



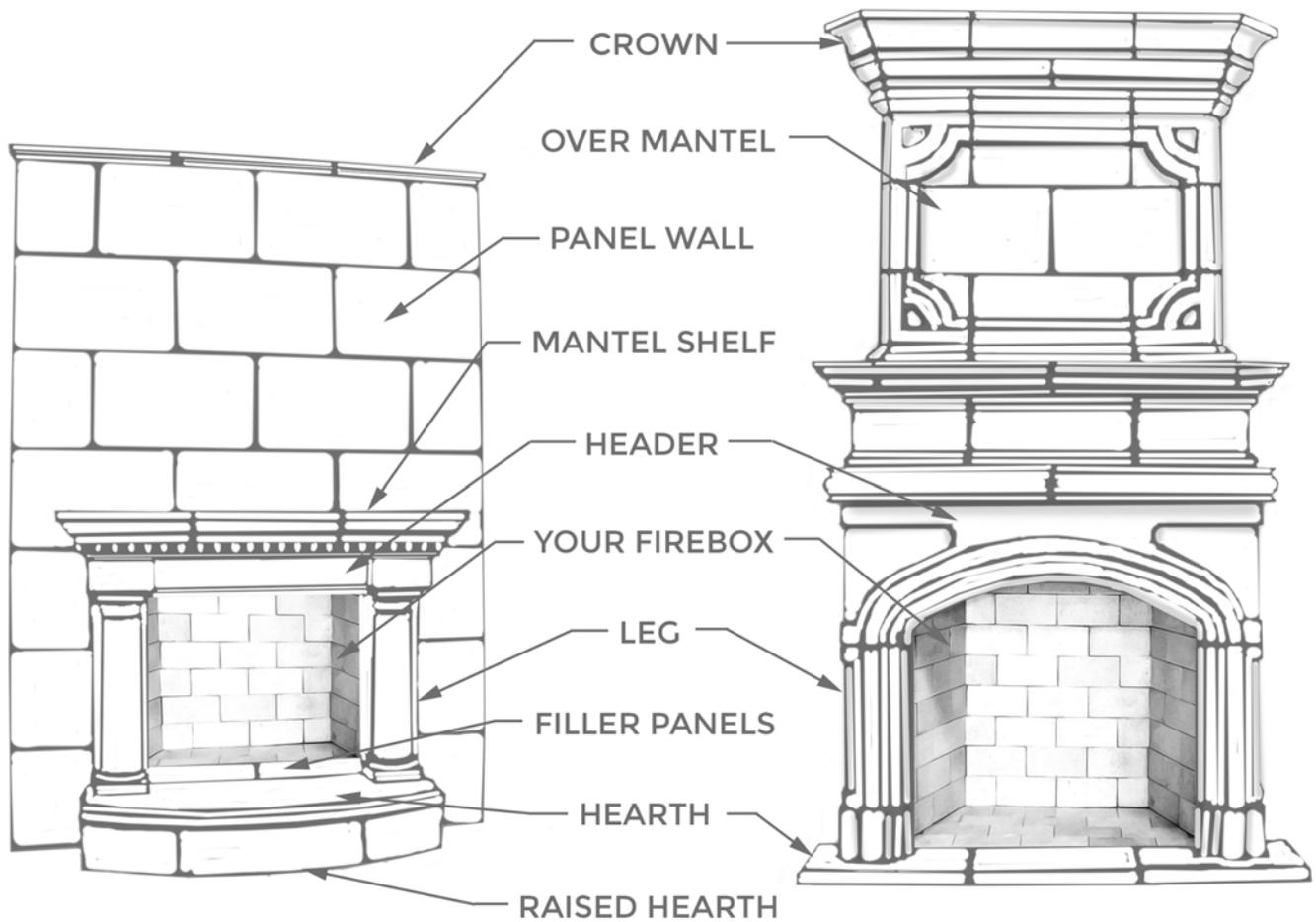
Custom Surround Installation Manual

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Anatomy Of A Fireplace



Installation Tools, Equipment, and Supplies

<i>DeVinci Provided</i>	<i>Installer Provided</i>	<i>Suggested</i>
Mortar Kit (Powdered Mortar and Polyplex Bottle for finish pointing (grouting) and patching)	Tapcon Fasteners (1/4" x 1-3/4") & (1/4" x 2-1/4")	Basic Hand Tool Set & Bounceless Hammer
	3/4" x 1" Self-Drilling Screws	Rubber Gloves
Plastic Grouting Bags	Impact Driver w/#2 Phillips Bit	Sponge
Spacer Set (SP) (4 each)	Paintable Caulk	Mason's Horsehair Brush or Carpet Squares
<p>*Installation Brackets & Dowels for anchorage between pieces.</p> <p>(Unit Dependent- Please see your packing list that was included in your shipping crate for a list of included installation anchors.)</p>	2" Blue Painter's Masking Tape	Toggle-Lock Heavy Duty Drywall Anchors
	Caulking Gun	Drop Cloths & Cardboard (floor and countertop protection)
	Tape Measure	
	Levels (2' & 4'), Framing Square & Speed Square	5-gallon Plastic Bucket(s)
	3/16" , 1/4", & 1/2" Masonry Drill Bits	16 in. Universal Thinset & Grout Mixing Paddle
	3/16" Metal Drill Bit	Stud Finder
	Power Drill	Safety Shoes, Gloves & Glasses
	Construction Adhesive	
	Thinset	** OSHA APPROVED DUST MASK
Mason's Trowel & Mortar Pointing Tools		

