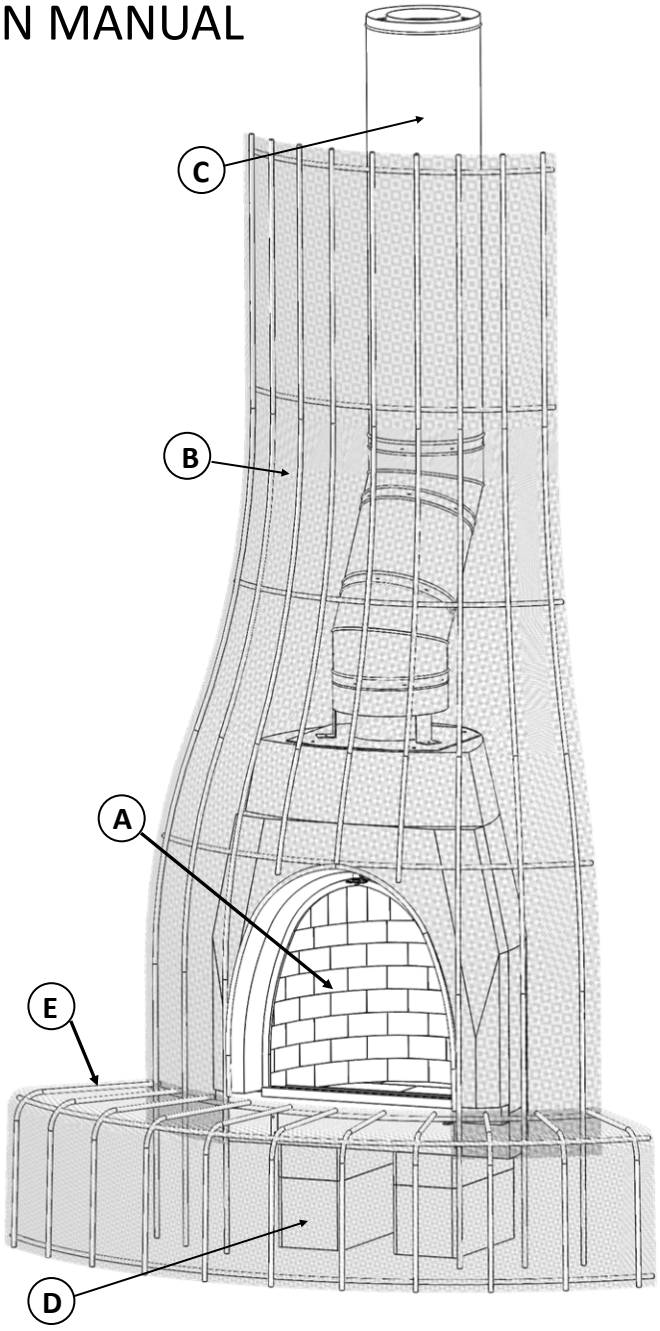
# 18”-24”-30” Kiva Fireplace

## WOOD BURNING INSTALLATION MANUAL

**Frame Models:** **Orno**
**Santa Fe**
**Navajo**
**Zuni**

**Keep these instructions for future use.**

This fireplace is to be installed ONLY by a construction industry licensed contractor. Any permits and construction industry inspections required for installation should be obtained by this contractor.




The Adobelite Fireplace System consists of:

**A) KIVA FIREBOX** - A pre-cast firebox consisting of real hand laid firebrick and lightweight concrete.

**B) EXTERIOR FIREPLACE FRAME** - A tubular steel and diamond-mesh frame. The frame is finished with stucco after installation.

**C) AIR-COOLED CHIMNEY** - Lightweight stainless steel double walled air-cooled chimney is used for venting the fireplace.

**D) FIREBOX PEDESTAL** - Concrete blocks are used to elevate the firebox.
***(Concrete blocks are not included)***

**E) HEARTH EXTENSION** - Provides flooring protection. Finished with stucco or plaster.

**NOTE:** All ***warnings*** are outlined in this manual and must be adhered to by the installer and the buyer. Failure to do so will nullify the manufacturer’s warranty, and may cause serious fire hazard.

RV-03142024

# WARNINGS AND GENERAL SAFETY PRECAUTIONS

**IMPORTANT:** ***THESE INSTRUCTIONS MUST BE LEFT WITH HOMEOWNER***

**ALL WARNINGS OUTLINED IN THIS MANUAL MUST BE STRICTLY ADHERED TO BY THE INSTALLER AND HOMEOWNER.**
**FAILURE TO FOLLOW** these installation instructions will **VOID THE WARRANTY** and may cause a serious **FIRE HAZARD.**

This fireplace is to be installed ONLY by a construction industry licensed contractor. Any permits and construction industry inspections required for installation should be obtained by this contractor.

Fireplace installation must be in compliance with local building codes. Before installing the fireplace, consult the local construction industry to ensure that you are in compliance with all applicable codes, including permits and inspections.

Fully **READ** and **UNDERSTAND** all instructions carefully before beginning installation.

**DO NOT modify your fireplace in any way.** Any modification will void the warranty and create a potential fire hazard.

Before burning your first fire, fully read the **"Homeowners Operation Manual".**

**Combustion Air Intake** of fireplace must be kept clear of debris at all times.

Do not **store** or **use** flammable liquids or aerosols near this fireplace.

Never leave the fireplace burning while unattended.

Children should never be left unattended while the fireplace is in use.

**WARNING**: Only use approved chimney and termination systems outlined in this manual.

**WARNING**: This fireplace is **NOT** designed for wall termination. Fireplace must be vented vertically.

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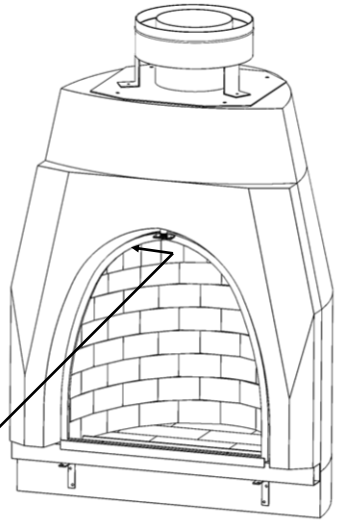
# LISTING DATA PLATE / LOCATION

The Adobelite Kiva Fireplace is a factory built fireplace tested to U.L. 127. test standards and is well-insulated for safe clearances to combustible construction materials used to build your home. The proper clearances are described by a label affixed to the inside of the top arch section near the damper handle on each firebox for use by the installers and by the local building inspector to ensure compliance.

Locate the Listing Data Plate on the upper left backside of the Kiva Firebox Front Arch. Record the model, size, and serial number listed on the data plate below.



MODEL TYPE / SIZE

SERIAL NUMBER

| | | |
|---|---|---|
| MANUFACTURED BY: ADOBELITE<br>ADOBELITE, LLC<br>ALBUQUERQUE NM 87123<br>MODEL TYPE: 30 - 24 - 18 | FIREPLACE INTENDED FOR USE WITH SOLID WOOD FUEL ONLY. SEE ADOBELITE INSTALLATION AND OPERATING INSTRUCTIONS FOR THE MODEL. CONTACT LOCAL BUILDING OFFICIAL PRIOR TO INSTALLATION. | LISTED FACTORY BUILT FIREPLACE<br>LC US FIREPLACE<br>SERIAL NO. |

FIRE CHAMBER INTENDED FOR USE WITH IHP, HEATILATOR, OR UL-103HT CHIMNEY & ADOBELITE FIREPLACE PARTS, DO NOT USE FIREPLACE INSERT OR OTHER PRODUCTS NOT SPECIFIED FOR USE WITH THIS MODEL.

▼ ▼ ▼ WARNING ▼ ▼ ▼ WARNING ▼ ▼ ▼ WARNING ▼ ▼ ▼ WARNING ▼ ▼ ▼

| | |
|---|---|
| FIREPLACE HAS NOT BEEN TESTED WITH GLASS DOOR DURING WOOD BURNING. TO REDUCE RISK OF INJURY, DO NOT OPERATE WITH GLASS DOOR IN PLACE. | HEARTH EXTENSIONS MUST BE INSTALLED ACCORDING TO INSTALLATION INSTRUCTIONS TO PREVENT RISK OF FIRE DAMAGE DO NOT DRY CLOTHING ON HEARTH. |

FOR OPERATION, THIS FIREPLACE NEEDS SUFFICIENT AIR. IMPROPER OPERATION MAY RESULT IN STARVING OTHER FUEL-BURNING APPLIANCES OF COMBUSTION. VENTILATION AND DILUTION OF AIR REQUIRES OUTSIDE AIR AS PER INSTALLATION INSTRUCTIONS. DO NOT OVERFIRE UNIT.

| | | |
|---|---|---|
| THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. DO NOT INSTALL AN UNVENTED GAS LOG SET IN THIS FIREPLACE. | DO NOT USE FIREPLACE TO COOK OR WARM FOODS. | CLEARANCE:<br>UNIT TO BACK/SIDE WALLS: 1"<br>CHIMNEY TO FRAMING CHASE: 2"<br>FIREPLACE OPENING TO SIDE WALL: 18" |

IF THIS FIREPLACE IS CONVERTED TO GAS, THE DAMPER MUST BE FIXED IN A PERMANENTLY OPEN POSITION

**FIG. 1 -** LISTING DATA PLATE LOCATION

## PLEASE FILL IN THE FOLLOWING INFORMATION FOR FUTURE REFERENCE

**Model Type / Size:** _____ **Date Purchased:** _____ **Date Installed:** _____

**Frame Style:** _____ **Dealership Purchased at:** _____

**Serial Number:** _____ **Dealership Phone #:** _____

**Chimney Pipe Brand:** _____ **Chimney Pipe Size (Inner/Outer):** _____

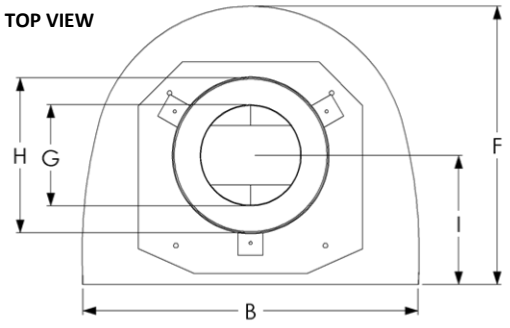
**Notes:** _____

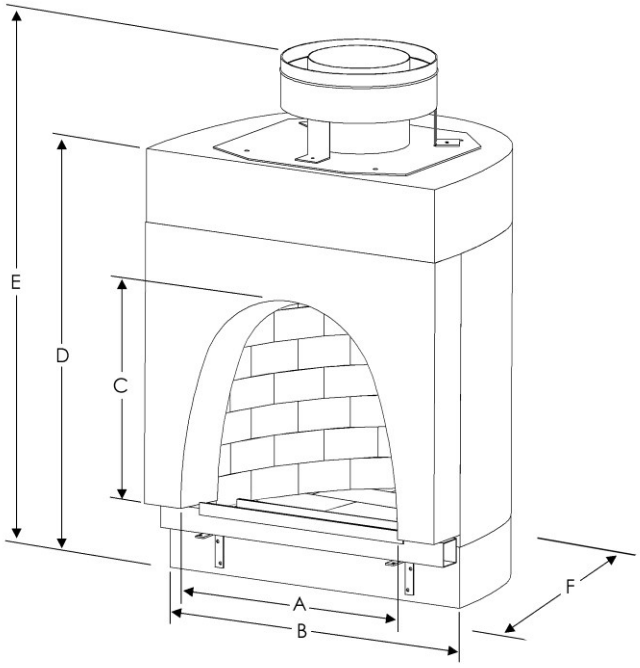
_____

_____

# PRE-INSTALLATION REQUIREMENTS

## KIVA18 FIREBOX DIMENSIONS:

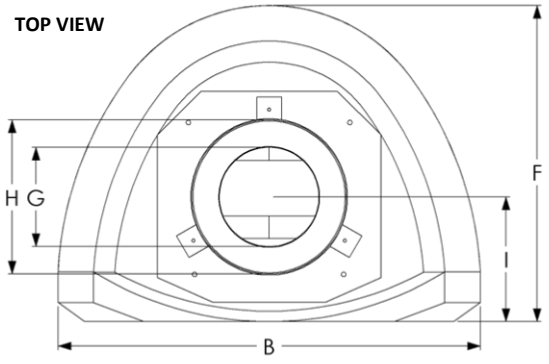


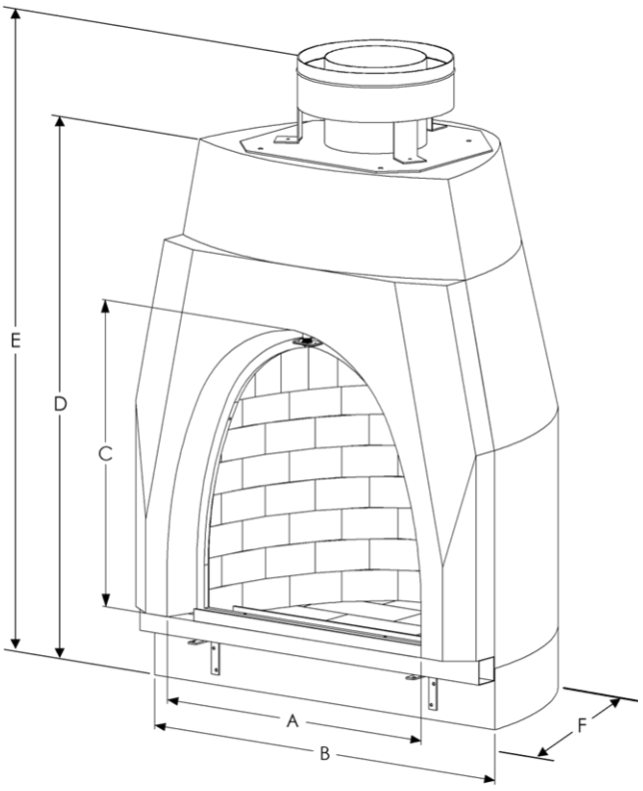




| CLEARANCES TO COMBUSTIBLES | |
|---|---|
| SIDES/BACK | 1” |
| FACE | All framing along firebox face must be non-combustible |
| HEARTH EXTENTION | 16” |
| CHIMNEY | 2” |

| | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| **KIVA 18** | 20 1/4” | 27” | 18 1/4” | 35” | 43” | 22 1/2” | 8” MIN. | 12” | 10 1/2” |

