



**LIMIT STATES DESIGN
CANADA**



VERSA-LAM® 2.0E EASTERN SPECIFIER GUIDE

CCMC Report Number
12472-R
VERSA-LAM®

High Performance Floor &
Roof Systems



Boise Cascade
Engineered Wood Products



Makes Designing Homes Easier

Architects, engineers, and designers trust
Boise Cascade's Engineered Wood Products to
provide a better system for framing floors, roofs and walls.

It's the **SIMPLE FRAMING SYSTEM®**, featuring beams, joists, studs, columns and rim boards that work together as a system, so you spend less time cutting and fitting. In fact, the **SIMPLE FRAMING SYSTEM®** uses fewer pieces and longer lengths than conventional framing, so you'll complete jobs in less time.

You'll Build Better Homes with the **SIMPLE FRAMING SYSTEM®**

Now it's easier than ever to design and build better floor systems. When you specify the **SIMPLE FRAMING SYSTEM®**, your clients will have fewer problems with squeaky floors and ceiling gypsum board cracks. The **SIMPLE FRAMING SYSTEM®** also means overall better floor, roof and wall framing than dimension lumber allows.

Better Framing

Doesn't Have to Cost More

Boise Cascade EWP **SIMPLE FRAMING SYSTEM®** often costs less than conventional framing methods when the resulting reduced labor and materials waste are considered. There's less sorting and cost associated with disposing of waste because you order only what you

need. Although our longer lengths help your clients get the job done faster, they cost no more.

Environmentally Sound

As an added bonus, floor, roof and wall systems built with Boise Cascade Joists require about half the number of trees as those built with dimension lumber. This helps you design a home both you and future generations will be proud to own.

What Makes the **SIMPLE FRAMING SYSTEM®** So Simple?

☑ Floor and Roof Framing with Boise Cascade Joists

Light in weight, but heavy-duty, Boise Cascade Joists have a better strength / weight ratio than dimension lumber. Knockouts can be removed for cross-ventilation and wiring.

☑ Ceilings Framed with Boise Cascade Joists

The consistent size of Boise Cascade Joists helps keep gypsum board flat and free of unsightly nail pops and ugly shadows, while keeping finish work to a minimum.

☑ **VERSA-LAM®** Beams for Floor and Roof Framing

☑ **VERSA-STUD®** and **VERSA-LAM®** Columns for wall Framing

These highly-stable beams are free of the large-scale defects that plague dimension beams. The result is quieter, flatter floors (no camber) and no shrinkage-related call-backs.

☑ Boise Cascade Rimboard

Boise Cascade EWP offer several engineered rimboard products regionally, including **BOISE CASCADE RIM BOARD® OSB**, **VERSA-RIM®**, **VERSA-STRAND™ 0.8** (check supplier or Boise Cascade EWP representative for availability). These products work with **Alljoist®** and **BCI®** Joists to provide a solid connection at the critical floor/wall intersection.

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Scope: This work includes the complete furnishing and installation of all VERSA-LAM® beams as shown on the drawings, herein special and necessary to complete the work.

Materials: Southern Pine veneer, laminated in a press with all grain parallel with the length of the member. Glue used in lamination is phenol formaldehyde and isocyanate exterior type adhesive which comply with CSA O112 standards. All adhesives are compliant to NBCC2010 and CCMC requirements for dry use structural applications.

Design: The VERSA-LAM® beams shall be sized and detailed to fit the dimensions and loads indicated on the plans. All designs are in accordance with allowable values developed with ASTM D5456 and CSA O86-09 and listed in the Canadian Construction Materials Center CCMC 12472-R report and section properties based upon standard engineering principles. Verification of design of the beams by complete calculations shall be available upon request.

Drawings: Additional drawings showing layout and detail necessary for determining fit and placement in the buildings are (are not) to be provided by supplier.

Fabrication: The VERSA-LAM® beams shall be manufactured in a plant evaluated for fabrication by the CCMC under the supervision of a third-party inspection agency listed by the CCMC.

Storage: The VERSA-LAM® beams, if stored prior to erection, shall be stored on stickers spaced a maximum of 15 ft. apart. Beams shall be stored on a dry, level surface and protected from the weather. They shall be handled with care so they are not damaged.

Installation: The VERSA-LAM® beams are to be installed in accordance with the plans and Boise Cascade Engineered Wood Products Installation Guide. Temporary construction loads which cause stresses beyond design limits are not permitted. Erection bracing shall be provided to assure adequate lateral support for the individual beams and the entire system until the sheathing material has been applied.



Codes: The design shall be based on CSA O86-09 and the National Building Code of Canada. The VERSA-LAM® beams shall be evaluated by the CCMC evaluation service.

Lifetime Guaranteed Quality and Performance

Boise Cascade warrants its BCI® Joist, VERSA-LAM®, and ALLJOIST® products to comply with our specifications, to be free from defects in material and workmanship, and to meet or exceed our performance specifications for the normal and expected life of the structure when correctly stored, installed and used according to our Installation Guide.

For information about
Boise Cascade's Engineered Wood Products,
including sales terms and conditions,
warranties and disclaimers,
visit our website at

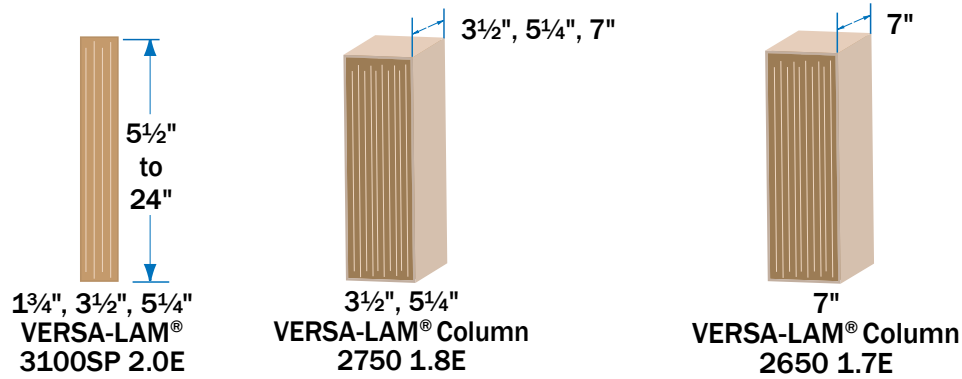
www.bcewp.com

Boise Cascade Chain-of-Custody Certifications

Boise Cascade Engineered Wood Products has a proven track record of providing quality wood products and a nationwide building materials distribution network for our customers, helping them to enhance their own businesses.

Boise Cascade Engineered Wood Products build better homes with stronger, stiffer floors using only wood purchased in compliance with a number of green building programs. Take a moment to view our sustainability certification site at <http://www.bc.com/sustainability/certification.html> or view our green brochure at http://www.bc.com/wood/ewp/Boise_EWP_Green.html.

Boise Cascade Engineered Wood Products throughout North America can now be ordered FSC® Chain-of-Custody (COC) certified, enabling homebuilders to achieve LEED® points residential and commercial green building programs including LEED for Homes and LEED for New Construction. Boise Cascade Engineered Wood Products are available as PEFC® Chain-of-Custody certified, SFI® Chain-of-Custody certified and SFI® Fiber-Sourcing certified, as well as NAHB Research Center Green Approved, enabling homebuilders to also obtain green building points through the Green Building Standards.



DESIGN PROPERTIES

Width	Depth	Size factor	Weight	Factored Shear Resistance (Joist), V_r	Factored Bending Resistance (Joist), M_r	Stiffness, EI	Modulus of Elasticity, E	Specified Bending Strength (Joist), f_b	Specified Shear Strength (Joist), f_v	Specified Compression Parallel to Grain, f_c	Specified Compression Perpendicular to Grain, f_{cp}
(in)	(in)		(lb/ft)	(lb)	(lb-ft)	(x10 ⁶ lb-in ²)	(x10 ⁶ psi)	(psi)	(psi)	(psi)	(psi)
VERSA-LAM® COLUMN 2750F _b 1.8E DESIGN PROPERTIES											
3½	3½	1.15	3.5	4 263	3 451	23	1.8	5 615	580	5 300	1 525
3½	5¼	1.10	5.3	6 395	7 422	76					
3½	7	1.06	7.1	8 526	12 780	180					
5¼	5¼	1.10	7.9	9 592	11 133	114					
5¼	7	1.06	10.6	12 789	19 170	270					
VERSA-LAM® COLUMN 2650F _b 1.7E DESIGN PROPERTIES											
7	7	1.06	12.6	17 052	24 040	340	1.7	5 281	580	4396	1525
VERSA-LAM® 3100F _b 2.0E DESIGN PROPERTIES											
1¾	5½	1.09	2.8	3350	4252	49	2.0	6 270	580	5 300	1 525
	7¼	1.06	3.7	4 415	7 624	111					
	9¼	1.03	4.7	5 633	12 080	231					
	9½	1.03	4.8	5 786	12 704	250					
	11¼	1.01	5.7	6 851	17 484	415					
	11½	1.00	6.1	7 232	19 364	488					
	14	0.98	7.1	8 526	26 426	800					
	16	0.97	8.2	9 744	34 007	1 195					
	18	0.96	9.2	10 962	42 481	1 701					
3½	20	0.94	10.2	12 180	51 835	2 333	2.0	6 270	580	5 300	1 525
	5½	1.09	5.6	6 699	9 049	97					
	7¼	1.06	7.4	8 831	15 249	222					
	9¼	1.03	9.4	11 267	24 160	462					
	9½	1.03	9.7	11 571	25 408	500					
	11¼	1.01	11.5	13 703	34 968	831					
	11½	1.00	12.1	14 464	38 727	977					
	14	0.98	14.3	17 052	52 852	1 601					
	16	0.97	16.3	19 488	68 015	2 389					
5¼	18	0.96	18.4	21 924	84 962	3 402	2.0	6 270	580	5 300	1 525
	20	0.94	20.4	24 360	103 671	4 667					
	5½	1.09	8.4	10 049	13 574	146					
	7¼	1.06	11.1	13 246	22 873	333					
	9¼	1.03	14.2	16 900	36 239	692					
	9½	1.03	14.5	17 357	38 112	750					
	11¼	1.01	17.2	20 554	52 451	1 246					
	11½	1.00	18.2	21 696	58 091	1 465					
	14	0.98	21.4	25 578	79 278	2 401					

NOTES:

- Repetitive member factor has not been applied to the Factored Bending Resistance.
- Size factors have been applied to the Factored Bending Resistance.
- VERSA-LAM® Specific Gravity for fasteners design = 0.5
- Specified compression perpendicular to grain on plank orientation (plate) is 809 psi.

VERSA-LAM® 3100F_b 2.0E Maximum Uniform Load (lbs/ft)

Design Span [ft]	Beam Thickness	1¾" - 1 Ply							
	Beam Depth	7¼"	9¼"	9½"	11¼"	11½"	14"	16"	18"
6' - 0"	Unfactored Live Load for L / 360 [plf]	762	-	-	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	1399	1885	1950	2429	2613	3292	-	-
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	4 / 10	5½ / 13¼	5½ / 13¼	7 / 17	7½ / 18¼	9¼ / 23	-	-
	Bearing Lengths [End / Intermediate] - beam [in]	2 / 5	2¾ / 6¾	2¾ / 7	3½ / 8¾	3¾ / 9¼	4¾ / 11¼	-	-
8' - 0"	Unfactored Live Load for L / 360 [plf]	321	667	723	-	-	-	-	-
	Unfactored Total Load for L / 240 [plf]	478	-	-	-	-	-	-	-
	Factored Total Load, Wf [plf]	947	1326	1369	1679	1796	2215	2648	-
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	3¾ / 9	5 / 12½	5¼ / 12¾	6¼ / 15¾	6¾ / 16¾	8¼ / 20¾	10 / 24¾	-
	Bearing Lengths [End / Intermediate] - beam [in]	2 / 4½	2½ / 6¼	2¾ / 6½	3¾ / 8	3½ / 8½	4¾ / 10½	5 / 12½	-
10' - 0"	Unfactored Live Load for L / 360 [plf]	164	341	370	615	723	-	-	-
	Unfactored Total Load for L / 240 [plf]	243	508	550	-	-	-	-	-
	Factored Total Load, Wf [plf]	604	959	1009	1282	1367	1668	1972	-
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	3 / 7¼	4½ / 11¼	4¾ / 11¾	6 / 15	6½ / 16	8 / 19½	9¼ / 23	-
	Bearing Lengths [End / Intermediate] - beam [in]	1½ / 3¾	2¼ / 5¾	2½ / 6	3¾ / 7¾	3¾ / 8¼	4 / 10	4¾ / 11¾	-
12' - 0"	Unfactored Live Load for L / 360 [plf]	95	197	214	355	418	686	1024	-
	Unfactored Total Load for L / 240 [plf]	139	292	316	528	622	-	-	-
	Factored Total Load, Wf [plf]	418	664	699	963	1067	1337	1570	1816
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	2½ / 6	3¾ / 9½	4 / 9¾	5½ / 13½	6 / 15	7½ / 18¾	9 / 22	10¼ / 25½
	Bearing Lengths [End / Intermediate] - beam [in]	1½ / 3½	2 / 4¾	2 / 5	2¾ / 7	3¾ / 7¾	4 / 9½	4¾ / 11¼	5¼ / 13
14' - 0"	Unfactored Live Load for L / 360 [plf]	59	124	134	224	263	432	644	918
	Unfactored Total Load for L / 240 [plf]	86	182	197	330	389	641	-	-
	Factored Total Load, Wf [plf]	306	486	512	706	782	1069	1304	1501
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	2 / 5	3¾ / 8	3½ / 8½	4¾ / 11½	5¼ / 12¾	7 / 17½	8½ / 21¼	10 / 24½
	Bearing Lengths [End / Intermediate] - beam [in]	1½ / 3½	1¾ / 4	1¾ / 4¼	2½ / 6	2¾ / 6½	3¾ / 9	4¾ / 10¾	5 / 12½
16' - 0"	Unfactored Live Load for L / 360 [plf]	40	83	90	150	176	289	432	615
	Unfactored Total Load for L / 240 [plf]	56	120	130	219	258	427	639	-
	Factored Total Load, Wf [plf]	233	371	390	538	597	816	1051	1278
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	1¾ / 4½	3 / 7	3 / 7½	4¾ / 10¾	4½ / 11¼	6¼ / 15¾	8 / 19¾	9¾ / 24
	Bearing Lengths [End / Intermediate] - beam [in]	1½ / 3½	1½ / 3½	1½ / 3¾	2¼ / 5¼	2¼ / 5¾	3¾ / 7¾	4 / 10	5 / 12
18' - 0"	Unfactored Live Load for L / 360 [plf]	-	58	63	105	124	203	303	432
	Unfactored Total Load for L / 240 [plf]	-	83	90	152	180	297	447	639
	Factored Total Load, Wf [plf]	-	292	307	424	470	643	829	1036
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	-	2½ / 6¼	2¾ / 6½	3¾ / 9	4 / 10	5½ / 13½	7 / 17½	8¾ / 21¾
	Bearing Lengths [End / Intermediate] - beam [in]	-	1½ / 3½	1½ / 3½	2 / 4½	2 / 5	2¾ / 7	3½ / 8¾	4½ / 11
20' - 0"	Unfactored Live Load for L / 360 [plf]	-	42	46	76	90	148	221	314
	Unfactored Total Load for L / 240 [plf]	-	59	64	109	129	215	323	463
	Factored Total Load, Wf [plf]	-	235	247	342	379	519	669	837
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	-	2¼ / 5½	2½ / 6	3¾ / 8	3¾ / 9	5 / 12¼	6¼ / 15¾	8 / 19½
	Bearing Lengths [End / Intermediate] - beam [in]	-	1½ / 3½	1½ / 3½	1¾ / 4¼	2 / 4½	2½ / 6¼	3¾ / 8	4 / 10
22' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	57	67	111	166	236
	Unfactored Total Load for L / 240 [plf]	-	-	-	80	95	159	241	345
	Factored Total Load, Wf [plf]	-	-	-	281	312	427	551	690
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	-	-	-	3 / 7¼	3¾ / 8	4½ / 11	5¾ / 14¼	7¼ / 17¾
	Bearing Lengths [End / Intermediate] - beam [in]	-	-	-	1½ / 3¾	1¾ / 4¼	2¼ / 5¾	3 / 7¾	3¾ / 9
24' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	44	52	85	127	182
	Unfactored Total Load for L / 240 [plf]	-	-	-	61	72	121	183	264
	Factored Total Load, Wf [plf]	-	-	-	235	261	357	461	578
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	-	-	-	2¾ / 6¾	3 / 7½	4 / 10	5¼ / 13	6½ / 16¼
	Bearing Lengths [End / Intermediate] - beam [in]	-	-	-	1½ / 3½	1½ / 3¾	2¼ / 5¼	2¾ / 6½	3½ / 8¼
26' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	-	41	67	100	143
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	55	94	142	205
	Factored Total Load, Wf [plf]	-	-	-	-	221	303	392	491
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	-	-	-	-	2¾ / 6¾	3¾ / 9¼	4¾ / 12	6 / 15
	Bearing Lengths [End / Intermediate] - beam [in]	-	-	-	-	1½ / 3½	2 / 4¾	2½ / 6	3 / 7½
28' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	-	-	53	80	114
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	73	112	163
	Factored Total Load, Wf [plf]	-	-	-	-	-	260	336	421
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	-	-	-	-	-	3½ / 8½	4½ / 11	5½ / 13¾
	Bearing Lengths [End / Intermediate] - beam [in]	-	-	-	-	-	1¾ / 4½	2¼ / 5¾	3 / 7
30' - 0"	Unfactored Live Load for L / 360 [plf]	-	-	-	-	-	43	65	93
	Unfactored Total Load for L / 240 [plf]	-	-	-	-	-	58	90	130
	Factored Total Load, Wf [plf]	-	-	-	-	-	225	291	365
	Bearing Lengths [End / Intermediate] - SPF Plate [in]	-	-	-	-	-	3¾ / 8	4¾ / 10¾	5¼ / 13
	Bearing Lengths [End / Intermediate] - beam [in]	-	-	-	-	-	1¾ / 4	2¼ / 5¼	2¾ / 6½

NOTES:

- Factored Total Load values are limited by shear or moment. Total Load values are given by the beam capacity in addition to its own weight.
- Unfactored Live Load values are limited by deflection equal to L / 360. For deflections limited to L / 480, multiply live load values by 0.75 (recommended for less vibration).
- All 3 loading cases must be checked. Where a Live Load value is not shown, the Factored Total Load value will control.
- Table values represent the most restrictive of simple or continuous span beams applications and assume an uniform loading. Span is measured center to center of the supports. Analyze continuous span beams with the BC CALC® software if the length of any span is less than half the length of an adjacent span.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the Total Factored Load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- For 2-ply, 3-ply or 4-ply beams; double, triple or quadruple the Factored Total Load, Unfactored Live and Total Load values. Minimum Required Bearing Lengths remain the same for any number of plies.
- 1¾ inch members deeper than 14 inches are recommended to be used as multiple-member beams. Refer to pages 22-23 for connection details.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

VERSA-LAM® 3100F_b 2.0E (1¾")

Live Load of 40 psf

Dead Load of 15 psf

L/360

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	14' - 6"	16' - 8"	18' - 4"	18' - 2"	20' - 10"	22' - 11"	21' - 5"	24' - 6"	27' - 0"	24' - 6"	28' - 0"	30' - 9"	27' - 7"	31' - 6"	34' - 6"
	End/Int bearing_SPF Plate (in)	1.6 / 4	1.5 / 3.5	1.5 / 3.5	2 / 5	1.6 / 3.9	1.5 / 3.5	2.4 / 5.9	1.8 / 4.5	1.5 / 3.8	2.7 / 6.8	2.1 / 5.2	1.7 / 4.3	3.1 / 7.6	2.4 / 5.8	1.9 / 4.8
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5
	8	13' - 2"	15' - 1"	16' - 8"	16' - 6"	18' - 11"	20' - 10"	19' - 5"	22' - 3"	24' - 6"	22' - 3"	25' - 6"	28' - 0"	25' - 0"	28' - 8"	31' - 6"
	End/Int bearing_SPF Plate (in)	2 / 4.9	1.5 / 3.7	1.5 / 3.5	2.5 / 6.1	1.9 / 4.7	1.6 / 3.9	2.9 / 7.2	2.2 / 5.5	1.8 / 4.5	3.3 / 8.2	2.5 / 6.3	2.1 / 5.2	3.7 / 9.2	2.8 / 7	2.4 / 5.8
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.6	1.5 / 3.5	1.5 / 3.5	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5
	10	12' - 3"	14' - 0"	15' - 5"	15' - 4"	17' - 6"	19' - 4"	18' - 1"	20' - 8"	22' - 9"	20' - 8"	23' - 8"	26' - 0"	23' - 3"	26' - 7"	29' - 3"
	End/Int bearing_SPF Plate (in)	2.3 / 5.7	1.8 / 4.3	1.5 / 3.6	2.9 / 7.1	2.2 / 5.4	1.8 / 4.5	3.4 / 8.3	2.6 / 6.4	2.1 / 5.3	3.8 / 9.5	2.9 / 7.3	2.4 / 6	4.3 / 10.7	3.3 / 8.2	2.7 / 6.8
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.6	1.5 / 3.5	1.5 / 3.5	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	2 / 4.8	1.5 / 3.7	1.5 / 3.5	2.2 / 5.4	1.7 / 4.1	1.5 / 3.5
	12	11' - 6"	13' - 2"	14' - 6"	14' - 5"	16' - 6"	18' - 2"	17' - 0"	19' - 5"	21' - 5"	19' - 5"	22' - 3"	24' - 5"	21' - 10"	25' - 0"	27' - 7"
	End/Int bearing_SPF Plate (in)	2.6 / 6.4	2 / 4.9	1.6 / 4	3.2 / 8	2.5 / 6.1	2 / 5	3.8 / 9.4	2.9 / 7.2	2.4 / 5.9	4.3 / 10.7	3.3 / 8.2	2.7 / 6.8	4.9 / 12.1	3.7 / 9.2	3.1 / 7.6
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.8	1.5 / 3.6	1.5 / 3.5	2.2 / 5.4	1.5 / 3.5	1.5 / 3.5	2.5 / 6.1	1.9 / 4.7	1.6 / 3.9
	14	10' - 11"	12' - 6"	13' - 9"	13' - 8"	15' - 8"	17' - 3"	16' - 2"	18' - 6"	20' - 4"	18' - 5"	21' - 1"	23' - 3"	20' - 9"	23' - 9"	26' - 2"
	End/Int bearing_SPF Plate (in)	2.9 / 7.1	2.2 / 5.4	1.8 / 4.5	3.6 / 8.8	2.7 / 6.8	2.3 / 5.6	4.2 / 10.4	3.2 / 8	2.7 / 6.6	4.8 / 11.9	3.7 / 9.1	3 / 7.5	5.4 / 13.4	4.1 / 10.2	3.4 / 8.4
	End/Int bearing_Member (in)	1.5 / 3.6	1.5 / 3.5	1.5 / 3.5	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.1 / 5.3	1.6 / 4	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.6 / 3.8	2.7 / 6.8	2.1 / 5.2	1.7 / 4.3
	16	10' - 5"	12' - 0"	13' - 2"	13' - 1"	15' - 0"	16' - 6"	15' - 5"	17' - 8"	19' - 5"	17' - 8"	20' - 2"	22' - 3"	19' - 10"	22' - 9"	25' - 0"
	End/Int bearing_SPF Plate (in)	3.1 / 7.7	2.4 / 5.9	2 / 4.9	3.9 / 9.7	3 / 7.4	2.5 / 6.1	4.6 / 11.4	3.5 / 8.7	2.9 / 7.2	5.2 / 13	4 / 9.9	3.3 / 8.2	5.9 / 14.6	4.5 / 11.2	3.7 / 9.2
	End/Int bearing_Member (in)	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.7	1.5 / 3.5	2.3 / 5.8	1.8 / 4.4	1.5 / 3.6	2.7 / 6.6	2 / 5	1.7 / 4.2	3 / 7.4	2.3 / 5.7	1.9 / 4.7
	18	10' - 1"	11' - 6"	12' - 8"	12' - 7"	14' - 5"	15' - 10"	14' - 10"	17' - 0"	18' - 8"	17' - 0"	19' - 5"	21' - 5"	19' - 1"	21' - 10"	24' - 1"
	End/Int bearing_SPF Plate (in)	3.4 / 8.4	2.6 / 6.4	2.1 / 5.3	4.2 / 10.4	3.2 / 8	2.7 / 6.6	4.9 / 12.3	3.8 / 9.4	3.1 / 7.8	5.6 / 14	4.3 / 10.7	3.6 / 8.9	6.3 / 15.8	4.9 / 12.1	4 / 10
	End/Int bearing_Member (in)	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	2.1 / 5.3	1.6 / 4	1.5 / 3.5	2.5 / 6.2	1.9 / 4.8	1.6 / 3.9	2.9 / 7.1	2.2 / 5.4	1.8 / 4.5	3.2 / 8	2.5 / 6.1	2.1 / 5.1
	20	9' - 8"	11' - 1"	12' - 3"	12' - 2"	13' - 11"	15' - 4"	14' - 4"	16' - 5"	18' - 1"	16' - 4"	18' - 9"	20' - 8"	18' - 5"	21' - 1"	23' - 3"
	End/Int bearing_SPF Plate (in)	3.6 / 9	2.8 / 6.9	2.3 / 5.7	4.5 / 11.2	3.5 / 8.6	2.9 / 7.1	5.3 / 13.2	4.1 / 10.1	3.4 / 8.3	6.1 / 15.1	4.6 / 11.5	3.8 / 9.5	6.8 / 16.9	5.2 / 12.9	4.3 / 10.7
	End/Int bearing_Member (in)	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.3 / 5.7	1.8 / 4.3	1.5 / 3.6	2.7 / 6.7	2.1 / 5.1	1.7 / 4.2	3.1 / 7.6	2.4 / 5.8	2 / 4.8	3.5 / 8.6	2.7 / 6.6	2.2 / 5.4

