

# SECTION 07 46 23 ENGINEERED BAMBOO RAINSCREEN CLADDING/SIDING SYSTEM

## **PART 1 GENERAL**

## 1.1 SECTION INCLUDES

- **A.** Exterior Lamboo Rainscreen™ Cladding System:
  - 1. Concealed Rainscreen clips and starter rail.
  - 2. Pre-drilled furring board.(Optional)
  - 3. Milled Lamboo cladding/siding.
  - 4. Milled Lamboo corner trim and termination trim.
- **B.** Interior wood finish system.

#### 1.2 RELATED SECTIONS

- A. Section 06 20 00 Finish Carpentry.
- B. Section 07 13 00 HDPE Membrane Waterproofing

## 1.3 REFERENCES

- A. National Fire Protection Association (NFPA).
- B. Uniform Building Code (UBC).
- **C.** International Building Code (IBC)

## 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.
- **C.** Shop Drawings: Provide manufacturer's standard details referenced to exterior and interior elevations of the project drawings.
- **D.** Selection Samples:
  - 1. Sample 12-inch (305 mm) boards chosen from Lamboo Rainscreen™ System milled to rainscreen profile.
  - 2. Lamboo Rainscreen™ Cladding to be used with tinted finish applied to 12-inches (305

mm) long sample.

- **E.** Verification Samples: For each finish product specified.
  - Lamboo Rainscreen™ System to be used with tinted finish applied 12-inches (305 mm) long sample.
- F. Manufacturer Qualifications: Minimum 5-year experience manufacturing similar products.
- G. Installer Qualifications: Minimum 2-year experience installing similar products.
- **H.** 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.
  - 4. Mockup of Rainscreen System complete with milled Lamboo Rainscreen™, chosen dimension, and chosen profile, Marine Grade Extruded Aluminum Starter Rail, Marine Grade Extruded Aluminum Rainscreen Clips and #10 x 1-inch (25 mm) Pan Head Screws #3 Square Head Screws, or #10 x 1-inch (25 mm) Trim Head T25 Stainless Steel Screws

#### 1.5 LEED SUBMITTALS

- **A.** LEED Submittal (MR credit 6 / MRc6): Rapidly renewable material. Documentation as required.
- **B.** LEED Submittal (EQ credit 2 / EQc2): Low Emitting Materials. (No added formaldehyde) Documentation as required.
- **C.** LEED Submittal (EA credit 2 / EAc2): Innovation in Design. (Environmentally Preferred material) Documentation as required.
- **D.** LEED Submittal (IN credit 2 / INc1): Innovation in Design. (Life Cycle / Environmental Impact) Documentation as required.

## 1.6 PRE-INSTALLATION MEETINGS

- **A.** Pre-Installation Meeting:
  - Meet at project site prior to delivery of finish carpentry materials and review condition and environmental controls required for proper installation and ambient conditioning in areas to receive work.
  - 2. Include in meeting the Contractor, Architect and other Owner Representatives, installers of finish carpentry, wet work including plastering, other finishes, painting, mechanical work and electrical work, and firms and persons responsible for continued operation (whether temporary or permanent) of HVAC systems as required to maintain temperature and humidity conditions.
  - 3. Proceed with finish carpentry only when everyone concerned agrees that required ambient conditions can be properly maintained.
- **B.** Convene the Pre-Installation Meeting a minimum two (2) weeks prior to starting work of this section.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- **A.** Deliver and store products in manufacturer's packaging bearing the brand name and manufacturer's identification until ready for installation.
- **B.** Use Proper Material Handling practices to avoid damage to finished products.
- C. Include in delivery of material a complete list of items shipped to include; Lamboo Rainscreen™, board length, hardware, finish and any other product accessories delivered with the Lamboo Rainscreen™ System.
- **D.** Protect finish Carpentry during transit, delivery, storage and handling to prevent damage, soiling, and deterioration. Lamboo Rainscreen<sup>™</sup> shall be delivered on a tarped flatbed truck or an enclosed van for small quantities. Keep Lamboo Rainscreen<sup>™</sup> tarped or store indoors until installation.
- E. Do not deliver finish carpentry materials until painting, wet work, grinding, and similar operation which could damage, soil or deteriorate Lamboo Rainscreen™ have been completed in installation areas. If finish carpentry must be stored in other than the installation areas, store only in areas meeting requirements specified for installation areas.
- **F.** Do not allow finish carpentry to get wet.

