



SECTION 07 46 00

RAINSCREEN WOOD SIDING SYSTEM

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Exterior rainscreen wood siding system and accessories.
 - 1. Horizontal rainscreen wood siding application with concealed fasteners.
 - 2. Vertical rainscreen wood siding application with concealed fasteners.
 - 3. Diagonal rainscreen wood siding application with concealed fasteners.
- B. Interior wood finish system.

1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry.
- B. Section 06 20 00 - Finish Carpentry.
- C. Section 06 16 00 - Sheathing.
- D. Section 07 13 00 - HDPE Membrane Waterproofing.

1.3 REFERENCES

- A. National Fire Protection Association (NFPA).
- B. Uniform Building Code (UBC).

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. Selection Samples:
 - 1. Sample 5.5 inches (140 mm) boards in chosen wood species milled to rainscreen clip pattern for use on siding, soffits, and ceilings.

2. Wood board of species to be used with a tinted finish applied 5.5 inches (140 mm) long.
 3. Submit a sample of rainscreen clip. Nova ExoClad QuickClip Rainscreen Siding System is recommended.
- D. LEED Submittals, Certified Wood: Submit chain-of-custody certificates signed by manufacturer certifying that wood siding products comply with LEED forest certification and chain-of-custody requirements. Include evidence that mill is certified for chain-of-custody by a third party certification body. Include a statement indicating costs for each certified wood siding product.
- E. Alternate Wood Certification: Submit chain-of-custody certificates signed by manufacturer certifying that wood siding products comply with Nova USA Wood Products Chain-of-Custody requirements. Include a statement indicating costs for each certified wood siding product.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years experience producing similar products.
- B. Installer Qualifications: Minimum 2 years experience installing similar products.
- C. Mockup: Provide a mockup 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 clip system complete with milled siding of chosen wood species, chosen dimension, and chosen profile, marine grade extruded aluminum resilient rainscreen siding clips (Nova ExoClad QuickClip) and exterior grade #9 x 2" T-25 screws or alternate.
- D. Regulatory Requirements: Comply with requirements of authorities having jurisdiction and applicable codes at the location of the project.

1.6 DELIVERY, STORAGE AND HANDLING RAINSCREEN WOOD SIDING

- A. Deliver, store and handle wood siding materials and rainscreen system components in accordance with manufacturer's recommendations. Protect from soiling, damage and construction operations.
- B. Handle materials to avoid damage.
- C. Include in delivery of material a complete list of items shipped to include wood grade and species, board length and count, hardware, finish and any other product accessories delivered with the wood rainscreen system.
- D. Do not allow finish carpentry to get wet.

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.

1.9 WARRANTY

- A. Provide manufacturer's standard 25-year warranty for hardwood siding material and 20-year warranty for thermally modified wood siding material against insect damage and decay.

1.10 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: Nova USA Wood Products, which is located at: 3821 24th Ave, Forest Grove, OR 97116; Telephone: 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 EXTERIOR FINISH MATERIALS

- A. Wood Rainscreen Wall:
 - 1. Milled wood siding boards nominally sized at 1x4 with a 3.25" overall width and a 2.625" exposed face. Coverage is 2.85". Random lengths ranging from 8 feet to 18 feet.
 - 2. Milled wood siding boards nominally sized at 1x6 with a 5.25" overall width and 4.625" exposed face. Coverage is 4.85". Random lengths ranging from 8 feet to 18 feet.
 - 3. Milled wood siding boards nominally sized at 1x 8 with a 7" overall width and 6.375" exposed face. Coverage is 6.60". Random lengths ranging from 8 feet to 18 feet.
 - 4. Fasteners and Anchorages: Nova ExoClad QuickClip Nylon 6/6 Glass Infused resilient rainscreen clips-1.5" long with .75" stand-off. #9 x 2 inch (25 mm) T-25 exterior grade screws or alternate. No furring strips required.
- B. Species
 - 1. Wood Siding: Nova Premium Ipe Hardwood Siding (Handroanthus spp).
 - a. Brazilian Hardwood, often called Brazilian Walnut. Exotic wood from South America. Dark brown in color. Hard, strong, and naturally resistant to insects, rot, abrasion, and weather. Twice as dense as most woods and up to five times harder.
 - b. NFPA Class A Fire Resistance. UBC Class 1.
 - c. Minimum Janka Rating 3000 lbs.
 - d. Hardness of wood requires predrilling for nails and screws. Recommended for rainscreen siding along with Nova's ExoClad QuickClip system. No predrilling required for ExoClad QuickClip system. Finishes and sands smooth.
 - 2. Wood Siding: Nova Premium Cumaru Hardwood Siding (Dipteryx Odorata).
 - a. South American Hardwood often called Brazilian Chestnut. Heartwood is medium to dark brown, sometimes with a reddish or purplish hue. Fine, uniform grain and texture with very small open pores. Excellent durability and weathering

properties. The wood is rated very durable regarding insect and decay resistance.