Live Load of 40 psf

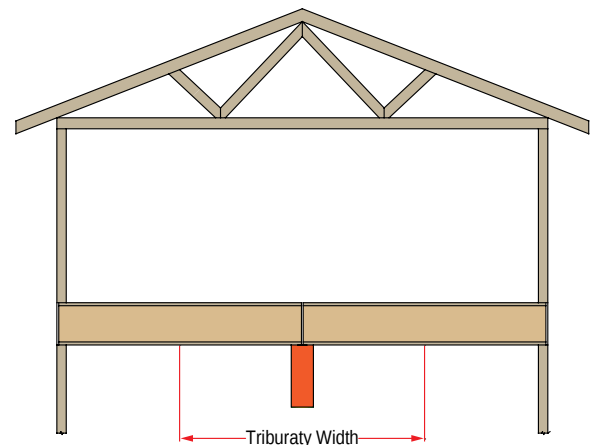
Dead Load of 25 psf

L/360

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	14' - 0"	16' - 0"	17' - 6"	17' - 6"	19' - 11"	21' - 10"	20' - 7"	23' - 5"	25' - 8"	23' - 6"	26' - 9"	29' - 3"	26' - 5"	30' - 0"	32' - 10"
	End/Int bearing_SPF Plate (in)	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.3 / 5.6	1.7 / 4.3	1.5 / 3.5	2.7 / 6.6	2 / 5	1.7 / 4.1	3 / 7.5	2.3 / 5.7	1.9 / 4.7	3.4 / 8.5	2.6 / 6.4	2.1 / 5.3
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.8	1.5 / 3.5	1.5 / 3.5	1.7 / 4.3	1.5 / 3.5	1.5 / 3.5
	8	12' - 9"	14' - 7"	16' - 0"	15' - 11"	18' - 2"	19' - 11"	18' - 9"	21' - 5"	23' - 5"	21' - 5"	24' - 5"	26' - 9"	24' - 1"	27' - 5"	30' - 0"
	End/Int bearing_SPF Plate (in)	2.2 / 5.5	1.7 / 4.2	1.5 / 3.5	2.8 / 6.8	2.1 / 5.2	1.7 / 4.3	3.2 / 8	2.5 / 6.1	2 / 5	3.7 / 9.2	2.8 / 7	2.3 / 5.7	4.1 / 10.3	3.2 / 7.8	2.6 / 6.4
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5	1.9 / 4.6	1.5 / 3.5	1.5 / 3.5	2.1 / 5.2	1.6 / 4	1.5 / 3.5
	10	11' - 10"	13' - 7"	14' - 11"	14' - 10"	16' - 11"	17' - 7"	17' - 5"	19' - 11"	21' - 10"	19' - 11"	22' - 9"	24' - 11"	22' - 5"	25' - 6"	28' - 0"
	End/Int bearing_SPF Plate (in)	2.6 / 6.4	2 / 4.8	1.6 / 4	3.2 / 7.9	2.4 / 6	2 / 5	3.8 / 9.3	2.9 / 7.1	2.4 / 5.8	4.3 / 10.6	3.3 / 8.1	2.7 / 6.7	4.8 / 11.9	3.7 / 9.1	3 / 7.5
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5	2.2 / 5.4	1.7 / 4.1	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.5 / 3.8
	12	11' - 2"	12' - 9"	14' - 0"	13' - 11"	15' - 1"	17' - 6"	16' - 5"	18' - 9"	20' - 7"	18' - 9"	21' - 5"	23' - 6"	21' - 1"	24' - 1"	26' - 5"
	End/Int bearing_SPF Plate (in)	2.9 / 7.2	2.2 / 5.5	1.8 / 4.5	3.6 / 8.9	2.8 / 6.8	2.3 / 5.6	4.2 / 10.5	3.2 / 8	2.7 / 6.6	4.8 / 12	3.7 / 9.2	3 / 7.5	5.4 / 13.5	4.1 / 10.3	3.4 / 8.5
	End/Int bearing_Member (in)	1.5 / 3.6	1.5 / 3.5	1.5 / 3.5	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.2 / 5.3	1.7 / 4.1	1.5 / 3.5	2.5 / 6.1	1.9 / 4.6	1.6 / 3.8	2.8 / 6.8	2.1 / 5.2	1.7 / 4.3
	14	10' - 7"	12' - 2"	13' - 4"	13' - 3"	15' - 2"	16' - 8"	15' - 8"	17' - 10"	19' - 7"	17' - 10"	20' - 5"	22' - 5"	20' - 1"	22' - 11"	25' - 2"
	End/Int bearing_SPF Plate (in)	3.2 / 8	2.5 / 6.1	2 / 5	4 / 9.9	3.1 / 7.6	2.5 / 6.2	4.7 / 11.7	3.6 / 8.9	3 / 7.3	5.4 / 13.3	4.1 / 10.2	3.4 / 8.4	6 / 15	4.6 / 11.4	3.8 / 9.4
	End/Int bearing_Member (in)	1.6 / 4	1.5 / 3.5	1.5 / 3.5	2 / 5	1.6 / 3.8	1.5 / 3.5	2.4 / 5.9	1.8 / 4.5	1.5 / 3.7	2.7 / 6.7	2.1 / 5.1	1.7 / 4.2	3.1 / 7.6	2.3 / 5.8	1.9 / 4.8
	16	10' - 2"	11' - 7"	12' - 9"	12' - 8"	14' - 6"	15' - 11"	14' - 11"	17' - 1"	18' - 9"	17' - 1"	19' - 6"	21' - 5"	19' - 3"	21' - 11"	24' - 1"
	End/Int bearing_SPF Plate (in)	3.5 / 8.7	2.7 / 6.6	2.2 / 5.5	4.4 / 10.8	3.3 / 8.3	2.8 / 6.8	5.1 / 12.8	3.9 / 9.7	3.2 / 8	5.9 / 14.6	4.5 / 11.1	3.7 / 9.2	6.6 / 16.4	5 / 12.5	4.1 / 10.3
	End/Int bearing_Member (in)	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2.2 / 5.5	1.7 / 4.2	1.5 / 3.5	2.6 / 6.5	2 / 4.9	1.7 / 4.1	3 / 7.4	2.3 / 5.6	1.9 / 4.6	3.3 / 8.3	2.6 / 6.3	2.1 / 5.2
	18	9' - 9"	11' - 2"	12' - 3"	12' - 2"	13' - 11"	15' - 4"	14' - 5"	16' - 5"	18' - 1"	16' - 5"	18' - 9"	20' - 8"	18' - 6"	21' - 1"	23' - 2"
	End/Int bearing_SPF Plate (in)	3.8 / 9.4	2.9 / 7.2	2.4 / 5.9	4.7 / 11.7	3.6 / 8.9	3 / 7.4	5.6 / 13.8	4.2 / 10.5	3.5 / 8.7	6.3 / 15.8	4.8 / 12	4 / 9.9	7.1 / 17.7	5.4 / 13.5	4.5 / 11.1
	End/Int bearing_Member (in)	1.9 / 4.8	1.5 / 3.6	1.5 / 3.5	2.4 / 5.9	1.8 / 4.5	1.5 / 3.7	2.8 / 7	2.2 / 5.3	1.8 / 4.4	3.2 / 8	2.5 / 6.1	2 / 5	3.6 / 9	2.8 / 6.8	2.3 / 5.6
	20	9' - 5"	10' - 9"	11' - 10"	11' - 9"	13' - 6"	14' - 10"	13' - 11"	15' - 11"	17' - 5"	15' - 11"	18' - 2"	19' - 11"	17' - 10"	20' - 5"	22' - 5"
	End/Int bearing_SPF Plate (in)	4.1 / 10.1	3.1 / 7.7	2.6 / 6.4	5.1 / 12.6	3.9 / 9.6	3.2 / 7.9	6 / 14.8	4.6 / 11.3	3.8 / 9.3	6.8 / 16.9	5.2 / 12.9	4.3 / 10.6	7.6 / 19	5.8 / 14.5	4.8 / 11.9
	End/Int bearing_Member (in)	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.6 / 6.4	2 / 4.9	1.6 / 4	3 / 7.5	2.3 / 5.7	1.9 / 4.7	3.5 / 8.6	2.6 / 6.5	2.2 / 5.4	3.9 / 9.6	3 / 7.3	2.4 / 6

NOTES:

- This table has been established using a Live Load deflection equal to L / 360 and a Total Load deflection limit equal to L / 240.
- This table assumes uniform loads and simple floor joists spans. When the floor joists are continuous over the VERSA-LAM® LVL beam, multiply the tributary width by 1.25 and always select the value closer to the higher tributary width.
Example : Tributary width of 14 feet multiply by 1.25 = 17'-6".
Hence, select 18 feet for new tributary width.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Table values represent the most restrictive of simple or continuous span beam applications. Span is measured center to center of the supports.
- Analyze continuous span beams with BC CALC® software if the length of any span is less than half the length of the adjacent span.
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1¾")

Live Load of 40 psf

Dead Load of 15 psf

L/480

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	13' - 2"	15' - 1"	16' - 8"	16' - 6"	18' - 11"	20' - 10"	19' - 5"	22' - 3"	24' - 6"	22' - 3"	25' - 6"	28' - 0"	25' - 0"	28' - 8"	31' - 6"
	End/Int bearing_SPF Plate (in)	1.5 / 3.7	1.5 / 3.5	1.5 / 3.5	1.9 / 4.6	1.5 / 3.5	1.5 / 3.5	2.2 / 5.4	1.7 / 4.1	1.5 / 3.5	2.5 / 6.2	1.9 / 4.7	1.6 / 3.9	2.8 / 6.9	2.1 / 5.3	1.8 / 4.4
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5
	8	12' - 0"	13' - 9"	15' - 1"	15' - 0"	17' - 2"	18' - 11"	17' - 8"	20' - 3"	22' - 3"	20' - 2"	23' - 2"	25' - 6"	22' - 9"	26' - 0"	28' - 8"
	End/Int bearing_SPF Plate (in)	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2.2 / 5.5	1.7 / 4.2	1.5 / 3.5	2.6 / 6.5	2 / 5	1.7 / 4.1	3 / 7.5	2.3 / 5.7	1.9 / 4.7	3.4 / 8.4	2.6 / 6.4	2.1 / 5.3
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.8	1.5 / 3.5	1.5 / 3.5	1.7 / 4.3	1.5 / 3.5	1.5 / 3.5
	10	11' - 1"	12' - 9"	14' - 0"	13' - 11"	15' - 11"	17' - 6"	16' - 5"	18' - 9"	20' - 8"	18' - 9"	21' - 6"	23' - 8"	21' - 1"	24' - 2"	26' - 7"
	End/Int bearing_SPF Plate (in)	2.1 / 5.2	1.6 / 3.9	1.5 / 3.5	2.6 / 6.4	2 / 4.9	1.7 / 4.1	3.1 / 7.6	2.3 / 5.8	1.9 / 4.8	3.5 / 8.6	2.7 / 6.6	2.2 / 5.5	3.9 / 9.7	3 / 7.4	2.5 / 6.1
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.8	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.8	1.5 / 3.5
	12	10' - 5"	12' - 0"	13' - 2"	13' - 1"	15' - 0"	16' - 5"	15' - 5"	17' - 8"	19' - 5"	17' - 8"	20' - 2"	22' - 3"	19' - 10"	22' - 9"	25' - 0"
	End/Int bearing_SPF Plate (in)	2.4 / 5.8	1.8 / 4.4	1.5 / 3.7	2.9 / 7.3	2.2 / 5.5	1.9 / 4.6	3.4 / 8.5	2.6 / 6.5	2.2 / 5.4	3.9 / 9.8	3 / 7.5	2.5 / 6.2	4.4 / 11	3.4 / 8.4	2.8 / 6.9
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.7	1.5 / 3.5	1.5 / 3.5	1.8 / 4.3	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.8	1.5 / 3.5	2.3 / 5.6	1.7 / 4.3	1.5 / 3.5
	14	9' - 11"	11' - 5"	12' - 6"	12' - 5"	14' - 3"	15' - 8"	14' - 8"	16' - 9"	18' - 6"	16' - 9"	19' - 2"	21' - 1"	18' - 10"	21' - 7"	23' - 9"
	End/Int bearing_SPF Plate (in)	2.6 / 6.4	2 / 4.9	1.7 / 4.1	3.2 / 8	2.5 / 6.1	2.1 / 5.1	3.8 / 9.5	2.9 / 7.2	2.4 / 6	4.4 / 10.8	3.3 / 8.3	2.8 / 6.8	4.9 / 12.1	3.7 / 9.3	3.1 / 7.7
	End/Int bearing_Member (in)	1.5 / 3.6	1.5 / 3.5	1.5 / 3.5	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5	1.9 / 4.8	1.5 / 3.7	1.5 / 3.5	2.2 / 5.5	1.7 / 4.2	1.5 / 3.5	2.5 / 6.2	1.9 / 4.7	1.6 / 3.9
	16	9' - 6"	10' - 11"	12' - 0"	11' - 11"	13' - 7"	15' - 0"	14' - 0"	16' - 1"	17' - 8"	16' - 0"	18' - 4"	20' - 2"	18' - 0"	20' - 8"	22' - 9"
	End/Int bearing_SPF Plate (in)	2.8 / 7	2.2 / 5.4	1.8 / 4.4	3.5 / 8.8	2.7 / 6.7	2.2 / 5.5	4.2 / 10.3	3.2 / 7.9	2.6 / 6.5	4.8 / 11.8	3.6 / 9	3 / 7.5	5.3 / 13.3	4.1 / 10.1	3.4 / 8.4
	End/Int bearing_Member (in)	1.5 / 3.6	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2.1 / 5.2	1.6 / 4	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.5 / 3.8	2.7 / 6.7	2.1 / 5.1	1.7 / 4.3
	18	9' - 2"	10' - 5"	11' - 6"	11' - 5"	13' - 1"	14' - 5"	13' - 6"	15' - 5"	17' - 0"	15' - 5"	17' - 8"	19' - 5"	17' - 4"	19' - 10"	21' - 10"
	End/Int bearing_SPF Plate (in)	3.1 / 7.6	2.4 / 5.8	2 / 4.8	3.8 / 9.5	2.9 / 7.3	2.4 / 6	4.5 / 11.2	3.4 / 8.5	2.9 / 7.1	5.1 / 12.8	3.9 / 9.8	3.3 / 8.1	5.8 / 14.4	4.4 / 11	3.7 / 9.1
	End/Int bearing_Member (in)	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5	2 / 4.8	1.5 / 3.7	1.5 / 3.5	2.3 / 5.7	1.8 / 4.3	1.5 / 3.6	2.6 / 6.5	2 / 4.9	1.7 / 4.1	2.9 / 7.3	2.3 / 5.6	1.9 / 4.6
	20	8' - 10"	10' - 1"	11' - 1"	11' - 0"	12' - 8"	13' - 11"	13' - 0"	14' - 11"	16' - 5"	14' - 10"	17' - 0"	18' - 9"	16' - 9"	19' - 2"	21' - 1"
	End/Int bearing_SPF Plate (in)	3.3 / 8.1	2.5 / 6.2	2.1 / 5.2	4.1 / 10.2	3.1 / 7.8	2.6 / 6.4	4.8 / 12	3.7 / 9.2	3.1 / 7.6	5.5 / 13.7	4.2 / 10.5	3.5 / 8.6	6.2 / 15.4	4.7 / 11.8	3.9 / 9.7
	End/Int bearing_Member (in)	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5	2.1 / 5.2	1.6 / 3.9	1.5 / 3.5	2.5 / 6.1	1.9 / 4.6	1.6 / 3.8	2.8 / 6.9	2.2 / 5.3	1.8 / 4.4	3.1 / 7.8	2.4 / 6	2 / 4.9

Live Load of 40 psf

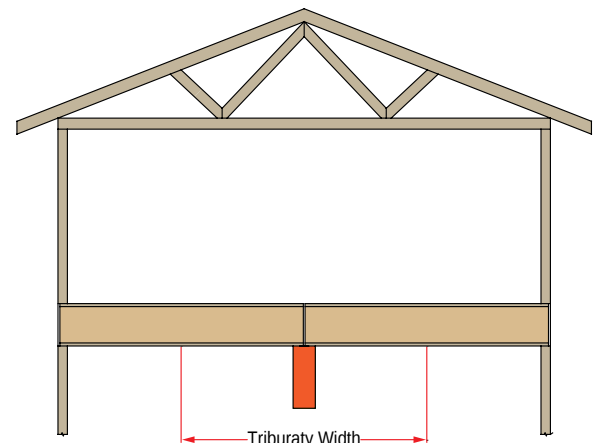
Dead Load of 25 psf

L/480

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	13' - 2"	15' - 1"	16' - 8"	16' - 6"	18' - 11"	20' - 10"	19' - 5"	22' - 3"	24' - 6"	22' - 3"	25' - 6"	28' - 0"	25' - 0"	28' - 8"	31' - 6"
	End/Int bearing_SPF Plate (in)	1.7 / 4.3	1.5 / 3.5	1.5 / 3.5	2.2 / 5.3	1.7 / 4.1	1.5 / 3.5	2.5 / 6.2	1.9 / 4.8	1.6 / 4	2.9 / 7.1	2.2 / 5.5	1.8 / 4.5	3.2 / 8	2.5 / 6.1	2.1 / 5.1
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5
	8	12' - 0"	13' - 9"	15' - 1"	15' - 0"	17' - 2"	18' - 11"	17' - 8"	20' - 3"	22' - 3"	20' - 2"	23' - 2"	25' - 6"	22' - 9"	26' - 0"	28' - 8"
	End/Int bearing_SPF Plate (in)	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.6 / 6.4	2 / 4.9	1.7 / 4.1	3.1 / 7.6	2.3 / 5.8	1.9 / 4.8	3.5 / 8.6	2.7 / 6.6	2.2 / 5.5	3.9 / 9.7	3 / 7.4	2.5 / 6.1
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.8	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.8	1.5 / 3.5
	10	11' - 1"	12' - 9"	14' - 0"	13' - 11"	15' - 11"	17' - 6"	16' - 5"	18' - 9"	20' - 8"	18' - 9"	21' - 6"	23' - 8"	21' - 1"	24' - 2"	26' - 7"
	End/Int bearing_SPF Plate (in)	2.4 / 6	1.9 / 4.6	1.5 / 3.8	3 / 7.4	2.3 / 5.7	1.9 / 4.7	3.5 / 8.8	2.7 / 6.7	2.2 / 5.5	4 / 10	3.1 / 7.6	2.6 / 6.3	4.5 / 11.3	3.5 / 8.6	2.9 / 7.1
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.8	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.3 / 5.7	1.8 / 4.4	1.5 / 3.6
	12	10' - 5"	12' - 0"	13' - 2"	13' - 1"	15' - 0"	16' - 5"	15' - 5"	17' - 8"	19' - 5"	17' - 8"	20' - 2"	22' - 3"	19' - 10"	22' - 9"	25' - 0"
	End/Int bearing_SPF Plate (in)	2.7 / 6.7	2.1 / 5.1	1.7 / 4.3	3.4 / 8.4	2.6 / 6.4	2.2 / 5.3	4 / 9.9	3.1 / 7.6	2.5 / 6.2	4.5 / 11.3	3.5 / 8.6	2.9 / 7.1	5.1 / 12.7	3.9 / 9.7	3.2 / 8
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.3	1.5 / 3.5	1.5 / 3.5	2 / 5	1.6 / 3.8	1.5 / 3.5	2.3 / 5.7	1.8 / 4.4	1.5 / 3.6	2.6 / 6.4	2 / 4.9	1.7 / 4.1
	14	9' - 11"	11' - 5"	12' - 6"	12' - 5"	14' - 3"	15' - 8"	14' - 8"	16' - 9"	18' - 6"	16' - 9"	19' - 2"	21' - 1"	18' - 10"	21' - 7"	23' - 9"
	End/Int bearing_SPF Plate (in)	3 / 7.4	2.3 / 5.7	1.9 / 4.7	3.7 / 9.3	2.9 / 7.1	2.4 / 5.9	4.4 / 11	3.4 / 8.4	2.8 / 6.9	5 / 12.5	3.9 / 9.6	3.2 / 7.9	5.7 / 14.1	4.3 / 10.7	3.6 / 8.9
	End/Int bearing_Member (in)	1.5 / 3.8	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5	2.2 / 5.5	1.7 / 4.2	1.5 / 3.5	2.6 / 6.3	2 / 4.8	1.6 / 4	2.9 / 7.1	2.2 / 5.4	1.8 / 4.5
	16	9' - 6"	10' - 11"	12' - 0"	11' - 11"	13' - 7"	15' - 0"	14' - 0"	16' - 1"	17' - 8"	16' - 0"	18' - 4"	20' - 2"	18' - 0"	20' - 8"	22' - 9"
	End/Int bearing_SPF Plate (in)	3.3 / 8.1	2.5 / 6.2	2.1 / 5.1	4.1 / 10.2	3.1 / 7.8	2.6 / 6.4	4.8 / 12	3.7 / 9.1	3.1 / 7.6	5.5 / 13.7	4.2 / 10.4	3.5 / 8.6	6.2 / 15.4	4.7 / 11.7	3.9 / 9.7
	End/Int bearing_Member (in)	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.5 / 6.1	1.9 / 4.6	1.6 / 3.8	2.8 / 6.9	2.1 / 5.3	1.8 / 4.4	3.1 / 7.8	2.4 / 5.9	2 / 4.9
	18	9' - 2"	10' - 5"	11' - 6"	11' - 5"	13' - 1"	14' - 5"	13' - 6"	15' - 5"	17' - 0"	15' - 5"	17' - 8"	19' - 5"	17' - 4"	19' - 10"	21' - 10"
	End/Int bearing_SPF Plate (in)	3.5 / 8.8	2.7 / 6.7	2.3 / 5.6	4.4 / 11	3.4 / 8.4	2.8 / 6.9	5.2 / 12.9	4 / 9.9	3.3 / 8.2	5.9 / 14.8	4.5 / 11.3	3.8 / 9.3	6.7 / 16.6	5.1 / 12.7	4.2 / 10.5
	End/Int bearing_Member (in)	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.3 / 5.6	1.7 / 4.3	1.5 / 3.5	2.7 / 6.6	2 / 5	1.7 / 4.1	3 / 7.5	2.3 / 5.7	1.9 / 4.7	3.4 / 8.4	2.6 / 6.4	2.2 / 5.3
	20	8' - 10"	10' - 1"	11' - 1"	11' - 0"	12' - 8"	13' - 11"	13' - 0"	14' - 11"	16' - 5"	14' - 10"	17' - 0"	18' - 9"	16' - 9"	19' - 2"	21' - 1"
	End/Int bearing_SPF Plate (in)	3.8 / 9.4	2.9 / 7.2	2.4 / 6	4.7 / 11.8	3.6 / 9	3 / 7.4	5.6 / 13.9	4.3 / 10.6	3.5 / 8.8	6.4 / 15.9	4.9 / 12.1	4 / 10	7.2 / 17.8	5.5 / 13.6	4.5 / 11.3
	End/Int bearing_Member (in)	1.9 / 4.8	1.5 / 3.7	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.5 / 3.8	2.8 / 7	2.2 / 5.4	1.8 / 4.4	3.2 / 8	2.5 / 6.1	2.1 / 5.1	3.6 / 9	2.8 / 6.9	2.3 / 5.7

NOTES:

- This table has been established using a Live Load deflection equal to L / 480 and a Total Load deflection limit equal to L / 240.
- This table assumes uniform loads and simple floor joists spans. When the floor joists are continuous over the VERSA-LAM® LVL beam, multiply the tributary width by 1.25 and always select the value closer to the higher tributary width.
Example : Tributary width of 14 feet multiply by 1.25 = 17'-6".
Hence, select 18 feet for new tributary width.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Table values represent the most restrictive of simple or continuous span beam applications. Span is measured center to center of the supports.
- Analyze continuous span beams with BC CALC® software if the length of any span is less than half the length of the adjacent span.
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1¾")

Live Load of 40 psf

Dead Load of 15 psf

L/360

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	11' - 4"	13' - 0"	14' - 3"	14' - 2"	16' - 3"	17' - 10"	16' - 9"	19' - 1"	21' - 0"	19' - 1"	21' - 10"	23' - 11"	21' - 6"	24' - 6"	26' - 10"
	End/Int bearing_SPF Plate (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/4	1.5/3.5	1.5/3.5	1.9/4.7	1.5/3.6	1.5/3.5	2.2/5.3	1.6/4	1.5/3.5	2.4/6	1.8/4.5	1.5/3.7
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5
	7.5	10' - 5"	11' - 11"	13' - 1"	13' - 0"	14' - 11"	16' - 4"	15' - 4"	17' - 7"	19' - 3"	17' - 7"	20' - 0"	22' - 0"	19' - 9"	22' - 6"	24' - 9"
	End/Int bearing_SPF Plate (in)	1.6/3.9	1.5/3.5	1.5/3.5	2/4.8	1.5/3.7	1.5/3.5	2.3/5.7	1.8/4.3	1.5/3.6	2.6/6.5	2/4.9	1.7/4.1	2.9/7.3	2.3/5.6	1.9/4.6
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.7	1.5/3.5	1.5/3.5
	10	9' - 8"	11' - 1"	12' - 3"	12' - 2"	13' - 11"	15' - 4"	14' - 4"	16' - 5"	18' - 0"	16' - 4"	18' - 9"	20' - 7"	18' - 5"	21' - 1"	23' - 1"
	End/Int bearing_SPF Plate (in)	1.8/4.5	1.5/3.5	1.5/3.5	2.3/5.6	1.8/4.3	1.5/3.6	2.7/6.6	2.1/5.1	1.7/4.2	3.1/7.6	2.3/5.8	1.9/4.8	3.4/8.5	2.6/6.5	2.2/5.3
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.8	1.5/3.5	1.5/3.5	1.8/4.3	1.5/3.5	1.5/3.5
	12	9' - 2"	10' - 5"	11' - 6"	11' - 5"	13' - 1"	14' - 5"	13' - 6"	15' - 5"	17' - 0"	15' - 5"	17' - 8"	19' - 5"	17' - 4"	19' - 10"	21' - 10"
	End/Int bearing_SPF Plate (in)	2.1/5.1	1.6/3.9	1.5/3.5	2.6/6.3	2/4.9	1.6/4	3/7.5	2.3/5.7	1.9/4.7	3.4/8.5	2.6/6.5	2.2/5.4	3.9/9.6	3/7.3	2.5/6.1
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.8	1.5/3.5	1.5/3.5	1.8/4.3	1.5/3.5	1.5/3.5	2/4.9	1.5/3.7	1.5/3.5
	14	8' - 8"	9' - 11"	10' - 11"	10' - 10"	12' - 5"	13' - 8"	12' - 10"	14' - 8"	16' - 2"	14' - 8"	16' - 9"	18' - 5"	16' - 6"	18' - 10"	20' - 9"
	End/Int bearing_SPF Plate (in)	2.3/5.6	1.8/4.3	1.5/3.6	2.8/7	2.2/5.4	1.8/4.4	3.3/8.3	2.6/6.3	2.1/5.2	3.8/9.4	2.9/7.2	2.4/6	4.3/10.6	3.3/8.1	2.7/6.7
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	1.5/3.5	1.5/3.5	1.7/4.2	1.5/3.5	1.5/3.5	1.9/4.8	1.5/3.7	1.5/3.5	2.2/5.4	1.7/4.1	1.5/3.5
	16	8' - 3"	9' - 6"	10' - 5"	10' - 4"	11' - 11"	13' - 1"	12' - 2"	14' - 0"	15' - 5"	13' - 11"	16' - 0"	17' - 8"	15' - 8"	18' - 0"	19' - 10"
	End/Int bearing_SPF Plate (in)	2.5/6.1	1.9/4.7	1.6/3.9	3.1/7.6	2.4/5.9	2/4.9	3.6/9	2.8/6.9	2.3/5.7	4.1/10.3	3.2/7.9	2.6/6.5	4.6/11.5	3.6/8.9	3/7.3
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	1.5/3.5	1.5/3.5	1.9/4.6	1.5/3.5	1.5/3.5	2.1/5.2	1.6/4	1.5/3.5	2.4/5.8	1.8/4.5	1.5/3.7
	18	7' - 6"	9' - 2"	10' - 1"	9' - 5"	11' - 5"	12' - 7"	11' - 1"	13' - 6"	14' - 10"	12' - 8"	15' - 5"	17' - 0"	14' - 3"	17' - 4"	19' - 1"
	End/Int bearing_SPF Plate (in)	2.5/6.3	2.1/5.1	1.7/4.2	3.2/7.8	2.6/6.3	2.1/5.2	3.7/9.2	3/7.5	2.5/6.2	4.2/10.5	3.4/8.5	2.8/7	4.7/11.8	3.9/9.6	3.2/7.9
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/4	1.5/3.5	1.5/3.5	1.9/4.7	1.5/3.8	1.5/3.5	2.2/5.3	1.8/4.3	1.5/3.6	2.4/6	2/4.9	1.6/4
	20	6' - 11"	8' - 10"	9' - 8"	8' - 8"	11' - 0"	12' - 2"	10' - 2"	13' - 0"	14' - 4"	11' - 8"	14' - 10"	16' - 4"	13' - 1"	16' - 9"	18' - 5"
	End/Int bearing_SPF Plate (in)	2.6/6.4	2.2/5.4	1.8/4.5	3.2/8	2.8/6.8	2.3/5.6	3.8/9.4	3.2/8	2.7/6.6	4.3/10.7	3.7/9.1	3.1/7.6	4.9/12.1	4.1/10.3	3.4/8.5
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/4	1.5/3.5	1.5/3.5	1.9/4.8	1.7/4.1	1.5/3.5	2.2/5.4	1.9/4.6	1.6/3.8	2.5/6.1	2.1/5.2	1.8/4.3

Live Load of 40 psf

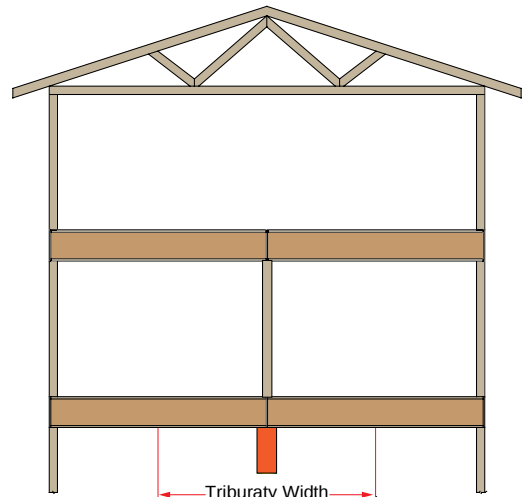
Dead Load of 25 psf

L/360

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	10' - 10"	12' - 4"	13' - 7"	13' - 6"	15' - 5"	16' - 11"	15' - 11"	18' - 2"	20' - 0"	18' - 2"	20' - 9"	22' - 10"	20' - 5"	23' - 4"	25' - 7"
	End/Int bearing_SPF Plate (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.4	1.5/3.5	1.5/3.5	2.1/5.1	1.6/3.9	1.5/3.5	2.4/5.8	1.8/4.5	1.5/3.7	2.7/6.6	2/5	1.7/4.1
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5
	8	9' - 11"	11' - 4"	12' - 5"	12' - 5"	14' - 2"	15' - 7"	14' - 7"	16' - 8"	18' - 4"	16' - 8"	19' - 1"	20' - 11"	18' - 9"	21' - 5"	23' - 6"
	End/Int bearing_SPF Plate (in)	1.7/4.3	1.5/3.5	1.5/3.5	2.2/5.3	1.7/4.1	1.5/3.5	2.5/6.3	1.9/4.8	1.6/3.9	2.9/7.1	2.2/5.4	1.8/4.5	3.2/8	2.5/6.1	2/5
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	1.5/3.5	1.5/3.5	1.7/4.1	1.5/3.5	1.5/3.5
	10	9' - 3"	10' - 7"	11' - 8"	11' - 7"	13' - 3"	14' - 6"	13' - 7"	15' - 7"	17' - 1"	15' - 7"	17' - 10"	19' - 7"	17' - 6"	20' - 0"	22' - 0"
	End/Int bearing_SPF Plate (in)	2/5	1.5/3.8	1.5/3.5	2.5/6.2	1.9/4.7	1.6/3.9	2.9/7.3	2.3/5.6	1.9/4.6	3.4/8.3	2.6/6.4	2.1/5.2	3.8/9.4	2.9/7.1	2.4/5.9
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.7	1.5/3.5	1.5/3.5	1.7/4.2	1.5/3.5	1.5/3.5	1.9/4.7	1.5/3.6	1.5/3.5
	12	8' - 9"	10' - 0"	11' - 0"	10' - 11"	12' - 6"	13' - 9"	12' - 10"	14' - 9"	16' - 2"	14' - 8"	16' - 10"	18' - 6"	16' - 6"	18' - 11"	20' - 9"
	End/Int bearing_SPF Plate (in)	2.3/5.6	1.8/4.3	1.5/3.6	2.8/7	2.2/5.4	1.8/4.4	3.3/8.3	2.6/6.3	2.1/5.2	3.8/9.4	2.9/7.2	2.4/5.9	4.3/10.6	3.3/8.1	2.7/6.7
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.6	1.5/3.5	1.5/3.5	1.7/4.2	1.5/3.5	1.5/3.5	1.9/4.8	1.5/3.7	1.5/3.5	2.2/5.4	1.7/4.1	1.5/3.5
	14	8' - 2"	9' - 6"	10' - 6"	10' - 3"	11' - 11"	13' - 1"	12' - 0"	14' - 0"	15' - 5"	13' - 9"	16' - 0"	17' - 7"	15' - 6"	18' - 0"	19' - 10"
	End/Int bearing_SPF Plate (in)	2.5/6.1	1.9/4.8	1.6/3.9	3.1/7.7	2.4/6	2/4.9	3.6/9	2.8/7	2.3/5.8	4.1/10.3	3.2/8	2.7/6.6	4.7/11.6	3.6/9	3/7.4
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	1.5/3.5	1.5/3.5	1.9/4.6	1.5/3.6	1.5/3.5	2.1/5.2	1.7/4.1	1.5/3.5	2.4/5.9	1.9/4.6	1.5/3.8
	16	7' - 4"	9' - 1"	10' - 0"	9' - 2"	11' - 5"	12' - 6"	10' - 10"	13' - 5"	14' - 9"	12' - 4"	15' - 4"	16' - 11"	13' - 11"	17' - 3"	19' - 0"
	End/Int bearing_SPF Plate (in)	2.6/6.3	2.1/5.2	1.8/4.3	3.2/7.9	2.6/6.5	2.2/5.4	3.7/9.2	3.1/7.7	2.6/6.3	4.3/10.6	3.5/8.7	2.9/7.2	4.8/11.9	4/9.8	3.3/8.1
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/4	1.5/3.5	1.5/3.5	1.9/4.7	1.6/3.9	1.5/3.5	2.2/5.3	1.8/4.4	1.5/3.7	2.4/6	2/5	1.7/4.1
	18	6' - 8"	8' - 9"	9' - 8"	8' - 4"	11' - 0"	12' - 1"	9' - 10"	12' - 11"	14' - 3"	11' - 3"	14' - 9"	16' - 3"	12' - 8"	16' - 8"	18' - 3"
	End/Int bearing_SPF Plate (in)	2.6/6.5	2.3/5.7	1.9/4.7	3.3/8.1	2.9/7.1	2.4/5.8	3.8/9.5	3.4/8.3	2.8/6.9	4.4/10.8	3.8/9.5	3.2/7.8	4.9/12.2	4.3/10.7	3.5/8.8
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.1	1.5/3.6	1.5/3.5	2/4.8	1.7/4.2	1.5/3.5	2.2/5.5	2/4.8	1.6/4	2.5/6.2	2.2/5.4	1.8/4.5
	20	6' - 2"	8' - 6"	9' - 4"	7' - 8"	10' - 7"	11' - 8"	9' - 1"	12' - 6"	13' - 9"	10' - 4"	14' - 4"	15' - 9"	11' - 8"	16' - 1"	17' - 8"
	End/Int bearing_SPF Plate (in)	2.7/6.6	2.5/6.1	2/5	3.3/8.2	3.1/7.6	2.5/6.3	3.9/9.7	3.6/8.9	3/7.4	4.5/11.1	4.1/10.2	3.4/8.4	5/12.5	4.6/11.4	3.8/9.4
	End/Int bearing_Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.2	1.6/3.8	1.5/3.5	2/4.9	1.8/4.5	1.5/3.7	2.3/5.6	2.1/5.2	1.7/4.3	2.6/6.3	2.3/5.8	1.9/4.8