## 1.8 PROJECT CONDITIONS

**A.** Maintain environmental conditions within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

## 1.9 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 MANUFACTURERS

- A. Acceptable Manufacturer: Lamboo Technologies, LLC, 311 West Edwards Street, Litchfield, Illinois, 62056. Toll Free Telephone: 1 (866)-966-2999, Email: <a href="mailto:sales@lamboo.us">sales@lamboo.us</a>.
- **B.** Substitutions: Not permitted.
- **C.** Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 Product Requirements.

## 2.2 PRODUCT AVAILABILITY

- **A.** Lamboo Exterior Rainscreen™ Wall Cladding and Siding.
- **B.** Lamboo Interior Rainscreen™ Wall Cladding and Siding.
- C. Lamboo Soffit™ System.
- **D.** Lamboo Elements™ Exterior Design Products
- **E.** Lamboo Skyline™ Interior Ceiling System.

- **F.** Lamboo Structure™ Structural Beams and Glu-Lams.
- **G.** Lamboo Glazing™ Window and Door Products
- **H.** Lamboo Surface™ Interior Grade Products.
- I. Lamboo Contour™ Custom Profiled Products

#### 2.3 WOOD PRODUCT QUALITY STANDARDS AND REQUIREMENTS

## A. High Yield:

- 1. Lamboo products are made entirely out of 100% bamboo with specialized adhesives, binders, and treatments specific per the application.
- 2. Lamboo's engineered materials offer up to 98% to 99% usage avoiding the need to cut around defects found in other natural-based material.

# B. Key Advantages:

- 1. High material yield.
- 2. Rapidly Renewable Materials.
- 3. Uniform lengths up to 20-feet
- 4. Ease of workability.
- LEED credits.

#### 2.4 EXTERIOR FINISH MATERIAL:

## A. Lamboo Rainscreen™ Cladding – Exterior Finish:

1. **Exterior Finished Lamboo Cladding Boards:** Milled Lamboo cladding boards are provided in typical lengths of 8', 10', 12' and 16'. Custom sizes and colors available upon request.

## a. Rainscreen Board Lengths:

- 1.) 8-foot lengths. (EXT-8)
- 2.) 10-foot lengths. (EXT-10)
- 3.) 12-foot lengths. (EXT-12)
- 4.) 16-foot lengths. (EXT-16)
- 5.) Custom Sizes and Colors available upon request.
- b. **3-inch Rainscreen Cladding** at 11/16-inch thick. (Actual 11/16" thick with a 2-3/4" inch face) milled groove separating the boards. Lamboo is factory finished.
  - 1.) #LAMRSC-104-EXT Unfinished Vertical Carbonized.
  - 2.) #LAMRSH-104-EXT Finished Vertical Hazel.
  - 3.) #LAMRSG-104-EXT Finished Vertical Golden Honey.
  - 4.) #LAMRSA-104-EXT Finished Vertical Deep Amber.
  - 5.) #LAMRSF-104-EXT Finished Vertical Fawn.
  - 6.) #LAMRSO-104-EXT Finished Vertical Oxford Brown.

- c. **5-inch Rainscreen Cladding** at 11/16-inch thick. (Actual 11/16" thick with a 4-3/4" inch face) milled groove separating the boards. Lamboo is factory finished.
  - 1.) #LAMRSC-106-EXT Unfinished Vertical Carbonized.
  - 2.) #LAMRSH-106-EXT Finished Vertical Hazel.
  - 3.) #LAMRSG-106-EXT Finished Vertical Golden Honey.
  - 4.) #LAMRSA-106-EXT Finished Vertical Deep Amber.
  - 5.) #LAMRSF-106-EXT Finished Vertical Fawn.
  - #LAMRSO-106-EXT Finished Vertical Oxford Brown.
- d. **7-inch Rainscreen Cladding** at 11/16-inch thick. (Actual 11/16" thick with a 6-9/16" inch face) milled groove separating the boards. Lamboo is factory finished.
  - 1.) #LAMRSC-108-EXT Unfinished Vertical Carbonized.
  - 2.) #LAMRSH-108-EXT Finished Vertical Hazel.
  - 3.) #LAMRSG-108-EXT Finished Vertical Golden Honey.
  - 4.) #LAMRSA-108-EXT Finished Vertical Deep Amber.
  - 5.) #LAMRSF-108-EXT Finished Vertical Fawn.
  - 6.) #LAMRSO-108-EXT Finished Vertical Oxford Brown.

