

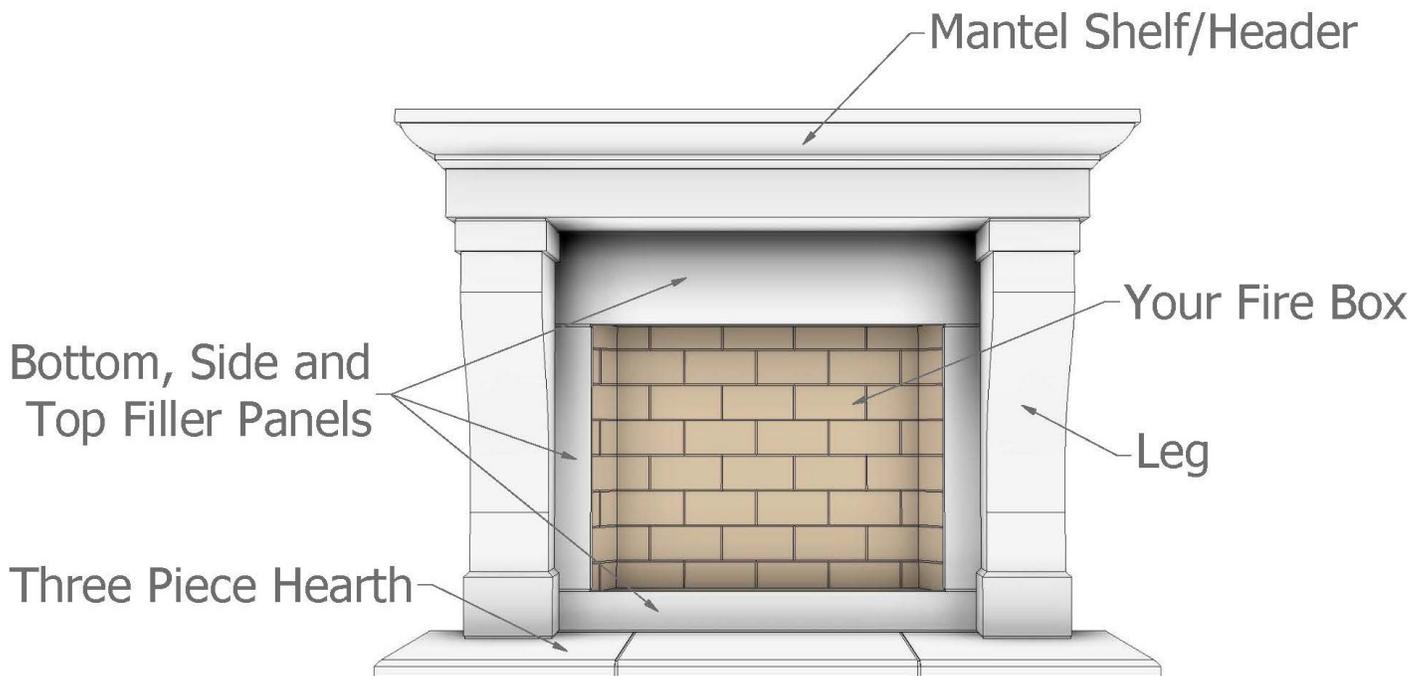


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# Installation Guide

## Quick Ship Mantels

# Anatomy Of A Fireplace



## Installation Tools, Equipment and Supplies

DeVinci Provided	Installer Provided	Suggested
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
	1/4 x 1 Self-Drilling Screws	Rubber Gloves
Plastic Grouting Bags	Impact Driver w/#2 Phillips Bit	Sponge
Spacer Set (SP) (4 each)	Construction Adhesive	Mason's Horsehair Brush
Installation Brackets:	Calking Gun	Toggle-Lock Heavy Duty Drywall Anchors
J-01 (4 each)	2 Blue Painter's Masking Tape	
J-02 (4 each)	Tape Measure	Drop Cloths & Cardboard (floor and countertop protection)
Z-01 (2 each)	Levels (2' & 4')	
* Mantel Shelf / Header Cleat (CL) with #10 x 3 & 1/2 deck screws (3 each)	Power Drill	5-gallon Plastic Bucket(s)
	3/16 Masonry Drill Bit	Grout Mixing Paddle
	3/16 Metal Drill Bit	Stud Finder
	Caulking Gun	Safety Shoes, Gloves and Glasses
	Thinset	
	Mortar Pointing Tools	<b>** OSHA APPROVED DUST MASK</b>

