

# Bricking a Corsair Arch

**CORSAIR SIZE:** 2½ feet wide x 8 to 10 feet long

(Firebox is 30 inches wide x 30 inches long)

## IF CUTTING YOUR OWN BRICKS, YOU WILL START WITH:

- 25 Thin Fire Bricks
- 19 Thick Fire Bricks

## PRE-CUT SIZES AND QUANTITIES:

### Thin Bricks



**Full:** 9" x 4½" x 1¼" .....Qty 14



**Size A:** Wedge Shape .....Qty 2  
(Note: The angle is 45°)



**Size B:** 5¼" x 4½" x 1¼" .....Qty 8

**Size C:** 1¾" x 4½" x 1¼" .....Qty 2



**Size E:** 9" x 2¼" x 1¼" .....Qty 2



**Size J:** 5" x 2¼" x 1¼" .....Qty 1

### Thick Bricks



**Full:** 9" x 4½" x 2⅜" .....Qty 12



**Size F:** Wedge Shape .....Qty 2  
(Note: The angle is 45°)



**Size G:** 8¼" x 4½" x 2⅜" .....Qty 2



**Size H:** 4½" x 4½" x 2⅜" .....Qty 4



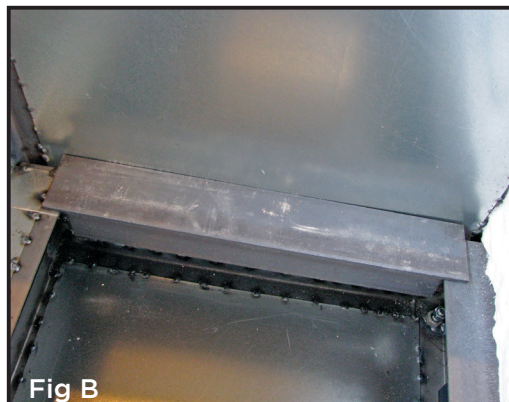
**Size I:** 6¼" x 4½" x 2⅜" .....Qty 2

## YOU WILL NEED:

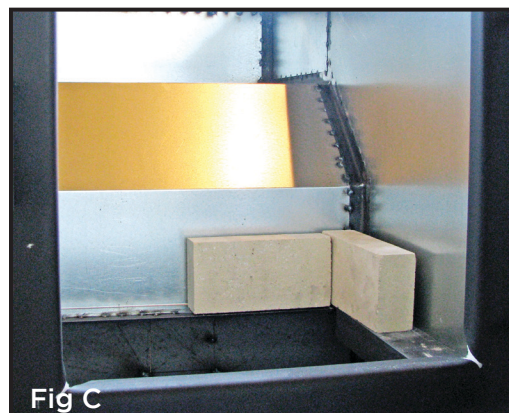
- Ceramic Blanket Insulation  
(Available on SmokyLakeMaple.com)
- Brick Saw  
(OR order precut bricks from SmokyLakeMaple.com)
- Pencil
- Measuring Tape
- Utility Knife
- Safety Equipment: Gloves, Safety Glasses, Ear Plugs
- Brick Batter  
(AKA High Temp Mortar. Optional but recommended. Available on SmokyLakeMaple.com.)

## INSTRUCTIONS:

1. Line the inside left and the inside right sides of the arch with Ceramic Blanket. You will need to cut the Ceramic Blanket to shape with a utility knife so that it fits properly. It is best to measure the ceramic blanket slightly too big so that it packs firmly into place.
2. If you have a Raised Flue Pan or Flat Pan, place the riser (provided with the Corsair Arch) on the flat area behind the firebox as far forward as possible. For Flat Pans, the slope of the riser lines up with the slope of the arch (See Fig A). For Raised Flue Pans, the straight vertical end of the riser is closest to the firebox and the slope is toward the back. You do NOT need to glue or bolt the riser in place. If your pan has drop flues, the riser does not apply to you.
3. Using one long piece of insulation, insulate the rear wall of the arch (by the exhaust), down the arch bed (over the top of the riser if applicable), and into the firebox. This long piece of insulation will end at the firebox's rear brick ledge. No insulation is required below the brick ledge, but some folks do opt to use remaining scraps of insulation on the floor.
4. If you did not order precut bricks from Smoky Lake, use a brick saw to cut your bricks according to the cut list on page 1.
5. See Fig B and Fig C, as well as the instructions on your Smoky Lake Brick Batter. Then install the Bricks according to the diagrams on the next pages.
6. After bricking, pack a long, skinny piece of insulation on the top left and top right sides of the firebox, fitting it into the gap between the top arch rail and the top layer of bricks. This additional layer of insulation will shield the top rail of the arch and will help prevent flexing. See Fig D.