*Unit Dependent (not included with all units)

****OSHA APPROVED DUST MASKS SHOULD BE WORN BY ALL PERSONNEL IN THE VICINITY OF ANY CUTTING OF PRECAST ITEMS.**

Additionally, all dust should be thoroughly cleaned up with shop vacs utilizing OSHA approved filters to prevent inhalation of latent dust by others during construction or at cleanup. Some project sites may require the use of wet saws for any cutting of concrete. OSHA jobsites will require compliance with "29 CFR 1926 OSHA Construction Industry Regulations; paragraph 55". It is the responsibility of the installer to provide a safe work space for all.

Warnings, Cautions, and Notes

Warnings, Cautions, & Notes

All Informational and installation documentation contains warnings, cautions, and notes as needed.

WARNING

A warning shall be provided to inform the reader of a hazard that could cause death or personal injury of any degree. The warning shall be worded clearly and shall be placed immediately before the text that refers to the hazardous condition.

CAUTION

A caution shall be provided to inform the reader of a hazard that could cause damage to DeVinci Cast Stone products and/or the home or facility in which they are being installed. The caution shall be worded clearly and shall be placed immediately before the text that refers to the hazardous condition.

NOTE

A note shall be provided to give the reader information that needs to be separated from the general text for emphasis. The note shall be worded clearly and shall be placed near the text that requires clarification.

Transportation Disclaimer

Although DeVinci has made every effort to safeguard our products by being crated and packed in a way that minimizes the chance of damages during shipping, please review the following information carefully to ensure you know how to handle the unfortunate situation in which your surround has arrived damaged.

Visible Damage

If your crate arrives with visible damage to the package, please **DO NOT SIGN FOR, NOR ACCEPT THE SHIPMENT**. Please take photos of the damages and send them to your customer service representative. As soon as the images have been sent, please call us to inform us of the situation, we will be more than happy to help you through the process of reconciliation. Please do not sign for a shipment with visible damage until after you have spoken with a representative. If you are accepting your delivery outside of DeVinci Cast Stone's standard business hours, and cannot talk to a representative, please call our logistics service provider to receive 24/7 support. You can find the contact information to our logistics service provider in your shipment tracking email.

Non-Visible Damage

If your crate arrives with no visible damage to the package, please ensure you have allowed for enough time to uncrate and inspect the contents of the shipment within 24 hours of signing to accept delivery. This small window of time is allotted as a grace period in case the purchase has any concealed damage (concealed damage is freight that might have been damaged during transit, but the damage, loss, or shortage was not visible or not notated on the proof of delivery document). If any concealed damage is not reported within the 24-hour window, the carrier will be released of any responsibility for any repairs or replacement pieces they would typically be expected to cover. For more information, please see our Shipping and Receiving document that was provided to you.

DeVinci Cast Stone is not liable for any damage occurring during transport, delivery, unloading or uncrating. While DeVinci Cast Stone will work with the client and carrier to resolve any issues, DeVinci Cast Stone is not and will not accept liability except as outlined in terms of sale.

Uncrating Product

Within **twenty-four (24)** hours of signing for receipt of the fireplace, it must be uncrated, and all contents inspected for damage. During the uncrating process, care must be taken to protect the integrity of the shipping crate and contents. Should any damage be identified, DeVinci Cast Stone must be notified within **twenty-four (24)** hours of signing for receipt. Such notification must include photographic evidence of damage(s) along with photographs of the crating and packing components. Failure to notify DeVinci Cast Stone of damage within the identified period releases DeVinci Cast Stone from any responsibility for losses during the preparation and shipping processes. Should any damages be identified outside the above parameters, DeVinci Cast Stone will work with the shipping recipient in the most expeditious manner to bring resolution to the identified issue(s).

Receipt of Shipment and Inspection of Contents



The shipping crate and contents are extremely heavy. Assure that appropriate equipment and personnel are available to assist shipping carrier with staging the shipping crate and breaking down its content for inspection.

Receiving Shipment of DeVinci Cast Stone Products

1. Shipping recipient should generate a photo journal of the receiving and unpacking process to assure proper resolution of any issues encountered.