## KIVA24 FIREBOX DIMENSIONS:

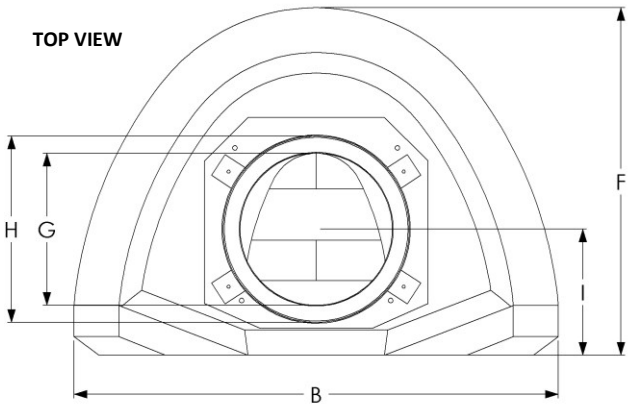


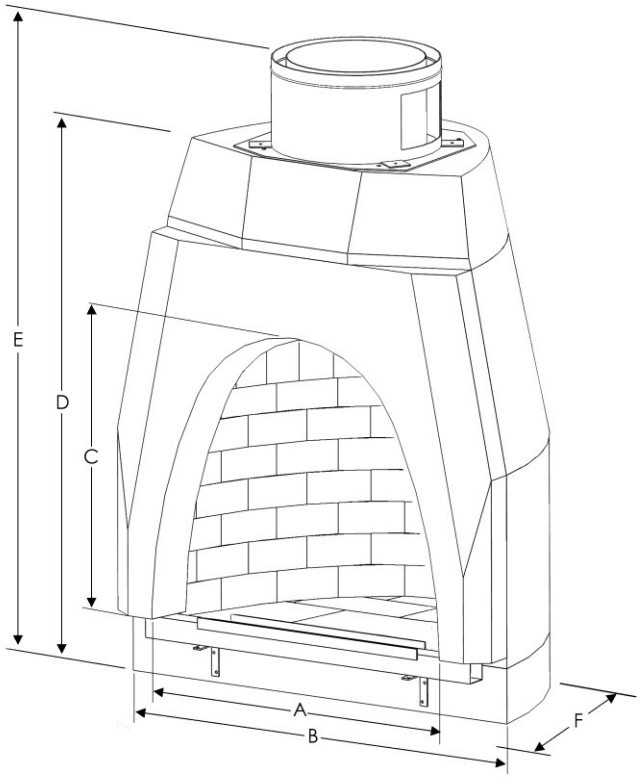




| CLEARANCES TO COMBUSTIBLES | |
|---|---|
| SIDES/BACK | 1” |
| FACE | All framing along firebox face must be non-combustible |
| HEARTH EXTENTION | 16” |
| CHIMNEY | 2” |

| | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| **KIVA 24** | 25 1/4” | 34” | 25” | 44” | 52” | 25 1/2” | 8” MIN. | 12” | 10 1/2” |

## KIVA30 FIREBOX DIMENSIONS:




| CLEARANCES TO COMBUSTIBLES | |
|---|---|
| SIDES/BACK | 1” |
| FACE | All framing along firebox face must be non-combustible |
| HEARTH EXTENTION | 16” |
| CHIMNEY | 2” |

| | A | B | C | D | E | F | G | H | I |
|---|---|---|---|---|---|---|---|---|---|
| **KIVA 30** | 30” | 40” | 27 1/4” | 48 1/2” | 56 1/2” | 28” | 10” MIN. | 15” | 12 1/2” |

## CHIMNEY REQUIREMENTS

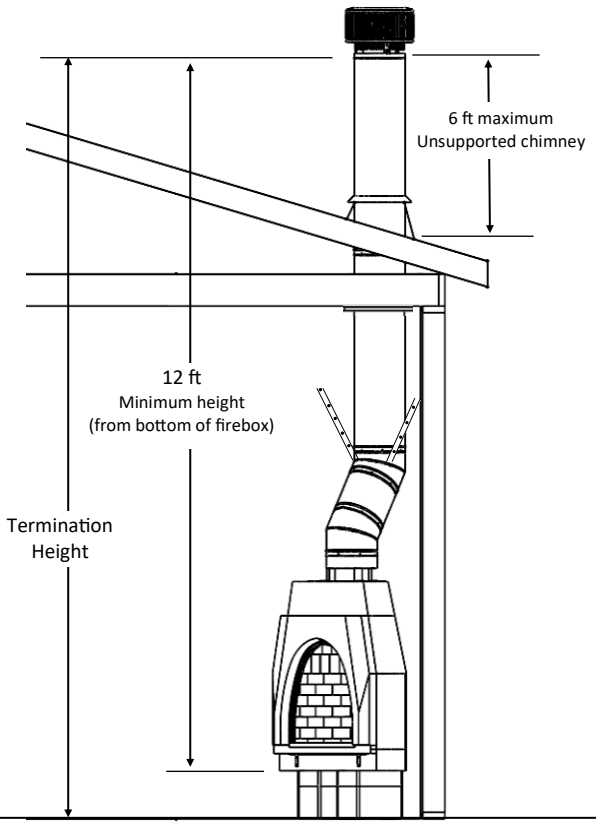
For minimum chimney sizes and types see table below. Certified equivalents tested and listed to UL Test Procedure 103, UL 103HT, and ULC S604 rated to 1700°F or 2100°F may also be used if minimum chimney diameter (8" I.D. for KIVA 18 and KIVA24, 10" I.D. for KIVA 30) is adhered to. Note: Anchor Plate (FIG 8 / page 14) and Chimney Starter Collar (FIG 11 / page 16) are specific to each chimney pipe type and are not interchangeable. Verify the Chimney Starter Collar and Anchor Plate are compatible with the chimney system you have before beginning installation.

| | Approved Chimney Type and Sizes | I.D. | O.D. | Minimum Clearance | Minimum Truss/Joist Framing "A" | Wall to Center of Chimney "B" |
|---|---|---|---|---|---|---|
| KIVA 18 and KIVA 24 | Innovative Hearth Products (IHP) 8DM Double-Wall Chimney | 8" | 12" | 2" | 17"x 17" | 8" |
| | Lennox TF8 Air-Cooled Double-Wall Chimney | 8" | 12" | 2" | 17"x 17" | 8" |
| | Heatilator SL300 Air-Cooled Double-Wall Chimney | 8" | 10 1/2" | 2" | 14 1/2"x 14 1/2" | 7 1/2" |
| | DuraTech 8DT All-fuel Double-Wall Chimney | 8" | 10" | 2" | 14" x 14" | 7" |
| | Selkirk 8GT / 8UT All-fuel Double-Wall Chimney | 8" | 10" | 2" | 14" x 14" | 7" |
| KIVA 30 | Innovative Hearth Products (IHP) 12DM Double-Wall Chimney | 12" | 15" | 2" | 20"x 20" | 9 1/2" |
| | Lennox TF12 Air-Cooled Double-Wall Chimney | 12" | 15" | 2" | 20"x 20" | 9 1/2" |
| | Heatilator SL1100 Air-Cooled Double-Wall Chimney | 11" | 13" | 2" | 17"x 17" | 8 1/2" |
| | DuraTech 10DT All-fuel Double-Wall Chimney | 10" | 12" | 2" | 16" x 16" | 8" |
| | Selkirk 10GT / 10UT All-fuel Double-Wall Chimney | 10" | 12" | 2" | 16" x 16" | 8" |

**TABLE 1. chimney requirements**

**WARNING! B-Vent Chimney should never be used when solid fuels are to be burned!**

| | |
|---|---|
| Minimum overall system height | 12 ft |
| Minimum system height with double offset | 15 ft |
| Maximum height | 90 ft |
| Maximum unsupported chimney height above the fireplace | 35 ft |
| Maximum unsupported chimney above the roof | 6 ft |



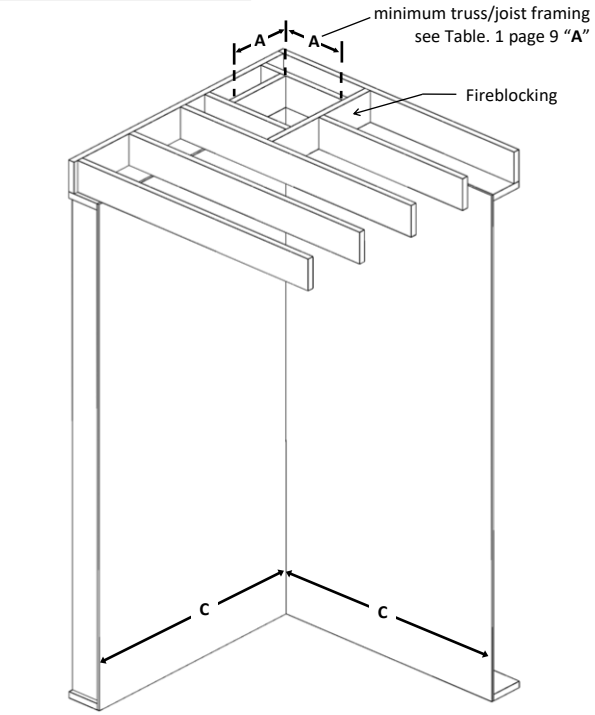

**NOTE: A maximum of two pairs of offsets and returns may be used for installation.**

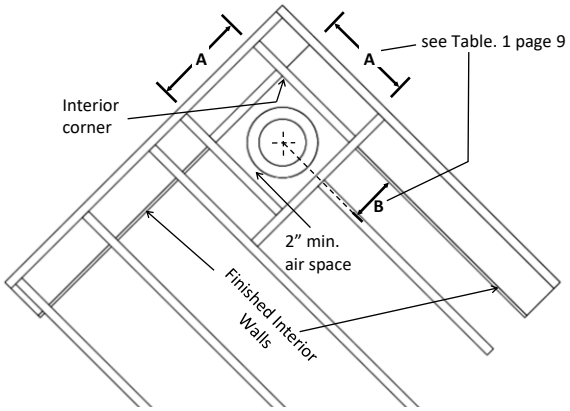
## FRAMING REQUIREMENTS:

Typical framing for corner and flatwall installations are shown below. Wall widths should be framed to a minimum as outlined by “C” dimension below to accommodate the standard hearth extension of the kiva frame. If the hearth extension has been customized in width the “C” dimension can be modified accordingly. A 16” deep non-combustible hearth extension extending to 6” to either side of the firebox opening is required over combustible flooring. Where the chimney passes through a ceiling joist or truss, a ceiling box should be framed to an inside minimum dimension of “A” as outlined in Table 1 (chimney requirements), page 9. Drywall or other wall board should be used to secure insulation and provide a surface for the kiva frame to attach to.

**DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.**

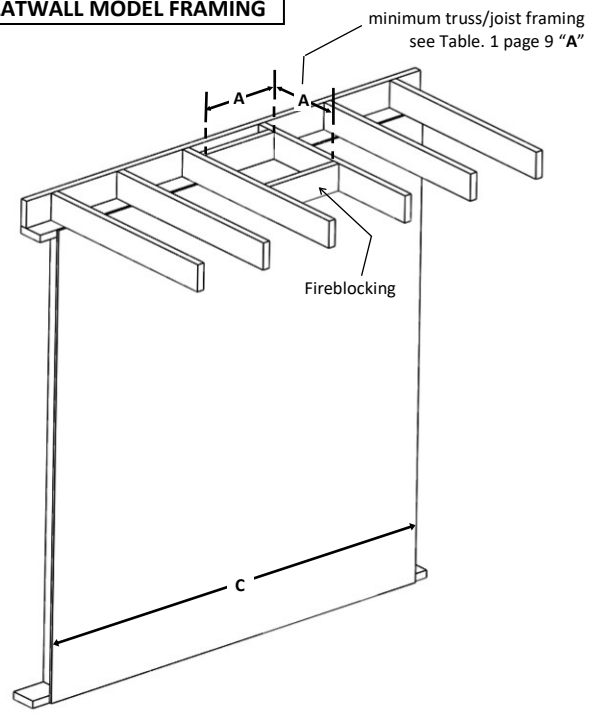
**CORNER MODEL FRAMING**

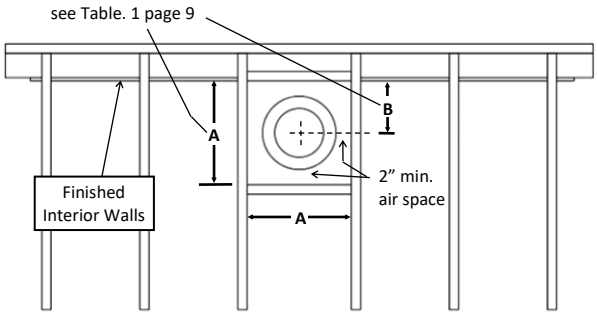



| CORNER MODELS | | | |
|---|---|---|---|
| | C<br>Minimum Corner Framing Dimensions | | |
| **MODEL** | **KIVA 18** | **KIVA 24** | **KIVA 30** |
| Orno/Ornito | 4’2” | 4’7” | 4’11” |
| Santa Fe | 4’7” | 4’8” | 5’1” |
| Navajo | N/A | 4’8” | 5’1” |
| Zuni | N/A | 5’5” | 5’7” |

**FLATWALL MODEL FRAMING**



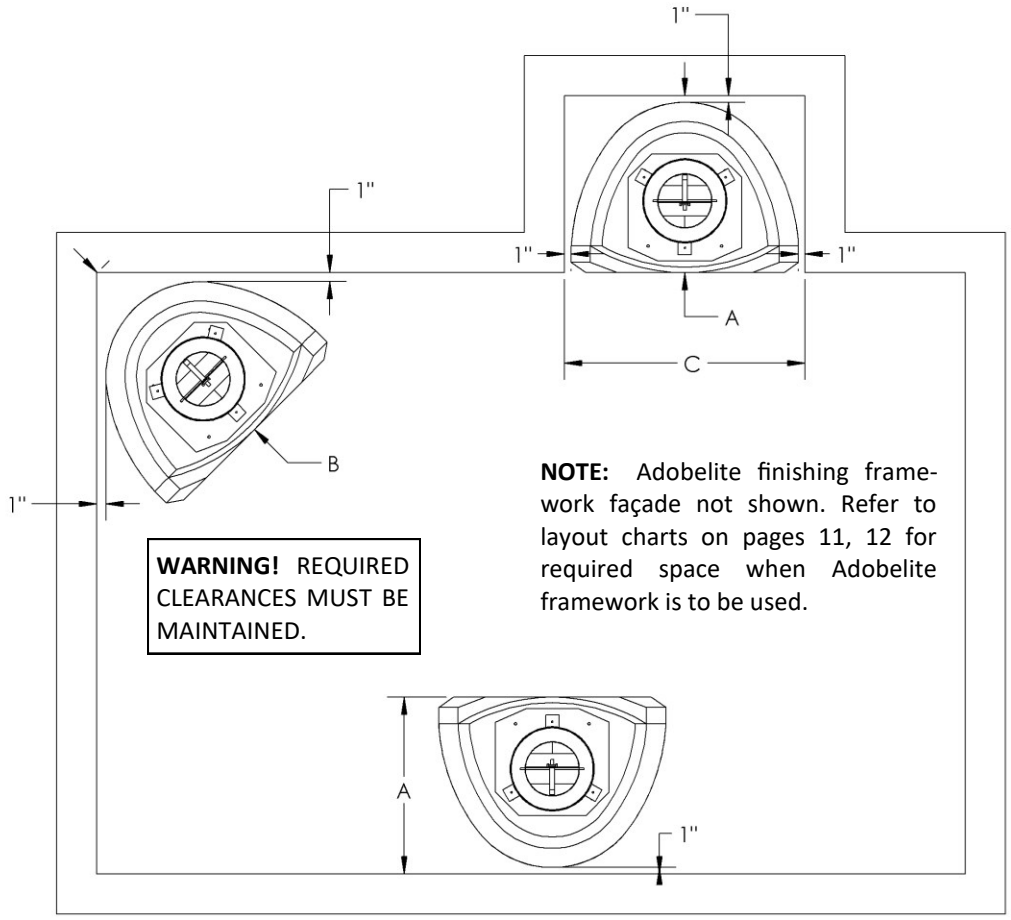

| FLATWALL MODELS | | |
|---|---|---|
| | C<br>Minimum Flatwall Framing Dimensions | |
| **MODEL** | **KIVA 24** | **KIVA 30** |
| Orno | 6’8” | 7’6” |
| Santa Fe | 6’8” | 7’6” |
| Navajo | 6’8” | 7’6” |
| Zuni | 7’8” | 8’6” |

## FRAMING REQUIREMENTS (CONTINUED):

Refer to the below diagram for minimum combustible framing requirements and clearances to combustibles. See pages 11 and 12 for required spaces and layouts for Adobelite systems including Adobelite stucco/plaster ready outer façade frames.

**⚠ DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS.**

**FIREBOX COMBUSTIBLE FRAMING CLEARANCES**




**WARNING!** REQUIRED CLEARANCES MUST BE MAINTAINED.

**NOTE:** Adobelite finishing framework façade not shown. Refer to layout charts on pages 11, 12 for required space when Adobelite framework is to be used.

| Minimum Framing Dimensions | | | |
|---|---|---|---|
| | **KIVA 18** | **KIVA 24** | **KIVA 30** |
| A | 23-1/2” | 26-1/2” | 29” |
| B | 29-1/2” | 33” | 37” |
| C | 30” | 36” | 42” |

## FIREPLACE LAYOUT AND FIREBOX PEDESTAL:

### CHIMNEY CHASE REQUIREMENTS

If an enclosed exterior roof top chimney chase is constructed, it should be framed with a minimum open clear space specified by dimension "A" *Minimum Framing* as specified in TABLE 1, Page 9. Framing should be constructed of 2 x 4 lumber or heavier. Fire-blocking is required between the joists in which the flue will be installed.

A ½" plywood or wafer board should cap the chase in which a minimum diameter circle, of 2" larger than the outside pipe diameter, should be removed. The chimney must terminate at least 3'0" above the roof and 2'0" above the parapet, roof, or anything else within 10' (see 10' rule on page 18).

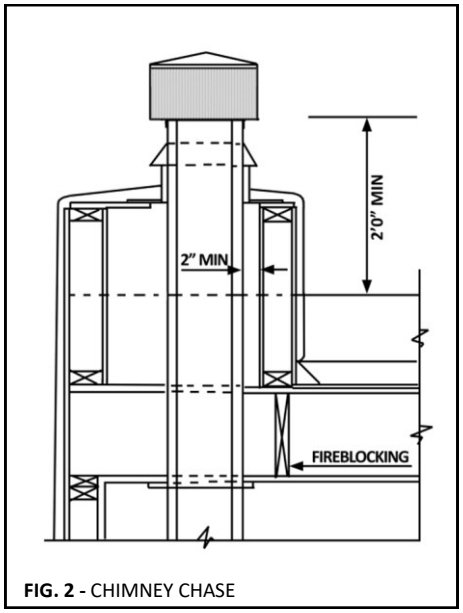


**FIG. 2 -** CHIMNEY CHASE

### WOOD FLOOR REQUIREMENTS (FIG. 3)

If the fireplace is going to be installed over a wood or vinyl floor a sheet of $^1/_4$"x3'x3' masonry board needs to be placed on the floor (tight in the corner, or against the flat-wall centered on the center line (see chart below) prior to any layout or installation.

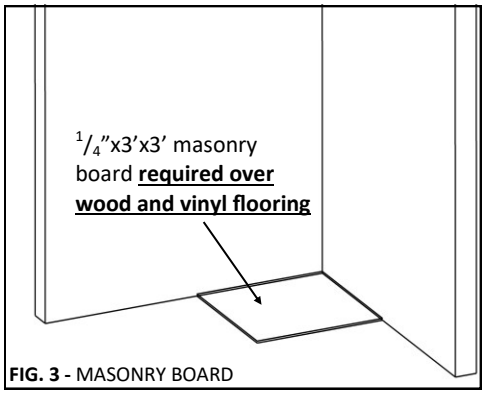


**FIG. 3 -** MASONRY BOARD

### CARPET

Carpet and padding will need to be removed up to the hearth line. See FIG. 4 and FIG. 5 below.

## LAYOUT (FIG. 4, FIG. 5)

Begin the layout by drawing a center line at 45 degrees for a corner installation, or perpendicular to the wall for a flat-wall installation. Next, draw the baseline (dimension D - refer to FIG. 4 below and FIG. 5 on page 12) perpendicular to the center line. The base line will be aligned with the front edge of the Firebox Base and the Firebox Pedestal.

### CORNER LAYOUT

| 18" FIREBOX MODELS | | | | |
|---|---|---|---|---|
| **MODEL** | **A** | **B** | **C** | **D** |
| | **Frame at Ceiling** | **Frame at Hearth** | **Hearth** | **Baseline** |
| Ornito | 2'0" | 2'10" | 4'1" | 2'4" |
| Santa Fe | 2'0" | 3'3" | 4'6" | 2'4" |

| 24" FIREBOX MODELS | | | | |
|---|---|---|---|---|
| **MODEL** | **A** | **B** | **C** | **D** |
| | **Frame at Ceiling** | **Frame at Hearth** | **Hearth** | **Baseline** |
| Orno | 2'2" | 3'2" | 4'6" | 2'5" |
| Santa Fe | 2'0" | 3'3" | 4'7" | 2'5" |
| Navajo | 2'0" | 3'9" | 4'7" | 2'5" |
| Zuni | 2'0" | 4'0" | 5'4" | 2'5" |

| 30" FIREBOX MODELS | | | | |
|---|---|---|---|---|
| **MODEL** | **A** | **B** | **C** | **D** |
| | **Frame at Ceiling** | **Frame at Hearth** | **Hearth** | **Baseline** |
| Orno | 2'6" | 3'6" | 4'10" | 2'9" |
| Santa Fe | 2'5" | 3'8" | 5'0" | 2'9" |
| Navajo | 2'5" | 4'2" | 5'0" | 2'9" |
| Zuni | 2'5" | 4'2" | 5'6" | 2'9" |

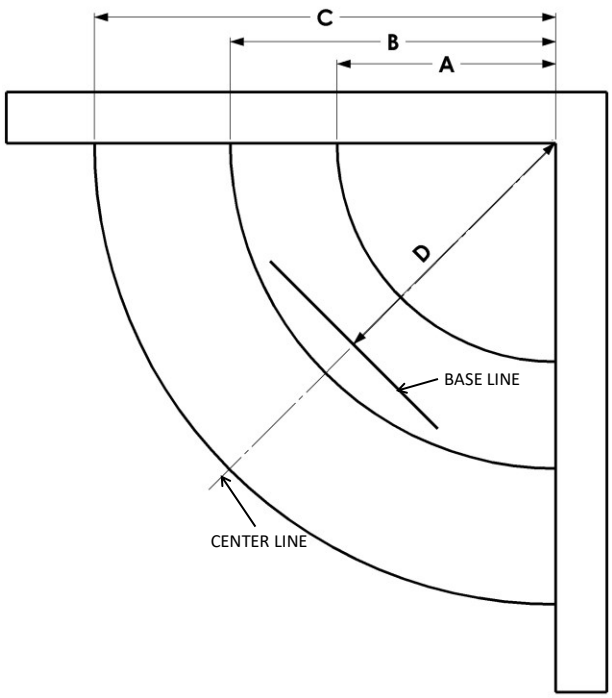


**FIG. 4 -** CORNER LAYOUT

## FIREBOX PEDESTAL:

### Standard Hearth Height of 18”

**(Note: Concrete Blocks are not included with the Adobelite Fireplace Kit and must be purchased separately)**

Concrete Masonry Units (C.M.U) are used to construct the Firebox Pedestal. The overall height of the pedestal should be 12”. A combination of two 8”x8”x16” and two 4”x8”x16” CMU can be stacked (as shown in FIG 6), or any other combination of concrete blocks can also be used as long as the overall height is 12”.

1) Position the front edge of the blocks with the Firebox Base Line. Refer to Block Spacing dimension (H) in positioning the width of the block pedestal. The blocks should be equally spaced from the center line.

2) Adhere the concrete blocks to each other and to the concrete slab / masonry board as they are assembled using mortar or a construction adhesive such as Liquid Nails or F26.

