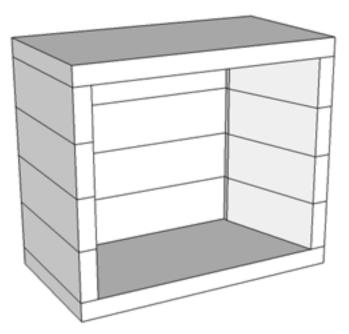


# **INSTALLATION & SPECIFICATION MANUAL**

## LISTED VENT-FREE FIREBOX ENCLOSURE MODEL

## VF-LITE: 30 VFL, 36 VFL, 42 VFL, 48 VFL



Before installing this product, please consult with local building and zoning authorities regarding the need for proper permittance. INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE

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CONTACT FIREROCK: Office: 205.639.5000 Toll Free: 888.876.1025 Fax: 888.886.3473 CORPORATE OFFICE & MAILING ADDRESS: 1500 1<sup>ST</sup> AVE N, #75 BIRMINGHAM, AL 35203

# **FIRE ROCK** BUILDING MATERIALS

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## VENTLESS FIREBOX ENCLOSURES for GAS DECORATIVE TYPE UNVENTED ROOM HEATERS

This page and the page immediately following in this manual provide information regarding the Ventless Firebox Enclosures for Gas Decorative Type Unvented Room Heaters as tested to ANSI Z21.91-2007. Any installation of this FireRock product <u>must</u> conform with local codes or in the absence of local codes, with the National Fuel Gas Code, ANSI Z 223.1 (NFPA 54).

**TESTING PROVIDED BY** 



FOR USE ONLY WITH DECORATIVE TYPE UNVENTED ROOM HEATERS NOT TO EXCEED 40,000 BTU/HR DO NOT BUILD A WOOD FIRE

Carefully review the instructions supplied with the decorative type unvented room heater for the minimum fireplace requirement.

DO NOT INSTALL THE APPLIANCE IN THIS FIREBOX UNLESS THIS FIREBOX MEETS THE MINIMUM DIMENSIONS REQUIRED FOR THIS INSTALLATION.

**WARNING**: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

#### PLEASE REMEMBER:

- When the enclosure is to be installed on carpeting, tile, or other combustible material other than wood flooring, the enclosure shall be installed on a metal or wood panel extending the full width and depth of the enclosure.
- 2. This product, when coupled with a correct unvented gas appliance, requires combustion air as well as ventilation. Be sure to have adequate combustion <u>AND</u> ventilation air.
- 3. If replacement parts are needed please contact the manufacturer of the appliance.

# **INTENDED PRODUCT USAGE**

This FireRock fireplace is designed to use gas only. This fireplace is NOT designed to burn wood, coal or anything other than natural gas or propane. The fireplace must be installed within the clearances found in this manual on page 5 or specifically marked on the tag of the unit being installed.

## USE PROPANE OR NATURAL GAS FUEL ONLY VENTLESS GAS LOGS MUST BE LISTED TO ANSI Z21.11.2.

## »» WARNING ««

ANY FIREPLACE INSERT MUST BE APPROVED, IN WRITING, BY FIREROCK PRODUCTS, LLC. FAILURE TO HEED THIS WARNING COULD RESULT IN FAILURE OF THIS PRODUCT AND/OR THE INSERT PRODUCT.

## »» WARNING ««

DO NOT PACK AIR SPACES WITH INSULATION OR OTHER MATIERIALS.

## ALWAYS OBTAIN NECESSARY PERMITS FROM PROPER AUTHORITIES IN LOCAL JURISDICTIONS AND COMPLY WITH ALL LOCAL BUILDING CODES.

**WARNING** : If the information in this manual (including installation

instructions) is not followed exactly, a fire or explosion may result -

causing property damage, personal injury, or loss of life.

# **CLEARANCE TO COMBUSTIBLES**

The FireRock Vent-Free Firebox must be installed with the following clearances to combustibles:

0 in.	UNIT TO FLOOR
0 in.	UNIT TO BACKWALL
3.5 in.	UNIT TOP AT FRONT TO FRAMING
0 in.	UNIT TO SIDE FRAMING
0 in.	UNIT TOP AT REAR TO FRAMING
18 in.	UNIT OPENING TO CEILING OR MANTLE
6 in.	UNIT OPENING TO ADJACENT WALL

The front surface at the bottom and sides must be covered with a NON-COMBUSTIBLE MATERIAL. The front surface at the top must be covered with noncombustible material that extends three (3) inches obove the top of the structure. Any header above the top at the front of the unit must be non-combustible material.