NOTES:

- This table has been established using a Live Load deflection equal to $L/360$ and a Total Load deflection limit equal to $L/240$.
- This table assumes uniform loads and simple floor joists spans. When the floor joists are continuous over the VERSA-LAM® LVL beam, multiply the tributary width by 1.25 and always select the value closer to the higher tributary width.
Example : Tributary width of 14 feet multiply by 1.25 = 17'-6".
Hence, select 18 feet for new tributary width.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Table values represent the most restrictive of simple or continuous span beam applications. Span is measured center to center of the supports.
- Analyze continuous span beams with BC CALC® software if the length of any span is less than half the length of the adjacent span.
- Table values assume an interior wall dead load of 80 plf.
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_B 2.0E (1¾")

Live Load of 40 psf

Dead Load of 15 psf

L/480

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	10' - 5"	12' - 0"	13' - 2"	13' - 1"	15' - 0"	16' - 6"	15' - 5"	17' - 8"	19' - 5"	17' - 8"	20' - 2"	22' - 3"	19' - 10"	22' - 9"	25' - 0"
	End/Int bearing_SPF Plate (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.7	1.5 / 3.5	1.5 / 3.5	1.7 / 4.3	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.8	1.5 / 3.5	2.2 / 5.5	1.7 / 4.2	1.5 / 3.5
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5
	8	9' - 6"	10' - 11"	12' - 0"	11' - 11"	13' - 7"	15' - 0"	14' - 0"	16' - 1"	17' - 8"	16' - 0"	18' - 4"	20' - 2"	18' - 0"	20' - 8"	22' - 9"
	End/Int bearing_SPF Plate (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2.1 / 5.2	1.6 / 4	1.5 / 3.5	2.4 / 5.9	1.8 / 4.5	1.5 / 3.8	2.7 / 6.7	2.1 / 5.1	1.7 / 4.2
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5
	10	8' - 10"	10' - 1"	11' - 1"	11' - 0"	12' - 8"	13' - 11"	13' - 0"	14' - 11"	16' - 5"	14' - 10"	17' - 0"	18' - 9"	16' - 9"	19' - 2"	21' - 1"
	End/Int bearing_SPF Plate (in)	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.6 / 3.8	2.8 / 6.9	2.1 / 5.3	1.8 / 4.3	3.1 / 7.7	2.4 / 5.9	2 / 4.9
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5
	12	8' - 4"	9' - 6"	10' - 5"	10' - 5"	11' - 11"	13' - 1"	12' - 3"	14' - 0"	15' - 5"	14' - 0"	16' - 0"	17' - 8"	15' - 9"	18' - 0"	19' - 10"
	End/Int bearing_SPF Plate (in)	1.9 / 4.6	1.5 / 3.5	1.5 / 3.5	2.3 / 5.8	1.8 / 4.4	1.5 / 3.7	2.7 / 6.8	2.1 / 5.2	1.7 / 4.3	3.1 / 7.8	2.4 / 5.9	2 / 4.9	3.5 / 8.7	2.7 / 6.7	2.2 / 5.5
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5
	14	7' - 10"	9' - 0"	9' - 11"	9' - 10"	11' - 3"	12' - 5"	11' - 7"	13' - 4"	14' - 8"	13' - 3"	15' - 3"	16' - 9"	14' - 11"	17' - 2"	18' - 10"
	End/Int bearing_SPF Plate (in)	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.6 / 6.4	2 / 4.9	1.6 / 4	3 / 7.5	2.3 / 5.7	1.9 / 4.8	3.5 / 8.6	2.7 / 6.6	2.2 / 5.4	3.9 / 9.7	3 / 7.4	2.5 / 6.1
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.8	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.7	1.5 / 3.5
	16	7' - 6"	8' - 7"	9' - 6"	9' - 5"	10' - 10"	11' - 11"	11' - 1"	12' - 9"	14' - 0"	12' - 9"	14' - 7"	16' - 0"	14' - 4"	16' - 5"	18' - 0"
	End/Int bearing_SPF Plate (in)	2.3 / 5.6	1.7 / 4.3	1.5 / 3.5	2.8 / 7	2.2 / 5.3	1.8 / 4.4	3.3 / 8.2	2.5 / 6.3	2.1 / 5.2	3.8 / 9.4	2.9 / 7.2	2.4 / 5.9	4.2 / 10.5	3.3 / 8.1	2.7 / 6.7
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	1.9 / 4.8	1.5 / 3.6	1.5 / 3.5	2.2 / 5.3	1.7 / 4.1	1.5 / 3.5
	18	7' - 3"	8' - 4"	9' - 2"	9' - 1"	10' - 5"	11' - 5"	10' - 8"	12' - 3"	13' - 6"	12' - 3"	14' - 0"	15' - 5"	13' - 9"	15' - 9"	17' - 4"
	End/Int bearing_SPF Plate (in)	2.4 / 6	1.9 / 4.6	1.6 / 3.8	3 / 7.5	2.3 / 5.8	1.9 / 4.8	3.6 / 8.9	2.7 / 6.8	2.3 / 5.6	4.1 / 10.1	3.1 / 7.8	2.6 / 6.4	4.6 / 11.4	3.5 / 8.7	2.9 / 7.2
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.8	1.5 / 3.5	1.5 / 3.5	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.3 / 5.8	1.8 / 4.4	1.5 / 3.7
	20	6' - 11"	8' - 0"	8' - 10"	8' - 8"	10' - 0"	11' - 0"	10' - 2"	11' - 10"	13' - 0"	11' - 8"	13' - 6"	14' - 10"	13' - 1"	15' - 2"	16' - 9"
	End/Int bearing_SPF Plate (in)	2.6 / 6.4	2 / 5	1.7 / 4.1	3.2 / 8	2.5 / 6.2	2.1 / 5.1	3.8 / 9.4	2.9 / 7.3	2.4 / 6	4.3 / 10.7	3.4 / 8.3	2.8 / 6.9	4.9 / 12.1	3.8 / 9.3	3.1 / 7.7
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.8	1.5 / 3.7	1.5 / 3.5	2.2 / 5.4	1.7 / 4.2	1.5 / 3.5	2.5 / 6.1	1.9 / 4.7	1.6 / 3.9

Live Load of 40 psf

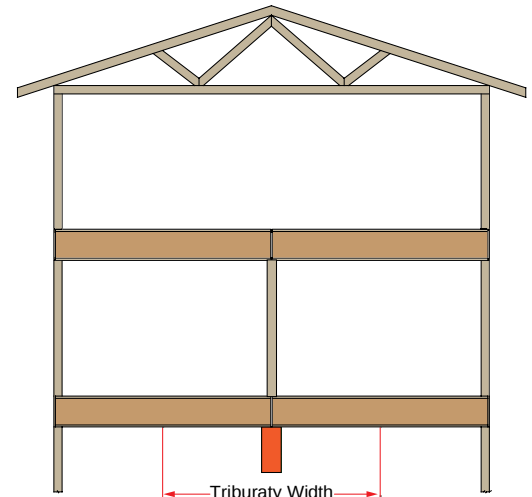
Dead Load of 25 psf

L/480

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
Tributary Width [ft]	6	10' - 5"	12' - 0"	13' - 2"	13' - 1"	15' - 0"	16' - 6"	15' - 5"	17' - 8"	19' - 5"	17' - 8"	20' - 2"	22' - 3"	19' - 10"	22' - 9"	25' - 0"
	End/Int bearing_SPF Plate (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	2 / 5	1.6 / 3.8	1.5 / 3.5	2.3 / 5.7	1.8 / 4.3	1.5 / 3.6	2.6 / 6.4	2 / 4.9	1.6 / 4
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5
	8	9' - 6"	10' - 11"	12' - 0"	11' - 11"	13' - 7"	15' - 0"	14' - 0"	16' - 1"	17' - 8"	16' - 0"	18' - 4"	20' - 2"	18' - 0"	20' - 8"	22' - 9"
	End/Int bearing_SPF Plate (in)	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.6 / 3.8	2.8 / 6.9	2.1 / 5.2	1.8 / 4.3	3.1 / 7.7	2.4 / 5.9	2 / 4.9
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5
	10	8' - 10"	10' - 1"	11' - 1"	11' - 0"	12' - 8"	13' - 11"	13' - 0"	14' - 11"	16' - 5"	14' - 10"	17' - 0"	18' - 9"	16' - 9"	19' - 2"	21' - 1"
	End/Int bearing_SPF Plate (in)	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5	2.4 / 5.9	1.8 / 4.5	1.5 / 3.7	2.8 / 7	2.2 / 5.3	1.8 / 4.4	3.2 / 8	2.5 / 6.1	2 / 5	3.6 / 8.9	2.8 / 6.8	2.3 / 5.7
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5
	12	8' - 4"	9' - 6"	10' - 5"	10' - 5"	11' - 11"	13' - 1"	12' - 3"	14' - 0"	15' - 5"	14' - 0"	16' - 0"	17' - 8"	15' - 9"	18' - 0"	19' - 10"
	End/Int bearing_SPF Plate (in)	2.2 / 5.3	1.7 / 4.1	1.5 / 3.5	2.7 / 6.7	2.1 / 5.1	1.7 / 4.2	3.2 / 7.9	2.4 / 6	2 / 5	3.6 / 9	2.8 / 6.9	2.3 / 5.7	4.1 / 10.1	3.1 / 7.7	2.6 / 6.4
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.6	1.5 / 3.5	1.5 / 3.5	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5
	14	7' - 10"	9' - 0"	9' - 11"	9' - 10"	11' - 3"	12' - 5"	11' - 7"	13' - 4"	14' - 8"	13' - 3"	15' - 3"	16' - 9"	14' - 11"	17' - 2"	18' - 10"
	End/Int bearing_SPF Plate (in)	2.4 / 5.9	1.8 / 4.5	1.5 / 3.7	3 / 7.4	2.3 / 5.7	1.9 / 4.7	3.5 / 8.7	2.7 / 6.7	2.2 / 5.5	4 / 9.9	3.1 / 7.6	2.5 / 6.3	4.5 / 11.2	3.4 / 8.5	2.9 / 7.1
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.8	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2 / 5	1.6 / 3.9	1.5 / 3.5	2.3 / 5.7	1.8 / 4.3	1.5 / 3.6
	16	7' - 4"	8' - 7"	9' - 6"	9' - 2"	10' - 10"	11' - 11"	10' - 10"	12' - 9"	14' - 0"	12' - 4"	14' - 7"	16' - 0"	13' - 11"	16' - 5"	18' - 0"
	End/Int bearing_SPF Plate (in)	2.6 / 6.3	2 / 4.9	1.7 / 4.1	3.2 / 7.9	2.5 / 6.2	2.1 / 5.1	3.7 / 9.2	2.9 / 7.3	2.4 / 6	4.3 / 10.6	3.4 / 8.3	2.8 / 6.9	4.8 / 11.9	3.8 / 9.3	3.1 / 7.7
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.7	1.5 / 3.5	2.2 / 5.3	1.7 / 4.2	1.5 / 3.5	2.4 / 6	1.9 / 4.7	1.6 / 3.9
	18	6' - 8"	8' - 4"	9' - 2"	8' - 4"	10' - 5"	11' - 5"	9' - 10"	12' - 3"	13' - 6"	11' - 3"	14' - 0"	15' - 5"	12' - 8"	15' - 9"	17' - 4"
	End/Int bearing_SPF Plate (in)	2.6 / 6.5	2.2 / 5.3	1.8 / 4.4	3.3 / 8.1	2.7 / 6.7	2.2 / 5.5	3.8 / 9.5	3.2 / 7.9	2.6 / 6.5	4.4 / 10.8	3.6 / 9	3 / 7.4	4.9 / 12.2	4.1 / 10.1	3.4 / 8.3
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.1	1.5 / 3.5	1.5 / 3.5	2 / 4.8	1.6 / 4	1.5 / 3.5	2.2 / 5.5	1.9 / 4.6	1.5 / 3.8	2.5 / 6.2	2.1 / 5.1	1.7 / 4.2
	20	6' - 2"	8' - 0"	8' - 10"	7' - 8"	10' - 0"	11' - 0"	9' - 1"	11' - 10"	13' - 0"	10' - 4"	13' - 6"	14' - 10"	11' - 8"	15' - 2"	16' - 9"
	End/Int bearing_SPF Plate (in)	2.7 / 6.6	2.3 / 5.7	1.9 / 4.7	3.3 / 8.2	2.9 / 7.2	2.4 / 5.9	3.9 / 9.7	3.4 / 8.4	2.8 / 7	4.5 / 11.1	3.9 / 9.6	3.2 / 8	5 / 12.5	4.4 / 10.8	3.6 / 8.9
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.2	1.5 / 3.6	1.5 / 3.5	2 / 4.9	1.7 / 4.3	1.5 / 3.5	2.3 / 5.6	2 / 4.9	1.6 / 4	2.6 / 6.3	2.2 / 5.5	1.8 / 4.5

NOTES:

- This table has been established using a Live Load deflection equal to L / 480 and a Total Load deflection limit equal to L / 240.
- This table assumes uniform loads and simple floor joists spans. When the floor joists are continuous over the VERSA-LAM® LVL beam, multiply the tributary width by 1.25 and always select the value closer to the higher tributary width.
Example : Tributary width of 14 feet multiply by 1.25 = 17'-6".
Hence, select 18 feet for new tributary width.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Table values represent the most restrictive of simple or continuous span beam applications. Span is measured center to center of the supports.
- Analyze continuous span beams with BC CALC® software if the length of any span is less than half the length of the adjacent span.
- Table values assume an interior wall dead load of 80 plf.
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1³/₄"

Snow Load of 20 psf

Dead Load of 15 psf

L/240

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
House Width [ft]	20	15' - 2"	17' - 4"	19' - 0"	18' - 11"	21' - 7"	23' - 8"	22' - 3"	25' - 4"	27' - 9"	25' - 5"	28' - 11"	31' - 8"	28' - 7"	32' - 6"	35' - 6"
	End/Int bearing, SPF Plate (in)	1.8/4.4	1.5/3.5	1.5/3.5	2.2/5.4	1.7/4.1	1.5/3.5	2.6/6.4	2/4.8	1.6/4	2.9/7.3	2.2/5.5	1.8/4.5	3.3/8.2	2.5/6.2	2.1/5.1
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.1	1.5/3.5	1.5/3.5
	24	14' - 3"	16' - 4"	17' - 11"	17' - 10"	20' - 4"	22' - 4"	21' - 0"	23' - 11"	26' - 3"	24' - 0"	27' - 4"	29' - 11"	26' - 11"	30' - 8"	33' - 7"
	End/Int bearing, SPF Plate (in)	2/4.9	1.5/3.8	1.5/3.5	2.5/6.1	1.9/4.7	1.6/3.8	2.9/7.2	2.2/5.5	1.8/4.5	3.3/8.2	2.5/6.2	2.1/5.1	3.7/9.2	2.8/7	2.3/5.8
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.9/4.7	1.5/3.6	1.5/3.5
	28	13' - 7"	15' - 6"	17' - 0"	16' - 11"	19' - 4"	21' - 3"	20' - 0"	22' - 9"	25' - 0"	22' - 10"	26' - 0"	28' - 6"	25' - 8"	29' - 2"	32' - 0"
	End/Int bearing, SPF Plate (in)	2.2/5.4	1.7/4.2	1.5/3.5	2.7/6.8	2.1/5.2	1.7/4.3	3.2/8	2.5/6.1	2/5	3.7/9.1	2.8/6.9	2.3/5.7	4.1/10.2	3.1/7.8	2.6/6.4
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.1	1.5/3.5	1.5/3.5	1.9/4.6	1.5/3.5	1.5/3.5	2.1/5.2	1.6/3.9	1.5/3.5
	32	13' - 0"	14' - 10"	16' - 4"	16' - 3"	18' - 6"	20' - 4"	19' - 1"	21' - 10"	23' - 11"	21' - 10"	24' - 11"	27' - 4"	24' - 7"	28' - 0"	30' - 8"
	End/Int bearing, SPF Plate (in)	2.4/6	1.8/4.5	1.5/3.8	3/7.4	2.3/5.7	1.9/4.7	3.5/8.7	2.7/6.7	2.2/5.5	4/10	3.1/7.6	2.5/6.2	4.5/11.2	3.4/8.5	2.8/7
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.8	1.5/3.5	1.5/3.5	1.8/4.4	1.5/3.5	1.5/3.5	2/5	1.6/3.9	1.5/3.5	2.3/5.7	1.8/4.3	1.5/3.6
	36	12' - 6"	14' - 3"	15' - 8"	15' - 7"	17' - 10"	19' - 7"	18' - 5"	21' - 0"	23' - 1"	21' - 0"	24' - 0"	26' - 4"	23' - 8"	26' - 11"	29' - 7"
	End/Int bearing, SPF Plate (in)	2.6/6.4	2/4.9	1.7/4.1	3.2/8	2.5/6.1	2.1/5.1	3.8/9.5	2.9/7.2	2.4/5.9	4.3/10.8	3.3/8.2	2.7/6.8	4.9/12.1	3.7/9.2	3.1/7.6
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.7/4.1	1.5/3.5	1.5/3.5	1.9/4.8	1.5/3.7	1.5/3.5	2.2/5.5	1.7/4.2	1.5/3.5	2.5/6.1	1.9/4.7	1.6/3.9
	40	12' - 1"	13' - 10"	15' - 2"	15' - 1"	17' - 3"	18' - 11"	17' - 9"	20' - 4"	22' - 3"	20' - 4"	23' - 2"	25' - 5"	22' - 10"	26' - 1"	28' - 7"
	End/Int bearing, SPF Plate (in)	2.8/6.9	2.1/5.3	1.8/4.4	3.5/8.6	2.7/6.6	2.2/5.4	4.1/10.1	3.1/7.7	2.6/6.4	4.7/11.6	3.6/8.8	2.9/7.3	5.2/13	4/9.9	3.3/8.2
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.4	1.5/3.5	1.5/3.5	2.1/5.1	1.6/3.9	1.5/3.5	2.4/5.9	1.8/4.5	1.5/3.7	2.7/6.6	2/5	1.7/4.1

Snow Load of 40 psf

Dead Load of 15 psf

L/240

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
House Width [ft]	20	13' - 4"	15' - 2"	16' - 8"	16' - 8"	19' - 0"	20' - 10"	19' - 7"	22' - 4"	24' - 6"	22' - 5"	25' - 6"	28' - 0"	25' - 2"	28' - 8"	31' - 5"
	End/Int bearing, SPF Plate (in)	2.5/6.2	1.9/4.7	1.6/3.9	3.1/7.7	2.4/5.9	2/4.8	3.6/9	2.8/6.9	2.3/5.7	4.2/10.3	3.2/7.8	2.6/6.5	4.7/11.6	3.6/8.8	2.9/7.2
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	1.5/3.5	1.5/3.5	1.9/4.6	1.5/3.5	1.5/3.5	2.1/5.2	1.6/4	1.5/3.5	2.4/5.9	1.8/4.5	1.5/3.7
	24	12' - 6"	14' - 4"	15' - 9"	15' - 8"	17' - 11"	19' - 8"	18' - 6"	21' - 1"	23' - 1"	21' - 1"	24' - 1"	26' - 5"	23' - 8"	27' - 0"	29' - 8"
	End/Int bearing, SPF Plate (in)	2.8/7	2.2/5.3	1.8/4.4	3.5/8.7	2.7/6.6	2.2/5.5	4.1/10.2	3.1/7.8	2.6/6.4	4.7/11.6	3.6/8.9	3/7.3	5.3/13.1	4/10	3.3/8.2
	End/Int bearing, Member (in)	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.4	1.5/3.5	1.5/3.5	2.1/5.2	1.6/3.9	1.5/3.5	2.4/5.9	1.8/4.5	1.5/3.7	2.7/6.6	2/5	1.7/4.2
	28	11' - 11"	13' - 7"	15' - 0"	14' - 11"	17' - 0"	18' - 8"	17' - 7"	20' - 0"	22' - 0"	20' - 1"	22' - 11"	25' - 1"	22' - 6"	25' - 9"	28' - 3"
	End/Int bearing, SPF Plate (in)	3.1/7.7	2.4/5.9	2/4.9	3.9/9.6	3/7.3	2.4/6	4.6/11.3	3.5/8.6	2.9/7.1	5.2/12.9	4/9.8	3.3/8.1	5.8/14.5	4.4/11	3.7/9.1
	End/Int bearing, Member (in)	1.6/3.9	1.5/3.5	1.5/3.5	2/4.9	1.5/3.7	1.5/3.5	2.3/5.7	1.8/4.4	1.5/3.6	2.6/6.5	2/5	1.7/4.1	3/7.3	2.3/5.6	1.9/4.6
	32	11' - 5"	13' - 0"	14' - 4"	14' - 3"	16' - 3"	17' - 11"	16' - 10"	19' - 2"	21' - 1"	19' - 2"	21' - 11"	24' - 1"	21' - 7"	24' - 8"	27' - 0"
	End/Int bearing, SPF Plate (in)	3.4/8.4	2.6/6.4	2.2/5.3	4.2/10.5	3.2/8	2.7/6.6	5/12.4	3.8/9.4	3.1/7.8	5.7/14.1	4.3/10.8	3.6/8.9	6.4/15.9	4.9/12.1	4/10
	End/Int bearing, Member (in)	1.7/4.3	1.5/3.5	1.5/3.5	2.2/5.3	1.7/4.1	1.5/3.5	2.5/6.3	1.9/4.8	1.6/3.9	2.9/7.1	2.2/5.4	1.8/4.5	3.2/8	2.5/6.1	2/5
	36	11' - 0"	12' - 6"	13' - 9"	13' - 8"	15' - 8"	17' - 3"	16' - 2"	18' - 6"	20' - 3"	18' - 6"	21' - 1"	23' - 2"	20' - 8"	23' - 8"	26' - 0"
	End/Int bearing, SPF Plate (in)	3.7/9.1	2.8/7	2.3/5.7	4.6/11.4	3.5/8.7	2.9/7.2	5.4/13.4	4.1/10.2	3.4/8.4	6.1/15.3	4.7/11.6	3.9/9.6	6.9/17.1	5.3/13.1	4.3/10.8
	End/Int bearing, Member (in)	1.9/4.6	1.5/3.5	1.5/3.5	2.3/5.8	1.8/4.4	1.5/3.6	2.7/6.8	2.1/5.2	1.7/4.3	3.1/7.7	2.4/5.9	2/4.9	3.5/8.7	2.7/6.6	2.2/5.5
	40	10' - 7"	12' - 1"	13' - 4"	13' - 3"	15' - 2"	16' - 8"	15' - 6"	17' - 10"	19' - 7"	17' - 7"	20' - 4"	22' - 5"	19' - 8"	22' - 11"	25' - 2"
	End/Int bearing, SPF Plate (in)	3.9/9.8	3/7.5	2.5/6.2	4.9/12.2	3.8/9.3	3.1/7.7	5.7/14.3	4.4/10.9	3.6/9	6.5/16.2	5/12.5	4.2/10.3	7.3/18.1	5.6/14	4.7/11.6
	End/Int bearing, Member (in)	2/5	1.5/3.8	1.5/3.5	2.5/6.2	1.9/4.7	1.6/3.9	2.9/7.2	2.2/5.5	1.9/4.6	3.3/8.2	2.6/6.3	2.1/5.2	3.7/9.1	2.9/7.1	2.4/5.9

Snow Load of 60 psf

Dead Load of 15 psf

L/240

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
House Width [ft]	20	12' - 2"	13' - 10"	15' - 3"	15' - 2"	17' - 4"	19' - 0"	17' - 10"	20' - 5"	22' - 5"	20' - 5"	23' - 3"	25' - 7"	22' - 11"	26' - 2"	28' - 8"
	End/Int bearing_SPF Plate (in)	3.1/ 7.7	2.4/ 5.9	2/ 4.9	3.9/ 9.6	3/ 7.4	2.5/ 6.1	4.6/ 11.4	3.5/ 8.7	2.9/ 7.1	5.2/ 13	4/ 9.9	3.3/ 8.1	5.9/ 14.6	4.5/ 11.1	3.7/ 9.1
	End/Int bearing_Member (in)	1.6/ 3.9	1.5/ 3.5	1.5/ 3.5	2/ 4.9	1.5/ 3.7	1.5/ 3.5	2.3/ 5.8	1.8/ 4.4	1.5/ 3.6	2.7/ 6.6	2/ 5	1.7/ 4.1	3/ 7.4	2.3/ 5.6	1.9/ 4.6
	24	11' - 5"	13' - 1"	14' - 4"	14' - 3"	16' - 4"	17' - 11"	16' - 10"	19' - 3"	21' - 1"	19' - 3"	21' - 11"	24' - 1"	21' - 7"	24' - 8"	27' - 1"
	End/Int bearing_SPF Plate (in)	3.5/ 8.7	2.7/ 6.7	2.2/ 5.5	4.4/ 10.9	3.4/ 8.3	2.8/ 6.9	5.2/ 12.8	3.9/ 9.8	3.3/ 8.1	5.9/ 14.6	4.5/ 11.2	3.7/ 9.2	6.6/ 16.5	5/ 12.5	4.2/ 10.3
	End/Int bearing_Member (in)	1.8/ 4.4	1.5/ 3.5	1.5/ 3.5	2.2/ 5.5	1.7/ 4.2	1.5/ 3.5	2.6/ 6.5	2/ 5	1.7/ 4.1	3/ 7.4	2.3/ 5.7	1.9/ 4.7	3.4/ 8.3	2.6/ 6.3	2.1/ 5.2
	28	10' - 10"	12' - 5"	13' - 8"	13' - 7"	15' - 6"	17' - 1"	16' - 0"	18' - 3"	20' - 1"	18' - 1"	20' - 10"	22' - 11"	20' - 3"	23' - 6"	25' - 9"
	End/Int bearing_SPF Plate (in)	3.9/ 9.7	3/ 7.4	2.5/ 6.1	4.9/ 12.1	3.7/ 9.2	3.1/ 7.6	5.7/ 14.2	4.4/ 10.8	3.6/ 8.9	6.5/ 16.1	5/ 12.4	4.1/ 10.2	7.2/ 18	5.6/ 13.9	4.6/ 11.5
	End/Int bearing_Member (in)	2/ 4.9	1.5/ 3.8	1.5/ 3.5	2.5/ 6.1	1.9/ 4.7	1.6/ 3.9	2.9/ 7.2	2.2/ 5.5	1.8/ 4.5	3.3/ 8.1	2.5/ 6.3	2.1/ 5.2	3.7/ 9.1	2.8/ 7	2.4/ 5.8
	32	10' - 4"	11' - 10"	13' - 1"	12' - 10"	14' - 10"	16' - 4"	14' - 11"	17' - 6"	19' - 3"	16' - 11"	20' - 0"	21' - 11"	18' - 11"	22' - 6"	24' - 8"
	End/Int bearing_SPF Plate (in)	4.3/ 10.6	3.3/ 8.1	2.7/ 6.7	5.2/ 13	4.1/ 10.1	3.4/ 8.3	6.1/ 15.2	4.8/ 11.9	3.9/ 9.8	6.9/ 17.2	5.4/ 13.5	4.5/ 11.2	7.7/ 19.2	6.1/ 15.2	5/ 12.5
	End/Int bearing_Member (in)	2.2/ 5.4	1.7/ 4.1	1.5/ 3.5	2.7/ 6.6	2.1/ 5.1	1.7/ 4.2	3.1/ 7.7	2.4/ 6	2/ 5	3.5/ 8.7	2.8/ 6.9	2.3/ 5.7	3.9/ 9.7	3.1/ 7.7	2.6/ 6.3
	36	9' - 9"	11' - 5"	12' - 7"	12' - 1"	14' - 3"	15' - 8"	14' - 1"	16' - 10"	18' - 6"	16' - 0"	19' - 3"	21' - 1"	17' - 10"	21' - 7"	23' - 9"
	End/Int bearing_SPF Plate (in)	4.5/ 11.2	3.5/ 8.7	2.9/ 7.2	5.6/ 13.8	4.4/ 10.9	3.6/ 9	6.5/ 16.1	5.2/ 12.8	4.3/ 10.6	7.3/ 18.3	5.9/ 14.6	4.9/ 12.1	8.2/ 20.4	6.6/ 16.5	5.5/ 13.6
	End/Int bearing_Member (in)	2.3/ 5.7	1.8/ 4.4	1.5/ 3.7	2.8/ 7	2.2/ 5.5	1.9/ 4.6	3.3/ 8.2	2.6/ 6.5	2.2/ 5.4	3.7/ 9.2	3/ 7.4	2.5/ 6.1	4.2/ 10.3	3.4/ 8.3	2.8/ 6.9
	40	9' - 2"	11' - 0"	12' - 2"	11' - 5"	13' - 9"	15' - 2"	13' - 4"	16' - 3"	17' - 10"	15' - 2"	18' - 7"	20' - 5"	16' - 11"	20' - 9"	22' - 11"
	End/Int bearing_SPF Plate (in)	4.7/ 11.6	3.8/ 9.4	3.1/ 7.7	5.8/ 14.5	4.7/ 11.7	3.9/ 9.6	6.8/ 17	5.5/ 13.8	4.6/ 11.4	7.7/ 19.3	6.3/ 15.7	5.2/ 13	8.6/ 21.5	7/ 17.5	5.9/ 14.6
	End/Int bearing_Member (in)	2.4/ 5.9	1.9/ 4.8	1.6/ 3.9	3/ 7.3	2.4/ 5.9	2/ 4.9	3.5/ 8.6	2.8/ 7	2.3/ 5.8	3.9/ 9.7	3.2/ 7.9	2.7/ 6.6	4.4/ 10.9	3.6/ 8.9	3/ 7.4

