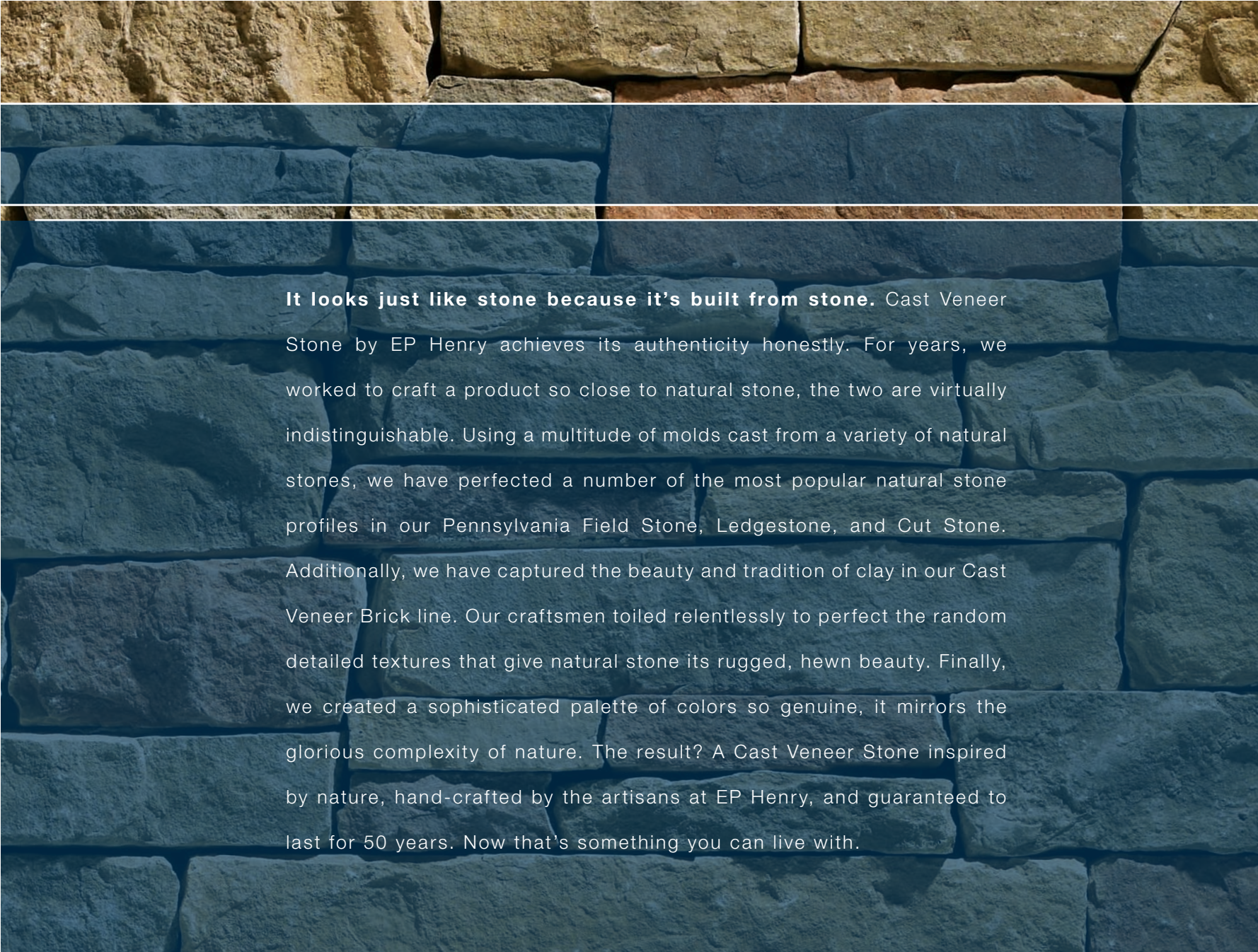


EP HENRY
EXCELLENCE SINCE 1903

201 Park Avenue, Woodbury, NJ 08096

www.ephenry.com

800 44 HENRY



It looks just like stone because it’s built from stone. Cast Veneer Stone by EP Henry achieves its authenticity honestly. For years, we worked to craft a product so close to natural stone, the two are virtually indistinguishable. Using a multitude of molds cast from a variety of natural stones, we have perfected a number of the most popular natural stone profiles in our Pennsylvania Field Stone, Ledgestone, and Cut Stone. Additionally, we have captured the beauty and tradition of clay in our Cast Veneer Brick line. Our craftsmen toiled relentlessly to perfect the random detailed textures that give natural stone its rugged, hewn beauty. Finally, we created a sophisticated palette of colors so genuine, it mirrors the glorious complexity of nature. The result? A Cast Veneer Stone inspired by nature, hand-crafted by the artisans at EP Henry, and guaranteed to last for 50 years. Now that’s something you can live with.



