



SECTION 06 15 00
WOOD DECKING, POSTS, AND TIMBERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Hardwood, Softwood, Thermally Modified products including the following:
 - 1. Wood decking and rails.
 - 2. Wood posts and timbers.
 - 3. Wood siding and cladding.
 - 4. Wood fencing.
 - 5. Wooden site furnishings.
 - 6. Dimensional lumber

1.2 RELATED SECTIONS

- A. Section 06 10 00 – ROUGH CARPENTRY
- B. Section 06 20 00 – FINISH CARPENTRY

1.3 REFERENCES

- A. FSC-Certified – Forest Stewardship Council Certification.
- B. Lacey Act – USDA Compliance.
- C. CSFM Test Procedure 12-7A-4, Part 4 and ASTM E84-10 - Fire Rating.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00- Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- B. Samples: Submit a representative sample of actual material.

NOTE TO SPECIFIER Delete the following paragraph if LEED is not applicable.

- C. LEED Submittal: Provide documentation of how the requirements of credit will be met:
 - 1. Product data for Credit MR 7: For products having Certified Wood Content:
 - a. Include a statement indicating costs for each product having Certified Wood content.
- D. FSC Submittals: Certified Wood: Materials shall be produced from wood obtained from forests certified by a third party certification body or local government authority to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship."

- E. Verification Samples: For each finish product specified, two samples, minimum size 5-1/2 inches (150 mm) in length representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Products covered under this Section shall be supplied by a single manufacturer/vendor unless otherwise specified with a minimum of ten years proven production or supply experience.
- B. Installer Qualifications: Installer shall have a minimum of three years proven construction experience and be capable of estimating and building from drawings and details, determining elevations, in addition to proper material handling. Familiar with Nova USA Wood Products Installation Instructions.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship is approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle materials in accordance with manufacturer's recommendations. Protect materials during shipment, storage and construction against damage. Protect from soiling, damage and construction operations. Allow for proper on-site acclimation of wood materials.
- B. Store a minimum of 4 inches off the ground in a dry location and cover with polyethylene to protect from contact with materials which would cause staining, discoloration, or moisture damage.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by the manufacturer for optimum results. Do not install products under environmental conditions outside the manufacturer's recommended limits.

1.8 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: Nova USA Wood Products, which is located at 3821 24th Ave, Forest Grove, Oregon, 97116; Tel: (503) 419-6407; Fax: 216-373-4931; Email: sales@novausawood.com; Web: <https://www.novausawood.com>
- B. Substitutions: Not Permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00- Product Requirements.

2.2 WOOD DECKING AND DIMENSIONAL LUMBER

A. Material: Ipe Deck Boards and Dimensional Lumber

1. Deck Boards: Solid Ipe KD, S4S E4E
 - a. Grade: FAS Clear.
 - b. Nominal 1 inch x 4 inches, 1 inch x 6 inches, 1 inch x 8 inches.
 - c. Nominal 5/4 inches x 4 inches, 5/4 inches x 6 inches.
2. Dimensional Lumber: Solid Ipe KD or AD, S4S E4E
 - a. Grade: FAS Clear.
 - b. Nominal 2 inches x 4 inches through 2 inches x 12 inches.
 - c. Nominal 4 inches x 4 inches posts.

B. Material: Batu, Red Balau Deck Boards and Dimensional Lumber

1. Deck Boards: Solid Batu, Red Balau KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 1 inch x 4 inches, 1 inch x 6 inches, 1 inch x 8 inches.
 - c. Nominal 5/4 inches x 4 inches, 5/4 inches x 6 inches.
2. Dimensional Lumber: Solid Batu, Red Balau KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 2 inches x 2 inches through 2 inches x 12 inches.
 - c. Nominal 4 inches x 4 inches posts.

