

CSI - 3 PART SPEC

SECTION 04 73 00 MANUFACTURED STONE VENEER

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Manufactured stone veneer, thin brick and architectural trim products.

1.2 RELATED SECTIONS

- A. Section 03 30 00 Cast-In-Place Concrete
- B. Section 04 20 00 Masonry Units
- C. Section 04 71 00 Thin Brick Masonry Veneer
- D. Section 05 40 00 Cold-Formed Metal Framing
- E. Section 06 10 00 Rough Carpentry
- F. Section 06 11 20 Framing and Sheathing
- G. Section 07 62 00 Sheet Metal Flashing & Trim
- H. Section 07 90 00 Joint Protection

1.3 REFERENCES

- A. ASTM C 39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
- B. ASTM C 67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile
- C. ASTM C 177 Standard Test Method for Steady-State Head Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus
- D. ASTM C 190 Method of Test for Tensile Strength of Hydraulic Cement Mortars
- E. ASTM C 192 Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory
- F. ASTM C 482 Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement Paste
- G. ASTM C 567 Standard Test Method for Determining Density of Structural Lightweight Concrete
- H. ASTM C 1329 Standard Specification for Portland Cement
- I. ASTM C 1670 Standard Specification for Adhered Manufactured Stone Masonry Veneer Units.
- J. ASTM C 1780 Standard Practice for Installation Methods for Adhered Manufactured Stone Masonry Veneer
- K. ICC AC 38 Acceptance Criteria for Water Resistive Barriers
- L. ICC ESR 2598 Coronado Stone Products Evaluation Report
- M. LEED: US Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System
- N. Texas Department of Insurance: Product Evaluation EC101
- O. UBC Standard No. 14-1, Kraft Waterproof Building Paper

- A. Submit following in accordance with Section 01300.
- B. Product Data: Manufacturer's specification and data sheets for each product used, including:
 - 1. Preparation instructions.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation guidelines.
 - 4. Cleaning and maintenance methods.
- C. Shop Drawings: Submit elevations and cross-section details showing proper installation methods.
- D. LEED Submittals: Provide documentation of how the requirements of credit will be met.
- E. Sample Selection
 - 1. Standard sample board with selected stone profile and color should be submitted for each product specification.

- 2. Selection of approved grout colors and styles (if applicable).
- F. Sample Verification: A field panel sample with the minimum size of 3' x 3' should be installed for every product selection showing: styles, colors, textures and grout colors.
- G. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- H. Closeout Submittals: Provide manufacturer's warranty and maintenance recommendations.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Coronado Stone Products
- B. Installer Qualifications: Minimum 5 years experience with similar scope of work and must be able to furnish list of previous jobs and references if requested by Architect.
- C. Certifications: Products approved by ICC-ES Evaluation Service.
- D. Mock-Up: Provide field panel sample to evaluate preparation and application techniques.
- E. Pre-Installation Conference: Conduct a pre-installation meeting to verify all products, application methods, site conditions and warranty terms no less than thirty days prior to stone veneer installation.

1.6 DELIVERY, STORAGE & HANDLING

- A. Coordination of on-site delivery and storage should be arranged in advance to avoid work delays.
- B. Store and handle stone products in accordance with the manufacturer's recommendations.
- C. All material stored on-site should be protected from the elements before and during the installation process. Store material under cover and in a dry location.
- D. Store mortar, sealant and other installation material in compliance with the manufacturer's recommendations.

1.7 **PROJECT CONDITIONS**

- A. Maintain manufacturer's recommended environmental conditions to ensure optimum results.
- B. Cold Weather Requirements: Installations should be performed in temperatures exceeding 40 degrees Fahrenheit prior to, during and for 48 hours after completion of work. If temperatures are below 40 degrees Fahrenheit, masons should use heaters and tents during the installation process to regulate temperature.
- C. Hot Weather Requirements: If temperatures exceed 90 degrees Fahrenheit during the installation, additional moisture will need to be added to the backs of the stone veneer and scratch coated surface. Shade and/or frequent misting of the wall and stone may be required.

1.8 WARRANTY

A. Provide manufacturer's 50 year limited warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer: Coronado Stone Products (Corporate Office), which is located at: 11191 Calabash Ave, Fontana, CA 92337; Toll Free Tel: 800-847-8663; Fax: 909-357-7362; Email: sales@coronado.com; Web: www.Coronado.com
- B. Substitutions: Not permitted.
- C. Authorized Distributors: _____

2.2 MATERIALS

- A. Manufactured Stone Veneer:
 - 1. Profile / Color: _____
- B. Manufactured Thin Brick:
 - 1. Profile / Color: _____
- C. Stone Accessories:
 - 1. Profile / Color: _____
- D. Manufactured Stone Veneer Properties: Units consisting of Portland cement, lightweight aggregates and oxide pigments.
 - 1. Compressive Strength: Tested in accordance with ASTM C39 and ASTM C192, greater than 1800 psi.
 - 2. Shear Bond Test: Tested in accordance with ASTM C482, greater than 50 psi.
 - 3. Water Absorption: Tested in accordance with section 3.1.4 and 4.6 of ICC-ES AC51.
 - 4. Freeze / Thaw: Tested in accordance with ASTM C67, less than 3% mass loss.
 - 5. Unit Weight: Shipping weight is less than 15 lbs. per sq ft, density is determined in accordance with ASTM C567.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Do not begin the installation process until substrates have been properly prepared.
- B. Notify architect of any unsatisfactory preparation of substrate before proceeding.
- C. Correct all unsatisfactory substrate conditions before installation begins.
- D. Verify roofs use proper water displacement methods to direct moisture away from the installed stone veneer.
- E. If substrate surface is questionable, bonding tests should be performed before installation to assess adhesion and confirm proper bonding strength.
- F. Flashing must be installed at wall penetrations and terminations of the stone veneer. Assure that all flashing and kickouts are corrosion resistant, integrated with the WRB properly (when used), and installed in accordance with the local building code requirements.

3.2 **PREPARATION**

- A. Clean all surfaces thoroughly prior to installation.
- B. Use manufacturer surface preparation recommendations to achieve best result.

3.3 INSTALLATION

- A. Product should be pulled from a variety of boxes and blended on site during installation to ensure a consistent overall project color on the wall.
- B. Install in accordance with manufacturer's installation instructions. Visit this page for detailed installation instructions https://www.coronado.com/InstallationGuide
- C. Application details and mortar recommendations may vary depending on the stone style. Consult manufacturer for proper installation instructions.
- D. All dry-stacked and large format standard stones must be applied using a polymer-modified mortar meeting ANSI A118.4 or ANSI 118.15.
- E. All Classic Series and WoodStone products must be applied with a polymer-modified thinset bonding mortar meeting ANSI A118.4 or ANSI 118.15.
- F. All applications in freeze-thaw environments require a polymer-modified mortar.

3.4 CLEANING AND PROTECTION

- A. Installed manufactured stone veneer can be cleaned with a mild soap and water solution.
- B. Cleaning efflorescence can be done by lightly scrubbing the face of the stone with a soft bristle brush and water. In some cases, a 25% vinegar 75% water solution may need to be used. Do not use any harsh cleaning methods to remove efflorescence.
- C. Touch-up, repair or replace damaged stone before completion of project.
- D. Water repellents and enhancers can be used to further protect a finished project. Only breathable, penetrating water-based silane water repellents should be used.