VERSA-LAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf

Dead Load of 15 psf

L/360

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
House Width [ft]	20	13' - 9"	15' - 8"	17' - 3"	17' - 2"	19' - 7"	21' - 6"	20' - 3"	23' - 1"	25' - 3"	23' - 1"	26' - 3"	28' - 9"	25' - 11"	29' - 6"	32' - 3"
	End/Int bearing_SPF Plate (in)	1.6 / 4	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.8	1.5 / 3.5	2.3 / 5.8	1.8 / 4.4	1.5 / 3.6	2.7 / 6.6	2 / 5	1.7 / 4.1	3 / 7.4	2.3 / 5.6	1.9 / 4.6
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5
	24	13' - 0"	14' - 10"	16' - 3"	16' - 2"	18' - 6"	20' - 3"	19' - 1"	21' - 9"	23' - 10"	21' - 9"	24' - 10"	27' - 2"	24' - 6"	27' - 10"	30' - 6"
	End/Int bearing_SPF Plate (in)	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.3 / 5.6	1.7 / 4.2	1.5 / 3.5	2.6 / 6.5	2 / 5	1.7 / 4.1	3 / 7.5	2.3 / 5.7	1.9 / 4.7	3.4 / 8.4	2.6 / 6.4	2.1 / 5.2
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5
	28	12' - 4"	14' - 1"	15' - 6"	15' - 5"	17' - 7"	19' - 3"	18' - 2"	20' - 8"	22' - 8"	20' - 9"	23' - 7"	25' - 11"	23' - 3"	26' - 6"	29' - 1"
	End/Int bearing_SPF Plate (in)	2 / 5	1.5 / 3.8	1.5 / 3.5	2.5 / 6.2	1.9 / 4.7	1.6 / 3.9	2.9 / 7.3	2.2 / 5.5	1.9 / 4.6	3.3 / 8.3	2.6 / 6.3	2.1 / 5.2	3.7 / 9.3	2.9 / 7.1	2.4 / 5.8
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5
	32	11' - 10"	13' - 6"	14' - 10"	14' - 9"	16' - 10"	18' - 6"	17' - 4"	19' - 10"	21' - 9"	19' - 10"	22' - 8"	24' - 10"	22' - 4"	25' - 5"	27' - 10"
	End/Int bearing_SPF Plate (in)	2.2 / 5.4	1.7 / 4.1	1.5 / 3.5	2.7 / 6.7	2.1 / 5.1	1.7 / 4.2	3.2 / 7.9	2.4 / 6	2 / 5	3.7 / 9.1	2.8 / 6.9	2.3 / 5.7	4.1 / 10.2	3.1 / 7.7	2.6 / 6.4
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.6	1.5 / 3.5	1.5 / 3.5	2.1 / 5.2	1.6 / 3.9	1.5 / 3.5
	36	11' - 4"	13' - 0"	14' - 3"	14' - 2"	16' - 2"	17' - 9"	16' - 9"	19' - 1"	20' - 11"	19' - 1"	21' - 9"	23' - 11"	21' - 6"	24' - 6"	26' - 10"
	End/Int bearing_SPF Plate (in)	2.4 / 5.9	1.8 / 4.5	1.5 / 3.7	3 / 7.3	2.3 / 5.6	1.9 / 4.6	3.5 / 8.6	2.6 / 6.5	2.2 / 5.4	4 / 9.8	3 / 7.5	2.5 / 6.2	4.4 / 11	3.4 / 8.4	2.8 / 6.9
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.7	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2 / 5	1.5 / 3.8	1.5 / 3.5	2.3 / 5.6	1.7 / 4.3	1.5 / 3.5
	40	11' - 0"	12' - 6"	13' - 9"	13' - 8"	15' - 8"	17' - 2"	16' - 2"	18' - 5"	20' - 3"	18' - 5"	21' - 1"	23' - 1"	20' - 9"	23' - 8"	25' - 11"
	End/Int bearing_SPF Plate (in)	2.5 / 6.3	1.9 / 4.8	1.6 / 4	3.2 / 7.8	2.4 / 6	2 / 4.9	3.7 / 9.2	2.8 / 7	2.3 / 5.8	4.2 / 10.5	3.2 / 8	2.7 / 6.6	4.8 / 11.8	3.6 / 9	3 / 7.4
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5	2.2 / 5.3	1.7 / 4.1	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.5 / 3.8

Snow Load of 40 psf

Dead Load of 15 psf

L/360

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
House Width [ft]	20	12' - 1"	13' - 10"	15' - 2"	15' - 1"	17' - 3"	18' - 11"	17' - 10"	20' - 4"	22' - 3"	20' - 4"	23' - 2"	25' - 5"	22' - 10"	26' - 0"	28' - 6"
	End/Int bearing_SPF Plate (in)	2.3 / 5.6	1.7 / 4.3	1.5 / 3.5	2.8 / 7	2.2 / 5.3	1.8 / 4.4	3.3 / 8.2	2.5 / 6.3	2.1 / 5.2	3.8 / 9.4	2.9 / 7.1	2.4 / 5.9	4.2 / 10.5	3.2 / 8	2.7 / 6.6
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5	2.2 / 5.3	1.7 / 4.1	1.5 / 3.5
	24	11' - 5"	13' - 0"	14' - 4"	14' - 3"	16' - 3"	17' - 10"	16' - 9"	19' - 2"	21' - 0"	19' - 2"	21' - 10"	24' - 0"	21' - 6"	24' - 7"	26' - 11"
	End/Int bearing_SPF Plate (in)	2.6 / 6.3	2 / 4.8	1.6 / 4	3.2 / 7.9	2.4 / 6	2 / 5	3.7 / 9.3	2.9 / 7.1	2.4 / 5.8	4.3 / 10.6	3.3 / 8.1	2.7 / 6.6	4.8 / 11.9	3.6 / 9	3 / 7.4
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.6 / 4	1.5 / 3.5	1.5 / 3.5	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5	2.2 / 5.4	1.7 / 4.1	1.5 / 3.5	2.4 / 6	1.9 / 4.6	1.5 / 3.8
	28	10' - 10"	12' - 4"	13' - 7"	13' - 6"	15' - 5"	17' - 0"	15' - 11"	18' - 2"	20' - 0"	18' - 3"	20' - 9"	22' - 10"	20' - 6"	23' - 4"	25' - 8"
	End/Int bearing_SPF Plate (in)	2.8 / 7	2.2 / 5.3	1.8 / 4.4	3.5 / 8.7	2.7 / 6.7	2.2 / 5.5	4.1 / 10.3	3.2 / 7.8	2.6 / 6.5	4.7 / 11.7	3.6 / 8.9	3 / 7.4	5.3 / 13.2	4 / 10	3.3 / 8.3
	End/Int bearing_Member (in)	1.5 / 3.6	1.5 / 3.5	1.5 / 3.5	1.8 / 4.4	1.5 / 3.5	1.5 / 3.5	2.1 / 5.2	1.6 / 4	1.5 / 3.5	2.4 / 5.9	1.8 / 4.5	1.5 / 3.7	2.7 / 6.7	2.1 / 5.1	1.7 / 4.2
	32	10' - 4"	11' - 10"	13' - 0"	12' - 11"	14' - 9"	16' - 3"	15' - 3"	17' - 5"	19' - 2"	17' - 5"	19' - 11"	21' - 10"	19' - 7"	22' - 4"	24' - 7"
	End/Int bearing_SPF Plate (in)	3.1 / 7.7	2.4 / 5.8	2 / 4.8	3.8 / 9.5	2.9 / 7.3	2.4 / 6	4.5 / 11.2	3.5 / 8.6	2.9 / 7.1	5.2 / 12.8	3.9 / 9.8	3.3 / 8.1	5.8 / 14.4	4.4 / 11	3.6 / 9
	End/Int bearing_Member (in)	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5	2 / 4.8	1.5 / 3.7	1.5 / 3.5	2.3 / 5.7	1.8 / 4.3	1.5 / 3.6	2.6 / 6.5	2 / 5	1.7 / 4.1	2.9 / 7.3	2.3 / 5.6	1.9 / 4.6
	36	10' - 0"	11' - 5"	12' - 6"	12' - 5"	14' - 3"	15' - 8"	14' - 8"	16' - 9"	18' - 5"	16' - 9"	19' - 2"	21' - 0"	18' - 10"	21' - 6"	23' - 8"
	End/Int bearing_SPF Plate (in)	3.3 / 8.3	2.6 / 6.3	2.1 / 5.2	4.2 / 10.3	3.2 / 7.9	2.6 / 6.5	4.9 / 12.2	3.7 / 9.3	3.1 / 7.6	5.6 / 13.9	4.3 / 10.6	3.5 / 8.7	6.3 / 15.6	4.8 / 11.9	3.9 / 9.8
	End/Int bearing_Member (in)	1.7 / 4.2	1.5 / 3.5	1.5 / 3.5	2.1 / 5.2	1.6 / 4	1.5 / 3.5	2.5 / 6.2	1.9 / 4.7	1.6 / 3.9	2.8 / 7	2.2 / 5.4	1.8 / 4.4	3.2 / 7.9	2.4 / 6	2 / 5
	40	9' - 7"	11' - 0"	12' - 1"	12' - 0"	13' - 9"	15' - 1"	14' - 2"	16' - 2"	17' - 10"	16' - 2"	18' - 6"	20' - 4"	18' - 3"	20' - 10"	22' - 10"
	End/Int bearing_SPF Plate (in)	3.6 / 8.9	2.7 / 6.8	2.3 / 5.6	4.5 / 11.1	3.4 / 8.5	2.8 / 7	5.2 / 13	4 / 10	3.3 / 8.2	6 / 14.9	4.6 / 11.4	3.8 / 9.4	6.7 / 16.7	5.1 / 12.8	4.2 / 10.5
	End/Int bearing_Member (in)	1.8 / 4.5	1.5 / 3.5	1.5 / 3.5	2.3 / 5.6	1.7 / 4.3	1.5 / 3.5	2.7 / 6.6	2 / 5	1.7 / 4.2	3 / 7.5	2.3 / 5.8	1.9 / 4.7	3.4 / 8.5	2.6 / 6.5	2.2 / 5.3

Snow Load of 60 psf

Dead Load of 15 psf

L/360

Beam Depth		9.5"			11.875"			14"			16"			18"		
		2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply	2 ply	3 ply	4 ply
House Width [ft]	20	10' - 8"	12' - 3"	13' - 6"	13' - 4"	15' - 4"	16' - 10"	15' - 9"	18' - 1"	19' - 11"	18' - 0"	20' - 8"	22' - 9"	20' - 3"	23' - 3"	25' - 7"
	End/Int bearing_SPF Plate (in)	2.8 / 6.8	2.1 / 5.2	1.8 / 4.3	3.4 / 8.5	2.6 / 6.5	2.2 / 5.4	4 / 10	3.1 / 7.7	2.6 / 6.3	4.6 / 11.5	3.5 / 8.8	2.9 / 7.2	5.2 / 12.9	4 / 9.8	3.3 / 8.1
	End/Int bearing_Member (in)	1.5 / 3.5	1.5 / 3.5	1.5 / 3.5	1.8 / 4.3	1.5 / 3.5	1.5 / 3.5	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.4 / 5.8	1.8 / 4.4	1.5 / 3.7	2.6 / 6.5	2 / 5	1.7 / 4.1
	24	10' - 1"	11' - 6"	12' - 8"	12' - 7"	14' - 5"	15' - 10"	14' - 10"	17' - 0"	18' - 8"	17' - 0"	19' - 5"	21' - 5"	19' - 1"	21' - 10"	24' - 1"
	End/Int bearing_SPF Plate (in)	3.1 / 7.7	2.4 / 5.9	2 / 4.9	3.9 / 9.6	3 / 7.3	2.5 / 6.1	4.6 / 11.3	3.5 / 8.7	2.9 / 7.2	5.2 / 12.9	4 / 9.9	3.3 / 8.2	5.8 / 14.5	4.5 / 11.1	3.7 / 9.2
	End/Int bearing_Member (in)	1.6 / 3.9	1.5 / 3.5	1.5 / 3.5	2 / 4.9	1.5 / 3.7	1.5 / 3.5	2.3 / 5.7	1.8 / 4.4	1.5 / 3.6	2.6 / 6.5	2 / 5	1.7 / 4.1	3 / 7.4	2.3 / 5.6	1.9 / 4.7
	28	9' - 7"	10' - 11"	12' - 0"	11' - 11"	13' - 8"	15' - 1"	14' - 1"	16' - 2"	17' - 9"	16' - 1"	18' - 5"	20' - 4"	18' - 2"	20' - 9"	22' - 10"
	End/Int bearing_SPF Plate (in)	3.4 / 8.5	2.6 / 6.5	2.2 / 5.4	4.3 / 10.6	3.3 / 8.1	2.7 / 6.7	5 / 12.5	3.9 / 9.6	3.2 / 7.9	5.8 / 14.3	4.4 / 10.9	3.6 / 9	6.5 / 16.1	5 / 12.3	4.1 / 10.2
	End/Int bearing_Member (in)	1.8 / 4.3	1.5 / 3.5	1.5 / 3.5	2.2 / 5.4	1.7 / 4.1	1.5 / 3.5	2.6 / 6.4	2 / 4.9	1.6 / 4	2.9 / 7.3	2.2 / 5.5	1.9 / 4.6	3.3 / 8.2	2.5 / 6.2	2.1 / 5.2
	32	9' - 2"	10' - 5"	11' - 6"	11' - 5"	13' - 1"	14' - 5"	13' - 6"	15' - 5"	17' - 0"	15' - 5"	17' - 8"	19' - 5"	17' - 4"	19' - 10"	21' - 10"
	End/Int bearing_SPF Plate (in)	3.8 / 9.3	2.9 / 7.1	2.4 / 5.9	4.7 / 11.6	3.6 / 8.9	3 / 7.3	5.5 / 13.7	4.2 / 10.5	3.5 / 8.7	6.3 / 15.7	4.8 / 12	4 / 9.9	7.1 / 17.6	5.4 / 13.5	4.5 / 11.1
	End/Int bearing_Member (in)	1.9 / 4.7	1.5 / 3.6	1.5 / 3.5	2.4 / 5.9	1.8 / 4.5	1.5 / 3.7	2.8 / 6.9	2.2 / 5.3	1.8 / 4.4	3.2 / 7.9	2.5 / 6.1	2 / 5	3.6 / 8.9	2.8 / 6.8	2.3 / 5.6
	36	8' - 9"	10' - 1"	11' - 1"	11' - 0"	12' - 7"	13' - 10"	12' - 11"	14' - 10"	16' - 4"	14' - 10"	17' - 0"	18' - 8"	16' - 8"	19' - 1"	21' - 0"
	End/Int bearing_SPF Plate (in)	4.1 / 10.1	3.1 / 7.7	2.6 / 6.4	5.1 / 12.6	3.9 / 9.6	3.2 / 7.9	6 / 14.8	4.6 / 11.3	3.8 / 9.4	6.8 / 16.9	5.2 / 12.9	4.3 / 10.7	7.6 / 19	5.8 / 14.5	4.8 / 12
	End/Int bearing_Member (in)	2.1 / 5.1	1.6 / 3.9	1.5 / 3.5	2.6 / 6.4	2 / 4.9	1.6 / 4	3 / 7.5	2.3 / 5.7	1.9 / 4.7	3.5 / 8.6	2.6 / 6.5	2.2 / 5.4	3.9 / 9.6	3 / 7.4	2.5 / 6.1
	40	8' - 6"	9' - 8"	10' - 8"	10' - 7"	12' - 2"	13' - 4"	12' - 6"	14' - 4"	15' - 9"	14' - 4"	16' - 4"	18' - 0"	16' - 1"	18' - 5"	20' - 3"
End/Int bearing_SPF Plate (in)	4.4 / 10.8	3.3 / 8.3	2.8 / 6.8	5.4 / 13.5	4.2 / 10.3	3.4 / 8.5	6.4 / 15.9	4.9 / 12.1	4 / 10	7.3 / 18.2	5.6 / 13.9	4.6 / 11.5	8.2 / 20.4	6.3 / 15.6	5.2 / 12.9	
End/Int bearing_Member (in)	2.2 / 5.5	1.7 / 4.2	1.5 / 3.5	2.8 / 6.8	2.1 / 5.2	1.8 / 4.3	3.2 / 7.8	2.5 / 6.1	2.1 / 5.1	3.7 / 9.2	2.8 / 7	2.4 / 5.8	4.2 / 10.3	3.2 / 7.9	2.6 / 6.5	

VERSA-LAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf

Dead Load of 15 psf

L/240

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	8' - 3"	9' - 5"	10' - 11"	12' - 6"	13' - 11"	15' - 10"	14' - 3"	16' - 4"	16' - 11"	19' - 3"	17' - 10"	20' - 4"	21' - 0"	23' - 11"	24' - 0"	27' - 4"	26' - 11"	30' - 8"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.4	1.9	2.8	2.1	3.1	2.4
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
24	7' - 10"	9' - 0"	10' - 4"	11' - 10"	13' - 3"	15' - 1"	13' - 7"	15' - 6"	16' - 1"	18' - 4"	16' - 11"	19' - 4"	20' - 0"	22' - 9"	22' - 10"	26' - 0"	25' - 8"	29' - 2"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.9	1.5	1.9	1.5	2.2	1.7	2.4	1.8	2.8	2.1	3.2	2.4	3.5	2.7
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5
28	7' - 6"	8' - 7"	9' - 11"	11' - 4"	12' - 8"	14' - 5"	13' - 0"	14' - 10"	15' - 5"	17' - 7"	16' - 3"	18' - 6"	19' - 1"	21' - 10"	21' - 10"	24' - 11"	24' - 7"	28' - 0"
End bearing_SPF Plate (in)	1.5	1.5	1.6	1.5	2.1	1.6	2.1	1.6	2.5	1.9	2.6	2.0	3.1	2.4	3.5	2.7	3.9	3.0
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.0	1.5
32	7' - 3"	8' - 3"	9' - 6"	10' - 11"	12' - 2"	13' - 11"	12' - 6"	14' - 3"	14' - 10"	16' - 11"	15' - 7"	17' - 10"	18' - 5"	21' - 0"	21' - 0"	24' - 0"	23' - 8"	26' - 11"
End bearing_SPF Plate (in)	1.5	1.5	1.8	1.5	2.3	1.7	2.3	1.8	2.7	2.1	2.9	2.2	3.4	2.6	3.9	3.0	4.3	3.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	2.0	1.5	2.2	1.7
36	7' - 0"	8' - 0"	9' - 2"	10' - 6"	11' - 9"	13' - 5"	12' - 1"	13' - 10"	14' - 3"	16' - 4"	15' - 1"	17' - 3"	17' - 9"	20' - 4"	20' - 4"	23' - 2"	22' - 10"	26' - 1"
End bearing_SPF Plate (in)	1.5	1.5	1.9	1.5	2.5	1.9	2.5	1.9	3.0	2.3	3.1	2.4	3.7	2.8	4.2	3.2	4.7	3.6
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.9	1.5	2.1	1.6	2.4	1.8
40	6' - 9"	7' - 9"	8' - 11"	10' - 2"	11' - 5"	13' - 0"	11' - 8"	13' - 4"	13' - 10"	15' - 10"	14' - 7"	16' - 8"	17' - 3"	19' - 8"	19' - 8"	22' - 6"	22' - 2"	25' - 3"
End bearing_SPF Plate (in)	1.6	1.5	2.1	1.6	2.6	2.0	2.7	2.1	3.2	2.4	3.4	2.6	4.0	3.0	4.5	3.4	5.1	3.9
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.6	2.3	1.8	2.6	2.0

Snow Load of 40 psf

Dead Load of 15 psf

L/240

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	7' - 3"	8' - 4"	9' - 7"	10' - 11"	12' - 3"	13' - 11"	12' - 6"	14' - 4"	14' - 10"	16' - 11"	15' - 8"	17' - 11"	18' - 6"	21' - 1"	21' - 1"	24' - 1"	23' - 8"	27' - 0"
End bearing_SPF Plate (in)	1.5	1.5	1.8	1.5	2.3	1.8	2.4	1.8	2.8	2.1	2.9	2.2	3.4	2.6	3.9	3.0	4.4	3.4
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.5	2.2	1.7
24	6' - 11"	7' - 11"	9' - 1"	10' - 5"	11' - 7"	13' - 3"	11' - 11"	13' - 7"	14' - 1"	16' - 1"	14' - 11"	17' - 0"	17' - 7"	20' - 0"	20' - 1"	22' - 11"	22' - 6"	25' - 9"
End bearing_SPF Plate (in)	1.6	1.5	2.1	1.6	2.6	2.0	2.7	2.0	3.2	2.4	3.3	2.5	3.9	3.0	4.5	3.4	5.0	3.8
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.3	1.7	2.5	2.0
28	6' - 7"	7' - 7"	8' - 8"	9' - 11"	11' - 1"	12' - 8"	11' - 5"	13' - 0"	13' - 6"	15' - 5"	14' - 3"	16' - 3"	16' - 10"	19' - 2"	19' - 2"	21' - 11"	21' - 7"	24' - 8"
End bearing_SPF Plate (in)	1.7	1.5	2.3	1.8	2.9	2.2	3.0	2.3	3.5	2.7	3.7	2.8	4.4	3.3	5.0	3.8	5.6	4.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.2
32	6' - 4"	7' - 3"	8' - 4"	9' - 7"	10' - 8"	12' - 3"	11' - 0"	12' - 6"	13' - 0"	14' - 10"	13' - 8"	15' - 8"	16' - 2"	18' - 6"	18' - 5"	21' - 1"	20' - 8"	23' - 8"
End bearing_SPF Plate (in)	1.9	1.5	2.5	1.9	3.2	2.4	3.3	2.5	3.9	3.0	4.1	3.1	4.8	3.7	5.5	4.2	6.1	4.7
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.4	1.9	2.8	2.1	3.1	2.4
36	6' - 1"	7' - 0"	8' - 1"	9' - 3"	10' - 4"	11' - 9"	10' - 7"	12' - 1"	12' - 6"	14' - 4"	13' - 3"	15' - 2"	15' - 6"	17' - 10"	17' - 7"	20' - 4"	19' - 8"	22' - 11"
End bearing_SPF Plate (in)	2.1	1.6	2.7	2.1	3.5	2.6	3.5	2.7	4.2	3.2	4.4	3.4	5.2	4.0	5.9	4.5	6.5	5.1
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.1	1.6	2.3	1.7	2.6	2.0	3.0	2.3	3.3	2.6
40	5' - 11"	6' - 9"	7' - 10"	8' - 11"	10' - 0"	11' - 5"	10' - 3"	11' - 9"	12' - 0"	13' - 11"	12' - 8"	14' - 8"	14' - 9"	17' - 3"	16' - 9"	19' - 9"	18' - 9"	22' - 2"
End bearing_SPF Plate (in)	2.2	1.7	2.9	2.2	3.7	2.8	3.8	2.9	4.5	3.4	4.7	3.6	5.5	4.3	6.2	4.9	6.9	5.5
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.9	1.5	1.9	1.5	2.3	1.8	2.4	1.9	2.8	2.2	3.2	2.5	3.5	2.8

Snow Load of 60 psf

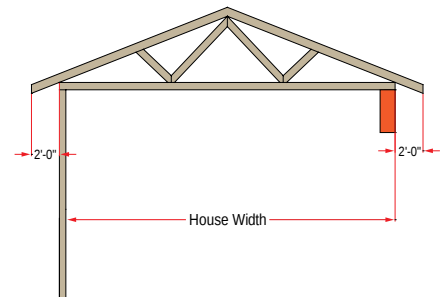
Dead Load of 15 psf

L/240

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	6' - 7"	7' - 7"	8' - 9"	10' - 0"	11' - 1"	12' - 9"	11' - 5"	13' - 1"	13' - 6"	15' - 5"	14' - 3"	16' - 4"	16' - 10"	19' - 3"	19' - 3"	21' - 11"	21' - 7"	24' - 8"
End bearing_SPF Plate (in)	1.7	1.5	2.3	1.7	2.9	2.2	2.9	2.3	3.5	2.7	3.7	2.8	4.3	3.3	4.9	3.8	5.5	4.2
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.1
24	6' - 3"	7' - 2"	8' - 3"	9' - 6"	10' - 7"	12' - 1"	10' - 10"	12' - 5"	12' - 10"	14' - 8"	13' - 7"	15' - 6"	16' - 0"	18' - 3"	18' - 1"	20' - 10"	20' - 3"	23' - 6"
End bearing_SPF Plate (in)	2.0	1.5	2.6	2.0	3.3	2.5	3.4	2.6	4.0	3.0	4.2	3.2	4.9	3.8	5.6	4.3	6.2	4.8
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.7	1.5	2.0	1.6	2.1	1.6	2.5	1.9	2.8	2.2	3.1	2.4
28	6' - 0"	6' - 10"	7' - 11"	9' - 1"	10' - 1"	11' - 7"	10' - 4"	11' - 10"	12' - 2"	14' - 1"	12' - 10"	14' - 10"	14' - 11"	17' - 6"	16' - 11"	20' - 0"	18' - 11"	22' - 6"
End bearing_SPF Plate (in)	2.2	1.7	2.9	2.2	3.6	2.8	3.7	2.9	4.4	3.4	4.6	3.6	5.3	4.2	6.1	4.8	6.8	5.4
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.9	1.5	1.9	1.5	2.2	1.7	2.3	1.8	2.7	2.1	3.1	2.4	3.4	2.7
32	5' - 9"	6' - 7"	7' - 7"	8' - 9"	9' - 6"	11' - 1"	9' - 9"	11' - 5"	11' - 6"	13' - 6"	12' - 1"	14' - 3"	14' - 1"	16' - 10"	16' - 0"	19' - 3"	17' - 10"	21' - 7"
End bearing_SPF Plate (in)	2.4	1.8	3.1	2.4	3.9	3.1	4.0	3.1	4.7	3.7	4.9	3.9	5.8	4.6	6.5	5.2	7.3	5.9
End bearing_Member (in)	1.5	1.5	1.6	1.5	2.0	1.6	2.1	1.6	2.4	1.9	2.5	2.0	2.9	2.3	3.3	2.7	3.7	3.0
36	5' - 6"	6' - 4"	7' - 2"	8' - 5"	9' - 0"	10' - 9"	9' - 3"	11' - 0"	10' - 11"	13' - 1"	11' - 5"	13' - 9"	13' - 4"	16' - 3"	15' - 2"	18' - 7"	16' - 11"	20' - 9"
End bearing_SPF Plate (in)	2.6	2.0	3.3	2.6	4.2	3.3	4.3	3.4	5.0	4.0	5.3	4.2	6.1	5.0	7.0	5.7	7.8	6.3
End bearing_Member (in)	1.5	1.5	1.7	1.5	2.1	1.7	2.2	1.7	2.6	2.1	2.7	2.2	3.1	2.5	3.5	2.9	3.9	3.2
40	5' - 3"	6' - 2"	6' - 10"	8' - 2"	8' - 7"	10' - 5"	8' - 10"	10' - 8"	10' - 4"	12' - 8"	10' - 11"	13' - 4"	12' - 9"	15' - 7"	14' - 6"	17' - 8"	16' - 2"	19' - 9"
End bearing_SPF Plate (in)	2.7	2.1	3.5	2.8	4.4	3.6	4.5	3.7	5.3	4.3	5.6	4.6	6.5	5.3	7.4	6.0	8.2	6.7
End bearing_Member (in)	1.5	1.5	1.8	1.5	2.3	1.8	2.3	1.9	2.7	2.2	2.8	2.3	3.3	2.7	3.7	3.1	4.2	3.4