C. Material: Bangkirai, Yellow Balau Deck Boards and Dimensional Lumber

1. Deck Boards: Solid Bangkirai, Yellow Balau KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 1 inch x 4 inches, 1 inch x 6 inches, 1 inch x 8 inches.
 - c. Nominal 5/4 inches x 4 inches, 5/4 inches x 6 inches.
2. Dimensional Lumber: Solid Bangkirai, Yellow Balau KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 2 inches x 4 inches through 2 inches x 12 inches.
 - c. Nominal 4 inches x 4 inches posts.

D. Material: Torem, South Pacific Redwood Deck Boards and Dimensional Lumber

1. Deck Boards: Solid Torem, South Pacific Redwood KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 1 inch x 4 inches, 1 inch x 6 inches, 1 inch x 8 inches.
 - c. Nominal 5/4 inches x 4 inches, 5/4 inches x 6 inches.
2. Dimensional Lumber: Solid Torem, South Pacific Redwood KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 2 inches x 4 inches through 2 inches x 12 inches.
 - c. Nominal 4 inches x 4 inches posts.

E. Material: Korina Thermally Modified Deck Boards and Dimensional Lumber

1. Deck Boards: Solid Korina, Thermally Modified KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 1 inch x 4 inches, 1 inch x 6 inches, 1 inch x 8 inches.
 - c. Nominal 5/4 inches x 4 inches, 5/4 inches x 6 inches.
2. Dimensional Lumber: Solid Korina, Thermally Modified KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 2 inches x 4 inches through 2 inches x 12 inches.
 - c. Nominal 4 inches x 4 inches posts.

F. Material: Rhino Wood, Dual Modified Deck Boards and Dimensional Lumber

1. Deck Boards: Solid Rhino Wood Dual Modified KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 1 inch x 4 inches, 1 inch x 6 inches, 1 inch x 8 inches.
 - c. Nominal 5/4 inches x 4 inches, 5/4 inches x 6 inches.
2. Dimensional Lumber: Solid Rhino Wood Dual Modified KD, S4S E4E
 - a. Grade: Standard & Better.
 - b. Nominal 2 inches x 4 inches through 2 inches x 12 inches.
 - c. Nominal 4 inches x 4 inches posts.

2.3 LENGTH

- A. Lumber shall be supplied over specified length for final fit in the field.
- B. Lumber shall be supplied precision trimmed to specified lengths only when specified in writing.

2.4. MOISTURE CONTENT

- A. Air Dried, moisture content of 18 to 25 percent.
- B. Kiln Dried, moisture content of 10 to 15 percent.

2.5 SURFACE

- A. S4S (surfaced four sides), E4E (eased four edges). Edges shall be eased to a radius of 3/32 inch.
- B. Rough Sawn. Edges shall be square and all surfaces are band sawn.
- C. Custom profiled. Profiles shall be as per plans and specifications.

2.6 DIMENSIONAL TOLERANCE: Plus or minus 0.125 inch in width and 0.0625 in thickness, measured at 15 percent moisture content.

2.7 GRADING

- A. Grade Option/Requirements: FAS Clear Grade (or) Standard & Better - Inspected for Serviceable appearance on 1 face and 2 Edges.

1. Grading Face, Back Face, and Edges – FAS Clear Grade.
 - a. Include - Appearance characteristics.
 - b. Include - Physical characteristics which can be removed using normal installation methods, tools, or sanding.
 - c. Include – Sound defects.
2. Grading Face, Back Face, and Edges – Standard & Better.
 - a. Include - Appearance characteristics.
 - b. Include - Physical characteristics which can be removed using normal installation methods, tools, or sanding.
 - c. Include – Sound defects.

