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SECTION 07 46 00

THERMALLY MODIFIED WOOD RAIN SCREEN SIDING SYSTEM

PART 1 GENERAL

1.1 SUMMARY

- A. Provide rain screen thermally modified wood siding system and accessories.
 - 1. Horizontal rain screen thermally modified wood siding application with concealed fasteners.
 - 2. Vertical rain screen thermally modified wood siding application with concealed fasteners.
 - 3. Horizontal rain screen thermally modified wood siding application with furring strips and exposed fasteners.
 - 4. Vertical rain screen thermally modified wood siding application with furring strips and exposed fasteners.
- B. Related Sections: Refer to the following specification sections for coordination:
 - 1. Section 05 40 00 - Cold-Formed Metal Framing.
 - 2. Section 06 10 00 - Rough Carpentry.
 - 3. Section 07 25 00 – Weather Barriers
 - 4. Section 07 60 00 - Flashing and Sheet Metal.
 - 5. Section 07 90 00 - Joint Protection.

1.2 REFERENCES

- A. American Wood Protection Association (AWPA):
 - 1. Guidance Document N – Data Requirements for Listing Thermally Modified Wood
 - 2. AWPA E10-14 – Soil Block Decay Test
- B. American Society for Testing and Materials (ASTM):
 - 1. ASTM D143 – Standard Test Methods for Small Clear Specimens of Timber.
 - 2. ASTM D2395 – Standard Test Methods for Density and Specific Gravity (Relative Density) of Wood and Wood-Based Materials

1.3 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. Material descriptions, dimensions, and profiles.
 2. Preparation instructions and recommendations.
 3. Storage and handling requirements and recommendations.
 4. Installation methods.
- C. Samples: Submit representative sample of actual thermally modified wood siding material and rainscreen clips.
- D. Verification Samples: For each finish product specified, two samples, 4 inches long minimum samples of siding and trim in selected finish and color.
- E. FSC Certified Wood Submittals: FSC certification upon request –Contact Arbor Wood Co.
- F. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- G. Test Reports: Submit manufacturer's test reports from testing performed by qualified, independent testing laboratories.
- H. Product Evaluation Reports: Submit manufacturer's product evaluation reports from accredited, evaluation service.
- I. Warranty Documentation: Submit manufacturer's standard warranty.

1.4 QUALITY ASSURANCE

- A. Single Source: To ensure functional and appearance compatibility, siding, furring strips, concealed fasteners and all trim pieces shall be products by Arbor Wood Co.
- B. Regulatory Requirements: Comply with requirements of authorities having jurisdiction and applicable codes at the location of the project.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store and handle materials in accordance with manufacturer's instructions.
- B. Store thermally modified wood siding on flat, level surface, raised above floor or ground, with adequate support to prevent sagging.
- C. Keep thermally modified wood siding covered and free of dirt, debris, and moisture until installation.
- D. Protect materials and finish during storage, handling, and installation to prevent damage.

1.6 WARRANTY

- A. Manufacturer's Warranty: Provide manufacturer's standard 20- year warranty for Thermally Modified Wood Siding (*when installed per manufacturer recommendations*).

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Arbor Wood Co., which is located at: 1025 London Rd,

Duluth, MN 55802; Toll Free Tel: 1-855-414-2727; Email: hello@arborwoodco.com;
Web: arborwoodco.com

- B. Siding, Trim, and Furring shall be manufactured from Arbor Wood Co. thermally modified wood, certified conforming to AWPA Use-Class UC3B, Above Ground, Exposed (see AWPA Guidance N for required tests). Manufacturer should be able to present certification, and documentation of the quality processes used during thermal modification. Wood shall be sourced & processed entirely in the U.S.
- C. Substitutions: Not permitted.

2.2 THERMALLY MODIFIED WOOD SIDING

- A. Arbor Wood Co. Thermally Modified Wood Siding:
 - 1. Siding used as exterior rainscreen system over wood furring strips and/or attached with concealed rainscreen clips.
 - 2. Species: White Ash or Southern Yellow Pine
 - 3. Grade: FAS / Select & Better
 - 4. Actual Size:
 - a. Tongue & Groove profile - 3/4" x 5", 3/4" x 3"
 - b. Hidden Fastener profile - 3/4" x 4.5"
 - 5. Length: 6'-0" or Longer.
 - 6. Exposed Texture: Smooth.
 - 7. Color: Color and appearance is a natural feature of wood, and may vary slightly from one piece to another. Wood will naturally patina when left unfinished.

