



Kiva Fireplace Kit Information Guide

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1421 Camino Del Pueblo
Bernalillo, NM 87004

www.GrandRiverSupply.com

TABLE OF CONTENTS

OVERVIEW	1
1. FIREBOX ASSEMBLY	1
2. CHIMNEY SYSTEM	1
3. AIR INTAKE SYSTEM	2
4. GAS ASSEMBLY (OPTIONAL)	3
5. FACE FRAME	3
6. FINISH	3
KIVA FIREPLACE COMPONENTS	4
1. FIREBOX ASSEMBLY COMPONENTS	4
2. CHIMNEY SYSTEM COMPONENTS	5
3. AIR INTAKE SYSTEM COMPONENTS	5
4. GAS SYSTEM COMPONENTS (OPTIONAL)	6
5. FACE FRAME COMPONENTS	6
6. FINISH COMPONENTS	6
7. OPTIONAL ACCESSORIES	7
INSTALLATION CONSIDERATIONS	8
1. LOCATION	8
2. CHIMNEY CHASE	9
3. AIR INTAKE SYSTEM	10
INSTALLATION	11
1. AIR INTAKE SYSTEM	11
2. FLOOR PREPARATION	11
3. FIREBOX INSTALLATION	12
4. GAS LINE (OPTIONAL)	15
5. CHIMNEY SYSTEM INSTALLATION	16
6. FACE FRAME INSTALLATION	18
7. FINISH	19

IMPORTANT NOTE

THE KIVA FIREPLACE KIT HAS BEEN EXTENSIVELY TESTED. AS A PART OF THIS TESTING AN OFFICIAL “INSTALLATION INSTRUCTIONS AND OPERATIONS” MANUAL HAS BEEN WRITTEN. THIS MANUAL SHOULD BE USED DURING ACTUAL INSTALLATION. THE INTENTION OF THIS “KIVA FIREPLACE KIT INFORMATION GUIDE” IS TO HELP DEVELOP AN OVERALL UNDERSTANDING OF WHAT THE KIVA FIREPLACE KIT IS, AND WHAT IS REQUIRED TO INSTALL IT.

PLEASE KEEP IN MIND THAT THIS FIREPLACE SHOULD BE INSTALLED **ONLY** BY A CONSTRUCTION INDUSTRY LICENSED CONTRACTOR, OR A CERTIFIED INSTALLER. LOCAL CODES SHOULD BE CHECKED AND ANY PERMITS OR INSPECTIONS SHOULD BE OBTAINED BEFORE INSTALLATION.

To be used as a supplement to original manufactures manual only. NOT intended to replace original manufactory installation/owners manual. Refer to original owner's manual for specific clearances, operating instructions and additional safety information.

OVERVIEW

THE SIX MAJOR COMPONENT SECTIONS OF THE KIVA FIREPLACE KIT ARE:

1. Firebox Assembly
2. Chimney System
3. Air Intake System
4. Gas Assembly (optional)
5. Face Frame
6. Finish

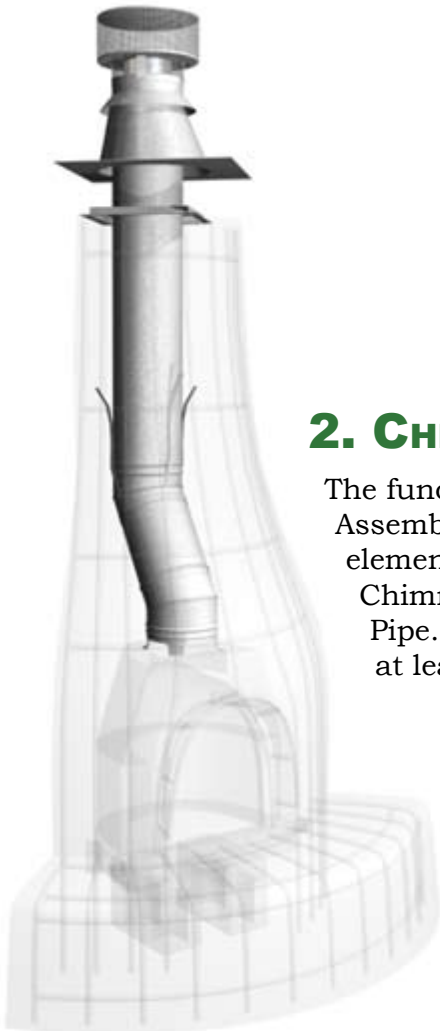
1. FIREBOX ASSEMBLY

The Firebox Assembly consists of three Firebox Sections. During installation, these Firebox Sections are stacked to form a traditional looking masonry firebox. The entire Firebox Assembly weighs less than 600 pounds and two people can lift each section. Special structural support is not required because of its minimal weight.



2. CHIMNEY SYSTEM

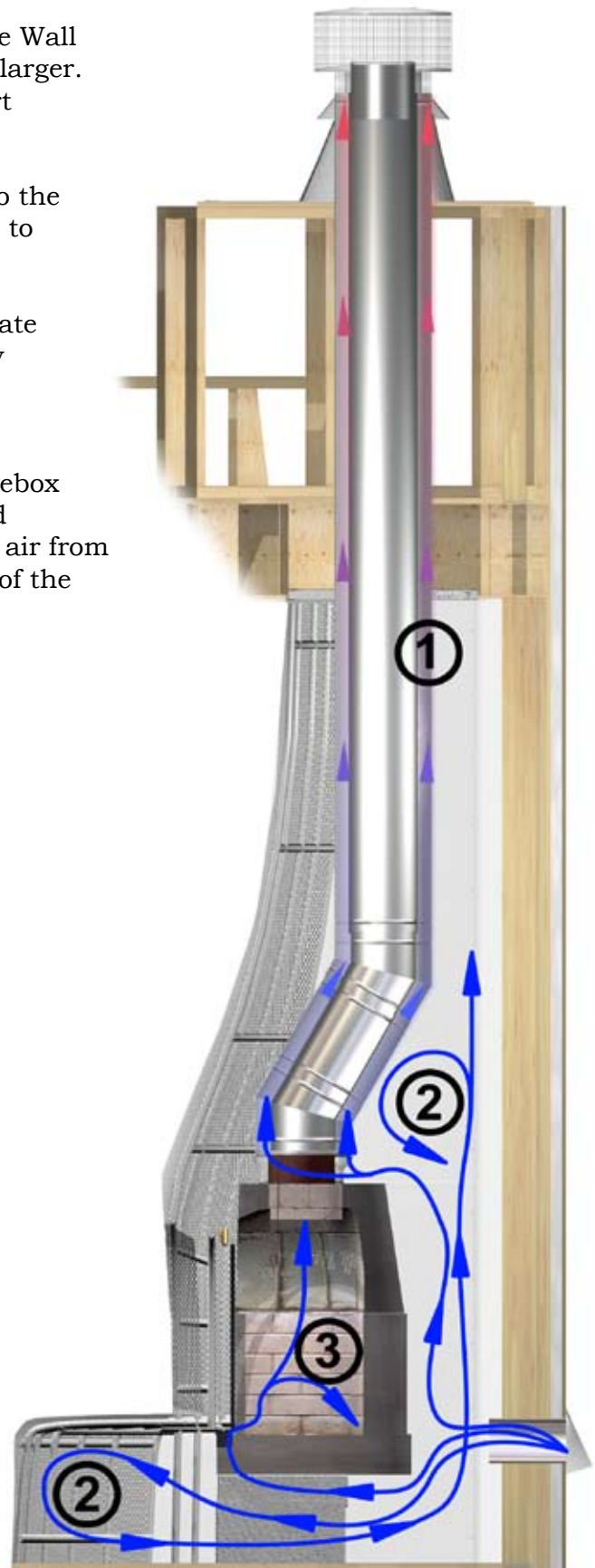
The function of the Chimney System is to evacuate smoke from the Firebox Assembly to the outside. The Chimney System consists of two main elements, the Chimney Chase and the Double Wall Chimney Pipe. The Chimney Chase is the passage that conceals the Double Wall Chimney Pipe. It is important that the Double Wall Chimney Pipe maintain a space at least 2" from any combustible material.



