

Installation Guide

Architectural Casting, LLP



Custom Stone Fireplace Surrounds 2021

Stone Fireplace Surround

Installation Instructions

Welcome to the Architectural Casting fireplace installation guide. Thank you so much for choosing us as your quality custom stone fireplace vendor. We value your business and appreciate the opportunity to serve you. Since each of our stone fireplaces are seamless, one of a kind custom creations, you will realize that much of the work has already been done for you by our in-house professionals, ensuring an easy installation experience for you.

Please keep in mind that what is included in this instruction sheet are guiding principles. Always consider each site specific factor, consulting your General Contractor and fireplace manufacturer to ensure that your fireplace is installed safely and to building code.

The installation procedure will vary depending on a few site-specific factors, the most important being the type of material you are adhering the stone fireplace to. In most cases, you are either adhering to masonry materials, or non masonry materials such as drywall, firebox sheet metal, flooring ect.

If you are adhering the fireplace to drywall with a firebox that is constructed out of sheet metal or similar material, the cast stone components are installed using heavy duty construction adhesive and masonry screws.

Non-Masonry Installation Procedure

Suggested Tools & Materials

- 1) PL Loctite Premium Heavy Duty Construction Adhesive
- 2) 4" Masonry Screws
- 3) 1/8" Masonry Drill Bit
- 4) 3/8" Masonry Drill Bit for Creating Countersink
- 5) Power Tools/Drills



Step 1:

First, install the fireplace hearth by marking the center of your firebox as well as the center of the hearth, which you will use to align the hearth perfectly centered to the firebox opening in your wall. Next, apply premium construction adhesive liberally onto the surface wherein the fireplace hearth will rest. Ensure that the surface area is level, and adding extra glue to accommodate for small imperfections in the leveling of the floors if appropriate. Finally, carefully place the hearth down on the glue, simultaneously aligning the center of the hearth with the center mark of the fireplace unit.

Step 2:

Next, install the seamless surround panel by applying generous amounts of glue onto the back of the surround panel, and then placing the surround panel on the wall. Use the inner perimeter of the surround panels fireplace opening to align the surround panel flush with the opening of your fireplace viewing area. Press firmly against the surround panel all around to ensure that glue is squeezed and a firm bond is created between drywall, metal, and your stone fireplace surround.

Step: 3

Thirdly, install the stone fireplace around the surround paneling by applying premium construction adhesive on its inner edges, on the outer edges of the surround panel, and where the fireplace legs will meet the stone hearth as well. This ensures that the fireplace itself is glued both to the wall that it occupies, and the stone pieces around it as well. Be cautious not to apply too much of the heavy duty construction adhesive at this point, as excess material will ooze out of the crevasses once applied to the wall, and is difficult to clean. Once the fireplace is

glued to the wall, you must secure it in place using 4” masonry or exterior screws. Drill two screw holes using your 1/8” masonry drill bit through the stone at a 45 degree angle, catching the stud framing behind the sheetrock of the wall that the fireplace occupies. Create a countersink opening using the 3/8” masonry drill bit in order to hide your masonry screw head in the stone. Clear the screw hole of any dust and install the 4” masonry screws, securing the fireplace firmly to the wall that it occupies. Note that the best placement for your screws depends on your the position of your fireplace and the framing of the wall that it will occupy. If the firebox allows it, you are to install the screws on the underside or belly of the horizontal portion of your stone fireplace surround. This way the screw holes are going to be partially covered by the inner surround panel, and are invisible from any viewing perspective. If you cannot place the screws by drilling up at a 45 degree angle on the underside of the fireplace, then you may drill the hole on the top portion of the mantel, running the screw down into the stone, drywall, and catching the wood framing behind it. The screw heads are countersink and the touch up kit is used to cover the area to making the screw holes imperceptible.

Step 4:

Finally, clean and grout your custom stone fireplace. First clean your stone fireplace of any smudges using Acetone and clean paper towels. Soak the paper towels with Acetone and use it to rub off any stains. If any stains remain, gently polish the area using 120 grit sandpaper. Once the fireplace is clean, refer to the grouting instruction guide to infill the spaces where the fireplace components come together, and any gapping that may exist between the fireplace and the drywall on its extremities where the fireplace comes in to the wall that it occupies.

Masonry Installation Procedure

Suggested Tools & Materials

- 1) PL Loctite Premium Heavy Duty Construction Adhesive
- 2) 4" Masonry Screws
- 3) 1/8" Masonry Drill Bit
- 4) 3/8" Masonry Drill Bit for Creating Countersink
- 5) Power Drills
- 6) Large Format Thin-set
- 6) Mud Mixer
- 7) Square Tiling Notch



Step 1:

First, begin installing the fireplace hearth by marking the center of your firebox as well as the center of the hearth. You will use to align the hearth perfectly centered to the viewing area of firebox. Next, prepare and apply large format Thin-Set mortar mix both onto the surface where the fireplace hearth will be installed and on the back of the hearth itself. Ensure that the surface area is level, and adding extra Thin-Set to accommodate for imperfections in the leveling of the floors if appropriate. Finally, carefully place the hearth down on the mortar, simultaneously aligning the center of the hearth with the center mark of the fireplace unit. Press the hearth down to ensure a suctioning seal of the mortar mix, pushing out access mortar as needed.

Step 2:

Next, install the seamless surround panel by applying generous amounts of Thin-Set to both the back of the surround panel, and the masonry firebrick of the firebox that the surround panel is to adhere to. Use a square notch to first work in a thin layer of the Thin-Set mortar mix into the surface, then apply about a quarter inch layer to both surfaces. This will ensure that the thinnest mortar bonds well to both the cast stone hearth and the masonry surface of your fireplace unit. Use the inner perimeter of the surround panels fireplace opening to align the surround panel flush with the opening of your fireplace viewing area. Press firmly against the surround panel all around to ensure that the mortar mix is squeezed and a firm bond is created between the masonry stone work of your fireplace, and your stone fireplace surround.

Step 3:

Install the rest of the fireplace using the standard non masonry installation procedure from step three above.

Step 4:

Follow the standard cleaning and grouting instructions as in step 4 above.

Special Notes:

Please note steps 2 and 3 are interchangeable based on the judgment of the installers and their convenience. For fireplace with traditional composition involving hearth, surround paneling, legs (columns), and a shelf (lintel) as pictured below, it may be easier to first install the fireplace hearth, followed by the legs or supporting columns, next the shelf, and then finally the inner surround panel. Please feel free to give us a call anytime at (704) 737-0551 for a project specific installation consultation for your convenience.