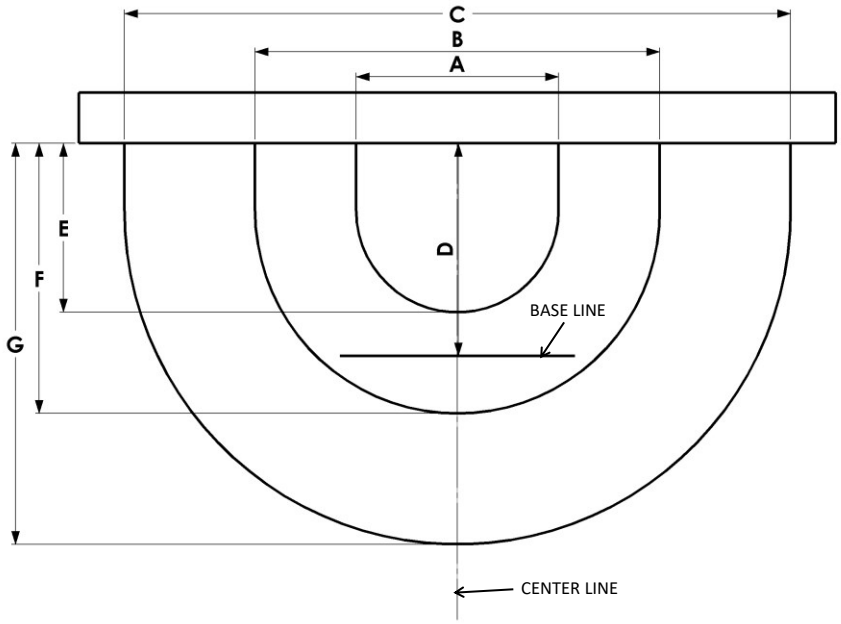



**FIG. 5 -** FLAT-WALL LAYOUT

| 24” FIREBOX MODELS | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MODEL** | **A** | **B** | **C** | **D** | **E** | **F** | **G** |
| | **Width at Ceiling** | **Width at Firebox** | **Width of Hearth** | **Baseline** | **Depth at Ceiling** | **Depth at Firebox** | **Depth of Hearth** |
| Orno | 2’0” | 4’0” | 6’7” | 1’11” | 1’8” | 2’8” | 4’0” |
| Santa Fe | 1’6” | 4’0” | 6’7” | 1’11” | 1’5” | 2’8” | 4’0” |
| Navajo | 1’6” | 5’0” | 6’7” | 1’11” | 1’5” | 2’8” | 4’0” |
| Zuni | 1’6” | 5’0” | 7’7” | 1’11” | 1’5” | 3’3” | 4’6” |

| 30” FIREBOX MODELS | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MODEL** | **A** | **B** | **C** | **D** | **E** | **F** | **G** |
| | **Width at Ceiling** | **Width at Firebox** | **Width of Hearth** | **Baseline** | **Depth at Ceiling** | **Depth at Firebox** | **Depth of Hearth** |
| Orno | 2’8” | 5’0” | 7’5” | 2’1” | 2’0” | 3’0” | 4’4” |
| Santa Fe | 2’2” | 5’0” | 7’5” | 2’1” | 1’9” | 3’0” | 4’4” |
| Navajo | 2’2” | 6’0” | 7’5” | 2’1” | 1’9” | 3’0” | 4’4” |
| Zuni | 2’2” | 6’0” | 8’5” | 2’1” | 1’9” | 3’6” | 4’10” |

### For Hearth Height below 18”

#### Concrete Floor

When working on a concrete floor, the base section (shown in step 1, page 13) can be set directly on the floor if desired, for a 5” hearth height.

#### Wood Floor

The hearth height can also be lowered to 11” for a wood floor. If you plan to lower the firebox pedestal lower than 8”, you must use a heat barrier consisting of: 1) a layer of 1 ¼” thick split firebrick, 2) a 16 gauge steel barrier (the same size as the base, and 3) another layer of 1 ¼” firebrick. The steel barrier should be sandwiched in-between the firebrick. *Only adjust the base pedestal height if:* 1) you ordered a custom frame at that height, or 2) you feel comfortable performing the necessary modifications to the frame.

| | **18” Firebox** | **24” Firebox** | **30” Firebox** |
|---|---|---|---|
| **H -** Block Spacing | 5” | 6” | 9” |

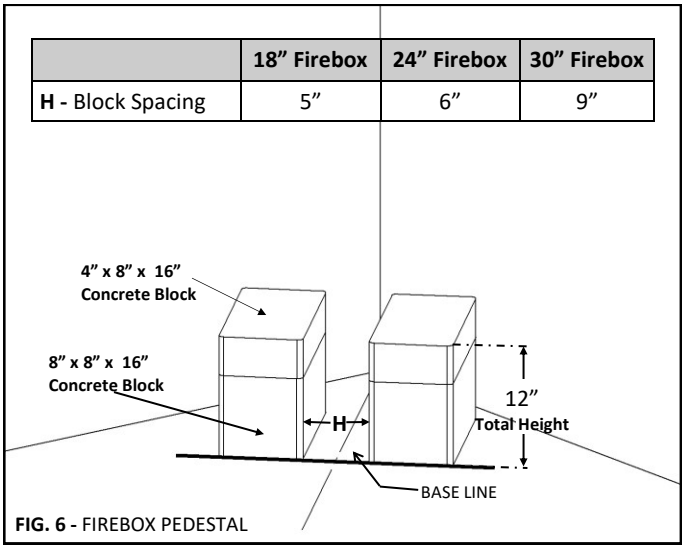


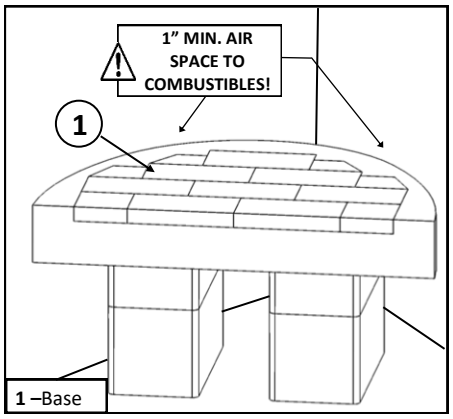

**FIG. 6 -** FIREBOX PEDESTAL

***WARNING:*** **<u>ONLY</u> NON-COMBUSTIBLE MATERIAL MAY BE USED FOR THE FIREBOX PEDESTAL!**

# FIREBOX ASSEMBLY



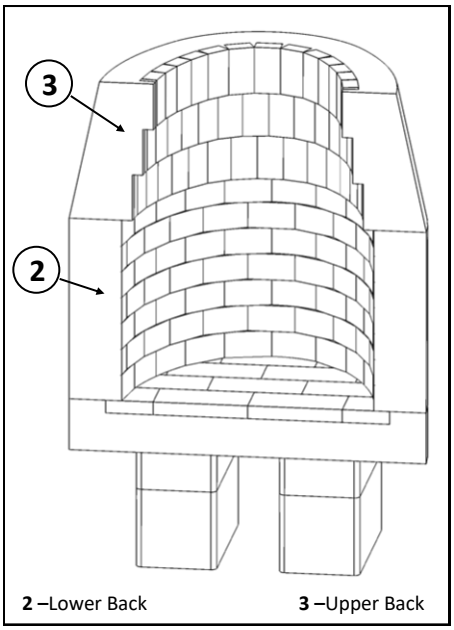
**1) BASE** –Spread a thin layer of concrete mortar or construction adhesive on the top of the firebox pedestal. Place the firebox base on the pedestal. Using the layout sketch, align the front of the base with the firebox base line and center the firebox along the center line. Make sure the Base is level. Verify there is a minimum 1" clearance from the sides and back of the Base to any combustible framing.



**1** –Base

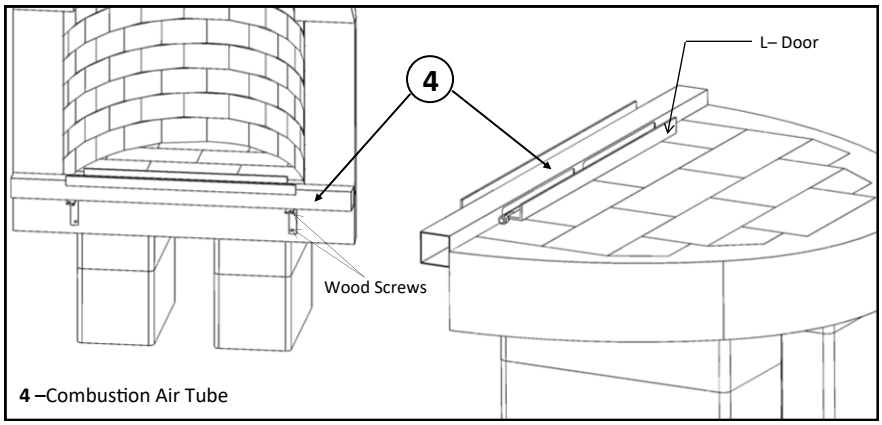
**2) LOWER BACK** –Apply a 5" wide thin layer of the included refractory mortar to the outside top edge of the base where the Lower Back will rest. Place the Lower Back in place and rotate the piece slightly back and forth to squish the mortar into place. Align the back and sides of the Lower Back and Base.

**3) UPPER BACK (MODELS KIVA24 AND KIVA30 ONLY)** – Following the above procedure, spread a layer of refractory mortar and place the Upper Back section on top of the Lower Back. Again, align the back and sides of the pieces.



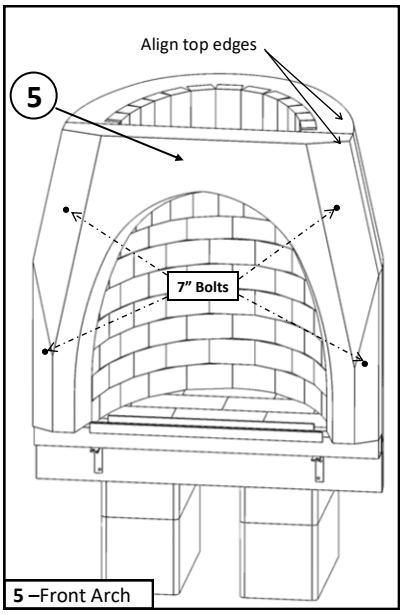
**2** –Lower Back **3** –Upper Back

**4) COMBUSTION AIR TUBE** –Place the Combustion Air Tube against the Firebox Base. The "L" door should rest on the Firebox Base when opened. Attach the tube to the face of the Base using four 2 $^{1}/_{2}$" wood screws.



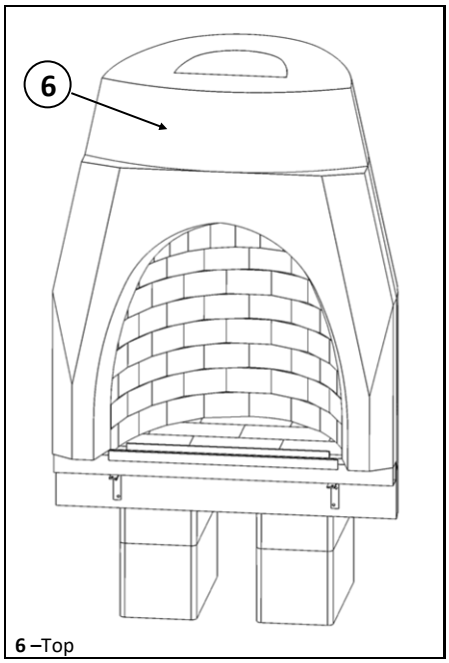
**4** –Combustion Air Tube

**5) FRONT ARCH** –Apply refractory mortar to the front edges of the Lower and Upper Back pieces and to the top of the Front Arch section. Place the Front Arch into place with the top of the Front Arch piece aligned with the top edge of the Upper Back (3) and attach arch using four $^{1}/_{4}$" x 7" Lag Bolts. Avoid placing the weight of the Arch piece onto the Combustion Air Tube.



**5** –Front Arch

**6) TOP** –Now install the top section of the fireplace. Again, spread a thin layer of refractory mortar where the pieces will meet, and align the back and sides of the pieces.