*\*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

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

### Receiving Shipment

The utmost care is taken at our factory to protect the integrity of our shipping crates and the fireplace components within. Should the shipping container be damaged in transit, you must be prepared to capture photo documentation of the damage prior to opening the container as well as the condition of its contents prior to signing for receipt of the shipment. Signing for receipt of damaged shipping containers and their contents would release both the shipper and *DeVinci Cast Stone* for responsibility of any damage that has occurred. Once off the transport, safeguarding the containers and their content becomes the responsibility of the owner.

## 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 damages 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

### WARNING

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 product(s)

- Shipping recipient should generate a photo journal of the receiving and unpacking process to assure proper resolution of any issues encountered.
  - Capture images of all sides and top of packing crate immediately upon delivery by carrier.

### NOTE

Whenever possible, it is advantageous to unpack and inspect shipping crate contents prior to 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.

- Sign shipping receipt and release carrier.

## Inspecting Contents

### WARNING

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

### CAUTION

*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.

### NOTE

*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 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 inventorying crate contents.
3. Carefully remove formed foam protective packaging assuring that fireplace components do not shift striking one another.

### NOTE

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

4. Remove all fireplace components positioning them separately on a clean and level surface.
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 or damage(s) be identified.

# Installation

## WARNING

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.

## CAUTION

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.

## NOTE

After safety and careful handling of *DeVinci Cast Stone* components, the most important 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.

## NOTE

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

## NOTE

*DeVinci Cast Stone* components may have some minor irregularities in thickness. Standard grout spacing is 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 and, 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 attaching points during the build.



## 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

 **NOTE**

All Quick Ship units are shipped with a three-piece hearth. The customer may use or discard these stones depending upon their desired configuration.

 **CAUTION**

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

5. If a hearth is installed, find and mark centerline of hearth's middle stone.

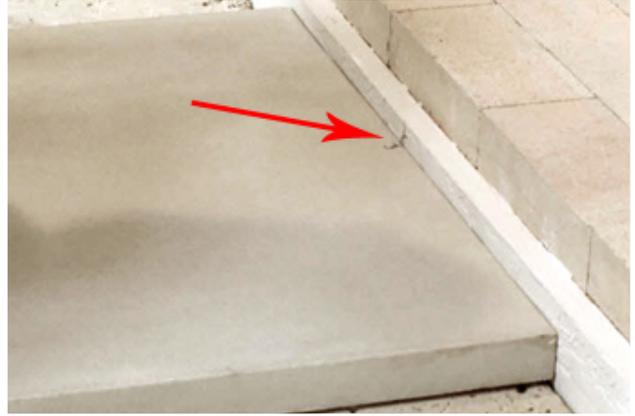


6. Shim mounting surface as necessary to gain appropriate base height and level side to side and front to back.

 **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 at to provide space for grout.

7. Apply generous amount of mastic to mounting surface.
8. 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.

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



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



## Filler Panels

One of the unique designs of the Quick Ship fireplace surrounds is that the legs and mantel overlap the filler panels allowing for quick and easy adjustment to a large range of firebox sizes.

### WARNING

Always wear eye, hand and skin, breathing and hearing protectors appropriate for the procedure being performed. Due to silica considerations, a N95 or better respirator must be worn when sawing concrete.

These units are packaged with five filler panels, a bottom, top, two sides and a spare. When necessary, these panels can be modified in width or height using a saw or grinder with a diamond blade.

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.

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.

- 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.



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



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



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



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



- Clean any extraneous mastic off installed panels.

## Legs and Mantle Shelf / Header

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.



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



When installing a J-01 Leg & Mantle mounting bracket, two Tapcons must be installed through the horizontal surface into the floor or stone and at least two Tapcons or screws into the wall.