NOTES:

- This table has been established using a Live Load deflection equal to L / 240 and a Total Load deflection limit equal to L / 180.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf

Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
20	7' - 6"	8' - 7"	9' - 11"	11' - 4"	12' - 8"	14' - 5"	13' - 0"	14' - 10"	15' - 4"	17' - 6"	16' - 2"	18' - 6"	19' - 1"	21' - 9"	21' - 9"	24' - 10"	24' - 6"	27' - 10"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
24	7' - 2"	8' - 2"	9' - 5"	10' - 9"	12' - 0"	13' - 9"	12' - 4"	14' - 1"	14' - 7"	16' - 8"	15' - 5"	17' - 7"	18' - 2"	20' - 8"	20' - 9"	23' - 7"	23' - 3"	26' - 6"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.7	1.5	2.0	1.6	2.1	1.6	2.5	1.9	2.9	2.2	3.2	2.5
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
28	6' - 10"	7' - 10"	9' - 0"	10' - 4"	11' - 6"	13' - 2"	11' - 10"	13' - 6"	14' - 0"	15' - 11"	14' - 9"	16' - 10"	17' - 4"	19' - 10"	19' - 10"	22' - 8"	22' - 4"	25' - 5"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.9	1.5	1.9	1.5	2.3	1.7	2.4	1.8	2.8	2.1	3.2	2.4	3.6	2.7
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5
32	6' - 7"	7' - 6"	8' - 8"	9' - 11"	11' - 1"	12' - 8"	11' - 4"	13' - 0"	13' - 5"	15' - 4"	14' - 2"	16' - 2"	16' - 9"	19' - 1"	19' - 1"	21' - 9"	21' - 6"	24' - 6"
End bearing_SPF Plate (in)	1.5	1.5	1.6	1.5	2.1	1.6	2.1	1.6	2.5	1.9	2.6	2.0	3.1	2.4	3.5	2.7	3.9	3.0
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.0	1.5
36	6' - 4"	7' - 3"	8' - 4"	9' - 7"	10' - 8"	12' - 2"	11' - 0"	12' - 6"	13' - 0"	14' - 10"	13' - 8"	15' - 8"	16' - 2"	18' - 5"	18' - 5"	21' - 1"	20' - 9"	23' - 8"
End bearing_SPF Plate (in)	1.5	1.5	1.8	1.5	2.2	1.7	2.3	1.8	2.7	2.1	2.9	2.2	3.3	2.6	3.8	2.9	4.3	3.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	2.0	1.5	2.2	1.7
40	6' - 2"	7' - 0"	8' - 1"	9' - 3"	10' - 4"	11' - 10"	10' - 7"	12' - 2"	12' - 7"	14' - 4"	13' - 3"	15' - 2"	15' - 8"	17' - 10"	17' - 11"	20' - 5"	20' - 1"	22' - 11"
End bearing_SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.8	2.5	1.9	2.9	2.2	3.1	2.3	3.6	2.8	4.1	3.1	4.6	3.5
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.1	1.6	2.4	1.8

Snow Load of 40 psf

Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
20	6' - 7"	7' - 6"	8' - 8"	9' - 11"	11' - 1"	12' - 8"	11' - 5"	13' - 0"	13' - 6"	15' - 5"	14' - 3"	16' - 3"	16' - 9"	19' - 2"	19' - 2"	21' - 10"	21' - 6"	24' - 7"
End bearing_SPF Plate (in)	1.5	1.5	1.6	1.5	2.1	1.6	2.1	1.6	2.5	1.9	2.7	2.0	3.1	2.4	3.6	2.7	4.0	3.0
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.0	1.6
24	6' - 3"	7' - 2"	8' - 3"	9' - 5"	10' - 6"	12' - 1"	10' - 10"	12' - 4"	12' - 10"	14' - 8"	13' - 6"	15' - 5"	15' - 11"	18' - 2"	18' - 3"	20' - 9"	20' - 6"	23' - 4"
End bearing_SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.8	2.4	1.9	2.9	2.2	3.0	2.3	3.6	2.7	4.1	3.1	4.6	3.5
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.1	1.6	2.3	1.8
28	6' - 0"	6' - 10"	7' - 11"	9' - 0"	10' - 1"	11' - 6"	10' - 4"	11' - 10"	12' - 3"	14' - 0"	12' - 11"	14' - 9"	15' - 3"	17' - 5"	17' - 5"	19' - 11"	19' - 7"	22' - 4"
End bearing_SPF Plate (in)	1.6	1.5	2.1	1.6	2.6	2.0	2.7	2.1	3.2	2.4	3.4	2.6	4.0	3.0	4.5	3.5	5.1	3.9
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.6	2.3	1.8	2.6	2.0
32	5' - 9"	6' - 7"	7' - 7"	8' - 8"	9' - 8"	11' - 1"	9' - 11"	11' - 5"	11' - 10"	13' - 6"	12' - 5"	14' - 3"	14' - 8"	16' - 9"	16' - 9"	19' - 2"	18' - 10"	21' - 6"
End bearing_SPF Plate (in)	1.7	1.5	2.3	1.8	2.9	2.2	3.0	2.3	3.5	2.7	3.7	2.8	4.4	3.3	5.0	3.8	5.6	4.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.2
36	5' - 7"	6' - 4"	7' - 4"	8' - 5"	9' - 4"	10' - 9"	9' - 7"	11' - 0"	11' - 5"	13' - 0"	12' - 0"	13' - 9"	14' - 2"	16' - 2"	16' - 2"	18' - 6"	18' - 3"	20' - 10"
End bearing_SPF Plate (in)	1.9	1.5	2.5	1.9	3.1	2.4	3.2	2.5	3.8	2.9	4.0	3.1	4.7	3.6	5.4	4.1	6.1	4.6
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	1.9	1.5	2.1	1.6	2.4	1.8	2.7	2.1	3.1	2.4
40	5' - 5"	6' - 2"	7' - 1"	8' - 2"	9' - 1"	10' - 5"	9' - 4"	10' - 8"	11' - 0"	12' - 7"	11' - 8"	13' - 4"	13' - 9"	15' - 8"	15' - 8"	17' - 11"	17' - 8"	20' - 2"
End bearing_SPF Plate (in)	2.0	1.6	2.7	2.0	3.4	2.6	3.5	2.7	4.1	3.1	4.3	3.3	5.1	3.9	5.8	4.4	6.5	5.0
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.6	2.0	3.0	2.3	3.3	2.5

Snow Load of 60 psf

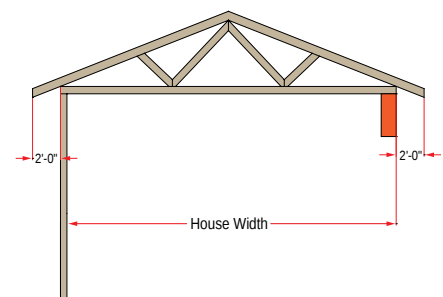
Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
20	5' - 10"	6' - 8"	7' - 8"	8' - 9"	9' - 9"	11' - 3"	10' - 1"	11' - 6"	11' - 11"	13' - 8"	12' - 7"	14' - 5"	14' - 10"	17' - 0"	17' - 0"	19' - 5"	19' - 1"	21' - 10"
End bearing_SPF Plate (in)	1.5	1.5	2.0	1.5	2.5	1.9	2.6	2.0	3.1	2.4	3.2	2.5	3.8	2.9	4.3	3.3	4.9	3.7
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	1.9	1.5	2.2	1.7	2.5	1.9
24	5' - 6"	6' - 4"	7' - 3"	8' - 4"	9' - 4"	10' - 8"	9' - 7"	10' - 11"	11' - 4"	12' - 11"	11' - 11"	13' - 8"	14' - 1"	16' - 2"	16' - 1"	18' - 5"	18' - 2"	20' - 9"
End bearing_SPF Plate (in)	1.7	1.5	2.3	1.7	2.9	2.2	3.0	2.3	3.5	2.7	3.7	2.8	4.3	3.3	4.9	3.8	5.6	4.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.2
28	5' - 3"	6' - 0"	6' - 11"	8' - 0"	8' - 11"	10' - 2"	9' - 2"	10' - 5"	10' - 10"	12' - 5"	11' - 5"	13' - 1"	13' - 6"	15' - 5"	15' - 5"	17' - 8"	17' - 4"	19' - 10"
End bearing_SPF Plate (in)	1.9	1.5	2.5	1.9	3.2	2.5	3.3	2.5	3.9	3.0	4.1	3.1	4.8	3.7	5.5	4.2	6.2	4.7
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.5	1.9	2.8	2.2	3.1	2.4
32	5' - 1"	5' - 10"	6' - 8"	7' - 8"	8' - 7"	9' - 9"	8' - 9"	10' - 1"	10' - 5"	11' - 11"	11' - 11"	12' - 7"	12' - 11"	14' - 10"	14' - 10"	17' - 0"	16' - 8"	19' - 1"
End bearing_SPF Plate (in)	2.1	1.6	2.8	2.1	3.5	2.7	3.6	2.8	4.3	3.3	4.5	3.5	5.3	4.1	6.1	4.6	6.8	5.2
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.2	1.7	2.3	1.8	2.7	2.1	3.1	2.4	3.5	2.6
36	4' - 11"	5' - 7"	6' - 5"	7' - 5"	8' - 3"	9' - 5"	8' - 6"	9' - 8"	10' - 0"	11' - 6"	10' - 7"	12' - 2"	12' - 6"	14' - 4"	14' - 4"	16' - 4"	16' - 1"	18' - 5"
End bearing_SPF Plate (in)	2.3	1.8	3.0	2.3	3.8	2.9	3.9	3.0	4.6	3.5	4.9	3.7	5.8	4.4	6.6	5.0	7.4	5.6
End bearing_Member (in)	1.5	1.5	1.5	1.5	2.0	1.5	2.0	1.5	2.4	1.8	2.5	1.9	2.9	2.2	3.3	2.6	3.7	2.9
40	4' - 9"	5' - 5"	6' - 3"	7' - 2"	8' - 0"	9' - 2"	8' - 2"	9' - 5"	9' - 9"	11' - 2"	10' - 3"	11' - 9"	12' - 1"	13' - 10"	13' - 10"	15' - 10"	15' - 7"	17' - 10"
End bearing_SPF Plate (in)	2.5	1.9	3.2	2.5	4.1	3.1	4.2	3.2	5.0	3.8	5.3	4.0	6.2	4.7	7.1	5.4	7.9	6.1
End bearing_Member (in)	1.5	1.5	1.7	1.5	2.1	1.6	2.2	1.7	2.5	1.9	2.7	2.1	3.1	2.4	3.6	2.8	4.0	3.1

NOTES:

- This table has been established using a Live Load deflection equal to L / 360 and a Total Load deflection limit equal to L / 240.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Multi-ply members may be substituted with solid section beams.



14 HEADER SPAN TABLES ROOF + ONE STOREY (NO CENTER BEARING)

VERSA-LAM® 3100Fb 2.0E (1¾")

Snow Load of 20 psf **Roof Dead Load of 15 psf** **Floor Live Load of 40 psf** **Floor Dead Load of 15 psf** **L/360**

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	5' - 4"	6' - 1"	7' - 0"	8' - 0"	8' - 11"	10' - 3"	9' - 2"	10' - 6"	10' - 10"	12' - 5"	11' - 6"	13' - 2"	13' - 6"	15' - 6"	15' - 6"	17' - 8"	17' - 5"	19' - 11"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.0	1.6
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	24	5' - 0"	5' - 9"	6' - 8"	7' - 7"	8' - 6"	9' - 8"	8' - 9"	10' - 0"	10' - 4"	11' - 10"	10' - 11"	12' - 6"	12' - 10"	14' - 8"	14' - 8"	16' - 9"	16' - 6"	18' - 11"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.1	1.6	2.3	1.8
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	28	4' - 10"	5' - 6"	6' - 4"	7' - 3"	8' - 1"	9' - 3"	8' - 4"	9' - 6"	9' - 10"	11' - 3"	10' - 5"	11' - 11"	12' - 3"	14' - 1"	14' - 0"	16' - 1"	15' - 9"	18' - 1"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.3	1.8	2.6	2.0
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	32	4' - 7"	5' - 3"	6' - 1"	7' - 0"	7' - 9"	8' - 11"	8' - 0"	9' - 2"	9' - 6"	10' - 10"	10' - 0"	11' - 5"	11' - 10"	13' - 6"	13' - 6"	15' - 5"	15' - 2"	17' - 4"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.2
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	36	4' - 5"	5' - 1"	5' - 11"	6' - 9"	7' - 6"	8' - 7"	7' - 9"	8' - 10"	9' - 2"	10' - 6"	9' - 8"	11' - 1"	11' - 5"	13' - 0"	13' - 0"	14' - 11"	14' - 8"	16' - 9"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.0	1.6	2.4	1.8	2.7	2.1	3.0	2.3
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
	40	4' - 4"	4' - 11"	5' - 8"	6' - 6"	7' - 3"	8' - 4"	7' - 6"	8' - 7"	8' - 10"	10' - 2"	9' - 4"	10' - 8"	11' - 0"	12' - 7"	12' - 7"	14' - 5"	14' - 2"	16' - 3"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.6	2.0	2.9	2.2	3.3	2.5
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5

Snow Load of 40 psf **Roof Dead Load of 15 psf** **Floor Live Load of 40 psf** **Floor Dead Load of 15 psf** **L/360**

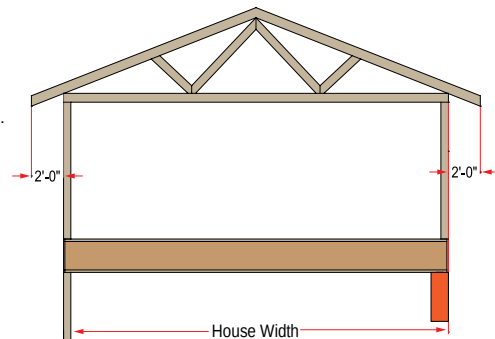
Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	5' - 0"	5' - 9"	6' - 8"	7' - 7"	8' - 6"	9' - 8"	8' - 9"	10' - 0"	10' - 4"	11' - 10"	10' - 11"	12' - 6"	12' - 10"	14' - 8"	14' - 8"	16' - 9"	16' - 6"	18' - 11"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	1.9	1.5	2.1	1.6	2.4	1.8	2.7	2.1	3.1	2.4
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
	24	4' - 9"	5' - 6"	6' - 4"	7' - 3"	8' - 1"	9' - 3"	8' - 3"	9' - 6"	9' - 10"	11' - 3"	10' - 4"	11' - 10"	12' - 2"	13' - 11"	13' - 11"	15' - 11"	15' - 8"	17' - 11"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.3	1.8	2.7	2.1	3.1	2.4	3.5	2.7
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5
	28	4' - 7"	5' - 3"	6' - 0"	6' - 11"	7' - 8"	8' - 10"	7' - 11"	9' - 1"	9' - 4"	10' - 9"	9' - 11"	11' - 4"	11' - 8"	13' - 4"	13' - 4"	15' - 3"	15' - 0"	17' - 2"
	End bearing_SPF Plate (in)	1.5	1.5	1.6	1.5	2.0	1.6	2.1	1.6	2.5	1.9	2.6	2.0	3.0	2.3	3.5	2.7	3.9	3.0
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.0	1.5
	32	4' - 5"	5' - 0"	5' - 9"	6' - 8"	7' - 5"	8' - 6"	7' - 7"	8' - 8"	9' - 0"	10' - 4"	9' - 6"	10' - 10"	11' - 2"	12' - 10"	12' - 10"	14' - 8"	14' - 5"	16' - 6"
	End bearing_SPF Plate (in)	1.5	1.5	1.8	1.5	2.2	1.7	2.3	1.8	2.7	2.1	2.8	2.2	3.3	2.6	3.8	2.9	4.3	3.3
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5	2.2	1.7
	36	4' - 3"	4' - 10"	5' - 7"	6' - 5"	7' - 2"	8' - 2"	7' - 4"	8' - 5"	8' - 8"	9' - 11"	9' - 2"	10' - 6"	10' - 10"	12' - 4"	12' - 4"	14' - 2"	13' - 11"	15' - 11"
	End bearing_SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.9	2.5	1.9	2.9	2.2	3.1	2.4	3.6	2.8	4.1	3.2	4.6	3.6
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.9	1.5	2.1	1.6	2.4	1.8
	40	4' - 1"	4' - 8"	5' - 5"	6' - 2"	6' - 11"	7' - 11"	7' - 1"	8' - 1"	8' - 5"	9' - 7"	8' - 11"	10' - 2"	10' - 6"	12' - 0"	12' - 0"	13' - 8"	13' - 6"	15' - 5"
	End bearing_SPF Plate (in)	1.6	1.5	2.0	1.6	2.6	2.0	2.7	2.0	3.1	2.4	3.3	2.5	3.9	3.0	4.4	3.4	5.0	3.8
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.3	1.7	2.5	2.0

Snow Load of 60 psf **Roof Dead Load of 15 psf** **Floor Live Load of 40 psf** **Floor Dead Load of 15 psf** **L/360**

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	4' - 10"	5' - 6"	6' - 4"	7' - 3"	8' - 1"	9' - 3"	8' - 4"	9' - 6"	9' - 10"	11' - 3"	10' - 5"	11' - 11"	12' - 3"	14' - 1"	14' - 0"	16' - 1"	15' - 9"	18' - 1"
	End bearing_SPF Plate (in)	1.5	1.5	1.7	1.5	2.1	1.6	2.2	1.7	2.6	2.0	2.7	2.1	3.2	2.4	3.6	2.8	4.0	3.1
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.1	1.6
	24	4' - 7"	5' - 3"	6' - 0"	6' - 11"	7' - 8"	8' - 10"	7' - 11"	9' - 1"	9' - 4"	10' - 9"	9' - 11"	11' - 4"	11' - 8"	13' - 4"	13' - 4"	15' - 3"	15' - 0"	17' - 2"
	End bearing_SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.8	2.5	1.9	2.9	2.2	3.1	2.3	3.6	2.8	4.1	3.1	4.6	3.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.1	1.6	2.3	1.8
	28	4' - 4"	5' - 0"	5' - 9"	6' - 7"	7' - 4"	8' - 5"	7' - 7"	8' - 8"	8' - 11"	10' - 3"	9' - 5"	10' - 10"	11' - 2"	12' - 9"	12' - 9"	14' - 7"	14' - 4"	16' - 5"
	End bearing_SPF Plate (in)	1.6	1.5	2.1	1.6	2.7	2.0	2.7	2.1	3.2	2.5	3.4	2.6	4.0	3.1	4.6	3.5	5.1	3.9
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.7	1.5	2.0	1.6	2.3	1.8	2.6	2.0
	32	4' - 2"	4' - 10"	5' - 6"	6' - 4"	7' - 1"	8' - 1"	7' - 3"	8' - 4"	8' - 7"	9' - 10"	9' - 1"	10' - 5"	10' - 9"	12' - 3"	12' - 3"	14' - 0"	13' - 9"	15' - 9"
	End bearing_SPF Plate (in)	1.8	1.5	2.3	1.8	2.9	2.2	3.0	2.3	3.5	2.7	3.7	2.9	4.4	3.4	5.0	3.8	5.6	4.3
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.6	2.0	2.9	2.2
	36	4' - 0"	4' - 8"	5' - 4"	6' - 1"	6' - 10"	7' - 10"	7' - 0"	8' - 0"	8' - 4"	9' - 6"	8' - 9"	10' - 0"	10' - 4"	11' - 10"	11' - 9"	13' - 6"	13' - 2"	15' - 3"
	End bearing_SPF Plate (in)	1.9	1.5	2.5	1.9	3.2	2.4	3.3	2.5	3.8	2.9	4.1	3.1	4.8	3.6	5.4	4.2	6.1	4.7
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.4	1.9	2.8	2.1	3.1	2.4
	40	3' - 11"	4' - 6"	5' - 2"	5' - 11"	6' - 7"	7' - 7"	6' - 9"	7' - 9"	8' - 0"	9' - 2"	8' - 6"	9' - 9"	9' - 11"	11' - 5"	11' - 3"	13' - 1"	12' - 7"	14' - 9"
	End bearing_SPF Plate (in)	2.0	1.6	2.7	2.1	3.4	2.6	3.5	2.7	4.1	3.2	4.3	3.3	5.1	3.9	5.7	4.5	6.4	5.0
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.6	2.0	2.9	2.3	3.3	2.6

NOTES:

- This table has been established using a Live Load deflection equal to L / 360 and a Total Load deflection limit equal to L / 240.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume an exterior wall dead load of 100 plf.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.**
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf **Roof Dead Load of 15 psf** **Floor Live Load of 40 psf** **Floor Dead Load of 15 psf** **L/480**

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	5' - 4"	6' - 1"	7' - 0"	8' - 0"	8' - 11"	10' - 3"	9' - 2"	10' - 6"	10' - 10"	12' - 5"	11' - 6"	13' - 2"	13' - 6"	15' - 6"	15' - 6"	17' - 8"	17' - 5"	19' - 11"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	24	5' - 0"	5' - 9"	6' - 8"	7' - 7"	8' - 6"	9' - 8"	8' - 9"	10' - 0"	10' - 4"	11' - 10"	10' - 11"	12' - 6"	12' - 10"	14' - 8"	14' - 8"	16' - 9"	16' - 6"	18' - 11"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	28	4' - 10"	5' - 6"	6' - 4"	7' - 3"	8' - 1"	9' - 3"	8' - 4"	9' - 6"	9' - 10"	11' - 3"	10' - 5"	11' - 11"	12' - 3"	14' - 1"	14' - 0"	16' - 1"	15' - 9"	18' - 1"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	32	4' - 7"	5' - 3"	6' - 1"	7' - 0"	7' - 9"	8' - 11"	8' - 0"	9' - 2"	9' - 6"	10' - 10"	10' - 0"	11' - 5"	11' - 10"	13' - 6"	13' - 6"	15' - 5"	15' - 2"	17' - 4"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	36	4' - 5"	5' - 1"	5' - 11"	6' - 9"	7' - 6"	8' - 7"	7' - 9"	8' - 10"	9' - 2"	10' - 6"	9' - 8"	11' - 1"	11' - 5"	13' - 0"	13' - 0"	14' - 11"	14' - 8"	16' - 9"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	40	4' - 4"	4' - 11"	5' - 8"	6' - 6"	7' - 3"	8' - 4"	7' - 6"	8' - 7"	8' - 10"	10' - 2"	9' - 4"	10' - 8"	11' - 0"	12' - 7"	12' - 7"	14' - 5"	14' - 2"	16' - 3"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Snow Load of 40 psf **Roof Dead Load of 15 psf** **Floor Live Load of 40 psf** **Floor Dead Load of 15 psf** **L/480**

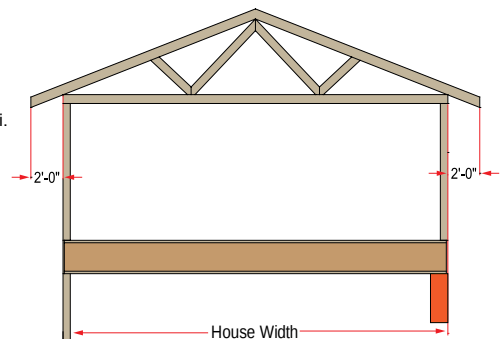
Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	4' - 11"	5' - 8"	6' - 6"	7' - 5"	8' - 4"	9' - 6"	8' - 6"	9' - 9"	10' - 1"	11' - 7"	10' - 8"	12' - 3"	12' - 7"	14' - 5"	14' - 5"	16' - 6"	16' - 3"	18' - 7"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	24	4' - 8"	5' - 4"	6' - 2"	7' - 1"	7' - 10"	9' - 0"	8' - 1"	9' - 3"	9' - 7"	10' - 11"	10' - 1"	11' - 7"	11' - 11"	13' - 8"	13' - 7"	15' - 7"	15' - 4"	17' - 7"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	28	4' - 5"	5' - 1"	5' - 10"	6' - 9"	7' - 6"	8' - 7"	7' - 8"	8' - 10"	9' - 1"	10' - 5"	9' - 8"	11' - 0"	11' - 4"	13' - 0"	13' - 0"	14' - 10"	14' - 7"	16' - 9"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	32	4' - 3"	4' - 10"	5' - 7"	6' - 5"	7' - 2"	8' - 3"	7' - 5"	8' - 5"	8' - 9"	10' - 0"	9' - 3"	10' - 7"	10' - 11"	12' - 6"	12' - 5"	14' - 3"	14' - 0"	16' - 1"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	36	4' - 1"	4' - 8"	5' - 5"	6' - 2"	6' - 11"	7' - 11"	7' - 1"	8' - 2"	8' - 5"	9' - 8"	8' - 11"	10' - 2"	10' - 6"	12' - 0"	12' - 0"	13' - 9"	13' - 6"	15' - 6"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	40	4' - 0"	4' - 6"	5' - 3"	6' - 0"	6' - 8"	7' - 8"	6' - 10"	7' - 10"	8' - 2"	9' - 4"	8' - 7"	9' - 10"	10' - 2"	11' - 7"	11' - 7"	13' - 3"	13' - 1"	14' - 11"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Snow Load of 60 psf **Roof Dead Load of 15 psf** **Floor Live Load of 40 psf** **Floor Dead Load of 15 psf** **L/480**

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	4' - 6"	5' - 2"	6' - 0"	6' - 10"	7' - 8"	8' - 9"	7' - 10"	9' - 0"	9' - 4"	10' - 8"	9' - 10"	11' - 3"	11' - 7"	13' - 4"	13' - 3"	15' - 3"	14' - 11"	17' - 2"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	24	4' - 4"	4' - 11"	5' - 8"	6' - 6"	7' - 3"	8' - 4"	7' - 5"	8' - 6"	8' - 10"	10' - 1"	9' - 4"	10' - 8"	11' - 0"	12' - 7"	12' - 7"	14' - 5"	14' - 2"	16' - 3"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	28	4' - 1"	4' - 8"	5' - 5"	6' - 2"	6' - 11"	7' - 11"	7' - 1"	8' - 2"	8' - 5"	9' - 8"	8' - 11"	10' - 2"	10' - 6"	12' - 0"	12' - 0"	13' - 9"	13' - 6"	15' - 6"
	End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	32	3' - 11"	4' - 6"	5' - 2"	5' - 11"	6' - 8"	7' - 7"	6' - 10"	7' - 10"	8' - 1"	9' - 3"	8' - 6"	9' - 9"	10' - 1"	11' - 6"	11' - 6"	13' - 2"	12' - 1"	14' - 10"
	End bearing_SPF Plate (in)	1.7	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	36	3' - 9"	4' - 4"	5' - 0"	5' - 9"	6' - 5"	7' - 4"	6' - 7"	7' - 6"	8' - 11"	8' - 3"	9' - 5"	9' - 8"	11' - 1"	11' - 1"	12' - 8"	12' - 6"	14' - 4"	14' - 4"
	End bearing_SPF Plate (in)	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	40	3' - 8"	4' - 2"	4' - 10"	5' - 7"	6' - 2"	7' - 1"	6' - 4"	7' - 3"	7' - 6"	8' - 8"	7' - 11"	9' - 1"	9' - 5"	10' - 9"	10' - 9"	12' - 4"	12' - 1"	13' - 10"
	End bearing_SPF Plate (in)	1.9	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

NOTES:

- This table has been established using a Live Load deflection equal to L / 480 and a Total Load deflection limit equal to L / 240.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume an exterior wall dead load of 100 plf.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.**
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

Floor Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	5' - 11"	6' - 9"	7' - 10"	8' - 11"	10' - 0"	11' - 5"	10' - 3"	11' - 8"	12' - 1"	13' - 10"	12' - 10"	14' - 8"	15' - 1"	17' - 3"	17' - 3"	19' - 8"	19' - 5"	22' - 2"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.5	1.7
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
24	5' - 8"	6' - 5"	7' - 5"	8' - 6"	9' - 6"	10' - 10"	9' - 9"	11' - 2"	11' - 7"	13' - 2"	12' - 2"	13' - 11"	14' - 4"	16' - 5"	16' - 5"	18' - 9"	18' - 6"	21' - 1"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.3	1.8	2.6	2.0
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
28	5' - 5"	6' - 2"	7' - 1"	8' - 2"	9' - 1"	10' - 5"	9' - 4"	10' - 8"	11' - 1"	12' - 8"	11' - 8"	13' - 4"	13' - 9"	15' - 9"	15' - 9"	18' - 0"	17' - 8"	20' - 3"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.6	2.0	2.9	2.2
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
32	5' - 2"	5' - 11"	6' - 10"	7' - 10"	8' - 9"	10' - 0"	9' - 0"	10' - 3"	10' - 8"	12' - 2"	11' - 3"	12' - 10"	13' - 3"	15' - 2"	15' - 2"	17' - 4"	17' - 1"	19' - 6"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.5	1.9	2.8	2.1	3.1	2.4
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
36	5' - 0"	5' - 9"	6' - 8"	7' - 7"	8' - 6"	9' - 8"	8' - 8"	9' - 11"	10' - 4"	11' - 9"	10' - 10"	12' - 5"	12' - 10"	14' - 8"	14' - 8"	16' - 9"	16' - 6"	18' - 10"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.2	1.7	2.3	1.7	2.7	2.0	3.0	2.3	3.4	2.6
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5
40	4' - 10"	5' - 7"	6' - 5"	7' - 4"	8' - 2"	9' - 5"	8' - 5"	9' - 8"	10' - 0"	11' - 5"	10' - 6"	12' - 1"	12' - 5"	14' - 3"	14' - 2"	16' - 3"	16' - 0"	18' - 3"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.9	1.5	2.0	1.5	2.3	1.8	2.4	1.9	2.9	2.2	3.3	2.5	3.7	2.8
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5

