Nova is committed to providing the best products, service, and value possible.

Nova offers a wide selection of superior quality tropical hardwood products from a network of leading manufacturers.

With offices in Indonesia and Malaysia at the source, Nova offers the very best in quality control, logistics, product knowledge, and supplier relationships. We employ our own quality control personnel at the manufacturer to monitor the production, packaging, and shipping of our products, ensuring that our exacting standards are met on every shipment.



Batu

DECKING

Distinctive Grain Lengths up to 20' Kiln Dried for Maximum Stability Resists Checking Long Term Sustainability Easy to Install Excellent Durability 25 Year Warranty

NOVAUSAWOOD.COM

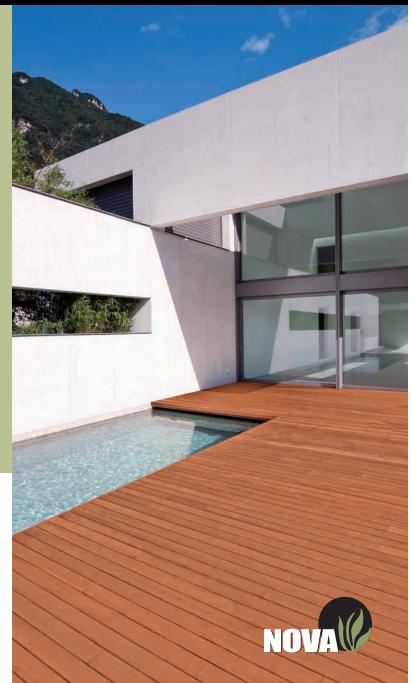


National Wood Flooring Association



Batu

DECKING



Natural Beauty and Durability

Fine landscape architecture demands the highest quality materials. With rich natural beauty and legendary durability, Nova Batu Decking is a great choice for exterior decking applications.

Batu (also known as Membatu, Selangan Batu or Red Balau) is known for its hardness, beauty and natural durability. Professional builders and do-it-yourselfers alike enjoy working with Nova Batu Decking because of its high quality and consistency.

We carefully select only the finest timber to achieve a nearly blemish free decking with excellent color consistency, superior strength and natural durability, thus ensuring there is no compromise on quality.

While there are more than 200 different species of Meranti / Philippine Mahogany found throughout Asia, our Batu Decking utilizes only a select few species found within the Shorea Genus. Although similar in appearance to Meranti / Philippine Mahogany, Nova Batu decking is twice as hard and considerably more durable. With top of the line beauty and tough, long lasting performance, our Batu Decking is the product which others try to emulate.

Because we stake our reputation on the superior quality of our products, we are confident that when your project is complete, you will be satisfied with the distinctive beauty and performance of Nova Batu Decking.

Environmental Information

The Asia and Pacific region is home to 900 million people. Since most of these people live in rural areas, the region's forests play an important role in helping to sustain their basic needs and to maintain their quality of life.

Since extractive utilization of their forests will continue to be an essential component of economic development for most tropical countries, wood-based companies and enterprises are a key to making a successful transition to sustainability in tropical forests.

Selective hardwood extraction, not clear cutting, is the best way to add value to the standing forest resource in tropical forests. The tropical wood industry plays a key role in preserving tropical forests by providing significant economic value and employment without chopping the forest down. Buying tropical hardwood products helps to preserve the standing forest while providing important jobs for the people that live there.

We are committed to the preservation and responsible utilization and management of our forest resources. We strongly encourage all of our suppliers to follow the best industry practices in order to minimize damage to the environment and ensure long term sustainability. Our products are in compliance with all local, national and international laws and regulations.

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Installation

We recommend stainless steel screws through the face of every board, two screws per joist. To prevent surface checking, discoloration, and cupping, we recommend that Batu decking be finished on all four sides, prior to or immediately after installation. To maintain the natural color, a high quality penetrating oil finish with UV inhibitors should be used.

Please see our detailed installation instructions at: *www.novausawood.com*

Name	Nova Batu	Meranti, Mahogany	Cambara	Southern Yellow Pine	Western Red Cedar	Trex
Density: 12% MC	830 kg/m3	730 kg/m3	650 kg/m3	590 kg/m3	410 kg/m3	700 kg/m3
Strength psi	18,400	12,700	12,800	14,200	7,500	1,420
Stiffness 1000 psi	2,560	1,770	1,640	1,880	1,100	175
Hardness Janka Ibs	1,640	780	860	750	350	1,120
Insect & Decay Resistance	High	Low	Medium	Low	High, Heartwood only	High
Color	Dark red-brown	Light tan thru dark red-brown	Light red-brown	Yellow blond distinct grain	Light red to dark brown	Various

Comparative Wood Species



Nova Batu Decking is the finest quality Batu material available on the market today. Our material is carefully kiln dried and inspected by our own personnel at the source.

Nova Batu is available in 1x4, 1x6, 5/4x4, 5/4x6, 2x2, 2x4, 2x6, and 4x4 sizes. We can also supply 1x4 and 5/4x4 T&G porch f ooring plus trim boards from 1x8 through to 2x12. Versatile, durable and beautiful, Nova Batu is the superior choice for your next outdoor project.