*The pieces of angle iron which were provided with the Corsair Arch should be installed on the left and right sides of the firebox to bridge the front and back ledges. Bricks will sit on top.*

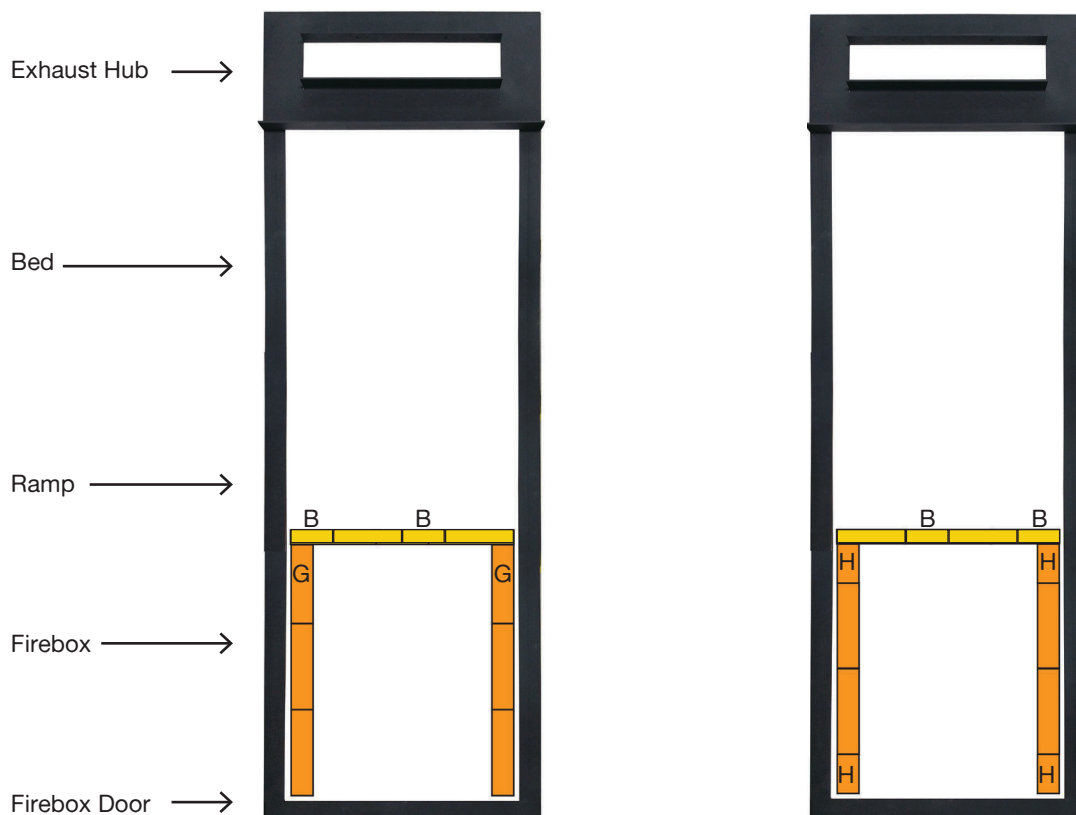


*This photo, looking through the door of the firebox, shows the ledge upon which your first layer of bricks will sit. NOTE: Ceramic blanket should be installed at this point even though these photos don't show it.*



## INSTALLING FIRE BRICK:

After installing the ceramic insulation blanket (see page 1 – 2 of this guide), follow these diagrams to install your bricks. Each diagram depicts an aerial view of a Corsair evaporator. The bricks will be placed only in the firebox and on the ramp. Only the cut bricks are labeled (see the key above). All unlabeled bricks are full size (9" long and 4.5" wide). If you are using Smoky Lake Brick Batter (High Temperature Mortar), please read all mortaring instructions — located on the side of the bucket — before proceeding.