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EP Henry is continually developing new Cast Veneer Stone product and colors. Please contact your EP Henry Sales Representative or visit www.ephentry.com for the most up-to-date selections.

Because photographic reproduction cannot precisely convey the color and texture of the actual product, please visit your local distributor or ask your Contractor to bring samples before you make a decision.

PENNSYLVANIA FIELD STONE

Pennsylvania Field Stone: An evocative beauty.

Pennsylvania Field Stone is the cobbled, rustic and emotive stone seen in the paintings of the Chadds Ford countryside by Andrew Wyeth. Fieldstone is collected from the surface of meadows where it is found naturally and used in its original shape, just as it has been taken from the ground. The irregularity of the shapes, rounded character of the stones and random patterns give Pennsylvania Field Stone its distinctive look and charm. EP Henry's Cast Veneer Pennsylvania Field Stone captures that rustic countryside appeal.





PENNSYLVANIA FIELD STONE

ASPEN WITH NATURAL MORTAR



[07]

PENNSYLVANIA FIELD STONE

ASPEN WITH BUFF MORTAR



PENNSYLVANIA FIELD STONE

MESA VERDE WITH NATURAL MORTAR



[09]

PENNSYLVANIA FIELD STONE

MESA VERDE WITH BROWN MORTAR



PENNSYLVANIA FIELD STONE

BRECKENRIDGE WITH NATURAL MORTAR



[11]

PENNSYLVANIA FIELD STONE

BRECKENRIDGE WITH BUFF MORTAR





PENNSYLVANIA FIELD STONE

SILVERTON WITH NATURAL MORTAR



[15]

PENNSYLVANIA FIELD STONE

SILVERTON WITH CHARCOAL MORTAR

LEDGESTONE

Ledgestone: A rugged beauty.

Ledgestone is traditionally used in a drystack fashion with no mortar joints. Its rugged look is distinguished by a roughly textured silhouette which captures both light and shadow. The singularity of any Ledgestone structure derives from the interplay of the depth, texture and height of the stones. Ledgestone from EP Henry offers endless design possibilities for interior or exterior use, with a traditional drystack approach or with a natural or colored mortar.













CUT STONE

Cut Stone: An elegant beauty.

For the look of limestone, Cut Stone offers quarried stone sophistication with the ease of a more modular application. In applications ranging from contemporary to traditional, the hand chiseled texture of Cut Stone is satisfying and organic. The regularity of the shape and size of the stone adds a rhythmic harmony and pleasing line both indoors and out. In colors that capture nature's quiet palette, Cut Stone is always a tasteful choice.



CUT STONE
MESA VERDE WITH NATURAL MORTAR





EZ Fit

EZ Fit: The beauty of simplicity.

EP Henry's unique EZ Fit stone offers all the tightly stacked dimensionality of Ledgerstone, with the practical application of interlocking molded panels that can be quickly installed. The stones are keyed to ensure proper alignment, while the face of the stone gives the variation of depth that is characteristic of Ledgerstone's rugged profile. As an interior or exterior design choice, EZ Fit proves that sometimes simple things are the most beautiful.

[35]

EZ Fit

BUCKEYE

CAST VENEER BRICK

Cast Veneer Brick: A classic beauty.

Since 7500 B.C., people have been building structures with brick. Clay and shale bricks offered civilizations from the Chinese to the Romans a modular building material that was sturdy and aesthetically pleasing in its linear uniformity. The color of brick is determined by the chemical and mineral content of the natural materials, particularly iron which infuses bricks with a deep rust-red hue. Today's Cast Veneer Brick from EP Henry boasts the rich variations in color and depth of pigmentation that give brick its timeless appeal.



