FLUTED

Installation Instructions

IMPORTANT

The following installation instructions must be followed for warranty purposes and for optimal performance. InStone does not install panels or have control over the installation of the panels, therefore these Installation Instructions are to be used as guidelines. It is the responsibility of the installer to ensure all products are installed in accordance with these RealCast Installation Instructions. InStone assumes no liability for improper installation or personal injury resulting from proper or improper use or installation. RealCast Fluted panels are a raw and natural concrete. Please check if sealants are needed for your application.

SAFETY FIRST

The operator of any power tools or other tools should be skilled and familiar with the correct use of each tool. Proper safety gear must always be worn.

BUILDING CODE

Follow local Building Codes when applying RealCast. It is the responsibility of the installer to ensure that applicable building codes are met or exceeded.

PRODUCT COLORING:

RealCast is a natural concrete product, and some color variation is inevitable (and usually desirable). Please ensure, wherever possible, that the production dates on all product being installed side-by-side are the same or compatible. This will help ensure consistent coloring. Most of the time product from different dates will match up, but the installer should check this before installing. Also, there is the possibility for a panel to be slightly off colored in any batch. Again, the installer should check all panels prior to installing.



RECOMMENDED TOOLS:

Miter Saw and/or Table Saw Pencil

Stagger Stencil Safety Glasses

Drill Level Drywall Saw Earplugs

Measuring Tape 10 oz. Caulking Gun Utility Knife **Dust Mask**

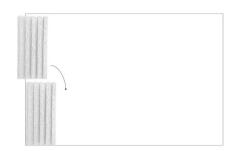


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Panel Installation





1. MEASURE and MARK: Before starting, the wall should first be measured, and panels laid out. A level or tape measure should be used to ensure each row is level. For exterior applications, the panels should be 1-2" off the ground to prevent water saturation.

Using a measuring tape, mark the backside with a pencil or marker, and then use a straight edge to mark a cutting line.

- **2. CUT:** The panels are best cut with backside (flat) down. Use a table saw, miter saw or circular saw with masonry blade to make the cuts. To cut outlet and fixture holes, use a masonry or tile-cutting hole-saw or high-speed drill to cut the opening. The final (top) piece will need to be cut to the necessary height, so the panel fits flush with the ceiling or top of the wall.
- **3. FASTEN**: RealCast Fluted panels can be installed horizontally or vertically, depending on the aesthetic goal. Fastening will depend on whether the installation is on an Interior or Exterior wall, and what substrate you are fastening to. If a sealant is being applied, read the manufacturer's instructions prior to fastening RealCast to the wall.

INTERIOR: Installing over existing concrete, brick, or cinderblock, plywood, or drywall.

- 1. Apply RealCast panels to wall using suitable wall tile adhesive or mortar. Clean and prepare both surfaces before application and follow tile adhesive / mortar guidelines.
- 2. Suitable construction adhesives (PL Premiums, TiteGrab, low-expanding foam adhesive, etc) can be used, but mechanical fastening (screws) is often needed due to the weight. Apply adhesive around the panel perimeter and within the border in a serpentine pattern. Clean and prepare both surfaces before application and follow all adhesive guidelines.
 - a. If installing onto plywood or drywall, it is best to first mark the wall showing all studs. Then predrill through the thinner joints on the panel, and screw into studs. The screw holes can be filled with colored caulking, and painted if necessary.
 - b. If installing onto brick or concrete, use suitable screws such as ROCK-ON™ and BACKER-ON™ where available. The screw heads should be counter-sunk very slightly and covered with a color-matched grout or caulking.

EXTERIOR: Due to the weight of RealCast Fluted panels, it is recommended to use standard masonry rules and procedures when installing on an exterior wall. ((There are many methods for this and will depend on the local climate and building code))

1. Surface Preparation (over wood, plaster board, painted stucco, foam, or metal)

Cover entire surface with metal lath/mesh, making sure to overlap the joints approximately 2" using 1-2" roofing nails or screws depending on surface. Over wood surface, nails or screws should be 6" apart in every direction. Over plaster board or painted surface or stucco, nails or screws should be kept 16" on center, penetrating the studs, and 6" apart. NOTE: Waterproof paper (exterior wrap) suitable for the geographic climate (and local building code) should be used over an exterior wood surface - before installing lath.



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2. Scratch Coat:

When required, a sand and cement mortar mix will then be applied over the metal lath, as thin as possible, but making sure that the lath is completely covered, and surface is completely level. Scratch up the plastered surface while it is still wet using a masonry scratcher, so that the surface is not too slick or smooth. Most codes require the coat to dry 48 hours before applying stone.

3. Applying Mortar to Fluted Panels:

Apply a suitable mortar (check with local supplier for most suitable mortar for your application and environment) to the back of the Fluted panels according to the ratio shown on the supplier's instructions. Important to note that too much mortar can cause slipping.

4. Applying Fluted Panels to the Wall

Wherever possible, begin at the bottom of the wall. Push Fluted panels firmly into place and "wiggle" slightly to set the bond. YOU SHOULD PUSH FIRMLY ENOUGH SO THAT THE MORTAR IS SQUEEZED OUT AROUND THE EDGES OF THE STONE. If sliding or slipping occurs, the mortar may be too thin, you may be using too little mortar, or you may be using too much mortar.

5. Cutting Fluted Panels:

The panels are best cut with backside (flat) down. Use a table saw, miter saw or circular saw with masonry blade to make the cuts. To cut outlet and fixture holes, use a masonry or tile-cutting hole-saw or high-speed drill to cut the opening. The final (top) piece will need to be cut to the necessary height, so the panel fits flush with the ceiling or top of the wall.

Corner Installation

Both INSIDE and OUTSIDE corners can be cut using the standard RealCast Fluted Panels.

BUTT CORNER- the panels can simply be butted together to create a finished inside or outside corner. Panels can be fit together as a tight joint (below left drawing), or as an open joint (below right drawing).



MITERED CORNER - the panels can be mitered to create a more continuous look, especially for outside corners. Cut the panel at a 45° angle, then use the same piece to continue the return. If there is a slight gap, caulking can be used to fill it.

