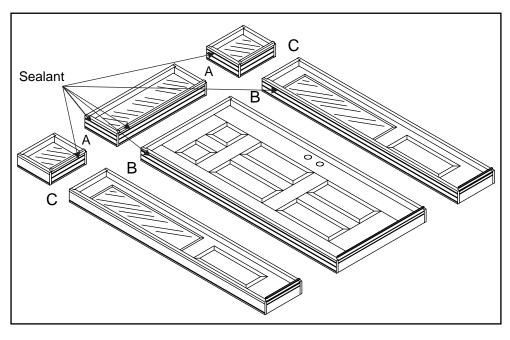
Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) entire length between units as shown.

Lay door, sidelite and transom units on a flat surface with exterior sides facing up.



Measure Widths and Compare





Shim or Remove Material Where Required To Match Widths

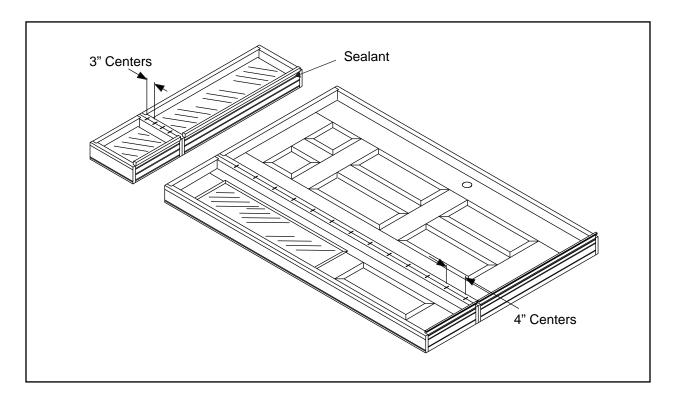
Transom Installation

Shim between jambs at A or B widths match at C.

If material needs to be removed, use a power planer or belt sander on back side of jamb where required.

Apply a 1/4" bead of sealant (Elastomeric or Polyurthane) entire length between units as shown.





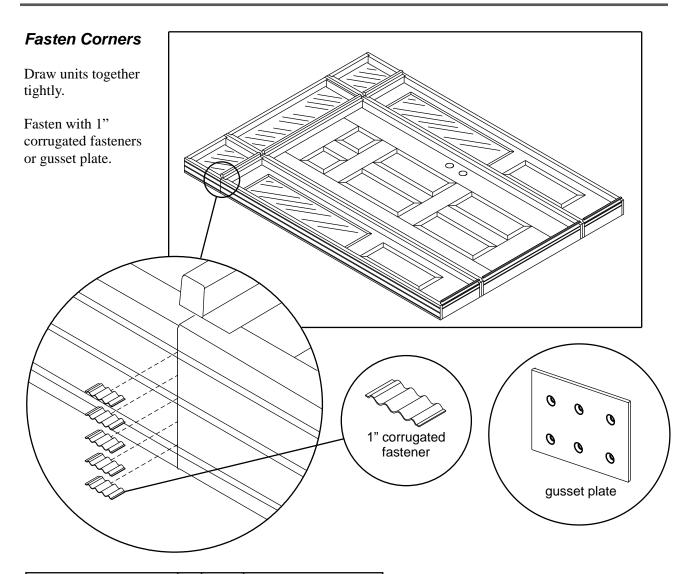
Stitch-Fasten Jambs

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) entire length between units as shown.

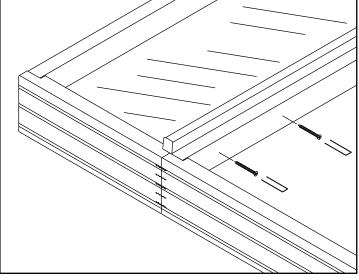
Draw jambs together and stitch-fasten at interior side across joint with 1" corrugated fatseners. Fasten door unit at 4" centers.

Fasten transom unit at 3" centers.





Transom Installation



Fasten Door/Sidelite Head to Transom Sill

Draw head to sill and clamp if required.

Using 2" screws or staples spaced on 6" centers, fasten through door/sidelite frame heads into transom sill.





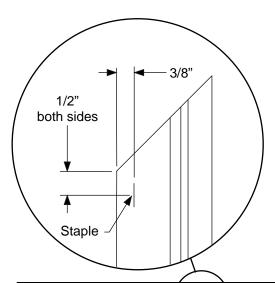
This page applies only to units with rectangular transoms.

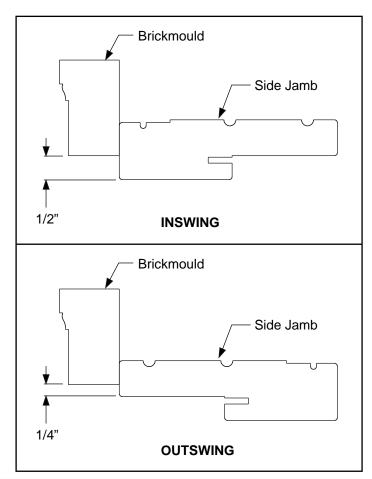
Fasten Brickmould to Side Jambs

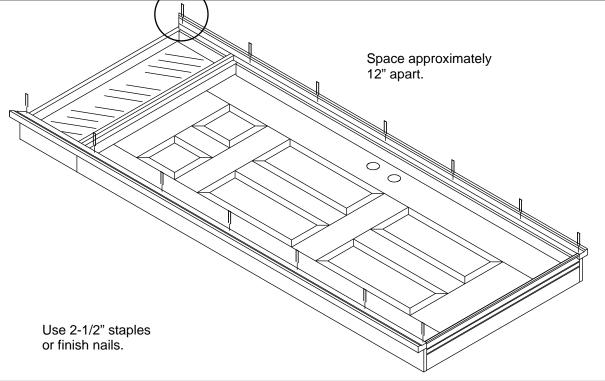
Locate and attach brickmould jamb pieces.

Fasten brickmould with 2-1/2" staples or finish nails. Starting 1/2" in from end and spaced approximately 12" apart.

Composite jambs may alternatively use the hidden fastening system.











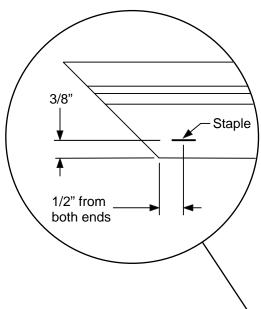
This page applies only to units with rectangular transoms.

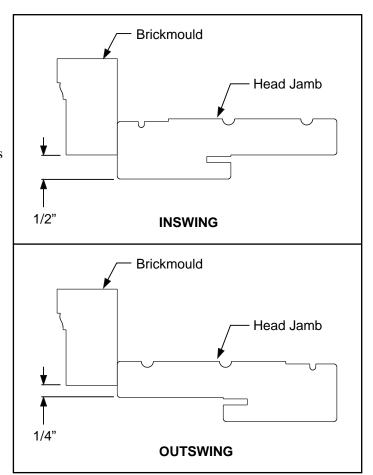
Fasten Brickmould to Frame Head

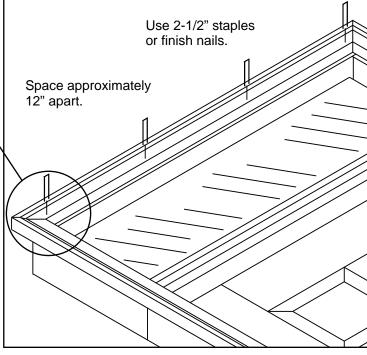
Align brickmould head at corner miters. Fasten near ends to jambs with 2-1/2" staples or finishing nails.

Composite jambs may alternatively use the hidden fastening system.

Hold proper 1/2" or 1/4" reveal and fasten to jamb across length at approximately 12" spacing



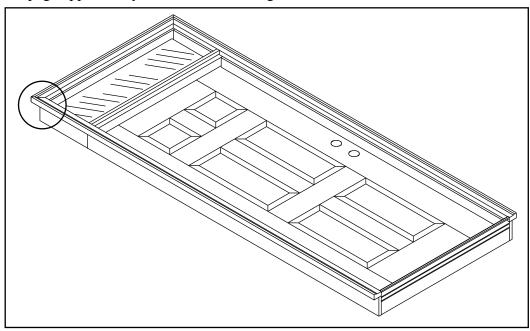








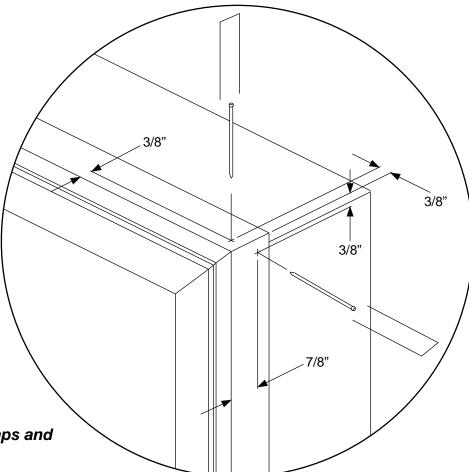
This page applies only to units with rectangular transoms.



Secure the Corners

Secure each corner with (2) 2-1/2" staples or 6d finishing nails, one applied through head piece and one applied through jamb length.

Composite jambs may alternatively use the hidden fastening system.



Caulk Remaining Gaps and Remove Excess





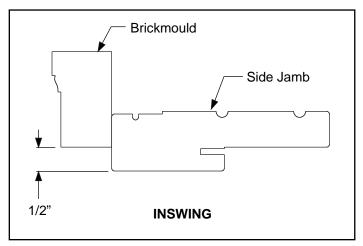
This page applies only to units with elliptical transoms.

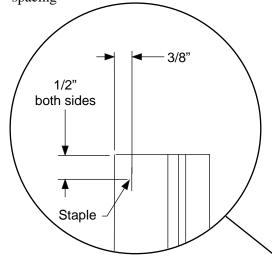
Fasten Brickmould to Frame Head

Align brickmould head at corner miters. Fasten near ends to jambs with 2-1/2" staples or finishing nails.

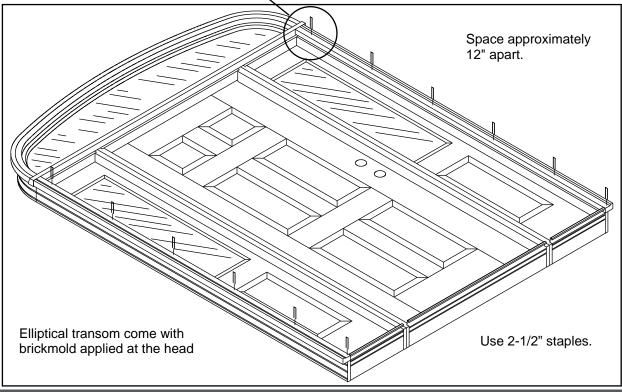
Composite jambs may alternatively use the hidden fastening system.

Hold proper 1/2" or 1/4" reveal and fasten to jamb across length at approximately 12" spacing

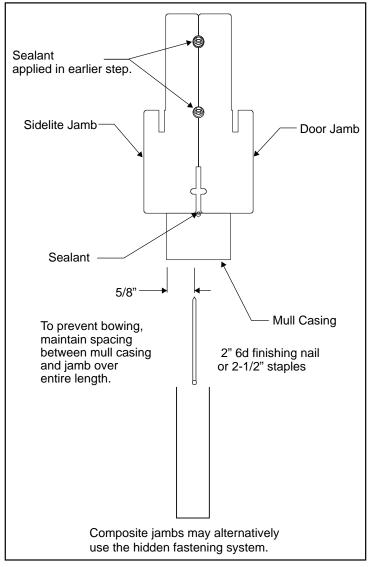








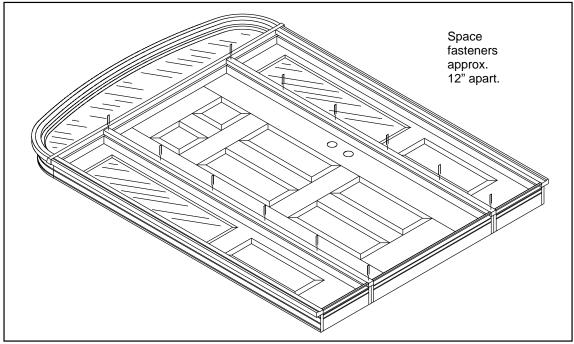




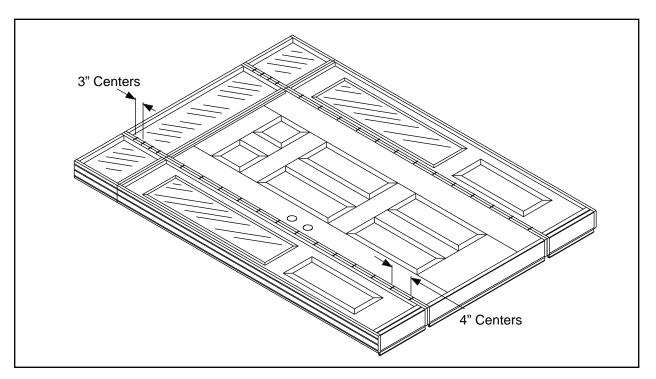
Cut Mull Casing to Proper Length

Apply Mull Casing

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) entire length between mull casing and units joint as shown.







Stitch-Fasten Jambs

Turn entire unit over.

Stitch-fasten at exterior side across joint with 1" corrugated fasteners.

Fasten door unit at 4" centers.

Fasten transom unit at 3" centers.

Fasten Transom Sill to Door/Sidelite Head

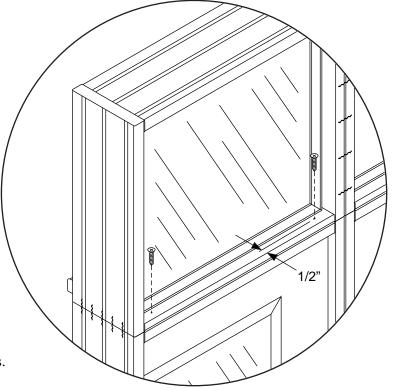
Draw head/sill joint together and clamp if required.

Screw or staple down through transom sill into door/sidelite frame heads.

Fasten along a line approximately 1/2" in from edge as shown.

Space on 6" centers.

Rectangular transoms require 1" fasteners. Elliptical transoms require 1-1/2" fasteners.

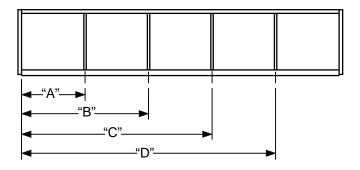


Mark Location of Grille Bars

Use table below for location of grille bars.

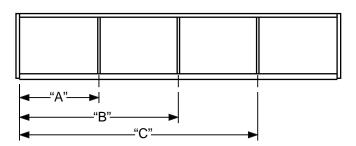
Measure from inside edge of transom jamb and place a mark on the sill approximately 3/4" from inside edge of sill.

Mark transom head in same manner.



GRILLE BAR LOCATIONS, 5-PANE TRANSOM

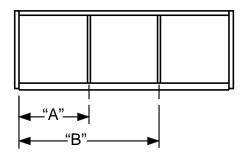
	,			
UNIT SIZE	"A"	"B"	"C"	"D"
6/0	14.719"	29.344"	43,969"	58.594"
5/8	13.906"	27.750"	41.565"	55.391"
5/4	13.109"	26.141"	39.172"	52.203"
5/0	12.313"	24.547"	36.766"	49.000"



GRILLE BAR LOCATIONS, 4-PANE TRANSOM

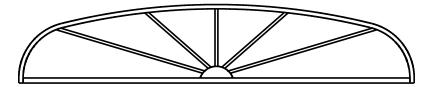
	,		
UNIT SIZE	"A"	"B"	"C"
6/0	18.375"	36.656"	54.938"
5/8	17.375"	34.656"	51.938"
5/4	16.375"	32.656"	48.938"
5/0	15.375"	30.656"	45.938"





GRILLE BAR LOCATIONS, 3-PANE TRANSOM

UNIT SIZE	"A"	"B"
3/0	12.078"	24.047"



Removable/replaceable grille is available as a special order for elliptical transoms.

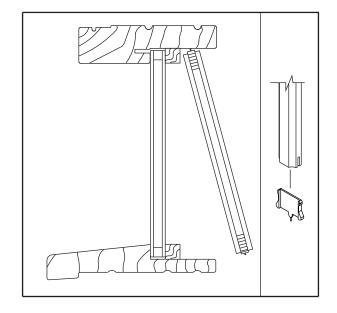
Transom Grille Installation (Optional)

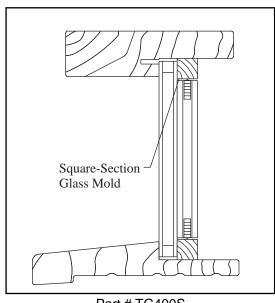
Grille Bar Installation (Rectangular Transoms)

Install Grille

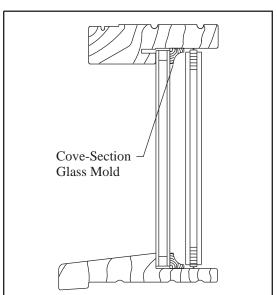
Locate each grille to align nail of each plastic slide with mark.

Using the plastic slides, press attached nail at each end of grille firmly into sill and transom head.









Part # TG400





SHOP 16 Patio System Unit Assembly

Exploded View and Part Identification	16.3
Patio Handing	16.4
Hinge Installation	16.5
Strike Installation	16.7
Spacer Shim Application	16.8
System Frame Assembly	16.9
Inactive Slab Installation	16.14
Active Slab Installation	16.23
Double and Triple Slim Screen Installation	16.28
Assembled Unit Packaging	16.30



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

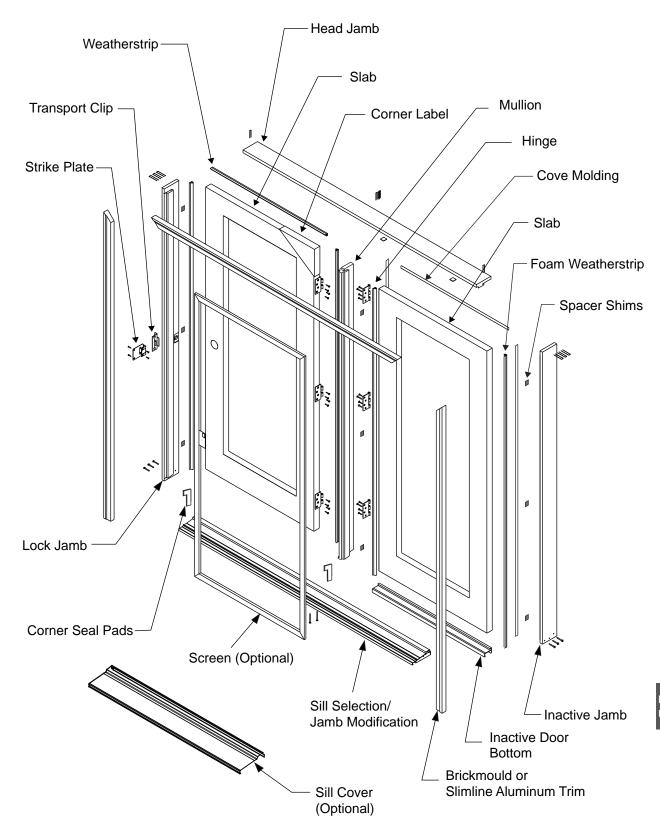
Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area. This section shows frame assemblies for patio door types:

- Replacement Height Inswing
- Full Height Inswing

Packaged frame kits, complete with accessory parts, less sills, are available from Therma-Tru for all above.

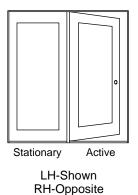


Exploded View and Part Identification



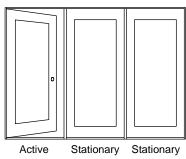


Mounting hardware, components and accessories will hand the door. Have a clear understanding of handing before proceeding. See the illustrations below for determining the handing of a door.

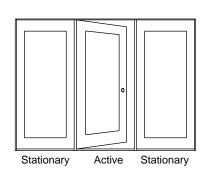




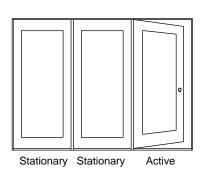
RH-Shown LH-Opposite



LH-Shown RH-Opposite



LH-Shown RH-Opposite



LH-Shown RH-Opposite

Triple Patio Units





CAUTION:

THIS PAGE APPLIES ONLY TO:



Triple Patio Units



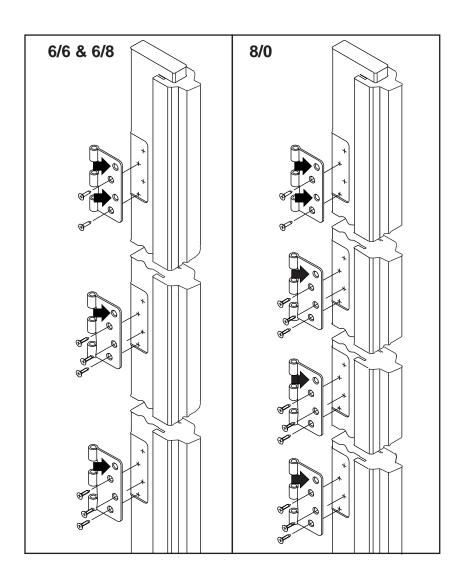
Double Patio Units Hinged at Mullion Place hinges into hinge mortise.

Seat hinge to back of machined hinge pocket.

Fasten with (2) #10 x 3/4" flat head screws and (2) #10 x 2 1/2" flat head screws in each hinge.



These are for 2 1/2" screws.







CAUTION: THIS PAGE APPLIES ONLY TO:



Double Patio Units Hinged at Jamb

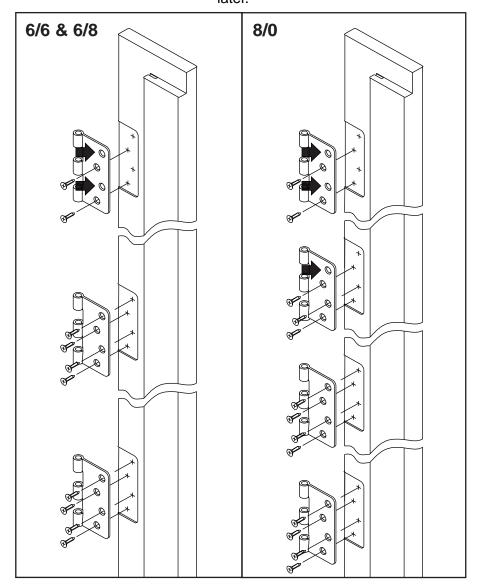
Place hinges into hinge mortise.

Seat hinge to back of machined hinge pocket.

Fasten with (2) #10 x 3/4" flat head screws in each hinge.



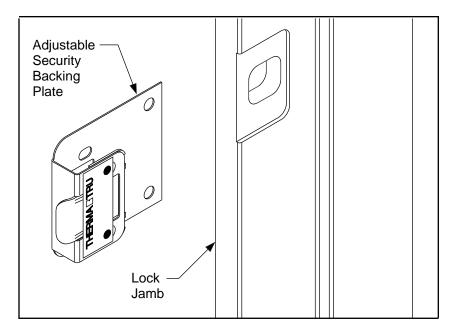
Leave holes vacant. These are for 2 1/2" screws to be installed later.



Patio System Unit Assembly

Shop 16







CAUTION: APPLIES ONLY TO:



Double Patio Units Hinged at Mullion

Slide Security Strike Assembly onto Lock Jamb

Lightly bend tongue area of security backing plate inward to allow for a snug fit.



CAUTION: APPLIES ONLY TO:



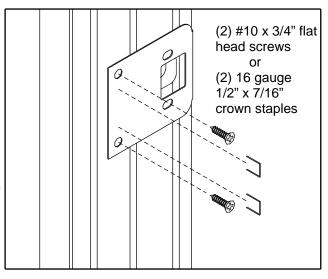
Double Patio Units Hinged at Mullion

Fasten Security Strike Assembly to Lock Jamb

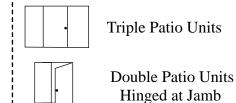
Fasten with (2) #10 x 3/4" screws or (2) 16 gauge 1/2" x 7/16" crown staples through strike plate on back side of jamb.

NOTE:

Do not staple through screw holes when using staples in place of screws.

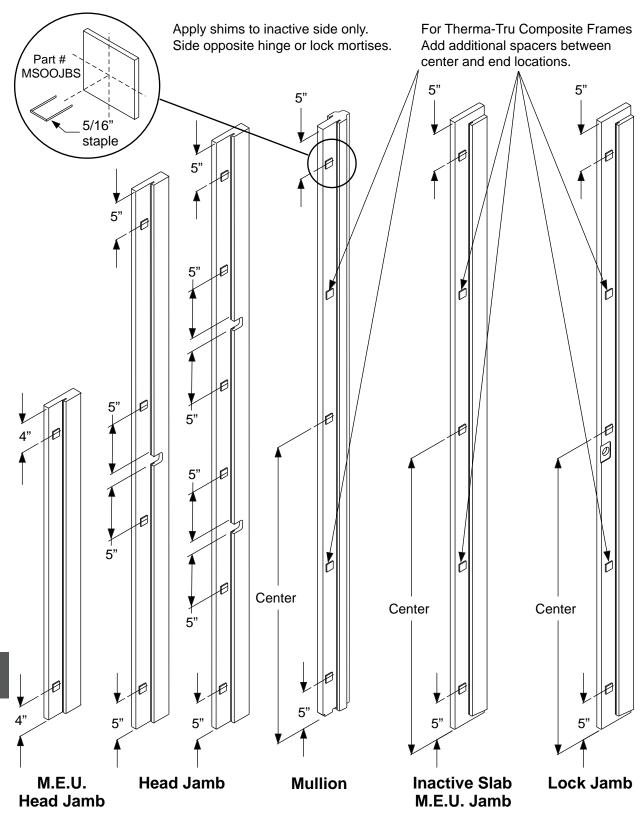


Strikes are not installed until the sidelite slab is installed.