FINISH PIECES

KEYSTONE



GRAY



TAUPE



BUFF

TRIMSTONE



GRAY



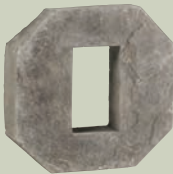
TAUPE



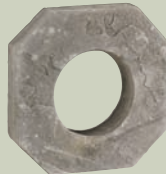
BUFF

FINISH PIECES

ELECTRICAL BOXES



SINGLE RECEPTACLE - GRAY



ROUND RECEPTACLE - GRAY



DOUBLE RECEPTACLE - GRAY



SINGLE RECEPTACLE - TAUPE



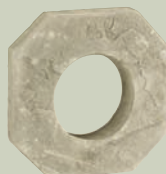
ROUND RECEPTACLE - TAUPE



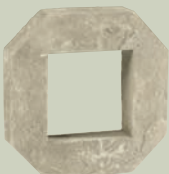
DOUBLE RECEPTACLE - TAUPE



SINGLE RECEPTACLE - BUFF

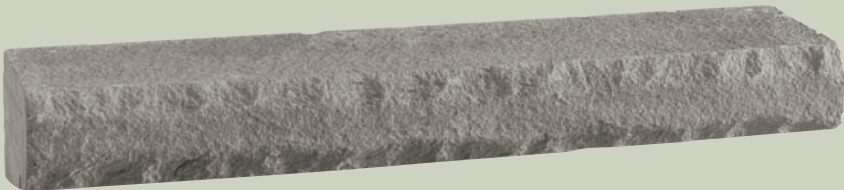


ROUND RECEPTACLE - BUFF



DOUBLE RECEPTACLE - BUFF

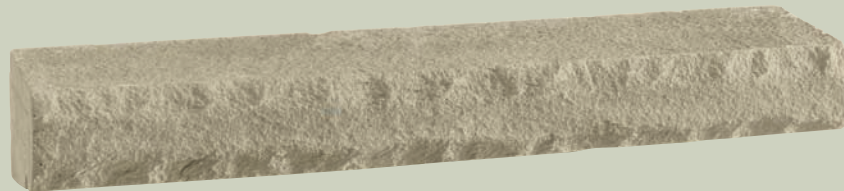
SILL/WATER TABLE



GRAY



TAUPE



BUFF

INSTALLATION

CAST VENEER STONE by EP HENRY PRODUCT AND INSTALLATION GUIDELINES PRODUCT DESCRIPTION

EP Henry's Cast Veneer Stone is designed to provide a non-structural, lightweight veneer facing for both interior and exterior applications. The product provides a quality architectural finish with all the colors, textures, sizes and shapes of quarried natural stone.

PRODUCT PACKAGING

All Cast Veneer Stone by EP Henry products are packaged with an anti-scuffing material between each layer of stone. This protects the product during packaging and shipping and protects against scuffing common with other veneer stone product lines.

- Each Crate of EP Henry Cast Veneer Stone flats contains 100 sf
- Each EP Small Pak of EP Henry Cast Veneer Stone flats contains 12 sf
- Each Crate of EP Henry Cast Veneer Stone corners contains 75 lf
- Each EP Small Pak of EP Henry Cast Veneer Stone corners contains 8 lf

FITTINGS (All fittings are packaged in EP Small Paks as follows):

Keystones	18 pieces
Electrical Fittings	20 pieces
Trimstones	24 pieces
Sills/Water Tables	10 pieces

Unit weight per sf: Maximum 15 psf (pounds per square foot)

PRODUCT WARRANTY

EP Henry provides a 50 year warranty to the original purchaser for Cast Veneer Stone when installed in accordance with the manufacturer's installation specifications. The warranty applies to Cast Veneer Stone units only and does not cover installation labor or damages resulting from improper installation or misuse of product.

PRODUCT GENERAL INFORMATION

Cast Veneer Stone should be applied only to structurally sound surfaces. Cast Veneer Stone should not be used on exterior horizontal surfaces or as wall caps. Water collection on the units combined with freeze-thaw conditions can result in surface damage.

Product applications:

- New construction: interior or exterior walls
- Retro-fitting of existing interior and exterior walls
- Fireplace openings, hearths and surrounds
- Chimneys
- Exterior Hardscaping masonry applications such as kitchens, bath houses and pre-cast fireplaces and seat parapet wall applications.

Do not install product below grade or in a water environment. Do not install in applications that expose the product to chlorine or chemicals, as discoloration may result. In fireplace and chimney applications, product should be kept at least 18" away from direct flame.

