SECTION 07460

SHINGLE SIDING

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PART 1 GENERAL

1.1 SECTION INCLUDES

A. Cedar shingle panels.

1.2 RELATED SECTIONS

- A. Section 06100 Rough Carpentry: sheathing and air infiltration barrier.
- B. Section 06200 Finish Carpentry: exterior wood trim.
- C. Section 07620 Sheet Metal Flashing and Trim: flashing, gutters and sheet metal roofing accessories.
- D. Section 07920 Sealants: field applied sealants.

1.3 REFERENCES

- A. ASTM D 226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
- B. ASTM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials.
- ASTM E 119 Standard Test Methods for Fire Tests of Building Construction and Materials.
- D. ASTM E 2707 Standard Test Method for Determining Fire Penetration of Exterior Wall Assemblies Using a Direct Flame Impingement Exposure.
- E. ASTM E 2273 Test Method for Determining Drainage Efficiency
- F. California SFM Wildland Urban Interface 12-7A-1 Wild Fire Exposure Resistance.
- G. Timber Products Inspection, Inc. PS1-09.
- H. Department of Housing and Urban Development (HUD) Materials Release 978a.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01300.
- 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. Samples: For each finish product specified, two full-size units of each type of siding and trim indicated for each color, texture and pattern specified..

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
- B. Installer Qualifications:
 - 1. Engage an experienced installer who has completed siding installations similar in material, design and extent to that indicated.
- C. Product Requirement:
 - Design Requirements: Provide cedar shingle panels as part of a wall system that has been designed to provide a one-hour fire resistance rating.
 - 2. Regulatory Requirements and Approvals:
 - a. International Code Council: ICC-ES Report No. ESR-2386.
 - b. Florida Building Code: Report No. FL680.
- D. Mock-Up: Before installing siding, construct sample wall panels to verify selections made under sample submittals and to demonstrate aesthetic effects and qualities of materials and installation.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store materials protected from exposure to damaging environmental conditions and at temperature and humidity conditions recommended by the manufacturer.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

A. Manufacturer shall provide a 25-year limited product warranty against manufacturing defects.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Shakertown, which is located at: 1200 Kerron St. P. O. Box 400; Winlock, WA 98596; Toll Free Tel: 800-426-8970; Tel: 360-785-3501; Email: request info (info@shakertown.com); Web: www.shakertown.com

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

2.2 SHINGLE PANELS

- A. Shakertown Craftsman Panels:
 - 1. Material: Western Red Cedar 3/8 inch (9.5 mm) thick butt tapered shingle, full glue bonded to 5/16 inch (7.9 mm) CC exterior grade plywood.
 - 2. Material Standard: Clear vertical grain Western Red Cedar heartwood.
 - 3. Shingle Width: Random 3 inches to 14 inches.
 - 4. Configuration: 4.5 inches (114 mm) exposure.
 - 5. Configuration: 7 inches (178 mm) exposure.
 - 6. Configuration: 14 inches (356 mm) exposure.
 - 7. Butt Line: Even butt line.
 - 8. Butt Line: Staggered butt line.
 - 9. Shingle Joint: Keyway shingle joint. Cedar backed keyway required.
 - 10. Shingle Joint: Contemporary shingle joint.
 - 11. Length: 8 foot (2438 mm) lengths.
 - 12. Finish:Unfinished/natural.
 - 13. Finish: Oil based stain Pasadena Green.
 - 14. Finish: Oil based stain Beach Grey.
 - 15. Finish: Oil based stain Redwood.
 - 16. Finish: Oil based stain Natural Beige.
 - 17. Finish: Other.
 - 18. Variations: Natural variations in color permissible.
 - 19. Compliance: HUD Materials Release 978a and PS1-95.
 - 20. Rain Screen Drainage: 90% efficiency or greater per ASTM E2273
 - 21. Flame Spread Rating: ASTM E 84.
 - a. Class A (Fire Retardant Treatment)
 - b. Class B. (Untreated)
 - c. Class C. (Untreated)
 - 22. One Hour Fire Wall: ASTM E 119.
 - 23. Wildland Urban Interface High Fire Severity Zone: ASTM E 2707, California SFM Wildland Urban Interface 12-7A-1.
- 2.3 Preservative Treatment: Manufacturer's standard factory-applied preservative treatment.
 - A. Shakertown Fancy Cuts Panels:
 - 1. Material: Western Red Cedar 1/4 inch (6.4 mm) thick face full glue bonded to 5/16 inch (7.9 mm) CC exterior grade plywood.
 - 2. Material Standard: Clear vertical grain heartwood.
 - 3. Configuration: 5 inches (127 mm) exposure.
 - 4. Shingle Width: 5 inches (127 mm).
 - 5. Butt Pattern: Square.
 - 6. Butt Pattern: Fishscale.
 - 7. Butt Pattern: Round.
 - 8. Butt Pattern: Octagon.
 - 9. Butt Pattern: Half cove.
 - 10. Butt Pattern: Hexagon.
 - 11. Butt Pattern: Arrow.
 - 12. Butt Pattern: Diagonal.
 - 13. Length: 8 foot (2438 mm) lengths.
 - 14. Finish: Unfinished/natural.
 - 15. Variations: Natural variations in color permissible.
 - 16. Compliance: HUD Materials Release 978a and PS1-95.