3. AIR INTAKE SYSTEM

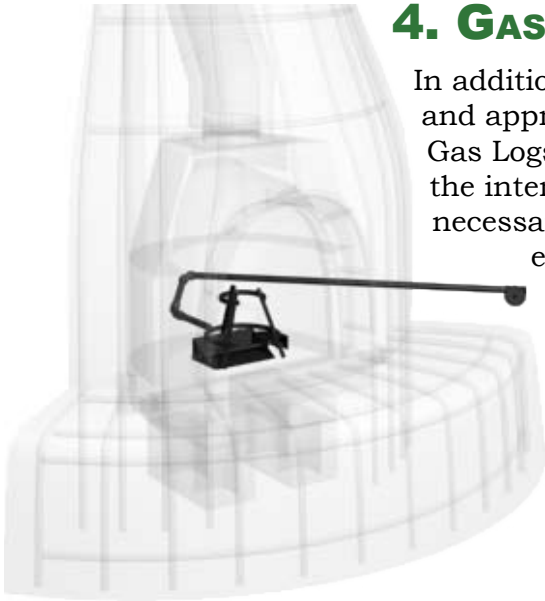
The major component of the Air Intake System is the Wall Vent. It looks much like a common dryer vent, only larger. The Air Intake System delivers outside air to support three important functions.

1. The Air Intake System delivers cool outside air to the outer chamber of the Double Wall Chimney Pipe to cool the outer wall and reduce fire hazard.
2. The Air Intake System provides cool air to circulate and cool the space around the Firebox Assembly behind the Face Frame.
3. The Wall Vent also supplies outside air to the Combustion Air Tube, which is built into the Firebox Base. The outside air enters the firebox area and supports combustion instead of using the warm air from the room, which greatly increases the efficiency of the fireplace.



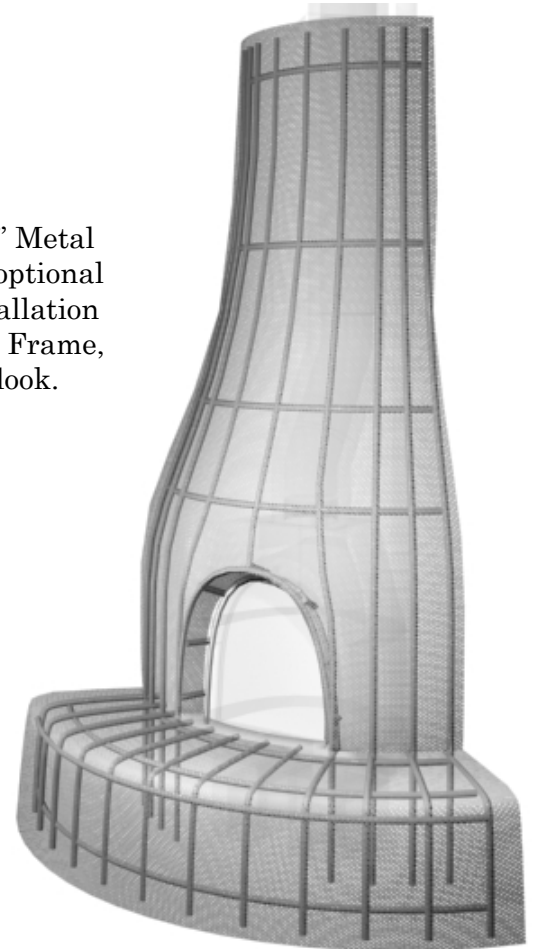
4. GAS ASSEMBLY (OPTIONAL)

In addition to wood log burning, the Kiva Fireplace Kit has been tested and approved for use with an optional natural gas or propane vented Gas Logs Set or a Log Lighter available from Grand River Supply. If the intended installation includes one of these gas devices, it will be necessary to have a gas line brought into the firebox. This gas line can easily be installed after the Firebox Assembly is in place but before the Face Frame is fixed into place.



5. FACE FRAME

The 10' tall Face Frame is pre-fabricated of ½" tubular steel with ¼" Metal Diamond Mesh attached. You can customize your installation with optional Nichos and Bancos available from Grand River Supply. During installation the Face Frame assembly will be attached to the Firebox. The Face Frame, available in four styles, is what gives the Kiva Fireplace its unique look.



6. FINISH

A three-coat plaster process is the most popular finish applied to the Fireplace.

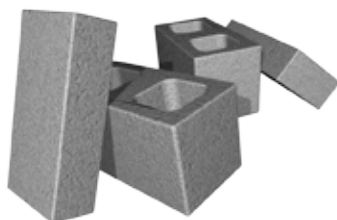
KIVA FIREPLACE COMPONENTS

All necessary components you will need to install your Kiva Fireplace Kit are shown below.

1. FIREBOX ASSEMBLY COMPONENTS



Flue Goo



Concrete Blocks



Damper



Firebox Top



Firebox Middle



Firebox Base

Damper. The Damper is made of steel and mounts to the top of the assembled Firebox Sections. To open or close the Damper one simply reaches up into the firebox and pulls a lever. When using a Gas Log Set the fireplace Damper must be permanently removed or locked in the open position. For the installation of the Gas Log Set follow the installation manual provided by the manufacturer.

2. CHIMNEY SYSTEM COMPONENTS

IMPORTANT: READ THIS!