ESTIMATING STONE QUANTITIES

- Determine the total square footage of the project (length times height of each area). Remember to subtract the square foot area of all openings (doors, windows, etc.).
- Calculate the linear footage of corner stones for the project. Remember to add all openings that require corner units. Convert the linear footage into square feet by multiplying by ½ (.5).
- If using Architectural Trim or Detail pieces or electrical outlet fittings, calculate the number of pieces required and the square footage.
- Subtract square footage for corners and trim/detail pieces from total square footage to determine the amount of flats required.

- It is recommended that an extra quantity of flats (approximately 5%) be factored into the estimated materials to allow for cutting, trimming and to achieve the best fit.

TYPES OF MORTAR

EP Henry recommends the use of a Type S Mortar for Cast Veneer Stone installations.

Type S Mortar: 1 bag Type S Mortar cement: 2½ to 3 ft³ mason's sand

INSTALLATION

NOTE: In accordance with good building practices, maintain materials and ambient air temperature in the work area at a minimum of 40 degrees F during installation and for 48 hours following the completion of work.

Preparing the surface

For clean masonry surfaces that have not been painted or treated in any way, Cast Veneer Stone can be applied directly to the surface. It is recommended that a bonding agent be applied to the masonry surface as well as a scratch coat to help strengthen the bond and minimize cracking. For all other surfaces and on painted or treated masonry, metal lath (galvanized for exterior use) must be applied first followed by a scratch coat. Most building codes and best building practices require that any nails, staples or screws that are used be galvanized.

Scratch Coat

An even, ½" thick coat of Type S Mortar is applied to the metal lath or clean masonry surface to help insure proper bonding of Cast Veneer Stone. The scratch coat should be allowed to set-up for 48 hours before installing the Cast Veneer Stone.

Starting the Installation

Lay out a quantity of Cast Veneer Stone prior to installing. Make sure to select stones from as many boxes as possible to achieve the best possible mix of shapes, sizes, colors and textures. Continue this practice throughout the installation. Begin installing the stone from the top down. Start installing the corner units first. The corners have a long and short return which should be alternated in opposite directions as you go down the wall corner. Try to maintain a uniform joint width (1/2") around the stones. Avoid long, unbroken joint lines. The stones can be trimmed using a brick hammer, nippers or the side of a mason's trowel. Stones can be cut when needed using a diamond or carborundum saw blade. Be sure to place the cut edges in unobtrusive places and touch up the cut with mortar when finishing the joints.

Setting the Stones

Apply an even layer of Type S Mortar, approximately ½" thick, to the entire back of the stone. Press the stone firmly into place on the wall surface. Press hard enough to squeeze the mortar out around the edges. To insure a good bond, gently wiggle the stone while pressing it in place. If any mortar gets on the stone face, DO NOT try to wipe it off. Allow the mortar to set and dry, then use a coarse brush to remove it. If working in hot, dry weather it may be necessary to wet the scratch coat and stone to prevent the mortar from drying too quickly and losing strength. The surface and back of the stone can be dampened with a hose but do not wet to excess. If too much water is applied and runoff occurs, allow a few minutes for the surface to dry before proceeding with the installation. Do not allow construction on the opposite side of the Cast Veneer Stone wall to take place until the stones have bonded and the mortar has cured properly (minimum of 48 hours).

INSTALLATION

Grouting and Finishing the Joints

Once all of the Cast Veneer Stone has been installed on the wall surface, use a grout bag and fill the joints between the stones with mortar making sure to fill all voids. It is recommended that a Type S or N Mortar be used. The grouting mortar can be colored if desired. When the mortar joints have begun to set and become firm to the touch, use a jointing tool and rake out the excess mortar to the desired depth. Make sure that all the edges of the stones are thoroughly sealed with mortar by pressing the mortar into place. Once the mortar joints have been worked, use a soft, hand whisk broom or paint brush and smooth the joints while cleaning away any loose mortar from the stones.

DRystack INSTALLATION

Dry stack installation follows the same guidelines as normal installation with a few key differences as addressed below:

- Install from the bottom up.
- Stones should be wetted regardless of air temperatures, bearing in mind that work should not be conducted in temperature below 40 degrees F. If the scratch coat is dry, wet the wall as you go.
- Use a chalk line and 4' level to keep your Cast Veneer Stone level.
- As there will be no mortar joint strengthening the bond, it is important that ample mortar is applied to the back of each stone to ensure it squeezes out around the edges. Mortar should not be stiff to allow the joint to seal to the next stone. After setting stone, use a trowel to remove excess mortar and fill any voids along the stones' edges.

CLEANING

It is always recommended that a test of the cleaning method be done in an inconspicuous location prior to proceeding with the overall cleaning. Cleaning

materials and methods appropriate for other masonry surfaces may not be suitable for Cast Veneer Stone.

General Maintenance:

- To clean dirt or dust, use a garden hose and a soft bristle brush
- Mild detergents can be used but should be rinsed immediately
- DO NOT use a wire brush
- DO NOT use acid based products or a pressure washer to clean stone

Efflorescence Removal:

- Allow Cast Veneer Stone to dry completely
- Scrub with a stiff bristle brush and rinse thoroughly with clean water

SECTION 04 70 00 (Master Format, 1995 Edition, 04700) MANUFACTURED MASONRY

PART I — GENERAL

1.01 Summary

- A. Section Includes: Manufactured stone veneer, Manufactured stone trim, and application materials.
- B. Related Sections:

INCLUDE ALL DIVISION 01 SECTIONS CONTAINING LEED® REQUIREMENTS, ENTER SECTION (S) IN 1. BELOW THAT SPECIFIES SUBSTRATE FOR MANUFACTURED MASONRY. ADD/DELETE OTHER SECTIONS AS APPROPRIATE.

1. _____ - _____.
2. Division 05, or 06 Section specifying weather resistant barrier over framed walls.
3. Division 07, Section specifying flashing material.
4. Division 09, Section specifying Portland Cement plastering.
5. Division 10, Section specifying fireplaces and stoves.

1.02 References

- A. American Concrete Institute (ACI).
- B. American Society for Testing and Material (ASTM):
 1. ASTM C 39, Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 2. ASTM C 177, Standard Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus.
 3. ASTM C 192, Standard Practice for Making and Curing Concrete Test Specimens in the Laboratory.
 4. ASTM C 270, Standard Specification for Mortar for Unit Masonry.
 5. ASTM C 482, Standard Test Method for Bond Strength of Ceramic Tile to Portland Cement.
- C. Natural Concrete Masonry Association (NCMA).
- D. Masonry Veneer Manufacturers Association (MVMA).
- E. LEED® US Green Building Council's Leadership in Energy and Environmental Design Green Building Rating System™ .

1.03 Submittals

- A. Submit following items:
 1. Product Data: Cast Veneer Stone by EP Henry and application materials including mortar color charts, and weather resistant barrier.
 2. Samples: Panel containing full-size samples of specified Cast Veneer Stone by EP Henry showing full range of colors and textures complete with specified mortar.
 - a. Actual size of masonry sample minimum 12 by 12 inches.

3. Quality Assurance/Control Submittals:
 - a. Test Reports for physical properties.
 - b. Manufacturer's Installation Instructions.
 - c. Material Safety Data Sheets. (MSDS)
4. LEED® Submittals:
 - a. Credit MR 5.1 Local/Regional Materials: Indicate location of manufacturer of manufactured masonry, and distance from manufacturer to project site.

MANUFACTURED MASONRY CAN ALSO CONTRIBUTE TO CREDITS EA 1.1 – 1.5 FOR OPTIMIZING ENERGY PERFORMANCE, HOWEVER, NO SPECIFIC SUBMITTALS ARE REQUIRED IN THIS SECTION.

- B. Closeout Submittals; submit following items:
 1. Maintenance Instructions.
 2. Special Warranties.

1.04 Quality Assurance

- A. Qualifications:
 1. Manufacturer Qualifications:
 - a. Minimum five years experience in producing manufactured masonry.
 - b. Member of following organizations: (1) NCMA.
- B. Field constructed Mock-up: Prior to installation, erect minimum 4'x4' sample panel(s) to verify selection(s) made for color and textural characteristics, and to represent completed masonry work for appearance, materials and construction.
 1. Minimum Size: 4 by 4 feet, or as required by architect.
 2. Approved field samples may remain as part of completed work.

INSTALLATION

1.05 Delivery, Storage, and Handling

- A. Cast Veneer Stone by EP Henry shall be delivered in manufacturer’s protective cartons, with anti-scuffing material between each layer of stone.
- B. Protect materials from rain, snow, ground water and soil during storage and installation.

1.06 Project/Site Conditions

- A. In accordance with good building practices, maintain materials and ambient air temperature in the work area at a minimum of 40 degrees F during installation and for 48 hours following the completion of work.
- B. Do not install product below grade or in a water environment.
- C. Do not install in applications that expose the product to chlorine or chemicals, as discoloration may result.
- D. In fireplace and chimney applications, product should be kept at least 18” away from direct flame.