## 2. Aluminum Fasteners:

- a. Architectural grade extruded aluminum rainscreen "wall clips" with a T6-6063 corrosion resistant coating. (TitanClip0716)
- b. Architectural grade extruded aluminum rainscreen "starter rail" with a T6-6063 corrosion resistant coating. (TitanRail0716)
- 3. Stainless Steel Anchorages: (For Exterior Lamboo Rainscreen™ System Only)
  - a. Pan Head #3 Square Drive Stainless Steel Rainscreen Clip Screws, #10 x 1 inch (25 mm) (SS-3SQ-10x1)

## B. Lamboo Trim System:

- 1. Inside Corners:
  - a. (LAMRS-IC-EXT-8) 8 foot length;
  - b. (LAMRS-IC-EXT-10) 10 foot length;
  - c. (LAMRS-IC-EXT-12) 12 foot length;
  - d. (LAMRS-IC-EXT-16) 16 foot length

## 2. Outside Corners:

- a. (LAMRS-OC-EXT-8) 8 foot length;
- b. (LAMRS-OC-EXT-10) 10 foot length;
- c. (LAMRS-OC-EXT-12) 12 foot length;
- d. (LAMRS-OC-EXT-16) 16 foot length
- 3. **Door Trim:** Lamboo Door Trim will be factory finished.
  - a. (LAMRS-DT-EXT-8) 8 foot length;
  - b. (LAMRS-DT-EXT-10) 10 foot length;
  - c. (LAMRS-DT-EXT-12) 12 foot length;
  - d. (LAMRS-DT-EXT-16) 16 foot length
- 4. Window Trim: Lamboo Window Trim will be factory finished.
  - a. (LAMRS-WT-EXT-8) 8 foot length;
  - b. (LAMRS-WT-EXT-10) 10 foot length;

- c. (LAMRS-WT-EXT-12) 12 foot length; (LAMRS-WT-EXT-16) 16 foot length
- 5. **Touch-up finish product:** Touch-up finish product will be provided to apply to field cut edges when specified.
  - a. (LAMRS-TU-HAZ-QT-EXT) Hazel Touch Up Stain Quart
  - b. (LAMRS-TU-GLDHNY-QT-EXT) Golden Honey Touch Up Stain Quart
  - c. (LAMRS-TU-AMBER-QT-EXT) Deep Amber Touch Up Stain Quart
  - d. (LAMRS-TU-FAWN-QT-EXT) Fawn Touch Up Stain Quart
  - e. (LAMRS-TU-OXFORD-QT-EXT) Oxford Brown Touch Up Stain Quart
  - f. (LAMRS-TU-HAZ-GAL-EXT) Hazel Touch Up Stain Gallon
  - g. (LAMRS-TU-GLDHNY-GAL-EXT) Golden Honey Touch Up Stain Gallon
  - h. (LAMRS-TU-AMBER-GAL-EXT) Deep Amber Touch Up Stain Gallon
  - i. (LAMRS-TU-FAWN-GAL-EXT) Fawn Touch Up Stain Gallon
  - j. (LAMRS-TU-OXFORD-GAL-EXT) Oxford Brown Touch Up Stain Gallon

## C. Exterior Vapor Barrier: (For Exterior Lamboo Rainscreen™ System Only)

- 1. **Brand Name by others**. The Lamboo Rainscreen<sup>™</sup> System does not include the brand name of the exterior vapor barrier to be used in conjunction with the system installation.
- 2. **Thickness by others:** The Lamboo Rainscreen<sup>™</sup> System does not include the thickness of the exterior vapor barrier to be used in conjunction with the system installation.
- 3. **Quality by others.** The Lamboo Rainscreen™ System does not include the quality, thickness of the exterior vapor barrier to be used in conjunction with the system installation.