The Chimney Starter Collar is the first section of Double Wall Chimney Pipe and mounts directly onto the top of the Firebox Assembly. Each manufacturer of Double Wall Chimney Pipe has their own design and parts from one manufacturer will not work with parts from another. There are three Chimney Starter Collars to fit Double Wall Chimney Pipe from three different manufacturers. The manufacturers are, FMI, Superior, and Heatilator Series 300. A Chimney Starter Collar to match the manufacturer of Double Wall Chimney Pipe that will be used for the installation must be specified when ordering a Kiva Fireplace Kit. The default manufacturer is FMI.



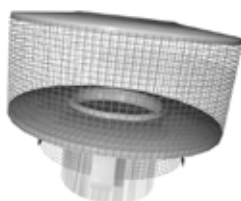
FMI Chimney Starter Collar



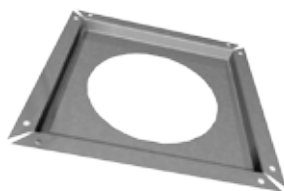
FMI 30 Degree Elbow



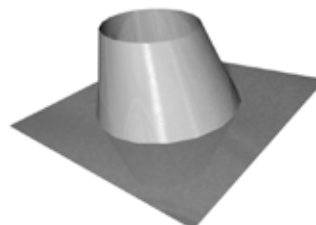
FMI Chimney Double Wall Pipe



FMI Round Top



Firestop Spacer

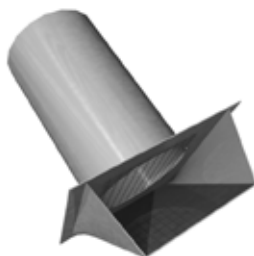


Roof Flashing

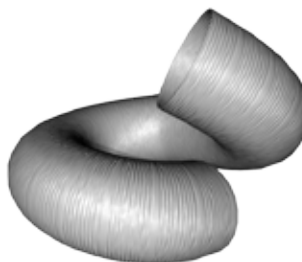


Storm Collar

3. AIR INTAKE SYSTEM COMPONENTS



Wall Vent



Flex Aluminum Duct

4. GAS SYSTEM COMPONENTS (OPTIONAL)



Gas Wall Valve



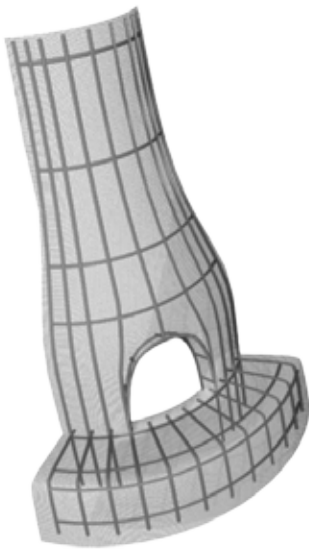
Propane Adapter Kit



Gas Log Kit

Gas Log Kit: As well as wood burning, the Kiva Fireplace Kit has been approved for use with a vented Gas Log Kit. The Gas Log Kit should incorporate an automatic shutoff device and comply with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60 and must be installed in accordance with the National Fuel Gas Code. The Gas Log Kit sold by Grand River Supply is pre-approved. The fireplace has not been tested with an un-vented gas log set. To reduce risk of fire or injury, do not install an un-vented gas log set into fireplace.

5. FACE FRAME COMPONENTS



Face Frame



Metal Diamond Mesh



Door Frame

6. FINISH COMPONENTS



Stucco Mix

7. OPTIONAL ACCESSORIES



Glass Door
(NOT FOR USE WITH
WOOD BURNING FIREPLACE)



Screen



Grate

INSTALLATION CONSIDERATIONS

1. LOCATION

To determine the safest and most efficient location for your fireplace, the following guidelines should be taken into consideration.

1. Make sure the fireplace will fit. The size of your Kiva Fireplace will vary with each model Face Frame. Please refer to **Chart A - Wall Clearance Requirements** and *figure 1 - Wall Clearance*.

CHART A - WALL CLEARANCE REQUIREMENTS				
Frame Style:	Laguna	Sandia	Hopi	Shalako
1 - Ceiling Radius Line	24"	24"	24"	24"
2 - Face Frame Clearance	36"	42"	42"	48"
3 - Floor Clearance Radius	54"	60"	60"	66"
4 - Banco Height	18"	18"	18"	18"

2. The location of your Kiva Fireplace should not interfere with air conditioning ducts, windows or doors, or be affected by drafts,.
3. If possible, choose a location where the cutting of joists or roof rafters can be avoided.
4. Consider a location where the Air Intake System Wall Vent can be easily installed.

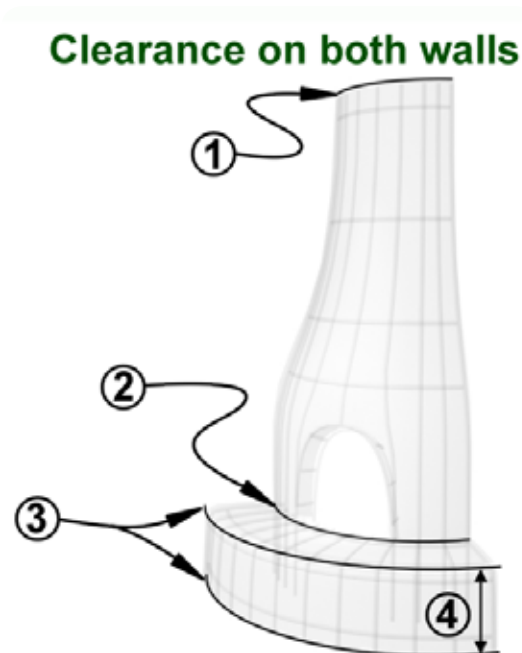


Figure 1 - Wall Clearance

2. CHIMNEY CHASE

The Chimney Chase is the area made available in the building framing for the Double Wall Chimney Pipe to go out through the roof. The views in the illustrations used here are looking up at the ceiling in the corner where the Kiva Fireplace Kit will be installed.

NOTE: If an obstruction is encountered within the space required for the Chimney Chase it must be removed or cut as your local building code allows. Do Not simply cut floor and ceiling joists, they are almost always structural, as are roof rafters and trusses. Check before cutting!

The minimum dimensions of the Chimney Chase is determined by the method of Air Intake System venting used, Outside Wall Venting or Chimney Chase Venting.

Outside Wall Venting will require that the inside of the Chimney Chase measure a minimum of 17" x 17", as shown in *figure 2 - Chimney Chase without Vent*. Air Intake System venting details will be discussed later.

Chimney Chase Venting will require that the inside of the Chimney Chase measure a minimum of 17" x 24". The longer dimension provides space for the Air Intake System as shown in *figure 3 - Chimney Chase Venting*.