- a. Capture images of all sides and top of packing crate immediately upon delivery by carrier.



Whenever possible, it is advantageous to unpack and inspect shipping crate contents before signing shipping receipt. Signing the receipt prior to inspection usually releases carrier and DeVinci Cast Stone of liability for any damage that may have occurred in transit. Damage can occur to contents due to improper handling even when there is no visible damage to the shipping crate.

- b. Sign shipping receipt and release carrier.

Inspecting Contents



Some fireplace components are heavy and unwieldy; care must be taken to assure personal safety during the unpacking and inspection process.



DeVinci Cast Stone products are thoroughly inspected and carefully packaged for shipment. Care must be taken during the unpacking process to assure that components do not strike one another causing chipping or abrasion.



DeVinci Cast Stone proactively strives to assure that its products arrive at the end-user in the best possible condition. Whenever possible, we request that our customers continue to compile a photo journal during the unpacking process, and also email the photos back to us for review by our shipping department.

1. Carefully remove top panel of packing crate.
2. Locate and remove packing list for use with inventory of crate contents.
3. Carefully remove formed foam protective packaging assuring that fireplace components do not shift, striking one another.



Carefully remove packing crate sides as necessary during the inventory and inspection process assuring that contents do not shift.



When removing components from the crate, take additional precautions to ensure no sliding or dragging of components out from the middle of the package. Please remove the parts from the top (or outside) first, working carefully in to ensure no edges or details get damaged during unpacking.

4. Remove all fireplace components positioning them separately on a clean and level surface, with padding between any parts and the floor or other items. You can reuse the foam pieces that were included in the crate to keep all components from damaging one another.
5. Inventory all crate contents using the packing list.
6. Carefully Inspect all contents.
7. Notify DeVinci Cast Stone within twenty-four (24) hours of signing for receipt of shipment via phone (405-680-5600) and/or email (mail@devincicaststone.com) should any deficiencies alternatively damage(s) be identified.

Installation



Some fireplace components are heavy and unwieldy; assure that appropriate equipment and personnel are available to assist during the installation process. Always wear appropriate eye, hand, skin, breathing and hearing protectors.



Throughout the installation process, assure that components do not strike one another causing chipping or abrasion. They must remain clean of dust to assure proper mastic adhesion.



After safety and careful handling of De Vinci Cast Stone components, the most critical aspect of your installation will be maintaining level. Any deviation from level throughout the build will be magnified and can affect the aesthetics of the final product.



Prior to beginning installation, the surface upon which the hearth will be installed must be checked for level and high spots. Any irregularities must be accounted for as the hearth is installed.



DeVinci Cast Stone components may have some minor irregularities in thickness. Standard grout spacing is a one-quarter inch (1/4"). Additional plastic shim stock is provided that can be added to spacers to maintain level.

1. Assure that mounting surface for the DeVinci Cast Stone product is clean, capable of supporting the final product weight and level.

2. Find and mark center line of firebox.



3. Using a level, transfer the centerline up the wall to a point above the final height of the DeVinci Cast Stone product. Mark the line with a 'C'.

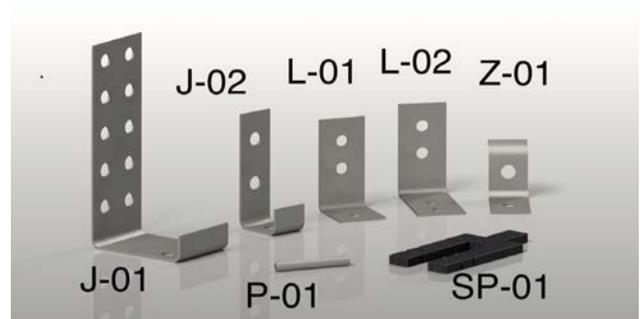


4. Find and mark the centers of all studs in the wall behind the DeVinci Cast Stone product also, using a level, transfer the mark up the wall to a point above the final height of the DeVinci Cast Stone product. These lines will identify anchoring points during the build.



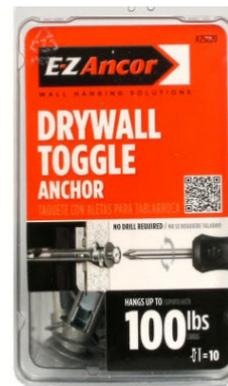
 **NOTE**

Throughout the build, components will be secured to the wall or to one another using construction adhesive and custom brackets or pins. Brackets, Pins, and their suggested locations are called out on your build sheets.



 **NOTE**

Whenever possible, mounting brackets should be attached to the wall at stud locations. When studs are not accessible, mounting brackets should be attached to the wall using Toggle-Lock Heavy Duty Drywall Anchors.



Hearth



Custom units normally include a three-piece hearth.



