



IMPORTANT NOTES ABOUT HARDSCAPING PRODUCTS

READ PRIOR TO INSTALLING ANY PAVER OR WALL PRODUCT

If you believe there is an issue with product style, color or quality, please contact your distributor immediately. Save all cube tags and provide to the distributor or manufacturer's representative who comes to the job site. INSTALLATION OF PRODUCT IS DEEMED ACCEPTANCE. No claims or returns on installed product will be allowed.

EFFLORESCENCE

Efflorescence is a whitish, powder-like deposit common on concrete and masonry products which will normally disappear over time with natural weathering. According to the Interlocking Concrete Pavement Institute (ICPI), it will typically stop developing within 18-24 months. Although it may present an aesthetic concern, efflorescence will not affect the structural performance of pavers or wall systems. Efflorescence is a natural occurrence for which EP Henry accepts neither responsibility nor liability. For more information, please visit www.icpi.org, www.ncma.org, www.masonryinstitute.org, or www.bia.org.

COLOR

EP Henry Hardscaping products are made from natural materials and variations in shade can be expected. It is recommended that the installer draw from multiple cubes of material during installation to disperse color more uniformly. The end user of the material (home or business owner) should make their selection from current physical product samples.

DON'T SCUFF THOSE PAVERS!

EP Henry recommends the use of a vibrating plate compactor with a protective pad to prevent surface damage to the pavers during installation. EP Henry will not be responsible for compaction scuffs or burns on pavers.

POLYMERIC SAND HAZE

Polymeric haze from the use of polymeric joint sand may appear on your pavers if the sand was not removed from the surface of the pavers properly. This does not in any way affect the integrity of your pavers or the installation. The haze will weather away naturally with time. If you wish to remove it with a cleaning product, it is recommended that you contact your distributor or the manufacturer of the polymeric sand used for advice and product recommendations. EP Henry accepts NO responsibility nor liability for this occurrence.

Caution: Dry sawing or grinding of concrete masonry products will result in the release of respirable crystalline silica dust. When sawing or grinding, OSHA requires the use of an integrated water delivery system. When dry sawing or grinding, the use of tight fitting goggles with a minimum APF10 half face respirator is required along with an attached vacuum dust collection system. Fit testing for half face respirator is required. For more information, refer to: www.osha.gov/silica

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 yields 100 sf

Each EP Small Pak of EP Henry Cast Veneer Stone flats yields 12 sf

Each Crate of EP Henry Cast Veneer Stone corners yields 75 lf

Each EP Small Pak of EP Henry Cast Veneer Stone corners yields 8 lf

EZ Fit Flats are packaged 5.625 sf per EP Small Pak/12 EP Small Paks per Crate

EZ Fit Corners are packaged 3 lf per EP Small Pak/12 EP Small Paks per Crate

CV Brick Flats are packaged 8 sf per EP Small Pak/32 EP Small Paks per Crate

CV Brick Corners are packaged 5.8 lf per EP Small Pak/32 EP Small Paks per Crate

Note: packaging quantities reflect approximate yield when erected in wall with typical mortar joints. Package yield will decrease when installing in a dry stack application.

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
Quoins	6 pieces
Hearthstones	4 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
- Fireplaces, hearths and surrounds
- Chimneys

- Exterior Hardscaping masonry applications such as kitchens, built-in grills, columns and seat 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

1. Determine the total square footage of the project (length times the height of each area). Remember to subtract the square foot area of all openings (doors, windows, etc.)
2. 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 1/2 (.5).

Note: As industry guidelines and building codes may change from time to time, for the most up-to-date standards, please visit www.masonryveneer.org

3. If using Architectural Trim Detail pieces or electrical outlet fittings, calculate the number of pieces required and the square footage. Remember to subtract this amount from the total square footage of Cast Veneer Stone flats.
4. Subtract square footage for corners from total square footage to determine the amount of flats required.
5. It is recommended that an extra quantity of flats (approximately 5%) be factored into the estimated materials to allow for cutting, trimming and the desired best fit.
6. Coverages stated for Cast Veneer Stone assume the use of a 1/2" mortar joint. When making linear and square footage calculations for dry stack applications, add 15% to 20% more to the materials calculation to compensate for the loss of the mortar joint space.

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 cubic ft. mason's sand

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 new clean CMU 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 including poured concrete walls and on painted or treated masonry, self-furring metal lath (galvanized for exterior use) must be applied first followed by a scratch coat. (Installation diagrams available on request.). Most building codes and best building practices require that any nails, staples or screws that are used be galvanized.

Check the backs of Veneer Stones to make sure they are free of scale or a surface that readily flakes off. If that condition exists remove that surface film with a wire brush and dust off the backs of the units before wetting or applying mortar to the back of the stone.

SCRATCH COAT

An even, 1/2" thick coat of Type S mortar is applied to self-furring 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. If possible, after applying the scratch coat cover it with plastic to slow the curing process and reduce cracking which weakens the bond strength.

When using the dry stack method one should consider adding pigment to the scratch coat mortar mix that matches a darker color of the Cast Veneer Stone. That will prevent the gray scratch coat from being seen in any gaps between the stones and improve the look of the finished job.

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 more precisely with a hand held grinder or saw 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 leaving no area on the back of the stone exposed. Press the stone firmly into place on the wall surface. Press hard enough to squeeze the mortar out around the edges. If needed, strike off the excess mortar with a mason's trowel. To insure a good bond, gently wiggle the stone while pressing it in place. If any mortar gets on the stone face, unless it is crumbs from packing mortar joints use a damp cloth or sponge to wipe it off before it dries. Once mortar has dried and hardened on to Cast Veneer Stone acid based cleaners, wire brushes, and metal tools cannot be used to remove it without risking permanent damage to the Cast Veneer Stone." If the mortar is crumbs from packing mortar joints, then use a coarse brush to remove it.

If working in hot or dry weather, wet the scratch coat and stone to prevent the mortar from drying too quickly and losing bond 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. If possible, cover the surface with plastic to slow the curing process and reduce cracking which weakens the bond strength.

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▲ Cast Veneer Stone, River Rock



▲ Cast Veneer Stone, Cut Stone, Mortared

DO NOT ALLOW construction (ex. hanging drywall, insulation, etc.) 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).

Caution: Dry sawing or grinding of concrete products may result in the release of respirable crystalline quartz.

Prolonged exposure to respirable crystalline quartz may cause delayed (chronic) lung injury (silicosis). The use of a NIOSH-Approved respirator, tight fitting goggles and hearing protection is recommended when sawing or grinding operations are in progress.



▲ Cast Veneer Stone, LedgeStone, Dry Stack

▲ Cast Veneer Stone, Pennsylvania Field Stone

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 to pack the joints 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:

1. Install from the bottom up.
2. Stones should be wetted regardless of air temperatures, bearing in mind that work should not be conducted in temperatures below 40 degrees F. If the scratch coat is dry, wet the wall as you go.
3. Use a chalk line and a 4' level to periodically level individual stones during installation.
4. As there will be no mortar joint strengthening the bond, it is important that ample mortar is applied to the back of each stone covering it 100% with enough mortar to ensure it squeezes out around the edges when pressed in place. 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
- Gently scrub with a nylon stiff bristle brush and rinse thoroughly with clean water

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