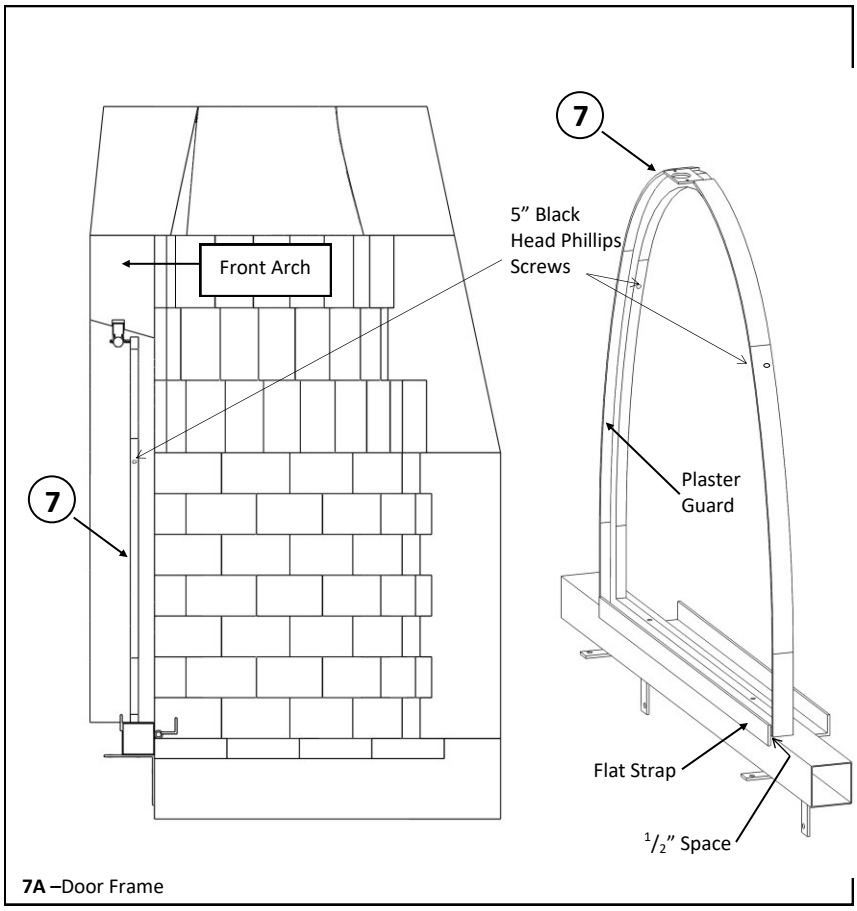
**6** –Top

## FIREBOX ASSEMBLY (CONTINUED):

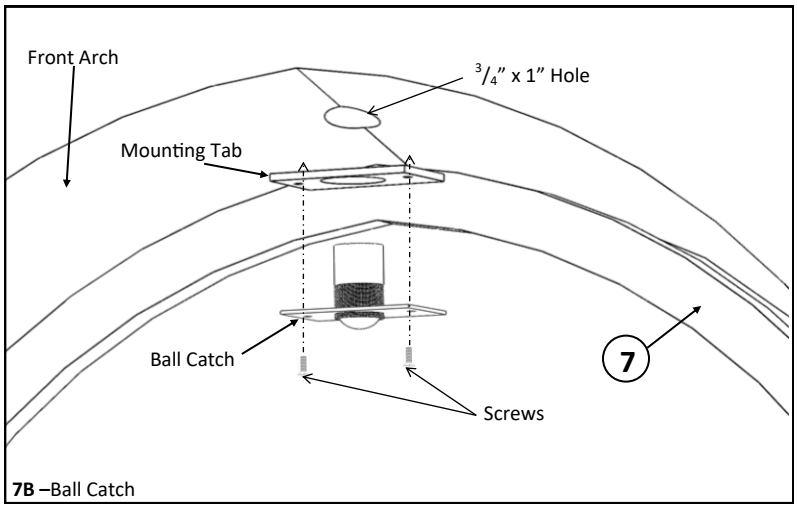
**7) DOOR FRAME** – The Door Frame allows an Adobelite Screen Door or Glass Door to be used with the fireplace. Begin by attaching the Door Frame to the Combustion Air Tube. Position the Door Frame on top of the Air Tube and allow a $^1/_2$" space between the flat strap on the Air Tube and the Door Frame. Use two $1^1/_4$" x #8 self drilling (black head) screws to secure the Door Frame to the Combustion Air Tube.

Plumb the Door Frame so it is vertical, then secure the Door Frame to the Front Arch using two 5" (black head) wood screws.

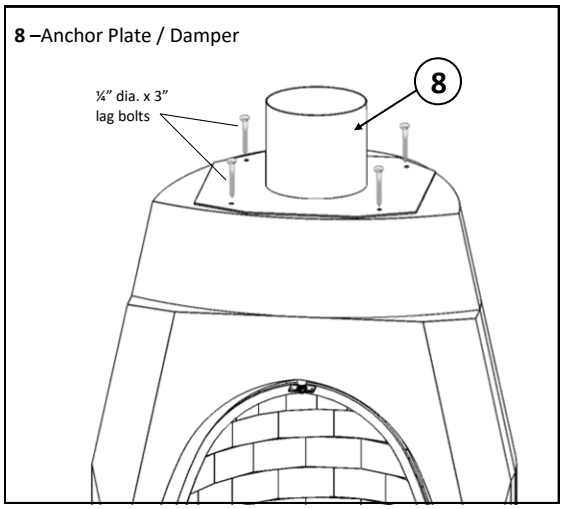
Finally, the Ball Catch (FIG. 7B) needs to be installed to the door frame. Begin by drilling a 1" deep x $^3/_4$" dia. hole through the mounting tab and into the Front Arch. Slide the Ball Catch up into the hole and secure it to the mounting tab on the Door Frame with the two provided brass screws.




**7A** –Door Frame




**7B** –Ball Catch




**8** –Anchor Plate / Damper

**8) ANCHOR PLATE / DAMPER**– Apply a thin layer of refractory mortar to the top of firebox where the Anchor Plate with Damper will sit. Align the back edge of the Anchor Plate opening with opening in the firebox top section. Check the operation of the Damper by fully opening and closing the Damper to insure the damper plate is not hitting the firebox. Secure the Anchor Plate using four ¼" dia. x 3" long lag bolts.

# CHIMNEY INSTALLATION

3

This fireplace must use an approved chimney system as specified under Chimney Requirements on page 9. The following Chimney Installation outlines a typical installation but does not cover all installation scenarios. Follow the installation procedures specified in the chimney manufacturer's installation manual and use only parts specified for use with the listed chimney system.

**WARNING:** A *MINIMUM* OF 2" AIR CLEARANCE MUST BE MAINTAINED BETWEEN ALL CHIMNEY COMPONENTS AND COMBSTIBLE MATERIALS. ALL INSTRUCTIONS PROVIDED BY CHIMNEY MANUFACTURERS MUST BE STRICTLY ADHERED TO. FAILURE TO PROPERLY FOLLOW ALL CLEARANCES AND INSTRUCTIONS MAY RESULT IN A SERIOUS FIRE CAUSING INJURY OR DEATH!

Each double wall chimney section consists of an inner and outer flue pipe. The two sections of chimney pipe are not attached to each other, and therefore must be installed individually. As the flue sections are assembled, the inner flue section will slip to the inside of the section below. The outer section of pipe will slide over the hemmed edge of the section below.

When installed properly, the chimney sections will "snap" into place, securely locking the two pieces together. Lock chimney sections together by pushing downward until the top section meets the stop bead on the lower section. Verify both the inner and outer sections of chimney are secure when assembling the flue. #6 or #8 sheet metal screws no longer than $^1/_2$" may be used to fasten outer chimney sections together. Do NOT penetrate the inner flue other than when securing the Starter Elbow to the Anchor Plate Collar.

**CHIMNEY OFFSET**

An offset and return elbow set is required for installation of the Adobelite Kiva Frame. Each elbow set consists of an offset (or starter) elbow, and a return elbow. The return elbow, which will be installed last (step 12), has straps that are attached to the walls in order to support the chimney weight above.

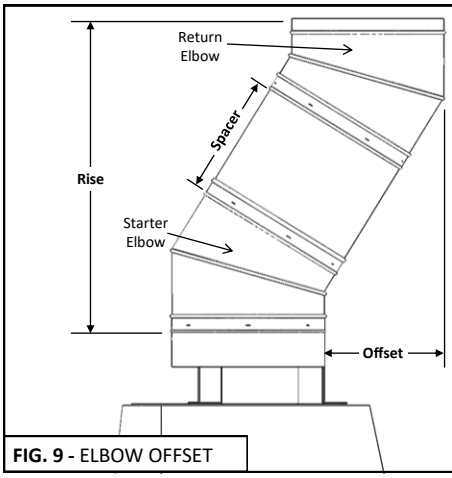


**FIG. 9 -** ELBOW OFFSET

| **KIVA 18 and KIVA 24** (8" I.D. Chimney) | | |
|---|---|---|
| **Spacer Length** | **Offset** | **Rise** |
| 0" (Elbows Only) | 3" | 11" |
| 12" | 8 $^1/_4$" | 20" |
| 18" | 11 $^1/_4$" | 25 $^1/_4$" |
| 24" | 13 $^1/_2$" | 29 $^1/_4$" |
| 30" | 16 $^1/_2$" | 34 $^1/_4$" |

| **KIVA 30** (10" or 12" I.D. Chimney) | | |
|---|---|---|
| **Spacer Length** | **Offset** | **Rise** |
| 0" (Elbows Only) | 4 $^3/_8$" | 16 $^3/_8$" |
| 12" | 9 $^3/_4$" | 25 $^1/_2$" |
| 18" | 12 $^3/_4$" | 30 $^3/_4$" |
| 24" | 15" | 34 $^3/_4$" |
| 30" | 18" | 40" |

When planning the chimney installation, verify the chimney will be offset far enough to clear the top portion of the Adobelite Kiva Frame (refer to dimensions A and E in Layout charts, Pages 11-12). Firmly push both the inner and outer pipes into the Starter Elbow until they lock into place.

**10) STARTER ELBOW (INNER)** – Begin the chimney installation by inserting the hemmed edge of the inner starter elbow *inside* the damper collar. The inner chimney pipe slips into the inside of the damper collar so that any soot buildup will fall into the firebox.

Align the inner Starter Elbow so that it points directly back away from the Firebox face. Secure the inner Starter Elbow to the Anchor Plate Collar by using four #12 x $^3/_4$" self drilling hex head screws.

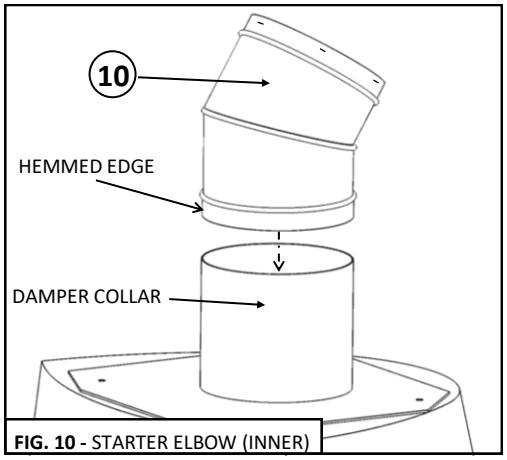


**FIG. 10 -** STARTER ELBOW (INNER)

## CHIMNEY INSTALLATION (CONTINUED):

**11) STARTER COLLAR**

The Starter Collar is used to support the outer chimney section, while the Anchor Plate / Damper supports the inner chimney. Attach the legs of the Starter Collar to the Anchor Plate with the supplied #12 x $^{3}/_{4}$" self drilling hex head screws.

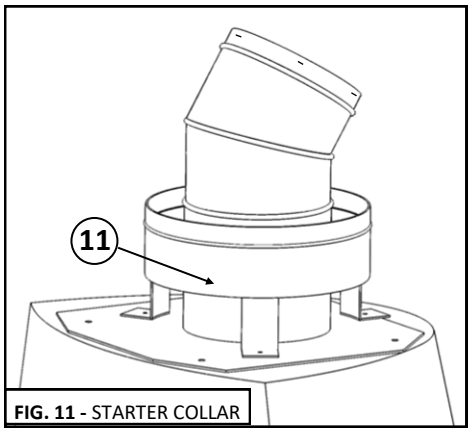



**FIG. 11 -** STARTER COLLAR

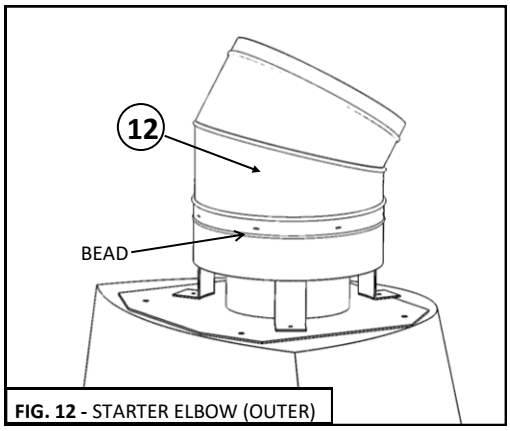



**FIG. 12 -** STARTER ELBOW (OUTER)

**12) STARTER ELBOW (OUTER)** – Now, position the outer Starter Elbow into place around the inner Elbow. Slide the outer Elbow to the outside of the Starter Collar and slide it down over the hemmed edge of the Starter Collar until it is in contact with the bead.

**13) SPACER CHIMNEY SECTION** – Typically a 12" length of chimney pipe is used between the Starter Elbow and Return Elbow. Refer to Offset and Rise chart on Page 15 (FIG. 9) for offset and rise dimensions of other spacer lengths.

**14) RETURN ELBOW** – Position the Return Elbow so that the chimney pipe is returned to a vertical position. Again, firmly press the pipes into place locking the connections. Attach the Return Elbow pipe straps to the walls. The straps should be screwed into studs in the walls to provide support for the straight chimney sections that will be installed next.

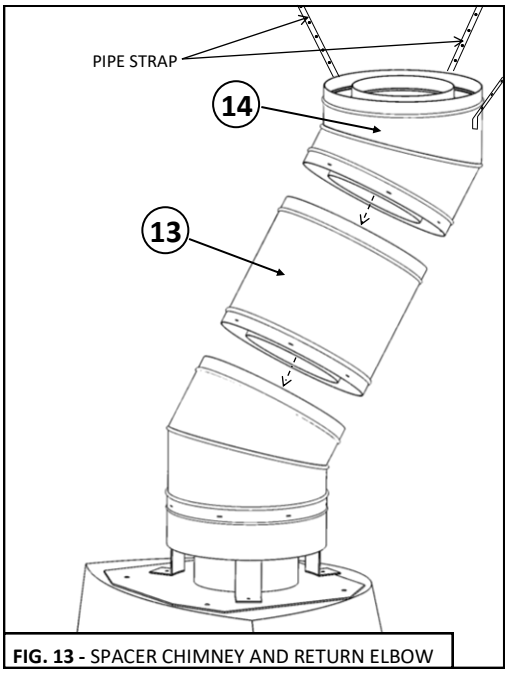
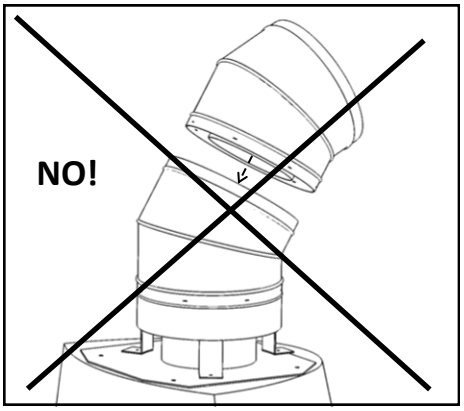
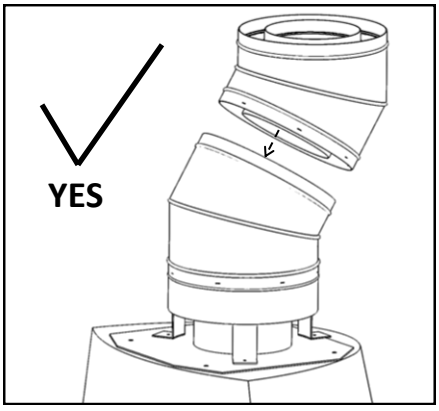



**FIG. 13 -** SPACER CHIMNEY AND RETURN ELBOW

**WARNING:** THE OPENINGS IN THE STARTER COLLAR AND THE AIR SPACE BETWEEN THE FLUE SECTIONS MUST NOT BE OBSTRUCTED. NEVER USE BLOWN INSULATION TO FILL THE CHIMNEY.