## 2.5 INTERIOR FINISH MATERIAL:

- A. Lamboo Rainscreen™ Cladding Interior Finish:
  - 1. **Interior Finish Lamboo Cladding Boards:** Cladding Boards in typical lengths of 8', 10', 12' and 16'. Custom sizes and colors available upon request.
    - a. Interior Rainscreen Board Lengths:
      - 1.) 8-foot lengths. (INT-8)
      - 2.) 10-foot lengths. (INT-10)
      - 3.) 12-foot lengths. (INT-12)
      - 4.) 16-foot lengths. (INT-16)
      - 5.) Custom Sizes and Colors available upon request.
    - b. **3-inch Rainscreen Cladding** at 11/16-inch thick. (Actual 11/16" thick with a 2-3/4" inch face) milled groove separating the boards. Lamboo is factory finished.
      - 1.) #LAMRSC-104-INT Unfinished Vertical Carbonized.
      - 2.) #LAMRSN-104-INT Finished Vertical Natural
      - 3.) #LAMRSH-104-INT Finished Vertical Hazel.
      - 4.) #LAMRSA-104-INT Finished Vertical Deep Amber.

- 5.) #LAMRSW-104-INT Finished Vertical Walnut.
- 6.) #LAMRSCF-104-INT Finished Vertical Coffee.
- 7.) #LAMRST-104-INT Finished Tiger Strand. (Only available in 8-foot lengths)
- c. **5-inch Rainscreen Cladding** at 11/16-inch thick. (Actual 11/16" thick with a 4-3/4" inch face) milled groove separating the boards. Lamboo is factory finished.
  - 1.) #LAMRSC-106-INT Unfinished Vertical Carbonized.
  - 2.) #LAMRSN-106-INT Finished Vertical Natural
  - 3.) #LAMRSH-106-INT Finished Vertical Hazel.
  - 4.) #LAMRSA-106-INT Finished Vertical Deep Amber.
  - 5.) #LAMRSW-106-INT Finished Vertical Walnut.
  - 6.) #LAMRSCF-106-INT Finished Vertical Coffee.
  - 7.) #LAMRST-106-INT Finished Tiger Strand. (Only available in 8-foot lengths)
- d. **7-inch Rainscreen Cladding** at 11/16-inch thick. (Actual 11/16" thick with a 6-9/16" inch face) milled groove separating the boards. Lamboo is factory finished.
  - 1.) #LAMRSC-108-INT Unfinished Vertical Carbonized.
  - 2.) #LAMRSN-108-INT Finished Vertical Natural
  - 3.) #LAMRSH-108-INT Finished Vertical Hazel.
  - 4.) #LAMRSA-108-INT Finished Vertical Deep Amber.
  - 5.) #LAMRSW-108-INT Finished Vertical Walnut.
  - 6.) #LAMRSCF-108-INT Finished Vertical Coffee.
  - 7.) #LAMRST-108-INT Finished Tiger Strand. (Only available in 8-foot lengths)

## 2. Fasteners: Lamboo Rainscreen™ Fasteners:

- a. Architectural grade extruded aluminum rainscreen "wall clips" with a T6-6063 corrosion resistant coating. (TitanClip0716)
- b. Architectural grade extruded aluminum rainscreen "starter rail" with a T6-6063 corrosion resistant coating. (TitanRail0716)
- 3. Anchors: Lamboo Rainscreen™ Zinc Coated Anchorages: (For Interior Lamboo Rainscreen™ System Only)
  - a. Pan Head, Zinc Coated Steel, Phillips Drive, Rainscreen Rail Screws, #10, 3/4-inch (19.05 mm) (ZC-PH-10x3/4)

## B. Lamboo Trim System:

- 1. Inside Corners:
  - a. (LAMRS-IC-INT-8) 8 foot length;
  - b. (LAMRS-IC-INT-10) 10 foot length;
  - c. (LAMRS-IC- INT-12) 12 foot length;
  - d. (LAMRS-IC-INT-16) 16 foot length
- 2. **Outside Corners:** (LAMRS-OC-INT-8) 8 foot length; (LAMRS-OC-INT-10) 10 foot length; (LAMRS-OC-INT-12) 12 foot length; (LAMRS-OC-INT-16) 16 foot length