2.3 THERMALLY MODIFIED WOOD TRIM

- A. Arbor Wood Co. Thermally Modified Wood Trim:
 - 1. Species: Thermally Modified White Ash or Southern Yellow Pine.
 - 2. Grade: FAS / Select & Better
 - 3. Size: 1 x 2, nominal; 3/4 x 1-1/2 inches, actual.
 - 4. Size: 1 x 4, nominal; 3/4 x 3-1/2 inches, actual.
 - 5. Size: 1 x 6, nominal; 3/4 x 5-1/2 inches, actual.
 - 6. Length: 6'-0" or Longer.
 - 7. Exposed Texture: Smooth.
 - 8. Color: Color and appearance is a natural feature of wood, and may vary slightly from one piece to another. Wood will naturally patina when left unfinished.

2.4 THERMALLY MODIFIED WOOD FURRING STRIPS

- A. Arbor Wood Co. Thermally Modified Wood Furring:
 - 1. Species: Thermally Modified White Ash or Southern Yellow Pine.
 - 2. Size: 1 x 2, nominal; 3/4 x 2 inches, actual.

2.5 FASTENERS

- A. Rain Screen Clips: Climate-Shield CSRSC2, 2 inch wide marine grade aluminum alloy rain screen siding clips and stainless steel screws.
- B. Additional Components/Accessories:
 - 1. Window and Door casing strips
 - 2. Climate-Shield Rain Screen Starter rail above openings and at starter course or rain screen wood siding materials. (CSSR8 Horizontal siding installations, CSVSSR8 Vertical siding installations.)

3. As indicated on Drawings.
- C. Fasteners (where face nailing or fastening is required only):
1. Type: Screws. #8 stainless steel w/ trim head, minimum 2 ½" recommended
 2. Type: As indicated on Drawings.

2.6 FINISHES

- A. Wood Finish: (manufacturer recommended)
1. Cutek Extreme Penetrating Oil
 2. Color to be selected from manufacturers full range.
 3. For additional information see Section 09 90 00 - Painting and Coating.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Confirm that all critical dimensions are as specified on the drawings. Examine wood framing members to receive Arbor Wood Co. thermally modify wood rainscreen siding system.
- B. Notify Architect of conditions that would adversely affect installation. Do not begin installation until unacceptable conditions are corrected.

3.2 PREPARATION

- A. Repair substrate flaws or defects before applying siding or soffits.
- B. Where necessary, fur surfaces to an even plane and free from obstructions before application.

3.3 INSTALLATION

- A. Install Arbor Wood Co. siding and trim in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Climate-Shield rain screen wood siding system installation guidelines are available from manufacturer. Install in accordance with manufacturer's instructions
- C. Do not install Arbor Wood Co. siding or trim in structural or load-bearing applications.
- D. Install Arbor Wood Co. siding and trim plumb, level, square, and true to line.
- E. Install exterior Arbor Wood Co. siding and trim with flush, tight joints.
- F. Fastening: Install fasteners in accordance with local building code.
1. Rainscreen Installation with Concealed Clips:
 - a) Maximum of 16 inches on center.
 - b) At Butt joints 1 clip top and bottom.
 2. Rainscreen Installation with Furring Strips:
 - a) Maximum of 16 inches on center.
 - b) At Butt joints provide 1" overlap on furring strip.
- G. Install siding, soffits, and accessories in accordance with best practice, with all joint members plumb and true.
- H. Fill any nail and screw holes with wood filler to match finished color.

- I. Finishing:
 - 1. Apply Cutek Extreme Penetrating Oil
 - a) Pre-finish Trim and Siding before installation per Finish Manufacturers Recommendations.
 - b) As specified in this Section and/or Section 09 90 00 - Painting and Coating.

3.4 ADJUSTING

- A. Repair minor damages to Arbor Wood Co. siding in accordance with manufacturer's instructions and as approved by Architect.
- B. Remove and replace with new material, damaged Arbor Wood Co. siding that cannot be successfully repaired, as determined by Architect.

3.5 CLEANING AND PROTECTION

- A. After application of siding and trim, clean as necessary to remove all fingerprints and soiled areas.
- B. Upon completion of siding application, clean entire area, removing all scrap, packaging, and unused materials related to this work.
- C. Protect installed Arbor Wood Co. siding to ensure that, except for normal weathering, siding will be without damage or deterioration at time of Substantial Completion.

END OF SECTION