2.8 MECHANICAL PROPERTIES:

A. Meet or exceed the following when tested in accordance with ASTM D143:

Decking or Dimensional Lumber	Bending Strength Modulus of Rupture (MOR)	Stiffness Modulus of Elasticity (MOE) (1000 psi)	Density @ 12% MC	Janka Hardness minimum
Nova Ipe	25,400 psi	3,140 kpsi	1020 kg/m3	3,000 lbs
Nova Batu, Red Balau	18,400 psi	2,560 kpsi	850 kg/m3	2,000 lbs
Nova Bangkirai, Yellow Balau	20,950 psi	2,900 kpsi	930 kg/m3	2,000 lbs
Nova Torem, South Pacific Redwood	29,200 psi	3,450 kpsi	980 kg/m3	3,000 lbs
Nova Korina, Thermally Modified	12,510 psi	1,520 kpsi	600 kg/m3	670 lbs
Nova Rhino Wood, Dual Modified	23,000 psi	1,830 kpsi	900 kg/m3	1,680 lbs

- B. Coefficient of Friction: Meet or exceed the Static Coefficient of Friction in accordance with ASTM C1028 standard testing method.
- C. Decay Resistance: Meet or exceed International Building Code/International Residential Code requirements for “Naturally Durable Wood” being durability rated by the U.S Forest Products Laboratory or the Forest Research Laboratory Oregon State University as Class 2 or better. Ipe (Tabebuia spp, Lapacho Group) – Class 1.
- D. Screw Pull Out: Meet or exceed a minimum average screw pull out of 1,100 pounds at

maximum load.

E. Fire Rating and Smoke Density Developed testing: Meet or exceed the following:

1. CSFM Test Procedure 12-7A-4, Part A and the San Diego County Modification to the SFM12-7A-4, Part B.
2. ASTM Designation E84-10, "Standard Method of Test for Surface Burning Characteristics of Building Material ". The test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.
3. CAN/ULC-S102.2-10, Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies, Seventh Edition.

F. Environmental Compliance:

1. Compliance: All lumber shall meet minimum environmental requirements as defined by The Lacey Act, Chain of Custody, Environmental Compliance Standards, Policies and Procedures confirming that:
 - a. All Nova USA Wood Products products have been verified of legal origin and compliance as being, legally harvested, transported, exported, imported and documented in compliance with all country of origin, international and domestic laws, rules, regulations and treaties pertaining to the fair and legal trade of forest products including but not limited to the U.S. Department of Agriculture Lacey Act, ITTA (International Tropical Timber Trade Agreement), and CITES (Convention On The International Trade of Endangered Species).
 - b. All Nova USA Wood Products products are derived from forests which are naturally occurring, renewable and sustainable and are not harvested from forests or forest plantations where traditional or civil rights have been violated, forests having high conservation values which are threatened, forests that have been genetically modified or forests which have been converted to non-forest use. All Nova USA Wood Products and their packaging materials have been kiln dried and or fumigated and are free from live and or invasive insect, plant or animal species.
 - c. All Nova USA Wood Products products are 100 percent organic and grown without the use of chemical fertilization and are regenerated naturally or by seeding and replanting. The natural service life of products from Nova USA Wood Products exceed their natural growth cycle, trap and store carbon and are able to be reclaimed, reused or recycled. These products do not require for service any petroleum based or inorganic chemical treatments adhesives or coatings, do not require for service any specialized handling storage or disposal procedures and generate zero post-industrial or postconsumer non-biodegradable waste. These products are also safe for human and animal contact, meet Low VOC emission standards and meet International Building Code and International Residential Code requirements for naturally durable wood.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Prior to starting work inspect the substrate to ensure that it has been properly prepared to accept materials specified in this Section. Commencement of work shall imply acceptance of surfaces and deck conditions:
 - 1. Review drawings for items such as planters, hot tubs, sculptures or equipment that will be installed on top of wood decking, lumber and timbers. Verify with manufacturer whether additional supports are required.
 - 2. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
 - 3. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved submittals including the following:
 - 1. Install materials plumb, true to line, cut and fitted.
 - 2. Scribe and cope as required for accurate fit to adjacent construction.
 - 3. Use manufacturer's recommended fasteners.
 - 4. Fasten tight to supports. Provide shims if there are variations in framing.

3.4 CLEANING AND PROTECTION

- A. Protect from damage during construction operations. Promptly repair any damaged surfaces. Remove and replace work which cannot be satisfactorily repaired.
- B. Clean using materials recommended by the manufacturer to remove stains, dirt and debris prior to final acceptance.