- 3. **Door Trim:** Lamboo Door Trim will be factory finished.
  - a. (LAMRS-DT-INT-8) 8 foot length;
  - b. (LAMRS-DT-INT-10) 10 foot length;
  - c. (LAMRS-DT-INT-12) 12 foot length;
  - d. (LAMRS-DT-INT-16) 16 foot length
- 4. Window Trim: Lamboo Window Trim will be factory finished.
  - a. (LAMRS-WT-INT-8) 8 foot length;
  - b. (LAMRS-WT-INT-10) 10 foot length;
  - c. (LAMRS-WT-INT-12) 12 foot length;
  - d. (LAMRS-WT-INT-16) 16 foot length
- 5. **Touch-up finish product:** Touch-up finish product will be provided to apply to field cut edges when specified.
  - a. (LAMRS-TU-HAZEL-QT-INT) Hazel Touch Up Stain Quart
  - b. (LAMRS-TU-NATURAL-QT-INT) Natural Touch Up Stain Quart
  - c. (LAMRS-TU-AMBER-QT-INT) Deep Amber Touch Up Stain Quart
  - d. (LAMRS-TU-COFFEE-QT-INT) Coffee Touch Up Stain Quart
  - e. (LAMRS-TU-WALNUT-QT-INT) Walnut Touch Up Stain Quart
  - f. (LAMRS-TU-TIGER-QT-INT) Tiger Strand Touch-Up Stain Quart
  - g. (LAMRS-TU-HAZEL-GAL-INT) Hazel Touch Up Stain Gallon
  - h. (LAMRS-TU-NATURAL-GAL-INT) Natural Touch Up Stain Gallon
  - i. (LAMRS-TU-AMBER-GAL-INT) Deep Amber Touch Up Stain Gallon
  - j. (LAMRS-TU-COFFEE-GAL-INT) Coffee Touch Up Stain Gallon
  - k. (LAMRS-TU-WALNUT-GAL-INT) Walnut Touch Up Stain Gallon
  - I. (LAMRS-TU-TIGER-GAL-INT) Tiger Strand Touch Up Stain Gallon

#### 2.6 LAMBOO SOFFIT SYSTEMS:

- A. Profile Options:
  - 1. Lamboo Rainscreen™ Soffit System: Exterior Finish.
  - 2. Lamboo Tongue & Groove Soffit System: Exterior Finish.
- B. Lamboo Rainscreen™ Soffit System: Exterior Finished Lamboo Soffit/Cladding System Boards: Milled Lamboo cladding boards are provided in typical lengths of 8', 10', 12' and 16'. Custom sizes and colors available upon request.
  - 1. Lamboo Rainscreen Board Lengths:
    - a. 8-foot lengths. (EXT-8)
    - b. 10-foot lengths. (EXT-10)
    - c. 12-foot lengths. (EXT-12)
    - d. 16-foot lengths. (EXT-16)
    - e. Custom Sizes and Colors available upon request.
  - 2. **3-inch Rainscreen Soffit/Cladding** at 11/16-inch thick milled groove separating the boards. Lamboo is factory finished.
    - a. #LAMRSC-104-EXT Unfinished Vertical Carbonized.
    - b. #LAMRSH-104-EXT Finished Vertical Hazel.
    - c. #LAMRSG-104-EXT Finished Vertical Golden Honey.
    - d. #LAMRSA-104-EXT Finished Vertical Deep Amber.

- e. #LAMRSF-104-EXT Finished Vertical Fawn.
- f. #LAMRSO-104-EXT Finished Vertical Oxford Brown.
- 3. **5-inch Rainscreen Soffit/Cladding** at 11/16-inch thick milled groove separating the boards. Lamboo is factory finished.
  - a. #LAMRSC-106-EXT Unfinished Vertical Carbonized.
  - 1.) #LAMRSH-106-EXT Finished Vertical Hazel.
  - 2.) #LAMRSG-106-EXT Finished Vertical Golden Honey.
  - 3.) #LAMRSA-106-EXT Finished Vertical Deep Amber.
  - 4.) #LAMRSF-106-EXT Finished Vertical Fawn.
  - 5.) #LAMRSO-106-EXT Finished Vertical Oxford Brown.
- 4. **7-inch Rainscreen Soffit/Cladding** at 11/16-inch thick milled groove separating the boards. Lamboo is factory finished.
  - a. #LAMRSC-108-EXT Unfinished Vertical Carbonized.
  - b. #LAMRSH-108-EXT Finished Vertical Hazel.
  - c. #LAMRSG-108-EXT Finished Vertical Golden Honey.
  - d. #LAMRSA-108-EXT Finished Vertical Deep Amber.
  - e. #LAMRSF-108-EXT Finished Vertical Fawn.
  - f. #LAMRSO-108-EXT Finished Vertical Oxford Brown.

