



# Product Specifications: Hillcrest<sup>™</sup> Stone Thin Veneer

## <u>PART I - GENERAL</u>

## SUMMARY

Section Includes: Hillcrest portland cement based manufactured light weight stone masonry veneer.

## QUALITY ASSURANCE

All concrete masonry veneer units shall be Hillcrest Stone Thin Veneer Units manufactured by an Oldcastle Company. All units shall conform to ASTM 1634 with the following exceptions:

- Unit Sizes: Adhered veneer units shall not exceed 2 5/8 in. (66.7 mm) in specified thickness, 36 in. (914 mm) in any face dimension, nor more than 5 ft2 (0.46 m2) in total area, and shall not weigh more than 15 psf (73kg/m2)
- 2. Adhesion developed between adhered veneer units and backing shall have a shear strength of at least 50 psi (345 kPa) based on gross unit surface area when tested in accordance with ASTM 482, or shall be adhered in compliance with Article 3.3 C of TMS 602/ACI 530.1/ASCE 6.
- 3. The average compressive strength of five specimens shall be a minimum of 2100 psi (15 MPa) with no individual specimen having a measured compressive strength less than 1800 psi (12 MPa)
- 4. Freeze-thaw durability: Test specimens in accordance with ASTM 1262, except that no single specimen or group of specimens shall exhibit a mass loss greater than 1.5%, or show any fracture completely through the cross section when subjected to 50 consecutive cycles of freezing and thawing when tested in accordance with this testing method.

**Related Sections:** 

- 1. Section 06 16 00 Sheathing.
- 2. Section 07 60 00 Flashing and Sheet Metal.
- 3. Section 07 90 00 Joint Protection.
- 4. Section 09 24 00 Cement Plastering.
- 5. Section 10 30 00 Fireplaces and Stoves.

## REFERENCES

A. Institute (ANSI): ANSI A118.4 Specifications for Latex-Portland Cement Mortar.

B. American Society for Testing and Materials (ASTM):

- 1. ASTM C33 Standard Specification for Concrete Aggregates.
- 2. ASTM C140 Test Methods for Sampling and Testing Concrete Masonry Units and Related Units.
- 3. ASTM C144 Standard Specification for Aggregate for Masonry Mortar.
- 4. ASTM C150 Standard Specification for Portland Cement.
- 5. ASTM C207 Standard Specification for Hydrated

Lime for Masonry Purposes.

- 6. ASTM C270 Standard Specification for Mortar of Unit Masonry.
- 7. ASTM C331 Standard Specification for Lightweight Aggregates for Concrete Masonry Units.
- 8. ASTM C426 Standard Test Method for Linear Drying Shrinkage of Concrete Masonry Units.
- 9. ASTM C494 Standard Specification for Chemical Admixtures for Concrete.
- 10. ASTM C595 Standard Specification for Blended Hydraulic Cements.
- 11. ASTM C618 Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete.
- 12. ASTM C666 Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing.
- 13. ASTM C979 Standard Specification for Pigments for Integrally Colored Concrete.
- 14. ASTM C 847 Standard Specification for Metal Lath.
- 15. ASTM C 932 Standard Specification for Surface-Applied Bonding Compounds for Exterior Plastering.
- 16. ASTM C 979 Standard Specification for Pigments for Integrally Colored Concrete.
- 17. ASTM C 1032 Standard Specification for Woven Wire Plaster Base.
- 18. ASTM C 1059 Standard Specification for Latex Agents for Bonding Fresh To Hardened Concrete.
- 19. ASTM C1063 Standard Specification for Installation of Lathing and Furring to Receive Interior and Exterior Portland Cement-Based Plaster
- 20. ASTM C1329 Standard Specification for Mortar cement.
- 21. ASTM D 226 Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
- 22. ASTM 1262 Standard Test Method for Evaluating the Freeze Thaw Durability of Dry-Cast Segmental Retaining Walls and Related Units

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 Water-resistive barrier. A minimum of one layer of No 15 asphalt felt, complying with ASTM D226 for Type 1 felt or other approved materials, shall be attached to the studs or sheathing, with flashing as described in Section 1405.4 in such a manner as to provide a continuous water-resistive barrier behind the exterior wall veneer.