Fire blocking is required between joists in which the Double Wall Chimney Pipe will be installed as shown in *figure 4 - Roof Joist Fire Blocking*. **Be sure to adhere to your local building codes.**

A hole with a 17" minimum diameter should be cut into plywood or other appropriate material that is a minimum of ½" thick and used to cap the Chimney Chase as shown in *figure 5 - Chimney Chase Cap*.

Remember, there can be no combustible material within 2" of the Double Wall Chimney Pipe.



Figure 2 - Chimney Chase without Vent

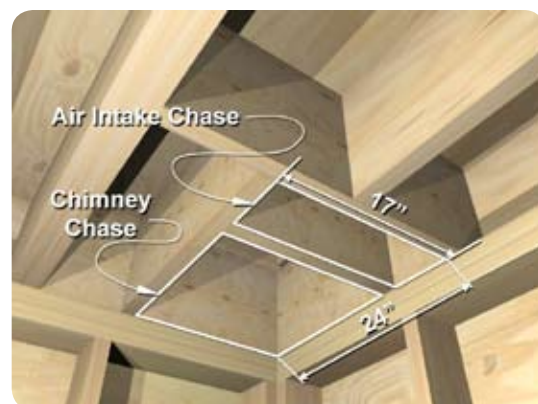


Figure 3 - Chimney Chase Venting



Figure 4 - Roof Joist Fire Blocking

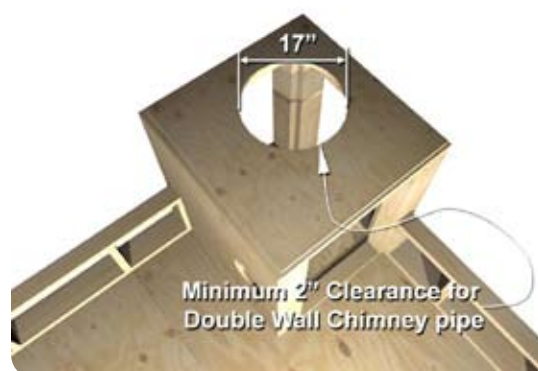


Figure 5 - Chimney Chase Cap

3. AIR INTAKE SYSTEM

There are many possible ways to accomplish the delivery of outside air to the firebox space and combustion area. Like the Chimney Chase, you should plan ahead for the Air Intake System installation.

Three common methods of installation include: Outside Wall Venting, Chimney Chase Venting and Roof Venting.

1. Outside Wall Venting is used when the fireplace is being installed on an outside wall as shown in *figure 6 - Outside Wall Venting*. It does not matter whether it is the wall on the right or the wall on the left, each will work equally well. The Wall Vent should be placed at least 12" above the floor on the available exterior wall. The Wall Vent must be placed within the Firebox Assembly area behind the Face Frame. Cut out a 6" diameter circle on the wall and insert the vent. Secure the outside of the vent to the wall using (4) #8 x 1-1/2" hex head self-drilling screws.

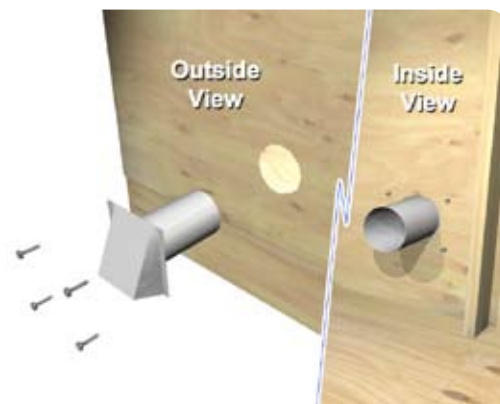


Figure 6 - Outside Wall Venting

2. Chimney Chase Venting is used when an exterior wall is not available as shown in *figure 7 - Chimney Chase Venting*. In this configuration the Wall Vent is installed into the Chimney Chase and a 6" Flex Aluminum Duct will run down the inside of the Chimney Chase to the firebox area. Draw a 6" diameter circle on the chase, cut out the circle, and insert the Wall Vent. Secure the outside of the vent to the wall using (4) #8 x 1-1/2" hex head self-drilling screws. Inside the Chimney Chase attach the 6" Flex Aluminum Duct to the Wall Vent sleeve, secure with screws, and stretch the Flex Aluminum Duct along the corner of the Chimney Chase to about 12" above the floor behind the firebox.



Figure 7 - Chimney Chase Venting

3. Roof Venting can be used in nearly any installation. A 6" hole is cut through the roof surface near the Chimney location. A short length of 6" single wall pipe is installed with roof flashing and a cap to protect against rain and snow. Attach the 6" Flex Aluminum Duct to the Wall Vent sleeve, secure with screws, and stretch the Flex Aluminum Duct along the corner of the Chimney Chase to about 12" above the floor near the base of the firebox. A typical roof vent installation is shown in *figure 8 - Pitched Roof Vent*.

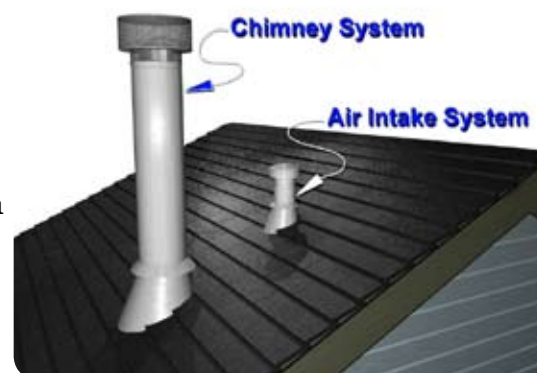


Figure 8 - Pitched Roof Vent

INSTALLATION

1. AIR INTAKE SYSTEM

Install as discussed earlier.

2. FLOOR PREPARATION

The firebox must be placed on a level non-combustible surface. In general a minimum of 18" clearance from the firebox opening to any combustible material is required. Wherever carpeting and padding is present it should be removed to the Banco Radius as shown in *figure 9 - Cut Away Carpet*. If this surface is wood, vinyl or any other combustible material it will need to be protected with Masonry Board.



Figure 9 - Cut Away Carpet

MASONRY BOARD

The Masonry Board should be placed on the floor prior to any layout or installation and will need to cover the entire floor area under the Firebox Assembly and Face Frame. Place the Masonry Board in the corner and mark a line. The radius of this line depends on the model of fireplace being installed. In order to determine which layout dimensions to use refer to **Chart B - Kiva Fireplace Layout Dimensions** (on next page) and use the column, based on the model of fireplace being installed, and row "Banco Radius". With the pivot point in the corner draw the Banco Line on the Masonry Board as shown in *figure 10 - Masonry Board Layout*.

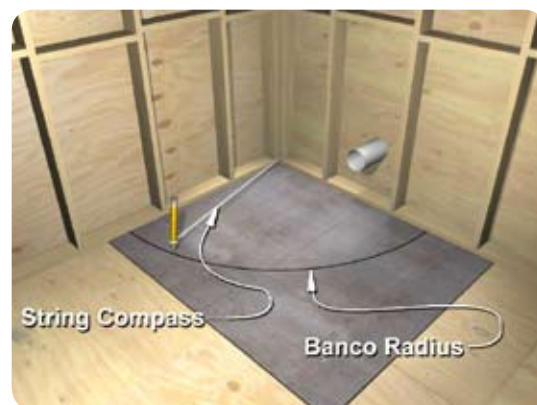


Figure 10 - Masonry Board Layout

TIP: To draw a large radius, use a piece of string attached to a nail in the corner as a compass. At the desired radius distance tie a pencil as shown in *Figure 9*. As long as you keep tension on the string as you draw, you will have a perfect arc with the correct radius to cut your Masonry board.

After cutting the Masonry Board to size, fasten it in place as shown in *figure 10 - Masonry Board Installation*.

TIP: To cut the Masonry Board, score along the cut line with a sharp utility or carbide scoring knife. The cement is tough, so you will have to score it a few times. Once it is well scored, use your knee to snap the board in two, just like you do a piece of drywall, and then cut the nylon mesh along the back seam.



Figure 10 - Masonry Board Installation

3. FIREBOX INSTALLATION

LAYOUT

The Layout and positioning of your Kiva Fireplace is important to insure proper alignment of all components. Be sure to double check your measurements and all dimensions.

Measure out from the corner where the fireplace is to be installed 22" along the wall. Use a framing square to mark a line coming out from the wall. Repeat the same procedure for the other wall as shown in *figure 11 - Center Line Cross*.



Figure 11 - Center Line Cross

Draw a line out from the corner through the intersection where the two previous lines cross. This is the Base Center Line as shown in *figure 12 - Base Center Line*.



Figure 12 - Base Center Line

CHART B - KIVA FIREPLACE LAYOUT DIMENSIONS

Fireplace Model	Laguna	Sandia	Hopi	Shalako
Face Frame Radius	36"	42"	42"	48"
Banco Height	18"	18"	18"	18"
Banco Radius	54"	60"	60"	66"
Base Front	32"	35"	35"	35"

Note: This Dimensions Table will be referred to several times during layout and installation.

The Base Front Line is the most important line to be drawn here. It will be used to locate the front of the Firebox Base. Mark a point on the Base Center Line out from the corner. The distance out from the corner depends on the model of fireplace being installed. In order to determine which layout dimensions to use refer to **Chart B - Kiva Fireplace Layout Dimensions** and use the Column based on the model of fireplace being installed and *Base Front*. Then with a framing square draw a perpendicular line about 1 foot long out to the right of the Base Center Line. Flip the framing square over and draw another perpendicular line about 1 foot long out to the left of the Base Center Line as shown in *figure 13 - Base Front Line*.

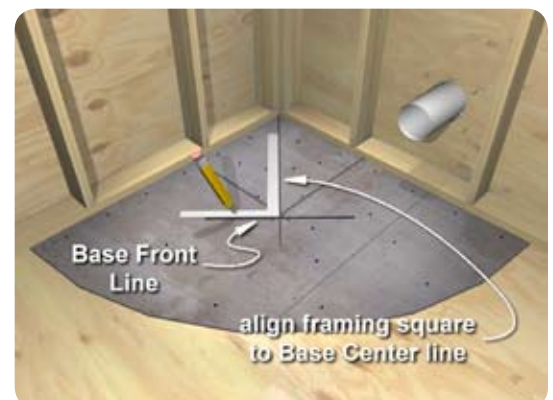


Figure 13 - Base Front Line

BASE COLUMNS

The Firebox Assembly will set on top of two concrete block columns. One 8" x 8" x 16" and one 4" x 8" x 16" concrete block is used to form each column. These columns are set 3" to the right and 3" to the left of the Base Center Line, with the front face of the block on the Base Front Line as shown in *figure 14 - Base Column Flue Goo*. Use a small amount of the Flue Goo that was included in your Kiva Fireplace Kit on the floor and between the concrete block. Care should be taken that these blocks are plumb, level, and the same height as shown in *figure 15 - Base Column Installation*. Make sure they are exactly aligned to and on the Base Front Line. This is an important step because the top edge of the concrete block columns will be used to locate the Firebox Base that will be placed on top of them.

NOTE: Use caution to insure proper positioning when installing the Base Column, because the top edge of the concrete block columns will be used to locate the Firebox Base that will be placed on top of them.



Figure 14 - Base Column Flue Goo



Figure 15 - Base Column Installation

FIREBOX BASE

Measure across the front of the Firebox Base and mark a Front Center Line at its center as shown in *figure 16 - Firebox Base*.

Spread a thin coat of Flue Goo on top of the Base Columns. Set the Firebox Base section on the Base Columns and align and center the front edge of the Firebox Base with the front edge and center of the Base Columns. Check to see that the clearance between the sides and back edge of the Firebox Base and the walls are a minimum of 2" and that the Firebox Base is level.

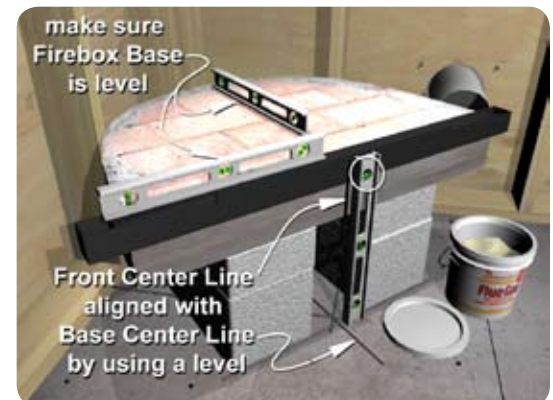


Figure 16 - Firebox Base

FIREBOX MIDDLE

Temporarily place the Firebox Middle on top of the Firebox Base. Draw a Firebox Curve Line on the Firebox Base using the interior bottom edge of the Firebox Middle as shown in *figure 17 - Firebox Middle*.

Remove the Firebox Middle section and spread a thin coat of Flue Goo on the Firebox Base staying about 1" behind the Firebox Curve Line as shown in *figure 17 - Firebox Middle*. Reset the Firebox Middle, press into position, and align with the back and sides of the Firebox Base.



Figure 17 - Firebox Middle

FIREBOX TOP

Spread a thin coat of Flue Goo on the top of the Firebox Middle. Place the Firebox Top onto the Firebox Middle, press into position, and align with the back and sides of the Firebox Middle as shown in *figure 18 - Firebox Top*.