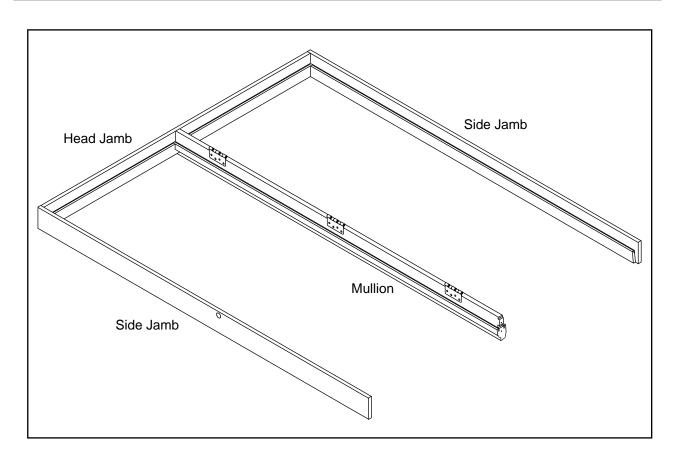




Fasten spacer shims to jamb and mullion with 5/16" galvanized staples as shown below.







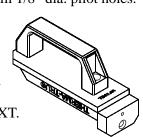
Fasten Side Jambs to Head Jamb

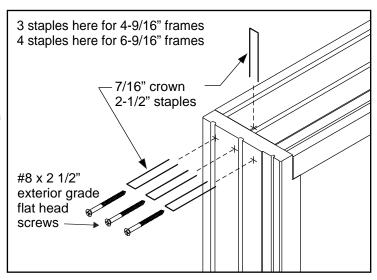
Fasten side jambs to head jamb with staples or screws through lock and hinge jamb into head jamb.

If using staples fasten 1 staple through the top of head jamb into each side jamb, be careful to keep head and side jamb rabbet stops flush.

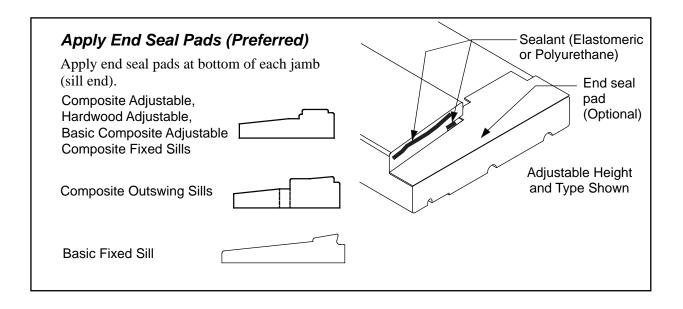
If using screws drill 1/8" dia. pilot holes.

Attach with (3) #8 x 2-1/2" exterior grade flat head screws. If doing this often use drill fixture TDSBSTRDRLFXT.



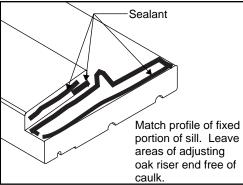




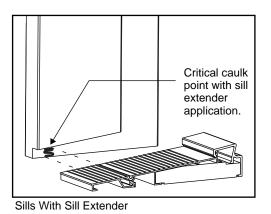


Caulk Only Assembly Method

Apply a 1/4" bead of sealant (Elastomeric or Polyurethane) to sill gain, jamb kerf and a bead that matches the profile of sill.

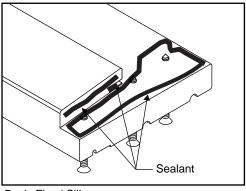




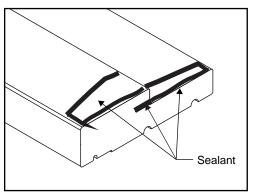


CAUTION:

If fastening with screws into sills made with composite substrates, drill 1/8" dia. pilot holes for #8 screws or 5/32" dia. pilot holes for #10 screws.



Basic Fixed Sills



Outswing Sills





CAUTION:

If fastening with screws into sills made with composite substrates, drill 1/8" dia. pilot holes for #8 screws or 5/32" dia. pilot holes for #10 screws.

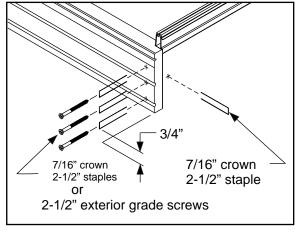
Note:

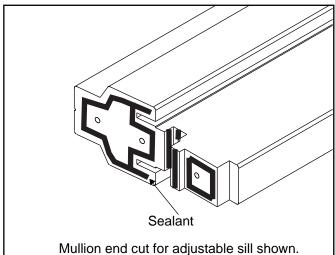
If doing this often use TDSBSTRDRLFXT drill fixture.

Fasten Sill to Side Jambs

Fasten each side jamb to sill with 2-1/2" staples or #8 2-1/2" exterior grade screw through side jamb approximately 3/4" from inside edge.

Fasten sill to each side jamb using 1 staple or screw through bottom of sill into 1-1/4" part of side jamb.



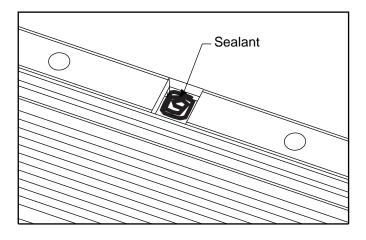


Apply Sealant to Bottom End of Mullion(s)

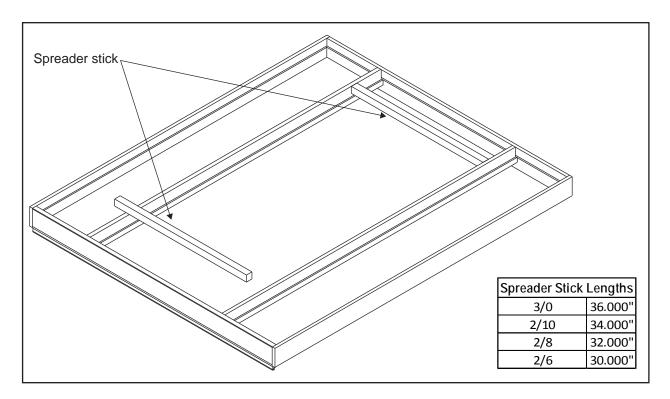
Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant around bottom of each mullion.

Apply Sealant to Sill

Apply a generous amount of (Elastomeric or Polyurethane) sealant inside cutout sections(s) of sill saddle.







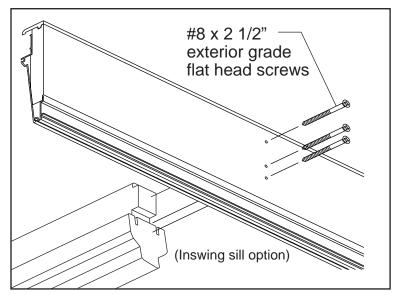
The use of spreader sticks is recommended to help square and position mullions properly.



Spreader sticks should be made from hardwood. Ends to be square and free of sharp edges.

Position spreader sticks in the active opening between the mullions or mullion/jamb, near the top and bottom.





Fasten Mullion(s) to Sill

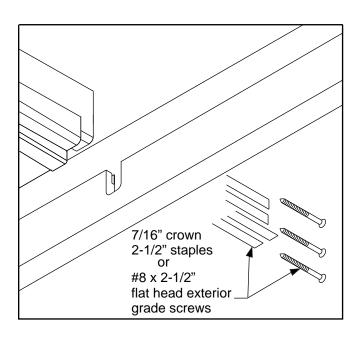
Pre-drill 1/8" dia. pilot holes into mullion thru pre-drilled holes in sill.

Attach with (3) #8 x 2 1/2" exterior grade flat head screws.

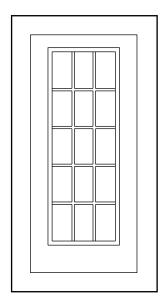
Fasten Mullion(s) to Head Jamb

Insert each mullion into head jamb mortise.

Fasten with (4) 2-1/2" staples or (3) #8 x 2-1/2" exterior grade screw through head jamb into mullion.





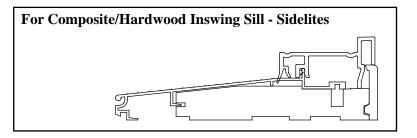


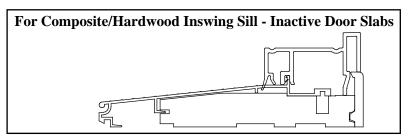
Install Doorlites and Panels

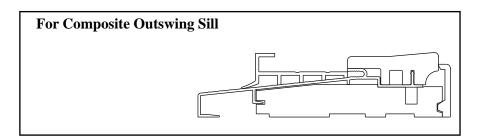
Install desired doorlites and/or panels into Inactive slab.

Select Inactive Door Bottom to Match Sill

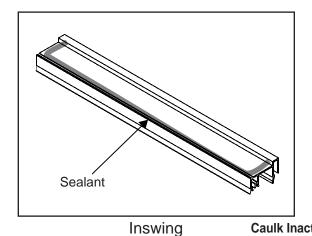
Select inactive door bottom to match head jamb.

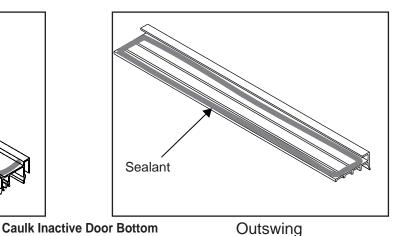






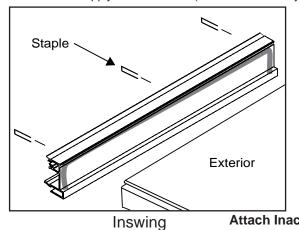


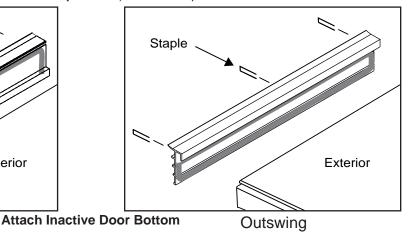




Select a (Elastomeric or Polyurethane) sealant that provides excellent adhesion to both plastic and wood.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant to top surface of inactive door bottom.

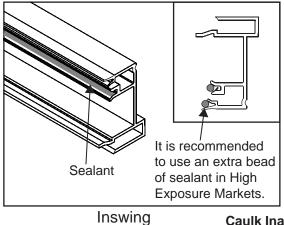


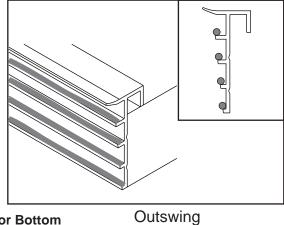


Fasten door bottom to sidelite slab with 1" staples.

Note:

For 14" and larger slabs use 5 or more fasteners.



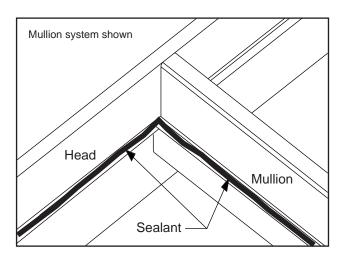


Patio System Unit Assembly

Inswing Caulk Inactive Door Bottom Outswing

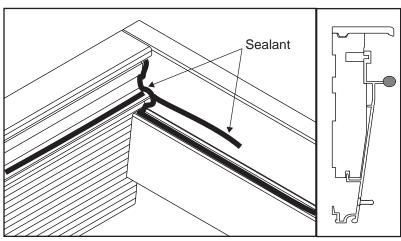
Apply (Elastomeric or Polyurthane) sealant along channel on bottom of inactive door bottom.





Seal Perimeter

Apply 1/4" bead of (Elastomeric or Polyurethane) sealant around entire perimeter on jamb and/or mullion stops.

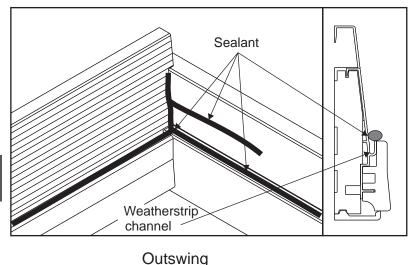


Inswing Sill

Apply a generous amount of (Elastomeric or Polyurethane) sealant at joints where sill and jamb/mullion meet.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant approximately 1" above weatherstrip kerf, 6" long.





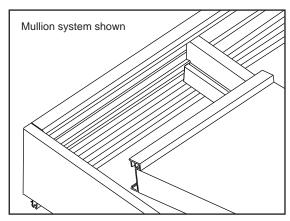
Outswing Sill

Apply a 1/4" bead of (Elastrometric or Polyurethane) sealant on saddle surface that contacts door face.

Apply a generous amount of sealant at joints where sill and jamb/mullion meet.

Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant approx. 1" above weatherstrip kerf, 6" long.

Inswing

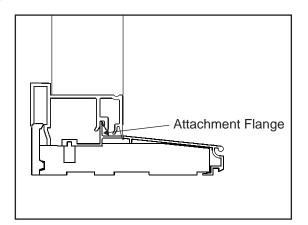


Install Sidelite Into Frame

Place sill end first, mating plastic inactive door bottom to sill, if necessary.

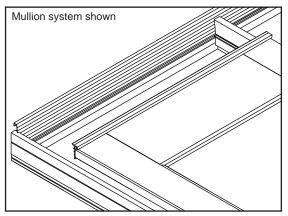
Use putty knife blade at top to aid insertion of slab in frame.

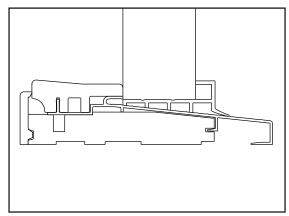
Sidelite panels are nominally 1/16" narrower than frame opening, for 1/32" clearance on each side.



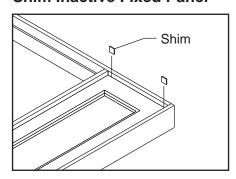
Inswing - Install inactive fixed panel by tilting bottom edge of panel so inactive door bottom aligns with sill attachment flange.

Outswing





Shim Inactive Fixed Panel



To ensure proper seal of inactive door bottom against sill, shim head of inactive fixed panel.

Locate shims near corners and slide shims between head jamb and inactive panel.

A putty knife may be required for this operation.

Careful not to damage face of panel.





CAUTION: THIS PAGE APPLIES ONLY TO:



Triple Patio Units

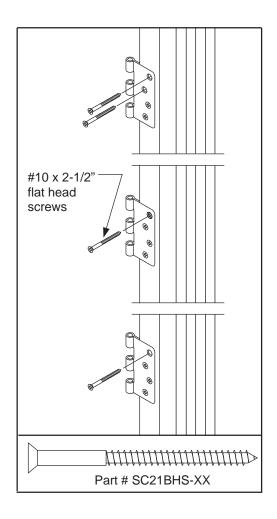


Double Patio Units Hinged at Mullion

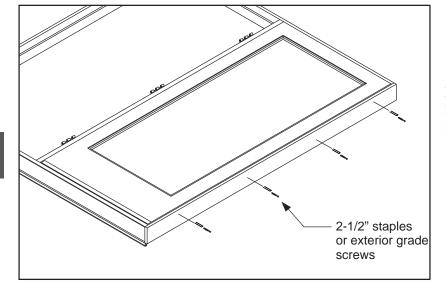
Fasten Slab Through Hinge Mullion

Drill 1/8" pilot holes through mullions at each vacant holes.

Fasten sidelite with #10 x 2-1/2" flat head screws through unused holes in hinges.





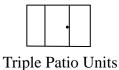


Fasten Slab Through Jamb

Fasten inactive slab with 2-1/2" staples or exterior grade screw as shown.









Mount Strike to Mullion

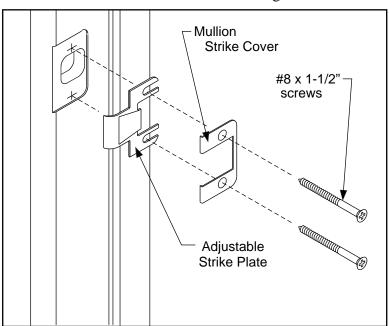
Use strike cover as template.

Drill 1/8" pilot holes, as shown through mullion.

Place security strike onto mullion.

Fasten to mullion with (2) #8 x 1-1/2" screws.

Drive screws through mullion into sidelite slab.







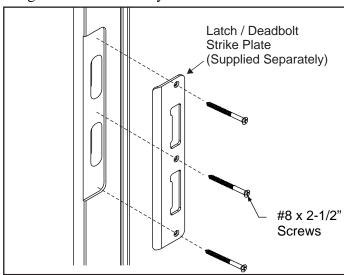
CAUTION: APPLIES ONLY TO: MULTIPOINT LOCK APPLICATIONS

Double Patio Units Hinged at Jamb

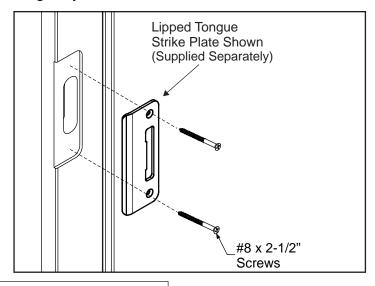
NOTE: Refer to Multipoint Lock Machining for alternate MPLS strike options.

Triple Patio Units

CENTER STRIKE installation Tongue and Shootbolt Systems



TOP & BOTTOM STRIKE installation Tongue Systems



Patio System Unit Assembly

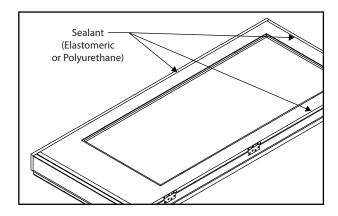
> Double Patio Units Hinged at Mullion

Use #8 x 5/8" Screws

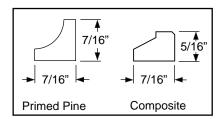


Outswing Only

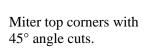
Apply a 1/4" bead of (Elastomeric or Polyurethane) sealant around perimeter of sidelite/inactive panel on the exterior side of unit.

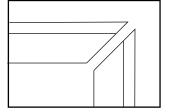


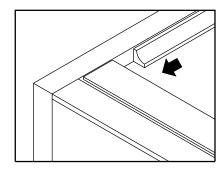
Apply Cove Molding



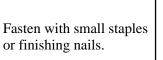
Cove Molding.

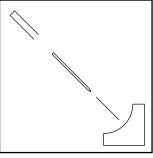


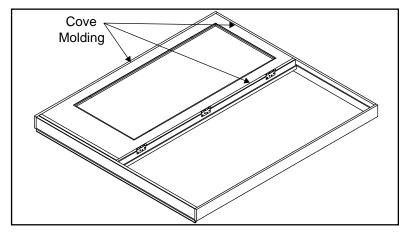




Butt-join bottom ends to plastic inactive door bottom ledge with square cuts.





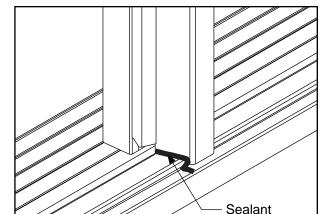




Apply Corner Seal Pad (If shop Application is Required)

Note:

Follow Corner Seal Pad Instructions included with Pads as they may vary for different sills & pads.



Seal Joint

Place a 1/4" bead of (Elastomeric or Polyurethane) sealant at corners where sill saddle meets jamb sides and mullions.

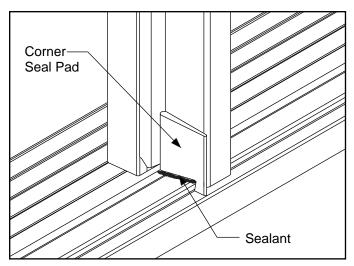
Apply Pads to Hinge Mullion and Lock Jamb



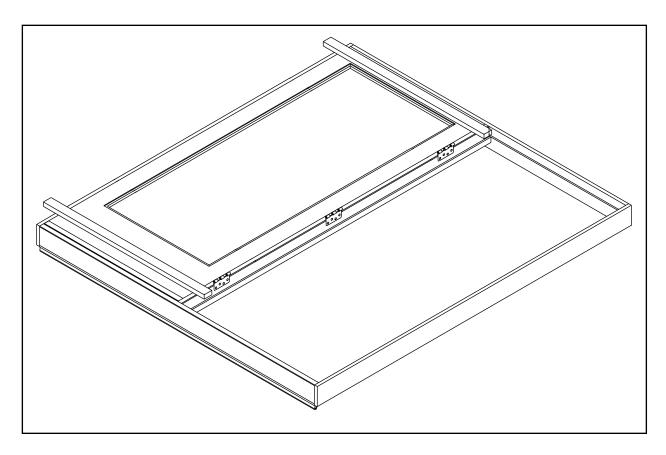
CAUTION:

For adjustable sills, do not install pads. Pads ship in bag to site with unit and are installed there.

Remove paper backing from pad and position pad tightly to threshold and flush with inside edge of mullion on active side of mullion.







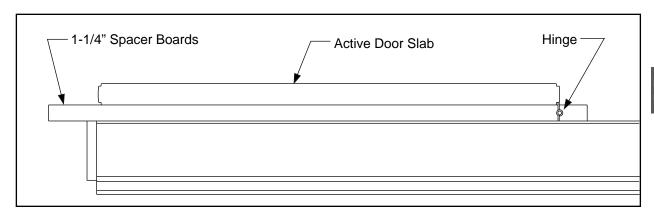
Place Door Slab into Frame

Lay frame on table with hinges on mullion pointed up as shown.

Place two 1-1/4" thick spacer boards (scrap jamb pieces) above and below glass area on inactive slab.

Place active door on top of inactive door with hinge knuckles facing downward.

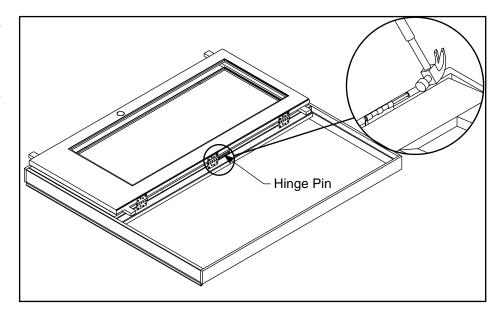
Engage hinges.





Install Hinge Pins

Tap in pins. Be certain to insert so heads are on top edges of hinges.



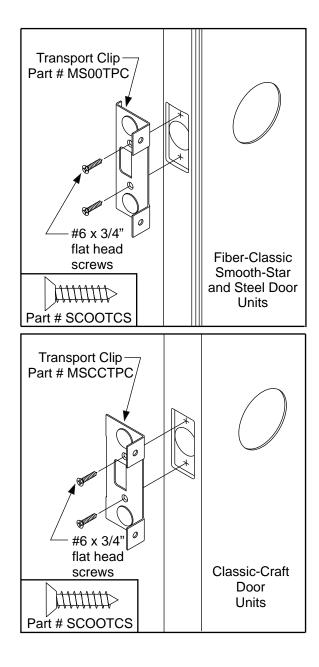


Attach Transport Clip Door

Insert tab into latch bore.

Position reference lip at edge of stile against exterior side of door.

Fasten with (2) #6 x 3/4" flat head screws.



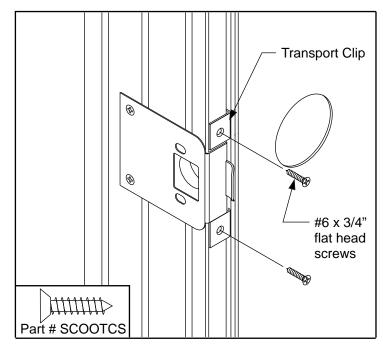




CAUTION: THIS APPLIES ONLY TO:



Double Patio Units Hinged at Mullion



Attach Transport Clip to Jamb

Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with (2) #6 x 3/4" flat head screws.



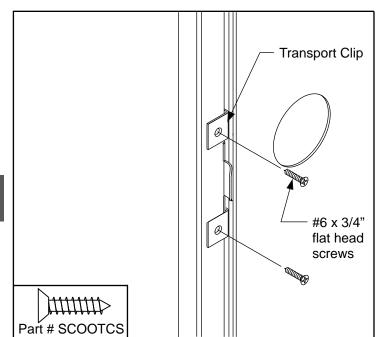
CAUTION: THIS APPLIES ONLY TO:



Triple Patio Units



Double Patio Units Hinged at Jamb



Attach Transport Clip to Mullion

Close door into frame, ensuring margins are even at head jamb.

Fasten transport clip to frame with (2) #6 x 3/4" flat head screws.





CAUTION:

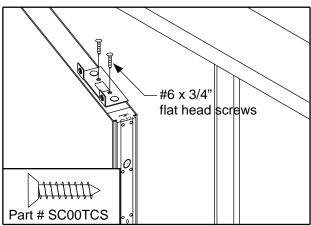
THIS APPLIES TO ALL MULTIPOINT LOCK HARDWARE APPLICATIONS:

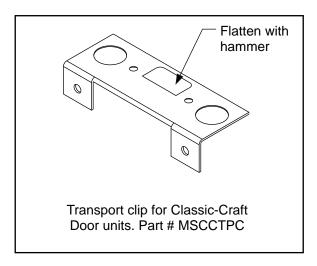
Attach Transport Clip to Door Slab

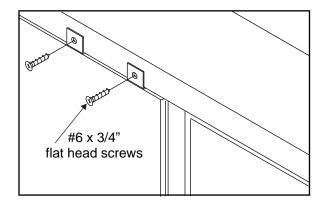
Flatten lock tabs with hammer.

Open door.

Fasten flattened transport clip to top of door with (2) #6 x 3/4" flat head screws (provided).







Attach Transport Clip to Head Jamb

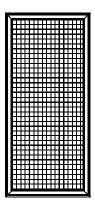
Close inactive door into frame ensuring margins are even at head jamb.

Fasten transport clip to head jamb with (2) #6 x 3/4" flat head screws.

Double and Triple Slim Screen Installation



Materials Supplied



Screen



Screen Stop Cover



Screen Stop Base



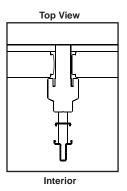
Head Screen Track



#6-20 x 3/4" Phillips Pan Head Screws

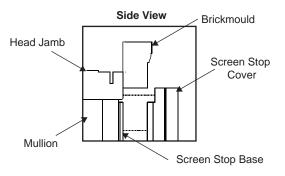
Install Screen Stop (For Triple Doors ONLY)

Assemble the screen stop base to the mullion by positioning the ridge of the stop base into the groove in the mullion, centered top to bottom.



Using a 3/32" drill bit, drill holes approximately 3/4" deep into the mullion using the pre-punched holes in the screen stop base as a guide.

Fasten screen stop base to mullion using #6-20 x 3/4" screws.



Orient screen stop cover notched side up.

Gently push the screen stop cover over the base until it snaps into place. (Make sure to position the top of the cover flush with the brickmould).