2. Referring to the installation drawing for placement, install a J-01 Leg & Mantle mounting bracket in two locations and secure them to the wall and the hearth or floor.



The bottom of each leg is slotted to accommodate the toe of the J-01 Leg & Mantle mounting bracket.



3. Place one-quarter inch of grout spacers on both sides of each J-01 Leg & Mantle mounting bracket.
4. For one leg, apply a generous amount of mastic between the grout spacers and a small amount on the back surfaces where the leg will meet the wall.
5. Carefully lift the leg in place so that its bottom slot fits over the toe of the J-01 Leg & Mantle mounting bracket and its inside edge aligns with the marks on the side filler panel and press leg to the wall.



When installing a J-01 Leg & Mantle mounting bracket, two Tapcons must be installed through the horizontal surface into the floor or stone and at least two Tapcons or screws into the wall.

6. Assure placement and vertical level and secure leg at top with a J-01 Leg & Mantle Bracket



7. Install opposing leg in the same manner.
8. Check level across tops of legs and make any necessary adjustment placing shims on lower grout spacers.
9. On the top of the Mantle Shelf / Header, make a small mark at the back center.



At both sides of the Mantle Shelf / Header where it meets the top of the leg, it is slotted to accommodate the toe of the J-01 Leg & Mantle mounting bracket.



Some mantle shelves / headers include an additional installation cleat (CL). For those units skip to step 14.

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



11. Put a small amount of mastic on the back surfaces of the mantle shelf / header that will meet the wall.
12. Carefully lift the mantle shelf / header in place so that it is aligned with the center line on the wall and its bottom slots fit over the toes of the J-01 Leg & Mantle mounting brackets on the top of each of the legs.



13. Check level side to side and front to back. Assure that top of header is even with top of legs.



The following steps are only for units that require a mantle shelf / header 'installation cleat' (CL).

14. Referring to the installation drawing for the appropriate dimension, measure up from the top of one of the legs and make a mark on the wall.
15. Using a level, scribe a horizontal line that approximately spans the width of the fireplace surround.
16. On the bottom (small, flat edge) of the cleat (CL), measure and mark the middle.



17. With the low edge of the chamfer on the top of the cleat (CL) facing the wall and its bottom edge centered on and aligned it with the horizontal line, Attach the cleat (CL) to the wall at three stud locations.
18. Place one-quarter inch of grout spacers and mastic on the top of each leg.

## Grouting

19. Apply mastic to the top of the installation cleat (CL).



20. Carefully lift the mantle shelf / header in place so that it is aligned with the center line on the wall, its bottom slots fit over the toes of the J-01 Leg & Mantle mounting brackets on the top of each of the legs and it rests on the installation cleat (CL).



21. Check level side to side and front to back. Assure that top of header is even with top of legs.

### **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 work space.

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

### **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.
  - i. Eight parts water to one part Polyplex
- b. Mix water/Polyplex mixture into screened grout to attain the correct consistency.



- c. 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.



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



A grout bag should be used during the grouting process. To prepare the grout bag, cut the small end of the bag so that the opening is approximately  $\frac{3}{8}$ " in diameter. 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.

4. Fill grout bag.



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

5. Begin grouting fireplace surround from bottom, working up.



6. Fill grout joint liberally and work first course back into joint approximately  $\frac{1}{4}$ " to  $\frac{1}{2}$ " with tuck pointing trowel or similar tool.

 **NOTE**

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



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



8. Continue the two-course grouting method throughout.
9. Allow grout to set up until it provides resistance to slight finger pressure and grout does not transfer to finger when touched.
10. 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.

11. 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.



12. Once flush, the joints can be tooled smooth with a trowel, brushed with a horsehair masonry brush or rubbed with a piece of carpet.
13. 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 surface lightly with damp sponge. Rinse sponge frequently in clean water container and wring out excess water. A piece of carpet can be used as well for a bit more texture.



14. Clean tools, equipment and work area.

Congratulations on the successful installation of your  
**DeVinci Mantel**



The AVANT