## **IMPROPER INSTALLATION**

Improper installation or misuse of this product can cause:

- 1. Failure of fireplace due to overheating
- 2. Combustion of materials adjacent to the fireplace
- 3. The emission of smoke, sparks, or hazardous gases in the house
- 4. Leakage of rainwater into the house
- 5. Cracks due to improper footings and foundations or settling

## **IN-FIELD APPLICATION**

#### A. MIXING MORTAR FOR FIREROCK INSTALLATION

The mortar used when installing the FireRock fireplace is available from your FireRock dealer or distributor, the same dealer that sold you the FireRock system.

This specially formulated mortar is low sand, polymer modified with heat resistant additives and is designed to work as a "glue" rather than a typical joint provider.

#### » THIS MORTAR MUST BE USED FOR YOUR FIREROCK WARRANTY TO BE VALID «

It is appropriate to use a trowel or grout bag to apply the mortar to firebox and smoke chamber joints. This material is to be mixed according to the instructions on the bag and troweled directly from the mixing pail. These joints should be completely covered and the components stacked so as to result in a 1/16<sup>th</sup> to 1/8<sup>th</sup> inch joint and the excess mortar should push (ooze) out and be scraped away. Use this product as an adhesive rather than a traditional mortar, the thin coating described above (1/16<sup>th</sup> to 1/8<sup>th</sup> inches thick) will work best.

Upon completion of the firebox and smoke chamber it is important to go back and "butter" all joints. This procedure involves a final smoothing, inside and out, sealing all joints and assuring a "no leak" installation.

#### **B. FIREBRICK LINING THE FIREBOX**

A 2 ¼" minimum firebrick (ASTM 1261) lining is required for the base and a 1 ¼" thickness for the back and sides is requires for an acceptable fire safety level. The same FireRock mortar used for the firebox may be used to affix the firebrick to the inner wall of the firebox. The firebrick may be installed one of two ways.

- 1) <u>Troweled joints</u>: The mortar may be troweled on to the face of the firebrick at a thickness of 1/16<sup>th</sup> to 1/8<sup>th</sup> inch and stuck to the presoaked inner wall of the firebox.
- 2) <u>Dipped joints</u>: Add enough clean (suitable for drinking) water to the mixed mortar to achieve a consistency that a typical firebrick floats with roughly 40% of its mass above the surface. Too much water will reduce strength.

A "brick-to-brick" (no mortar joints) installation will be the strongest; a mortar joint is a weak spot. The mortar will not develop its full strength until completely cured.

# **IN-FIELD APPLICATION (CONTINUED)**

#### **C. BROKEN COMPONENTS**

Components that become broken due to poor handling or shipping should be mortared back together prividing the breaks or cracks are clean and original alignment and dimension can be maintained. Components broken into multiple pieces or fragments must be discarded and replaced.

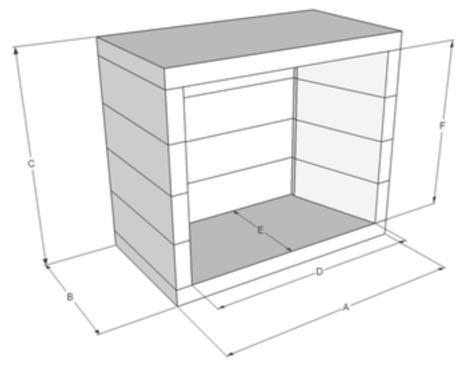
#### **D. HINTS**

- » If this is your first FireRock installation, it would only take a few extra minutes to "dry stack" (erect without mortar) your firebox to gain a better understanding of how the components go together. Then, disassemble and erect using FireRock Adhesive Mortar.
- » Use a level to assure all components are level and plumb as you erect your fireplace and chimney.
- » Assure your baseplate is level and at a proper elevation so the finished hearth height (including firebrick lining) is correct in relationship to your finished floor height.
- » Realize that this is a two man job. Some of these components are too heavy for one man to lift.
- » ALWAYS INSTALL IN ACCORDANCE WITH LOCAL CODES.

#### **E. GAS LINE APPLICATIONS**

The FireRock Ventless fireplace may be drilled through with an ordinary masonry drill bit to accommodate the gas connection. This natural gas or propane connection for the Ventless gas appliance needs to be installed in accordance with the National Fuel Gas Code, ANSI Z223.1. (NFPA 54).

# **FIREPLACE DIMENSIONS**

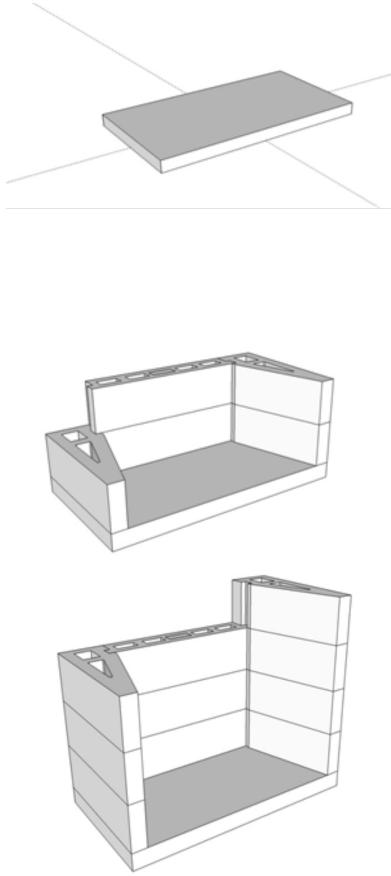


Firebox Size

		30"	36"	42"	48"
Α	OVERALL WIDTH	38"	44"	50"	56"
В	OVERALL DEPTH	24"	24"	24"	24"
C	FIREBOX HEIGHT	38"	38"	38"	38"
D	OPENING WIDTH *	32 ½"	38 ½"	<b>44 ½</b> "	50 ½"
Ε	FIREBOX DEPTH	18"	18"	18"	18"
F	OPENING HEIGHT *	32"	32"	32"	32"

\* Before firebrick lining

# FIREBOX ASSEMBLY INSTALLATION



#### **STEP ONE: BASE PLATE**

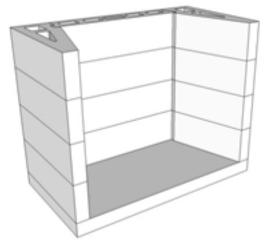
The base plate must be placed on a level surface. It is very important that your base plate be square to the room, properly centered and level. In the event you opt not to use the base plate carefully chalks lines on the concrete slab where the base plate would be to assure proper placement of your firebox.

#### **STEP TWO: SIDES & BACKS**

Sides and backs are next. Place a bead of mortar at least one inch thick where each edge of each component will lie or butt up against another  $\cdot$  component. Use your level to assure the components are level and plumb.

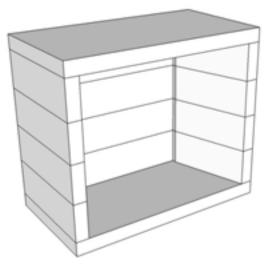
You will begin by placing a side block on the baseplate at one side where you wish to begin. After placing a side block you will place back block then the other side block completing the first level. Repeat these steps until all levels are installed. Remember to check for level and plumb after each level is finished.

