VERSETTA STONE

SECTION 07 42 00 - PANELIZED STONE VENEER

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Panelized stone veneer wall cladding for exterior applications.
- B. Panelized stone veneer wall cladding for interior applications.

1.2 RELATED SECTIONS

A. Section 06 11 00 – Wood Framing: Framing design compliance with panelized stone veneer structural requirements for supporting wall construction.

1.3 SUBMITTALS

- A. **Product Data:** Submit data on product characteristics and general installation information.
- B. **Shop Drawings:** Submit shop drawings indicating layout and elevations indicating coursing, trim, flashing and terminations with adjacent materials.
- C. **Verification Samples:** Submit for each finish product specified, two samples, minimum size 8 inches square, representing actual product.
- D. **Evaluation Reports:** Submit copy of ICC-ES Evaluation Service Report
- E. Recycled Content Documentation: Submit copy of UL Environment report.
- F. **Green Approved Product:** Submit copy of NAHB Research Center certificate.
- G. **Warranty:** Submit copy of manufacturer's standard warranty.
- 1.4 QUALITY ASSURANCE
- A. **Green Approved Product:** Certificate for National Green Building Certification, issued by NAHB Research Center.
- B. **Recycled Content:** Minimum 50 percent recycled content in panelized stone veneer as validated by UL Environment.
- C. **Testing Agency:** Provide certificate/s showing testing performed by all testing agencies that have

demonstrated compliance with ANSI/ISO/IEC Standard ¹⁷⁰²⁵ and is accredited as a Testing Laboratory (TL-¹44) by International Accreditation Service, Inc.

- D. **Mock-Up:** Provide a mock-up for evaluation of substrate preparation, detailing trim, and application workmanship.
 - 1. Locate mock-up in area designated by Architect.
 - 2. Do not proceed with remaining work mock-up is accepted by Architect.
 - 3. Modify mock-up if required until accepted by Architect.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Transport and store in original shipping packaging until ready to use. When sub-packs are removed, transport and store with nailing flange up.

1.6 PROJECT CONDITIONS

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

1.7 WARRANTY

A. **Warranty:** Provide manufacturer's standard warranty against defects in manufacturing.

PART 2 - PRODUCTS

2.1 PANELIZED STONE VENEER

- A. **Manufacturer:** Versetta[™] Stone as manufactured by **Westlake** 2256 Centennial Road Toledo, OH 43617 Web: http://www.versettastone.com.
 - 1. Style: Ledgestone.
 - 2. Style: Tight-Cut.
 - 3. Color: Plum Creek.
 - 4. Color: Sterling.
 - 5. Color: Terra Rosa.
- B. **Description:** Glass-fiber-reinforced concrete (GFRC) molded stone-shaped veneer panels that interlock with a tongue and groove system, with embedded nailing strip for attaching to framing and exterior sheathing.

- 1. **Manufactured Size:** 8 inches high by 36 inches wide with a thickness ranging from 1 to 2.02 inches off the wall.
- 2. **Fabricated Shapes:** Universal corners, flat panel units, trimstone, wainscot cap, light boxes, and receptacle boxes.
- 3. Water Resistant Barrier: Minimum No.15 Grade D felt building paper meeting ASTM D 226 or material meeting the requirements of ICC Acceptance Criteria #38 or ASTM E 2556.
- 4. **Nailing Strip:** 26 gage steel with G90 galvanizing and factory-applied black paint.
- 5. **Channels:** Manufacturer's standard vinyl starter strip and J channels.
- 6. **Fasteners:** Corrosion-resistant galvanized roofing nails or screws with minimum 5/16 inch head diameter and 1/8 inch shank diameter, with length suitable to penetrate framing material minimum 1 inch. Electrogalvanized fasteners are acceptable but may exhibit premature corrosion.
- 7. Flashing and Lath as Applicable: Non-painted, non-corrosive flashing and 2.5 lb./yard² expanded metal lath.
- 8. **Adhesive:** Manufacturer's recommended PL Premium Construction Adhesive.
- 9. **Concealing Material:** Colored sanded caulk at nail/ screw heads and as applicable.

