

SECTION 074600

WOOD RAIN SCREEN AND SOFFIT SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide labor, materials and equipment necessary to complete the work of this Section, including the following:
 - 1. Wood rain screen and soffit system with concealed fasteners.
- B. Related Work: The following items are not included in this Section and will be performed under the designated Sections.
 - 1. Section 061000 – ROUGH CARPENTRY for rough carpentry work.
 - 2. Section 061600 – SHEATHING for sheathing under rain screen system.
 - 3. Section 062000 – FINISH CARPENTRY for finish carpentry work.
 - 4. Section 076200 – FLASHING AND SHEET METAL.

1.2 SUBMITTALS

- A. Submittals: Submit under provisions of Division 01.
- B. Product Literature: Manufacturer's product literature describing all components. Include installation recommendations and instructions.
- C. Verification Samples: For wood, clips and fasteners.
- D. Master Plan Sheet, PE Sealed for code compliance within the state of application.
- E. Green By Nature: Controlled Wood, Chain of Custody, Life Cycle Impact and Due Care Policies And Procedures. Submit Vendor documented, comprehensive and verifiable Policies and Procedures outlining step by step a process of verification and accountability related to Environmental Compliance Submittals.
- F. Tropical Hardwood Only: Certificate of Compliance, Green by Nature: Submit a certificate confirming 'Due Care' Environmental Compliance with "Green By Nature – Controlled Wood, Chain of Custody, Verification of Legal Origin, Verification of Legal Compliance, Life Cycle Impact, CITES, Buy American Act, U.S. Lacey Act, U.S. Foreign Corrupt Practices Act, U.S. Forced Labor Laws. "
- G. Tropical Hardwood Only: Certificate of Compliance, Verification of Legal Origin / Verification of Legal Compliance: Submit Third Party Environmental NGO such as Unifloresta™, Rainforest Alliance™ "Or Approved Equal" confirming audit of legal chain of custody and legal compliance from harvest source to importer as verification of U.S. Lacey Act Due Care Compliance.
- H. USGBC LEED Submittals Only: Certified Wood: Submit chain-of-custody certificates signed by manufacturer certifying that wood products comply with LEED forest certification and chain-of-custody requirements. Include evidence that mill and fabricator is certified for chain-of-custody

or that outsourcing agreements are in place approved by an FSC-accredited certification body. Include statement indicating costs for each certified wood product.

- I. USGBC LEED ONLY Submittals, Rapidly Renewable Materials (Bamboo Only): Submit documentation confirming compliance with rapidly renewable resource requirements under LEED guidelines. Include statement indicating costs for each certified wood product
- J. Certificates of Compliance: Submit documentation of the following if requested by Architect.
 - 1. Certificate of Compliance "Inspection": A vendor/manufacture certificate confirming product compliance with grade and quality requirements.
 - 2. Certificate of Compliance "Technical": A vendor/manufacture certificate confirming product compliance with minimum specified Physical, Mechanical and Technical performance requirements as defined by the specification.
 - 3. MSDS (Material Safety Data Sheet) – Submit a Material Safety and Data Sheet for the wood products supplied on the project.

1.3 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Products covered under this Section shall be produced by a single manufacturer unless otherwise specified with a minimum of fifteen years proven production 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.
- C. Preinstallation Conference: Conduct conference at Project site to comply with requirements in Division 01.

1.4 DELIVERY, STORAGE, AND HANDLING

- A. Protect materials during shipment, storage and construction against damage. If material is air dried, stickers of a minimum of 10mm shall be placed between each layer of boards when packed. If material is kiln dried, material shall be dense packed and wrapped.
- B. All units shall be individually strapped to wood pallets or blocking of a minimum thickness to allow the egress of lift forks using high strength strapping with a minimum of 4 straps per crate.
- C. 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 or discoloration.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design: Iron Woods™ Vanish Rain Screen by Timber Holdings USA LLC, Tel 888-932-9663, www.ironwoods.com.
- B. Material Options:
 - 1. Ipe.

- a. Profile: Nominal 1x4 inches.
 - b. Profile: Nominal 1x6 inches.
 2. Garapa.
 - a. Profile: Nominal 1x6 inches.
 3. Cumaru.
 - a. Profile: Nominal 1x6 inches.
 4. DNA Dark Red Balau
 - a. Profile: Nominal 1x6 inches.
 5. Vertical Grain Cedar
 - a. Profile: Nominal 1x4 inches.
 - b. Profile: Nominal 1x6 inches.
 6. Thermally Modified Ash
 - a. Profile: Nominal 1x6 inches.
 7. Other Wood Options
 - a. Profile: Nominal 1x6 inches.
 8. Geolam Composite
 - a. Profile: Nominal 1x6 inches.
 9. Fused Bamboo
 - a. Profile: Nominal 1x6 inches.
- C. Tropical Hardwood Wood Grade Requirements: Iron Woods Premium Select Architectural Grade (First 4 Faces 4 Edges) Inspected and Hand Selected for Serviceable appearance on 4 faces and 4 Edges (reversible).
 1. Grading Face, Back Face, and Edges – Clear All Heart.
 - a. Include - Appearance characteristics.
 - b. Include - Physical characteristics which can be removed using normal installation methods, tools, or sanding.
 - c. Exclude - Sound defects.
 - d. Exclude - Unsound defects.
 - e. Exclude - Milling defects.
 - f. Moisture Content: KD, moisture content of 12 to 18 percent.

2. Pre-Finishing: Pre-finished on all surfaces with First Coat clear penetrating oil based finish with color pigment as selected.
 3. End Coating: Ends sealed with Anchorseal or equal aqueous wax after cutting.
 4. Mechanical Properties: In accordance with U.S. Forest Products Laboratory.
 5. Fire Rating: In accordance with manufacturer's testing. Varies by species.
- D. Species: Cedar.
1. Grade: Clear VG or Clear Mixed Grain.
 2. Moisture Content: KD, moisture content of 12 to 18 percent.
 3. Pre-Finishing and End Coating: Pre-finished on all surfaces with First Coat clear penetrating oil based finish with color pigment as selected. Ends sealed with penetrating oil based finish after cutting.
 4. Pre-Finishing and End Coating: Pre-finished on all surfaces with alkyd based oil finish and top coated with 100 percent acrylic paint with color pigment as selected. Ends sealed with 100 percent acrylic paint after cutting.
 5. Mechanical Properties: In accordance with U.S. Forest Products Laboratory.
 6. Fire Rating: NFPA Class C, 2007 edition.
- E. Species: Dasso Fused Bamboo, rapidly renewable.
1. Grade: Not applicable.
 2. Moisture Content: Per manufacturer's recommendation.
 3. Profile: Nominal 1x6 inches.
 4. Pre-Finishing: Pre-finished on all surfaces with First Coat clear penetrating oil based finish with color pigment as selected.
 5. End Coating: Ends sealed with Anchorseal or equal aqueous wax after cutting.
 6. Mechanical Properties: In accordance with manufacturer's testing.
 7. Fire Rating: NFPA Class B, 2007 edition.
- F. Species: Thermally-modified Ash
1. Grade: Select and Better.
 2. Moisture Content: Per manufacturer's recommendation.
 3. Profile: Nominal 1x6 inches.
 4. Pre-Finishing: Pre-finished on all surfaces with First Coat clear penetrating oil based finish with color pigment as selected.
 5. End Coating: Ends sealed with penetrating oil based finish after cutting.
 6. Mechanical Properties: In accordance with manufacturer's testing.
 7. Fire Rating: In accordance with manufacturer's testing.
- G. Rain Screen Attachments:
1. Screws: VRSSDPAS T316 stainless steel.
 2. Screws: VRSSDSAS T410 stainless steel.
 3. Clips: VRSCOBPL, low profile 0.375 inch elevation.
 4. Clips: VRCCNBHP, high profile, 0.75 inch elevation.
 5. Starter Screw for Vertical or Diagonal Applications: 1884302SSBS
- H. Environmental Compliance Tropical Hardwood:
1. Green by Nature Compliance: All lumber shall meet minimum environmental requirements as defined under Green By Nature...Build With Conscience™ Controlled Wood, Chain of Custody, Life Cycle Impact and Due Care – Environmental Compliance Standards, Policies and Procedures confirming that:

- a. All Iron Woods 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, U.S. Foreign Corrupt Practices Act, U.S. Forced Labor Laws, ITTA (International Tropical Timber Trade Agreement), CITES (Convention On The International Trade of Endangered Species), and U.S. Buy American Act.
 - b. All Iron Woods 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 Iron Woods 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 Iron Woods 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 Iron Woods®, exceed their natural growth cycle, trap and store carbon and are able to be reclaimed, reused or recycled. Iron Woods® do not require for service any petroleum based or inorganic chemical treatments adhesives or coatings. Iron Woods® do not require for service any specialized handling storage or disposal procedures and generate zero post-industrial or post-consumer non-biodegradable waste. Iron Woods 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.
2. USGBC LEED ONLY Compliance: Certified Wood: Materials shall be produced from wood obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001, "FSC Principles and Criteria for Forest Stewardship."

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 conditions.
 1. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
 2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

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

3.3 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.

END OF SECTION