# **FIREBOX ASSEMBLY INSTALLATION**



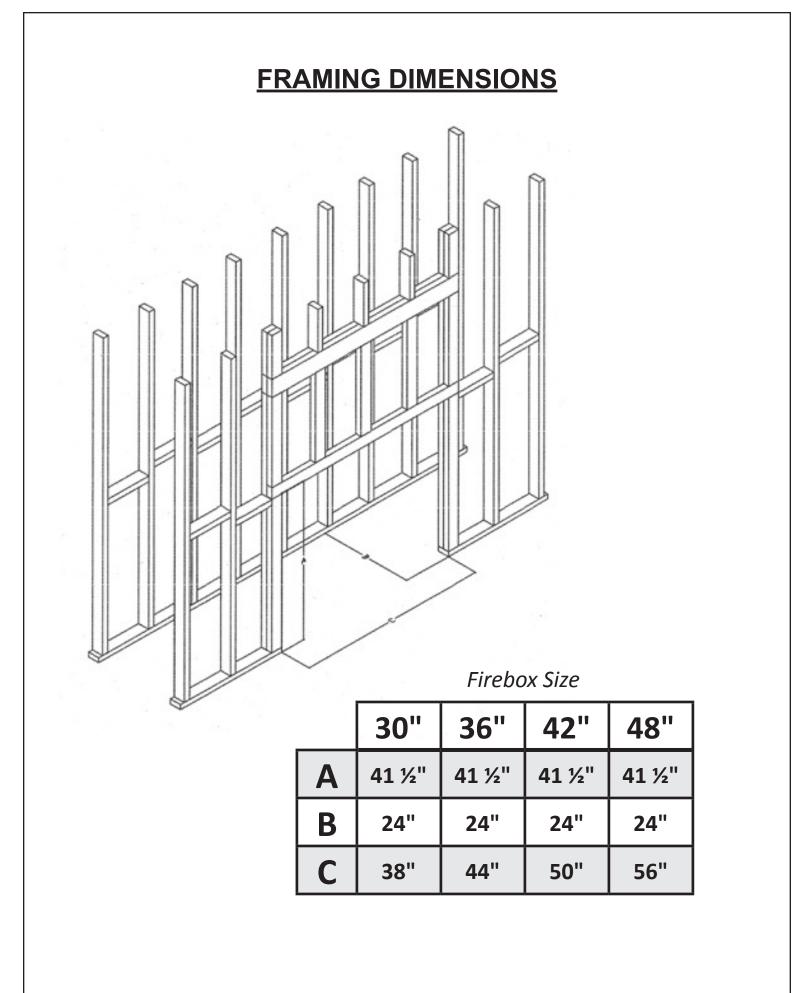
#### » INSTALLATION HINT «

With the firebox complete and the top plate not yet installed, you will have the easiest access to the lining of the firebox. This will be the best opportunity for the installation of the firebrick.



#### **STEP THREE: TOP PLATE**

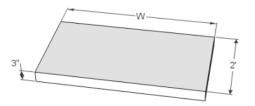
After sides and backs are all in place, the final step is to put a mortar bed around the top edge of the final layer and place the top plate. After the top plate has been set in place gently apply pressure to make sure the top plate is secure and in place. Make one final check for plumb and level and adjust if necessary.



## PARTS LIST

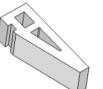
	VENT-FREE <b>30</b> "	VENT-FREE <b>36</b> "	VENT-FREE 42"	VENT-FREE 48"
38" LITE Base Plate / Top	2			
44" LITE Base Plate / Top		2		
50" LITE Base Plate / Top			2	
56" LITE Base Plate / Top				2
30" LITE Back Wall	4			
36" LITE Back Wall		4		
42" LITE Back Wall			4	
48" LITE Back Wall				4
LITE Firebox Side Block	8	8	8	8
TOTAL PARTS:	14	14	14	14

# **BASE PLATE/TOP PLATE**

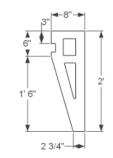


Fireplace Size - Width Chart			
Opening Size	Base/Top Width		
30"	38"		
36"	44"		
42"	50"		
48"	56"		

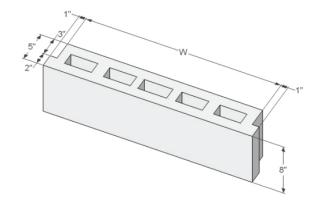








# **BACK BLOCK**



Fireplace Size - Width Chart			
Opening Size	Back Block Width		
30"	22"		
36"	28"		
42"	34"		
48"	40"		

## **NEW WEIGHTS FOR VENT-FREE LITE**

	VENT-FREE <b>30</b> "	VENT-FREE 36"	VENT-FREE 42"	vent-free 48"
38" LITE Base Plate / Top	2			
44" LITE Base Plate / Top		2		
50" LITE Base Plate / Top			2	
56" LITE Base Plate / Top				2
30" LITE Back Wall	4			
36" LITE Back Wall		4		
42" LITE Back Wall			4	
48" LITE Back Wall				4
LITE Firebox Side Block	8	8	8	8
TOTAL CUBIC FEET:	8.92	9.7	10.72	11.78
TOTAL WEIGHTS (lbs):	725	775	875	950

## **IMPORTANT:** Weights do NOT include firebrick



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