We

Oil Finish

Natural Unfinished

STORAGE AND HANDLING

For best results, Nova Decking should be kept out of direct sunlight and not exposed to weather before installation. Be sure you know whether you have a kiln dried or air dried product. **Air dried** decking must be allowed to acclimate to approximately 18% moisture content on the job site prior to installation. To determine moisture content, be sure to use a moisture meter that is calibrated for the correct species of wood. **Kiln dried** decking can be installed right away.

Once a decking package is delivered to the job site, keep the material off the ground by placing a few pieces of lumber underneath the decking package. Cover the material with a tarp to protect from sun damage and rain.

MATERIAL APPLICATION

Spacing: Be sure you know whether you have a kiln dried or air dried product. For **Kiln Dried** decking set spacing between boards at 3/16" for 4" and 1/4" for 6" decking. For **Air Dried** decking, acclimate on the job site until the material is around 18% moisture content, and then set spacing between boards at 3/32" for 4" and 1/8" for 6" decking. This space between boards will allow for air circulation, room for expansion, and provide for the proper spacing as boards become fully seasoned. The maximum movement, shrinkage or swelling, is typically 3/16" on 4" decking and 1/4" on 6" decking.

Span: You must consult local building codes to be sure you are following local regulations. Generally, 1x4 and 1x6 decking can be installed with joists on 16" centers. 5/4x4 and 5/4x6 decking can be installed with joists on 24" centers. When installing on an angle, joist spacing should be on 12" centers. Final joist spacing should only be determined after consulting local building codes.

Ground-side Ventilation: Build your deck so that the surface is at least 16" above the ground. There must be adequate air circulation underneath

the deck in order to prevent cupping and warping of boards. In wet areas or over water, additional clearance is recommended. In close to ground applications, 60" or less above ground, a vapor barrier is necessary to prevent moisture from absorbing into the underside of the decking boards.

Fasteners: Several different options are available for fasteners and for fastening techniques. We recommend stainless steel screws through the face of every board, two screws per joist. Self-tapping stainless steel screws are available but may require pre-drilling. Pre-drilling is always required on the ends of the boards. We do not recommend the use of non-stainless fasteners since they will cause discoloration near the fastener.

Hidden Fasteners: There are many brands of hidden fasteners available. None of these products are as reliable as screwing through the face, and most customers will experience some additional movement of the boards when using hidden fasteners. Choose a fastener which has the recommended amount of spacing between boards. Spacing between boards is critical and will allow for expansion when the material is exposed to moisture. The minimum recommended height above the ground is 60" when using hidden fasteners. Ensuring adequate ventilation and sealing the wood on all sides with an appropriate oil finish are critical steps when using hidden fasteners.

End Sealer: Nova Decking is always end-sealed during manufacturing to help prevent splitting and checking on the ends of boards. We recommend that the boards are end-sealed as soon as reasonably possible after cutting during installation. A clear, water-resistant wax should be used. One such product is Anchorseal from UC Coatings, although several other products are available. If the material is not end sealed the manufacturer will not honor any claims under the warranty.

FINISHING OPTIONS

In order to help prevent surface checking, cupping and discoloration, we recommend that Nova Decking be finished on all four sides, prior to or immediately after installation. Especially in dry, sunny conditions, finishing should be done prior to exposure to weather.

Finishing Nova Decking on the underside of your deck will reduce potential cupping by inhibiting moisture from absorbing into the wood. If a natural silver color is desired, finishing can be done with a water seal product such as Seasonite from Flood. For best results, apply the treatment according to the manufacturer's directions. To maintain the natural color, a high quality penetrating oil finish with UV inhibitors should be used.

PRODUCT RESOURCE INFORMATION:

SuperDeck, Duckback

www.superdeck.com 1-800-825-5382

Messmer's

www.messmers.com 1-800-731-3669

Penofin Performance Coatings

1-800-PENOFIN

PPG/Olympic Maximum

www.olympic.com 1-800-441-9695

Nova Decking can also be pressure washed, but you must be careful not to damage the surface wood fibers by setting the pressure too high. Pressure washing may be necessary between oil treatments in order to remove surface discoloration.

Porch Flooring: It is recommended that all T&G exterior applications be in a covered environment and be installed with a pitch to allow for proper drainage. Please refer to your local building codes on pitch requirements. Material should be finished on all six sides before application to prevent moisture from collecting on the underside of the deck. T&G products do not allow spacing for ventilation, which is why only covered installations are recommended. Fastening should be done with stainless steel fasteners.

REQUIRED EQUIPMENT:

Nova Decking can be easily crosscut with a good quality chop saw using a carbide-tipped blade. Ripping can be done on a standard table saw, using a well-aligned high quality fence and a carbide-tipped blade.

When drilling, always use the highest quality drill bits available. If screwing through the face, a countersink bit with a positive stop should be used so all screw heads end up at a consistent depth. If not pre-drilling, be sure not to let the fastener sink too deep into the wood. Fasteners should be lubricated for easiest assembly.