Fireplace Codes generally require that combustible materials (wood flooring, carpeting, etc.) shall be a minimum of twenty inches from the front of the firebox. DeVinci's hearths are designed to exceed these requirements. The installer is responsible for adhering with local code requirements.



1. Where a hearth is used, its overall dimensions are scribed on the floor.



Hearths can be installed on grout spacers directly on the sub-floor or tile or on a raised base depending upon the height required for the final flooring application.



If installed on a raised base, the dimension of the base should be shortened approximately two inches on both sides and the front to allow room for the final flooring to slide under the hearth.



2. Find and mark the center at the back edge of hearth's middle stone.



3. Shim mounting surface as necessary to gain appropriate base height and level side to side and front to back.

 **NOTE**

Construction adhesive should be used as a mastic where stones contact the floor or wall. Mastic should be applied generously but must remain back from faces of edges of stones to provide space for grout.

4. Apply generous amount of mastic to mounting surface.
5. Position hearth's middle stone against the wall aligning centerline of wall with centerline of hearth.



 **NOTE**

The center stone of the hearth is leveled first using shims if necessary then the right and left stones are leveled to the center.

6. Position right and left hearth stones with each separated from the middle stone using one-quarter inch of grout spacers.



7. Compress mastic to level hearth stones side to side, front to back and appropriate height.



Filler Panels

One of the unique designs of the Custom fireplace surrounds is that the legs and mantel overlap the filler panels allowing for quick and easy adjustment to an extensive range of firebox sizes.

When necessary, filler panels can be modified in width or height using a saw or grinder with a diamond blade.

 **WARNING**

Always wear eye, hand and skin, breathing and hearing protectors appropriate for the procedure being performed. Due to silica considerations, an OSHA approved N95 or better respirator must be worn by all personnel in the vicinity of any cutting of precast items.



The following steps identify the preparation and installation procedures for filler panels.

Fireplace Surrounds are assembled from the bottom up. The next component installed would be the bottom filler panel if one is used. In some applications, it is used to cover the area between the floor or hearth and the firebox or serve as an ash stop. In others, it is not used and discarded.

Prior to installation, the bottom filler panel may need to be cut to the appropriate height and width.

 **CAUTION**

It is the installer's responsibility to assure that the fireplace surround does not interfere with the operation of the fireplace.



1. Locate and mark center of bottom filler panel.

2. Position one-quarter inch of grout spacers on hearth or floor below outer edges of the fire box.
3. Apply mastic to the back of the filler panel and to the surface it will sit on.
4. Align the center mark on the filler panel with the center line scribed on the wall or hearth, set it on top of the grout spacers positioned earlier and press the panel against the wall.



5. Check and adjust level as needed and secure the panel to the wall at its right and left outer edges using J-02 brackets.



 **NOTE**

Wall brackets must always be located such that they will be completely covered by later panels. They are secured to the wall using a Tapcon at a stud point or with a heavy-duty wall toggle. They are secured to the stone components by drilling a 3/16" hole and inserting a 1/4" Tapcon.

Prior to installation, the side filler panels may need to be cut to the appropriate height and width or notched at mating surfaces.

6. Position one-quarter inch of grout spacers and mastic on both ends of the bottom filler panel by the J-02 brackets.
7. Apply mastic to the back of one of the side filler panels.
8. Align its inside edge with firebox, set it on top of the grout spacers positioned earlier with its bottom edge secured within the J-02 bracket holding the bottom panel and press it against the wall.



9. Check and adjust level as needed and secure the panel to the wall at its top edge using a J-02 bracket.



10. Install the other side filler panel in the same manner.

11. Make any adjustments necessary to assure that both side filler panels are leveled both vertically and at their tops in relation to one another.

Prior to installation, the top filler panel may need to be cut to the appropriate height and width.

12. Mark the horizontal center on the top edge of the top filler panel.
13. Position one-quarter inch of grout spacers and mastic on the top of both side filler panels by the J-02 brackets.
14. Apply mastic to the back of the panel.

15. Align its center with the center mark on the wall and set it on top of the grout spacers positioned earlier with its bottom edge secured within the J-02 bracket holding the side filler panels and press it against the wall.



16. Check and adjust level as needed and secure the panel to the wall at its top edge using two Z-01 brackets.



17. Clean any extraneous mastic off installed panels.

CAUTION

If areas of the filler panels project greatly into the fireplace opening, the installer should take care not to leave any plastic spacers exposed to the high heat or flame. The “inside” joints of the fillers should be well grouted thus sealing the plastic spacers from heat. The inside joints surrounding the existing opening should also be well sealed. Thus, if the opening is masonry, you will use the grout provided. If the opening is a prefab steel insert, use a fireproof sealant caulk.

Legs, Header, and Mantel Shelf

1. Referring to the installation drawing, with a pencil, lightly mark the locations of the inside edge of both legs on the side filler panels.

NOTE

These marks will be covered during the grouting process if located correctly.