Double and Triple Slim Screen Installation

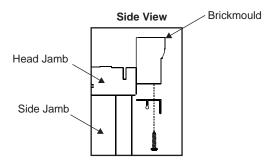
2

Install Head Screen Track

From the exterior, position the head screen track flush with the head brickmould and head jamb (as shown below).

For double doors, horizontally center the head screen track between the side jambs.

For triple doors, center between the jamb and screen stop.



Using a 3/32" drill bit, drill holes approximately 3/4" deep into the head brickmould using the pre-punched holes in the head screen track as a guide.

Fasten head screen track to head brickmould using #6-20 x 3/4" screws.

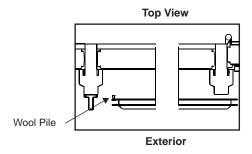
3

Install Screen

Start from the top, position the screen rollers onto the head screen track and push up to retract the rollers.

Then insert the bottom of the screen rollers onto the sill screen track.

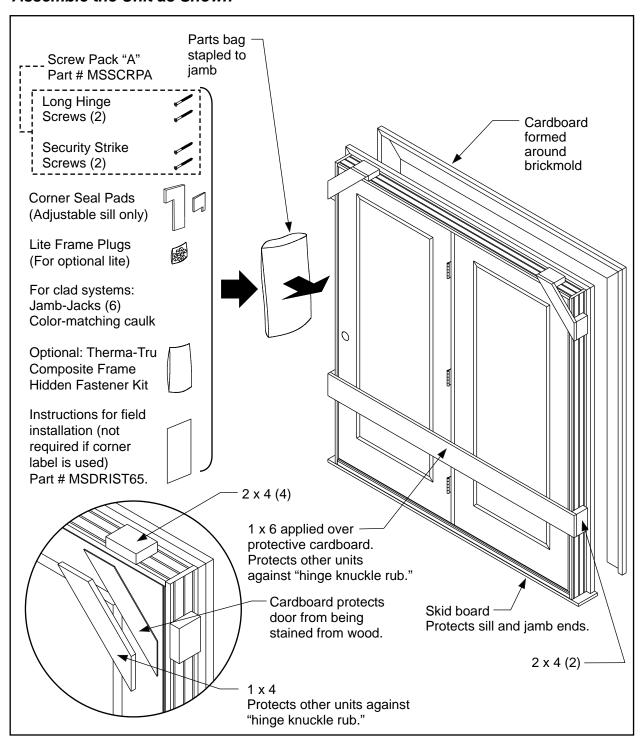
The wool pile should be on the interior side of the screen, as shown below.



Note: Head screen track and sill screen track not shown for clarity.



Assemble the Unit as Shown





SHOP 17 Coil Clad and Adjusta-Fit 2 Unit Assembly

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Screen Outer Side Jamb Cover	17.17
Screen Dado Side Cover	17.20
Screen Dado Head Cover	17.23
Head Jamb Cover	17.26
Screen Outer Head Jamb Cover	17.35
1 Piece Side Jamb Cover	17.38
1 Piece Head Jamb Cover	17.40
Side Brickmould Cover	17.42
Head Brickmould Cover	17.47
Side Flat Casing	17.54
Head Flat Casing	17.59
Mullion Cover	17.66
Spread Mullion Casing	17.70
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Adjusta-Fit 2 Assembly	17.96





Cladding Introduction

This section shows coil cladding procedures for:

- Single Doors
- French Doors
- Doors with Sidelites (1 and 2)
- Doors with Spread Mullions (1 and 2)
- Doors with Venting Sidelites
- Doors with Screens
- Transoms



Coil cladding to be bent and cut specific to each unit being produced. Dimensions and specifications given are for reference only

and should be verified prior to manufacturing.

Lengths given in table representing flat sheet lengths are intended to provide extra length. Cladding will need to be trimmed to fit unit.



Therma-Tru certified door systems and Therma-Tru door systems that require product approval typically for coastal applications

require special assembly, components and installation. Always refer to the certified system and product approval assembly and installation drawings for these applications.

Building codes vary by County and State. Always check for any specific assembly or installation requirements that may be required by Code in your area. Recommended tools for this procedure are:

- Straight Edge (T-Square)
- Tape Measure
- Tin Snips
- 3" Crimp Clamp
- Speed Square
- Utility Knife
- Marking Tool
- Sand Paper
- Steel Ruler
- Rubber Mallet
- Press Brake
- Break Buddy
- Shear

The recommended coil thickness is 0.019".

Always be sure to make crisp bends to achieve optimal fit.



Recommended PPE for this process includes:

- Kevlar Gloves
- Safety Glasses
- Steel Toe Shoes

BOM and Order of Operations - Single or French Doors



Single or French Doors

BILL OF MATERIALS - SINGLE OR FRENCH DOORS		
QUANTITY	ITEM	ADDITIONAL INFORMATION
2	1 PIECE SIDE JAMB COVER	VARIABLE BASED OFF WALL DEPTH
1	1 PIECE HEAD JAMB COVER	VARIABLE BASED OFF WALL DEFIN
	SIDE BRICKMOULD COVER	
2	OR	
	SIDE FLAT CASING	SET TRIM PROFILE
	HEAD BRICKMOULD COVER	SET TRIM FROMEE
1	OR	
	HEAD FLAT CASING	

ORDER OF OPERATIONS - SINGLE OR FRENCH DOORS			
	REFER TO: ASSEMBLY - 1 PIECE JAMB COVER		
1	INSTALL SIDE BRICKMOULD COVER (X2)		
2	INSTALL HEAD BRICKMOULD COVER		
3	INSTALL SIDE JAMB COVERS OR SIDE FLAT CASING (X2)		
4	INSTALL HEAD JAMB COVER OR HEAD FLAT CASING		



BOM and Order of Operations - Door with 1 Mullion

Door with 1 Mullion

BILL OF MATERIALS - DOOR WITH 1 MULLION		
QUANTITY	ITEM	ADDITIONAL INFORMATION
4	UTILITY (SIDE)	
1	UTILITY (SIDELITE HEAD)	
1	UTILITY (DOOR HEAD)	
4	SIDE JAMB COVER	VARIABLE BASED OFF WALL DEPTH
1	HEAD JAMB COVER	VARIABLE BASED OFF WALL DEFIN
		VARIABLE BASED OFF MULLION
1	MULLION COVER	DEPTH AND STANDARD VS. WIDE
		MULLION
	SIDE BRICKMOULD COVER	
2	OR	
	SIDE FLAT CASING	SET TRIM PROFILE
	HEAD BRICKMOULD COVER	SET TRIM PROFILE
1	OR	
	HEAD FLAT CASING	

ORDER OF OPERATIONS -			
DOOR WITH 1 MULLION			
	REFER TO: ASSEMBLY - 2 PIECE JAMB COVER		
1	INSTALL UTILITY (X6)		
2	INSTALL MULLION COVER		
3	INSTALL SIDE BRICKMOULD COVER (X2)		
4	INSTALL HEAD BRICKMOULD COVER		
5	INSTALL SIDE JAMB COVERS OR SIDE FLAT CASING (X4)		
6	INSTALL HEAD JAMB COVER OR HEAD FLAT CASING		

BOM and Order of Operations - Door with 2 Mullions



Door with 2 Mullions

	BILL OF MATERIALS - DOOR	WITH 2 MULLIONS
QUANTITY	ITEM	ADDITIONAL INFORMATION
6	UTILITY (SIDE)	
2	UTILITY (SIDELITE HEAD)	
1	UTILITY (DOOR HEAD)	
2	SIDE JAMB COVER	VARIABLE BASED OFF WALL DEPTH
1	HEAD JAMB COVER	VARIABLE BASED OF WALL DEFITE
		VARIABLE BASED OFF MULLION
2	MULLION COVER	DEPTH AND STANDARD VS. WIDE
		MULLION
	SIDE BRICKMOULD COVER	
2	OR	
	SIDE FLAT CASING	SET TRIM PROFILE
	HEAD BRICKMOULD COVER	SET TRIM FROTILE
1	OR	
	HEAD FLAT CASING	

ORDER OF OPERATIONS -		
DOOR WITH 2 MULLIONS		
	REFER TO: ASSEMBLY - 2 PIECE JAMB COVER	
1	INSTALL UTILITY (X9)	
2	INSTALL MULLION COVER (X2)	
3	INSTALL SIDE BRICKMOULD COVER (X2)	
4	INSTALL HEAD BRICKMOULD COVER	
5	INSTALL SIDE JAMB COVERS OR SIDE FLAT CASING (X2)	
6	INSTALL HEAD JAMB COVER OR HEAD FLAT CASING	

BOM and Order of Operations - Door with 1 Sidelite - Spread Mullion

Door with 1 Sidelite - Spread Mullion

BILL OF MATERIALS - DOOR WITH 1 SIDELITE - SPREAD MULLION		
QUANTITY	ITEM	ADDITIONAL INFORMATION
4	UTILITY (SIDE)	
1	UTILITY (SIDELITE HEAD)	
1	UTILITY (DOOR HEAD)	
4	SIDE JAMB COVER	
1	HEAD JAMB COVER (SIDELITE)	VARIABLE BASED OFF WALL DEPTH
1	HEAD JAMB COVER (DOOR)	
1	SPREAD MULLION CASING	VARIABLE BASED OFF SPREAD
	SIDE BRICKMOULD COVER	
2	OR	
	SIDE FLAT CASING	SET TRIM PROFILE
	HEAD BRICKMOULD COVER	SET TRIM PROFILE
1	OR	
	HEAD FLAT CASING	

ORDER OF OPERATIONS -			
DOOR WITH 1 SIDELITE - SPREAD MULLION			
	REFER TO: ASSEMBLY - 2 PIECE JAMB COVER		
1	INSTALL UTILITY (X6)		
2	INSTALL SPREAD MULLION CASING		
3	INSTALL SIDE BRICKMOULD COVER (X2)		
4	INSTALL HEAD BRICKMOULD COVER		
5	INSTALL SIDE JAMB COVERS OR SIDE FLAT CASING (X4)		
6	INSTALL HEAD JAMB COVER OR HEAD FLAT CASING		

BOM and Order of Operations -Door with 2 Sidelites - Spread Mullion



Door with 2 Sidelites - Spread Mullion

BILL (DELITES - SPREAD MULLION	
QUANTITY	ITEM	ADDITIONAL INFORMATION
6	UTILITY (SIDE)	
2	UTILITY (SIDELITE HEAD)	
1	UTILITY (DOOR HEAD)	
6	SIDE JAMB COVER	
2	HEAD JAMB COVER (SIDELITE)	VARIABLE BASED OFF WALL DEPTH
1	HEAD JAMB COVER (DOOR)	
2	SPREAD MULLION CASING	VARIABLE BASED OFF SPREAD
	SIDE BRICKMOULD COVER	
2	OR	
	SIDE FLAT CASING	SET TRIM PROFILE
	HEAD BRICKMOULD COVER	SEI IKIM FROFILE
1	OR	
	HEAD FLAT CASING	

ORDER OF OPERATIONS -			
DOOR WITH 2 SIDELITES - SPREAD MULLION			
	REFER TO: ASSEMBLY - 2 PIECE JAMB COVER		
1	INSTALL UTILITY (X9)		
2	INSTALL SPREAD MULLION CASING (X2)		
3	INSTALL SIDE BRICKMOULD COVER (X2)		
4	INSTALL HEAD BRICKMOULD COVER		
5	INSTALL SIDE JAMB COVERS OR SIDE FLAT CASING (X6)		
6	INSTALL HEAD JAMB COVER OR HEAD FLAT CASING (X3)		



BOM and Order of Operations - Door with 2 Venting Sidelites

Door with 2 Venting Sidelites

BILL OF MATERIALS - DOOR WITH 2 VENTING SIDELITES		
QUANTITY	ITEM	ADDITIONAL INFORMATION
4	UTILITY (SIDE)	
2	SIDE JAMB COVER	VARIABLE BASED OFF WALL DEPTH
1	HEAD JAMB COVER	VARIABLE BASED OFF WALL DEFIN
2	MULLION COVER	
2	SIDE BRICKMOULD COVER	SET TRIM PROFILE
1	HEAD BRICKMOULD COVER	SEI IKIM FROFILE

ORDER OF OPERATIONS -			
DOOR WITH 2 SIDELITES - SPREAD MULLION			
REFER TO: ASSEMBLY - MULLION SECTION CLADDING			
1	INSTALL UTILITY (X4)		
2	INSTALL MULLION COVER (X2)		
3	INSTALL SIDE BRICKMOULD COVER (X2)		
4	INSTALL HEAD BRICKMOULD COVER		
5	INSTALL SIDE JAMB COVERS (X2)		
6	INSTALL HEAD JAMB COVER (X3)		

BOM and Order of Operations - Transom



Transom

BILL OF MATERIALS - TRANSOM			
QUANTITY	ITEM	ADDITIONAL INFORMATION	
1	TRANSOM HEAD COVER		
1	TRANSOM SILL COVER		
1	SIDE BRICKMOULD COVER (TRANSOM)		
1	HEAD BRICKMOULD COVER (TRANSOM)		

ORDER OF OPERATIONS -		
TRANSOM		
REFER TO: ASSEMBLY - CORNER CLADDING -		
2 PIECE JAMB COVER		
1	INSTALL TRANSOM HEAD COVER	
2	INSTALL TRANSOM SILL COVER	
3	INSTALL SIDE BRICKMOULD COVER	
4	INSTALL HEAD BRICKMOULD COVER	



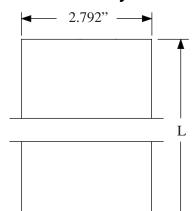
BOM and Order of Operations - Doors with Screens

Doors with Screens

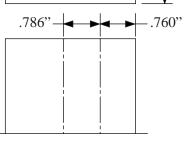
BILL OF MATERIALS - DOORS WITH SCREENS (6-9/16" JAMBS)			
QUANTITY	ITEM	ADDITIONAL INFORMATION	
2	UTILITY (SIDE)		
2 FOR OX	UTILITY (MULLION)		
4 FOR OXO	OTILITY (MOLLION)		
2 FOR OX	UTILITY (HEAD)		
3 FOR OXO	OTETT (HEAD)		
1 FOR OX	MULLION COVER		
2 FOR OXO	WEELON COVER		
2	SIDE JAMB COVER	VARIABLE BASED OFF WALL DEPTH	
1	HEAD JAMB COVER	VARIABLE BASED OIT WALL DEI III	
2	SCREEN DADO COVER (SIDE)		
1	SCREEN DADO COVER (HEAD)		
2	SIDE BRICKMOULD COVER	SET TRIM PROFILE	
1	HEAD BRICKMOULD COVER	SET TRIM PROFILE	
2	SCREEN OUTER SIDE JAMB COVER		
1	SCREEN OUTER HEAD JAMB COVER		

	ORDER OF OPERATIONS -		
	REFER TO: ASSEMBLY - 3 PIECE JAMB COVER		
1	INSTALL UTILITY (X6 OR X9)		
2	INSTALL MULLION COVER (X1 OR X2)		
3	INSTALL SIDE BRICKMOULD COVER (X2)		
4	INSTALL SCREEN DADO SIDE COVER (X2)		
5	INSTALL SCREEN OUTER SIDE JAMB COVER (X2)		
6	INSTALL SIDE JAMB COVER (X2)		
7	INSTALL HEAD BRICKMOULD COVER		
8	INSTALL SCREEN DADO HEAD COVER		
9	INSTALL SCREEN OUTER HEAD JAMB COVER		
10	INSTALL HEAD JAMB COVER		

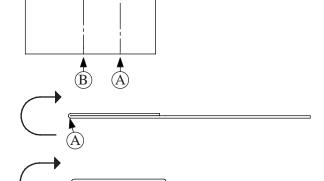
Bend the Utility



1. Shear coil to desired work piece length and width



2. Mark bend locations on unfinished side of work piece.



- 3. With finished side down, bend hem A in work piece to 180° .
- 4. With finished side down, bend hem B in work piece to 180° .
- 5. Cut end to match sill approach and cut to length.



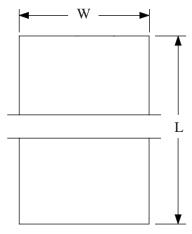
Utility Bend Lengths

UTILITY HEAI			D BEND LE	NGTHS		
		LENGTH L				
UNIT SIZE		MULLION	DOOR	SIDELITE	TRANSOM	
		10" SL			9.000	
		12" SL			11.000]
	S	14" SL			13.000]
	SIDELITES	12" VENT SL	N/A	N/A	11.177	N/A
		14" VENT SL			13.177	
		2/0		23.000		23.000
		2/4		27.000		27.000
	円	2/6		29.000		29.000
	SINGLE	2/8	N/A	31.000		31.000
	SI	2/10		33.000		33.000
Ö		3/0		35.000		35.000
ΙĘ		3/6		41.000		41.000
INSWING		4/0		47.718		
	ΗĽ	4/8		55.718		
	FRENCH 7/8" AST	5/0	N/A	59.718	N/A	N/A
	RE 8"	5/4	IV/A	63.718	IN/A	IN/A
	H 7	5/8		67.718		1
		6/0		71.718		
		4/8		27.000		56.000
		5/0		29.000		60.000
		5/4	STANDARD	31.000		64.000
	坷	5/8		33.000		68.000
	BI.	6/0		35.000	N/A	72.000
	DOUBLE	4/8		27.000	1N/PA	56.500
		5/0		29.000		60.500
		5/4	WIDE	31.000		64.500
		5/8		33.000		68.500
L		6/0		35.000		72.500

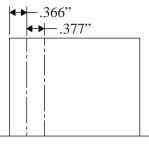
UT.	UTILITY SIDE BEND LENGTHS	
	UNIT SIZE	LENGTH L
	14" TRANSOM	11.5
Ŋ	6/6 U1	77.5
NI.	6/8 U1	80
NSWING	7/10 U1	94
Π	8/0 U1	96

UTILITY HEAD E				D BEND LE	NGTHS	
			LENGTH L			
		UNIT SIZE	MULLION	DOOR	SIDELITE	TRANSOM
		2/4 - 10"		27.000	9.000	49.000
		2/4 - 12"		27.000	11.000	53.000
		2/4 - 14"		27.000	13.000	57.000
		2/6 - 10"		29.000	9.000	41.000
		2/6 - 12"		29.000	11.000	55.000
		2/6 - 14"		29.000	13.000	59.000
		2/8 - 10"		31.000	9.000	53.000
			STANDARD	31.000	11.000	57.000
		2/8 - 14"		31.000	13.000	61.000
	S	2/10 - 10"		33.000	9.000	55.000
	TE	2/10 - 12"		33.000	11.000	59.000
	ELI	2/10 - 14"		33.000	13.000	63.000
		3/0 - 10"		35.000	9.000	57.000
	S C	3/0 - 12"		35.000	11.000	61.000
		3/0 - 14"		35.000	13.000	65.000
	문	2/4 - 10"		27.000	9.000	50.000
	V/2	2/4 - 12"		27.000	11.000	54.000
	Ξ	2/4 - 14"		27.000	13.000	58.000
Ö	T5	2/6 - 10"		29.000	9.000	52.000
Ϋ́		2/6 - 12"		29.000	11.000	56.000
INSWING	01	2/6 - 14"		29.000	13.000	60.000
4		2/8 - 10"		31.000	9.000	54.000
		2/8 - 12"	WIDE	31.000	11.000	58.000
		2/8 - 14"		31.000	13.000	62.000
		2/10 - 10"		33.000	9.000	56.000
		2/10 - 12"		33.000	11.000	60.000
		2/10 - 14"		33.000	13.000	64.000
		3/0 - 10"		35.000	9.000	58.000
		3/0 - 12"	[35.000	11.000	62.000
		3/0 - 14"		35.000	13.000	66.000
		2/4 - 12"		27.000	11.177	54.408
	NG	2/4 - 14"		27.000	13.177	58.408
	E	2/6 - 12"		29.000	11.177	56.408
	ES	2/6 - 14"		29.000	13.177	60.408
	SINGLE W/2 VENTING SIDELITES	2/8 - 12"	WIDE	31.000	11.177	58.408
	W/	2/8 - 14"	WIDE	31.000	13.177	62.408
	SII	2/10 - 12"		33.000	11.177	60.408
	NG	2/10 - 14"	[33.000	13.177	64.408
	SII	3/0 - 12"		35.000	11.177	62.408
		3/0 - 14"		35.000	13.177	66.408

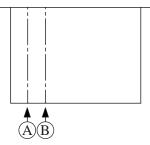
Bend the Side Jamb Cover



1. Shear coil to desired work piece length and width.

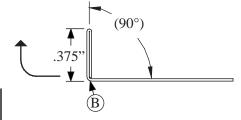


2. Mark bend locations on unfinished side of work piece.





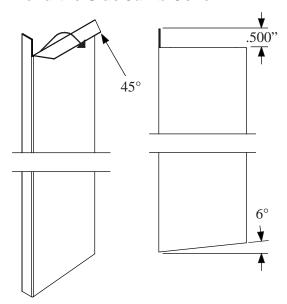
3. With finished side down, bend hem A in work piece to 180° .



4. Rotate. With finished side down, bend B in work piece to 90° .



Bend the Side Jamb Cover



- 5. Slit top end. Bend tab down 90° by hand.
- 6. Cut 45° angles on corners of tab as shown.
- 7. Cut end to match sill approach and cut to length.



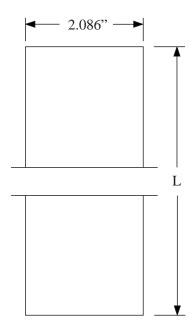
Side Jamb Cover Length and Width

SIDE JAMB COVER WIDTH		
FOR STANDARD UNITS		
JAMB DEPTH WIDTH "W"		
4-9/16	3.059	
5-1/4	3.746	
6-9/16	5.059	

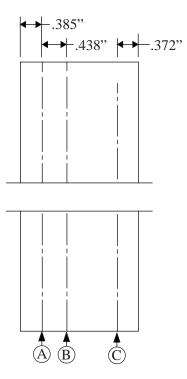
SIDE JAMB COVER WIDTH		
FOR VENTING UNITS		
JAMB DEPTH WIDTH "W"		
4-9/16	2.159	
5-1/4	2.846	
6-9/16	4.159	

	SIDE JAMB COVER LENGTH				
	UNIT SIZE	LENGTH "L"			
	UNII SIZE	4-9/16"	5-1/4"	6-9/16"	
	14" TRANSOM	12.500	12.500	12.500	
Ð	6/6 U1	78.000	78.000	78.500	
ΙŽ	6/8 U1	80.500	80.500	80.500	
NSWIN	7/0 U1	84.500	84.500	84.500	
4	8/0 U1	96.500	96.500	96.500	

Bend the Outer Side Jamb Cover for Units with Sliding Screens



1. Shear coil to desired work piece length and width.

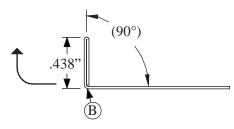


2. Mark bend locations on unfinished side of work piece.

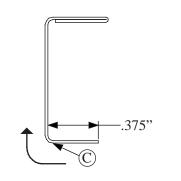


Bend the Outer Side Jamb Cover for Units with Sliding Screens

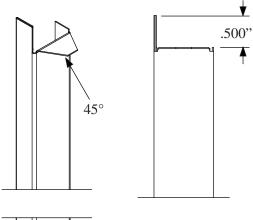




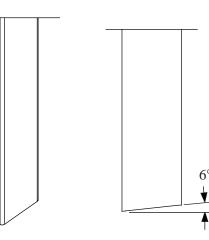
- 3. With finished side down, bend hem A in work piece to 180° .
- 4. Rotate. With finished side down, bend B in work piece to 90°.



5. With finished side down, bend C up 90°.



- 6. Slit top end. Bend tab down 90° by hand.
- 7. Cut 45° angles on corners of tab as shown.
- 8. Cut end to match sill approach and cut to length.

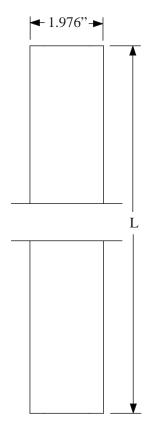




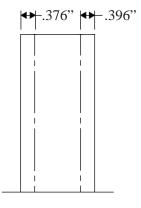
Bend the Outer Side Jamb Cover for Units with Sliding Screens

	OUTER SIDE JAMB			
(COVER FOR SLIDING			
	SCREENS LEN	IGTH		
	UNIT SIZE	LENGTH		
	UNII SIZE	4-9/16"		
	14" TRANSOM 12			
Ð	6/6 U1	78.000		
N.	6/8 U1	80.500		
INSWING	7/0 U1	84.500		
	8/0 U1	96.500		

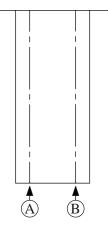
Bend the Screen Dado Side Cover for Units with Sliding Screens



1. Shear coil to desired work piece length and width.

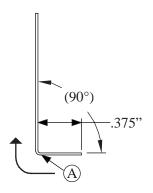


2. Mark bend locations on unfinished side of work piece.

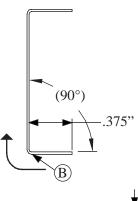




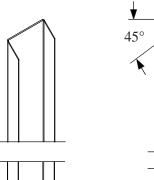
Bend the Screen Dado Side Cover for Units with Sliding Screens



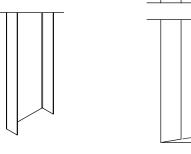
3. With finished side up, bend A 90° .



4. With finished side up, bend B 90°.



5. Cut 45° on top edge.



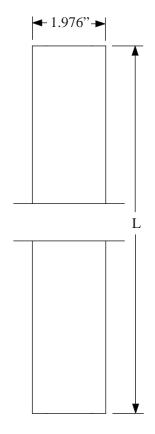
6. Cut end to match sill approach and cut to length.



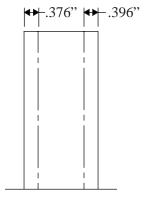
Bend the Screen Dado Side Cover for Units with Sliding Screens

SC	SCREEN DADO SIDE COVER		
	FOR SLIDING SCREENS		
	LENGTH		
	UNIT SIZE	LENGTH "L"	
IG	6/6 U1	77.500	
INSWING	6/8 U1	80.000	
ΛS	7/0 U1	84.000	
4I	8/0 U1	96.000	

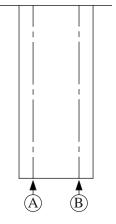
Bend the Screen Dado Head Cover for Units with Sliding Screens



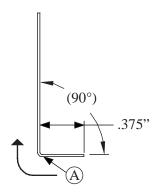
1. Shear coil to desired work piece length and width.