## 5. Aluminum Fasteners:

- a. Architectural grade extruded aluminum rainscreen "wall clips" with a T6-6063 corrosion resistant coating. (TitanClip0716)
- b. Architectural grade extruded aluminum rainscreen "starter rail" with a T6-6063 corrosion resistant coating. (TitanRail0716)
- 6. Stainless Steel Anchorages: (For Exterior Lamboo Rainscreen™ System Only)
  - a. Pan Head #3 Square Drive Stainless Steel Rainscreen Clip Screws, #10 x 1 inch (25 mm) (SS-3SQ-10x1)
- C. Lamboo Tongue & Grove (T&G) Soffit System: Exterior Finished Lamboo Tongue & Grove Soffit/Cladding System Boards: Milled Lamboo cladding boards are provided in typical lengths of 8', 10', 12' and 16'. Custom sizes and colors available upon request.
  - 1. T&G Actual 3" face x 11/16-inch thick T&G:
    - a. #LAMTGC-104-EXT Unfinished Vertical Carbonized.
    - b. #LAMTGH-104-EXT Finished Vertical Hazel.
    - c. #LAMTGG-104-EXT Finished Vertical Golden Honey.
    - d. #LAMTGA-104-EXT Finished Vertical Deep Amber.
    - e. #LAMTGF-104-EXT Finished Vertical Fawn.
    - #LAMTGO-104-EXT Finished Vertical Oxford Brown.

## 2. T&G Actual 5" face x 11/16-inch thick T&G:

- a. #LAMTGC-106-EXT Unfinished Vertical Carbonized.
- b. #LAMTGH-106-EXT Finished Vertical Hazel.
- c. #LAMTGG-106-EXT Finished Vertical Golden Honey.
- d. #LAMTGA-106-EXT Finished Vertical Deep Amber.

- e. #LAMTGF-106-EXT Finished Vertical Fawn.
- f. #LAMTGO-106-EXT Finished Vertical Oxford Brown.

## 3. T&G Actual 6-3/4" face x 11/16-inch thick T&G:

- a. #LAMTGC-108-EXT Unfinished Vertical Carbonized.
- b. #LAMTGH-108-EXT Finished Vertical Hazel.
- c. #LAMTGG-108-EXT Finished Vertical Golden Honey.
- d. #LAMTGA-108-EXT Finished Vertical Deep Amber.
- e. #LAMTGF-108-EXT Finished Vertical Fawn.
- f. #LAMTGO-108-EXT Finished Vertical Oxford Brown.
- 4. **Attachments:** For the Tongue & Grove System.
  - a. Attachment System Type #1: 1 1/4-inch air nailed through the tongue @ 12-inches o.c..
  - b. **Attachment System Type #2**: #6 Screw, 1 1/4-inch Stainless Steel Screws screwed through the tongue that is slightly countersunk @ 16-inches o.c.

## D. Miscellaneous Parts and Requirements for both Soffit Systems:

- 1. **Ceiling Trim Strip:** Size can vary based on desired profile (with optional plugs)
- 2. **Ceiling Soffit Substrate:** (By Others) Minimum 7/16-inch OSB or equal typical for both soffit systems.
- 3. **Exterior Vapor Barrier:** (Required for both, the Exterior Lamboo Rainscreen™ Soffit System and the Lamboo Tongue & Grove (T&G) Soffit System)
  - a. **Brand Name by others**. The Lamboo Rainscreen™ System does not include the brand name of the exterior vapor barrier to be used in conjunction with the system installation.
  - b. **Thickness by others:** The Lamboo Rainscreen™ System does not include the thickness of the exterior vapor barrier to be used in conjunction with the system installation.
  - c. **Quality by others.** The Lamboo Rainscreen™ System does not include the quality, thickness of the exterior vapor barrier to be used in conjunction with the system installation.