Snow Load of 40 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

Floor Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	5' - 6"	6' - 4"	7' - 3"	8' - 4"	9' - 3"	10' - 7"	9' - 6"	10' - 11"	11' - 4"	12' - 11"	11' - 11"	13' - 8"	14' - 1"	16' - 1"	16' - 1"	18' - 4"	18' - 1"	20' - 8"
End bearing_SPF Plate (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.6	2.0	3.0	2.3	3.4	2.6
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5
24	5' - 3"	6' - 0"	6' - 11"	7' - 11"	8' - 10"	10' - 1"	9' - 1"	10' - 5"	10' - 9"	12' - 4"	11' - 4"	13' - 0"	13' - 5"	15' - 4"	15' - 4"	17' - 6"	17' - 2"	19' - 8"
End bearing_SPF Plate (in)	1.5	1.5	1.6	1.5	2.0	1.5	2.1	1.6	2.4	1.9	2.6	2.0	3.0	2.3	3.4	2.6	3.8	2.9
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	2.0	1.5
28	5' - 0"	5' - 9"	6' - 8"	7' - 7"	8' - 6"	9' - 8"	8' - 8"	9' - 11"	10' - 4"	11' - 9"	10' - 10"	12' - 5"	12' - 10"	14' - 8"	14' - 8"	16' - 9"	16' - 6"	18' - 10"
End bearing_SPF Plate (in)	1.5	1.5	1.8	1.5	2.2	1.7	2.3	1.8	2.7	2.1	2.8	2.2	3.3	2.6	3.8	2.9	4.3	3.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5	2.2	1.7
32	4' - 10"	5' - 6"	6' - 5"	7' - 4"	8' - 2"	9' - 4"	8' - 4"	9' - 7"	9' - 11"	11' - 4"	10' - 6"	12' - 0"	12' - 4"	14' - 1"	14' - 1"	16' - 2"	15' - 10"	18' - 2"
End bearing_SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.9	2.5	1.9	3.0	2.3	3.1	2.4	3.7	2.8	4.2	3.2	4.7	3.6
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.9	1.5	2.1	1.6	2.4	1.8
36	4' - 8"	5' - 4"	6' - 2"	7' - 1"	7' - 11"	9' - 0"	8' - 1"	9' - 3"	9' - 7"	11' - 0"	10' - 1"	11' - 7"	11' - 11"	13' - 8"	13' - 8"	15' - 7"	15' - 4"	17' - 6"
End bearing_SPF Plate (in)	1.6	1.5	2.1	1.6	2.7	2.0	2.7	2.1	3.2	2.5	3.4	2.6	4.0	3.1	4.6	3.5	5.1	3.9
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.6	2.3	1.8	2.6	2.0
40	4' - 6"	5' - 2"	6' - 0"	6' - 10"	7' - 8"	8' - 9"	7' - 10"	9' - 0"	9' - 3"	10' - 8"	9' - 10"	11' - 3"	11' - 7"	13' - 3"	13' - 3"	15' - 1"	14' - 10"	17' - 0"
End bearing_SPF Plate (in)	1.7	1.5	2.3	1.7	2.9	2.2	2.9	2.2	3.5	2.7	3.7	2.8	4.3	3.3	4.9	3.7	5.5	4.2
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.1

Snow Load of 60 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

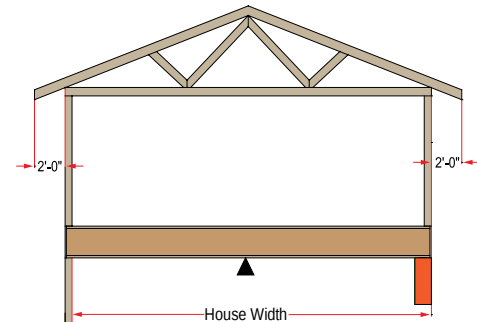
Floor Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	5' - 2"	5' - 11"	6' - 10"	7' - 10"	8' - 9"	10' - 0"	9' - 0"	10' - 4"	10' - 8"	12' - 2"	11' - 3"	12' - 10"	13' - 3"	15' - 2"	15' - 2"	17' - 4"	17' - 1"	19' - 6"
End bearing_SPF Plate (in)	1.5	1.5	1.8	1.5	2.3	1.7	2.3	1.8	2.8	2.1	2.9	2.2	3.4	2.6	3.9	3.0	4.4	3.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	2.0	1.5	2.2	1.7
24	4' - 11"	5' - 8"	6' - 6"	7' - 6"	8' - 4"	9' - 6"	8' - 7"	9' - 10"	10' - 2"	11' - 7"	10' - 9"	12' - 3"	12' - 8"	14' - 5"	14' - 5"	16' - 6"	16' - 3"	18' - 7"
End bearing_SPF Plate (in)	1.6	1.5	2.0	1.6	2.6	2.0	2.7	2.0	3.1	2.4	3.3	2.5	3.9	3.0	4.4	3.4	5.0	3.8
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.3	1.7	2.5	1.9
28	4' - 9"	5' - 5"	6' - 3"	7' - 2"	8' - 0"	9' - 2"	8' - 2"	9' - 5"	9' - 9"	11' - 1"	10' - 3"	11' - 9"	12' - 1"	13' - 10"	13' - 10"	15' - 10"	15' - 7"	17' - 9"
End bearing_SPF Plate (in)	1.7	1.5	2.3	1.7	2.9	2.2	3.0	2.3	3.5	2.7	3.7	2.8	4.3	3.3	5.0	3.8	5.6	4.3
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.2
32	4' - 7"	5' - 3"	6' - 0"	6' - 11"	7' - 8"	8' - 10"	7' - 11"	9' - 0"	9' - 4"	10' - 8"	9' - 10"	11' - 4"	11' - 8"	13' - 4"	13' - 4"	15' - 3"	15' - 0"	17' - 1"
End bearing_SPF Plate (in)	1.9	1.5	2.5	1.9	3.2	2.4	3.3	2.5	3.8	2.9	4.1	3.1	4.8	3.6	5.4	4.2	6.1	4.7
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.4	1.9	2.8	2.1	3.1	2.4
36	4' - 5"	5' - 0"	5' - 10"	6' - 8"	7' - 5"	8' - 6"	7' - 7"	8' - 9"	9' - 0"	10' - 4"	9' - 6"	10' - 11"	11' - 3"	12' - 10"	12' - 10"	14' - 8"	14' - 6"	16' - 7"
End bearing_SPF Plate (in)	2.1	1.6	2.7	2.1	3.4	2.6	3.5	2.7	4.2	3.2	4.4	3.4	5.2	4.0	5.9	4.5	6.6	5.1
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.6	2.0	3.0	2.3	3.4	2.6
40	4' - 3"	4' - 11"	5' - 8"	6' - 5"	7' - 2"	8' - 3"	7' - 5"	8' - 6"	8' - 9"	10' - 0"	9' - 3"	10' - 7"	10' - 11"	12' - 6"	12' - 5"	14' - 3"	13' - 11"	16' - 0"
End bearing_SPF Plate (in)	2.2	1.7	2.9	2.2	3.7	2.8	3.8	2.9	4.5	3.4	4.7	3.6	5.6	4.3	6.4	4.9	7.1	5.5
End bearing_Member (in)	1.5	1.5	1.5	1.5	1.9	1.5	1.9	1.5	2.3	1.8	2.4	1.9	2.8	2.2	3.2	2.5	3.6	2.8

NOTES:

- This table has been established using a Live Load deflection equal to L / 360 and a Total Load deflection limit equal to L / 240.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume an exterior wall dead load of 100 plf.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.**
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

Floor Dead Load of 15 psf

L/480

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	5'-11"	6'-9"	7'-10"	8'-11"	10'-0"	11'-5"	10'-3"	11'-8"	12'-1"	13'-10"	12'-10"	14'-8"	15'-1"	17'-3"	17'-3"	19'-8"	19'-5"	22'-2"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.5	2.3	1.7
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	24	5'-8"	6'-5"	7'-5"	8'-6"	9'-6"	10'-10"	9'-9"	11'-2"	11'-7"	13'-2"	12'-2"	13'-11"	14'-4"	16'-5"	16'-5"	18'-9"	18'-6"	21'-1"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.3	1.8	2.6	2.0
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	28	5'-5"	6'-2"	7'-1"	8'-2"	9'-1"	10'-5"	9'-4"	10'-8"	11'-1"	12'-8"	11'-8"	13'-4"	13'-9"	15'-9"	15'-9"	18'-0"	17'-8"	20'-3"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.6	2.0	2.9	2.2
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	32	5'-2"	5'-11"	6'-10"	7'-10"	8'-9"	10'-0"	9'-0"	10'-3"	10'-8"	12'-2"	11'-3"	12'-10"	13'-3"	15'-2"	15'-2"	17'-4"	17'-1"	19'-6"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.5	1.9	2.8	2.1	3.1	2.4
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5
	36	5'-0"	5'-9"	6'-8"	7'-7"	8'-6"	9'-8"	8'-8"	9'-11"	10'-4"	11'-9"	10'-10"	12'-5"	12'-10"	14'-8"	14'-8"	16'-9"	16'-6"	18'-10"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.2	1.7	2.3	1.7	2.7	2.0	3.0	2.3	3.4	2.6
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5
	40	4'-10"	5'-7"	6'-5"	7'-4"	8'-2"	9'-5"	8'-5"	9'-8"	10'-0"	11'-5"	10'-6"	12'-1"	12'-5"	14'-3"	14'-2"	16'-3"	16'-0"	18'-3"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.9	1.5	2.0	1.5	2.3	1.8	2.4	1.9	2.9	2.2	3.3	2.5	3.7	2.8
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5

Snow Load of 40 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

Floor Dead Load of 15 psf

L/480

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	5' - 4"	6' - 2"	7' - 1"	8' - 1"	9' - 1"	10' - 5"	9' - 4"	10' - 8"	11' - 0"	12' - 8"	11' - 8"	13' - 4"	13' - 9"	15' - 9"	15' - 8"	18' - 0"	17' - 8"	20' - 3"
	End bearing_ SPF Plate (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.6	2.0	2.9	2.2	3.3	2.5
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5
	24	5' - 1"	5' - 10"	6' - 9"	7' - 8"	8' - 7"	9' - 10"	8' - 10"	10' - 1"	10' - 5"	12' - 0"	11' - 0"	12' - 8"	13' - 0"	14' - 11"	14' - 10"	17' - 0"	16' - 9"	19' - 2"
	End bearing_ SPF Plate (in)	1.5	1.5	1.5	1.5	1.9	1.5	2.0	1.5	2.4	1.8	2.5	1.9	2.9	2.2	3.3	2.5	3.7	2.9
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5
	28	4' - 10"	5' - 7"	6' - 5"	7' - 4"	8' - 2"	9' - 5"	8' - 5"	9' - 8"	10' - 0"	11' - 5"	10' - 6"	12' - 1"	12' - 5"	14' - 3"	14' - 2"	16' - 3"	16' - 0"	18' - 4"
	End bearing_ SPF Plate (in)	1.5	1.5	1.7	1.5	2.2	1.7	2.2	1.7	2.6	2.0	2.8	2.1	3.2	2.5	3.7	2.8	4.2	3.2
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5	2.1	1.6
	32	4' - 8"	5' - 4"	6' - 2"	7' - 1"	7' - 10"	9' - 0"	8' - 1"	9' - 3"	9' - 7"	10' - 11"	10' - 1"	11' - 7"	11' - 11"	13' - 8"	13' - 7"	15' - 7"	15' - 4"	17' - 7"
	End bearing_ SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.8	2.4	1.9	2.9	2.2	3.0	2.3	3.5	2.7	4.0	3.1	4.5	3.5
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.1	1.6	2.3	1.8
	36	4' - 6"	5' - 2"	5' - 11"	6' - 10"	7' - 7"	8' - 8"	7' - 9"	8' - 11"	9' - 3"	10' - 7"	9' - 9"	11' - 2"	11' - 6"	13' - 2"	13' - 2"	15' - 1"	14' - 9"	16' - 11"
	End bearing_ SPF Plate (in)	1.5	1.5	2.0	1.6	2.6	2.0	2.6	2.0	3.1	2.4	3.3	2.5	3.8	2.9	4.4	3.4	4.9	3.8
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.2	1.7	2.5	1.9
	40	4' - 4"	5' - 0"	5' - 9"	6' - 7"	7' - 4"	8' - 5"	7' - 6"	8' - 7"	8' - 11"	10' - 3"	9' - 5"	10' - 10"	11' - 1"	12' - 9"	12' - 9"	14' - 7"	14' - 4"	16' - 5"
	End bearing_ SPF Plate (in)	1.7	1.5	2.2	1.7	2.7	2.1	2.8	2.2	3.3	2.6	3.5	2.7	4.1	3.2	4.7	3.6	5.3	4.1
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.4	1.8	2.7	2.1

Snow Load of 60 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

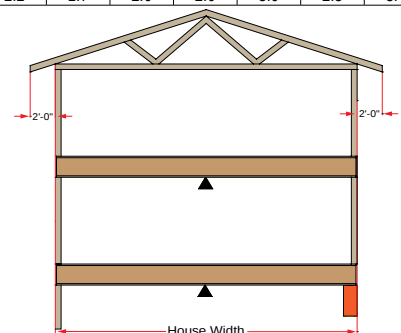
Floor Dead Load of 15 psf

L/480

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	4' - 10"	5' - 7"	6' - 5"	7' - 4"	8' - 2"	9' - 5"	8' - 5"	9' - 8"	10' - 0"	11' - 5"	10' - 6"	12' - 1"	12' - 5"	14' - 3"	14' - 2"	16' - 3"	16' - 0"	18' - 3"
	End bearing_ SPF Plate (in)	1.5	1.5	1.7	1.5	2.1	1.6	2.2	1.7	2.6	2.0	2.7	2.1	3.2	2.5	3.6	2.8	4.1	3.1
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.9	1.5	2.1	1.6
	24	4' - 7"	5' - 3"	6' - 1"	6' - 11"	7' - 9"	8' - 11"	8' - 0"	9' - 2"	9' - 5"	10' - 10"	10' - 0"	11' - 5"	11' - 9"	13' - 6"	13' - 5"	15' - 5"	15' - 2"	17' - 4"
	End bearing_ SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.9	2.5	1.9	2.9	2.2	3.1	2.4	3.6	2.8	4.1	3.2	4.7	3.6
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.9	1.5	2.1	1.6	2.4	1.8
	28	4' - 5"	5' - 0"	5' - 10"	6' - 8"	7' - 5"	8' - 6"	7' - 7"	8' - 9"	9' - 0"	10' - 4"	9' - 6"	10' - 11"	11' - 3"	12' - 10"	12' - 10"	14' - 9"	14' - 5"	16' - 7"
	End bearing_ SPF Plate (in)	1.6	1.5	2.1	1.6	2.7	2.1	2.8	2.1	3.3	2.5	3.4	2.6	4.0	3.1	4.6	3.5	5.2	4.0
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.3	1.8	2.6	2.0
	32	4' - 3"	4' - 10"	5' - 7"	6' - 5"	7' - 1"	8' - 2"	7' - 4"	8' - 4"	8' - 8"	9' - 11"	9' - 2"	10' - 6"	10' - 9"	12' - 4"	12' - 4"	14' - 2"	13' - 11"	15' - 11"
	End bearing_ SPF Plate (in)	1.8	1.5	2.3	1.8	2.9	2.3	3.0	2.3	3.6	2.7	3.8	2.9	4.4	3.4	5.1	3.9	5.7	4.3
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.3	1.7	2.6	2.0	2.9	2.2
	36	4' - 1"	4' - 8"	5' - 4"	6' - 2"	6' - 10"	7' - 10"	7' - 1"	8' - 1"	8' - 4"	9' - 7"	8' - 10"	10' - 1"	10' - 5"	11' - 11"	11' - 11"	13' - 7"	13' - 5"	15' - 4"
	End bearing_ SPF Plate (in)	1.9	1.5	2.5	1.9	3.2	2.4	3.3	2.5	3.9	3.0	4.1	3.1	4.8	3.7	5.5	4.2	6.2	4.7
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.4	1.9	2.8	2.1	3.1	2.4
	40	3' - 11"	4' - 6"	5' - 2"	5' - 11"	6' - 8"	7' - 7"	6' - 10"	7' - 10"	8' - 1"	9' - 3"	8' - 6"	9' - 9"	10' - 1"	11' - 6"	11' - 6"	13' - 2"	12' - 11"	14' - 10"
	End bearing_ SPF Plate (in)	2.1	1.6	2.7	2.1	3.4	2.6	3.5	2.7	4.2	3.2	4.4	3.4	5.2	3.9	5.9	4.5	6.6	5.1
	End bearing_ Member (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.6	2.0	3.0	2.3	3.4	2.6

NOTES:

- This table has been established using a Live Load deflection equal to L / 480 and a Total Load deflection limit equal to L / 240.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume an exterior wall dead load of 100 plf.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Multi-ply members may be substituted with solid section beams.



VERSA-LAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

Floor Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	5' - 2"	5' - 11"	6' - 10"	7' - 9"	8' - 8"	9' - 11"	8' - 11"	10' - 3"	10' - 7"	12' - 1"	11' - 2"	12' - 9"	13' - 2"	15' - 1"	15' - 0"	17' - 2"	16' - 11"	19' - 4"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.5
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
24	4' - 11"	5' - 7"	6' - 6"	7' - 5"	8' - 3"	9' - 6"	8' - 6"	9' - 9"	10' - 1"	11' - 6"	10' - 8"	12' - 2"	12' - 6"	14' - 4"	14' - 4"	16' - 5"	16' - 1"	18' - 5"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.5	2.2	1.7
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
28	4' - 8"	5' - 5"	6' - 3"	7' - 1"	7' - 11"	9' - 1"	8' - 2"	9' - 4"	9' - 8"	11' - 1"	10' - 2"	11' - 8"	12' - 0"	13' - 9"	13' - 9"	15' - 9"	15' - 5"	17' - 8"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.2	1.7	2.5	1.9
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
32	4' - 6"	5' - 2"	6' - 0"	6' - 10"	7' - 8"	8' - 9"	7' - 10"	9' - 0"	9' - 4"	10' - 8"	9' - 10"	11' - 3"	11' - 7"	13' - 3"	13' - 3"	15' - 2"	14' - 11"	17' - 0"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.2	1.7	2.5	1.9	2.8	2.1
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
36	4' - 5"	5' - 0"	5' - 9"	6' - 7"	7' - 5"	8' - 5"	7' - 7"	8' - 8"	9' - 0"	10' - 3"	9' - 6"	10' - 10"	11' - 2"	12' - 10"	12' - 10"	14' - 8"	14' - 5"	16' - 6"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.0	1.5	2.3	1.8	2.7	2.0	3.0	2.3
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
40	4' - 3"	4' - 10"	5' - 7"	6' - 5"	7' - 2"	8' - 2"	7' - 4"	8' - 5"	8' - 9"	10' - 0"	9' - 2"	10' - 6"	10' - 10"	12' - 5"	12' - 5"	14' - 2"	14' - 0"	16' - 0"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.7	1.5	2.0	1.6	2.1	1.6	2.5	1.9	2.9	2.2	3.2	2.5
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5

Snow Load of 40 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

Floor Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	4' - 11"	5' - 7"	6' - 6"	7' - 5"	8' - 3"	9' - 6"	8' - 6"	9' - 9"	10' - 1"	11' - 6"	10' - 8"	12' - 2"	12' - 6"	14' - 4"	14' - 4"	16' - 5"	16' - 1"	18' - 5"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.0	1.5	2.4	1.8	2.7	2.1	3.0	2.3
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
24	4' - 8"	5' - 4"	6' - 2"	7' - 1"	7' - 11"	9' - 0"	8' - 1"	9' - 3"	9' - 7"	11' - 0"	10' - 2"	11' - 7"	11' - 11"	13' - 8"	13' - 8"	15' - 7"	15' - 4"	17' - 7"
End bearing SPF Plate (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.2	1.7	2.3	1.8	2.7	2.1	3.1	2.3	3.4	2.6
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
28	4' - 6"	5' - 2"	5' - 11"	6' - 9"	7' - 7"	8' - 8"	7' - 9"	8' - 11"	9' - 2"	10' - 6"	9' - 8"	11' - 1"	11' - 5"	13' - 1"	13' - 1"	15' - 0"	14' - 9"	16' - 10"
End bearing SPF Plate (in)	1.5	1.5	1.6	1.5	2.0	1.5	2.0	1.6	2.4	1.9	2.5	2.0	3.0	2.3	3.4	2.6	3.8	2.9
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	2.0	1.5
32	4' - 4"	4' - 11"	5' - 8"	6' - 6"	7' - 3"	8' - 4"	7' - 6"	8' - 7"	8' - 10"	10' - 2"	9' - 4"	10' - 8"	11' - 0"	12' - 7"	12' - 7"	14' - 5"	14' - 2"	16' - 3"
End bearing SPF Plate (in)	1.5	1.5	1.7	1.5	2.2	1.7	2.2	1.7	2.7	2.0	2.8	2.1	3.3	2.5	3.7	2.9	4.2	3.2
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5	2.1	1.6
36	4' - 2"	4' - 9"	5' - 6"	6' - 4"	7' - 0"	8' - 1"	7' - 3"	8' - 3"	8' - 7"	9' - 10"	10' - 4"	10' - 8"	12' - 2"	12' - 2"	13' - 11"	13' - 8"	15' - 8"	
End bearing SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.8	2.4	1.9	2.9	2.2	3.0	2.3	3.6	2.7	4.1	3.1	4.6	3.5
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.1	1.6	2.3	1.8
40	4' - 0"	4' - 7"	5' - 4"	6' - 1"	6' - 10"	7' - 10"	7' - 0"	8' - 0"	8' - 4"	9' - 6"	8' - 9"	10' - 0"	10' - 4"	11' - 10"	11' - 10"	13' - 6"	13' - 3"	15' - 2"
End bearing SPF Plate (in)	1.5	1.5	2.0	1.6	2.6	2.0	2.6	2.0	3.1	2.4	3.3	2.5	3.8	2.9	4.4	3.4	4.9	3.8
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.2	1.7	2.5	1.9

Snow Load of 60 psf

Roof Dead Load of 15 psf

Floor Live Load of 40 psf

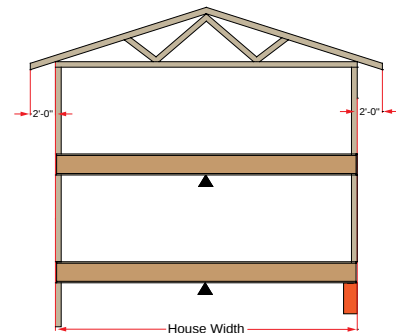
Floor Dead Load of 15 psf

L/360

Beam Depth	5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]																		
20	4' - 8"	5' - 5"	6' - 3"	7' - 1"	7' - 11"	9' - 1"	8' - 2"	9' - 4"	9' - 8"	11' - 1"	10' - 2"	11' - 8"	12' - 0"	13' - 9"	13' - 9"	15' - 9"	15' - 5"	17' - 8"
End bearing SPF Plate (in)	1.5	1.5	1.6	1.5	2.1	1.6	2.1	1.6	2.5	1.9	2.6	2.0	3.1	2.4	3.5	2.7	4.0	3.0
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	2.0	1.6
24	4' - 6"	5' - 2"	5' - 11"	6' - 9"	7' - 7"	8' - 8"	7' - 9"	8' - 11"	9' - 2"	10' - 6"	9' - 8"	11' - 1"	11' - 5"	13' - 1"	13' - 1"	15' - 0"	14' - 9"	16' - 10"
End bearing SPF Plate (in)	1.5	1.5	1.9	1.5	2.4	1.8	2.4	1.9	2.8	2.2	3.0	2.3	3.5	2.7	4.0	3.1	4.5	3.5
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.1	1.6	2.3	1.8
28	4' - 3"	4' - 11"	5' - 8"	6' - 6"	7' - 3"	8' - 3"	7' - 5"	8' - 6"	8' - 10"	10' - 1"	9' - 4"	10' - 8"	11' - 0"	12' - 7"	12' - 6"	14' - 4"	14' - 1"	16' - 2"
End bearing SPF Plate (in)	1.6	1.5	2.1	1.6	2.6	2.0	2.7	2.1	3.2	2.4	3.4	2.6	3.9	3.0	4.5	3.4	5.1	3.9
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.3	1.8	2.6	2.0
32	4' - 2"	4' - 9"	5' - 5"	6' - 3"	7' - 0"	8' - 0"	7' - 2"	8' - 2"	8' - 6"	9' - 8"	8' - 11"	10' - 3"	10' - 7"	12' - 1"	12' - 1"	13' - 10"	13' - 7"	15' - 6"
End bearing SPF Plate (in)	1.7	1.5	2.3	1.7	2.9	2.2	3.0	2.3	3.5	2.7	3.7	2.8	4.3	3.3	4.9	3.8	5.6	4.2
End bearing Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	1.9	1.5	2.2	1.7	2.5	1.9	2.8	2.2
36	4' - 0"	4' - 7"	5' - 3"	6' - 0"	6' - 9"	7' - 8"	6' - 11"	7' - 11"	8' - 2"	9' - 5"	8' - 8"	9' - 11"	10' - 2"	11' - 8"	11' - 7"	13' - 4"	12' - 11"	15' - 0"
End bearing SPF Plate (in)	1.9	1.5	2.5	1.9	3.1	2.4	3.2	2.5	3.8	2.9	4.0	3.1	4.7	3.6	5.3	4.1	6.0	4.6
End bearing Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.0	1.6	2.4	1.8	2.7	2.1	3.0	2.4
40	3' - 10"	4' - 5"	5' - 1"	5' - 10"	6' - 6"	7' - 6"	6' - 8"	7' - 8"	7' - 11"	9' - 1"	8' - 4"	9' - 7"	9' - 9"	11' - 4"	11' - 1"	12' - 11"	12' - 4"	14' - 7"
End bearing SPF Plate (in)	2.0	1.6	2.7	2.0	3.4	2.6	3.5	2.6	4.1	3.1	4.3	3.3	5.0	3.9	5.7	4.4	6.3	5.0
End bearing Member (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.2	1.7	2.5	2.0	2.9	2.3	3.2	2.5

NOTES:

- This table has been established using a Live Load deflection equal to $L / 360$ and a Total Load deflection limit equal to $L / 240$.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume an exterior wall dead load of 100 plf.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.**
- Multi-ply members may be substituted with solid section beams.