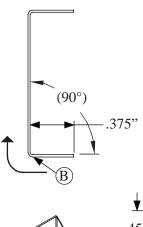
2. Mark bend locations on unfinished side of work piece.



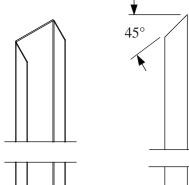
Bend the Screen Dado Head Cover for Units with Sliding Screens



3. With finished side up, bend A 90°.



4. With finished side up, bend B 90°.



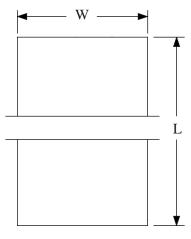
5. Cut 45° on both ends.



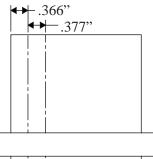
Bend the Screen Dado Head Cover for Units with Sliding Screens

SCI	SCREEN DADO HEAD COVER FOR SLIDING SCREENS LENGTH			
		UNIT SIZE	MULLION	LENGTH "L"
		4/8		57.000
		5/0		61.000
		5/4	STANDARD	65.000
	Щ	5/8		69.000
	DOUBLE	6/0		73.000
	o	4/8		57.500
	Ω	5/0		61.500
		5/4	WIDE	65.500
ū		5/8		69.500
ΙŽ		6/0		73.500
INSWING		7/0		86.000
4		7/6		92.000
		8/0	STANDARD	98.000
	ודו	8/6		104.000
	F	9/0		110.000
	HRIPLE 2/	7/0		87.000
		7/6		93.000
		8/0	WIDE	99.000
		8/6		105.000
		9/0		111.000

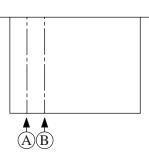
Bend the Head Jamb Cover



1. Shear coil to desired work piece length and width.

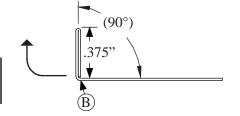


2. Mark bend locations on unfinished side of work piece.





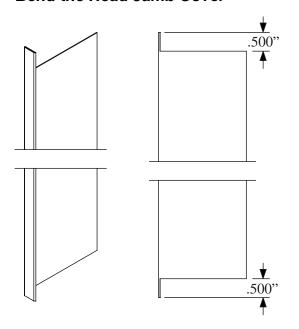
3. With finished side down, bend hem A in work piece to 180° .



4. Rotate. With finished side down, bend B in work piece to 90° .



Bend the Head Jamb Cover



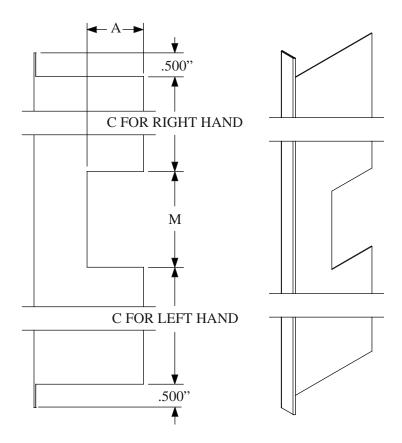
5. Notch both ends.

HEAD JAMB COVER WIDTH		
JAMB DEPTH		
4-9/16	3.059	
5-1/4	3.746	
6-9/16	5.059	

	HEAD JAMB COVER LENGTH						
				LENGTH "L"			
		UNIT SIZE	MULLION	DOOR	SIDELITE	TRANSOM	
	LES	10" SL			10.000		
	SIDELITES	12" SL	N/A	N/A	12.000	N/A	
	SID	14" SL			14.000		
	SINGLE	2/0	N/A	24.000	N/A	24.000	
		2/4		28.000		28.000	
75		2/6		30.000		30.000	
Ιž		2/8		32.000		32.000	
INSWING		2/10		34.000		34.000	
Z		3/0		36.000		36.000	
		3/6		42.000		42.000	
		4/0		48.718			
	Ξ	4/8		56.718			
	FRENCH	5/0	N/A	60.718	N/A	N/A	
		5/4	N/A	64.718	IN/A	IN/A	
	E.	5/8		68.718			
L		6/0		72.718			



Head Jamb Cover - Head Mullion Notch Details - Single w/ 1 Sidelite and Double





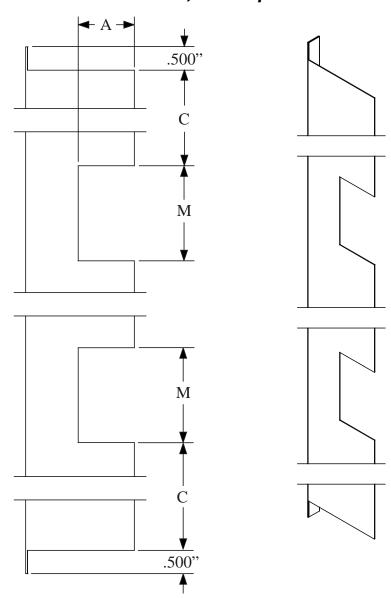
Head Jamb Cover - Head Mullion Notch Details - Single w/ 1 Sidelite and Double

	MULLION TYPE	"A"	"M"
STD.	ENTRY	1.359	2.000
SID.	PATIO	2.165	2.000
WIDE	ENTRY	1.359	2.500
WIDE	PATIO	2.165	2.300

	HEAD MULLION NOTCH DETAILS -					
	SINGLE W/ 1 SIDELITE AND DOUBLE					
				IDELITE		
		UNIT SIZE	MULLION	LENGTH L		
		4/8		57.000	27.000	
		5/0		61.000	29.000	
		5/4	STANDARD	65.000	31.000	
	当	5/8		69.000	33.000	
	DOUBLE	6/0		73.000	35.000	
	Ιğ	4/8		57.500	27.000	
		5/0		61.500	29.000	
		5/4	WIDE	65.500	31.000	
		5/8		69.500	33.000	
		6/0		73.500	35.000	
		2/4 - 10"		39.000	9.000	
		2/4 - 12"		41.000	11.000	
		2/4 - 14"		43.000	13.000	
		2/6 - 10"	STANDARD	41.000	9.000	
		2/6 - 12"		43.000	11.000	
	TE	2/6 - 14"		45.000	13.000	
		2/8 - 10"		43.000	9.000	
		2/8 - 12"		45.000	11.000	
Ō		2/8 - 14"		47.000	13.000	
		2/10 - 10"		45.000	9.000	
INSWING		2/10 - 12"		47.000	11.000	
		2/10 - 14"		49.000	13.000	
	Ë	3/0 - 10"		47.000	9.000	
	SINGLE W/1 SIDELITE	3/0 - 12"		49.000	11.000	
		3/0 - 14"		51.000	13.000	
	≩	2/4 - 10"		39.500	9.000	
	NGLE	2/4 - 12"		41.500	11.000	
		2/4 - 14"		43.500	13.000	
	SI	2/6 - 10"		41.500	9.000	
		2/6 - 12"		43.500	11.000	
		2/6 - 14"		45.500	13.000	
		2/8 - 10"		43.500	9.000	
		2/8 - 12"	WIDE	45.500	11.000	
		2/8 - 14"		47.500	13.000	
		2/10 - 10"		45.500	9.000	
		2/10 - 12"		47.500	11.000	
		2/10 - 14"		49.500	13.000	
		3/0 - 10"		47.500	9.000	
		3/0 - 12"		49.500	11.000	
		3/0 - 14"		51.500	13.000	



Head Jamb Cover - Head Mullion Notch Details - Single w/ 2 Sidelites, French w/ 2 Sidelites, and Triple





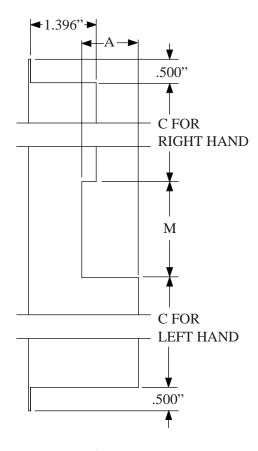
Head Jamb Cover - Head Mullion Notch Details - Single w/ 2 Sidelites, French w/ 2 Sidelites, and Triple

JAMB DEPTH	WIDTH "W"
4-9/16	3.059
5-1/4	3.746
6-9/16	5.059

	MULLION TYPE	"A"	"M"
STD.	ENTRY	1.359	2.000
510.	PATIO	2.165	2.000
WIDE	ENTRY	1.359	2.500
WIDE	PATIO	2.165	2.300

	HEAD MULLION NOTCH DETAILS -				
S	ING		DELITES, FRE		
			AND TRIP	LE	
				DOOR/S	IDELITE
		UNIT SIZE	MULLION	LENGTH L	LENGTH C
		2/4 - 10"		50.000	9.000
		2/4 - 12"		54.000	11.000
		2/4 - 14"		58.000	13.000
		2/6 - 10"		52.000	9.000
		2/6 - 12"		56.000	11.000
		2/6 - 14"		60.000	13.000
		2/8 - 10"	CTANDADD	54.000	9.000
		2/8 - 12"	STANDARD	58.000	11.000
		2/8 - 14"		62.000	13.000
		2/10 - 10"		56.000	9.000
	l	2/10 - 12"		60.000	11.000
	SI	2/10 - 14"		64.000	13.000
	Œ	3/0 - 10"		58.000	9.000
	SINGLE W/2 FIXED	3/0 - 12"		62.000	11.000
	V /2	3/0 - 14" 2/4 - 10"		66.000 51.000	9.000
	ΈV	2/4 - 10		55.000	
	G G	2/4 - 12		59.000	11.000 13.000
		2/4 - 14		53.000	9.000
	- 1	2/6 - 10"		57.000	11.000
		2/6 - 14"	WIDE	61.000	13.000
		2/8 - 10"		55.000	9.000
		2/8 - 12"		59.000	11.000
		2/8 - 14"		63.000	13.000
		2/10 - 10"		57.000	9.000
		2/10 - 12"		61.000	11.000
Z.G		2/10 - 14"		65.000	13.000
INSWING		3/0 - 10"		59.000	9.000
NS		3/0 - 12"		63.000	11.000
I		3/0 - 14"		67.000	13.000
		4/8 - 10"		79.718	9.000
		4/8 - 12"		83.718	11.000
		4/8 - 14"		87.718	13.000
	ij	5/0 - 10"		83.718	9.000
	D S	5/0 - 12"		87.718	11.000
	FIXED SI	5/0 - 14"		91.718	13.000
		5/4 - 10"		87.718	9.000
	/\ X	5/4 - 12"	WIDE	91.718	11.000
	FRENCH W/ 2	5/4 - 14"		95.718	13.000
	NC	5/8 - 10"		91.718	9.000
	RE.	5/8 - 12"		95.718	11.000
	"	5/8 - 14"		99.718	13.000
	1	6/0 - 10"		95.718	9.000
	1	6/0 - 12"		99.718	11.000
	<u> </u>	6/0 - 14"		103.718	13.000
	l	7/0		86.000	27.000
	1	7/6		92.000	29.000
	1	8/0	STANDARD	98.000	31.000
	ъí	8/6		104.000	33.000
	TRIPLE	9/0		110.000	35.000
	K	7/0		87.000	27.000
	1	7/6	111122	93.000	29.000
	1	8/0	WIDE	99.000	31.000
	1	8/6		105.000	33.000
l	l	9/0	1	111.000	35.000

Head Jamb Cover - Head Mullion Notch Details - Single w/ 1 Venting Sidelite



HEAD MULLION NOTCH DETAILS -						
SINGLE W/ 1 VENTING SIDELITE						
			DOOR/S	IDELITE		
	UNIT SIZE	MULLION	LENGTH L	LENGTH C		
L	2/4 - 12"		41.721	11.187		
SS	2/4 - 14"		43.721	13.187		
Ž	2/6 - 12"		43.721	11.187		
Z	2/6 - 14"		45.721	13.187		
ΛE	2/8 - 12"	WIDE	45.721	11.187		
1.	2/8 - 14"	WIDE	47.721	13.187		
	2/10 - 12"		47.721	11.187		
딩	2/10 - 14"		49.721	13.187		
Ž	3/0 - 12"		49.721	11.187		
S	3/0 - 14"		51.721	13.187		
	E W/1 VENTING	SINGLE UNIT SIZE 2/4 - 12" 2/4 - 14" 2/6 - 12" 2/6 - 14" 2/8 - 12" 2/8 - 14" 2/10 - 12" 2/10 - 14" 3/0 - 12"	SINGLE W/ 1 VENT UNIT SIZE MULLION 2/4 - 12" 2/4 - 14" 2/6 - 12" 2/8 - 12" 2/8 - 14" 2/10 - 12" 2/10 - 14" 2/10 - 12" 3/0 - 12"	SINGLE W/ 1 VENTING SIDELI DOOR/S UNIT SIZE MULLION LENGTH L 2/4 - 12" 2/4 - 14" 2/6 - 12" 2/8 - 12" 2/8 - 14" 2/10 - 12" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 14" 2/10 - 1		

JAMB DEPTH	WIDTH W
4-9/16	3.059
5-1/4	3.746
6-9/16	5.059

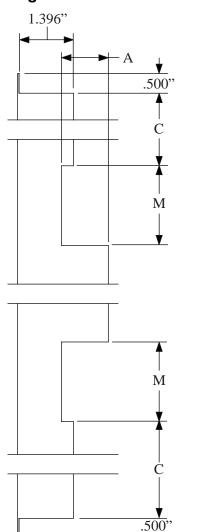
	MULLION TYPE	A	М
WIDE	PATIO	2.165	2.500

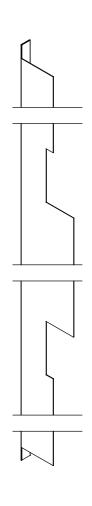
Coil Clad and

Adjusta-Fit 2 Unit Assembly



Head Jamb Cover - Head Mullion Notch Details - Single and French w/ 2 Venting Sidelites







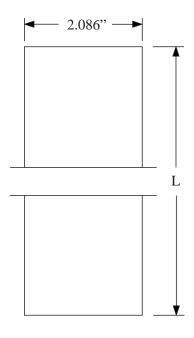
Head Jamb Cover - Head Mullion Notch Details - Single and French w/ 2 Venting Sidelites

	HEAD MULLION NOTCH DETAILS -						
	SINGLE & FRENCH W/ 2 VENTING SIDELITES						
				DOOR/S	IDELITE		
		UNIT SIZE	MULLION	LENGTH L	LENGTH C		
	$S\Gamma$	2/4 - 12"		55.408	11.187		
	S S	2/4 - 14"		59.408	13.187		
	ĭ	2/6 - 12"		57.408	11.187		
	N	2/6 - 14"		61.408	13.187		
	SINGLE W/2 VENTING	2/8 - 12"		59.408	11.187		
	7/2	2/8 - 14"		63.408	13.187		
	E	2/10 - 12"		61.408	11.187		
	GE	2/10 - 14"		65.408	13.187		
Ö	Ň	3/0 - 12"		63.408	11.187		
Æ	0,	3/0 - 14"	WIDE	67.408	13.187		
INSWING	SL	4/8 - 12"	WIDE	84.126	11.187		
	G S	4/8 - 14"		88.126	13.187		
	N	5/0 - 12"		88.126	11.187		
	ΙΞ	5/0 - 14"		92.126	13.187		
	VE	5/4 - 12"		92.126	11.187		
	V/2	5/4 - 14"		96.126	13.187		
	Η	5/8 - 12"		96.126	11.187		
	NC	5/8 - 14"		100.126	13.187		
	FRENCH W/2 VENTING	6/0 - 12"		100.126	11.187		
L	H.	6/0 - 14"		104.126	13.187		

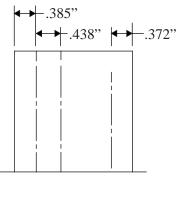
JAMB DEPTH	WIDTH W
4-9/16	3.059
5-1/4	3.746
6-9/16	5.059

	MULLION TYPE	A	M
WIDE	PATIO	2.165	2.500

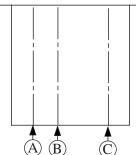
Bend the Outer Head Jamb Cover for Units with Sliding Screens



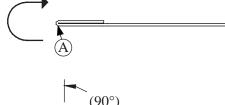
1. Shear coil to desired work piece length and width.



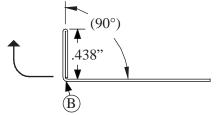
2. Mark bend locations on unfinished side of work piece.



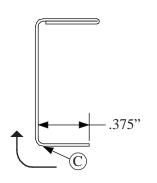
Bend the Outer Head Jamb Cover for Units with Sliding Screens



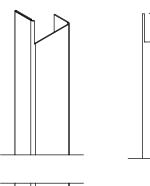
3. With finished side down, bend hem A in work piece to 180° .



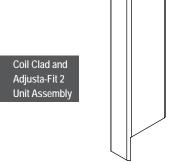
4. Rotate. With finished side down, bend B in work piece to 90° .

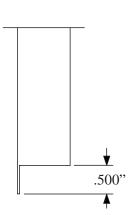


5. With finished side down, bend C up 90° .



6. Notch both ends.





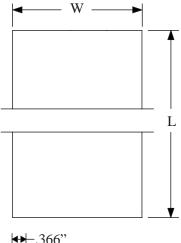
.500"



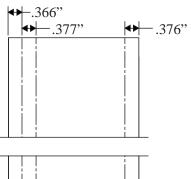
Bend the Outer Head Jamb Cover for Units with Sliding Screens

OUTER HEAD JAMB COVER FOR SLIDING SCREENS LENGTH				
	UNIT SIZE		MULLION	LENGTH "L"
	DOUBLE	4/8		57.000
		5/0		61.000
		5/4	STANDARD	65.000
		5/8		69.000
		6/0		73.000
	100	4/8		57.500
	Q	5/0		61.500
		5/4	WIDE	65.500
Ō		5/8		69.500
INSWING		6/0		73.500
ΛSΝ	TRIPLE	7/0	STANDARD	86.000
		7/6		92.000
		8/0		98.000
		8/6		104.000
		9/0		110.000
		7/0	WIDE	87.000
		7/6		93.000
		8/0		99.000
		8/6		105.000
		9/0		111.000

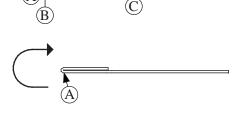
Bend the 1 Piece Side Jamb Cover



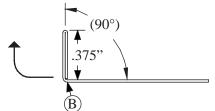
1. Shear coil to desired work piece length and width.



2. Mark bend locations on unfinished side of work piece.



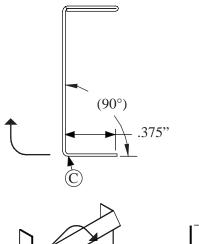
3. With finished side down, bend hem A in work piece to 180° .



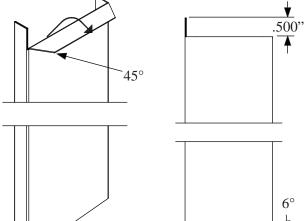
4. Rotate. With finished side down, bend B in work piece to 90° .



Bend the 1 Piece Side Jamb Cover



5. Rotate. With finished side down, bend C in work piece to 90° .

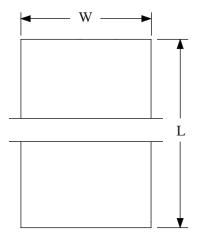


- 6. Slit top end. Bend tab down 90° by hand.
- 7. Cut 45° angles on corners of tab as shown.
- 8. Cut end to match sill approach and cut to length.

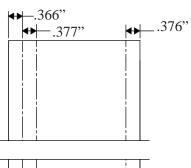
1 PIECE SIDE JAMB COVER WIDTH		
JAMB DEPTH	WIDTH "W"	
4-9/16	3.499	
5-1/4	4.186	
6-9/16	5.499	

1 PIECE SIDE JAMB COVER LENGTH				
	UNIT SIZE	STANDARD LENGTH "L"		
	UNII SIZE	4-9/16"	5-1/4"	6-9/16"
	14" TRANSOM	12.500	12.500	12.500
NIMS	6/6 U1	78.000	78.000	78.500
	6/8 U1	80.500	80.500	80.500
	7/0 U1	84.500	84.500	84.500
	8/0 U1	96.500	96.500	96.500

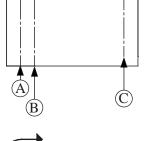
Bend the 1 Piece Head Jamb Cover



1. Shear coil to desired work piece length and width.

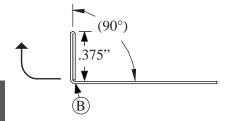


2. Mark bend locations on unfinished side of work piece.





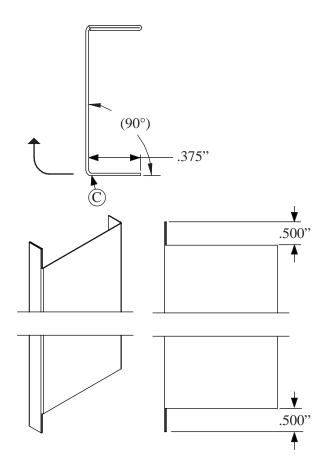
3. With finished side down, bend hem A in work piece to 180° .



4. Rotate. With finished side down, bend B in work piece to 90°.



Bend the 1 Piece Head Jamb Cover



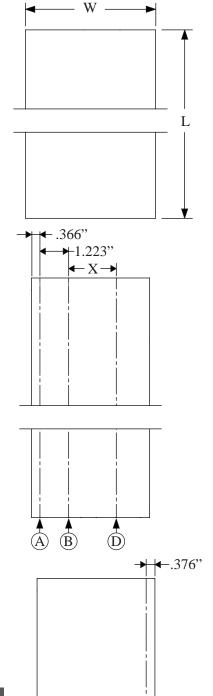
5. Rotate. With finished side down, bend C in work piece to 90°.

6. Notch both ends.

1 PIECE HEAD JAMB COVER WIDTH		
JAMB DEPTH	WIDTH "W"	
4-9/16	3.499	
5-1/4	4.186	
6-9/16	5.499	

1 PIECE HEAD JAMB COVER			
LENGTH			
	UNIT SIZE LENGTH "L"		
	SINGLE	2/0	24.000
		2/4	28.000
		2/6	30.000
		2/8	32.000
		2/10	34.000
NC		3/0	36.000
.WI		3/6	42.000
9NIMSNI	FRENCH	4/0	48.906
		4/8	56.906
		5/0	60.906
		5/4	64.906
		5/8	68.906
		6/0	72.906

Bend the Side Brickmould

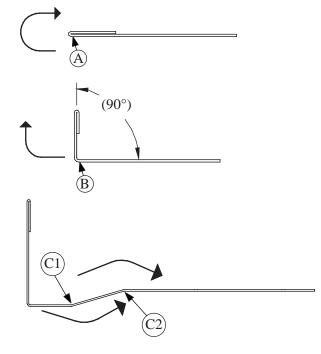


1. Shear coil to desired work piece length and width.

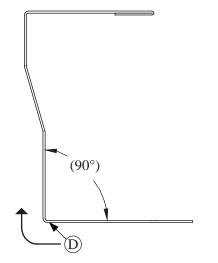
2. Mark bend locations A, B, and D on unfinished side of work piece.

3. Mark bend location E on finished side of work piece.

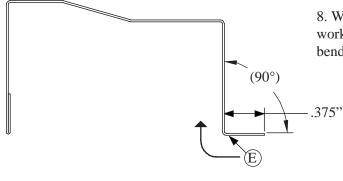
Bend the Side Brickmould



- 4. With finished side down, bend hem A in work piece to 180° .
- 5. Rotate. With finished side down, bend B in work piece to 90°.
- 6. Using Brake Buddy, create bends C1 and C2 simultaneously. Ensure bends follow the brickmould profile and will lay over the brickmould profile without interference.



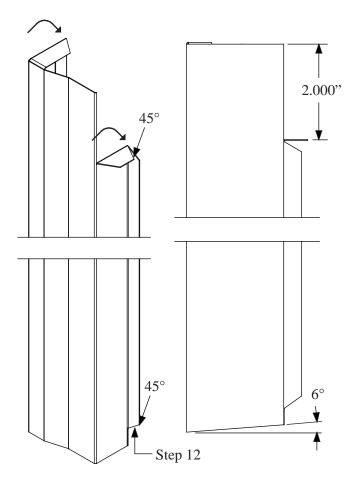
7. With finished side down, bend D in work piece to 90° .



8. With finished side up, bend E in work piece to 90°. Make sure the bend is crisp.



Bend the Side Brickmould



- 9. Cut head detail and bend tabs 90° by hand. Tuck flap at top in and behind.
- 10. Cut 45° angles on corners of tab as shown.
- 11. Cut bottom to match sill gain.
- 12. Cut end to match sill approach and cut to length. Notch out corner to fit above sill approach.

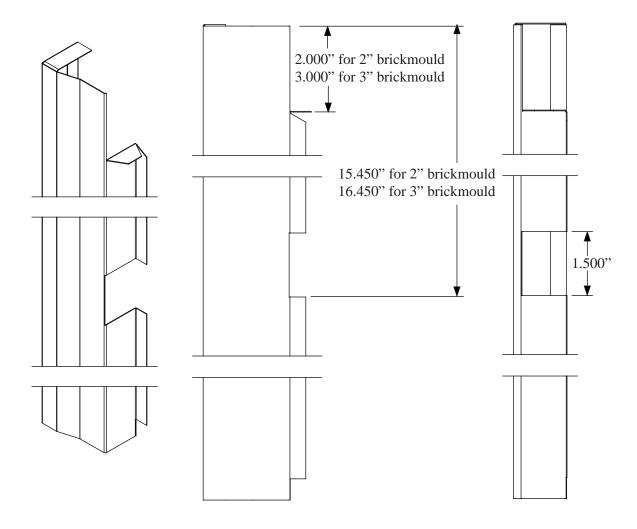
BRICKMOULD WIDTH			
BRICKMOULD	WIDTH	WIDTH	
WIDTH	"W"	"X"	
2	5.035	0.862	
3	6.035	1.862	

BRICKMOULD LENGTH			
	LINUT CITE	LENGTH	"L" W/14"
	UNIT SIZE	"L"	TRANSOM
INSWING	6/6 U1	79.500	93.000
	6/8 U1	82.000	95.500
	7/0 U1	86.000	N/A
	8/0 U1	98.000	N/A

Brickmould lengths are given for 2" brickmould. Add 1" to length for 3" brickmould.

