# Why is Eldorado Stone considered The Most Believable Architectural Stone Veneer in the World?

Believability. It's the most important ingredient of Eldorado Stone and the most compelling reason why so many architects, builders and homeowners choose Eldorado Stone. Eldorado's distinct process handcrafts molds and creates the natural color palettes that capture all the nuances of real stone. The warmth and richness of Eldorado Stone creates unique spaces of permanence, romance and beauty; inside and out. *The Most Believable Architectural Stone Veneer in the World*. Only from Eldorado Stone.

# What is the difference between manufactured stone veneer and natural stone?

Manufactured stone veneer is cast from molds of real stone which makes it lighter than natural stone. Natural stone may require wall ties and footings, which, in turn, can increase installation cost and difficulty. Eldorado's architectural stone veneer is lighter weight, designed to adhere easily to a variety of structurally sound surfaces, and is capable of installations that would normally be very difficult and costly to achieve with natural stone.

#### What are the benefits of using manufactured stone?

Installed, manufactured stone is approximately  $\frac{1}{2}$  to  $\frac{1}{2}$  the cost of natural stone. Its light weight properties eliminate the need for wall ties or footings. Manufactured stone has a 2% (approximately) waste factor versus IO% or more for natural stone.

#### Where can I install Eldorado Stone?

Eldorado Stone can be applied to any structurally sound surface with the proper preparation. It fits nearly any building plan — large or small, interior or exterior, new residential or commercial projects — or on any remodel. For inspirational installations visit www.eldoradostone.com/imagine.



#### Can I install Eldorado Stone myself?

In general, installation of Eldorado Stone can be installed by almost anyone. However, installation does require a fundamental understanding of stone masonry. Please review the *Installation Procedures* and *How to Install* at www.eldoradostone.com or contact Customer Service at 800.925.1491.

#### How does Eldorado Stone withstand freeze/thaw cycles?

Eldorado Stone products are tested for freeze/thaw durability. As with any installation, making sure to incorporate good building practices that include proper flashing and water diversion techniques will help ensure a successful installation.

#### How much does Eldorado Stone weigh?

Approximately 10-12 lbs. per square foot. Eldorado Stone qualifies as an adhered veneer because it weighs less than 15 lbs. per square foot.

#### Will Eldorado Stone fade?

The base color is blended throughout and permanent mineral oxide pigments are applied and absorbed when the veneer is cast. Color becomes an integral part of the veneer and, similar to natural stone, there are minimal noticeable color changes after years of weathering.

#### How important is a good stone installation?

As with any building material, the beauty of that product is greatly enhanced by how well it is installed. With Eldorado Stone, careful consideration regarding the type of profile and color selected, the actual installed stone "pattern", and the type of grout technique used, are all very important factors to regard. It is always best to create a mock up board with the desired aesthetic appeal prior to installation on your project. For more information download the *Installation Procedures* and *Finishing Details* PDFs from www.eldoradostone.com.



#### What type of coverage can be expected?

Approximately 100 square feet per day. This varies depending upon the stone type used and the installers ability. Stacked Stone, for instance, sold in 4" modular component panels, is easy to install and will provide coverage of up to 200 square feet in a day. Conversely, Shadow Rock, with its irregular shapes and varying stone sizes, can provide coverage of 70–80 square feet a day.

### Where can I buy Eldorado Stone?

Eldorado Stone is sold by more than I,000 authorized distributors throughout the U.S. and Canada. Please visit www.eldoradostone.com and select "Contact" to find a distributor near you.

#### Where can I find knowledgeable masons?

Your local Eldorado Stone distributor can recommend local masons that are familiar with Eldorado Stone products and installation.

### Does Eldorado Stone meet building code requirements?

Eldorado Stone complies with all applicable Building Code requirements. A copy of the Eldorado Stone *Technical Data Sheet* is available online at www.eldoradostone.com.

#### Is Eldorado Stone combustible?

No. Eldorado Stone's listing by Underwriter's Laboratories shows zero fuel contributed and zero smoke developed. It can be installed as a façade to fireplaces and behind stoves. It is recommended the product is at least 18" away from any direct flame.