**WARNING:** CHIMNEY PIPE MUST NOT EXCEED 30 DEGREES FROM VERTICAL. DO NOT PLACE TWO (OR MORE) 30 DEGREE ELBOWS TOGETHER TO CREATE AN ANGLE GREATER THAN 30 DEGREES!



## CHIMNEY INSTALLATION (CONTINUED):

**WARNING:** Ceiling firestops must be used whenever the chimney penetrates a ceiling/floor.

**15) FIRESTOP SPACERS** – Firestop Spacers are required at each point where the chimney penetrates a floor or ceiling joist space. Attach Firestop Spacer to joist using wood screws or nails.

If the chimney pipe passes through a framed opening into an attic space with an insulated ceiling, the Firestop must be placed on the top of the framing (attic floor) and an attic insulation shield should be used. When the pipe passes through a framed opening into living space above, the Firestop must be placed onto the ceiling from below.

Refer to local building codes and restrictions for variations in Firestop spacer requirements.

- Chase construction requires Firestop Spacers at each floor or every 10 ft.

**16) ATTIC INSULATION SHIELD** – WARNING! RISK OF FIRE! An attic insulation shield is required when there is any possibility of insulation or other combustible material coming into contact with the chimney. Refer to chimney manufacturers instructions for installation specifics.

- **DO NOT** pack insulation between the chimney and the attic insulation shield.
- **DO NOT** offset chimney inside insulation shield.
- Combustible material may come in contact with the attic insulation shield as long as the required clearances are maintained to the chimney pipe.

A custom shield may be constructed on site to hold back insulation from the chimney pipe provided:

- The shield should be constructed of metal or other non-combustible material.
- The shield or barrier must be tall enough to extend above the insulation and prevent blown-in insulation from spilling into the cavity.
- Check local codes for further details or restrictions.

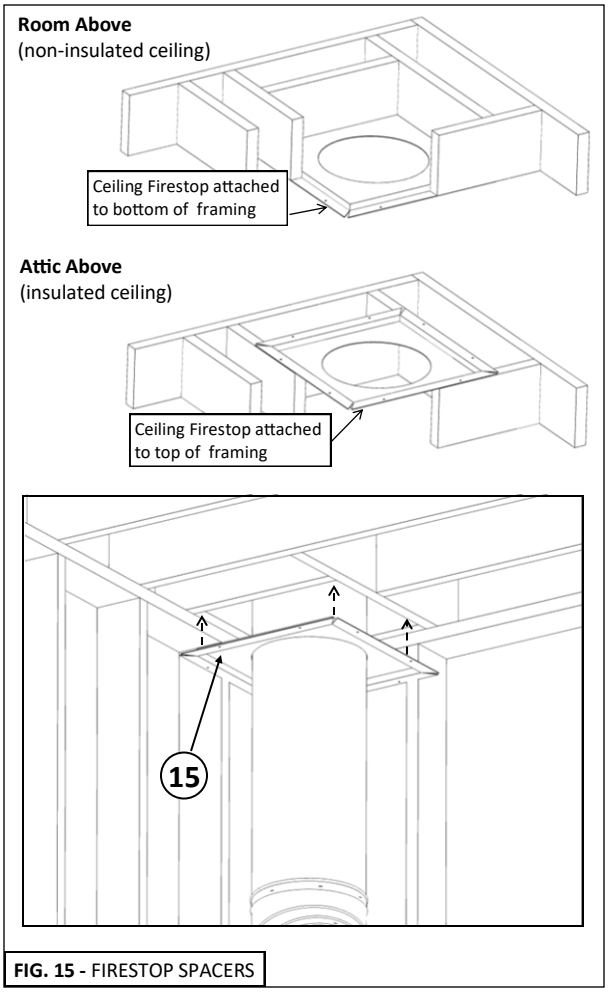



**FIG. 15 -** FIRESTOP SPACERS

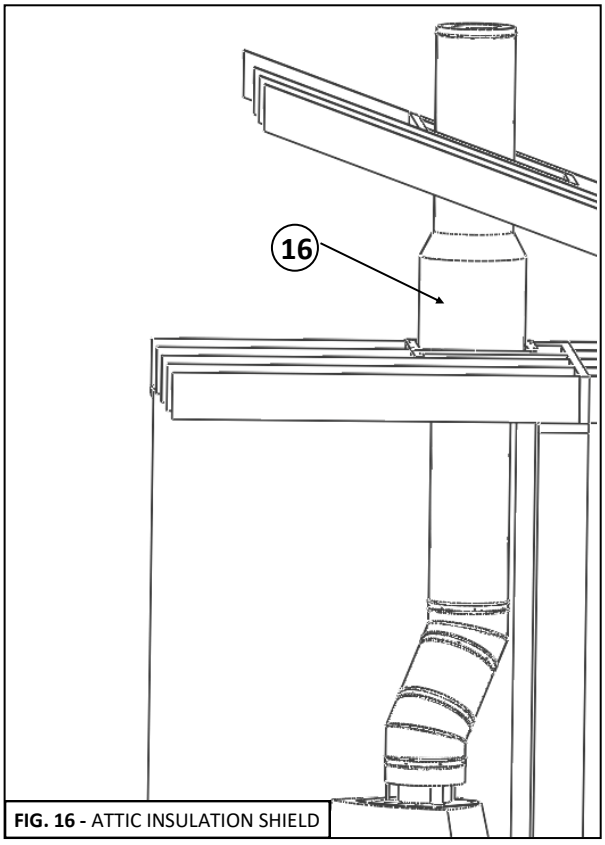



**FIG. 16 -** ATTIC INSULATION SHIELD

## CHIMNEY INSTALLATION (CONTINUED):

**17) STRAIGHT CHIMNEY SECTIONS** – Before running the straight chimney through the roof, determine the placement of required Firestop Spacers. If a Firestop will be installed against the ceiling, then before installing any straight chimney sections, first slide the Firestop Spacer (shown in FIG. 16) down over the Return Elbow. Now, snap the remaining Straight Chimney sections into place. Lock chimney sections together by pushing downward until the top section meets the stop bead on the lower section.

The chimney pipe must extend to a minimum of 3' above the roof and also must be 2' taller than any part of the roof, parapet walls, or any part of the building structure that is within 10'. See FIG 19.1 below.

**18) CHIMNEY ROOF FLASHING** – Slide the Chimney Roof Flashing down over the last section of straight chimney penetrating the roof or chase and nail to roof. Adjustable roof flashings may need to be trimmed to fit the slope of the roof by cutting the high side of the flashing collar.

**19) STORM COLLAR** – Slide the Storm Collar down around the outside chimney pipe, just above the Roof Flashing, and tighten. Seal the Storm Collar against the chimney pipe with a weather proof caulk.

**20) TERMINATION CAP** – Finally, slide the inside chimney of the Termination Cap to the inside of the straight chimney sections and secure the tabs to the outside chimney pipe with screws. Do not pierce the inner chimney pipe with the screws.

***IMPORTANT:*** If an exposed portion of chimney is greater than 6' above the roof line, use support wires to keep chimney secure. The support wires may be attached to the outer pipe of the chimney with screws but must not penetrate the inner flue pipe.

**10-FOOT RULE**

All chimney terminations must extend at least 3 ft. above the highest point where the chimney passes through the roof and must extend 2 ft. above the peak of the roof or any other building structure within a horizontal distance of 10 ft.

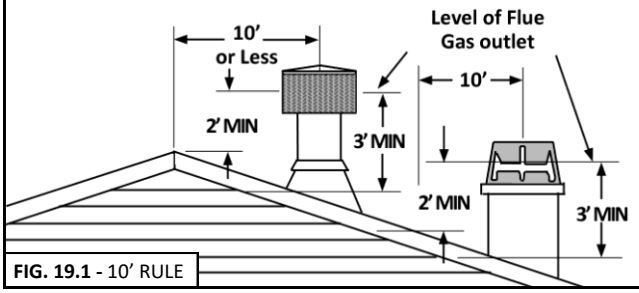



**FIG. 19.1** - 10' RULE

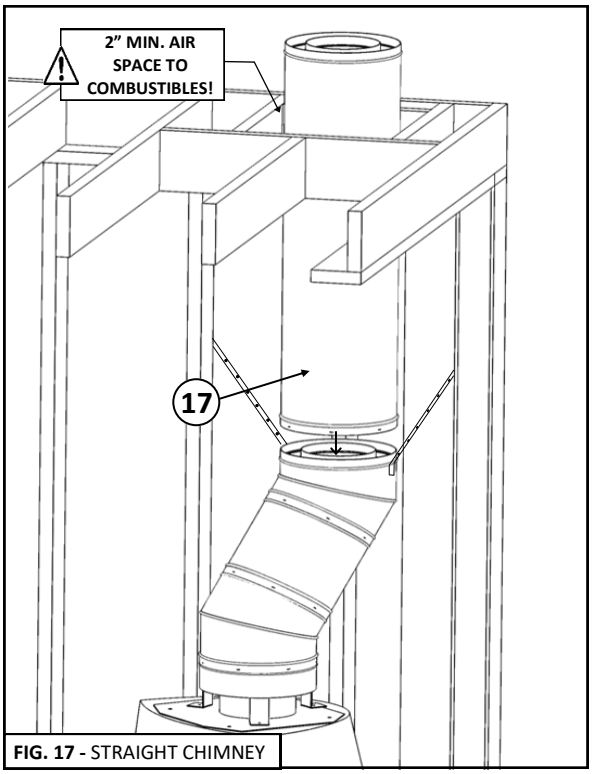



**FIG. 17** - STRAIGHT CHIMNEY

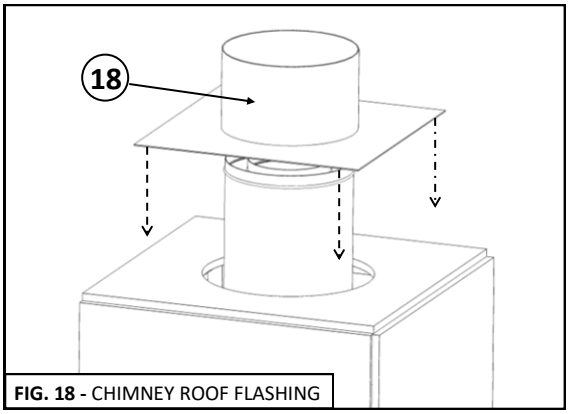



**FIG. 18** - CHIMNEY ROOF FLASHING

***WARNING:*** **DO NOT SEAL VENTILATION OPENINGS ON THE ROOF FLASHING!**

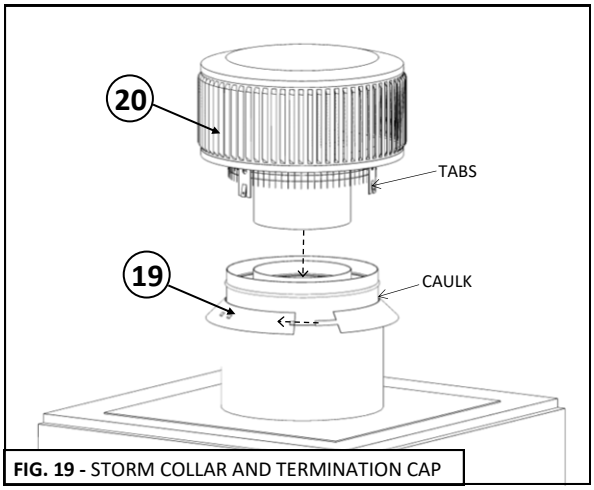



**FIG. 19** - STORM COLLAR AND TERMINATION CAP

## OUTSIDE AIR KIT INSTALLATION:

**FOR PROPER OPERATION THIS FIREPLACE REQUIRES THE OUTSIDE AIR KIT TO BE INSTALLED.**

**CAUTION!** DO NOT terminate combustion air inlet in wall, floor or ceiling cavity, or enclosed spaces such as an attic or garage. Locate outside air vent to prevent blockage from leaves, snow/ice, or other debris. Blockages could cause combustion air starvation.

Combustion air inlet and ducting should be a minimum of 4" in diameter (or a minimum cross sectional area of 12.5 sq. in.). It is recommended to use the shortest duct run possible to optimize performance of the outside air kit.

The Outside Air Kit is used to provide outside combustion air to the firebox, therefore not using air from the interior of the house. When installed, one end will be open and supply air to the cavity formed by the Adobelite Kiva Frame and walls. The air will then be drawn into the firebox through the Combustion Air Tube (see Step 4, page 13), and up between the inner and outer chimney pipes, cooling the inner pipe down. It is recommended to use the shortest duct run possible to optimize performance of the outside air kit.

**20) OUTSIDE AIR VENT INLET** – If the fireplace is located against an exterior wall (FIG 20.1), use a hole saw to cut a hole completely through the exterior wall. Use the layout charts (Pages 11-12) to make sure that the Adobelite Kiva Frame will cover the hole and Outside Air Vent. The center of the hole should be located about 8" from the bottom of the wall. If the fireplace is not located on an exterior wall, the outside air can be brought down from the chimney chase (FIG 20.2). Cut a 4" hole located on a vertical face of the chimney chase and attach the Outside Air Vent.

**21) ALUMINUM FLEX DUCT** – When the Outside Air Vent is installed at a height lower than the firebox base, the Flex Duct is not needed. Otherwise, connect the flex duct to the outside air vent using a 4" pipe clamp and bring the open end down below the base about 6" off the ground.

**FIG. 20.1 -** OUTSIDE AIR VENT (EXTERIOR WALL)

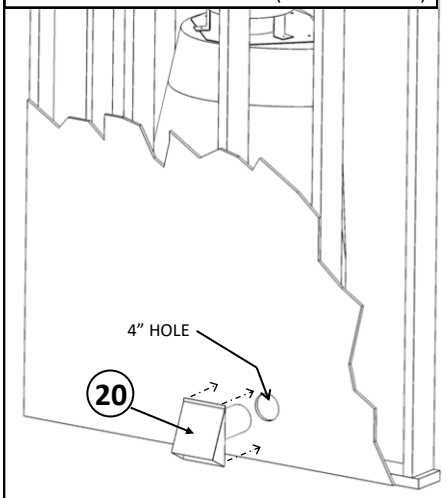



**FIG. 20.2 -** OUTSIDE AIR VENT (CHIMNEY CHASE)

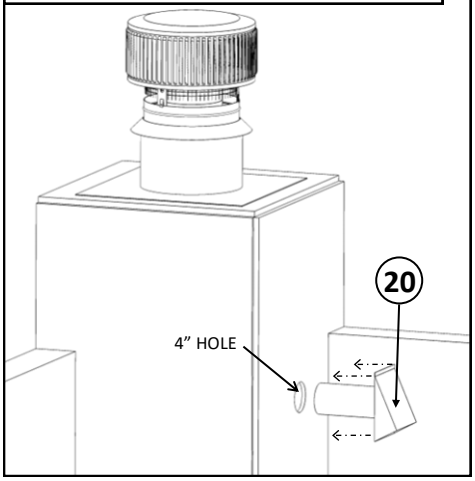
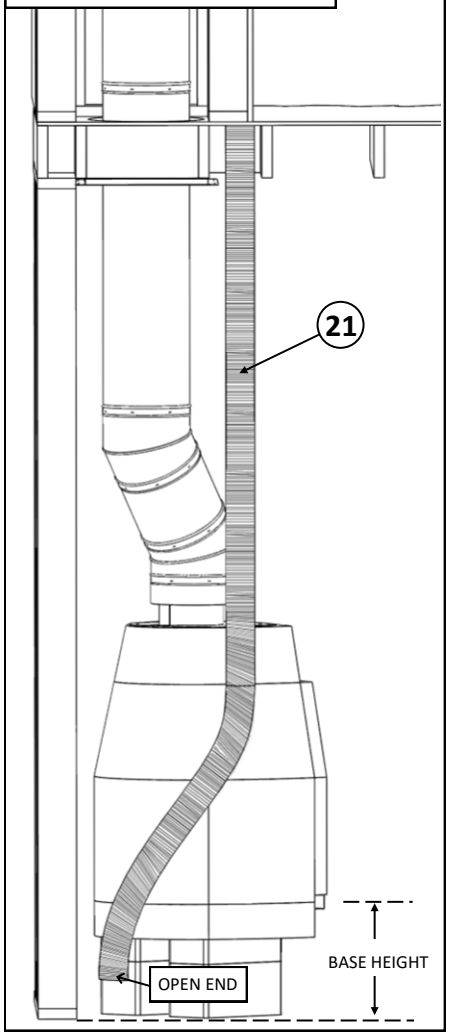



**FIG. 21 -** ALUMINUM FLEX DUCT



## GAS INSTALLATION FOR VENTED GAS LOGS/LIGHTER PROVISION:

4

**WARNING! Fire and/or Asphyxiation Risk!** Use with solid wood fuel or decorative gas appliance only. Gas fire generates fumes.

CAUTION: WHEN USING THE DECORATIVE APPLIANCE, THE FIREPLACE DAMPER MUST BE SET IN THE FULLY OPEN POSITION

**VENTED GAS LOGS**

- *CAUTION!* The gas appliance must only be operated with the fireplace doors fully removed (if included).
- Maximum input is 65,000 BTU/hr.
- Decorative gas appliance must be certified to ANSI Z21.60/CSA 2.26 “Standard for Decorative Appliances for Installation in Vented Fireplaces”.
- Must be installed in accordance with the National Fuel Gas Code, ANSI Z223.1
- Gas Log set must incorporate an automatic gas shutoff.
- A listed automatic damper system with safety interlock may be used in this fireplace with only compatible,

WARNING: THIS FIREPLACE HAS NOT BEEN TESTED WITH AN UNVENTED GAS LOG SET. TO REDUCE RISK OF FIRE OR INJURY, NO NOT INSTALL AN UNVENTED GAS LOG SET INTO THIS FIREPLACE.

**GAS LINE INSTALLATION**

Begin by drilling a $^{3}/_{4}$” hole through the lower back section of the firebox using a masonry drill bit. The gas line can be positioned in the firebox as desired provided there is at least 4” of gas line between the outside edge of the firebox and any combustible framing, see FIG. 22.1. Using a $^{3}/_{4}$” masonry drill bit, drill a hole from the inside of the firebox through the lower back section of the firebox. The hole should be positioned at least 1” from all edges of the lower back section to avoid splitting the concrete. Seal the gap between the firebrick and gas pipe using fireplace mortar or non-combustible sealant.

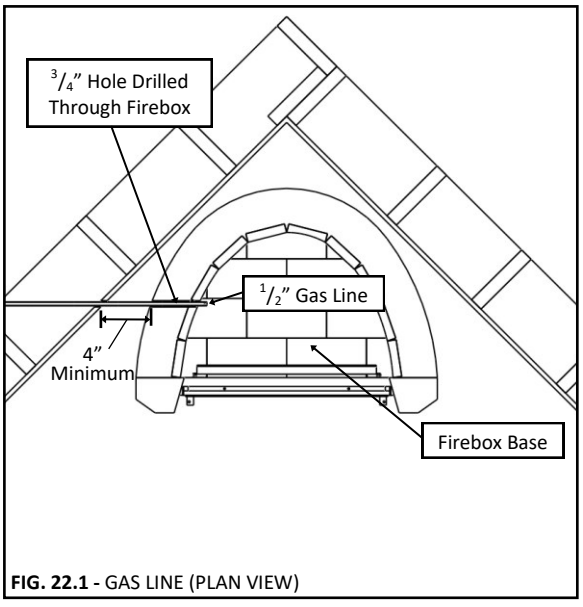



**FIG. 22.1 -** GAS LINE (PLAN VIEW)

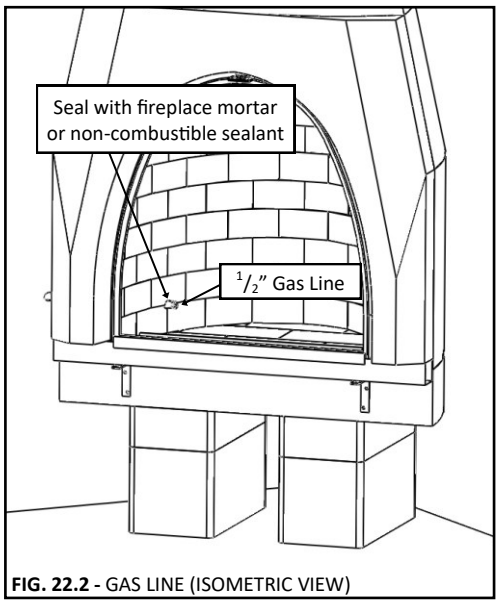



**FIG. 22.2 -** GAS LINE (ISOMETRIC VIEW)

# FINISHING (WITHOUT KIVA FRAME FAÇADE):

5

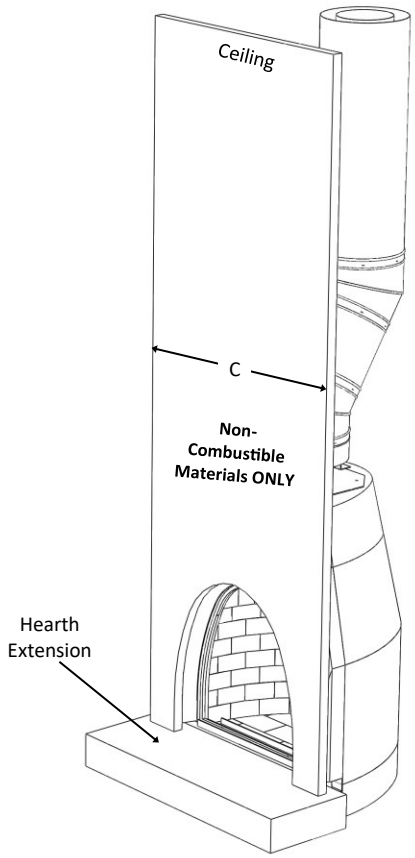
**FINISHING MATERIALS:**

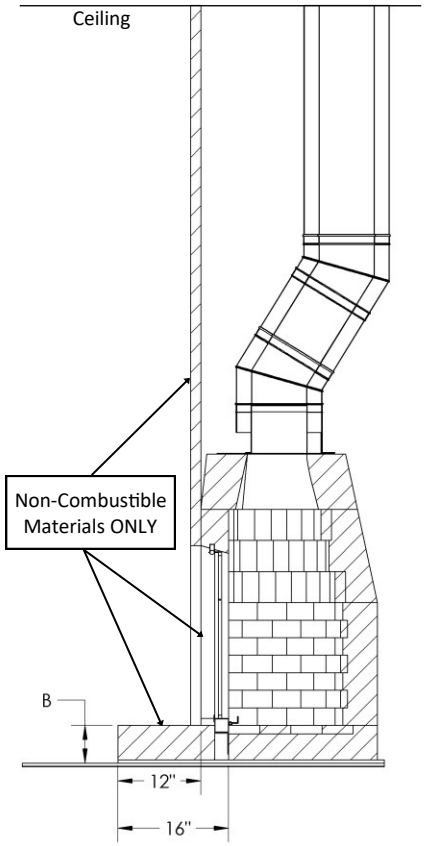
If the fireplace is to be installed with an Adobelite Kiva Frame Façade, proceed Kiva Frame Installation on page 24 for installation instructions and finishing. Refer to the below sections for finishing requirements if Adobelite Kiva Frame Façade is not used.

**WARNING:** THE FIREBOX MUST BE FINISHED WITH THE ADOBELITE KIVA METAL FRAME OR OTHER NON-COMBUSTIBLE MATERIALS. CLEARANCES TO COMBSTIBLE MATERIALS AND FRAMING MUST BE MAINTAINED.