VERSALAM® 3100F_b 2.0E (1¾")

Snow Load of 20 psf
Roof Dead Load of 15 psf
Floor Live Load of 40 psf
Floor Dead Load of 15 psf
L/480

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	5' - 2"	5' - 11"	6' - 10"	7' - 9"	8' - 8"	9' - 11"	8' - 11"	10' - 3"	10' - 7"	12' - 1"	11' - 2"	12' - 9"	13' - 2"	15' - 1"	15' - 0"	17' - 2"	16' - 11"	19' - 4"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.5
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	24	4' - 11"	5' - 7"	6' - 6"	7' - 5"	8' - 3"	9' - 6"	8' - 6"	9' - 9"	10' - 1"	11' - 6"	10' - 8"	12' - 2"	12' - 6"	14' - 4"	14' - 4"	16' - 5"	16' - 1"	18' - 5"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.5	2.2	1.7
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	28	4' - 8"	5' - 5"	6' - 3"	7' - 1"	7' - 11"	9' - 1"	8' - 2"	9' - 4"	9' - 8"	11' - 1"	10' - 2"	11' - 8"	12' - 0"	13' - 9"	13' - 9"	15' - 9"	15' - 5"	17' - 8"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.2	1.7	2.5	1.9
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	32	4' - 6"	5' - 2"	6' - 0"	6' - 10"	7' - 8"	8' - 9"	7' - 10"	9' - 0"	9' - 4"	10' - 8"	9' - 10"	11' - 3"	11' - 7"	13' - 3"	13' - 3"	15' - 2"	14' - 11"	17' - 0"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.2	1.7	2.5	1.9	2.8	2.1
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	36	4' - 5"	5' - 0"	5' - 9"	6' - 7"	7' - 5"	8' - 5"	7' - 7"	8' - 8"	9' - 0"	10' - 3"	9' - 6"	10' - 10"	11' - 2"	12' - 10"	12' - 10"	14' - 8"	14' - 5"	16' - 6"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.0	1.5	2.3	1.8	2.7	2.0	3.0	2.3
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	40	4' - 3"	4' - 10"	5' - 7"	6' - 5"	7' - 2"	8' - 2"	7' - 4"	8' - 5"	8' - 9"	10' - 0"	9' - 2"	10' - 6"	10' - 10"	12' - 5"	12' - 5"	14' - 2"	14' - 0"	16' - 0"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.7	1.5	1.7	1.5	2.0	1.6	2.1	1.6	2.5	1.9	2.9	2.2	3.2	2.5
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5

Snow Load of 40 psf
Roof Dead Load of 15 psf
Floor Live Load of 40 psf
Floor Dead Load of 15 psf
L/480

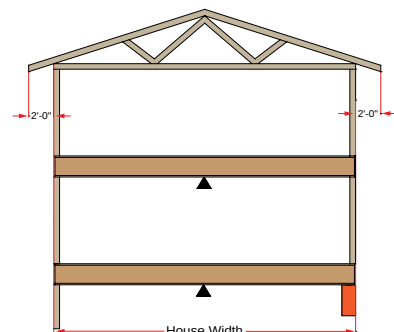
Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	4' - 11"	5' - 7"	6' - 6"	7' - 5"	8' - 3"	9' - 6"	8' - 6"	9' - 9"	10' - 1"	11' - 6"	10' - 8"	12' - 2"	12' - 6"	14' - 4"	14' - 4"	16' - 5"	16' - 1"	18' - 5"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.0	1.5	2.4	1.8	2.7	2.1	3.0	2.3
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
	24	4' - 8"	5' - 4"	6' - 2"	7' - 1"	7' - 10"	9' - 0"	8' - 1"	9' - 3"	9' - 7"	10' - 11"	10' - 1"	11' - 7"	11' - 11"	13' - 8"	13' - 7"	15' - 7"	15' - 4"	17' - 7"
	End bearing, SPF Plate (in)	1.5	1.5	1.5	1.5	1.8	1.5	1.8	1.5	2.2	1.7	2.3	1.7	2.7	2.1	3.0	2.3	3.4	2.6
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5
	28	4' - 5"	5' - 1"	5' - 10"	6' - 9"	7' - 6"	8' - 7"	7' - 8"	8' - 10"	9' - 1"	10' - 5"	9' - 8"	11' - 0"	11' - 4"	13' - 0"	13' - 0"	14' - 10"	14' - 7"	16' - 9"
	End bearing, SPF Plate (in)	1.5	1.5	1.6	1.5	2.0	1.5	2.0	1.6	2.4	1.8	2.5	1.9	3.0	2.3	3.4	2.6	3.8	2.9
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5
	32	4' - 3"	4' - 10"	5' - 7"	6' - 5"	7' - 2"	8' - 3"	7' - 5"	8' - 5"	8' - 9"	10' - 0"	9' - 3"	10' - 7"	10' - 11"	12' - 6"	12' - 5"	14' - 3"	14' - 0"	16' - 1"
	End bearing, SPF Plate (in)	1.5	1.5	1.7	1.5	2.2	1.7	2.2	1.7	2.6	2.0	2.8	2.1	3.3	2.5	3.7	2.8	4.2	3.2
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.9	1.5	2.1	1.6
	36	4' - 1"	4' - 8"	5' - 5"	6' - 2"	6' - 11"	7' - 11"	7' - 1"	8' - 2"	8' - 5"	9' - 8"	8' - 11"	10' - 2"	10' - 6"	12' - 0"	12' - 0"	13' - 9"	13' - 6"	15' - 6"
	End bearing, SPF Plate (in)	1.5	1.5	1.8	1.5	2.3	1.8	2.4	1.8	2.8	2.2	3.0	2.3	3.5	2.7	4.0	3.1	4.5	3.5
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.8	1.5	2.0	1.6	2.3	1.8
	40	4' - 0"	4' - 6"	5' - 3"	6' - 0"	6' - 8"	7' - 8"	6' - 10"	7' - 10"	8' - 2"	9' - 4"	8' - 7"	9' - 10"	10' - 2"	11' - 7"	11' - 7"	13' - 3"	13' - 1"	14' - 11"
	End bearing, SPF Plate (in)	1.5	1.5	2.0	1.5	2.5	1.9	2.6	2.0	3.0	2.3	3.2	2.5	3.8	2.9	4.3	3.3	4.8	3.7
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.2	1.7	2.5	1.9

Snow Load of 60 psf
Roof Dead Load of 15 psf
Floor Live Load of 40 psf
Floor Dead Load of 15 psf
L/480

Beam Depth		5.5"		7.25"		9.25"		9.5"		11.25"		11.875"		14"		16"		18"	
		2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply	2 ply	3 ply
House Width [ft]	20	4' - 6"	5' - 2"	6' - 0"	6' - 10"	7' - 8"	8' - 9"	7' - 10"	9' - 0"	9' - 4"	10' - 8"	9' - 10"	11' - 3"	11' - 7"	13' - 4"	13' - 3"	15' - 3"	14' - 11"	17' - 2"
	End bearing, SPF Plate (in)	1.5	1.5	1.6	1.5	2.0	1.5	2.0	1.6	2.4	1.9	2.5	2.0	3.0	2.3	3.4	2.6	3.8	2.9
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	2.0	1.5
	24	4' - 4"	4' - 11"	5' - 8"	6' - 6"	7' - 3"	8' - 4"	7' - 5"	8' - 6"	8' - 10"	10' - 1"	9' - 4"	10' - 8"	11' - 0"	12' - 7"	12' - 7"	14' - 5"	14' - 2"	16' - 3"
	End bearing, SPF Plate (in)	1.5	1.5	1.8	1.5	2.3	1.7	2.3	1.8	2.7	2.1	2.9	2.2	3.4	2.6	3.9	3.0	4.4	3.3
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	2.0	1.5	2.2	1.7
	28	4' - 1"	4' - 8"	5' - 5"	6' - 2"	6' - 11"	7' - 11"	7' - 1"	8' - 2"	8' - 5"	9' - 8"	8' - 11"	10' - 2"	10' - 6"	12' - 0"	12' - 0"	13' - 9"	13' - 6"	15' - 6"
	End bearing, SPF Plate (in)	1.5	1.5	2.0	1.5	2.5	1.9	2.6	2.0	3.0	2.3	3.2	2.5	3.8	2.9	4.3	3.3	4.8	3.7
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.6	1.5	1.9	1.5	2.2	1.7	2.5	1.9
	32	3' - 11"	4' - 6"	5' - 2"	5' - 11"	6' - 8"	7' - 7"	6' - 10"	7' - 10"	8' - 1"	9' - 3"	8' - 6"	9' - 9"	10' - 1"	11' - 6"	11' - 6"	13' - 2"	12' - 11"	14' - 10"
	End bearing, SPF Plate (in)	1.7	1.5	2.2	1.7	2.8	2.1	2.8	2.2	3.3	2.6	3.5	2.7	4.1	3.2	4.7	3.6	5.3	4.1
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.7	1.5	1.8	1.5	2.1	1.6	2.4	1.8	2.7	2.1
	36	3' - 9"	4' - 4"	5' - 0"	5' - 9"	6' - 5"	7' - 4"	6' - 7"	7' - 6"	7' - 9"	8' - 11"	8' - 3"	9' - 5"	9' - 8"	11' - 1"	11' - 1"	12' - 8"	12' - 6"	14' - 4"
	End bearing, SPF Plate (in)	1.8	1.5	2.3	1.8	3.0	2.3	3.1	2.3	3.6	2.8	3.8	2.9	4.5	3.4	5.1	3.9	5.7	4.4
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.5	1.8	1.5	1.9	1.5	2.3	1.8	2.6	2.0	2.9	2.2
	40	3' - 8"	4' - 2"	4' - 10"	5' - 7"	6' - 2"	7' - 1"	6' - 4"	7' - 3"	7' - 6"	8' - 8"	7' - 11"	9' - 1"	9' - 5"	10' - 9"	10' - 9"	12' - 4"	12' - 1"	13' - 10"
	End bearing, SPF Plate (in)	1.9	1.5	2.5	1.9	3.2	2.5	3.3	2.5	3.9	3.0	4.1	3.1	4.8	3.7	5.5	4.2	6.2	4.7
	End bearing, Member (in)	1.5	1.5	1.5	1.5	1.6	1.5	1.7	1.5	2.0	1.5	2.1	1.6	2.5	1.9	2.8	2.1	3.1	2.4

NOTES:

- This table has been established using a Live Load deflection equal to L / 480 and a Total Load deflection limit equal to L / 240.
- This table assumes a maximum roof slope of 12/12 and a 24" soffit.
- This table assumes uniform loads and simple span headers.
- Table values are based on SPF specified compression strength perpendicular to grain for plate of 769 psi.
- Minimum bearing lengths required are based on a minimum bearing width equal to or greater than the width of the supported beam.
- Span is measured center to center of the supports.
- Table values assume an exterior wall dead load of 100 plf.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.**
- Multi-ply members may be substituted with solid section beams.



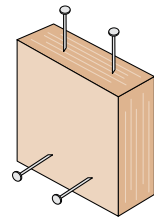
VERSA-LAM® & VERSA-RIM® Products

Nail Size	Nailing Parallel to Glue Lines (Narrow Face) ⁽¹⁾				Nailing Perpendicular to Glue Lines (Wide Face)	
	VERSA-LAM® 1¾"		VERSA-LAM® 3½" & Wider		All Products	
	O.C. [inches]	End [inches]	O.C. [inches]	End [inches]	O.C. [inches]	End [inches]
2½" (8d) Box	2	1	2	½	2	½
2½" (8d) Common	3	2	2	1	2	1
3" (10d) & 3¼" (12d) Box	3	2	2	1	2	1
3½" (16d) Box	3	2	2	1	2	1
3" (10d) & 3¼" (12d) common	4	3	2	2	2	2
3½" (16d) Sinker	4	3	2	2	2	2
3½" (16d) Common	6	3	2	2	2	2

NOTES:

- For 1¾" thickness and greater, 2 rows of nails (such as for a metal strap) are allowed (use ½" minimum offset between rows and stagger nails).
- Offset and stagger nail rows from floor sheathing and wall sole plate.

Nailing Parallel to Glue Lines (Narrow Face)



Nailing Perpendicular to Glue Lines (Wide Face)

SCARF CUT

VERSA-LAM® 3100Fb 2.0E (3½")

Maximum Factored Reaction for 3½" Wood Plate										
Depth (in)	Scarf Cut Slope (°/12)	Heel Height - dh								
		4½"	5"	5½"	6"	6½"	7"	7½"	8"	10"
7¼"	3	6 547	7 263	7 595	7 595					
	6	7 595								
9¼"	3	7 156	7 595	7 595	7 595	7 595	7 595	7 595		
	6	7 595	7 595	7 595	7 595	7 595	7 595			
	9	7 595	7 595	7 595	7 595					
	12	7 595	7 595	7 595						
9½"	3	7 156	7 595	7 595	7 595	7 595	7 595	7 595		
	6	7 595	7 595	7 595	7 595	7 595	7 595			
	9	7 595	7 595	7 595	7 595					
	12	7 595	7 595	7 595						
11¼"	3				7 595	7 595	7 595	7 595	7 595	
	6		7 595	7 595	7 595	7 595	7 595	7 595		
	9	7 595	7 595	7 595	7 595	7 595	7 595			
	12	7 595	7 595	7 595						
11½"	3					7 595	7 595	7 595	7 595	
	6		7 595	7 595	7 595	7 595	7 595	7 595		
	9	7 595	7 595	7 595	7 595	7 595	7 595	7 595		
	12	7 595	7 595	7 595	7 595	7 595	7 595	7 595		
14	3								7 595	7 595
	6						7 595	7 595	7 595	7 595
	9	7 595	7 595	7 595	7 595	7 595	7 595	7 595	7 595	
	12		7 595	7 595	7 595	7 595	7 595	7 595	7 595	
16	3									7 595
	6								7 595	7 595
	9						7 595	7 595	7 595	7 595
	12					7 595	7 595	7 595	7 595	
18	3									7 595
	6									7 595
	9									7 595
	12							7 595	7 595	
20	9									7 595
	12									7 595

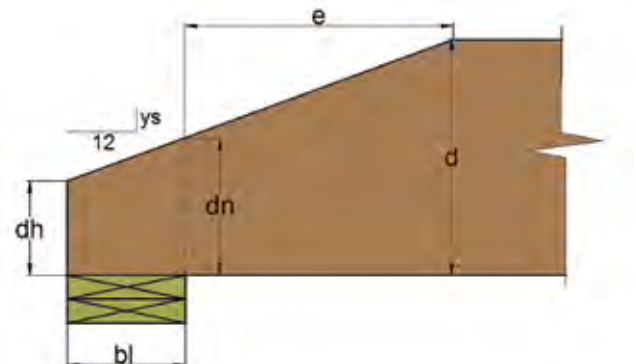
Maximum Factored Reaction for 5¼" Wood Plate										
Depth (in)	Scarf Cut Slope (°/12)	Heel Height - dh								
		4½"	5"	5½"	6"	6½"	7"	7½"	8"	10"
7¼"	3	7 098	8 152	8 694						
	6	8 825								
9¼"	3	7 080	7 689	8 298	8 907	9 978	10 751	11 161	11 267	
	6	9 723	10 423	10 887	11 156	11 262				
	9	11 139	11 249							
	12									
9½"	3	7 080	7 689	8 298	8 907	9 978	10 745	11 310	11 393	
	6	9 643	10 448	11 004	11 355	11 393				
	9	11 354	11 393							
	12									
11¼"	3	7 080	7 689	8 298	8 907	9 516	10 125	10 734	11 393	
	6	8 678	9 504	10 775	11 393	11 393	11 393	11 393	11 393	
	9	11 393	11 393	11 393	11 393	11 393	11 393			
	12	11 393	11 393	11 393						
11½"	3	7 080	7 689	8 298	8 907	9 516	10 125	10 734	11 343	11 393
	6	8 678	9 287	10 248	11 393	11 393	11 393	11 393	11 393	
	9	11 393	11 393	11 393	11 393	11 393	11 393	11 393		
	12	11 393	11 393	11 393	11 393	11 393				
14	3	7 080	7 689	8 298	8 907	9 516	10 125	10 734	11 343	11 393
	6	8 678	9 287	9 896	10 505	11 114	11 393	11 393	11 393	11 393
	9	11 097	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393
	12	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393	
16	3	7 080	7 689	8 298	8 907	9 516	10 125	10 734	11 343	11 393
	6	8 678	9 287	9 896	10 505	11 114	11 393	11 393	11 393	11 393
	9	10 277	10 886	11 393	11 393	11 393	11 393	11 393	11 393	11 393
	12	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393
18	3	7 080	7 689	8 298	8 907	9 516	10 125	10 734	11 343	11 393
	6	8 678	9 287	9 896	10 505	11 114	11 393	11 393	11 393	11 393
	9	10 277	10 886	11 393	11 393	11 393	11 393	11 393	11 393	11 393
	12	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393
20	3	7 080	7 689	8 298	8 907	9 516	10 125	10 734	11 343	11 393
	6	8 678	9 287	9 896	10 505	11 114	11 393	11 393	11 393	11 393
	9	10 277	10 886	11 393	11 393	11 393	11 393	11 393	11 393	11 393
	12	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393	11 393

NOTES:

- Tabulated values are based on the factored bearing resistance of 620 psi and a beam width of 3½".
- Downward loading conditions only. For uplift loading contact Boise Cascade EWP representative.
- $K_D = 1.0$
- Holes or concentrated loads are not allowed within the taper cut.
- The scarf cut length should not exceed (½) Span, where the scarf cut length $(e + bl) = (d - dh) \cdot A$.

Scarf Cut Slope (°/12)	A
3	4.00
6	2.00
9	1.33
12	1.00

- For 1¾", 5¼", and 7" beams, multiply the 3½" values by 0.5, 1.5, and 2.0, respectively.



VERSA-LAM® 3100F_b 2.0E (3½")

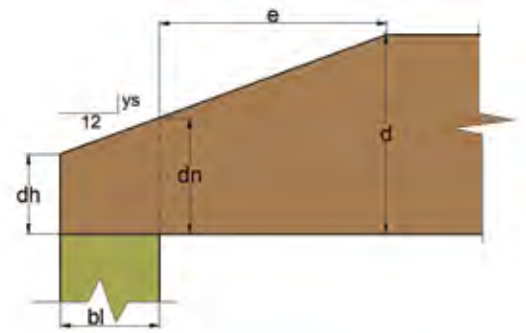
Maximum Factored Reaction for 3½" Column										
Depth (in)	Scarf Cut Slope (°/12)	Heel Height - dh								
		4½"	5"	5½"	6"	6½"	7"	7½"	8"	10"
7¼	3	6 547	7 263	8 245	8 731					
	6	8 441								
9¼	3	6 547	7 156	7 765	8 374	8 983	10 097	10 821	11 189	
	6	7 759	9 011	9 923	10 559	10 971	11 197			
	9	10 237	10 704	11 014	11 193					
	12	11 029	11 186	11 258						
9½	3	6 547	7 156	7 765	8 374	8 983	9 937	10 835	11 357	
	6	7 613	8 842	9 870	10 608	11 110	11 414	11 555		
	9	10 285	10 822	11 193	11 427	11 546				
	12	11 228	11 428	11 537						
11¼	3	6 547	7 156	7 765	8 374	8 983	9 592	10 201	10 810	13 640
	6	7 613	8 222	8 831	9 852	11 045	11 963	12 649	13 140	
	9	9 824	10 904	11 751	12 405	12 899	13 257	13 500	13 643	
	12	12 094	12 619	13 017	13 310	13 512		13 696		
11½	3	6 547	7 156	7 765	8 374	8 983	9 592	10 201	10 810	14 016
	6	7 613	8 222	8 831	9 440	10 584	11 745	12 649	13 336	14 461
	9	9 321	10 617	11 653	12 475	13 118	13 610	13 973	14 225	
	12	12 178	12 832	13 345	13 741	14 036	14 244	14 379	14 449	
14	3	6 547	7 156	7 765	8 374	8 983	9 592	10 201	10 810	13 246
	6	7 613	8 222	8 831	9 440	10 049	10 658	11 267	12 539	14 945
	9	8 678	9 287	10 153	11 612	12 822	13 822	14 644	14 945	14 945
	12	11 571	12 717	13 669	14 456	14 945	14 945	14 945	14 945	14 945
16	3	6 547	7 156	7 765	8 374	8 983	9 592	10 201	10 810	13 246
	6	7 613	8 222	8 831	9 440	10 049	10 658	11 267	11 876	14 945
	9	8 678	9 287	9 896	10 505	11 114	12 631	13 952	14 945	14 945
	12	9 744	11 428	12 857	14 071	14 945	14 945	14 945	14 945	14 945
18	3	6 547	7 156	7 765	8 374	8 983	9 592	10 201	10 810	13 246
	6	7 613	8 222	8 831	9 440	10 049	10 658	11 267	11 876	14 312
	9	8 678	9 287	9 896	10 505	11 114	11 723	12 332	13 611	14 945
	12	9 744	10 353	10 962	12 661	14 129	14 945	14 945	14 945	14 945
20	3	6 547	7 156	7 765	8 374	8 983	9 592	10 201	10 810	13 246
	6	7 613	8 222	8 831	9 440	10 049	10 658	11 267	11 876	14 312
	9	8 678	9 287	9 896	10 505	11 114	11 723	12 332	12 941	14 945
	12	9 744	10 353	10 962	11 571	12 180	13 891	14 945	14 945	14 945

NOTES:

- Tabulated values are based on the factored bearing resistance of 620 psi and a beam width of 3½".
- Downward loading conditions only. For uplift loading contact Boise Cascade EWP representative.
- $K_D = 1.0$
- Holes or concentrated loads are not allowed within the taper cut.
- The scarf cut length should not exceed (½) Span, where the scarf cut length $(e + bl) = (d - dh) \cdot A$.

Scarf Cut Slope (°/12)	A
3	4.00
6	2.00
9	1.33
12	1.00

- For 1¾", 5¼", and 7" beams, multiply the 3½" values by 0.5, 1.5, and 2.0, respectively.



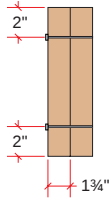
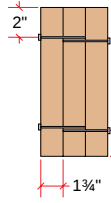
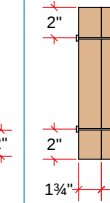
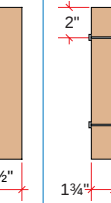
MINIMUM BEARING LENGTH PER BEARING WIDTH

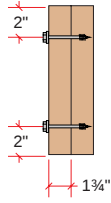
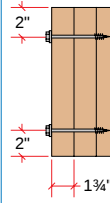
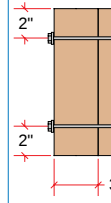
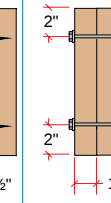
VERSA-LAM® Minimum End bearing length per bearing width (in)				
Total Factored Reaction (lb)	Bearing width (in)			
	1¾	3½	5¼	7
2 000	1½	1½	1½	1½
4 000	2	1½	1½	1½
6 000	3	1½	1½	1½
8 000	3¾	2	1½	1½
10 000	4¾	2½	1¾	1½
12 000	5¾	3	2	1½
14 000	6¾	3½	2¼	1¾
16 000	7½	3¾	2½	2
18 000		4¾	3	2¼
20 000		4¾	3¼	2½
22 000		5¼	3½	2¾
24 000		5¾	3¾	3
26 000		6¾	4¾	3¼
28 000		6¾	4½	3½
30 000		7¾	4¾	3¾
32 000		7½	5	3¾
34 000			5½	4
36 000			5¾	4¼
38 000			6	4½
40 000			6¾	4¾

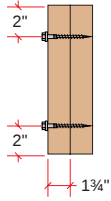
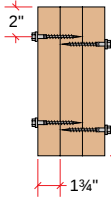
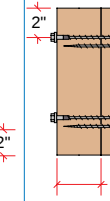
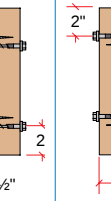
VERSA-LAM® Minimum Intermediate bearing length per bearing width (in)				
Total Factored Reaction (lb)	Bearing width (in)			
	1¾	3½	5¼	7
4 000	3½	3½	3½	3½
8 000	3¾	3½	3½	3½
12 000	5¾	3½	3½	3½
16 000	7½	3¾	3½	3½
20 000	9½	4¾	3½	3½
24 000	11¼	5¾	3¾	3½
28 000	13¼	6¾	4½	3½
32 000	15	7½	5	3¾
36 000		8½	5¾	4¼
40 000		9½	6¾	4¾
44 000		10½	7	5¼
48 000		11¼	7½	5¾
52 000		12¼	8¾	6¼
56 000		13¼	8¾	6¾
60 000		14¼	9½	7¼
64 000		15	10	7½
68 000			10¾	8
72 000			11¼	8½
76 000			12	9
80 000			12½	9½

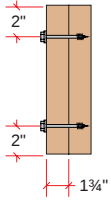
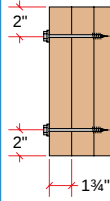
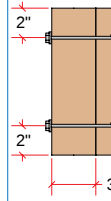
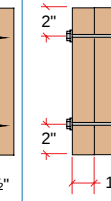
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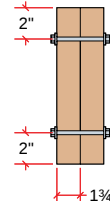
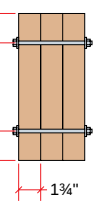
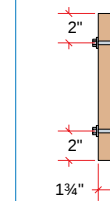
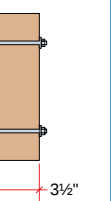
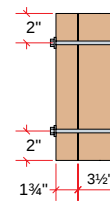
- Lateral support at bearings should be provided to prevent lateral displacement or rotation.
- Member bearing lengths are based on the VERSA-LAM® Factored Bearing Resistance of 1220 psi.

Rows	Depth Range	Spacing	   			
			3 1/2" (2 plies)	5 1/4" (3 plies)	5 1/4" (2 plies)	7" (3 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member			
			3.5" Common Wire Nails (16d)			
2	7 1/4" to 18"	24"	434	325	325	289
		12"	867	650	650	578
		6"	1734	1301	1301	1156
3	11 1/8" to 24"	24"	650	488	488	434
		12"	1301	976	976	867
		6"	2602	1951	1951	1734
4	14" to 24"	24"	867	650	650	578
		12"	1734	1301	1301	1156
		6"	3469	2602	2602	2312

Rows	Depth Range	Spacing	   			
			3 1/2" (2 plies)	5 1/4" (3 plies)	7" (2 plies)	7" (4 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member			
			SDW22338	SDW22500	SDW22634	SDW22634
2	7 1/4" to 18"	24"	680	623	1140	553
		12"	1360	1245	2280	1107
		6"	2720	2490	4560	2213
3	11 1/8" to 24"	24"	1020	934	1710	830
		12"	2040	1868	3420	1660
		6"	4080	3735	6840	3320
4	14" to 24"	24"	1360	1245	2280	1107
		12"	2720	2490	4560	2213
		6"	5440	4980	9120	4427

Rows	Depth Range	Spacing	   			
			3 1/2" (2 plies)	5 1/4" (3 plies)	7" (2 plies)	7" (4 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member			
			SDS 1/4"x3.5"	SDS 1/4"x3.5"	SDS 1/4"x6"	SDS 1/4"x6"
2	7 1/4" to 18"	24"	610	458	610	520
		12"	1220	915	1220	1040
		6"	2440	1830	2440	2080
3	11 1/8" to 24"	24"	915	686	915	780
		12"	1830	1373	1830	1560
		6"	3660	2745	3660	3120
4	14" to 24"	24"	1220	915	1220	1040
		12"	2440	1830	2440	2080
		6"	4880	3660	4880	4160

Rows	Depth Range	Spacing	   			
			3 1/2" (2 plies)	5 1/4" (3 plies)	7" (2 plies)	7" (4 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member			
			3 3/8" TrussLok	5" TrussLok	6 3/4" TrussLok	6 3/4" TrussLok
2	7 1/4" to 18"	24"	864	675	849	600
		12"	1,728	1,350	1,698	1,200
		6"	3,456	2,700	3,396	2,400
3	11 1/8" to 24"	24"	1,296	1,013	1,274	900
		12"	2,592	2,025	2,547	1,800
		6"	5,184	4,050	5,094	3,600
4	14" to 24"	24"	1,728	1,350	1,698	1,200
		12"	3,456	2,700	3,396	2,400
		6"	6,912	5,400	6,792	4,800

Rows	Depth Range	Spacing	     					
			3 1/2" (2 plies)	5 1/4" (3 plies)	5 1/4" (2 plies)	7" (3 plies)	7" (2 plies)	7" (4 plies)
			Maximum Factored Uniform Load (PLF) Applied to Either Outside Member					
			1/2" Bolts					
2	7 1/4" to 11 1/8"	12"	1560	1170	1755	1560	3120	1040
		6"	3120	2340	3510	3120	6240	2080
3	11 1/8" to 24"	12"	2340	1755	2632	2340	4680	1560
		6"	4680	3510	5265	4680	9360	3120

NOTES

- Design values apply to common bolts that conform to ASTM A307 Grades A&B, SAE J429 Grades 2 or higher. A washer not less than a standard cut washer shall be between the wood and the bolt head and between the wood and the nut. The minimum edge distance for SDS/TrussLok screws and bolts shall be 2". The minimum end distance for SDS/TrussLok screws and bolts shall be 4", except for SDW screws where the end distance should not be less than 6". Bolt holes shall not be greater than 1/16" of the bolt diameter.
- When 3 1/4" sinker nails (16d) are used, multiply the maximum factored uniform load for the 3.5" common wire nails by 0.87 factor.
- When 3 1/4" pneumatic gun nails 0.122" diameter (10d) are used, multiply the maximum factored uniform load for the 3.5" common wire nails by 0.61 factor.
- The nail schedules shown apply to both sides of a 3-member beam.
- 4-ply beams must be loaded from both sides. Lesser side shall be no less than 25% of the opposite side.
- Beams wider than 7" must be designed by the professional engineer of record.
- An equivalent specific gravity of 0.5 may be used when designing specific connections with VERSA-LAM®. Connection design is based on CSA O86-09.
- Refer to current technical literature from FastenMaster TrussLok and Simpson Strong-Tie to confirm information herein has not been superseded.
- Other fasteners may also be used to connect multiple VERSA-LAM® BEAMS. Contact Boise Cascade EWP Engineering for further information.