CAUTION

The legs can be heavy and unwieldy. Lift and transport carefully.

NOTE

Corresponding holes are drilled on-site in the hearth and in the bottom of each leg to accommodate stabilizer pins.

2. Measure and drill 1/2” hole in the bottom of each leg.



3. Measure and drill 1/4” holes in hearth.



4. Insert stabilizer pins into the hearth.



5. Position grout spacers and apply mastic around the stabilizer pin.



6. Carefully lift the leg in place so that its bottom hole fits over the stabilizer pin and its inside edge aligns with the line struck previously on the side filler panel and press leg to the wall.



7. Check level and secure the leg to the wall at the top with an L-02 bracket.



8. Install opposing leg in the same manner.
9. Check level across tops of legs and make any necessary adjustment placing shims on lower grout spacers.

10. On the top of Header, make a small mark at the back center.



11. Place one-quarter inch of grout spacers and mastic on the top of each leg.

⚠ WARNING

12. Put a small amount of mastic on the back surfaces of the header that will meet the wall.

Always assure that adequate assistance is available for lifting, carrying and placement of the heavier stone components.

13. Carefully lift the header in place so that it is aligned with the center line on the wall.



14. Recheck level and attach the header to the wall with L-02 brackets.



15. Lightly mark center at the front-top of the header.



16. Lightly mark center on the front - bottom of the middle mantel component.



17. Place grout spacers and apply mastic in the footprint of the middle mantel component.



18. Carefully lift the middle mantel component into place aligning the center marks.



19. Square its face with the header below, level it front to back and side to side; then attach it to the header with a L-02 bracket on each side.



 **NOTE**

The right and left side mantel components are pinned to the middle. The corresponding holes for the pins are measured and pinned on-site.



20. Mark and drill 1/4" holes on both sides of the middle mantel component and insert pins.



21. Mark and drill 1/2" holes on the inner faces of the right and left side mantel components at corresponding locations.



22. Place spacers on the header and apply mastic on the header, around the pin and on the side of the middle mantel component.



23. Carefully lift the side mantel component into place aligning its front and side faces with the header checking the gap between components, and leveling front to back and side to side.



24. Install opposing mantel component in the same manner.

Grouting



WARNING

Always wear eye, hand, and skin, breathing and hearing protectors appropriate for the procedure being performed.



NOTE

When taping, set tape back 1/32" to 1/16" from opening to provide a slight overlap. This aids in ease of finishing the grout lines. Added care given to the taping process will greatly enhance the finished product.

1. Carefully tape both sides of areas to be grouted.



Grout can stain floors, walls and ceilings. Take necessary precautions to cover areas surrounding the workspace.

2. Once taping is complete, apply drop cloths and shielding to all surfaces that might be stained by grout.

 **NOTE**

Fireplace surrounds are shipped with a small bucket of color-matched grout material and a smaller jar of polyplex, which is a curing liquid for the grout; and a grout bag.



 **NOTE**

Only prepare grout in a quantity that can be used in approximately one hour. Reserve a portion of the components for possible future patching needs.

3. Prepare Grout

- a. In a clean container, prepare water/Polyplex mixture. Eight-parts water to one-part Polyplex.

- b. Put a quantity of grout into a clean container.



- c. Mix water/Polyplex mixture into grout to attain the correct consistency.



- d. After initial mixing is complete, allow grout to rest for approximately five minutes and then re-agitate. This will break the grout's initial bond and make it easier to work in the grout bags.

 **NOTE**

Grout should be mixed to the consistency of thick pancake batter.

 **NOTE**

A grout bag should be used during the grouting process.

4. To prepare the grout bag, cut the small end of the bag so that the opening is approximately 1/2" in diameter.



5. Rinse the interior of the bag with clean water to prevent sticking of the grout. Fill the bag half to two-thirds full and twist top to seal the bag. The bag can be squeezed to expel the grout from the small end and the top twisted as necessary as the contents are used.



 **NOTE**

It's always good to have a container of clean water and sponge available for cleaning up spatters throughout the grouting process.

6. Begin grouting fireplace surround from bottom, working up.
7. Fill grout joint liberally and work first course back into joint approximately 1/4" to 1/2" with tuck pointing trowel or similar tool.



 **NOTE**

Should grout mixture begin to stiffen, rework it with a mixer to return it to a usable state. DO NOT add additional water unless mixing does not return grout to its initial consistency.



8. Apply second course of grout leaving it stand proud (well out from the joint).



9. Continue the two-course grouting method throughout.
10. Allow grout to set up until it provides resistance to slight finger pressure and grout does not transfer to finger when touched.
11. Using a pointing tool with medium pressure and a sliding motion, press the grout into the grout lines. The blade of the tool should be flat and wider than the joint width and free of rust. A mastic trowel will do perfectly. This helps reduce chances of the mortar cracking later. The pressure applied pushes the mortar farther into the joint and eliminates any unseen voids.
12. Allow the grout to dry for approximately ½ hour and then holding the blade of your grouting tool or mastic knife perpendicular to the grout lines and using short shaving motions, work grout flush with tape.