- 17. Flame Spread Rating: ASTM E 84.
 - Class A (Fire Retardant Treatment)
 - b. Class B. (Untreated)
 - c. Class C. (Untreated)
- 18. One Hour Fire Wall: ASTM E 119.
- Wildland Urban Interface High Fire Severity Zone: ASTM E 2707, California SFM Wildland Urban Interface 12-7A-1.
- Preservative Treatment: Manufacturer's standard factory-applied preservative treatment.

B. Shakertown Fancy Cuts Shingle:

- Material: Western Red Cedar 3/8 inch (9.5 mm) shingle butt, 4-15/16 inch (103 mm) wide, nominal 18 inch (457 mm) length, sanded face.
- 2. Material Standard: Clear vertical grain heartwood.
- 3. Configuration: Exposure as indicated on drawings.
- 4. Butt Pattern: Square.
- 5. Butt Pattern: Fishscale.
- Butt Pattern: Round.
- 7. Butt Pattern: Octagon.
- 8. Butt Pattern: Half cove.
- 9. Butt Pattern: Diamond.
- 10. Butt Pattern: Hexagon.
- 11. Butt Pattern: Arrow.
- 12. Butt Pattern: Diagonal.
- 13. Finish: Unfinished/natural.
- 14. Variations: Natural variations in color permissible.
- 15. Compliance: HUD Materials Release 978a and PS1-95.
- 16. Flame Spread Rating: ASTM E 84.
 - a. Class A (Fire Retardant Treatment)
 - b. Class B (Fire Retardant Treatment)
 - c. Class C (Fire Retardant Treatment)
- 17. Preservative Treatment: Manufacturer's standard factory-applied preservative treatment.

2.4 ACCESSORIES

- A. Related Materials: Refer to other sections for related materials.
- B. Outside Corners: Match panel. Refer to drawings for dimensions required.
 - 1. Shakertown Boston Weave, flush style.
 - 2. Shakertown Boston Weave, overlap style.
 - 3. Shakertown Mitered, flush style.
 - 4. Corner Boards (specify dimensions and material)
- C. Inside Corners: 2 inches by 2 inches (51 by 51 mm) nominal. Match panel.
- D. Nails:
 - 1. Shakertown Craftsman Blind Nailing:
 - a. Material: Stainless steel.
 - b. Material: Hot dipped galvanized steel.
 - c. Type: Roofing nail. 1-3/4 inch (46 mm) length to penetrate into stud a minimum of 1/2 inch (13 mm).
 - Type: Siding nail. Minimum length to penetrate into stud 1/2 inch (13 mm).
 - Color Matched Nails for Face Nailing:
 - a. Material: Steel.
 - b. Size: 7d siding nail; minimum length to penetrate stud 1/2 inch (13

mm).

- c. Coating: Hot dipped galvanized.
- d. Color: Painted to match natural cedar.

E. Building Paper:

- 1. Type: Asphalt impregnated paper, ASTM D226, 15# Type I.
- 2. Type: Asphalt impregnated paper, ASTM D226, 30# Type II.
- 3. Type: Spun fiber or other code approved moisture barrier.

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. Determine prior to framing layout which corner treatment is to be utilized. Panels require a nailable area 5-1/4 inches (133 mm) of outside corners and 3-1/2 inches (89 mm) of inside corners.
- D. After framing is completed, install building paper horizontally, shingle style, beginning at bottom of wall with 3 inches (76 mm) overlaps.
- E. Corner boards, trim and molding:
 - Shall be extended a minimum 1 inch (25.4 mm) from sheathing to allow for 7/8 inch (22 mm) depth of applied Shakertown Craftsman shingle panels.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install shingle panels by attaching to solid nailable sheathing, spaced nailable sheathing or to studs.
- C. Install working from the lowest level up to the top of the wall area.
 - 1. Furr out the bottom course of siding with 3/8 inch by 1 inch (9.5 by 25.4 mm) wood strips. Allow for canting of the first course of siding and install to level line.
 - Drive nails flush with siding surface, penetrating studs at least 1/2 inch (12.7 mm).
 - 3. Maintain 1/8 inch (3 mm) spacing at corner boards and trim. Caulk with non-hardening sealant.
- D. Maintain 1/16 inch (1.6 mm) spacing between ends of panels in order to allow for natural expansion.
- E. Maintain 1/4 inch (6 mm) space from panel butt line and flashing.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION