

SECTION 07 46 00

WOOD FAÇADE, CLADDING, 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 Cladding, Rain screen and Soffit System with Concealed Fasteners for Exterior and Interior Applications.
- B. Related Work: The following items are not included in this Section and will be performed under the designated Sections.
 - 1. Section 06 10 53 – ROUGH CARPENTRY for rough carpentry work.
 - 2. Section 06 20 00 – FINISH CARPENTRY for finish carpentry work.
 - 3. Section 07 62 00 – FLASHING AND SHEET METAL.

1.2 SUBMITTALS

- A. Submittals: Submit under provisions of Section 01 33 00.
- B. Product Literature: Manufacturer's product literature describing all components. Include installation guide containing Installation Details, Attachment Methods, Allowable Design Values for Cladding Materials, Maintenance Recommendations and Allowable Wind Pressure Ratings with PE Seal. **Non-Engineered Systems will not be allowed.**
- C. Verification Samples: For wood, clips and fasteners.
- D. Legal Lumber: 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.
- E. Tropical Hardwood Only: Certificate of Compliance, LEGAL LUMBER™: Submit a certificate confirming 'Due Care' Environmental Compliance with "LEGAL LUMBER™ – Controlled Wood, Chain of Custody, Verification of Legal Origin, Verification of Legal Compliance, Life Cycle Impact, CITES (Convention on the International Trade of Endangered Species), U.S. Buy American Act, U.S. Lacey Act, U.S. Foreign Corrupt Practices Act, U.S. Forced Labor Laws."
- F. 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.
- G. Certificates of Compliance: Submit documentation of the following if requested by Architect.
 - 1. Certificate of Compliance "Inspection": A vendor/manufacturer certificate confirming product compliance with grade and quality requirements.
 - 2. Certificate of Compliance "Technical": A vendor/manufacturer certificate confirming product compliance with minimum specified Physical, Mechanical and Technical performance requirements as defined by the specification including minimum allowable design values.
 - 3. MSDS (Material Safety Data Sheet) – Submit a Material Safety and Data Sheet for each component of the Rain Screen System 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.
- 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. Pre-installation 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, discoloration or moisture absorption. Materials shall not be placed on recently poured concrete.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design: Tropical Forest Products Cladding, Rain Screen and Soffit System with Clad Clip™ Hidden Fasteners by Tropical Forest Products LLC, Tel 905-672-8000, www.TropicalForestProducts.com.
- B. Material:
 - 1. Tropical Forest Products **Select Wood Species**
 - a. Profile: Nominal 1x4 IN.
 - b. Profile: Nominal 1x6 IN.
 - c. Profile: Nominal 1x8 IN. **Limited species availability, check with manufacturer.**
- C. Tropical Hardwood Wood Grade Requirements: Tropical Forest Products Premium Select Architectural Grade (Clear 4 Faces 4 Edges) Inspected and Hand Selected for Serviceable appearance on 4 faces and 4 Edges.
 - 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 14 percent.
 - 2. Pre-Finishing – It is recommended that a first coat of pre-finish be applied to all faces and edges prior to installation in exterior applications.
 - 2a. Exterior - Penetrating Oil Option: Pre-finished on all surfaces with Tropical Forest Products Ipe + Marine Oil™ clear penetrating oil based finish – Natural or approved equal.
 - 2b. Interior – Water Based or Hybrid finish as specified by architect.
 - 2c. For wood species requiring color stain application see manufacture for recommended products and color options unless specified by architect.

3. End Coating: Ends sealed with Tropical Forest Products Wood End Sealer™ or equal aqueous wax solution 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. Rain Screen Attachments:
1. Clip: Tropical Forest Products Clad Clip™ Heat Resistant Glass Infused Nylon 10mm Gap: CRSN10
 2. Clip to Wood (Exterior): Clad Clip™ Marine Screws: CRSS10 (#10 x 1.5 in. T316 stainless steel)
 3. Clip to Galvanized Steel (Exterior): Clad Clip™ Marine Screws: CRSS10 (#10 x 1.5 in. T316 stainless steel)
 4. Clip to Galvanized Steel (Interior): Clad Clip™ Marine Screws: CRSS10 (#10 x 1.5 IN T316 stainless steel)
 5. Starter Screw for Vertical or Diagonal Applications: #12 x4 IN T316 stainless steel or Tapcon
- DI. Environmental Compliance Tropical Hardwood:
1. Compliance: Certified Wood: All lumber shall meet minimum environmental requirements as defined under LEGAL LUMBER™ Due Care, Controlled Wood, Chain of Custody, Life Cycle Impact– Environmental Compliance Standards, Policies and Procedures confirming that:
 - a. All wood 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 wood 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 packaging materials have been kiln dried and or fumigated and are free from live and or invasive insect, plant or animal species.
 - c. All wood 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 the wood products specified exceed their natural growth cycle, trap and store carbon and are able to be reclaimed, reused or recycled. The specified wood products supplied do not require for service any petroleum based or inorganic chemical treatments for service. The specified wood products do not require for service any specialized handling storage or disposal procedures and generate zero post-industrial or post-consumer non-biodegradable waste. The wood products specified are also safe for human and animal contact, meet Low VOC emission standards and International Building Code and International Residential Code requirements for naturally durable wood.
 2. Compliance: FSC Certified Wood: In Circumstances where LEED credits are required. 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." **This may limit species availability so check with manufacturer before specifying.**

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 installation.
 - 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