13. Once flush, the joints can be tooled smooth with a trowel, brushed with a horsehair masonry brush or rubbed with a piece of carpet.
14. Remove tape touching up minor inconsistencies as you go with flat bladed tool.

 **NOTE**

When all tape has been removed, the grout surface can be touched up by brushing the surface lightly with damp sponge. Rinse the sponge frequently in a clean water container and wring out any excess water. A piece of carpet can be used as well for a bit more texture.

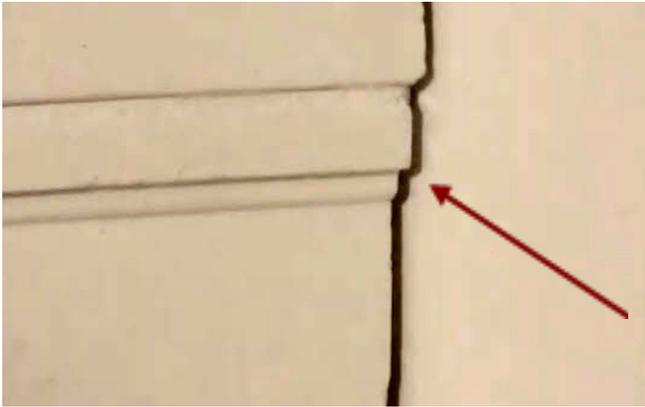


15. Clean tools, equipment, and work area.

Caulking

 **NOTE**

Any irregularities or voids between the surround and the wall against which it is mounted must be filled with paintable caulk. Grout should not be used.



 **NOTE**

When there is a larger gap between the surround and wall, Backer Rod can be inserted to hold the caulking close to the edge.

Backer Rod is a foam rope-like product that comes in several diameters.



1. Press Backer Rod into the void a minimum of one-quarter of an inch depth using a putty knife, screwdriver, or similar tool.



2. Apply Blue Painter's tape to protect the edge of the surround.



3. Apply a paintable caulk completely filling the gap.



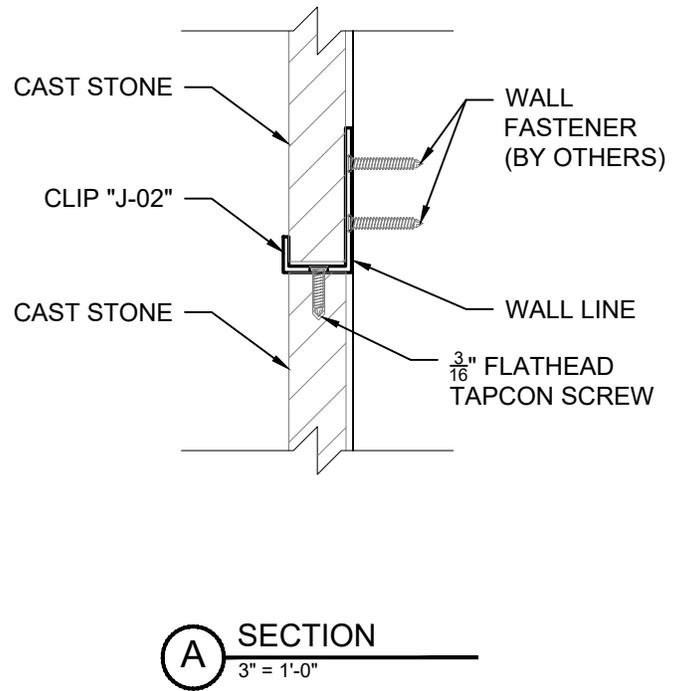
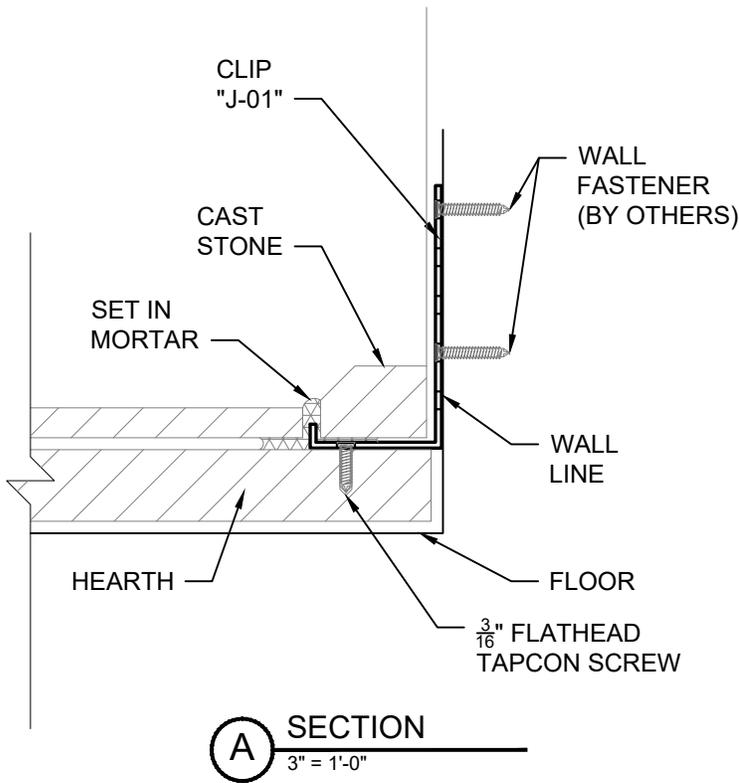
4. When the caulk has dried, it can be painted.