### Layer 1:

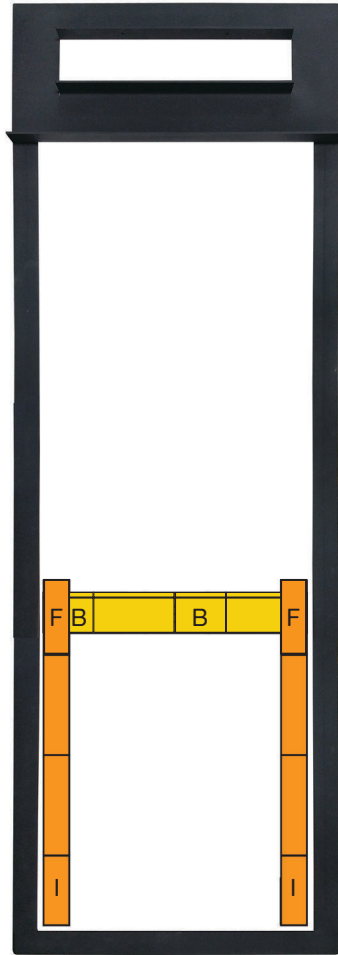
This bottom layer of bricks should be placed on the ledge inside your firebox. There will NOT be bricks below the grates.

- Full length ..... Qty 2
- Size B ..... Qty 2
- Full length ..... Qty 4
- Size G ..... Qty 2

### Layer 2:

These bricks will be placed on top of layer 1 bricks.

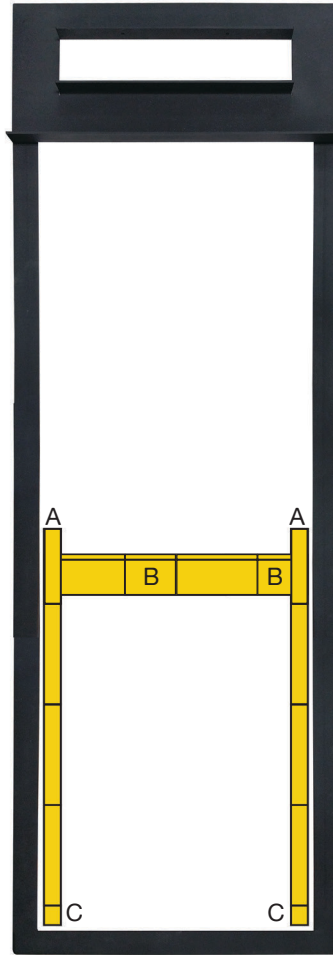
- Full length ..... Qty 2
- Size B ..... Qty 2
- Full length ..... Qty 4
- Size H ..... Qty 4



### Layer 3:

These bricks will be placed on top of layer 2 bricks. First, install the thin bricks at the base of the ramp. Size F bricks will overlap them.

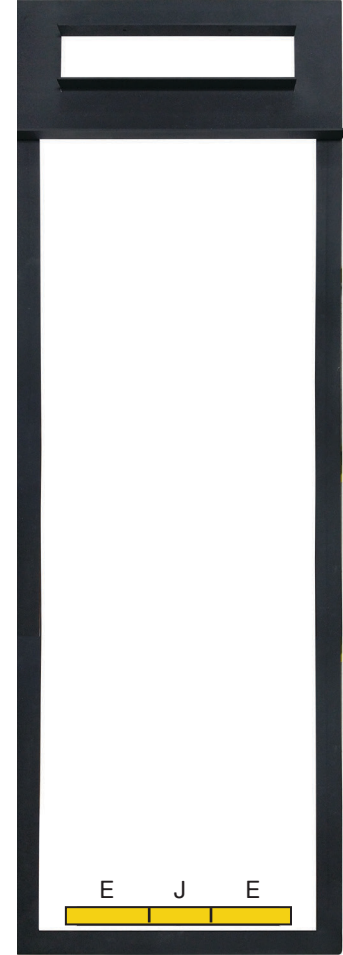
- Full length ..... Qty 2
- Size B ..... Qty 2
- Full length ..... Qty 4
- Size F ..... Qty 2
- Size I ..... Qty 2



### Layer 4:

These bricks will be placed on top of layer 3 bricks. First, install the bricks on the ramp. Size A bricks will overlap the ramp bricks.

- Full length ..... Qty 8
- Size A ..... Qty 2
- Size B ..... Qty 2
- Size C ..... Qty 2



### Layer 5:

Before placing the grates back into the firebox, you will need to insert your last two fire bricks on the ledge beneath the firebox's door. If space allows, place a layer of insulation between the bricks and the door frame.

- Size E ..... Qty 2
- Size J ..... Qty 1