1.07 Warranty

EP Henry provides a 50 year warranty to the original purchaser for Cast Veneer Stone when installed in accordance with the manufacturer’s installation specifications. The warranty applies to Cast Veneer Stone units only and does not cover installation replacement or damage resulting from improper installation or misuse of product.

PART 2 — MATERIALS

2.01 Manufacturer

- | | |
|--------------------|--------------------------|
| A. EP HENRY | Tel: 856-845-6200 |
| 201 Park Avenue | Fax: 856-845-0023 |
| Woodbury, NJ 08096 | Website: www.ephenry.com |

INSERT NAME, ADDRESS AND PHONE NUMBERS OF LOCAL DISTRIBUTOR BELOW.

- 1. Manufacturer’s Distributor
- B. Substitutions: None permitted.

2.02 Manufactured Masonry Materials

It is recommended that an amount equal to 5% be added to the order for each product type to allow for cutting, trimming and to achieve the best fit.

SELECT PRODUCTS FROM A., B., AND C. BELOW AS REQUIRED FOR THE PROJECT. DELETE THOSE NOT USED.

A. CAST VENEER STONE BY EP HENRY: FLATS

- 1. Single Product Style and Color _____,
- 2. Blended Product Style and Color
 - a. _____ Percent: _____,
 - b. _____ Percent: _____,

B. CAST VENEER STONE BY EP HENRY: CORNERS

- 1. Single Product Style and Color _____,
- 2. Blended Product Style and Color
 - a. _____ Percent: _____,
 - b. _____ Percent: _____,

C. CAST VENEER STONE BY EP HENRY: FITTINGS (Product Style, Color)

- 1. Trim Stones: _____,
- 2. Keystones: _____,
- 3. Electrical: _____,

D. CAST VENEER STONE BY EP HENRY PHYSICAL PROPERTIES:

- 1. Compressive Strength: All CVS units exceed ASTM C-39 and C192 with minimum of 2000 psi.

- 2. Bond Between Stone Unit, Type S Mortar, and backing: to meet ASTM C-482 with minimum of 50 psi.
- 3. Thermal Resistance: ASTM C 177.
- 4. Fire Hazard Test, UL 723.
- 5. Maximum Veneer Unit Weight: 15 psf

2.03 Related Material

EDIT FOLLOWING MATERIALS BASED ON LOCAL USAGE AND BUILDING CODE REQUIREMENTS, DELETE MATERIALS SPECIFIED IN SEPARATE SECTIONS.

- A. Weather Resistant Barrier, as required.
- B. Metal Lath: minimum 2.5# galvanized metal lath.
- C. Fasteners: For sheathing over wood or metal stud:
 - 1. Wood Studs: Galvanized nails with a minimum shank diameter of 1/8” or galvanized staples with a minimum length of 1 3/8”.
 - 2. Metal Studs: Self tapping, galvanized, flat head screws with a minimum head diameter and length of ½”.
- D. Mortar: Type S Mortar, mixed from components or pre-blended and complying with ASTM C-270.

PART 3 — EXECUTION

3.01 Examination

- A. Examine substrates upon which Cast Veneer Stone by EP Henry will be installed for compliance with manufacturer’s Installation Guidelines.
- B. Correct any improper conditions prior to proceeding with installation.

3.02 Preparation

- A. Do not allow work to occur on the opposite side of walls to which manufactured masonry is being applied during and for 48 hours following installation of the Cast Veneer Stone by EP Henry.
- B. Refer to installation instructions in 3.03 for proper surface preparation.

3.03 Installation

MANUFACTURER'S INSTALLATION GUIDELINES ARE BASED ON TYPICAL INSTALLATION SITUATIONS. UNUSUAL CONDITIONS SHOULD BE ADDRESSED WITH MANUFACTURER PRIOR TO INCLUDING IN SPECIFICATION.

- A. Install Cast Veneer Stone by EP Henry in accordance with Manufacturer’s Installation Guidelines.
- B. Install Related Materials specified above in accordance with type of substrate and manufacturer’s installation guidelines and Typical Wall Details for Cast Veneer Stone.

3.05 Cleaning

- A. Clean manufactured masonry in accordance with manufacturer’s installation instructions.

3.06 Protection

- A. Protect finished work from rain during and for 48 hours following installation.
- B. Protect finished work from damage during remainder of construction period.