5. When the paint is dry, carefully remove the painter's tape.

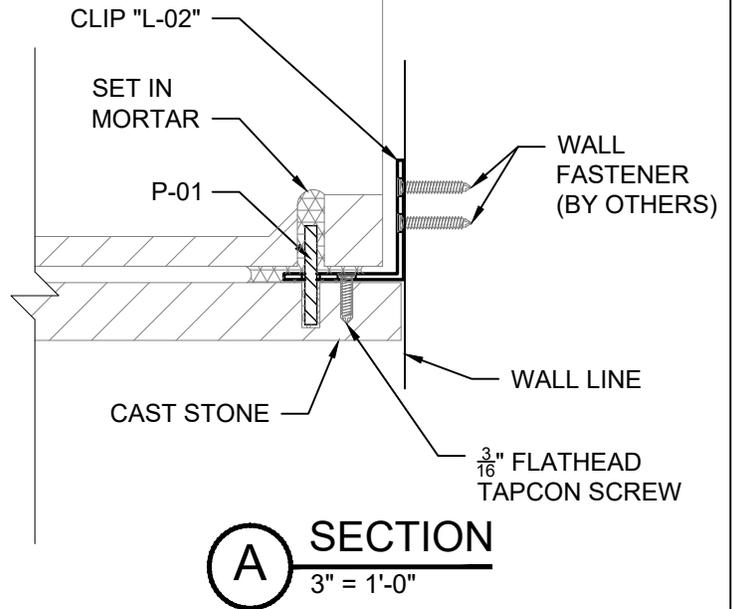
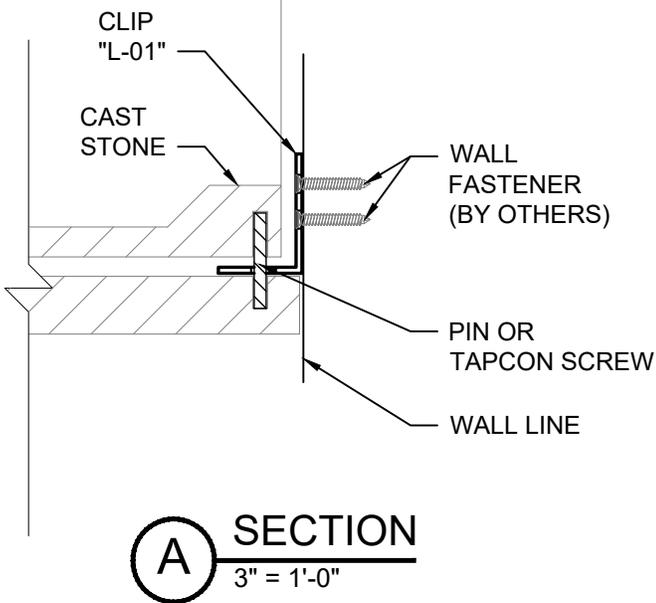


The finished fireplace surround pictured above is the **PETITE FLORENTINE** model.



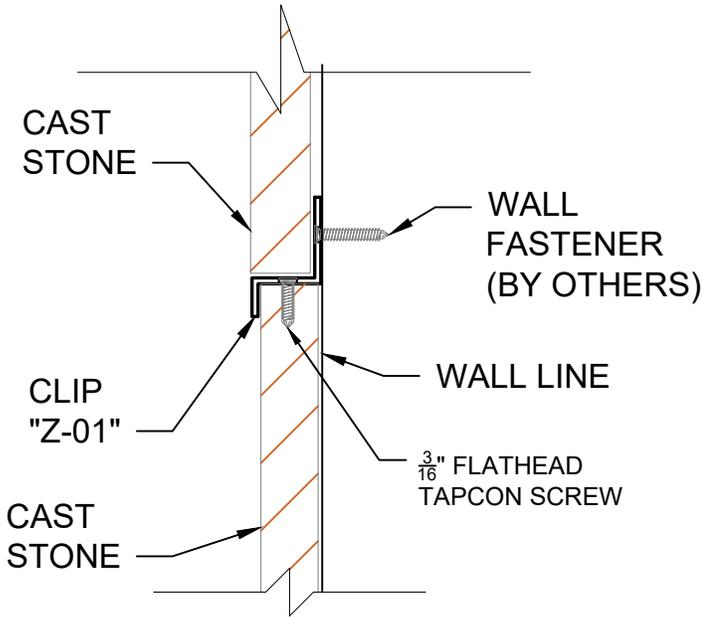
1 DETAIL - CLIP "J-01"