Figure 18 - Firebox Top

Spread a thin coat of Flue Goo on the outside edge, or seam, to seal the Firebox Base, Firebox Middle and Firebox Top together where they connect as shown in *figure 19 - Seal Firebox Seams*.

NOTE: If you do not have enough Flue Goo to seal the seams, you can use cement mortar instead.



Figure 19 - Seal Firebox Seams

DAMPER

Center the Damper over the opening on the Firebox Top with the damper handle extending down through the opening and the loop in the Damper handle facing forward. Use a 1/4" masonry bit to drill four holes into the concrete of the Firebox Top using the four holes in the Damper plate as a guide (see *figure 20 - Damper Installation*). After drilling the holes remove the Damper and clear away any dust and debris from the drilling. Apply Flue Goo between the Damper and the Firebox Top and bolt the Damper to the Firebox Top using the provided 1/4" diameter by 1 1/2" long lag bolts.

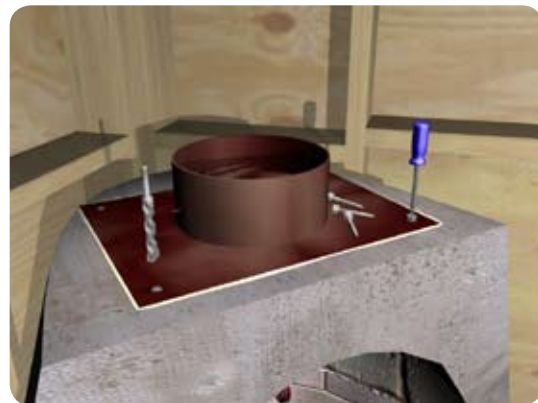


Figure 20 - Damper Installation

4. GAS LINE (OPTIONAL)

If the immediate, or possible future, use of the fireplace includes a Gas Log Kit or a Log Lighter, a gas line must be run into the firebox. Under normal circumstances the Firebox Assembly will be in place and the gas line will be run into the back center of the Firebox Middle section one brick up from the base. Drill a hole from the inside of the firebox out using a masonry bit. Stub the gas line into the firebox enough to accommodate a cap and carefully patch the hole with Flue Goo as shown in *figure 21 - Firebox Gas Line*. CONSULT LOCAL BUILDING CODES for gas line installation.

As well as other factors, the size of the gas line depends on the length of the run and the BTU's of the gas device being installed. The Grand River Supply Gas Log Kit runs in the 50K BTU range. Generally, the gas line that is actually stubbed into the firebox will be $\frac{1}{2}$ " but it is quite possible that a $\frac{3}{4}$ " or more line will be necessary leading up to the stub-in. The gas line may be run many different ways, horizontally as well as vertically.

NOTE: You should have a licensed gas installer bring the gas line into your firebox and follow all local building codes.

A Gas Wall Valve may be required, and is normally installed on the wall 24" above the floor as shown in *figure 21 - Firebox Gas Line*. The distance out from the corner depends on the Kiva Fireplace Kit model. Refer to the "Distance from Corner" column of **Chart C - Gas Wall Valve Table** as shown in *figure 22 - Gas Wall Valve Position*. This exact location is not critical but the Gas Wall Valve should be visible and allow the gas to be conveniently shut off when not in use.

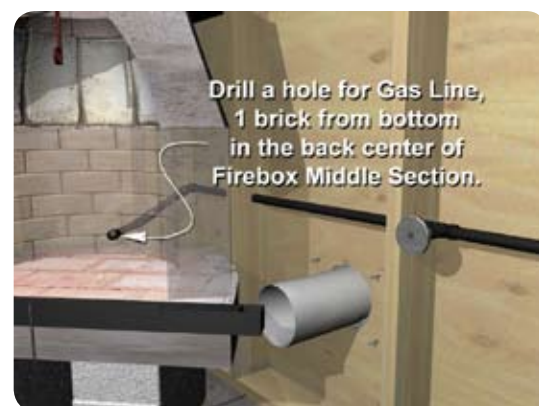


Figure 21 - Firebox Gas Line

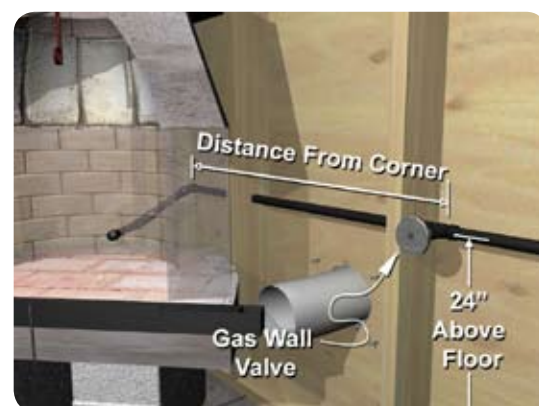


Figure 22 - Gas Wall Valve Position

CHART C - GAS WALL VALVE POSITION

Model	Distance from Corner
Laguna	45"
Sandia	51"
Hopi	51"
Shalako	57"

5. CHIMNEY SYSTEM INSTALLATION

All Chimney System components must be approved for use with the Kiva Fireplace Kit and installed according to the manufacturer's specifications, using all necessary parts required by the manufacturer to complete the chimney run. All chimney components must come from one manufacturer, they are not interchangeable. When the Double Wall Chimney Pipe is ordered with the Kiva Fireplace Kit directly from Grand River Supply, it will be manufactured by FMI.

FIRESTOP SPACER

A Firestop Spacer is required at each point where the chimney penetrates a floor or ceiling joist space. Its purpose is to establish and maintain the required clearance between the Double Wall Chimney Pipe and combustible materials, and provide separation from one floor space to another.

When the Double Wall Chimney Pipe passes through a framed opening into an attic space, the Firestop Spacer must be placed into the attic floor as shown in *figure 23 - Attic Firestop Spacer*.

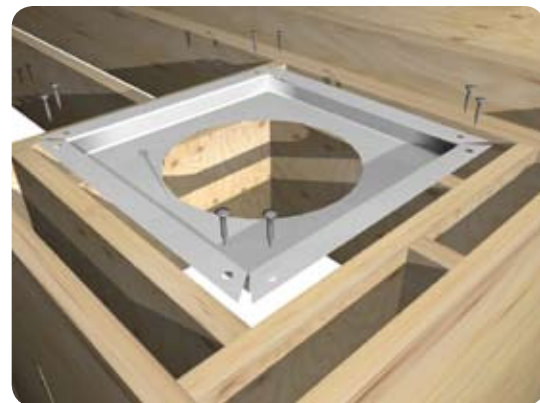


Figure 23 - Attic Firestop Spacer

When the pipe passes through a framed opening into a living space above, the Firestop Spacer must be placed onto the ceiling from below as shown in *figure 24 - Ceiling Firestop Spacer*.