## 2.7 MATERIAL (WOOD) SPECIES

- A. Engineered Bamboo:
  - Product: Lamboo Rainscreen™.
  - 2. Uses:
    - a. Exterior applications.
    - b. Interior applications.
  - 3. Toxicity: Low VOC adhesives, does not produce off-gassing when sanding, profiling or handling materials.

- 4. Anti-Microbial Properties: Naturally anti-bacterial material
- 5. Pests and Insects: Bamboo includes silica fibers which helps to resist insects and wood eating pests.
- 6. Fire Resistance:
  - a. ASTM E84 Class B
- 7. Density and Buoyancy:
  - a. Janka Rating 1900lbf
  - b. Average Weight: 44lbs/cubic foot
  - c. Specific Gravity: 0.60
- 8. Workability: Specialized adhesives, binders and treatments specific per the application.

## PART 3 EXECUTION

#### 3.1 EXAMINATION

- **A.** Do not begin installation until substrates have been properly prepared.
- **B.** If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

## 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.
- **C.** Condition wood material for a minimum of 48 hours to average prevailing humidity conditions in installation areas prior to installing.

## 3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
  - 1. Install all inside and outside corners with fasteners through the attached flanges directly to sheathing. (fasteners provided by others).
  - Starter rail.
  - Cor-A-Vent Siding Ventilation System.
  - 4. Initial bottom board.
  - 5. Add wall clips to anchor the top of the initial bottom board @ 20-inches o.c. for 3" & 5" and 16-inches o.c. for 7" Rainscreen system.
  - 6. Add second board
  - 7. Add wall clips and repeat until reaching the top of the wall

- 8. Add Cor-A-Vent to top of wall termination for entire length of Rainscreen.
- 9. Add Last board and face fasten through Lamboo & Cor-A-Vent then into sheathing.
- 10. NOTE: Use Finish Touch-Up on all field cut ends of the Rainscreen™ cladding, transition boards, inside and outside corners.
- **B.** Refer to Drawings for information pertaining dimension of milled siding, treatment of corners whether that be mitered boards or wood corner boards with built-in furring for concealed fastening, trim for doors and windows with built in furring for concealed fastening.
- **C.** Discard units of material which are unsound, warped, bowed, twisted, not adequately seasoned, or which are of defective manufacture with respect to surface, size, or pattern.
- **D.** Install moisture barrier (Supplied by others) over exterior wall sheathing prior to beginning the installation of the Lamboo Rainscreen™ System.
- **E.** Install the work plumb, level, true and straight with no distortions. Shim as required using concealed shims.
- **F.** Refinish cut surfaces or repair damage finish at cuts by applying the final coat of wood finish on the entire surface of the wood wall.
- **G.** Anchorage of Finish Carpentry:
  - Install engineered corners & window/door trim prior to installation of milled siding boards.
  - 2. Exterior Installation: Install extruded aluminum concealed clips securing with supplied Pan Head Square Drive Stainless Steel Rainscreen Clip Screws, #10 1 inch (25 mm).
  - 3. Interior Installation: Install extruded aluminum concealed clips securing with supplied Pan Head, Zinc Coated Steel, Phillips Drive, Rainscreen Rail Screws, #10, 3/4-inch (19.05 mm).
- H. Carefully coordinate electrical requirements and wiring with millwork installation.

#### 3.4 PROTECTION

- **A.** Repair damaged and defective finish carpentry work wherever possible to eliminate defects functionality and visually; where not possible to repair properly, replace woodwork. Adjust joinery for uniform appearance.
- **B.** Clean finish carpentry work on exposed and semi-exposed surfaces. Apply a complete top coat of wood finish to all exposed and semi-exposed surfaces.
- **C.** Installer of finish carpentry shall advise Contractor of final protection and maintained conditions necessary to ensure that work will be without damage or deterioration at the time of acceptance.
- **D.** Protect installed products until completion of project.
- E. Touch-up, repair or replace damaged products before Substantial Completion.
- **F.** Refinish field cuts by applying the final coat of wood finish directly on the cut ends prior to abutting an additional panel and before adding corner trim system.

# **END OF SECTION**

(REMAINING SECTION INTENATIONALLY LEFT BLANK)