## SUBMITTALS

General: Prepare, review, approve, and submit specified submittals in accordance with Section 01 30 00 Administration Requirements Sections. Submit the following:





Product Data: Submit product data for each type of product specified, including certification that each type complies with specified requirements. Submit samples for textures and colors of the stone veneer units. Standard sample display consisting of a small representation of veneer units showing the full range of colors and textures. After the sample units have been selected, a job site mockup will be constructed using the selected stone and mortar materials and showing the full range of colors expected in the finished work. The minimum sample size: will be 3' x 3' (1m x 1m). Construct the job mockup using the selected products and install according to the manufacturer's approved installation methods. The installed color blend, texture, joint size, and installation workmanship will be the standard for the project. Insure the Owner, Agent and Architect have accepted the mockup before any further work commences.

Maintenance: Maintain mockup during construction for workmanship comparison; remove and legally dispose of mockup when no longer required. Reference Section 01 78 00 for Closeout Submittals:

a. Cleaning and Maintenance b. Warranty

#### DELIVERY, STORAGE AND HANDLING

Ordering: Follow the manufacturer's ordering instructions and lead time requirements to avoid construction delays.

Storage and Protection: Store materials in a manner that protects from exposure to harmful weather conditions, damage or staining.

## PART II- PRODUCTS

#### MANUFACTURER

An Oldcastle Company, contact National Accounts at (877) 506-2745

Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

Proprietary Product(s)/System(s): Hillcrest<sup>™</sup> Manufactured Lightweight Stone Veneer Units, which are manufactured with RainBloc<sup>\*</sup> integral water repellent agent. RainBloc<sup>\*</sup> producers comply with production qualification and are annually certified by ACM Chemistries.

#### STONE VENEER

Veneer Unit Properties: Precast lightweight stone veneer units consisting of Portland cement, lightweight aggregates, standard aggregates, integral admixtures and inorganic oxide pigments that are integrally dispersed through the entire veneer stone (full depth color pigmentation). Per production mold design drawings, the peripheral stone veneer dimensional tolerances are +/- 2mm (.079") with no rear lipage. Freeze-Thaw Test: ASTM 1262 except shall less than 1  $^{1}\!\!/_2\%$  weight loss and no disintegration.

## PART III - EXECUTION

#### EXAMINATION

Confirm substrates have been properly constructed and prepared. If any deficiencies in construction are discovered, notify Owner, Agent or Architect. Confirm remediation of any deficiencies before proceeding. Commencement of work is deemed acceptance of substrate construction and preparation.

#### INSTALLATION

Install the units according to the manufacturer's guidelines. Insure the substrate surface is clean and acceptable to commence work. Insure veneer units are kept clean of mortar during the installation.

#### PROTECTION

Cover and protect adjacent work and project areas. Protect installed units from mortar staining or damage during the completion of the installation. Touch-up, repair or replace damaged products before substantial completion.

#### CLEANING

Reference Section 01 74 00 Cleaning and Waste Management.

Clean Veneer Units with a soft bristle brush with a soap and water solution to remove any dirt of loose mortar. Insure the soap and water solution does not dry and immediately rinse with clean water after the cleaning. In the event of any mortar staining or soiling of the installation, clean the residual stains with the veneer manufacturer's approved masonry cleaner. When using the masonry cleaner insure the directions are strictly followed and insure to protect any and all adjacent areas from the cleaner and rinse water.After cleaning remove protective coverings from adjacent work. Remove and properly dispose of any excess mortar or waste veneer pieces. Visit EchelonMasonry.com for specific cleaning recommendations.