**NON-COMBUSTIBLE FACING:**

Only non-combustible materials should be used to finish in front of the kiva firebox from the floor to ceiling. Refer to the below diagrams for width (C) of required non-combustible facing.




| Minimum Non-Combustible Framing Width | | | |
|---|---|---|---|
| | **KIVA 18** | **KIVA 24** | **KIVA 30** |
| C | 30” | 36” | 42” |

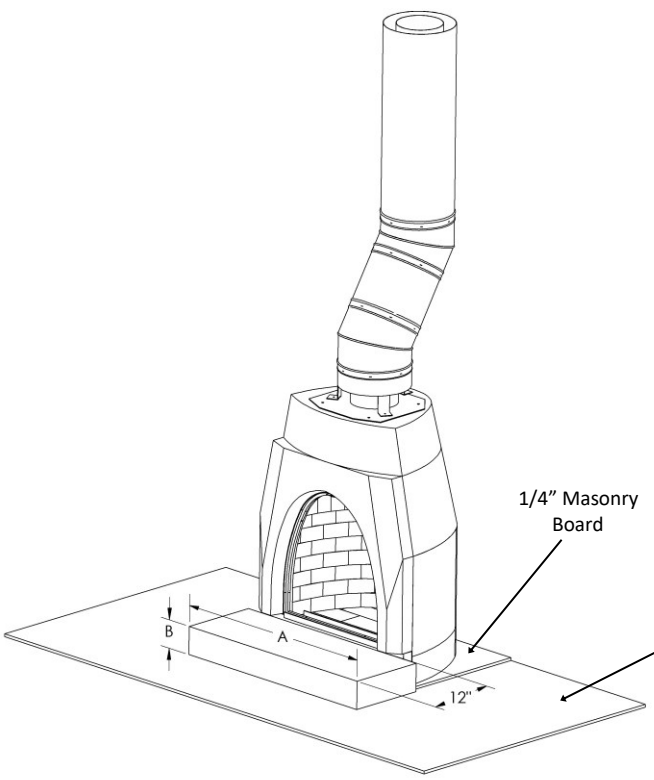
**NON-COMBISTIBLE FACING REQUIREMENTS**

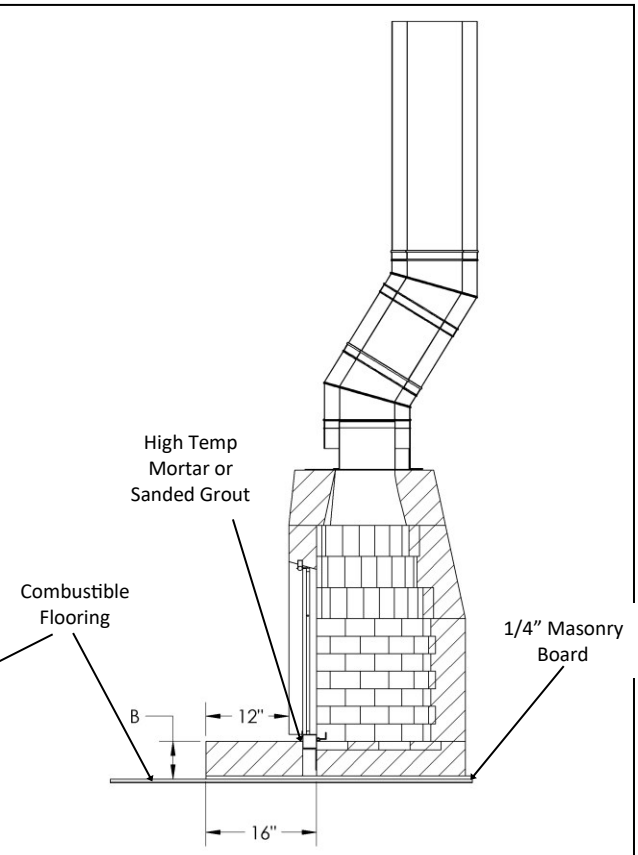
## HEARTH EXTENSION REQUIREMENTS:

**HEARTH EXTENSION:**
If the fireplace is to be installed with an Adobelite Kiva Frame Façade and included hearth extension, proceed to page 24 for installation instructions and finishing. Refer to the below sections for hearth extension requirements if Adobelite Kiva Frame Façade with hearth extension is not used.

**WARNING:** RISK OF FIRE! High temperatures, sparks, embers or other burning material falling from the fireplace may ignite flooring or concealed combustible surfaces. Hearth extensions must be installed as illustrated.

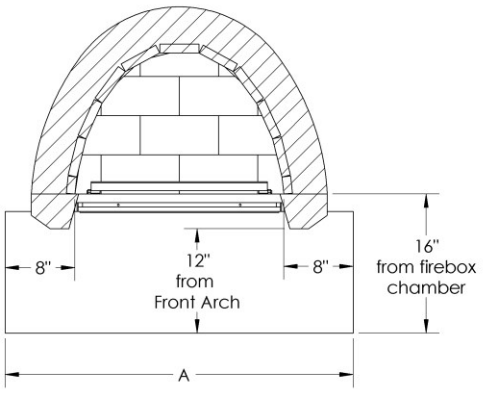
A hearth extension must be installed with all fireplaces to protect the combustible floor in front of the fireplace from both radiant heat and sparks. Refer to the below diagrams and tables for minimum hearth extension size. The hearth extension should be completely fabricated of masonry or equivalent r value insulating non-combustible material. The hearth extension MUST be covered with tile, stone or other non-combustible material. High temperature mortar or sanded grout should be used between the firebox and hearth extension.




| Minimum Hearth Extension Dimensions | | | |
|---|---|---|---|
| | **KIVA 18** | **KIVA 24** | **KIVA 30** |
| A | 34" | 40" | 50" |
| B | 5" | 5" | 5" |

| Hearth Extension Materials, R Value = 1 | | | |
|---|---|---|---|
| **Material** | **K per inch thick** | **R per inch thick** | **Minimum thickness** |
| Cement Mortar | 5.0 | 0.20 | 5" |
| Common Brick | 5.0 | 0.20 | 5" |




**HEARTH EXTENSION REQUIREMENTS**

# KIVA FRAME FAÇADE INSTALLATION:



**WARNING**: Use care and wear gloves when handling the frame and diamond lath pieces. Cut edges of the diamond lath mesh are very sharp!

**WARNING:** THE FIREBOX MUST BE FINISHED WITH THE ADOBELITE KIVA METAL FRAME OR OTHER NON-COMBUSTIBLE MATERIALS. CLEARANCES TO COMBSTIBLE MATERIALS AND FRAMING MUST BE MAINTAINED.

## ATTACH LATH TO COMBUSTION AIR TUBE (FIG. 23)

Before placing the Kiva frame around the firebox, Lath needs to be attached to the combustion air tube.

Cut a strip of lath 24" x 27". Fold the 24" side in half and place a sharp crease at the bend. Open the piece up and place the bent edge 1" down from the top surface of the air tube. Using the #6 x $^1/_2$" self drilling Phillips washer head screws, attach the lath every 3". Finally bend the bottom section of the lath up to meet the top section so they can both pass through the opening of the Kiva frame.

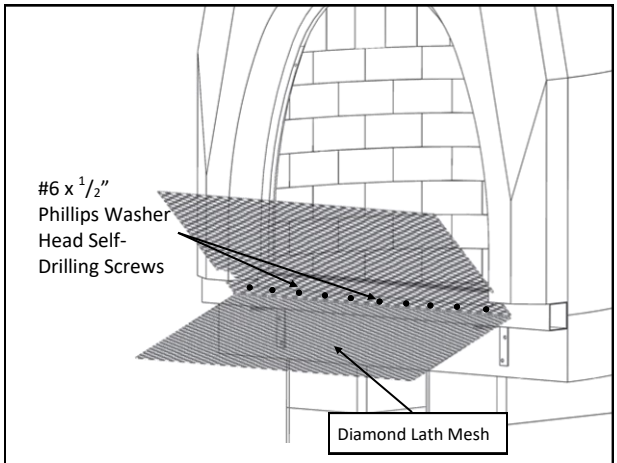



**FIG. 23 –** COMBUSTION AIR TUBE LATH

## ATTACH LATH FROM FIREBOX TO FRAME (FIG. 24)

Begin by placing the Kiva Frame into position in front of the Firebox. Measure from the frame to the corner or flatwall to make sure the frame is equal distance on both sides. Bring the folded lath that was attached to the Combustion Air Tube (FIG. 23) through the opening in the Kiva Frame. Attach the folded section of lath to the Kiva Frame using #6 x $^1/_2$" Hex Head Self-Drilling Screws. Any loose sections of lath can also be attached by fishing bailing wire through the pieces and tightening.

Next, cut several strips of diamond lath mesh 16" wide. Place the lath strips against the inside Front Arch even with the Door Frame (FIG. 24). Using $1^5/_8$" washer head screws, attach the lath to the Front Arch every 4". Cut strips in the opening lath from the outside edge up to the opening bar. Fold the strips back onto the frame. Attach the lath strips to the frame using #6 x $^1/_2$" self drilling hex head screws, or with bailing wire.

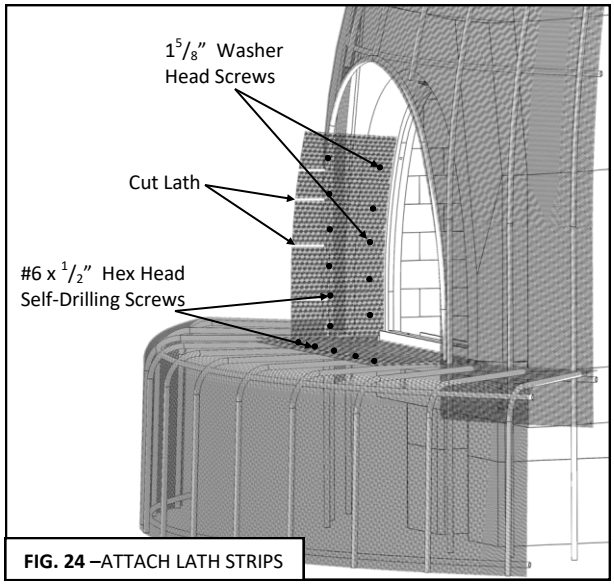



**FIG. 24 –**ATTACH LATH STRIPS

## ATTACH KIVA FRAME TO WALLS AND CEILING

Using #8x $1^5/_8$" Phillips washer head pointed screws, attach the lath from the frame to the walls and the ceiling. Screws should attach the lath about every 4". Some of the screws will only go into the sheetrock and not the studs. Fold the lath back onto the Kiva Frame and attach to the metal tubing using self drilling screws, or tie the lath down with bailing wire so that it is secure. Any gaps in the lath along the Kiva Frame surface should be filled in by cutting strips of lath and attaching to the Kiva Frame and walls / ceiling.

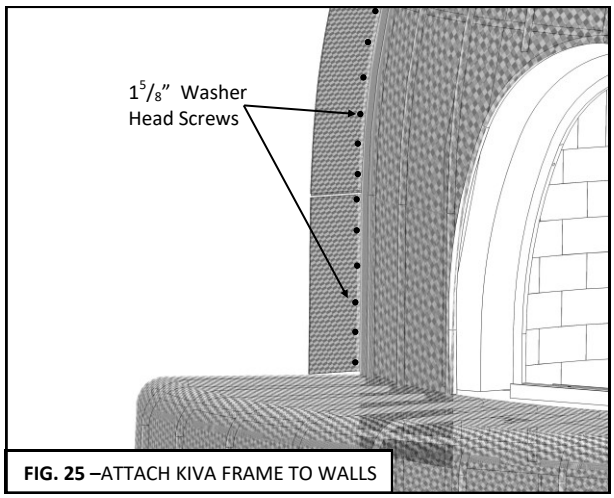



**FIG. 25 –**ATTACH KIVA FRAME TO WALLS

# FINISHING THE KIVA FRAME FACADE

7

## 3-COAT PLASTER FINISH

The Adobelite fireplace frame facade can be finished with any indoor plaster product designed for application over diamond lath mesh, or stucco. Typically a 3-coat gypsum plaster system is used for a smooth finish.

IMPORTANT: When plastering the inside Kiva Arch, do not cover the plaster guard on the door frame with plaster (see p.14 FIG 7A) or the optional kiva screen or glass door may not fit.

The first coat (base coat) should contain fiberglass and sand. This will provide a solid base for the following coats. The first coat can be mixed slightly on the dry side to help it bond to the Kiva Frame diamond lath. Apply the first coat gently, without worrying about shaping the plaster too much as that will be done in the following coats. It is normal for 15-25% of the first coat to fall through the lath.

Follow the plaster manufacturer's instructions on when to apply the second coat. The second coat generally should contain fiberglass, and may or may not contain sand. Apply the 2nd coat using a trowel, and then smooth out the plaster using a wet float (or sponge). When complete the 2nd coat will be fairly smooth but will have a grainy or stucco type finish.

It is recommended to allow one full week (or more) for the first two coats to completely dry before applying the final coat of plaster to fill any potential cracks that may develop during the drying phase. The final coat does not generally contain fiberglass and is applied with a hard trowel to give a smooth appearance, but can also be finished as desired.

Recommended Base Coat and 2nd Coat:

| Manufacturer | Product | Website |
|---|---|---|
| USG | Red Top Wood Fiber Gypsum Plaster* | http://www.usg.com/red-top-wood-fiber-gypsum-plaster.html |
| USG | Structo-Lite Fibered Basecoat Plaster | http://www.usg.com/usg-structo-lite-basecoat-plaster.html |

* Wood Fiber Gypsum Plaster should be mixed with sand at a 1 to 1 ratio for maximum strength. Refer to manufacturer's instructions.

Recommended Finish Coat Products

| Manufacturer | Product | Website |
|---|---|---|
| USG | Diamond Veneer Finish | http://www.usg.com/diamond-veneer-finish.html? |
| USG | Red Top Finish Plaster | http://www.usg.com/red-top-finish-plaster.html |

## SEALING THE PLASTER

The plaster can be sealed which will help keep the plaster from discoloring, and also make the fireplace easier to clean. Many types of sealers are available, such as: wax sealers, which will give the plaster a shiny (almost wet look), and masonry and grout sealers, which are available in matte and gloss finishes. Check with your plaster supplier for sealing options.

Approximate Surface Area
(based on a ceiling height of 10ft)

| Adobelite Frame Style | Surface Area (sq. ft) |
|---|---|
| Orno / Ornito | 62 |
| Santa Fe | 66 |
| Navajo | 77 |
| Zuni | 86 |

## PAINTING THE PLASTER

Once the plaster is completely dry, the fireplace can be painted if desired. Adobelite recommends using a latex based primer and paint. If the fireplace has been burned in, clean any soot buildup along the opening of the fireplace using a mild dish detergent and water before painting.

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