#### Can I install Eldorado Stone on overhead horizontal surfaces?

Please verify your installation with your building official and consult with an engineer for specific design issues on your project. There are grout and mortar manufacturers that will support their product's use in these installations. Eldorado Stone's 50 Year Limited Warranty will still cover our veneer products for manufacturing defects.

#### Can I install Eldorado Stone near water?

It is not recommended for use below the water line in a pool, a fountain or below grade. A high quality penetrating and breathable sealer that is either silane or siloxane-based is recommended in areas where the stone may be subject to frequent water run off.

NOTE: A sealer may affect the stone color and may create a gloss or matte finish. Always test a small area beforehand.

#### How thick are the stones?

0.625" to 3.625" depending on the texture.

#### What's the thickness from the substrate to surface of the stone?

There will be (approximately) an additional 0.5"-I" of mortar thickness behind the stone. For example, if your stone profile is 2" thick, you can expect the total thickness from the substrate to the face of the stone to be (approximately) 2.5" - 3" thick.

#### What is the R-value of Eldorado Stone?

An average of 0.41 per inch of thickness.

#### What is the installed weight?

The installed weight will vary depending upon the profile chosen and the mortar, grout technique, lath and lath accessories used. Eldorado Stone can weigh up to 15 lb./sq.ft. If a specific weight is needed for a project we recommend having an engineer evaluate the system.

#### How many square feet will a bag of mortar cover?

A 94 lb. bag covers 8'-12' for the standard, full and overgrout applications and 10'-14' for the drystack applications.

#### What happens if Eldorado Stone is damaged?

Small chips and cracks can be repaired using our *Color Touch-Up Kit* which includes easy-to-follow instructions. These kits are available from Customer Service at 800.925.1491. *Touch-Up Kits* are not made for coloring aggregate exposed by cutting stones. The best installers will bury cuts into transitions and/or hide them with mortar when grouting.

#### How do I clean the Eldorado Stone?

To clean dirt or other particles first try a simple soft bristle brush. If necessary use a solution of mild detergent with water and scrub the surface with a soft bristle brush. Rinse with clean water to remove any cleaning solution that might remain on the surface. If the stone has a white stain deposit (efflorescence) please contact Customer Service at 800.925.1491 for recommendations. Never use wire brushes, acid cleaners, power washers, bleach, paint remover or any other type of concrete cleaner.

#### How do I clean efflorescence?

When efflorescence occurs, as it does with many masonry products, it is the usually the result of moisture migration through the masonry substrate. Once the moisture is on the masonry surface, it evaporates, depositing dissolved salts in the form of efflorescence. Efflorescence naturally disappears over time as long as the moisture source is controlled or eliminated. If the stain will not wash off, do not apply chemicals or cleaners to the stone. Call Eldorado customer service to discuss optional solutions.

#### Can I seal Eldorado Stone?

It is not required to seal Eldorado Stone. A sealer will provide added protection and will usually be easier to clean if the surface becomes dirty. If you choose to use a sealer for added protection use only a silane or siloxane-based penetrating, breathable masonry sealer.

NOTE: A sealer may affect the stone color and may create a gloss or matte finish. Always test a small area beforehand.

#### What about protection against graffiti?

In many areas, Eldorado Stone is considered a protection against graffiti. The color blends and uneven textures are not the best canvas for graffiti "artists." However, if you should choose to use an anti-graffiti coating please speak directly to the manufacturer of the anti-graffiti coating product and ask your contractor to submit a test prior to installation. There are urethane and wax-based sealers that can damage the surface or cause it to "yellow." Other sealers may encourage additional efflorescence on the stone's surface. No type of coating should be applied until the stone has been on the wall for at least 14 to 28 days.

#### Does Eldorado Stone require movement joints?

Expansion joints normally pass completely through a wall. Control joints normally are on the surface of the wall and relieve strain on the skin of the wall. Terminate the veneer installation where control and expansion joints occur in the substrate. Do not span these joints with veneer because this will lead to cracking. Expansion joints in a building must be specified by the architect or engineer. The architect or engineer should consider the ASTM C 1063 control joint requirements when determining the location of control joints on any structure. Normally the weakest point on a wall is immediately above and below penetrations.

#### How do I install Eldorado Stone when there is an expansion joint?

Treat each section as a "separate" installation. Do not span movement joints with the veneer.