Routing or planing can be done with both high speed steel or carbide cutters. Feed speed should be fairly slow. Sanding is recommended to complete your project.

FASTENERS AND DRILL BITS:

Starborn Industries Headcote Screws, Smart Bit www.starbornindustries.com 1-800-596-7477

The Ipe Clip Company Hidden Fastening System www.ipeclip.com 1-866-427-2547

Simpson Strong Tie Eb-Ty Hidden Fasteners www.strongtie.com 1-800-999-5099

SAFETY CONCERNS:

Safety glasses and a dust mask should always be worn when working with hardwood lumber. We recommend an active carbon filter dust mask. Some people may have an allergic reaction to hardwood dust. Remove wood slivers immediately to prevent infection.

WARNING:

Drilling Sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

DISCLAIMER:

Our tropical decking products are carefully manufactured and inspected to ensure quality. However, these products are natural wood products and are subject to variations in weight, density, color, grain and performance. Wood decking is subject to dimensional changes as the moisture content in the wood fluctuates with humidity in the air. Swelling, shrinkage, checking, and other movement of individual pieces are normal occurrences in wood decking.

Local building codes must be consulted when building an exterior deck. Most counties require building permits.



Nova Hardwood Exterior Decking

Installation Guidelines

Ipe • Batu • Cumaru • Angelim Pedra Massaranduba • Cumaru • Tigerwood

BE SURE TO COMPLETE THIS CHECKLIST:

- □ Material stored out of direct sun and weather
- Material allowed to acclimate at site
- □ AD, Air Dried at 18%+ moisture content -Set spacing between boards at 3/32" for 4" and 1/8" for 6" decking
- KD, Kiln Dried at 10-12% moisture content -Set spacing between boards at 3/16" for 4" and 1/4" for 6" decking
- □ T&G porch flooring in covered areas only
- □ Adequate ventilation under deck
- □ Span of 16" max for 1x4, 1x6 (or)
- □ Span of 24" max for 5/4x4, 5/4x6
- □ Stainless Steel Fasteners
- Pre-drilling required on ends of boards
- End cuts are sealed with wax
- □ Appropriate oil based finish on all 4 sides
- Enjoy your new deck!

See inside for details on above requirements.



Exterior Residential Decking 25 Year Limited Warranty

Nova USA Wood Products LLC, "warrantor", warrants that our highly durable exterior decking products, limited to Nova Ipe Decking (Tabebuia spp.), Cumaru (Dipterix spp.), TigerWood (Astromium spp.) and Batu / Red Balau (Shorea guiso), when graded as First Clears or Select & Better Sap-free, are naturally durable woods which will not suffer structural damage due to rot, decay or termites for a period of at least 25 years from the date of consumer purchase from an authorized Nova USA Wood Products LLC dealer.

These products may show significant amounts of checking and are prone to weathering. Decking must be installed in a residential structure that meets all applicable construction and safety codes. This warranty is limited to the delivery to purchaser's residence of sufficient quantity of replacement decking and does not include installation, re-installation, nor any cost related to lack of use.

Installations with hidden fasteners or face-screws are covered against excessive movement provided that the installation maintains a gap of between 3/16" and 1/4" between boards and that the material purchased is kiln dried. Installations must have adequate ventilation underneath the deck and must have a minimum clearance of 60" between the bottom of the deck and the ground. Adequate ventilation is defined as no less than 50% unrestricted open air flow beneath the deck on at least 3 sides. Exposed ground beneath the deck must be sealed with a vapor barrier and moisture must not be allowed to accumulate underneath the deck; the ground should be sloped at a minimum 1:12 pitch away from the structure. Deck boards must be sealed on all four sides prior to or immediately after installation with an approved oil finish such as SuperDeck Duckback Hardwood Finish, Mesmers Tropical Hardwood Finish or Penofin Extreme Hardwood Finish. Excessive movement is defined as buckling of the deck, twisting of individual boards in excess of 1/2", and warping of individual boards in excess of 1/4".

The above remedy is exclusive and is in lieu of all other remedies, expressed, implied, or statutory, including but not limited to any and all other obligations, liabilities, whether in contract or in tort, all of which are expressly disclaimed. In no event shall the warrantor be liable for incidental, consequential, indirect or punitive damages of any kind. In order to validate your warranty you must complete and mail the following registration card within 90 days after installation. A copy of the receipt from an authorized Nova USA Wood Products LLC decking retailer or decking contractor and a photo of the project are required.

Mail to: 3428 NW Yeon Ave, Portland, OR 97210

In order to validate your warranty you must complete and mail the following registration card within 90 days after installation. A copy of the receipt from an authorized Nova USA Wood Products, LLC decking retailer or decking contractor and a photo of the project are required.

Name			
Address			
City	State	Zip	
Material purchased from			
Date project completed			
Description of project			
Comments			

Mail to: 3428 NW Yeon Ave, Portland, OR 97210