2 DETAIL - CLIP "J-02"

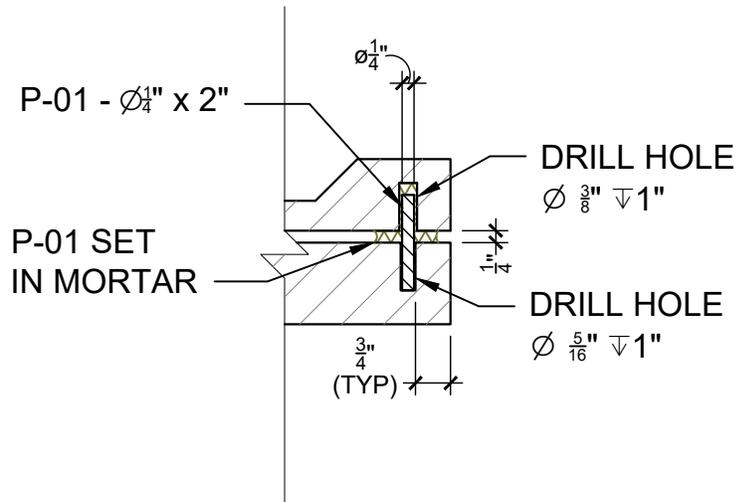


3 DETAIL - CLIP "L-01"

4 DETAIL - CLIP "L-02"



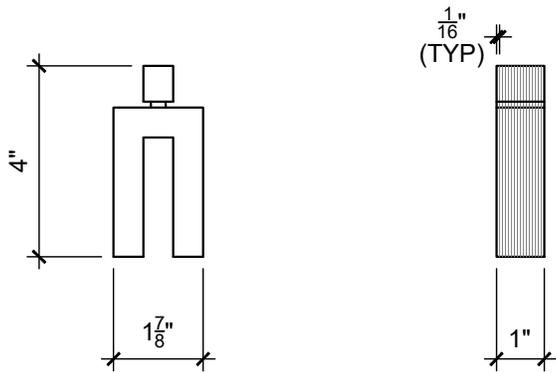
(A) SIDE
3" = 1'-0"



(A) SIDE W/ APPLICATION DETAIL
3" = 1'-0"

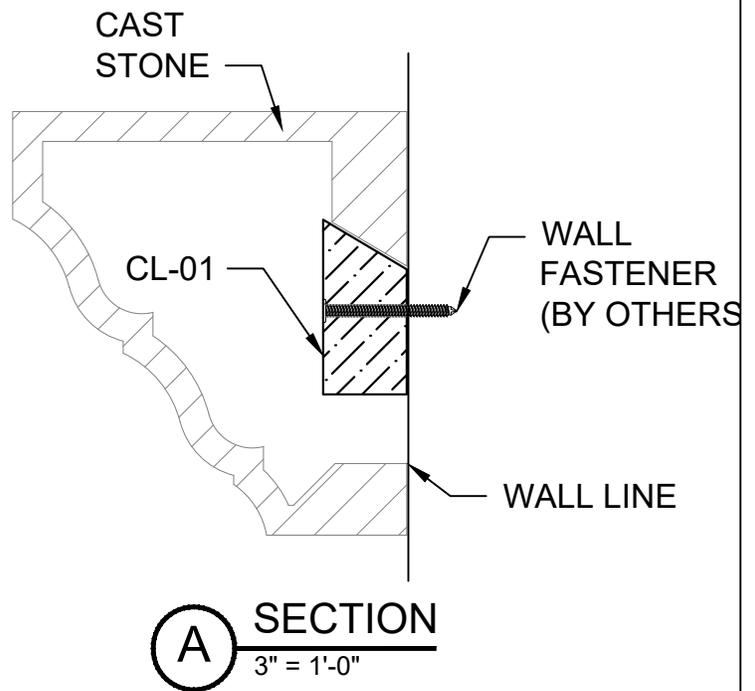
5 DETAIL - CLIP "Z-01"

6 DETAIL - PIN "P-01"



(A) FRONT
3" = 1'-0"

(B) SIDE
3" = 1'-0"



(A) SECTION
3" = 1'-0"

7 DETAIL - SPACER "SP-01"

8 DETAIL - CLEAT "CL-01"