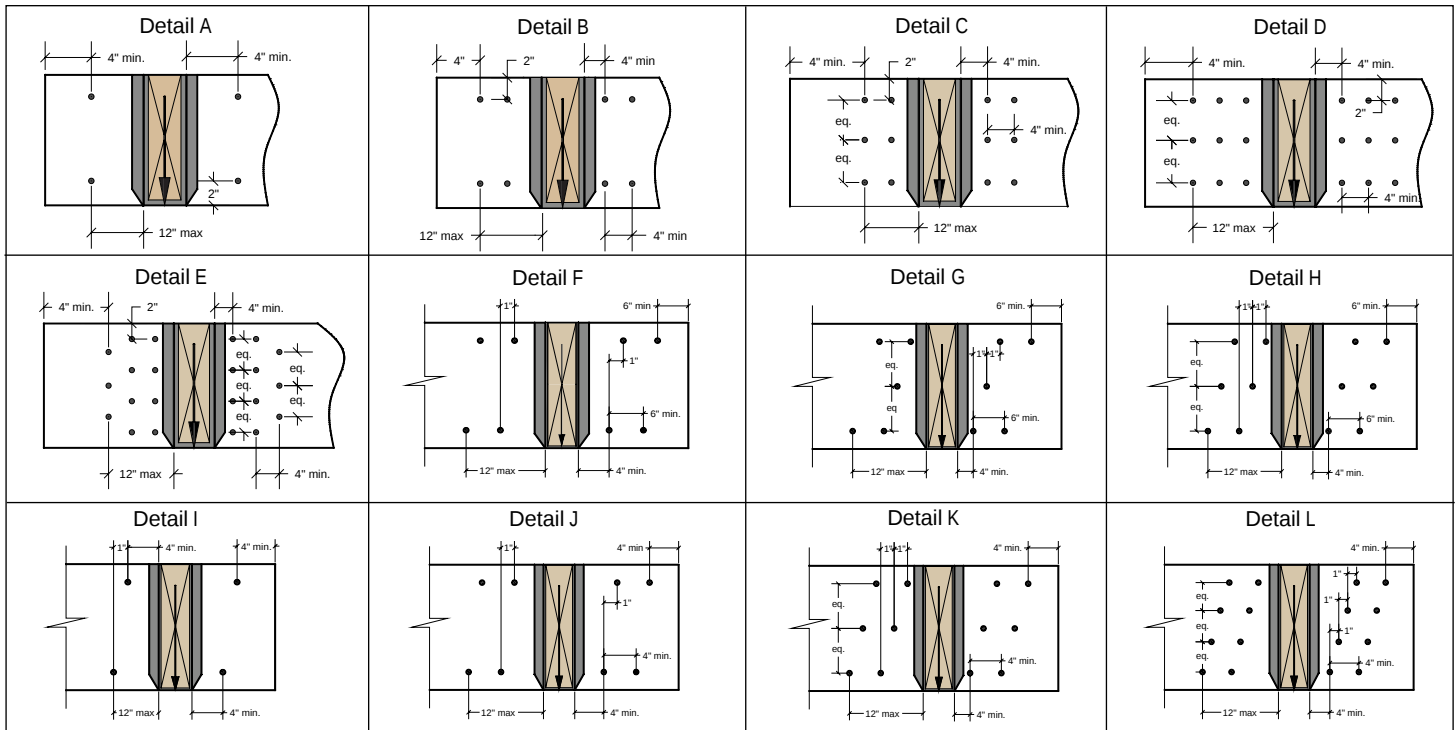
VERSA-LAM® 3100 2.0E - 1 1/4"

Maximum Factored Point Load Applied to Either Outside Member (lbs)

Connector Type	Number of Connectors	Min. Beam Depth (in)	Max. Beam Depth (in)	2-ply	3-ply	4-ply	Detail
3 1/2" (16d) Common Wire Nail (0.160" x 3 1/2")	4	7 1/4	18	1 734	1 301	-	A
	8	7 1/4	18	3 469	2 602	-	B
	12	9 1/4	18	5 203	3 902	-	C
	18	9 1/4	18	7 805	5 853	-	D
	22	11 1/4	18	9 539	7 154	-	E
3 3/8" TrussLok ⁽⁴⁾	8	7 1/4	18	6912	-	-	F
	10	9 1/4	18	8640	-	-	G
	12	9 1/4	18	10368	-	-	H
5" TrussLok ⁽⁴⁾	8	7 1/4	18	-	5400	-	F
	10	9 1/4	18	-	6750	-	G
	12	9 1/4	18	-	8100	-	H
6 3/4" TrussLok ⁽⁴⁾	8	7 1/4	18	-	-	4800	F
	10	9 1/4	18	-	-	6000	G
	12	9 1/4	18	-	-	7200	H
SDW 22338	8	7 1/4	18	5 440	-	-	F
	10	9 1/4	18	6 800	-	-	G
	12	9 1/4	18	8 160	-	-	H
SDW 22500	8	7 1/4	18	-	4 980	-	F
	10	9 1/4	18	-	6 225	-	G
	12	9 1/4	18	-	7 470	-	H
SDW 22634	8	7 1/4	18	-	-	4 427	F
	10	9 1/4	18	-	-	5 533	G
	12	9 1/4	18	-	-	6 640	H
SDS 1/4 X 6 ⁽⁵⁾	4	7 1/4	18	-	-	2 080	I
	8	7 1/4	18	-	-	4 160	J
	12	9 1/4	18	-	-	6 240	K
	16	11 1/4	18	-	-	8 320	L

NOTES

- When 3 1/4" sinker nails (16d) are used, multiply the maximum factored side load for the 3.5" common wire nails by 0.87 factor.
- When 3 1/4" pneumatic gun nails 0.122" diameter (10d) are used, multiply the maximum factored side load for the 3.5" common wire nails by 0.61 factor.
- Nailed 3-ply members must be fastened on both sides.
- The minimum end distance for FastenMaster TrussLok screws shall be 4", rather than the 6" as shown on the details.
- SDS screws must be applied on both sides.
- An equivalent specific gravity of 0.5 may be used when designing specific connections with VERSA-LAM®. Connection design is based on CSA O86-09.
- USP WS screws may also be used to connect multiple VERSA-LAM® beams. Contact Boise Cascade EWP Engineering for further information.
- Refer to current technical literature from FastenMaster TrussLok and Simpson Strong-Tie to confirm information herein has not been superseded.



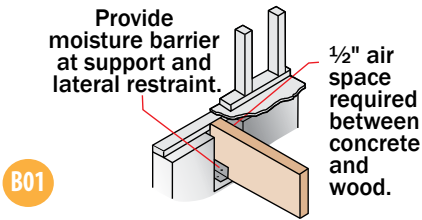
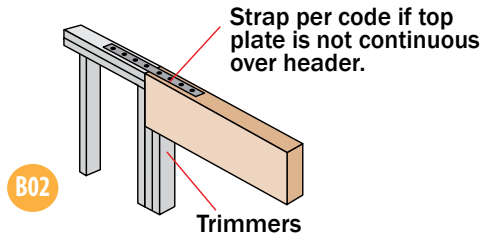
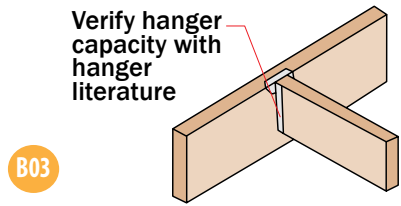
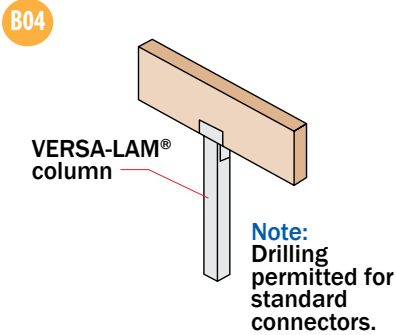
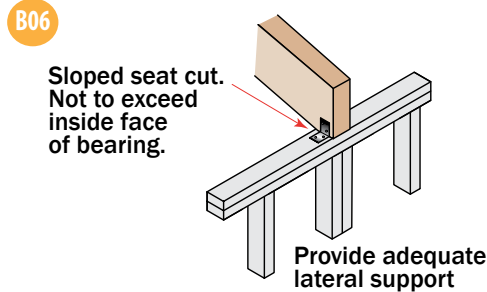
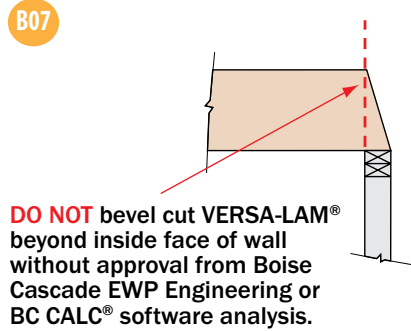
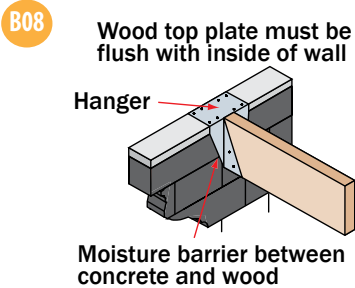
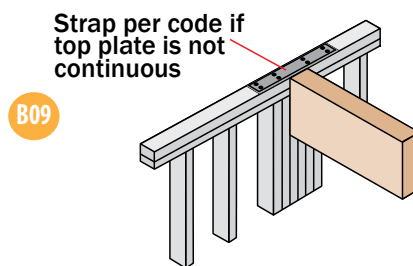
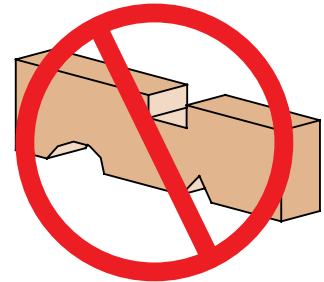
MULTIPLE BEAM CONNECTIONS – TOP LOADS

VERSA-LAM® 3100 2.0E - 1 1/4"

Depth (in)	Number of plies			
	2	3	4	
5 1/2	2 rows of 16d Common Wire Nails at 12" o.c.	2 rows of 16d Common Wire Nails at 12" o.c.	N/A	
7 1/4 to 11 1/4	2 rows of 16d Common Wire Nails at 12" o.c.	2 rows of 16d Common Wire Nails at 12" o.c.	2 rows of 1/2" Bolts at 24" o.c.	2 rows of SDS 1/4 x 6 screws at 24" o.c. (both sides)
14 to 18	3 rows of 16d Common Wire Nails at 12" o.c.	3 rows of 16d Common Wire Nails at 12" o.c.	3 rows of 1/2" Bolts at 24" o.c.	3 rows of SDS 1/4 x 6 screws at 24" o.c. (both sides)
20 to 24	4 rows of 16d Common Wire Nails at 12" o.c.	4 rows of 16d Common Wire Nails at 12" o.c.	4 rows of 1/2" Bolts at 24" o.c.	4 rows of SDS 1/4 x 6 screws at 24" o.c. (both sides)

NOTE

- Load is applied evenly across the entire member width.

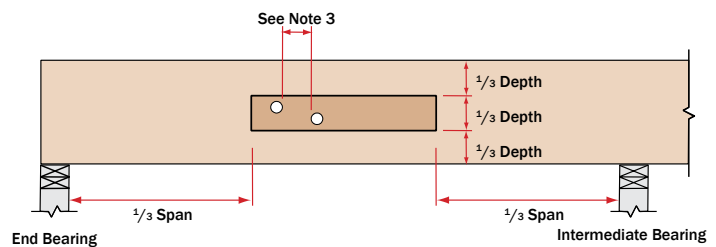
Bearing at concrete/masonry walls**Bearing for door or window header****Beam to beam connector****Bearing at column****Slope seat cut****Bevel cut****Beam to concrete/masonry walls****Bearing framing into wall****DO NOT drill, notch, cut or alter VERSA-LAM® beams****NOTES**

- Minimum of 1/2" air space between beam and wall pocket or adequate barrier must be provided between beam and concrete/masonry.
- Adequate bearing shall be provided. If not shown on plans, please refer to load tables in your region's Specifier Guide.
- VERSA-LAM® beams are intended for interior applications only and should be kept as dry as possible during construction.
- Continuous lateral support of top and bottom of beam shall be provided (side or top bearing framing).

ALLOWABLE HOLES IN VERSA-LAM® BEAMS**NOTES**

1. Square and rectangular holes are not permitted.
2. Round holes may be drilled or cut with a hole saw anywhere within the shaded area of the beam.
3. The horizontal distance between adjacent holes must be at least two times the size of the larger hole.
4. Do not drill more than three access holes in any four foot long section of beam.
5. The maximum round hole diameter permitted is:

Beam Depth	Max. Hole Diameter
5 1/2"	3/4"
7 1/4"	1"
Greater than 7 1/4"	2"



6. These limitations apply to holes drilled for plumbing or wiring access only. The size and location of holes drilled for fasteners are under the regulations of the CSA O86-09 Engineering Design in Wood.
7. Beams deflect under load. Size holes to provide clearance where required.
8. This hole chart is valid for beams supporting uniform load only. For beams supporting concentrated loads or for beams with larger holes, contact Boise Cascade EWP Engineering.

VERSA-LAM® 2750F _b 1.8E ⁽⁵⁾						
Solid Column						
Unsupported length of column (ft)	Column Size (inches)					
	3½ x 3½	3½ x 5¼	3½ x 7	5¼ x 5¼	5¼ x 7	7 x 7
4	23 875	35 812	47 749	58 437	77 917	94 341
4½	22 767	34 151	45 535	57 535	76 714	93 745
5	21 521	32 281	43 041	56 447	75 263	93 011
5½	20 172	30 258	40 344	55 173	73 564	92 129
6	18 761	28 142	37 522	53 718	71 624	91 094
6½	17 330	25 995	34 660	52 095	69 461	89 901
7	15 876	23 813	31 751	50 323	67 097	88 549
7½	14 359	21 539	28 718	48 422	64 562	87 038
8	12 984	19 476	25 805	46 418	61 891	85 373
8½	11 741	17 612	23 327	44 340	59 119	83 563
9	10 622	15 933	21 096	42 213	56 284	81 616
9½	9 615	14 422	19 091	40 065	53 420	79 545
10	8 710	13 064	17 290	37 922	50 563	77 364
10½	7 896	11 795	15 673	35 720	47 626	75 088
11	7 166	10 703	14 221	33 410	44 546	72 735
11½	6 509	9 722	12 918	31 242	41 656	70 321
12	5 919	8 841	11 747	29 213	38 951	67 864
14	4 100	6 125	8 138	22 362	29 816	57 937
16				17 199	22 931	47 905
18				13 318	17 698	39 349
20				10 400	13 822	32 364

VERSA-LAM® 3100F _b 2.0E (1¾")						
Built-up Column						
Unsupported length of column (ft)	Column Size (inches)					
	3½ x 5¼	3½ x 7¼	5¼ x 5¼	5¼ x 7¼	7 x 7¼	
4	28 119	37 066	46 390	61 151	83 566	
4½	26 661	35 144	45 578	60 080	82 927	
5	25 040	33 007	44 603	58 795	82 142	
5½	23 308	30 725	43 467	57 297	81 204	
6	21 524	28 372	42 178	55 599	80 107	
6½	19 738	26 018	40 751	53 718	78 848	
7	17 996	23 723	39 204	51 678	77 429	
7½	16 334	21 426	37 559	49 510	75 854	
8	14 775	19 377	35 841	47 245	74 132	
8½	13 333	17 483	34 075	44 917	72 272	
9	12 013	15 752	32 285	42 558	70 288	
9½	10 817	14 183	30 495	40 198	68 196	
10	9 711	12 770	28 726	37 865	66 013	
10½	8 748	11 504	26 995	35 584	63 758	
11	7 888	10 373	25 317	33 372	61 449	
11½	7 121	9 365	23 703	31 245	59 105	
12	6 439	8 468	22 162	29 213	56 743	
14	4 380	5 761	16 804	22 150	47 445	
16			12 713	16 759	38 951	
18			9 686	12 739	31 672	
20			7 466	9 820	25 678	

NOTES:

- The maximum factored axial loads assume a maximum eccentricity of either ¼ of column width or ¼ of column depth, whichever is worse.
- These values are for preliminary design only. Final design should include a complete analysis, including the bearing capacity of the foundation supporting the column. When the column is used in a wall system, review bearing resistance requirements to ensure adequacy.
- The column is subjected to a simple axial load.
- P - Δ effect was included in the analysis.
- 7 X 7 VERSA-LAM® Solid Column grade is 2650F_b 1.7E from Western Region.

VERSA-STUD® & VERSA-LAM® COLUMN DETAILS

Multiple Ply Stud Connections

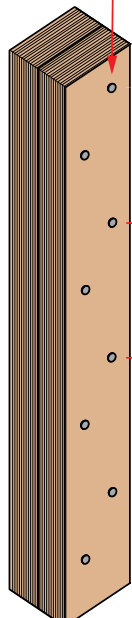
Thickness (in)	Number of plies	Fastener type	Fastener diameter (in)	Fastener length (in)	Min. end distance (in)	Min. edge distance (in)
1¾"	2	Common Nail 3½" (16d)	0.162	3½"	4.0	2.0
		SDW 22338	0.220	3¾"		
		3¾" TrussLok	0.228	3¾"		
		SDS ¼ x 3½	0.250	3½"		
	3	Common Nail 5" (40d)	0.225	5		
		5" TrussLok	0.228	5		
		SDW 22500	0.220	5		
	4	½" dia. Bolts	0.500	7		
		SDW 22634	0.220	6¾"		
		6¾" TrussLok	0.228	6¾"		
		SDS ¼ x 6 (on both sides)	0.250	6		

NOTE:

The number of rows of fasteners should be as follows:

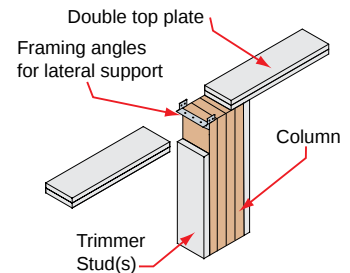
Stud/column depth	Rows of fasteners (staggered)
3½"	1
5½"	2
7¼"	2
9¼"	3
9½"	3
11¼"	3
11¾"	3
14"	4

Staggered rows

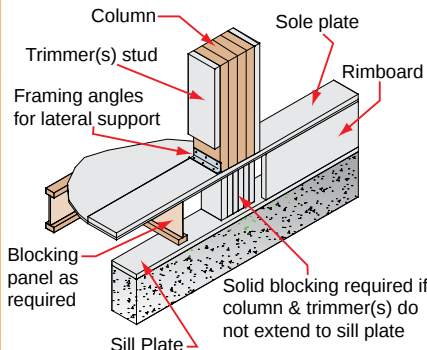


9"

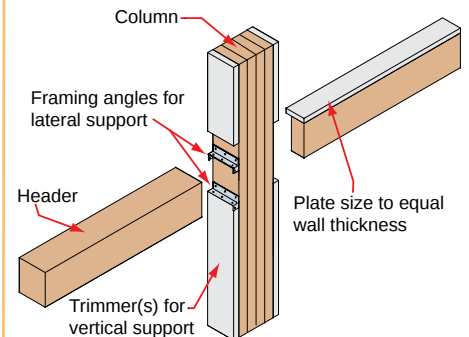
Column to Top Plate



Column to Bottom Plate



Header to Column



BC FRAMER® CADD Framing Software

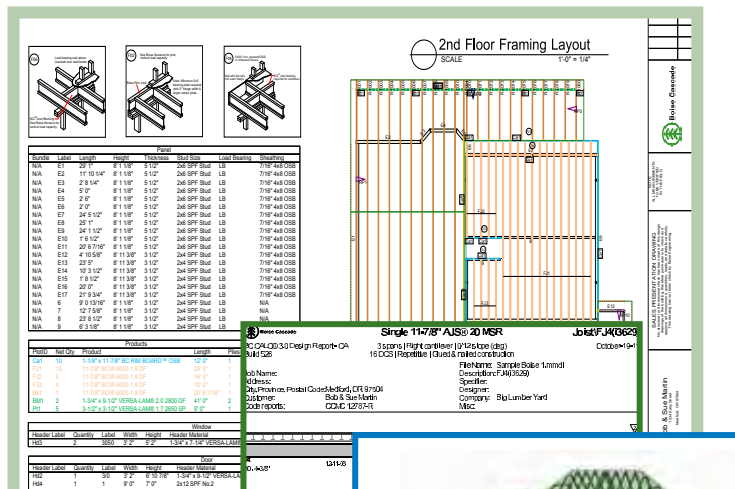
BC FRAMER® is an easy-to-use, stand-alone computer-aided drafting program with 3D capability designed to quickly create floor and roof framing layouts.

Draw walls, add framing areas, locate beams and rough openings, define cross-sections and on-center spacing. In minutes, BC FRAMER® frames your layout, builds a piece and price report, creates a framing drawing with schedule, all using Boise Cascade Engineered Wood Products.

Easy-to-use editing and drawing tools allow flexibility when modifying members and adding details, symbols and accessories.

Training classes for BC FRAMER® are provided at Boise Cascade EWP training centers.

For questions, comments or a free demonstration CD visit our website at www.BC.com/ewp or email us at EWPSupport@BC.com. Information can also be obtained at 800-405-5969.



RECOMMENDED HARDWARE

- CPU: Quad Core 64 bit Processor
- Cache: 3MB/Core
- RAM: 4.0GB to 8.0GB
- Video: Full support for DirectX 9; Single monitors, 1280x1024 128MB; Dual monitor, 1280x1024 256MB (Minimum 1024x768)
- Free Storage: (average 6,000-8,000 jobs)
- Operating Systems: Windows 7 (Professional Editions 32-bit and 64-bit)

Improvements in capacity or speed of these components will yield better performance.

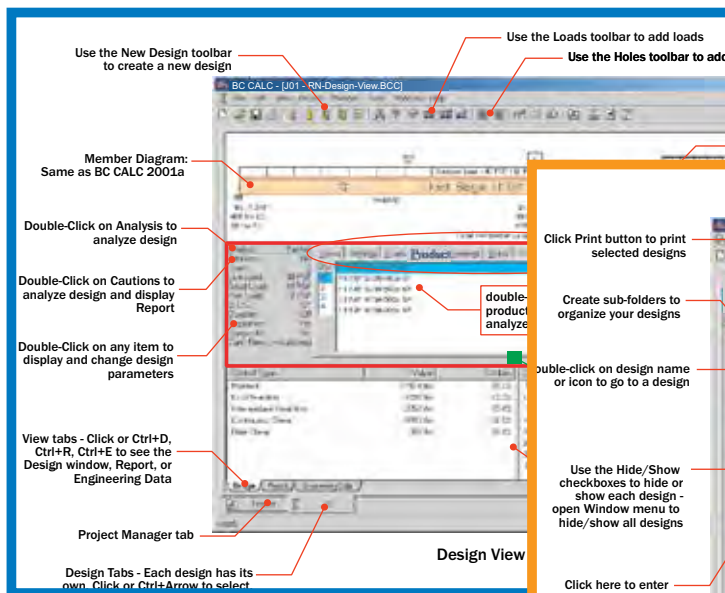


BC CALC® Sizing Software

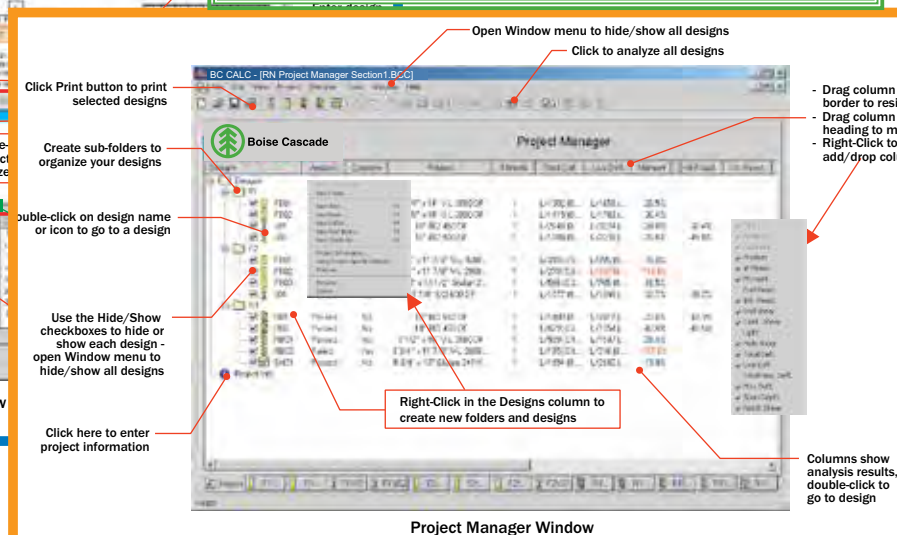
BC CALC® is Boise Cascade EWP sizing software for Boise Cascade Joists and VERSA-LAM® Beams.

BC CALC® is simple to use, yet flexible enough to analyze most joist and beam applications. Span, load and hole information entered by the user is analyzed by the program to correctly size Boise Cascade EWP. A comprehensive Help File menu is included in the program.

BC CALC® is available to designers, architects and engineers on CD-ROM or by download at www.BC.com/ewp. Hardware requirements include Pentium® Processor with a recommended minimum of 512MB RAM. To order BC CALC®, call 800-405-5969, email EWPSupport@BC.com or visit our website at www.bc.com/ewp/software.



To request a CD or Download of BC CALC® CANADA, <http://www.bc.com/wood/ewp/software/bccalc/order/CANADA-calc-form.html>



CEILING	Pounds Per Square Foot [PSF]
Acoustical fiber tile ⁽¹⁾	1
Suspended steel channel system ⁽¹⁾	2
Suspended wood channel system	2.5
2x8 ceiling joists @ 16" o.c., R-49 insulation, ½" gypsum board	7
1" Plaster	8
½" gypsum board	2.2
⅝" gypsum board	2.75
ROOF	Pounds Per Square Foot [PSF]
Fiberglass shingles	3
Asphalt shingles ⁽¹⁾	2
Wood shingles ⁽¹⁾	3
Spanish clay tile ⁽¹⁾	19
Composition Roofing:	
Three-ply ready roofing ⁽¹⁾	1
Four-ply felt and gravel ⁽¹⁾	5.5
Five-ply felt and gravel ⁽¹⁾	6
20 gage metal deck ⁽¹⁾	2.5
18 gage metal deck ⁽¹⁾	3
1" fiberglass batt insulation	0.04
1" loose fiberglass insulation	0.04
1" loose cellulose insulation	0.14
1" rigid insulation ⁽¹⁾	1.5
⅜" slate ⁽¹⁾	7
¼" slate ⁽¹⁾	10
Single-ply (no ballast) ⁽¹⁾	0.7
Single-ply (ballasted)	11
Dry gravel ⁽¹⁾	8.7
2x8 rafters @ 16" o.c., fiberglass shingles, 15# felt, ⅝" sheathing	8
Skylight: metal frame w/ ⅝" wire glass ⁽¹⁾	8
FLOOR	Pounds Per Square Foot [PSF]
1" reinforced regular weight concrete	12.5
1" plain lightweight concrete ⁽¹⁾	8
⅞" cementitious backerboard	3
Ceramic or quarry tile (¾") on ½" mortar bed ⁽¹⁾	16
Ceramic or quarry tile (¾") on 1" mortar bed ⁽¹⁾	23
1" mortar bed	12
1" slate ⁽¹⁾	15
⅝" marble tile	6
⅝" ceramic floor tile ⁽¹⁾	4.7
Hardwood flooring, 7/7-in ⁽¹⁾	4
¼" linoleum or asphalt tile ⁽¹⁾	1
BCI®/AJS® joists @ 16" o.c., ¾" sheathing, ½" gypsum board	10
¾" Gyp-Crete topping	6.5
Carpet & Pad	2.0
Waterproofing Membranes	
Bituminous, smooth surface ⁽¹⁾	1.5
Liquid applied ⁽¹⁾	1
MISCELLANEOUS	Pounds Per Square Foot [PSF]
1" of sand	8
1" of water	5.2
Hay: baled, dry ⁽²⁾	15 PCF ⁽²⁾
Straw: baled, dry ⁽²⁾	8 PCF ⁽²⁾
Saturated soil (garden/landscaped roof)	135 PCF
Grand piano	1000 LBS

(1) Minimum Design Loads for Buildings and Other Structures, ASCE 7-05.

(2) National Farm Building Code (Canada) 1995. Value in pounds per cubic foot (PCF), multiply by maximum height to obtain PSF.

SHEATHING	Pounds Per Square Foot [PSF]
11/32" or ⅝" Plywood – OSB ⁽³⁾	1.0 – 1.2
15/32" or ½" Plywood – OSB ⁽³⁾	1.4 – 1.7
19/32" or ⅝" Plywood – OSB ⁽³⁾	1.8 – 2.1
23/32" or ¾" Plywood – OSB ⁽³⁾	2.2 – 2.5
⅞" Plywood – OSB ⁽³⁾	2.6 – 2.9
1⅞" Plywood – OSB ⁽³⁾	3.3 – 3.6
½" cementitious backerboard	3
1½" softwood T & G decking	4.6
FLOOR FRAMING	Pounds Per Square Foot [PSF]
2x4 @ 16" o.c.	1.1
2x6 @ 16" o.c.	1.7
2x8 @ 16" o.c.	2.2
2x10 @ 16" o.c.	2.9
2x12 @ 16" o.c.	3.5
BCI® 4500s, 5000 or 5000s @ 12" o.c.	2.1 – 2.9
BCI® 4500s, 5000 or 5000s @ 16" o.c.	1.6 – 2.2
BCI® 4500s, 5000 or 5000s @ 19.2" o.c.	1.3 – 1.8
BCI® 4500s, 5000 or 5000s @ 24" o.c.	1.1 – 1.5
BCI® 6000 or 6000s @ 12" o.c.	2.5 – 3.4
BCI® 6000 or 6000s @ 16" o.c.	1.9 – 2.6
BCI® 6000 or 6000s @ 19.2" o.c.	1.6 – 2.1
BCI® 6000 or 6000s @ 24" o.c.	1.3 – 1.7
BCI® 60, 60s, 6500 or 6500s @ 12" o.c.	2.5 – 3.8
BCI® 60, 60s, 6500 or 6500s @ 16" o.c.	1.9 – 2.9
BCI® 60, 60s, 6000 or 6500s @ 19.2" o.c.	1.6 – 2.4
BCI® 60, 60s, 6500 or 6500s @ 24" o.c.	1.3 – 1.9
BCI® 90, 90s or 90e @ 12" o.c.	3.9 – 5.4
BCI® 90, 90s or 90e @ 16" o.c.	2.9 – 4.1
BCI® 90, 90s or 90e @ 19.2" o.c.	2.4 – 3.4
BCI® 90, 90s or 90e @ 24" o.c.	1.9 – 2.7
AJS® 140 or 20 @ 12" o.c.	2.2 – 3.3
AJS® 140 or 20 @ 16" o.c.	1.7 – 2.5
AJS® 140 or 20 @ 19.2" o.c.	1.4 – 2.1
AJS® 140 or 20 @ 24" o.c.	1.1 – 1.7
AJS® 25 @ 12" o.c.	3.1 – 5.4
AJS® 25 @ 16" o.c.	2.3 – 4.1
AJS® 25 @ 19.2" o.c.	1.9 – 3.4
AJS® 25 @ 24" o.c.	1.6 – 2.7
WALL	Pounds Per Square Foot [PSF]
⅝" x 7½" fiber cement lap siding	3
4" clay brick ⁽¹⁾	39
¼" ceramic wall tile ⁽¹⁾	3.1
1¾" Cultured Stone	12
2x4 studs @ 16" o.c., ⅝" gypsum, insulation, ⅝" siding ⁽¹⁾	11
2x6 studs @ 16" o.c., ⅝" gypsum, insulation, ⅝" siding ⁽¹⁾	12
Wood or steel studs, ½" gypsum board each side ⁽¹⁾	8
Exterior stud walls w/ brick veneer ⁽¹⁾	48
Stucco	10
Log Wall: 10" diameter	26
Glass Block:	
4" Thick - standard (hollow)	20
3" Thick - standard (hollow)	16
4" Thick - thin face	30
3" Thick - solid glass block	40
Windows: glass, frame and sash ⁽¹⁾	8
Include at least 1.5 psf in all dead load summations to account for incidentals such as plumbing, ducts, light fixtures, etc.	

(3) Approximate Engineering Dead Load Weight of Wood Structural Panels, APA EWS TT-019, 2005.

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12472-R VERSA-LAM

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