# What is Eldorado Stone's recommendation regarding flashing around windows and doors?

To maintain the weather-resistance of the exterior wall on which the stone products are installed, a rigid, corrosion-resistant flashing — and a means of drainage — should be installed at all penetrations and terminations of the veneer cladding. Flashing type and locations shall be in accordance with the requirements of the applicable code.

Please reference the *Finishing Details* PDF on our website. Also refer to ASTM E2112 and any information from your Window and Door manufacturer.

#### What kind of Weather Resistive Barrier (WRB) can I use?

It is recommended to use two separate layers of WRB in all applications where WRB is specified.\* The WRB must meet the requirements of ICC-ES AC 38 Acceptance Criteria for Water-Resistive Barriers. When using Grade D paper, a 60 minute rating is recommended. Felt paper must be clearly marked that it meets the requirements of ASTM D 226 for #15 or #30 asphalt saturated felt.\*\* It is acceptable to use one layer of housewrap covered by a second layer of WRB meeting the requirements above. The WRB should be free of tears or holes.

<sup>\*</sup> It is acceptable to use one layer of WRB on interior applications.

<sup>\*\*</sup> Felt meeting ASTM D 4869 or non-ASTM #15 felt is not recommended for use behind veneer.

#### Should I use a rainscreen drainage plane system?

Eldorado Stone veneer does not require the use of a rainscreen drainage plane system for all applications. However, some building codes now require the use of rainscreen drainage plane systems behind cladding materials such as manufactured veneer. If you are installing veneer in these areas, or wish to provide additional protection against entrapped moisture, download the *Installation Procedures PDF* from www.eldoradostone.com for more detailed information.

#### What is the fire rating of Eldorado Stone?

Eldorado Stone has been tested for fire hazard and shows zero flame spread and zero smoke developed. Since Eldorado Stone is non-combustible there is no fire rating.

#### Can we install Eldorado Stone around a fireplace?

Eldorado Stone can be installed around a fireplace. The veneer has to be a minimum of 18" from any open flame. Download the *Installation Procedures* PDF from www.eldoradostone.com for more detailed information.

# What measures should be taken for hot/cold weather installations?

For cold weather installations ambient temperature should be  $40^{\circ}F$  or higher at the time Eldorado Stone veneer is applied. If the temperature is below  $40^{\circ}F$ , mortar should be heated between  $40^{\circ}F - 120^{\circ}F$  (not to exceed  $140^{\circ}F$ ). Any mortar that freezes should be discarded. Wall surfaces may need to be covered and heated after installation of veneer to avoid freezing the mortar. See section 2104.3 of the International Building Code (IBC) for additional cold weather requirements.

Applications in hot weather conditions should follow the requirements in section 2104.4 of the IBC. Mortar should be kept under 120°F and be used within 2 hours of initial mixing.

# Does Eldorado Stone need a ledge detail at the bottom for structural support or can it hang freely?

No footings or support ledges are needed. The product is an adhered veneer and is supported on the wall by the bond of the mortar to the stone and scratch coat.

#### What measures should be taken for applications over 30 feet?

Eldorado Stone can be installed on any structurally sound surface. For all applications up to 30' in height we recommend following our *Installation Procedures*. Unless special construction techniques accommodates differential movement — which is approved by a code official — there is a 30' height limit for installations over wood-frame construction. For installations over non wood-framed sheathing (e.g., steel studs, concrete walls, etc.) there's no specific height limitation. However, Eldorado Stone recommends that you consult with a building code official regarding any project exceeding 30' in height.

# What kind of wind-load testing has been applied to Eldorado Stone veneer?

Eldorado Stone has tested grouted and dry-stacked applications in accordance with: ASTM E330, Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference (Modified). Wall samples were subjected to positive and negative structural load tests at 57.6 psf (150 mph wind speed) and 60 psf (153 mph wind speed) pressure differentials. After completion of each load a visual inspection revealed no visible damage or cracking.

#### Where can I learn more about Eldorado Stone?

Contact your Architectural Representative, visit www.eldoradostone.com or talk to your local distributor to find out more about the many inspirational and technical attributes that make Eldorado Stone *The Most Believable Architectural Stone Veneer in the World*<sup>TM</sup>.



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