Figure 24 - Ceiling Firestop Spacer

DOUBLE WALL CHIMNEY PIPE ASSEMBLY

Each Double Wall Chimney Pipe section consists of a Galvanized Outer Pipe and a Stainless Steel Inner Pipe. Each section is assembled as the chimney is installed.

The Stainless Steel Inner Pipe must be installed first with the **punched end up**. The Galvanized Outer Pipe section can then be installed over the Stainless Steel Inner Pipe with the **Punched end down**.

Place the Starter Collar on the Damper as shown in *figure 25 - Starter Collar on Damper*.



Figure 25 - Starter Collar on Damper

NOTE: Do not attach the Starter Collar until after you have installed the 30° Offset to make sure it is properly positioned.

The next step involves the 30 Degree Elbow. The 30 Degree Elbow actually consists of two parts, the 30 Degree Offset and the 30 Degree Return.

The 30 Degree Offset attaches to the Starter Collar and begins the Offset Pipe Run. The 30 Degree Return ends the Offset Pipe Run and begins the Vertical Chimney Pipe Run.

The 30 Degree Return is easily identifiable because it has four long straps attached to it. These straps will be attached to the walls, rafters, joists or studs, and will support the weight of the Vertical Chimney Pipe Run as shown in *figure 26 - 30 Degree Elbow*.

Place the Stainless Steel Inner Pipe section of the 30 Degree Offset punched end up into the Damper and slide it down until the hem seats. The Galvanized Outer Pipe section can now be installed. Press down on the outer section until it securely engages and snaps into the Starter Collar. The integrated wire spacer will assure the proper spacing. Between the Stainless Steel Inner Pipe section and the Galvanized Outer Pipe section. Secure the Starter Collar to the Damper plate with the provided self-tapping screws. It will be easier if the Damper plate is pre-drilled.

A typical Offset Pipe Run will require the use of a 30 Degree Offset, one 18" Double Wall Chimney Pipe section and a 30 Degree Return as shown in *figure 26 - 30 Degree Elbow*. When completed the vertical end of the 30 Degree Return must align with the Firestop Spacer above.

Nail or screw the straps of the 30 Degree Return to the walls, rafters, joists or studs as shown in *figure 27 - 30 Degree Return Straps*. This will hold it securely in place and enable it to bear the weight of the Vertical Chimney Pipe Run.

Continue installing the Double Wall Chimney Pipe sections necessary to reach the required height of the Vertical Chimney Pipe Run. Each section should be locked together individually by first connecting the Stainless Steel Inner Pipe and then the Galvanized Outer Pipe. Securing the chimney sections together with screws is not necessary. Once the Vertical Chimney Pipe Run is completed and in position, it is important to ensure the connections between the chimney sections are locked and that the 2" clearance to combustibles is maintained.

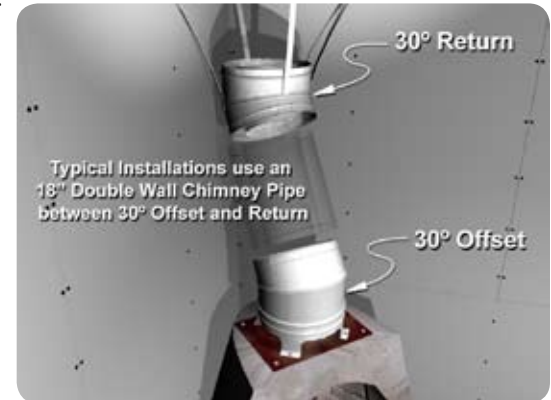


Figure 26 - 30 Degree Elbow

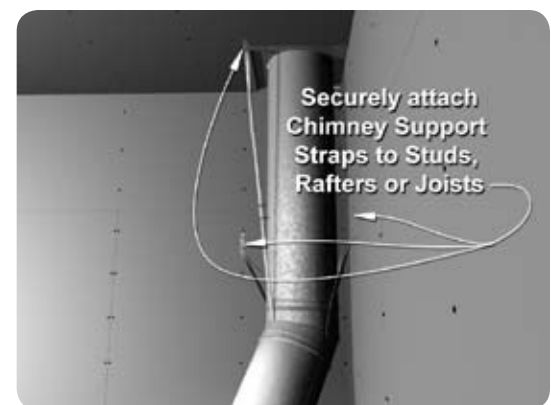


Figure 27 - 30 Degree Return Straps

Slide the Roof Flashing over the protruding Double Wall Chimney Pipe and secure. In heavily sloped roof installations it may be necessary to cut the Roof Flashing.

Install the Storm Collar at the top edge of the Roof Flashing, secure and seal. Install the Round Top as per manufacturer's instructions, as shown in *figure 28 - Roof Flashing and Round Top*.

CAUTION: Before moving on to the Face Frame Installation, make sure the 2" minimum clearance has been maintained between Firebox Assembly and Double Wall Chimney Pipe system and all combustible materials.

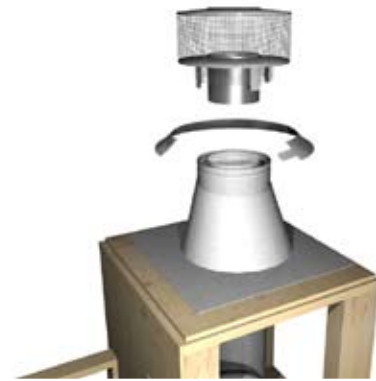


Figure 28 - Roof Flashing and Round Top

6. FACE FRAME INSTALLATION

A 32" x 32" piece of Metal Diamond Mesh, which will cover the entire opening of the firebox, will be held in place with the provided #8 washer head screws set every 3" apart in the concrete portion of the firebox face.

Do not screw into the refractory bricks. After screws are in place, cut the Metal Diamond Mesh as indicated in *figure 29 Metal Diamond Mesh Cut*.



Figure 29 - Metal Diamond Mesh Cut

Place the Face Frame in front of and recessed into the firebox opening by approximately 1/2" as shown in *figure 30 - Face Frame in Place*.



Figure 30 - Face Frame in Place

Pull the cut sections of the Metal Diamond Mesh out through the firebox opening and wrap around the front of the Face Frame. Secure to the Face Frame with the provided #6 x 1/2" self-drilling screws. Attach another piece of Metal Diamond Mesh 28" x 24" folded in half along the 24" dimension to the face of the Combustion Air Tube with the provided #6 x 1/2" self-drilling screws. Once in place the mesh should be folded down on top of the Banco. This mesh is also screwed to the Face Frame with the provided #6 x 1/2" self-drilling screws as shown in *figure 31 - Metal Diamond Mesh to Banco*.