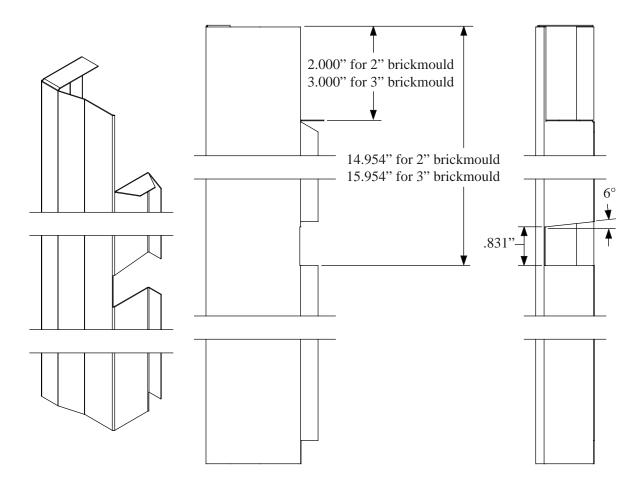


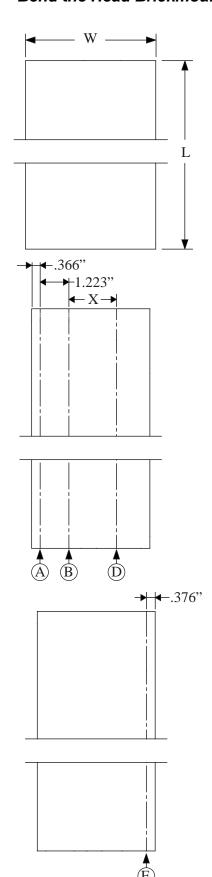
Side Brickmould - Transom Notch Details - W/ Jamb Transom





Side Brickmould - Transom Notch Details - W/TT Transom



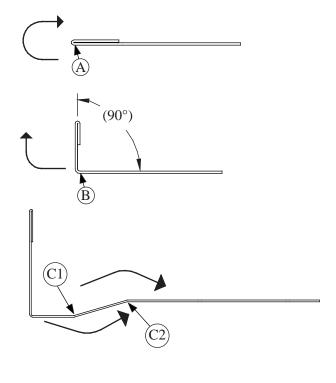


1. Shear coil to desired work piece length and width.

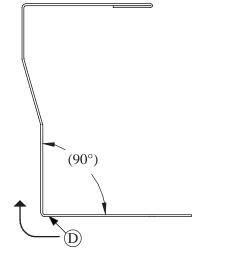
2. Mark bend locations A, B, and D on unfinished side of work piece.

3. Mark bend location E on finished side of work piece.



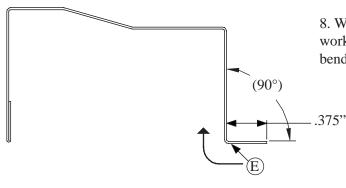


- 4. With finished side down, bend hem A in work piece to 180° .
- 5. Rotate. With finished side down, bend B in work piece to 90° .
- 6. Using Brake Buddy, create bends C1 and C2 simultaneously. Ensure bends follow the brickmould profile and will lay over the brickmould profile without interference.



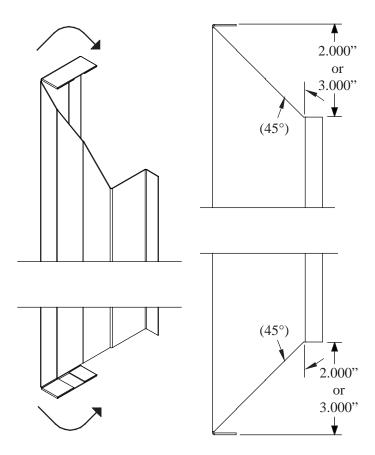
7. With finished side down, bend D in work piece to 90° .





8. With finished side up, bend E in work piece to 90°. Make sure the bend is crisp.





9. Cut head detail and bend tab 90° by hand. Cut ends at 45° .



BRICKMOULD WIDTH					
BRICKMOULD WIDTH "W" WIDTH "X					
2"	5.035	0.862			
3" 6.035 1.862					

	BRICKMOULD LENGTH					
		UNIT SIZE	MULLION	LENGTH "L"		
		2/0		31.500		
	[7]	2/4		35.500		
	끸	2/6	N/A	37.500		
	SINGLE	2/8		39.500		
	SI	2/10		11.500		
	S	3/0		43.500		
		3/6		49.500		
	8" [4/0		56.500		
	7/ [Ai	4/8		64.500		
	H. AC	5/0	N/A	58.500		
	FRENCH 7/8" ASTRAGAL	5/4	IN/A	72.500		
	RE S	5/8		76.500		
	田一一	6/0		80.500		
		4/8	STANDARD	64.500		
כז		5/0		68.500		
ž		5/4		72.500		
≥	田	5/8		77.000		
INSWING	OOUBLE	6/0		80.500		
Γ	0	4/8		65.000		
	Ŏ	5/0		69.000		
		5/4	WIDE	73.000		
		5/8		77.000		
		6/0		81.000		
		7/0		93.500		
		7/6		99.500		
		8/0	STANDARD	105.500		
	ш	8/6		111.500		
	F	9/0		117.500		
	TRIPLE	7/0		94.500		
	T	7/6		100.500		
		8/0	WIDE	106.500		
		8/6		112.500		
		9/0		118.500		

Brickmould lengths are given for 2" brickmould. Add 2" to length for 3" brickmould.

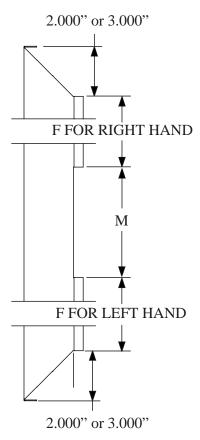


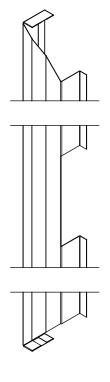
	BRICKMOULD LENGTH				
	UNIT SIZE	MULLION	LENGTH "L"		
ď	2/4 - 12"	-	49.000		
ΙŽ	2/4 - 14"		51.000		
	2/6 - 12"		51.000		
	2/6 - 14"		53.000		
	2/8 - 12"		53.000		
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2/8 - 14"	WIDE	55.000		
	2/10 - 12"		55.000		
	2/10 - 14"		57.000		
SINGLE W/1 VENTING	3/0 - 12"		57.000		
\sim	3/0 - 14"		59.000		
77			63.000		
ΙĮ	2/4 - 14"		67.000		
	2/6 - 12"		65.000		
	2/6 - 14"		69.000		
>	2/8 - 12"		67.000		
2/2	2/8 - 14"	WIDE	71.000		
(I)	2/10 - 12"		69.000		
	2/10 - 14"		73.000		
SINGLE W/2 VENTING	3/0 - 12"		71.000		
SI	3/0 - 14"		75.000		
L	4/8 - 10"		87.500		
INSWING	4/8 - 12"		91 500		
\mathbb{Z}	4/8 - 14"		91.500 95.500		
SI	5/0 - 10"		91.500		
	5/0 - 12"		95.500		
ΙX	5/0 - 14"		99.500		
2 E	5/4 - 10"		95.500		
IN FRENCH W/2 FIXED	5/4 - 12"	WIDE	95.500 99.500		
	5/4 - 14"	WIDE	103.500		
1 15	5/8 - 10"		99.500		
	5/8 - 12"		103.500		
丘	5/8 - 14"		107.500		
	6/0 - 10"		103.500		
	6/0 - 12"		107.500		
	6/0 - 14"		111.500		
77	4/8 - 12"		91.500		
ΙĮž	4/8 - 14"		95.500		
	5/0 - 12"				
	5/0 - 14"		95.500 99.500		
>	5/4 - 12"		99.500		
	5/4 - 14"	WIDE	103.500		
FRENCH W/2 VENTING	5/8 - 12"		103.500		
	5/8 - 14"		103.500		
	6/0 - 12"		107.500		
1 2	6/0 - 14"		111.500		
뜨	0/0 - 14		111.500		

BRICKMOULD LENGTH					
H		UNIT SIZE	MULLION	LENGTH "L"	
		2/4 - 10"		46.500	
		2/4 - 12"		48.500	
		2/4 - 14"		50.500	
		2/6 - 10"		58.500	
		2/6 - 12"		50.500	
		2/6 - 14"		52.500	
		2/8 - 10"		50.500	
		2/8 - 12"	STANDARD	52.500	
		2/8 - 14"		54.500	
		2/10 - 10"		52.500	
	_	2/10 - 12"		54.500	
	固	2/10 - 14"		56.500	
	X	3/0 - 10" 3/0 - 12"		54.500	
	1	3/0 - 12" 3/0 - 14"		56.500 58.500	
	×	2/4 - 10"		47.000	
	巴	2/4 - 12"		49.000	
	SINGLE W/1 FIXED	2/4 - 14"		51.000	
	SIV	2/6 - 10"		49.000	
	<u> </u>	2/6 - 12"		51.000	
		2/6 - 14"		53.000	
		2/8 - 10"		51.000	
		2/8 - 12"	WIDE	53.000	
		2/8 - 14"		55.000	
		2/10 - 10"		53.000	
		2/10 - 12"		55.000	
		2/10 - 14"		57.000	
		3/0 - 10"		55.000	
Ş		3/0 - 12"		57.000	
ΣĮ		3/0 - 14"		59.000	
INSWING		2/4 - 10"	STANDARD	57.500	
		2/4 - 12" 2/4 - 14"		61.500	
		2/6 - 10"		65.500 59.500	
		2/6 - 10"		63.500	
		2/6 - 14"		67.500	
		2/8 - 10"		61.500	
		2/8 - 12"		65.500	
		2/8 - 14"	511111111111111111111111111111111111111	69.500	
		2/10 - 10"		63.500	
		2/10 - 12"		67.500	
	Ð	2/10 - 14"		71.500	
	X	3/0 - 10"		65.500	
	SINGLE W/2 FIXED	3/0 - 12"		69.500	
	V/2	3/0 - 14"		73.500	
	ΕŃ	2/4 - 10"		58.500	
	3.	2/4 - 12"		62.500	
	Ιž	2/4 - 14"		66.500	
	S	2/6 - 10"		60.500	
		2/6 - 12"		64.500	
		2/6 - 14"		68.500	
		2/8 - 10" 2/8 - 12"	WIDE	62.500 66.500	
		2/8 - 12	WIDE	70.500	
		2/10 - 10"		64.500	
		2/10 - 10"		68.500	
		2/10 - 14"	•	72.500	
		3/0 - 10"		66.500	
		3/0 - 12"		70.500	
L	L	3/0 - 14"		74.500	



Head Brickmould - Mullion Notch Details - Single w/ 1 Sidelite Spread Mullion



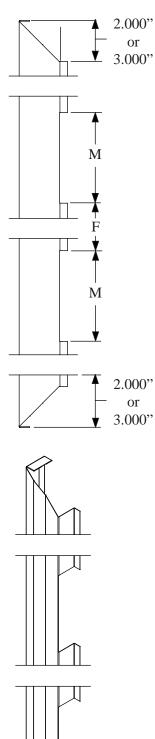


HEAD BRICKMOULD - MULLION NOTCH DETAILS -						
	HE		/ 1 SIDELIT			
		DITTOLL W	/ I SIDELII		LENGTH	MULL
		UNIT SIZE	SPREAD	L	F	NOTCH M
	1		0.000	55.000	26.750	1.500
		3/0 - 10"				
		3/0 - 10"	0.250	55.500	26.875	1.750
		3/0 - 10"	0.500	55.500	26.750	2.000
		3/0 - 10"	0.750	56.000	26.875	2.250
		3/0 - 10"	1.000	56.000	26.750	2.500
		3/0 - 10"	1.250	56.500	26.875	2.750
		3/0 - 10"	1.500	56.500	26.750	3.000
		3/0 - 10"	1.750	57.000	26.875	3.250
		3/0 - 10"	2.000	57.000	26.750	3.500
		3/0 - 10"	2.250	57.500	26.875	3.750
		3/0 - 10"	2.500	57.500	26.750	4.000
		3/0 - 10"	2.750	58.000	26.875	4.250
		3/0 - 10"	3.000	58.000	27.500	4.500
		3/0 - 12"	0.000	57.000	27.750	1.500
	FIXED SIDELITE	3/0 - 12"	0.250	57.500	27.875	1.750
	Ξ	3/0 - 12"	0.500	57.500	27.750	2.000
		3/0 - 12"	0.750	58.000	27.875	2.250
G	Q S	3/0 - 12"	1.000	58.000	27.750	2.500
/IN	XE	3/0 - 12"	1.250	58.500	27.875	2.750
INSWING		3/0 - 12"	1.500	58.500	27.750	3.000
Z	SINGLE W/1	3/0 - 12"	1.750	59.000	27.875	3.250
	Ä	3/0 - 12"	2.000	60.000	28.250	3.500
	ΙΞ	3/0 - 12"	2.250	60.500	28.375	3.750
	SIN	3/0 - 12"	2.500	60.500	28.250	4.000
		3/0 - 12"	2.750	61.000	28.375	4.250
		3/0 - 12"	3.000	61.000	28.250	4.500
		3/0 - 14"	0.000	59.000	28.750	1.500
		3/0 - 14"	0.250	59.500	28.875	1.750
		3/0 - 14"	0.500	59.500	28.750	2.000
		3/0 - 14"	0.750	60.000	28.875	2.250
		3/0 - 14"	1.000	60.000	28.750	2.500
		3/0 - 14"	1.250	60.500	28.875	2.750
		3/0 - 14"	1.500	60.560	28.750	3.000
		3/0 - 14"	1.750	61.000	28.875	3.250
		3/0 - 14"	2.000	61.000	28.750	3.500
		3/0 - 14"	2.250	61.500	28.875	3.750
		3/0 - 14"	2.500	61.500	28.750	4.000
		3/0 - 14"	2.750	62.000	28.875	4.250
		3/0 - 14"	3.000	62.000	28.750	4.500

Brickmould lengths are given for 2" brickmould. Add 2" to length for 3" brickmould.



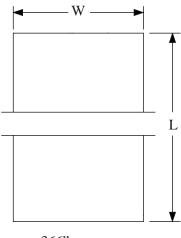
Head Brickmould - Mullion Notch Details - Single w/ 2 Sidelites Spread Mullion



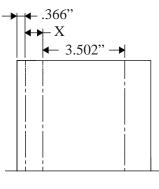
	HEAD BRICKMOULD - MULLION NOTCH DETAILS -						
	SINGLE W/ 2 SIDELITES SPREAD MULLION						
					LENGTH	_	
		UNIT SIZE	SPREAD	L	F	NOTCH M	
		3/0 - 10"	0.000	66.500	32.500	1.500	
		3/0 - 10"	0.250	67.000	32.625	1.750	
		3/0 - 10"	0.500	67.500	32.750	2.000	
		3/0 - 10"	0.750	68.000	32.875	2.250	
		3/0 - 10"	1.000	68.500	33.000	2.500	
		3/0 - 10"	1.250	69.000	33.125	2.750	
		3/0 - 10"	1.500	69.500	33.250	3.000	
		3/0 - 10"	1.750	70.000	33.375	3.250	
		3/0 - 10"	2.000	70.500	33.500	3.500	
		3/0 - 10"	2.250	71.000	33.625	3.750	
		3/0 - 10"	2.500	71.500	33.750	4.000	
		3/0 - 10"	2.750	72.000	33.875	4.250	
		3/0 - 10"	3.000	72.500	34.000	4.500	
		3/0 - 12"	0.000	70.500	34.500	1.500	
	S	3/0 - 12"	0.250	71.000	34.625	1.750	
	Ę	3/0 - 12"	0.500	71.500	34.750	2.000	
	岡	3/0 - 12"	0.750	72.000	34.875	2.250	
	SINGLE W/2 FIXED SIDELITES	3/0 - 12"	1.000	72.500	35.000	2.500	
INSWING	Ð	3/0 - 12"	1.250	73.000	35.125	2.750	
WI	X	3/0 - 12"	1.500	73.500	35.250	3.000	
NS	2 F	3/0 - 12"	1.750	74.000	35.375	3.250	
Г	≩	3/0 - 12"	2.000	74.500	35.500	3.500	
	LE	3/0 - 12"	2.250	75.000	35.625	3.750	
	NS S	3/0 - 12"	2.500	75.500	35.750	4.000	
	$_{\rm SI}$	3/0 - 12"	2.750	76.000	35.875	4.250	
		3/0 - 12"	3.000	76.500	36.000	4.500	
		3/0 - 14"	0.000	74.500	36.500	1.500	
		3/0 - 14"	0.250	75.000	36.625	1.750	
		3/0 - 14"	0.500	75.500	36.750	2.000	
		3/0 - 14"	0.750	76.000	36.875	2.250	
		3/0 - 14"	1.000	76.500	37.000	2.500	
		3/0 - 14"	1.250	77.000	37.125	2.750	
		3/0 - 14"	1.500	77.500	37.250	3.000	
	l	3/0 - 14"	1.750	78.000	37.375	3.250	
		3/0 - 14"	2.000	78.500	37.500	3.500	
		3/0 - 14"	2.250	79.000	37.625	3.750	
		3/0 - 14"	2.500	79.500	37.750	4.000	
	l	3/0 - 14"	2.750	80.000	37.875	4.250	
	l	3/0 - 14"	3.000	80.500	38.000	4.500	

Brickmould lengths are given for 2" brickmould. Add 2" to length for 3" brickmould.

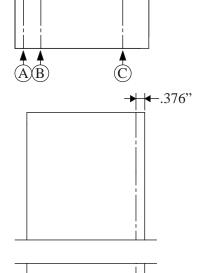
Bend the Side Flat Casing



1. Shear coil to desired work piece length and width.



2. Mark bend locations A, B, and D on unfinished side of work piece.



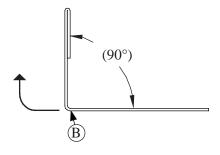
3. Mark bend location E on finished side of work piece.



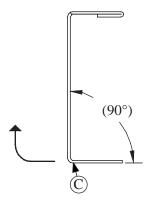
Bend the Side Flat Casing



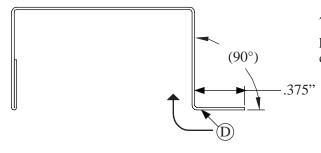
4. With finished side down, bend hem A in work piece to 180° .



5. Rotate. With finished side down, bend B in work piece to 90° .



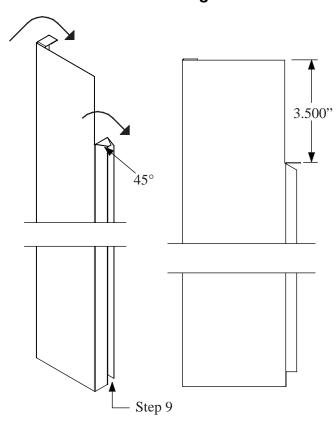
6. Rotate. With finished side down, bend C in work piece to 90° .



7. With finished side up, bend D in work piece to 90°. Make sure the bend is crisp.



Bend the Side Flat Casing



8. Bend tabs 90° by hand.

9. Cut 45° angles on corners of tab as shown.

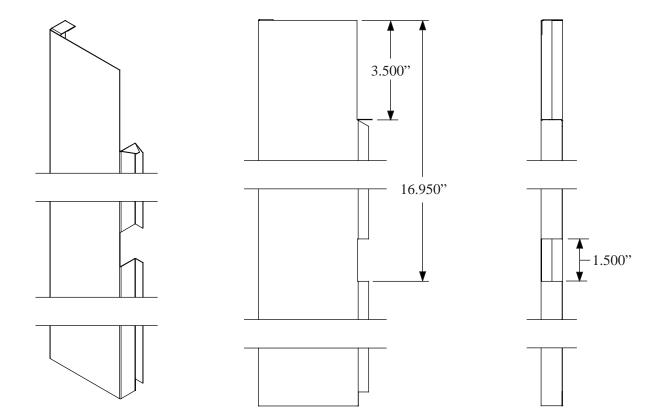
10. Notch out corner to fit above sill approach. Cut to length.

SIDE FLAT CASING WIDTH					
SIZE WIDTH W WIDTH X					
1 X 4	5.718	83.000			
5/4 X 4	6.344	86.000			

SID	SIDE FLAT CASING LENGTH				
	UNIT SIZE	LENGTH L			
G	6/6 U1	83.000			
NSWING	6/8 U1	85.500			
₹ 7/0 U1		89.500			
	8/0 U1	101.500			

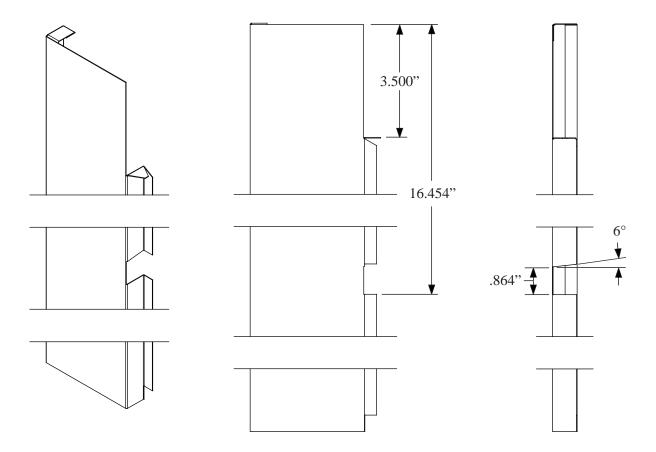


Side Flat Casing - Transom Notch Details - W/ Jamb Transom

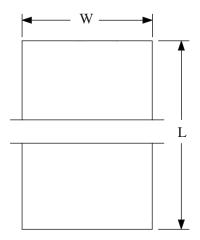




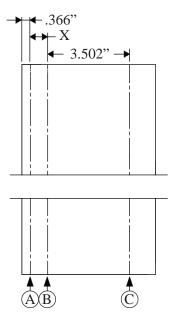
Side Flat Casing - Transom Notch Details - W/TT Transom



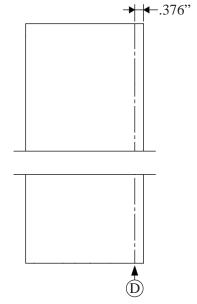




1. Shear coil to desired work piece length and width.



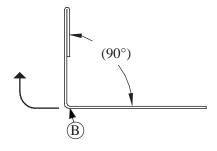
2. Mark bend locations A, B, and D on unfinished side of work piece.



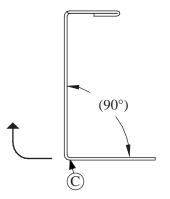
3. Mark bend location E on finished side of work piece.



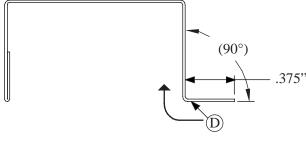
4. With finished side down, bend hem A in work piece to 180°.