C. Performance Criteria:

- Physical Properties, ICC-ES AC 90 Section 3.1.
 a. Dimensions and Tolerances: Within manufacturer's specifications.
 - b. Flexural Strength: Greater than 700 psi.
 - c. Density: 1218 kg/m³.
- 2. Weather-Resistive Properties, ICC-ES AC 90 Section 3.2.
 - a. Moisture Movement, ASTM C 1185: Average linear change in moisture content 0.06 percent
 - b. Water Absorption, ASTM C 1185: Less than 19 percent.
 - c. Moisture Content, ASTM C 1185: Less than 10 percent.
 - d. Water Tightness, ASTM C1185: No water droplets present.
 - e. Heat/Rain Exposure, ASTM C 1185: No damage or structural alternations.
 - f. Bond Strength: Tensile strength greater than 45 lb/inch.
- 3. **Transverse Loads,** ICC-ES AC 90 Section 3.3: Average sustained negative load of 135 psf, average ultimate negative load of 140 psf.
- 4. Accelerated Weathering, ICC-ES AC 90 Section 3.7: Complies with Section 5.1 of ASTM C 1186.

- 5. Surface Burning Characteristics, ICC-ES AC 235 -Section 4.2.3:
 - a. Flame Spread Index = 0.
 - b. Smoke Density Index = 0.
 - c. ASTM E 84, Class A.
- 6. Water Drainage Efficiency, ICC-ES AC 235 -Section 4.5: Greater than 90 percent.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory conditions before proceeding.
- B. Verify compliance of existing conditions with manufacturer's requirements including the following:
 - 1. Wood framing studs are spaced 16 inches on center or closer, designed to limit out-of-plane wall deflection to a minimum of L/240.
 - 2. Sheathing is code approved and nailable, minimum 7/16 inch oriented strandboard or 1/2 inch exterior grade plywood.
 - 3. Substrate is plumb within 1/4 inch in 10 lineal feet.
 - 4. Building corners have been sheathed to meet code requirements and mitigate the effects of wall racking.
 - 5. Expansion joints, if any, have been installed.
 - 6. Roofing and interior wallboard have been installed.
 - 7. Height for panelized stone veneer will not exceed 30 feet.

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.

3.3 INSTALLATION

- A. **Water Resistive Barrier Application:** Cover sheathing with a minimum of one layer of water resistive barrier, following the installation instructions provided by the manufacturer and local building code requirements. Wrap minimum 16 inches past all inside and outside corners. Integrate with flashing, panel channels and trim.
- B. **Starter Strip:** Install starter strip level at the base starting point line. Fasten every 8 to 10 inches.
- C. **J Channel where specified:** Install J channel at windows, doors, material transitions, penetrations and terminations. Fasten every 8 to 10 inches.
- D. **Drainage:** Provide a means for drainage and ventilation at all horizontal terminations by using starter strip and J channel in conjunction with flashing products.

- E. **Installation:** Comply with manufacturer's installation instructions including the following
 - 1. Each full flat panel or Universal Corner panel requires a minimum of 4 fasteners. A minimum of 2 fasteners per panel shall penetrate framing.
 - 2. Attach products without nail flanges using adhesive. Non-painted, clean metal flashing or expanded metal lath, fastened 16 inches on center into framing is required for an acceptable bonding surface. After bonding surface has been prepared, apply minimum 3/8 inch beads of adhesive, in vertical beads, every 2 to 3 inches. Install partial panel and press into adhesive to assure complete contact. Secure until adhesive has cured.
 - 3. Install trim pieces and sills, as indicated.
 - 4. Install electrical/fixtures. Stones as indicated.
 - 5. Conceal fasteners or unsightly gaps as needed.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.
- C. Follow adhesive manufacturers instructions and temperature limitations.

END OF SECTION