- b. NFPA Class A Fire Resistance. UBC Class 1.
 - c. Minimum Janka Rating 3000 lbs.
 - d. Hardness of wood requires predrilling for nails and screws. Recommended for rainscreen siding along with Nova's ExoClad QuickClip system. No predrilling required for ExoClad QuickClip system. Finishes and sands smooth.
3. Wood Siding: Nova Premium Batu, Red Balau Hardwood Siding (Shorea guiso).
- a. Southeast Asian hardwood, also known as Red Balau. Brown in color with an even grain. Durable and resistant to insects, rot, abrasion, and weather. Strong, scratch resistant and the highest rating for fire resistance.
 - b. NFPA Class A Fire Resistance. UBC Class 1.
 - c. Minimum Janka Rating 2000 lbs.
 - d. Hardness of wood requires predrilling for nails and screws. Recommended for rainscreen siding along with Nova's ExoClad QuickClip system. No predrilling required for ExoClad QuickClip system. Finishes and sands smooth.
4. Wood Siding: Nova Premium Bangkirai, Yellow Balau Hardwood Siding (Shorea laevis).
- a. Southeast Asian hardwood, also known as Yellow Balau. Tan brown in color with an even grain. Durable and resistant to insects, rot, abrasion, and weather. Strong, scratch resistant and the highest rating for fire resistance.
 - b. NFPA Class A Fire Resistance. UBC Class 1.
 - c. Minimum Janka Rating 2000 lbs.
 - d. Hardness of wood requires predrilling for nails and screws. Recommended for rainscreen siding along with Nova's ExoClad QuickClip system. No predrilling required for ExoClad QuickClip system. Finishes and sands smooth.
5. Wood Siding: Nova Thermally Modified Ayous Hardwood Siding (Shorea laevis).
- a. West African Cedar, also known as Obeche and Wawa. Caramel brown in color due to thermal modification with an even grain. Durable and resistant to insects, rot, and weather. Similar in density and hardness to Western Red Cedar. Treat with fire retardant coating if Class A fire resistance is required.
 - c. Minimum Janka Rating 500 lbs.
 - d. Recommended for rainscreen siding along with Nova's ExoClad QuickClip system. No predrilling required for ExoClad QuickClip system. Finishes and sands smooth.

D. Accessories

1. Wood Finish: Nova ExoShield Exterior Oil Finish.
- a. Seven colors available: Clear, Natural, Mahogany, Walnut, Black Walnut, Platinum and Antique Bronze.
 - b. Penetrating premium exterior finish using pure tung oil, UV blocker, trans-oxide pigments, and fungicide.
 - c. Low VOC. (<250 g/L)
 - d. Up to 800 sf per gallon on hardwood surfaces. 400 sf per gallon on softwood.

- e. DekGuard Fire Retardant may be added to ExoShield in the field to achieve Class A fire rating. Contact fire retardant manufacturer for testing results and requirements.
- 2. Trim pieces using Nova solid wood siding material.
 - a. Corners may be trimmed with mitered edges.
 - b. Corners may also be finished with a vertical corner board with an overlay joint.
- 3. Attachment using Nova ExoClad QuickClip Rainscreen Siding Clips
 - a. 1-1/2 inch wide Nylon 6/6 Glass Infused resilient rainscreen siding clips and exterior grade #9 x 2" T-25 screws or alternate.
 - b. Nova ExoClad QuickClip Rainscreen Siding Clips eliminate the need for furring strips.
- 4. Additional Components / Accessories:
 - a. Window and door casing transition trim strips.
 - b. Rainscreen siding vent, Cor-A-Vent SV-3, at top and bottom for pest protection and drainage.

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. Prior to the start of installation, inspect existing conditions to ensure surfaces are suitable for installation of rainscreen siding system and that adequate structural support has been provided.
- B. Confirm structural sheathing, drainage plane, windows, and doors have been installed to project requirements. Starting work indicates the installer's acceptance of existing conditions.

3.3 INSTALLATION NOVA RAINSCREEN WOOD SIDING

- A. Nova Rainscreen Wood Siding System Installation Guidelines are available from the manufacturer. Install in accordance with manufacturer's instructions including the following:
 - 1. Install outside and inside corner systems, and window and door trim, prior to installation of rainscreen wood siding.
 - 2. Installed materials must be plumb, true to line, cut and fitted.
 - 3. For installation on exterior walls, install over a moisture barrier.
 - 4. Use the manufacturer's recommended rainscreen clips and fasteners.

3.4 CLEANING AND PROTECTING

- A. Protect from moisture and 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