5. Rotate. With finished side down, bend B in work piece to 90°.

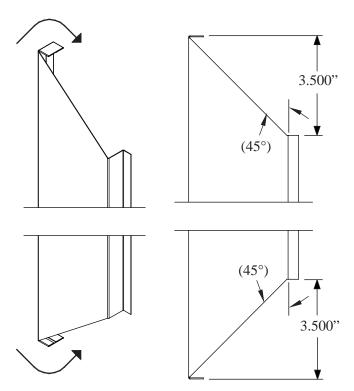


6. Rotate. With finished side down, bend C in work piece to 90°.



7. With finished side up, bend D in work piece to 90°.





8. Cut head detail and bend tabs 90° by hand. Cut ends at 45° .



	HEAD FLAT CASING LENGTH					
		UNIT SIZE	MULLION	LENGTH L		
		2/0		32.500		
		2/4		36.500		
	E	2/6		38.500		
	Ŋ.	2/8	N/A	40.500		
	SINGLE	2/10		42.500		
		3/0		44.500		
		3/6		50.500		
	AL	4/0		57.500		
	FRENCH 7/8" ASTRAGAI	4/8		65.500		
	N. N.	5/0	N/A	69.500		
	FRENCH ' ASTRAC	5/4	IV/A	73.500		
	± .″	5/8		77.500		
	//	6/0		81.500		
		4/8	STANDARD	65.500		
rh		5/0		69.500		
ĭ		5/4		73.500		
INSWING	ъį	5/8		77.500		
Ĭ	DOUBLE	6/0		81.500		
	Ĭ	4/8		66.000		
	Δ	5/0	WIDE	70.000		
		5/4		74.000		
		5/8		78.000		
		6/0		82.000		
		7/0		94.500		
		7/6		100.500		
		8/0	STANDARD	106.500		
	ш	8/6		112.500		
	F	9/0		118.500		
	TRIPLE	7/0		95.500		
	`	7/6		101.500		
		8/0	WIDE	107.500		
		8/6		113.500		
		9/0		119.500		

SIDE FLAT CASING WIDTH					
SIZE	SIZE WIDTH W WIDTH X				
1 X 4	5.718	0.742			
5/4 X 4	6.344	1.055			

	HEAD FLAT CASING LENGTH						
			UNIT SIZE	MULLION	LENGTH L		
_			4/8 - 10"		88.500		
			4/8 - 12"		92.500		
	ľ	3	4/8 - 14"		96.500		
	1	3	5/0 - 10"		92.500		
	2	3	5/0 - 12"		96.500		
	15	2	5/0 - 14"		100.500		
	Ė	1	5/4 - 10"		96.500		
	6	7.1	5/4 - 12"	WIDE	100.500		
	EPENCH WO EIXED SIDEI ITES	1	5/4 - 14"		104.500		
	5		5/8 - 10"		100.500		
	ן ב]	5/8 - 12"		104.500		
	ļ]	5/8 - 14"		108.500		
	5	=	6/0 - 10"		104.500		
	1		6/0 - 12" 6/0 - 14"		108.500		
	L		6/0 - 14"		112.500		
			2/4 - 12"		50.500		
	SINGLE W/1 VENTING		2/4 - 14"		52.500		
	Ē	SIDELITE	2/6 - 12"		52.500		
	Ē		2/6 - 14"		54.500		
	1		2/8 - 12"	WIDE	54.500		
ריז	×		2/8 - 14"		56.500		
INSWING	ž 🖺 🤊	S	2/10 - 12"		56.500		
SW	Ιž		2/10 - 14"		58.500		
Z	\mathbf{z}		3/0 - 12"		58.500		
			3/0 - 14"		60.500		
	SINGLE W/2 VENTING SIDEL ITES		2/4 - 12"		64.000		
			2/4 - 14"		68.000		
	E		2/6 - 12" 2/6 - 14"		66.000		
	NE NE		2/6 - 14"		70.000		
	7		2/8 - 12" 2/8 - 14"	WIDE	68.000		
	× ×	SIDELITES	2/8 - 14"		72.000		
	ij	\mathbf{S}	2/10 - 12"		70.000		
	ĭ		2/10 - 14"		74.000		
	\mathbf{S}		3/0 - 12"		72.000		
	L		3/0 - 14" 4/8 - 12"		76.000		
	۲'n		4/8 - 12"		93.000		
	ĭ		4/8 - 14"		97.000		
	Ę		5/0 - 12"		97.000		
	ΛE	ES	5/0 - 14"		101.000		
	72	SIDELITES	5/4 - 12"	WIDE	101.000		
	¥.	DE	5/4 - 14" 5/8 - 12" 5/8 - 14"		105.000		
	Ę.	SI	5/8 - 12"		105.000		
	FRENCH W/2 VENTING		5/8 - 14"		109.000		
	Æ		6/0 - 12"		109.000		
			6/0 - 14"		113.000		

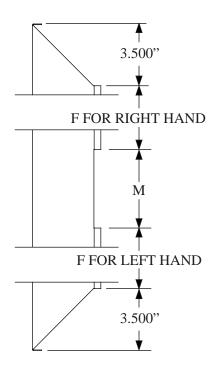


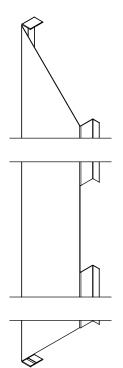
HEAD FLAT CASING LENGTH				
UNIT SIZE		UNIT SIZE	MULLION	LENGTH L
		2/4 - 10"		47.500
		2/4 - 12"		49.500
		2/4 - 14"		51.500
		2/6 - 10"		49.500
		2/6 - 12"		51.500
		2/6 - 14"		53.500
		2/8 - 10"		51.500
		2/8 - 12"	STANDARD	53.500
		2/8 - 14"		55.500
	[7]	2/10 - 10"		53.500
	ITE	2/10 - 12"		55.500
	頁	2/10 - 14"		57.500
	SIL	3/0 - 10"		55.500
Ω̈́	Ð	3/0 - 12"		57.500
VIV.	X	3/0 - 14"		59.500
INSWING	SINGLE W/1 FIXED SIDELITE	2/4 - 10"		48.000
í	/M	2/4 - 12"		50.000
	E	2/4 - 14"		52.000
	NG	2/6 - 10"		50.000
	SII	2/6 - 12"		52.000
		2/6 - 14"		54.000
		2/8 - 10"		52.000
		2/8 - 12"	WIDE	54.000
		2/8 - 14"		56.000
		2/10 - 10"		54.000
		2/10 - 12"		56.000
		2/10 - 14"		58.000
		3/0 - 10"		56.000
		3/0 - 12"		58.000
Ш		3/0 - 14"		60.000

	HEAD FLAT CASING LENGTH				
UNIT SIZE		UNIT SIZE	MULLION	LENGTH L	
		2/4 - 10"		58.500	
		2/4 - 12"		62.500	
		2/4 - 14"		66.500	
		2/6 - 10"		60.500	
		2/6 - 12"		64.500	
		2/6 - 14"		68.500	
		2/8 - 10"		62.500	
		2/8 - 12"	STANDARD	66.500	
		2/8 - 14"		70.500	
	S	2/10 - 10"		64.500	
	TE	2/10 - 12"		68.500	
	ΕΠ	2/10 - 14"		72.500	
	O.S	3/0 - 10"		66.500	
ξ	Q	3/0 - 12"		70.500	
ŽĮ.	XE	3/0 - 14"		74.500	
INSWING	SINGLE W/2 FIXED SIDELITES	2/4 - 10"		59.500	
	Z/M	2/4 - 12"		63.500	
	Ē	2/4 - 14"		67.500	
	[G]	2/6 - 10"		61.500	
	SII	2/6 - 12"		65.500	
		2/6 - 14"		69.500	
		2/8 - 10"		63.500	
		2/8 - 12"	WIDE	67.500	
		2/8 - 14"		71.500	
		2/10 - 10"		65.500	
		2/10 - 12"		69.500	
		2/10 - 14"		73.500	
		3/0 - 10"		67.500	
		3/0 - 12"		71.500	
		3/0 - 14"		75.500	



Head Flat Casing - Mullion Notch Details - Single w/ 1 Sidelite Spread Mullion



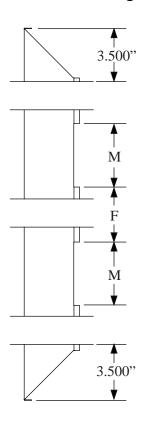


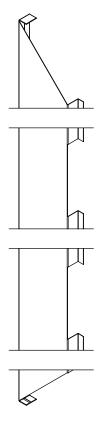
	HEAD FLAT CASING - MULLION NOTCH DETAILS -					
	SINGLE W/ 1 SIDELITE SPREAD MULLION					
				LENGTH	LENGTH	MULL
		UNIT SIZE	SPREAD	L	F	NOTCH M
		3/0 - 10"	0.000	56.000	27.250	1.500
		3/0 - 10"	0.250	56.500	27.375	1.750
		3/0 - 10"	0.500	56.500	27.250	2.000
		3/0 - 10"	0.750	57.000	27.375	2.250
		3/0 - 10"	1.000	57.000	27.250	2.500
		3/0 - 10"	1.250	57.500	27.375	2.750
		3/0 - 10"	1.500	57.500	27.250	3.000
		3/0 - 10"	1.750	58.000	27.375	3.250
		3/0 - 10"	2.000	58.000	27.250	3.500
		3/0 - 10"	2.250	58.500	27.375	3.750
		3/0 - 10"	2.500	58.500	27.250	4.000
		3/0 - 10"	2.750	59.000	27.375	4.250
		3/0 - 10"	3.000	59.000	27.250	4.500
		3/0 - 12"	0.000	58.000	28.250	1.500
	田	3/0 - 12"	0.250	58.500	28.375	1.750
	TI	3/0 - 12"	0.500	58.500	28.250	2.000
	DE	3/0 - 12"	0.750	59.000	28.375	2.250
75	SI	3/0 - 12"	1.000	59.000	28.250	2.500
Z	闰	3/0 - 12"	1.250	59.500	28.375	2.750
INSWING	ΕĹ	3/0 - 12"	1.500	59.500	28.250	3.000
IN	1/1	3/0 - 12"	1.750	60.000	28.375	3.250
	Ε.	3/0 - 12"	2.000	60.000	28.250	3.500
	35	3/0 - 12"	2.250	60.500	28.375	3.750
	SINGLE W/1 FIXED SIDELIT	3/0 - 12"	2.500	60.500	28.250	4.000
	S	3/0 - 12"	2.750	61.000	28.375	4.250
		3/0 - 12"	3.000	61.000	28.250	4.500
		3/0 - 14"	0.000	60.000	29.250	1.500
		3/0 - 14"	0.250	60.500	29.375	1.750
		3/0 - 14"	0.500	60.500	29.250	2.000
		3/0 - 14"	0.750	61.000	29.375	2.250
		3/0 - 14"	1.000	61.000	29.250	2.500
		3/0 - 14"	1.250	61.500	29.375	2.750
		3/0 - 14"	1.500	61.500	29.250	3.000
		3/0 - 14"	1.750	62.000	29.375	3.250
		3/0 - 14"	2.000	62.000	29.250	3.500
		3/0 - 14"	2.250	62.500	29.375	3.750
		3/0 - 14"	2.500	62.500	29.250	4.000
		3/0 - 14"	2.750	63.000	29.375	4.250
	L	3/0 - 14"	3.000	63.000	29.250	4.500

SIDE FLAT CASING WIDTH					
SIZE	WIDTH W	WIDTH X			
1 X 4	5.718	0.742			
5/4 X 4	6.344	1.055			



Head Flat Casing - Mullion Notch Details - Single w/ 2 Sidelites Spread Mullion

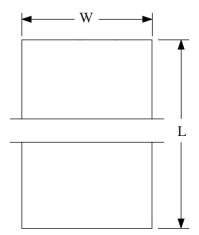




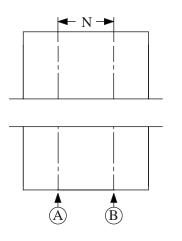
	HEAD FLAT CASING - MULLION NOTCH DETAILS -					
	SINGLE W/ 2 SIDELITES SPREAD MULLION					
LENGTH LENGTH MUI						MULL
		UNIT SIZE	SPREAD	L	F	NOTCH M
		3/0 - 10"	0.000	67.500	33.000	1.500
		3/0 - 10"	0.250	68.000	33.125	1.750
		3/0 - 10"	0.500	68.500	33.250	2.000
		3/0 - 10"	0.750	69.000	33.375	2.250
		3/0 - 10"	1.000	69.500	33.500	2.500
		3/0 - 10"	1.250	70.000	33.625	2.750
		3/0 - 10"	1.500	70.500	33.750	3.000
		3/0 - 10"	1.750	71.000	33.875	3.250
		3/0 - 10"	2.000	71.500	34.125	3.500
		3/0 - 10"	2.250	72.000	34.375	3.750
		3/0 - 10"	2.500	72.500	34.625	4.000
		3/0 - 10"	2.750	73.000	34.875	4.250
		3/0 - 10"	3.000	73.500	35.125	4.500
		3/0 - 12"	0.000	71.500	35.000	1.500
	ITE	3/0 - 12"	0.250	72.000	35.125	1.750
	TL	3/0 - 12"	0.500	72.500	35.250	2.000
	SIDELI	3/0 - 12"	0.750	73.000	35.375	2.250
rh		3/0 - 12"	1.000	73.500	35.500	2.500
ĭ	Œ	3/0 - 12"	1.250	74.000	35.625	2.750
INSWING	FIXED	3/0 - 12"	1.500	74.500	35.750	3.000
Š	1/2	3/0 - 12"	1.750	75.000	35.875	3.250
	SINGLE W/2	3/0 - 12"	2.000	75.500	36.125	3.500
	3E	3/0 - 12"	2.250	76.000	36.375	3.750
	ž	3/0 - 12"	2.500	76.500	36.625	4.000
	S	3/0 - 12"	2.750	77.000	36.875	4.250
		3/0 - 12"	3.000	77.500	37.125	4.500
		3/0 - 14"	0.000	75.500	37.000	1.500
		3/0 - 14"	0.250	76.000	37.125	1.750
		3/0 - 14"	0.500	76.500	37.250	2.000
l		3/0 - 14"	0.750	77.000	37.375	2.250
ĺ		3/0 - 14"	1.000	77.500	37.500	2.500
		3/0 - 14"	1.250	78.000	37.625	2.750
		3/0 - 14"	1.500	78.500	37.750	3.000
		3/0 - 14"	1.750	79.000	37.875	3.250
		3/0 - 14"	2.000	79.500	38.000	3.500
l		3/0 - 14"	2.250	80.000	38.125	3.750
l		3/0 - 14"	2.500	80.500	38.250	4.000
		3/0 - 14"	2.750	81.000	38.375	4.250
		3/0 - 14"	3.000	81.500	38.500	4.500

SIDE FLAT CASING WIDTH					
SIZE	WIDTH W	WIDTH X			
1 X 4	5.718	0.742			
5/4 X 4	6.344	1.055			

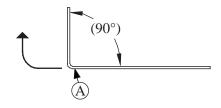
Bend the Mullion Cover



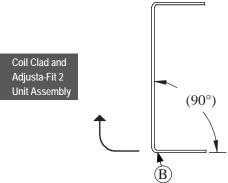
1. Shear coil to desired work piece length and width.



2. Mark bend locations A and B on unfinished side of work piece.



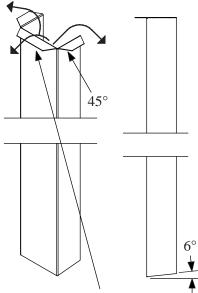
3. With finished side down, bend A in work piece to 90° .



4. Rotate. With finished side down, bend B in work piece to 90°.



Bend the Mullion Cover



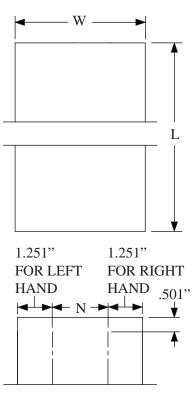
Omit this tab for patio mullions used in 4-9/16" jamb depth systems.

- 5. Slit top end. Bend tabs 90° by hand.
- 6. Cut 45° angles on corners of tabs as shown.
- 7. Cut end to match sill approach and cut to length.

MULLION COVER WIDTH				
	MULLION	WIDTH	WIDTH	
	PROFILE	W	N	
STANDARD	ENTRY	4.503	2.022	
STANDARD	PATIO	6.004	2.022	
WIDE	ENTRY	5.004	2.522	
WIDE	PATIO	6.504	2.522	

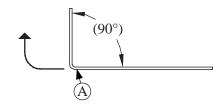
	MULLION COVER LENGTH				
		STANDARD	LENGTH L		
	UNIT SIZE	ENTRY	PATIO		
	UNII SIZE	MULLION	MULLION		
G	6/6 U1	78.500	79.000		
SWING	6/8 U1	81.000	81.000		
SV	7/0 U1	85.000	85.000		
	8/0 U1	97.000	97.000		

Bend the Mullion Cover for Units with Venting Sidelites

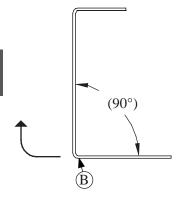


1. Shear coil to desired work piece length and width.

2. Mark bend locations A, B, and C on unfinished side of work piece.



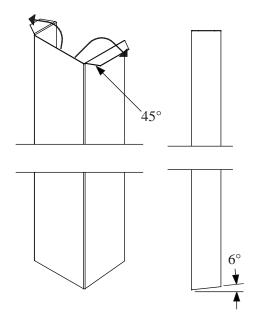
3. With finished side down, bend A in work piece to 90° .



4. Rotate. With finished side down, bend B in work piece to 90° .



Bend the Mullion Cover for Units with Venting Sidelites

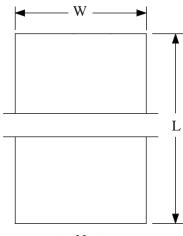


- 5. Slit top end. Bend tabs 90° by hand.
- 6. Cut 45° angles on corners of tabs as shown.
- 7. Cut end to match sill approach and cut to length.

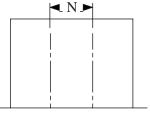
MULLION COVER WIDTH				
	MULLION	WIDTH	WIDTH	
	PROFILE	W	N	
WIDE	PATIO	5.604	2.522	

Μl	MULLION COVER LENGTH			
		LENGTH "L"		
	UNIT SIZE	PATIO		
	UNII SIZE	MULLION		
ū	6/6 U1	79.000		
SWING	6/8 U1	81.000		
SN	7/0 U1	85.000		
	8/0 U1	97.000		

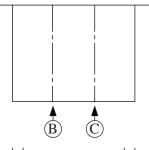
Bend the Spread Mullion Casing

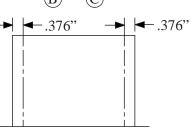


1. Shear coil to desired work piece length and width.



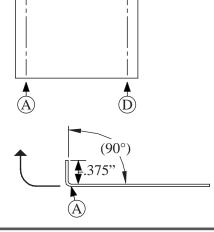
2. Mark bend locations B and C on unfinished side of work piece.





3. Mark bend locations A and D on finished side of work piece.

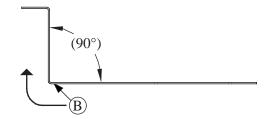




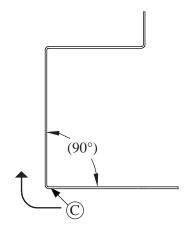
4. With finished side up, bend A in work piece to 90°.



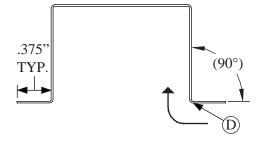
Bend the Spread Mullion Casing



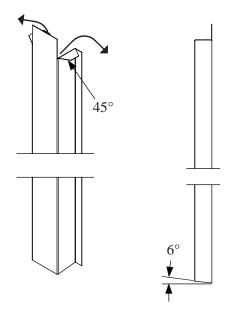
5. With finished side down, bend B to 90°.



6. With finished side down, bend C to 90°.



7. With finished side up, bend D to 90° .



- 8. Slit top end. Bent tabs 90° by hand.
- 9. Cut 45° angles on corners of tabs as shown.
- 10. Cut end to match sill approach and cut to length.



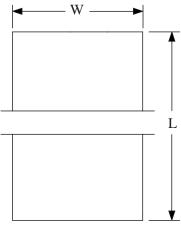
Bend the Spread Mullion Casing

SPREAD MULLION CASING WIDTH					
SPREAD	WIDTH W	WIDTH N			
0.000	4.345	1.502			
0.250	4.595	1.752			
0.500	4.845	2.002			
0.750	5.095	2.252			
1.000	5.345	2.502			
1.250	5.595	2.752			
1.500	5.845	3.002			
1.750	6.095	3.252			
2.000	6.345	3.502			
2.250	6.595	3.752			
2.500	6.845	4.002			
2.750	7.095	4.252			
3.000	7.345	4.502			

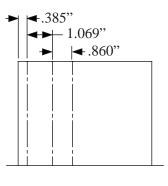
Š	SPREAD MULLION CASING LENGTH				
	UNIT SIZE	STANDARD LENGTH L			
	UNII SIZE	4-9/16"	5-1/4"	6-9/16"	
G	6/6 U1	79.000	79.500	79.500	
SWING	6/8 U1	81.500	81.500	82.000	
SV	7/0 U1	85.500	85.500	86.000	
4	8/0 U1	97.500	97.500	98.000	



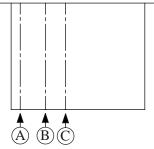
Bend the Transom Sill Cover

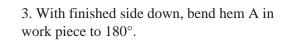


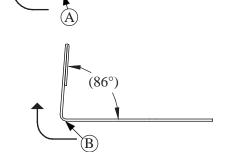
1. Shear coil to desired work piece length and width.



2. Mark bend locations B and C on unfinished side of work piece. Mark bend location A on finished side of work piece.







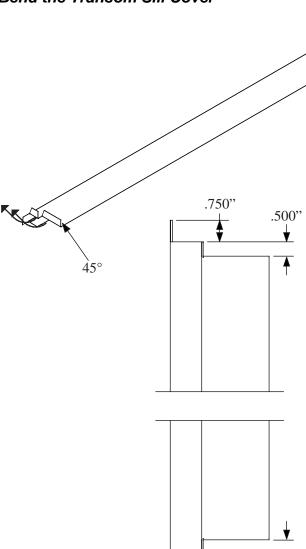
4. With finished side down, bend B in work piece to 86° .

Coil Clad and Adjusta-Fit 2 Unit Assembly

5. With finished side down, bend C in work piece to 96°.



Bend the Transom Sill Cover



6. Slit top end. Bend tabs 90°.

7. Cut 45° angles on corners of tabs as shown.

Coil Clad and Adjusta-Fit 2 Unit Assembly .500"

.750"



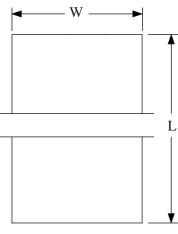
Bend the Transom Sill Cover

TRANSOM SILL COVER WIDTH		
JAMB DEPTH	WIDTH W	
4-9/16"	5.681	
5-1/4"	6.368	
6-9/16"	7.681	

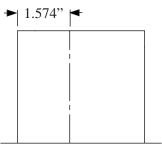
TRANSOM SILL COVER LENGTH				
UNIT SIZE		MULLION	LENGTH L	
	SINGLE	2/4	N/A	30.000
		2/6		32.000
		2/8		34.000
		2/10		36.000
		3/0		38.000
		3/6		44.000
G	DOUBLE	4/8	STANDARD	59.000
NI.		5/0		63.000
INSWING		5/4		67.000
		5/8		71.000
		6/0		75.000
		4/8	WIDE	59.500
		5/0		63.500
		5/4		67.500
		5/8		71.500
		6/0		75.500

TRANSOM SILL COVER LENGTH				
		UNIT SIZE	MULLION	LENGTH L
		2/4 - 10"		52.000
		2/4 - 12"	STANDARD	56.000
		2/4 - 14"		60.000
		2/6 - 10"		54.000
		2/6 - 12"		58.000
		2/6 - 14"		62.000
		2/8 - 10"		56.000
		2/8 - 12"		60.000
		2/8 - 14"		64.000
	7.0	2/10 - 10"		58.000
	Ë	2/10 - 12"		62.000
	ELI	2/10 - 14"		66.000
	Ē	3/0 - 10"		60.000
	S	3/0 - 12"		64.000
	Ξ	3/0 - 14"		68.000
	H	2/4 - 10"	WIDE	53.000
	V/2	2/4 - 12"		57.000
	SINGLE W/2 FIXED SIDELITES	2/4 - 14"		61.000
Ŋ	ZD.	2/6 - 10"		55.000
INSWING	Ž	2/6 - 12"		59.000
SW	01	2/6 - 14"		63.000
Z		2/8 - 10"		57.000
		2/8 - 12"		61.000
		2/8 - 14"		65.000
		2/10 - 10"		59.000
		2/10 - 12"		63.000
		2/10 - 14"		67.000
		3/0 - 10"		61.000
		3/0 - 12"		65.000
		3/0 - 14"		69.000
	SINGLE W/2 VENTING SIDELITES	2/4 - 12"	WIDE	57.700
		2/4 - 14"		61.500
		2/6 - 12"		59.500
		2/6 - 14"		63.500
		2/8 - 12"		61.500
		2/8 - 14"		65.500
		2/10 - 12"		63.500
		2/10 - 14"		67.500
		3/0 - 12"		65.500
L		3/0 - 14"		69.500
				,

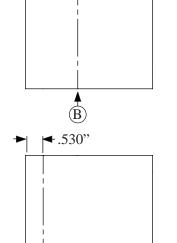
Bend the Transom Head Cover



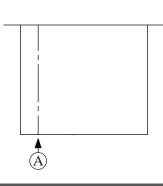
1. Shear coil to desired work piece length and width.



2. Mark bend location B on unfinished side of work piece.

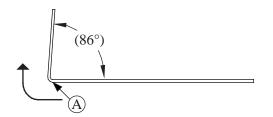


3. Mark bend location A on finished side of work piece.

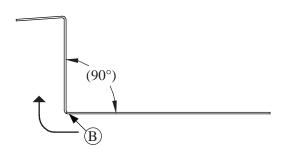




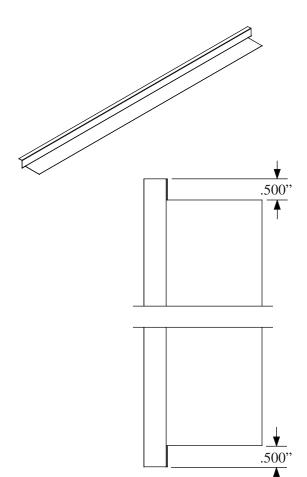
Bend the Transom Head Cover



4. With finished side up, bend A in work piece to 86° .



5. With finished side down, bend B in work piece to 90° .



6.Cut and notch both ends.



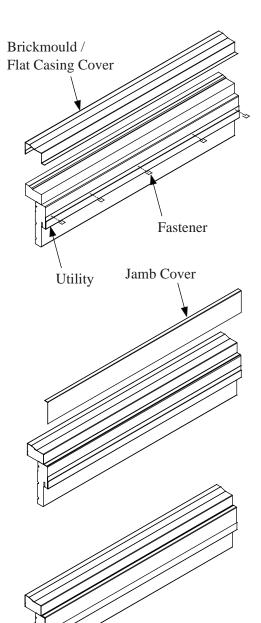
Bend the Transom Head Cover

TRANSOM HEAI	FRANSOM HEAD COVER WIDTH	
JAMB DEPTH	WIDTH W	
4-9/16"	3.825	
6-9/16"	5.825	

TRANSOM HEAD COVER LENGTH				
UNIT SIZE		MULLION	LENGTH L	
	SINGLE	2/4	N/A	28.000
		2/6		30.000
		2/8		32.000
		2/10		34.000
		3/0		36.000
		3/6		42.000
ū	DOUBLE	4/8	STANDARD	57.000
		5/0		61.000
INSWING		5/4		65.000
		5/8		69.000
		6/0		73.000
		4/8	WIDE	57.500
		5/0		61.500
		5/4		65.500
		5/8		69.500
		6/0		73.500

TRANSOM HEAD COVER LENGTH				
		UNIT SIZE	MULLION	LENGTH L
		2/4 - 10"	STANDARD	50.000
		2/4 - 12"		54.000
		2/4 - 14"		58.000
	SINGLE W/2 FIXED SIDELITES	2/6 - 10"		52.000
		2/6 - 12"		56.000
		2/6 - 14"		60.000
		2/8 - 10"		54.000
		2/8 - 12"		58.000
		2/8 - 14"		62.000
		2/10 - 10"		56.000
		2/10 - 12"		60.000
		2/10 - 14"		64.000
	Œ	3/0 - 10"		58.000
	O S	3/0 - 12"		62.000
	XE	3/0 - 14"		66.000
	臣	2/4 - 10"		51.000
	Z/W	2/4 - 12"		55.000
	Ä	2/4 - 14"	WIDE	59.000
Ď	ΙΘΙ	2/6 - 10"		53.000
INSWING	SIN	2/6 - 12"		57.000
\S\		2/6 - 14"		61.000
		2/8 - 10"		55.000
		2/8 - 12"		59.000
		2/8 - 14"		63.000
		2/10 - 10"		57.000
		2/10 - 12"		61.000
		2/10 - 14"		65.000
		3/0 - 10"		59.000
		3/0 - 12"		63.000
		3/0 - 14"		67.000
		2/4 - 12"	WIDE	55.408
	NG	2/4 - 14"		59.408
	III	2/6 - 12"		57.408
	SINGLE W/2 VENTING SIDELITES	2/6 - 14"		61.408
		2/8 - 12"		59.408
		2/8 - 14"		63.408
		2/10 - 12"		61.408
		2/10 - 14"		65.408
		3/0 - 12"		63.408
		3/0 - 14"		67.408

2 Piece Jamb Cover for Units with Fixed Panel(s) and Venting Sidelite(s)

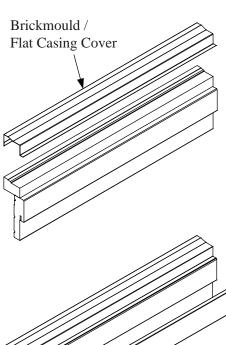


- 1. Install Utility trim flush with jamb rabbet. Fasten Utility with 1/4" crown x 1/2" staples approximately every 12".
- 2. Install Brickmould.

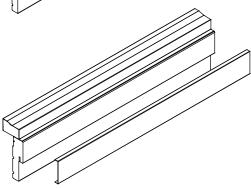
3. Install Jamb Cover. Tuck into Utility.



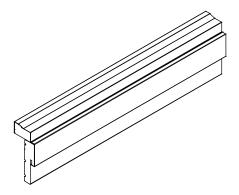
1 Piece Jamb Cover for Units without Fixed Panels



1. Install Brickmould.

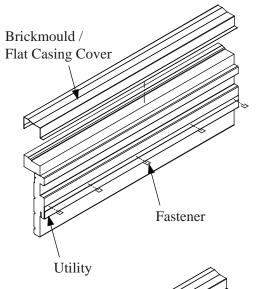


2. Install Jamb Cover.





3 Piece Jamb Cover for Units with Sliding Screens

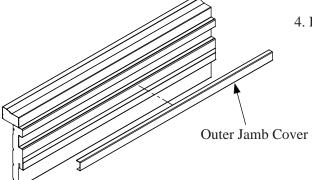


- 1. Install Utility trim flush with jamb rabbet. Fasten Utility with 1/4" crown x 1/2" staples approximately every 12".
- 2. Install Brickmould.

Utility

Jamb Dado Cover

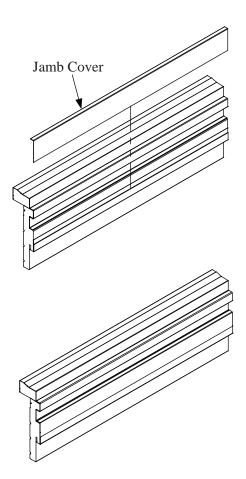
3. Install Dado Cover into Jamb Dado.



4. Install Outer Jamb Cover



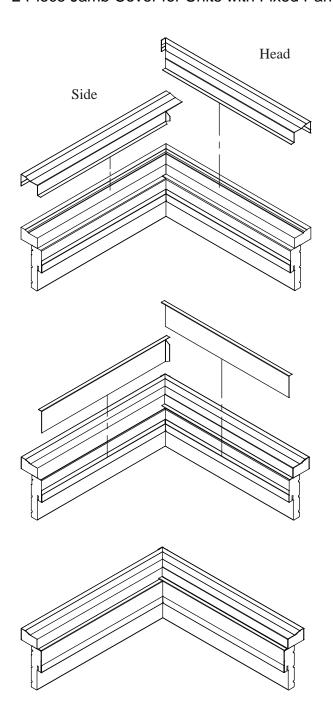
3 Piece Jamb Cover for Units with Sliding Screens



5. Install Jamb Cover. Tuck into Utility.

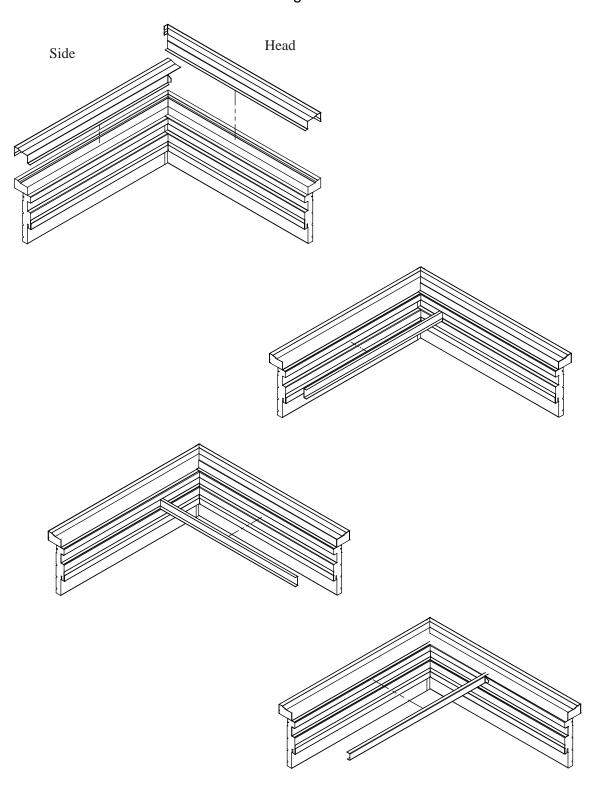


2 Piece Jamb Cover for Units with Fixed Panels



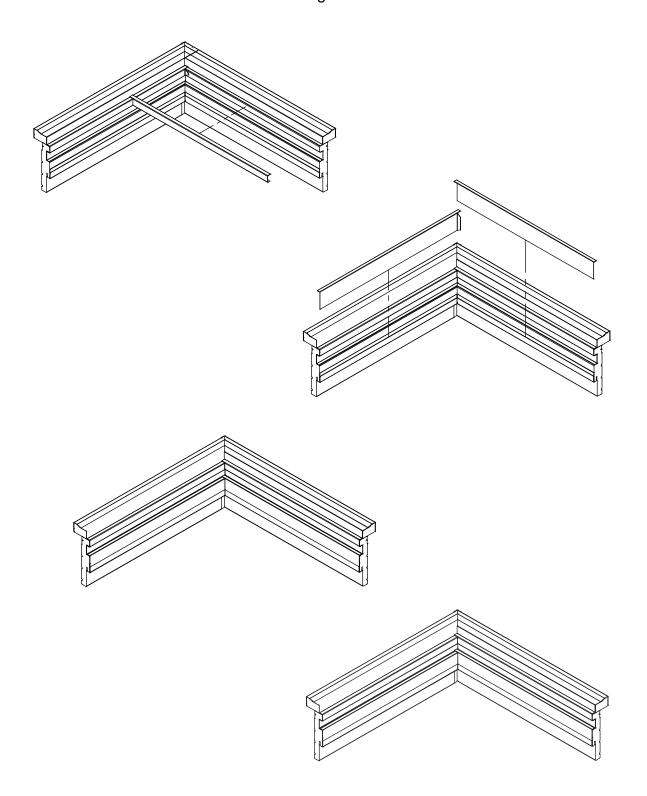


2 Piece Jamb Cover for Units with Sliding Screens



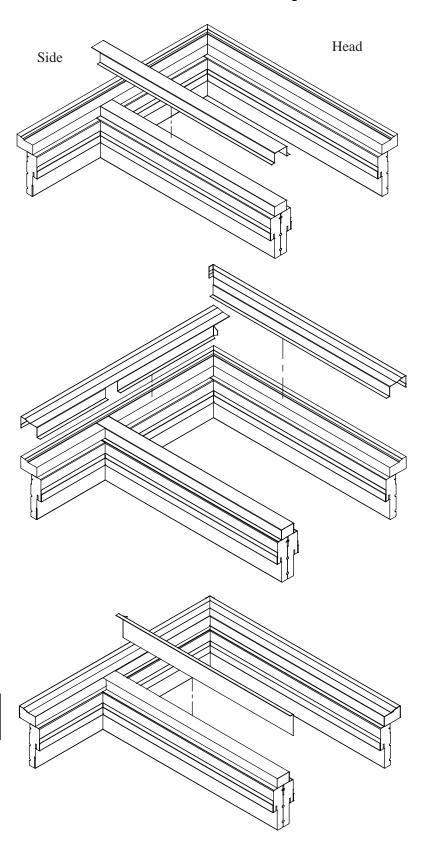


2 Piece Jamb Cover for Units with Sliding Screens



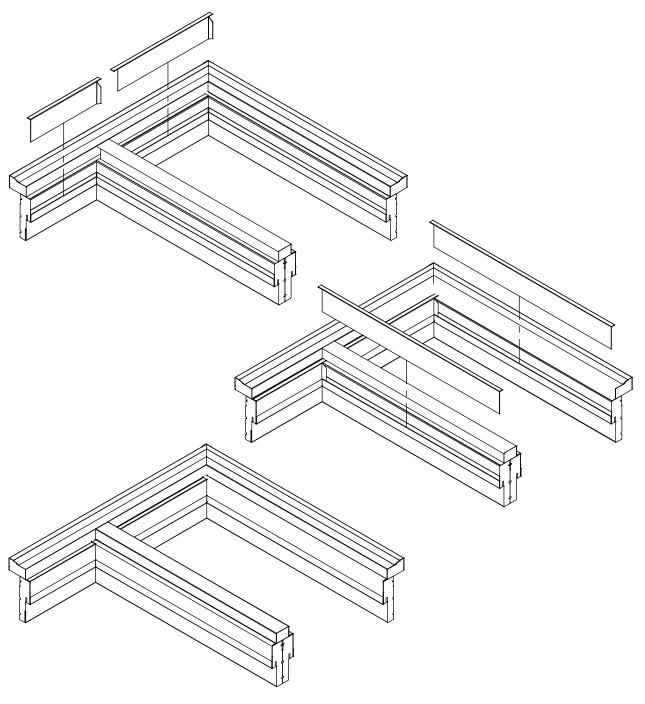


2 Piece Jamb Cover and Transom Using Jamb as Transom Sill



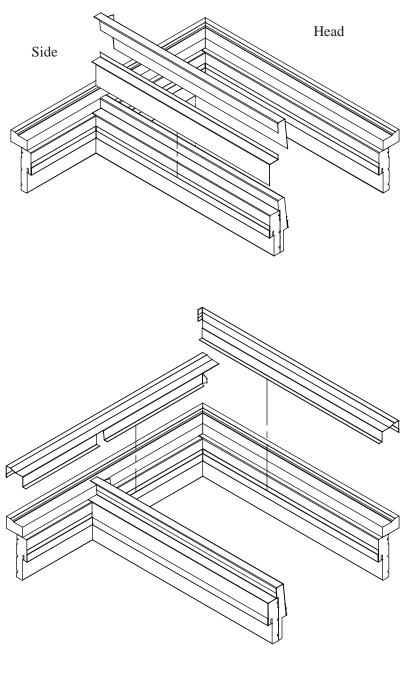


2 Piece Jamb Cover and Transom Using Jamb as Transom Sill



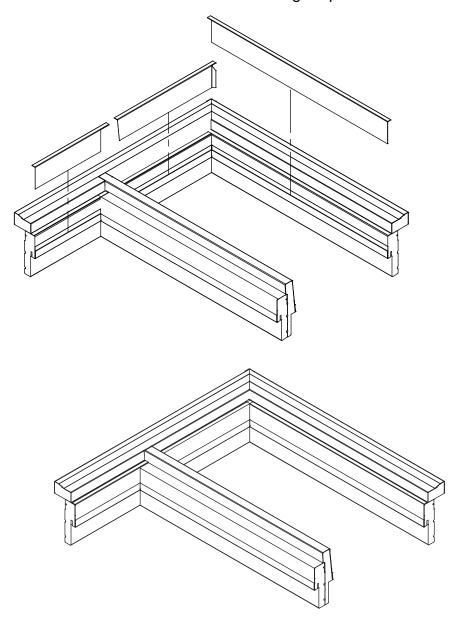


2 Piece Jamb Cover and Transom Using Sloped Transom Sill





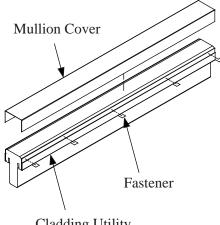
2 Piece Jamb Cover and Transom Using Sloped Transom Sill





Mullion Section Cladding

Entry or Patio Mullion



- Cladding Utility

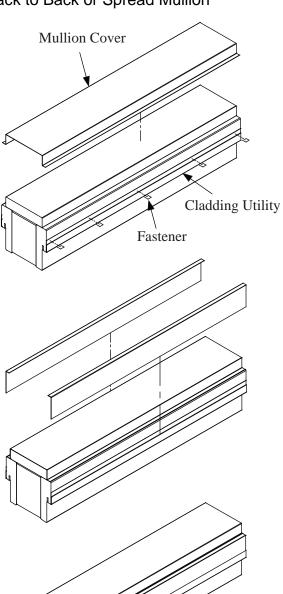
- 1. Install Utility trim flush with jamb rabbet on both sides of mullion. Fasten Utility with 1/4" crown x 1/2" staples approximately every 12".
- 2. Install Mullion Cover. Tuck into Utility.



Assembly - Mullion Section Cladding

Mullion Section Cladding

Back to Back or Spread Mullion



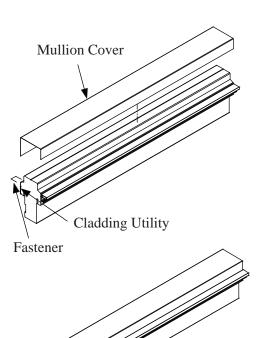
- 1. Install Utility trim flush with jamb rabbet on both sides of mullion. Fasten Utility with 1/4" crown x 1/2" staples approximately every 12".
- 2. Install Mullion Cover. Tuck into Utility.

3. Install Jamb Cover.



Mullion Section Cladding

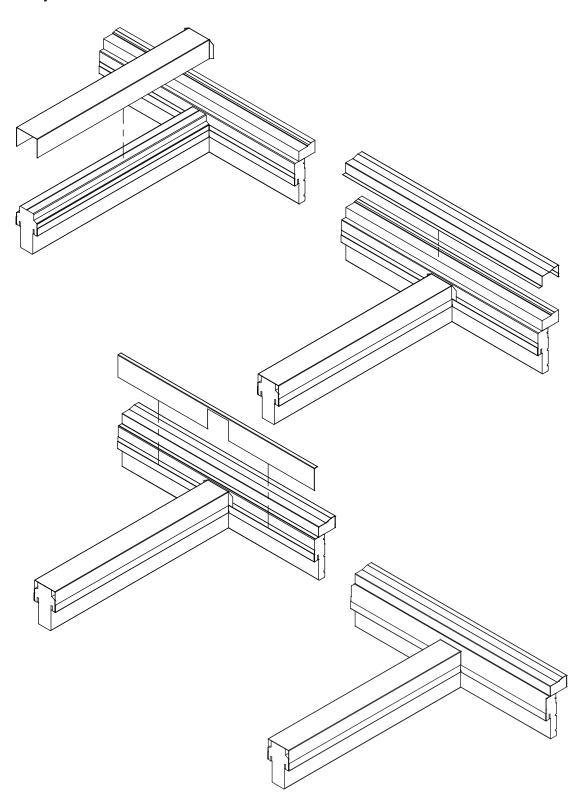
Venting Sidelite Mullion



- 1. Install Utility trim flush with jamb rabbet on both sides of mullion. Fasten Utility with 1/4" crown x 1/2" staples approximately every 12".
- 2. Install Mullion Cover. Tuck into Utility.

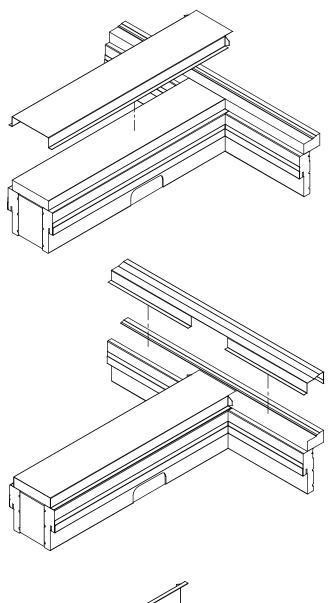
Mullion Interface Cladding

Entry or Patio Mullion

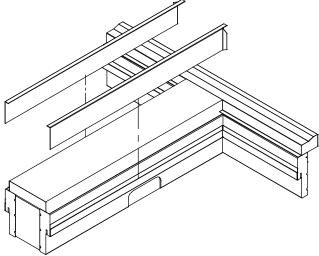




Mullion Interface CladdingBack to Back or Spread Mullion





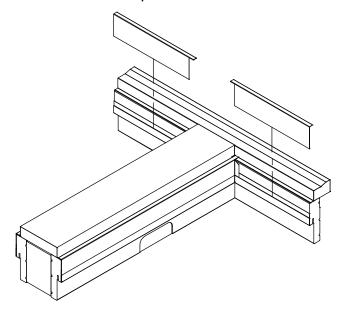


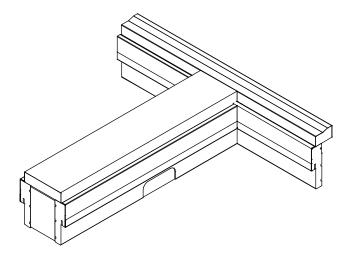


Assembly - Mullion Interface Cladding

Mullion Interface Cladding

Back to Back or Spread Mullion







THERMA TRU®

Shop Prehanging Instructions for Adjusta-Fit_® 2

Read *all* instructions carefully before pre-hanging your new Therma-Tru Adjusta-Fit 2 system.

Please note there are separate "Installation Instructions" for your Adjusta-Fit 2 system.

Therma-Tru Positive Pressure (NFPA-252/UL-10C/CAN4-S104) Labeled Systems

This Therma-Tru door system has been labeled in compliance with NFPA-252/UL-10C/CAN4-S104 Positive Pressure Smoke and Draft control rating and requires a listed Category "H" gasket and the application of an additional Category edge sealing system. To maintain the validity of this certification, the door installer must follow these instructions. They should be kept on file on the building premises for verification by the authority having jurisdiction.

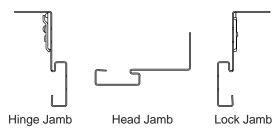
- Verify that the frame is compatible with the door and properly installed.
- Install hardware per the hardware manufacturer's instructions.
- For Positive Pressure Rating, a listed and labeled category "G" edge seal shall be installed into the opening.
- For smoke rating, a listed and labeled category "H" Smoke and Draft control gasket (included) shall be installed into the opening.
- Installation must comply with requirements of NFPA 80 "Standard for Fire Doors and Fire Windows"
- Surface mounted hardware must be attached with through bolts unless interior



PREHANGING COMPONENTS

PREHANGING INSTRUCTIONS

JAMBS (3 Parts)



WEATHERSTRIP

Shorter Reach (Category "H" Smoke and Draft control gasket)



HARDWARE



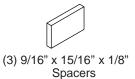
(2) #8 x 3/4" Phillips Flat Head Wood Screw



(5) #10 x 3/4" Phillips Panhead TEKS 2 Screws



(5) #8 x 1/2" Phillips Panhead Spear Tip Screws (white)



(1) "L" Bracket

(Prehanging Components cont.)

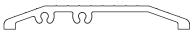
DOOR BOTTOM



(2) LOCK BORE **SLEEVE**



SILLS



Barrier Free Sill (included with public access pack)



Inswing Sill (included with inswing pack)

SUPPLIED SEPARATELY

DOOR

HINGES & SCREWS: 1-1/2" Pair TT Standard: TT Standard 5/8" Radius Undersize: ANSI Template 1/4" Radius

HINGE SHIM (used for wood edge doors)

TOOLS REQUIRED

Phillips Screwdriver Hammer or Rubber Mallet #2 Phillips Driver Bit

Drill

Utility Knife or Scissors

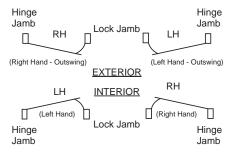
JOB SITE COMPONENTS

(1) CARTON - Site Package



1 LAY JAMBS ON CLEAN WORK SURFACE.

Choose the correct width, height, hand, hardware prep, and fire rating for your Therma-Tru door.



2 ASSEMBLE JAMBS



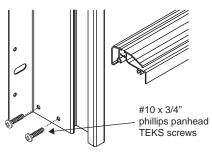
Insert tabs on ends of side jambs into slots on head jamb.

Bend tabs down and out using a rubber mallet or hammer.



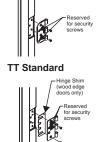
3 ASSEMBLE SILL TO HINGE AND LOCK JAMBS.

Attach sill with (4) #10 x 3/4" TEKS screws.



ATTACH HINGES TO JAMB

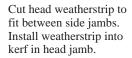
Fasten three knuckle hinge leaves to hinge jamb with (6) #10-24 x 3/8" nachine screws (#12-24 x 3/8" for Undersize). Note that two holes in each hinge are reserved for on-site application of securite screws.



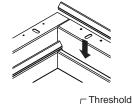
For Wood Edge in TR 12-24 systems: Install the hinge shim (supplied separately behind the hinge leaf prior to fastening.

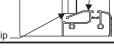
A closing device may be rewuired. Consult your local building code authority having jurisdiction to determine requirements.

INSTALL WEATHERSTRIP



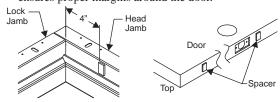
Cut side weatherstrip to fit from head weatherstrip till it touches threshold. Install into kerf in side jambs. Weatherstrip.





APPLY SPACERS

Place 1 self-adhesive spacer from the hardware bag on the head jamb 4" from the lock jamb. Place the remaining 2 spacers on the lock edge of the door (one near the top and one below the latch). This ensures proper margins around the door.

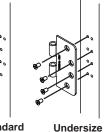




7

ATTACH HINGES TO DOOR

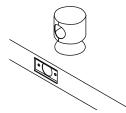
Fasten two knuckle hinge leaves (UL logo towards jamb on spring hinges) to door using (12) #10-24 x 3/8" machine screws (#12-24 x 3/8" for Undersize doors).



8

INSERT LOCK BORE SLEEVE (Composite lock blocks only)

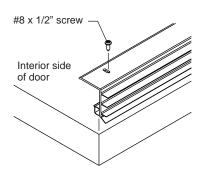
For fire doors with a composite lock block, insert lock bore sleeve into lock bore with opening of sleeve facing towards latch.



9

ATTACH DOOR BOTTOM.

Align ends of door bottom with edge of door and lip against interior face. Screw door bottom in place with (5) # 8 x 1/2" spear tip screws beginning in the center and working out to ends.

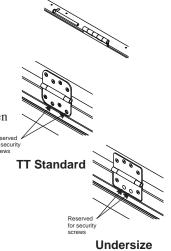


10

INSTALL DOOR TO FRAME

Align knuckles on hinges and tap in hinge pins.

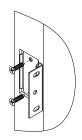
For spring hinges, prop door up so hinges align with holes in jamb. Fasten with #10-24 x 3/8" machine screws for series (#12-24 x 3/8" for Undersize systems). Note that two holes in each hinge are reserved for on-site application of security screws.



11

FASTEN DOOR TO FRAME WITH "L" BRACKET.

With door open, attach "L" bracket to lock plate mortise on door edge with two #8 x 3/4" wood screws provided.





With door closed, adjust the door to the top and to the latch side resting on the spacers applied in step 6. Attach "L" bracket to lock jamb with a #10 x 3/4" TEKS screw.

12 PREPARE PRE-HUNG UNIT FOR DELIVERY TO JOB SITE.

Package to provide protection during handling and shipping.

Ship along with "SITE" carton.





SHOP 18 Same-Day Stain Finishing

Prep for Finish - Door	18.3
Prep for Finish - Components	18.6
Hand Applied - Door	18.8
Hand Applied - Components	18.12
Spray Applied - Door	18.13
Spray Applied - Components	18.16
Gun Cleaning	18.17
Glass Cleanup	





Prep for Finish - Door

Equipment needed:

- Safety Glasses
- Gloves
- Chemical Resistant Glove
- 220 Grit Sand Paper
- · Sanding Block
- Orbital Sander
- Vacuum
- · Mineral Spirits
- Rags
- Glass Cleaner
- Shop Towels
- Single Edge Razor
- Putty Knife
- Screw Gun
- 7/64" Drill Bit
- T-Bars
- #8 x 1-1/2" Wood Screws
- Washers
- Tamper and Rubber Hammer
- Wood Filler
- Foam Brush
- Therma-Tru Same Day® Stain
- Masking Tape
- 1. If your door includes glass, continue to step 2. If your door does not include glass, skip to step 5.
- 2. Spray glass cleaner to clean the glass surface. Use a clean shop towel to wipe off the glass cleaner.
- 3. Check the glass for scratches and debris.
- 4. Set glass aside on a soft surface.





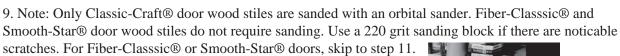
5. Use a single edge razor to remove any glue left on the skin.

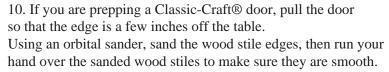
Note: Single edge razor blade must be new or cleaned well prior to using.



Prep for Finish - Door

- 6. If you are prepping a Fiber-Classic® or Smooth-Star® door, apply filler to the bullnose then smooth it out with a putty knife.
- 7. Run your hand over the bullnose to remove any debris.
- 8. If you notice a gap, apply wood filler between the wood stile and the wood rail then smooth it out with a putty knife.







- 13. Use a vacuum to remove anything that was left from the sanding procedure.
- 14. If you find extra glue after sanding, remove it using a single edge razor blade or 220 grit sand paper.
- 15. Use a rag to apply mineral spirits to all sanded surfaces of the door. Solvent is applied to make it easier to spot glue or other debris left behind. Note: Be sure to use a chemical resistant glove.
- 16. Flip the door over and repeat steps 5-15.





- 11. Using a sanding block with 220 grit sand paper, sand all flat surfaces beginning with the inside panels, stiles, and rails. Sand with the grain. Be careful not to overlap stile lines.
- 12. After sanding all inner stiles, sand the outside stiles. Make sure to sand the full length of the stile in one motion at the end.



- 17. If your door includes glass, continue to the next step. If your door does not include glass, skip to step 23.
- 18. Place the exterior frame and the glass on a soft surface table. Place the door over the glass with the exterior side facing down. Ensure that it is oriented correctly.



Prep for Finish - Door

- 19. Place the interior frame over the glass.
- 20. Using a screw gun, place all screws around the frame.

Note: Refer to the table to the right to set torque.



Doorlite	Torque
Doornte	(in-lbs)
Classic-Craft	9-12
Classic-Craft Wrought Iron & Impact	67-70
Fiber-Classic, Smooth-Star, Steel	12-14



- 21. Place a plug in each screw boss. By using a tamper and rubber hammer, all plugs will lock into place. The caps should be flush with the frame and the grain should be aligned.
- 22. Mask off the glass.



- 23. Sand the top and bottom wood rails of the door using a 220 grit sanding block. Run your hand over the wood rails to remove any debris.
- 24. Use a foam brush to apply stain to the top and bottom of the door.