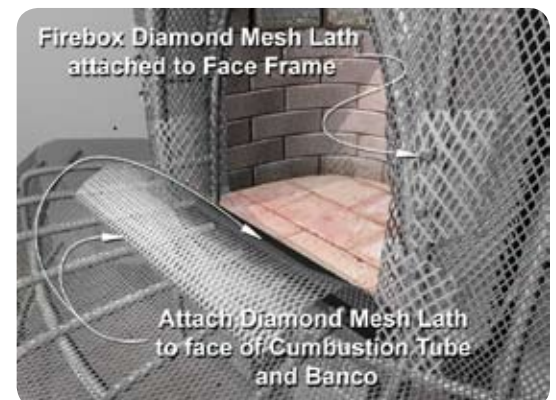


Figure 31 - Metal Diamond Mesh to Banco

The extra 6" of Metal Diamond Mesh that extends around the perimeter of the Face Frame should be folded under and back so that only about one inch remains. Secure the Face Frame to the wall by driving the provided #8 washer head screws, placed every 4" apart, as shown in *figure 32 - Secure Face Frame*.

DOOR FRAME INSTALLATION

Install the Ball Latch onto the Door Frame. This Ball Latch will hold the top of the optional Glass Door and/or Fireplace Screen in place. Bring the Door Frame up into the firebox opening and set it on top of the Combustion Air Tube. Make a hole in the mesh at the top large enough to allow for the Ball Latch. Align the holes in the base of the Door Frame with the two pilot holes in the Combustion Air Tube, and loosely attach with the provided screws. Place a 1/2" wood strip between the Door Frame and the lip on the top inside edge of the Combustion Air Tube as shown in *figure 33 - Door Frame Position*. It will act as a spacer for the Glass Door or Fireplace Screen that must fit into this space. Tighten the Door Frame screws. After the bottom of the Door Frame is in the proper position, Vertically align the Door Frame and push the provided butterfly bolt through the Face Frame mesh and tighten.

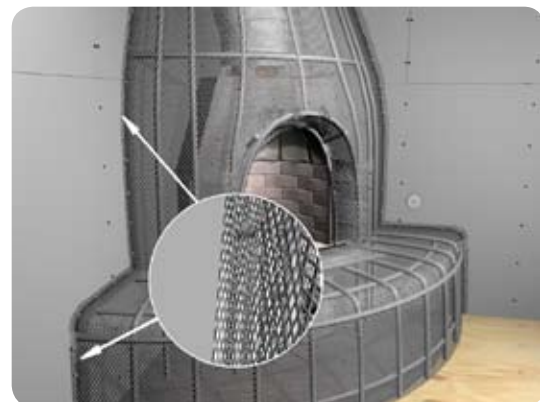


Figure 32 - Secure Face Frame



Figure 33 - Door Frame Position

7. FINISH

A standard 3 coat plaster process should be used to finish your Kiva Fireplace.

1. Scratch Coat
2. Brown coat
3. Finish coat.

First plaster the interior of the kiva opening arch with a mortar mix of 1 part Portland cement, 1/2 part lime, 3 parts Vermiculite, 1/2 cup (by volume) of shredded fiberglass. Limit water to only an amount to make mixture workable. Apply to the lath inside the arch opening between firebox and frame. As shown in *figure 30 - Face Frame in Place* and *figure 31 - Metal Diamond Mesh to Banco of Face Frame Installation*. This is to seal the firebox from possible ashes spilling out of the firebox through the unsealed lath on to the floor below.

Cover the entire Face Frame with either plaster or stucco. Stucco is a moisture resistant Portland Cement based product and must be used if your Kiva Fireplace is installed outside. Your choice of either plaster or stucco may be purchased from your local supplier or hardware store.

You may also purchase factory blended fiber reinforced and sanded stucco mix direct from Grand River Supply and have it shipped along with your Kiva Fireplace Kit. The fiber reinforced

stucco should be used for the Scratch Coat and the Brown Coat. Your choice of cement based colored stucco finish mix or premixed acrylic polymer based stucco finish can be used for the final Finish Coat. Both finishes are available in a variety of colors and can be shipped from Grand River Supply along with your Kiva Fireplace Kit.

When applying your stucco around the doorway, make sure your stucco does not interfere with the operation of your Glass Door or Screen. Only apply enough stucco to seat the door frame without covering the outer face as shown in *figure 34 - Door Frame Finish*.



Figure 34 - Door Frame Finish

CAUTION: Be sure to follow Manufacturer's Instructions when mixing and applying the plaster or stucco.

SCRATCH COAT

The Scratch Coat is a base coat and should not be over worked. It is important for some stucco to press into the mesh to “hold on”, but pressing too hard will cause the stucco to push through. Apply a layer of stucco mixture to the Metal Diamond Mesh about $\frac{3}{8}$ ” inch thick. Before the mix sets too hard, scratch the surface with a small hand rake leaving grooves about $\frac{1}{8}$ ” deep as shown in *figure 35 - Scratch Coat*, giving the Brown Coat a good surface to adhere to.



Figure 35 - Scratch Coat

BROWN COAT

The Brown Coat is the second layer or stucco. This is the layer where you want to shape and prepare your Kiva Fireplace for the very thin final Finish Coat as shown in *figure 36 - Brown Coat*.

Trowel a second $\frac{3}{8}$ ” layer or stucco base coat mixture over the scratch coat. Care should be given to creating a reasonably smooth well shaped surface. The finish coat is very thin and will not hide significant imperfections such as bumps dips or valleys in the surface.



Figure 36 - Brown Coat

FINISH COAT

Trowel a very thin $\frac{1}{8}$ ” thick layer of Finish Coat mixture to the surface of your Kiva Fireplace. At this time you should create the final surface texture you desire as shown in *figure 37 - Finish Coat*. If necessary, mix the final coat according to Manufacturer's Instructions. Many Finish Coats allow the inclusion of color.

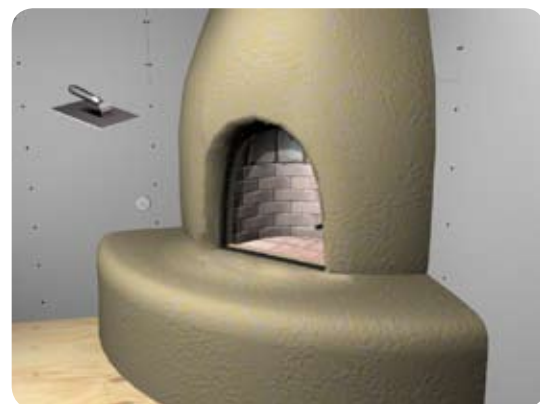


Figure 37 - Finish Coat