Note: If door bottom will be applied, this step may be skipped for the bottom of the door.

- 25. Once the stain is dry, place a T-Bar or equivalent door support at the top and bottom of the door and pre-drill 4 holes using a 7/64" drill bit. Ensure that the pilot holes are centered, uncentered screws can crack the surface of the skin.
- 26. Drill screws with washers into place.

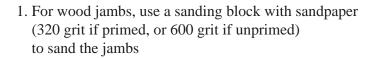




Prep for Finish - Components - Jambs

Equipment needed:

- Safety Glasses
- Gloves
- 320 Grit Sand Paper for Primed Jambs
 600 Grit Sand Paper for Wood Jambs
 Scotch Brite Pad Type A Very Fine for Composite Jambs
- Sanding Block
- Buff Colored Primer
- Foam Brush, Bristle Brush, or HVLP Spray Gun
- Pressurized Air



For composite jambs, polish out any scratches with a very fine Scotch Brite pad and wipe down with soap and water.

- 2. Spray off the jamb with pressurized air.
- 3. Lay the jamb on a flat surface.
- 4. For wood jambs only, apply buff colored primer to the surface of the jamb, and allow recommended drying time prior to finishing.







Prep for Finish - Components - Astragals

Equipment needed:

- · Safety Glasses
- Gloves
- Masking Tape
- Pressurized Air
- 1. Tape off the hardware lock side of the astragal and the foam weatherstrip for the inactive panel. Remove active door weatherstrip. For inswing astragals, remove the bottom astragal boot and tape off the top astragal boot. For outswing astragals, tape off the top and bottom boots.
- 2. Spray off the astragal with pressurized air.



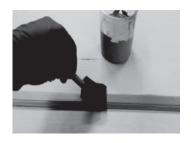


Prep for Finish - Components - SDL Bars

Equipment needed:

- · Safety Glasses
- Gloves
- Chemical Resistant Glove
- Shop Towels
- Mineral Spirits
- Buff Colored Primer
- Foam Brush, Bristle Brush, or HVLP Spray Gun
- Pressurized Air
- 1. Use a clean shop towel to clean off the surface of the SDL Bars using mineral spirits.

 Note: Be sure to use a chemical resistant glove.
- 2. Lay the SDL Bar(s) on a flat surface.
- 3. Spray off the SDL Bar(s) with pressurized air.





- 4. Using a foam brush, apply buff colored primer to the surface of the SDL Bar(s). Note: A bristle brush or spray application can also be used.
- 5. Allow recommended drying time of primer product before moving on to finishing.

Prep for Finish - Components - Dentil Shelves

Equipment needed:

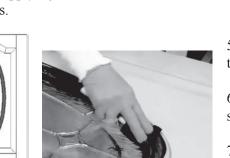
- Safety Glasses
- Gloves
- 220 Grit Sand Paper
- · Pressurized Air
- 1. Sand using 220 grit sand paper.
- 2. Spray off the dentil shelf with pressurized air.

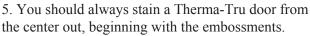


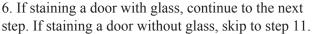


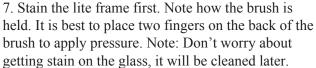
Equipment needed:

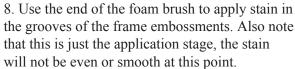
- Safety Glasses
- Nitrile Gloves
- Sleeves
- 3" Natural Bristle Paint Brush
- 2" Paint Brush
- · Foam Brush
- Apron
- Rags
- Therma-Tru Same Day® Stain
- Cup
- Stir Stick
- Masking Tape
- Color Control Samples
- 1. Note: Stain in temperatures between 50° and 90° with humidity below 80%.
- 2. Open and stir the stain using a stir stick. Improperly mixed stain will not dry. Do not shake.
- 3. Pour the appropriate stain into a cup.
- 4. Start by applying stain with a foam brush to the wood stiles.

















9. Use the 3" brush to smooth out the stain. Using a back and forth motion will help get stain into the grain of the door. Be sure to get down in the grooves of the lite frame.

Note: To reduce bristle loss, tug on the bristles with a rag before beginning and periodically during the brushing process.



11. Now you can move on to the innermost embossment. Use the foam brush again to apply stain.



10. Wipe off excess stain. Use the 3" brush as a scoop at a sharp angle. Make sure to get inside the grooves as well as flat surfaces. After each pass, wipe the brush on a rag to keep clean.



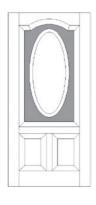




12. Use the 3" brush to smooth out the stain. Using a back and forth motion will help get stain into all of the grain. Pay special attention to the corners and the small, detailed parts of the embossment.

13. Use the 3" brush as a scoop to wipe off excess stain. Use a rag to clean off the brush after each pass.

14. Once the excess is removed, use short, choppy strokes and go back over the part of the embossment where the grain is vertical.







15. Now you can move on to the innermost flat portion of the door. Use the foam brush to apply stain over the flat area.

16. Use the 3" brush to smooth out the stain in the flat areas. Be sure to brush with the grain. Note: Check your door against a color control sample throughout the entire staining process.



- 17. Note that it is ok to go over lite frames. They will be touched up later.
- 18. Working your way out from the center of the door, apply stain to the next flat area with the foam brush. Do areas surrounded by embossments first.



- 22. Use the tip of the brush to make stain flow in the direction of the grain in the embossments.
- 23. Next, move on to the rails and inner stiles.
- 24. Apply stain with the foam brush then smooth out the stain with the 3" brush. Don't forget to wipe off excess stain as before.

Note: When working with stiles and rails, try not to spread the stain too far past intersections. Be sure to smooth out brush lines after completing each rail.





- 27. Once the stain is applied, use a 3" brush to smooth it out.
- 28. Wipe off excess stain.

Note: If stain is too thick, apply mineral spirits to your rag and wipe your brush before the next pass.





- 19. Avoid excess stain on the corners of the embossments. They will be finished later with the bristles of a brush.
- 20. Smooth out the stain with a 3" brush. Stain about 1" around the embossments as well.
- 21. Using the brush as a scoop again, wipe off excess stain. Use a rag to clean off the brush after each pass.





- 25. The stiles of the door are stained last. Apply stain with the foam brush.
- 26. Note: Earlier when stain was applied to the embossments, stain was applied to about 1" of the stile. This was done so that stain would not have to be applied too close to the embossments, keeping large amounts of stain from running in them.





29. Next, go over the door with a 2" brush to touch up embossments, intersections, and streaks. Note: Pay special attention to the intersections. Also pay attention to the corners and grain direction at the angles of the embossments.





- 30. Watch for areas where stain did not get into the grain.
- 31. Inspect the door for brush bristles as you go. As you find them, use the edge of the brush to carefully remove them.
- 32. Depending on environmental conditions, let the door dry for approximately 6-8 hours before applying Top Coat.

Note: Test for dryness before applying topcoat. Place a piece of masking tape on the door in an inconspicuous area. Rub the tape down firmly then remove. The stain is completely dry when the tape can be removed without taking any stain off. Touch up if necessary.

33. Repeat the Hand Applied - Door steps to apply two layers of Top Coat. Let the first layer of Top Coat dry approximately 4 hours before applying the second layer. Do not use the tape test for Top Coat.

Note: Top Coat layers should be 2-3 wet mils per layer.

34. For door with glass, refer to the Glass Cleanup section.

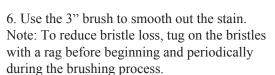


Hand Applied - Components

Equipment needed:

- · Safety Glasses
- Nitrile Gloves
- Sleeves
- 3" Natural Bristle Paint Brush
- 2" Paint Brush
- · Foam Brush
- Apron
- Rags
- Therma-Tru Same Day® Stain
- Cup
- · Stir Stick
- Pressurized Air
- Color Control Samples
- Masking Tape
- 1. Note: Stain in temperatures between 50° and 90° with humidity below 80%.
- 2. Lay the component on a flat surface.
- 3. Open and stir the stain using a stir stick. Improperly mixed stain will not dry. Do not shake.
- 4. Pour the appropriate stain into a cup.
- 5. Start by applying stain with a foam or bristle brush.





Note: Check your component against a color control sample throughout the entire staining process.

7. Depending on environmental conditions, let the component dry for approximately 6-8 hours before applying Top Coat.

Note: Test for dryness before applying topcoat. Place a piece of masking tape on the component in an inconspicuous area. Rub the tape down firmly then remove. The stain is completely dry when the tape can be removed without taking any stain off. Touch up if necessary.

- 8. Spray off the component with pressurized air to remove any debris.
- 9. Use the Hand Applied Components steps to apply two layers of Top Coat. Let the first layer of Top Coat dry approximately 4 hours before applying the second layer. Do not use the tape test for Top Coat.

Note: Top Coat layers should be at least 2 wet mils per layer.

10. For astragals, re-install the active door weatherstrip and astragal boots.





Spray Applied - Door

Equipment needed:

- Safety Glasses
- Nitrile Gloves
- HVLP Gun
- Ear Plugs
- 3" Natural Bristle Brush
- Rags
- · Mineral Spirit
- Therma-Tru Same Day® Stain
- Stir Stick
- Color Control Samples
- Masking Tape
- 1. Note: Stain in temperatures between 50° and 90° with humidity below 80%.
- 2. Open and stir the stain using a stir stick. Improperly mixed stain will not dry. Do not shake.
- 3. Load the proper stain into the HVLP gun. Before using, dry fire the gun to remove any prior stain.
- 4. Start by applying stain to both wood stiles and the top and bottom wood rails.



7. Remove excess stain starting around any lite frames using a 3" brush. Wipe the brush on a rag after each pass to keep the brush clean. Note: To reduce bristle loss, tug on the bristles with a rag before beginning and periodically during the brushing process.



5. Tilt the door at a 45° angle, then continue spraying using a continuous left-to-right, right-to-left motion.

Note: The gun should always be 6" - 8" away from the door. Use a 50/50 overlap pass technique.

6. For doors with glass, note that it is ok for stain to get on the lite, but try not to spray the entire lite. Spray around the frame to assure that stain is where needed.







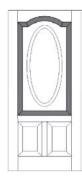
Spray Applied - Door

- 8. Next, move on to the embossments.
- 9. Wipe brush on a rag after each pass.





12. Next, move on to the flat area contained by the embossment.





- 10. Use choppy strokes to smooth out the stain in the direction of the grain.
- 11. Note: Check your door against a color control sample throughout the entire staining process.





13. Touch up around the frame.



- 14. Move on to the rest of the embossments. Make sure to get the brush deep into the grooves.
- 15. Use choppy strokes to smooth out the stain in the direction of the grain.

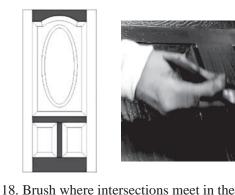






Spray Applied - Door

- 16. Move on to the flat areas contained by the embossments.
- 17. Remove excess stain on all inner rails and stiles in the direction of the grain.



direction of the grain.



19. Remove excess stain from the outside stiles.





- Note: If stain is too thick, apply mineral spirits to your rag and wipe your brush before the next pass.
- 20. Remove excess stain from the side stiles.
- 21. Repeat steps 4-20 on the opposite side of the door.
- 22. Depending on environmental conditions, let the door dry for approximately 6-8 hours before applying Top Coat.

Note: Test for dryness before applying topcoat. Place a piece of masking tape on the door in an inconspicuous area. Rub the tape down firmly then remove. The stain is completely dry when the tape can be removed without taking any stain off. Touch up if necessary.

23. Use the Spray Applied - Door steps to apply two layers of Top Coat. Let the first layer of Top Coat dry approximately 4 hours before applying the second layer. Do not use the tape test for Top Coat.

Note: Top Coat layers should be 2-3 wet mils per layer.

- 24. When finished spraying, refer to the Gun Cleaning section.
- 25. For door with glass, refer to the Glass Cleanup section.

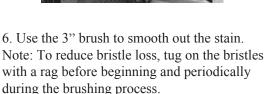


Spray Applied - Components

Equipment needed:

- · Safety Glasses
- Nitrile Gloves
- HVLP Gun
- Ear Plugs
- 3" Natural Bristle Paint Brush
- · Foam Brush
- Rags
- Therma-Tru Same Day® Stain
- Stir Stick
- Pressurized Air
- Color Control Samples
- Masking Tape
- 1. Note: Stain in temperatures between 50° and 90° with humidity below 80%.
- 2. Lay the component on a flat surface.
- 3. Open and stir the stain using a stir stick. Improperly mixed stain will not dry. Do not shake.
- 4. Load the proper stain into the HVLP gun. Before using, dry fire the gun to remove any prior stain.
- 5. Spray the component.





Note: Check your component against a color control sample throughout the entire staining process.

7. Depending on environmental conditions, let the component dry for approximately 6-8 hours before applying Top Coat.

Note: Test for dryness before applying topcoat. Place a piece of masking tape on the component in an inconspicuous area. Rub the tape down firmly then remove. The stain is completely dry when the tape can be removed without taking any stain off. Touch up if necessary.

- 8. Spray off the component with pressurized air to remove any debris.
- 9. Use the Spray Applied Components steps to apply two layers of Top Coat. Let the first layer of Top Coat dry approximately 4 hours before applying the second layer. Do not use the tape test for Top Coat.

Note: Top Coat layers should be at least 2 wet mils per layer.

- 10. When finished spraying, refer to the Gun Cleaning section.
- 11. For astragals, re-install the active door weatherstrip and astragal boots.





Gun Cleaning

Equipment needed:

- Safety Glasses
- Gloves
- Gun Tool
- Soft-Bristle Brush and Wires
- 1. Remove paint cup from the gun.
- 2. Spray hot water through the gun until it runs clean.
- 3. Remove the air cap and tip from the front of the gun.

Note: The gun tool is needed to remove the tip. Trigger the gun while removing the tip to prevent damage to the needle.



5. Use a soft-bristle brush to clean out the paint inlet fittings.



7. Flush the gun with water. Use a soft-bristle brush to clean out any remaining stain or buildup within the gun.

Note: Clean the outside of the gun.

- 8. Clean all parts and the gun. Use brushes and wires to clean holes.
- 9. Once all parts are clean, reassemble the gun. Make sure all fittings are snug.



4. Unscrew the needle adjustment knob from the back of the gun and pull out the needle.



6. Remove both inlet fittings. Use the gun tool.





Glass Cleanup

- Safety Glasses
- Gloves
- Shop Towels
- Single Edge Razor
- Glass Cleaner
- Disposable Paint Applicator
- Cotton Swab
- 1. For doors with glass, begin by applying glass cleaner on the surface around the frame.
- 2. Run you fingers over the glass surface to ensure that the stain is saturated with glass cleaner.



- 5. Scrape debris away from the lite frame.
- 6. Touch up around the frame with the razor, checking for any remaining stain.



- 9. Using a clean shop towel, remove debris from glass, then wipe the glass clean.
- 10. Clean well around the frame.



- 12. Use a cotton swab to smooth out the stain.
- 13. Apply Top Coat to surfaces that were touched up once they are dry.
- 14. Repeat steps 2-13 on the opposite side of the door.



- 3. Use a single edge razor to remove stain from glass. Note: Single edge razor blade must be new or cleaned well prior to using.
- 4. Start around the frame first. Make sure the corners are cleaned out well.



- 7. Apply glass cleaner to the rest of the glass surface.
- 8. Use the razor to clean the rest of the glass.



11. If any stain was removed from the frame, use a disposable paint applicator to re-apply stain.



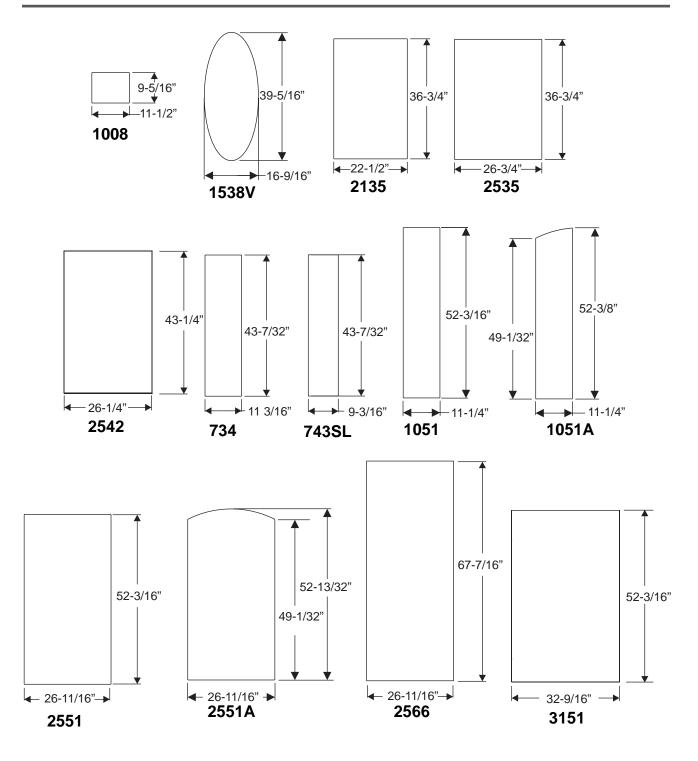


SHOP 19 Cutout Size Reference

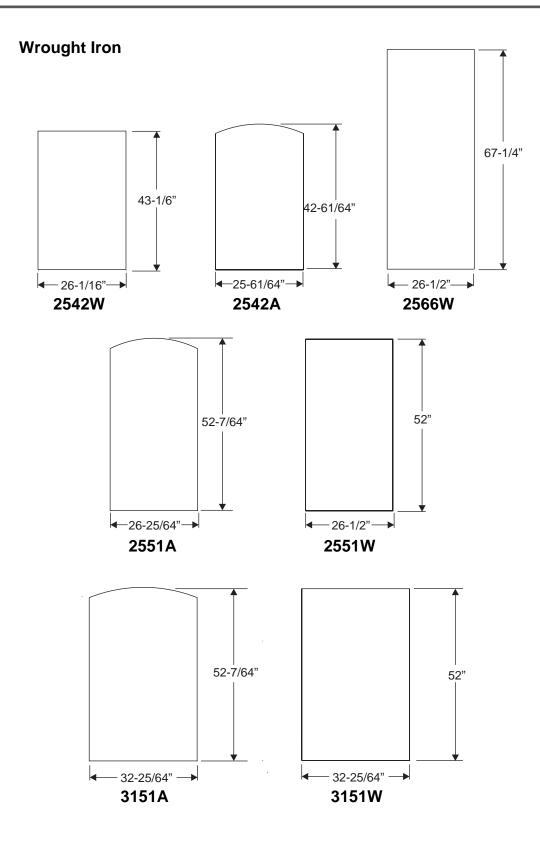
Classic-Craft Door Lite Cutouts	19.3
Fiber Classic, Smooth Star, and Steel Door Lite Cutouts	19.5
Impact Door Lite Cutouts	19 7



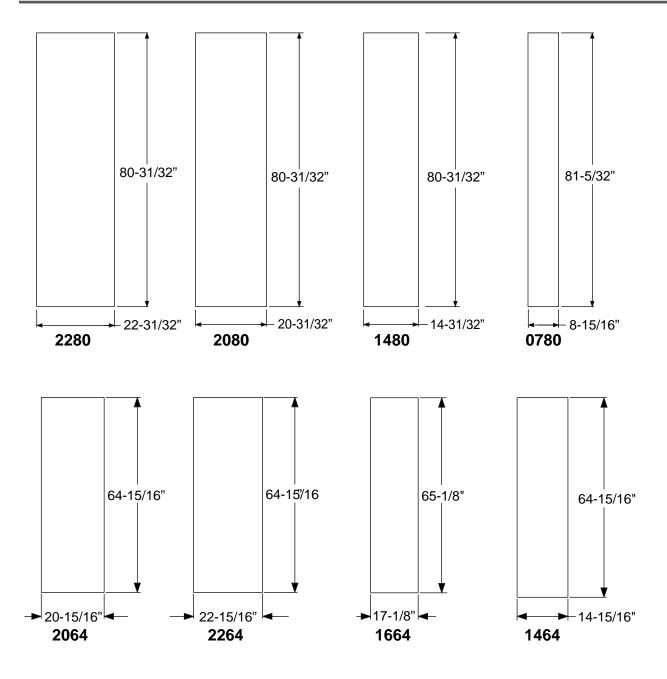


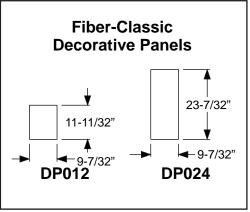




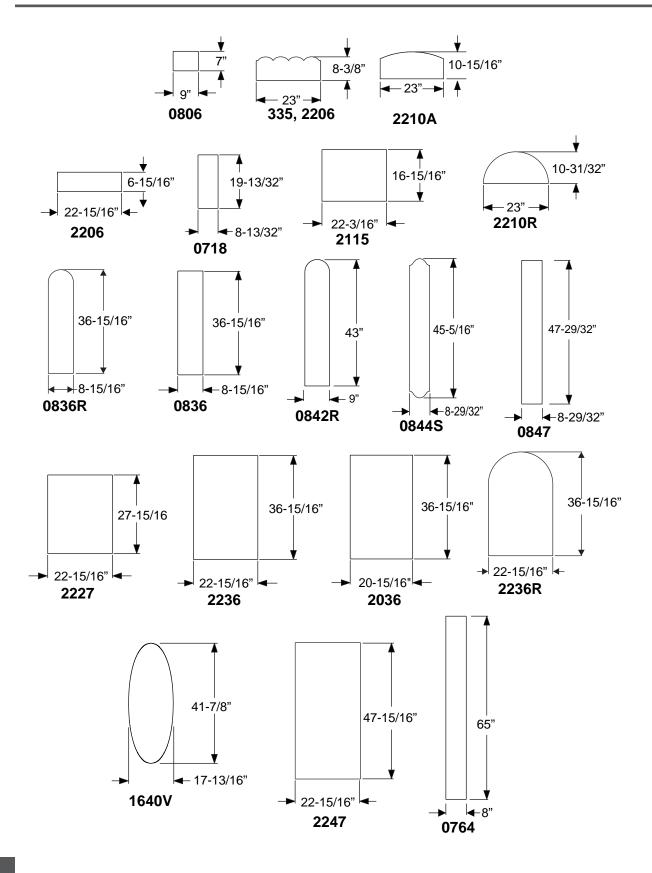


Fiber Classic, Smooth Star, and Steel Door Lite Cutouts

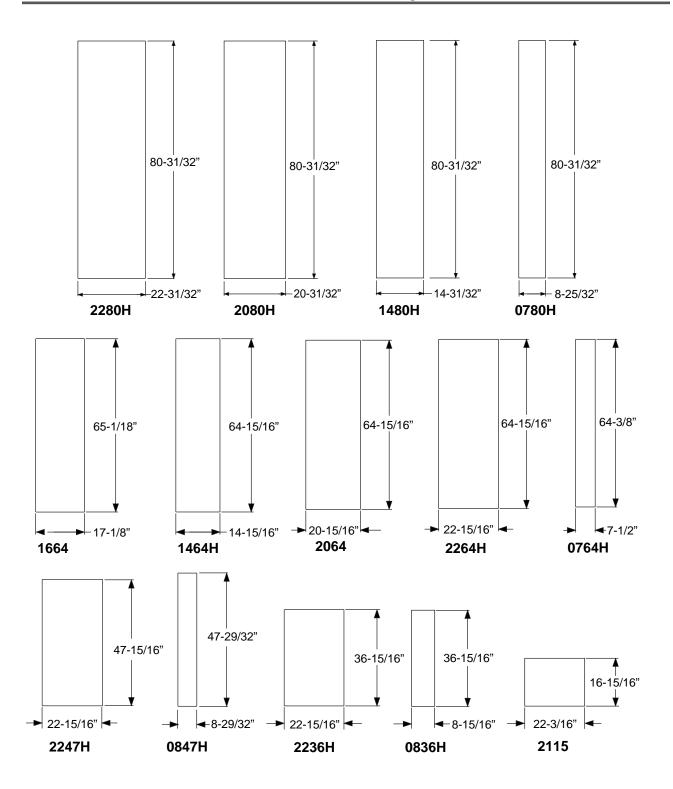
















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Conversion Chart

Fraction	Decimal	Metric	Fraction	Decimal	Metric
1/64	0.01563	0.39688	33/64	0.51563	13.09688
1/32	0.03125	0.79375	17/32	0.53125	13.49375
3/64	0.04688	1.19063	35/64	0.54688	13.89063
1/16	0.06250	1.58750	9/16	0.56250	14.28750
5/64	0.07813	1.98438	37/64	0.57813	14.68438
3/32	0.09375	2.38125	19/32	0.59375	15.08125
7/64	0.10938	2.77813	39/64	0.60938	15.47813
1/8	0.12500	3.17500	5/8	0.62500	15.87500
9/64	0.14063	3.57188	41/64	0.64063	16.27188
5/32	0.15625	3.96875	21/32	0.65625	16.66875
11/64	0.17188	4.36563	43/64	0.67188	17.06563
3/16	0.18750	4.76250	11/16	0.68750	17.46250
13/64	0.20313	5.15938	45/64	0.70313	17.85938
7/32	0.21875	5.55625	23/32	0.71875	18.25625
15/64	0.23438	5.95313	47/64	0.73438	18.65313
1/4	0.25000	6.35000	3/4	0.75000	19.05000
17/64	0.26563	6.74688	49/64	0.76563	19.44688
9/32	0.28125	7.14375	25/32	0.78125	19.84375
19/64	0.29688	7.54063	51/64	0.79688	20.24063
5/16	0.31250	7.93750	13/16	0.81250	20.63750
21/64	0.32813	8.33438	53/64	0.82813	21.03438
11/32	0.34375	8.73125	27/32	0.84375	21.43125
23/64	0.35938	9.12813	55/64	0.85938	21.82813
3/8	0.37500	9.52500	7/8	0.87500	22.22500
25/64	0.39063	9.92188	57/64	0.89063	22.62188
13/32	0.40625	10.31875	29/32	0.90625	23.01875
27/64	0.42188	10.71563	59/64	0.92188	23.41563
7/16	0.43750	11.11250	15/16	0.93750	23.81250
29/64	0.45313	11.50938	61/64	0.95313	24.20938
15/32	0.46875	11.90625	31/32	0.96875	24.60625
31/64	0.48438	12.30313	63/64	0.98438	25.00313
1/2	0.50000	12.70000	1	1.00000	25.40000



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