



**Fireplace
Manufacturers
Incorporated**

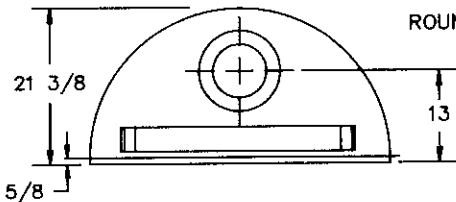
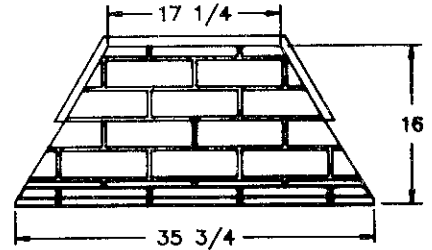
*The Symbol of
Excellence*

EQUALIZER 36 EC II

INSTALLATION INSTRUCTIONS

SAVE THIS BOOK

This book is valuable. In addition to telling you how to install and maintain your fireplace and chimney, it also contains the information that will enable you to obtain repair parts when needed. Keep it with your other important papers.



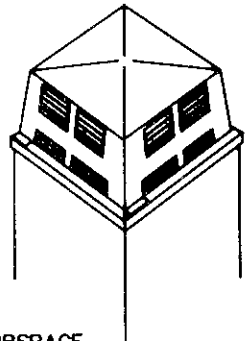
ROUND TOP TERMINATION

STORM COLLAR

FLASHING

FIRESTOP

ECONO-TOP
TERMINATION



2 IN. AIRSPACE
TO COMBUSTIBLE
MATERIAL

COMBUSTIBLE
WALL BOARD

NO COMBUSTIBLE
MATERIAL ON FACE

NOT LESS THAN 14 IN.
TO PERPENDICULAR
SIDEWALL

HEARTH EXTENSION
52 IN. X 16 IN.

8 IN.
EACH SIDE

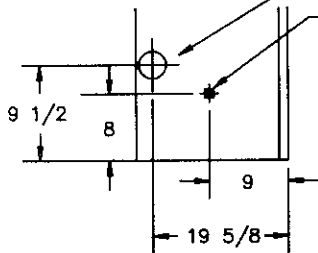
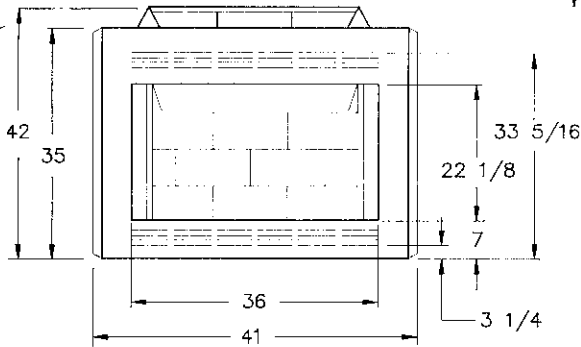
0 IN. TO
BOTTOM

OUTSIDE AIR
(LEFT SIDE ONLY)

3/4" AIR SPACE
BACK AND SIDES

0 IN. TO
TOP SPACER

AIR KIT K/O
GAS LINE K/O



THIS SYMBOL ON THE PRODUCT
MEANS IT IS LISTED BY
UNDERWRITER'S LABORATORIES, INC.



WARNOCK HERSEY
LISTED

MANUFACTURED BY FIREPLACE MANUFACTURERS INC.
2701 SO. HARBOR BLVD., SANTA ANA, CA. 92704

INSTALLATION INSTRUCTIONS

INTRODUCTION

Before beginning the installation of your fireplace, read these instructions through completely.

These FMI components and fireplace are safe when installed according to this Installation Manual. Unless you use FMI components which have been designed and tested for the fireplace systems, you may cause a fire hazard.

The FMI warranty will be voided by, and FMI disclaims any responsibility for the following actions:

- a) Modification of the fireplace, components, doors, air inlet system and the damper control.
- b) Use of any component part not manufactured or approved by FMI in combination with FMI fireplace systems.

WARNING: DO NOT USE A FIREPLACE INSERT FOR USE WITH THIS FIREPLACE.

PROPER INSTALLATION is the most important step in ensuring safe and continuous operation of this fireplace. Consult the local building codes as to the particular requirements concerned with the installation of all factory built fireplaces. Although grounding may not be required by code it is recommended by the manufacturer.

THIS FIREPLACE IS NOT INTENDED TO BE USED AS A SUBSTITUTE FOR A FURNACE TO HEAT AN ENTIRE HOME. USE FOR SUPPLEMENTARY HEATING ONLY.

MINIMUM CLEARANCES TO COMBUSTIBLES:

Framing and enclosures may safely make direct contact with the spacers on the top of the fireplace. The fireplace may sit directly on combustible flooring. The fireplace opening must not be less than 14 inches from a combustible perpendicular side wall. A 2-inch minimum air space clearance between combustible materials and the chimney must be absolutely maintained. A 16-1/2 inch inside chase dimension is recommended as a minimum size. A 3/4 inch air space required around back and sides of fireplace.

PROTECTIVE WALL SHIELD

The distance from the fireplace opening to a perpendicular side wall may be reduced to 3 inch provided a FMI PWS-36 is installed. See PSW-36 installation instructions for proper installation.

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

HEIGHT: The minimum height of the chimney, measured from the base of the fireplace to the flue gas outlet, is 14 feet for straight flues or a flue with one elbow set. For systems with 2 elbow sets, the minimum height is 22 feet. The maximum height of any system is 60 feet. This measurement includes the fireplace, chimney sections and the effective height of the termination assembly.

INSTALLING THE FIREPLACE:

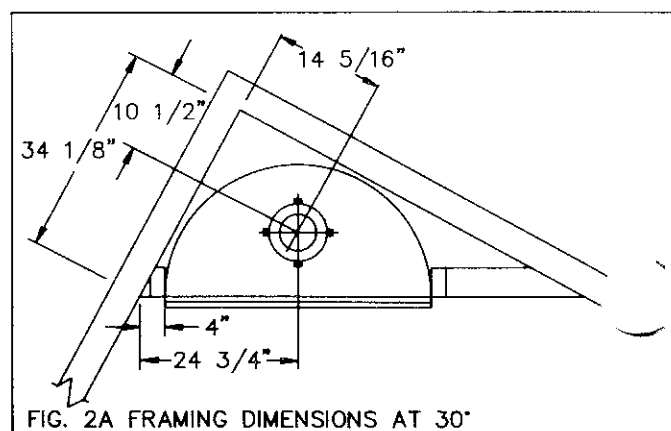
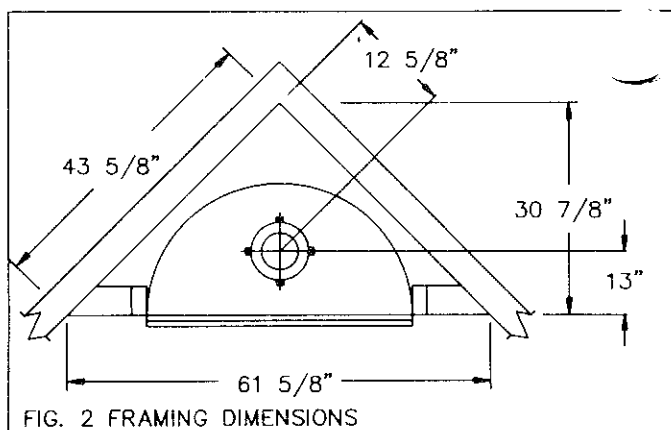
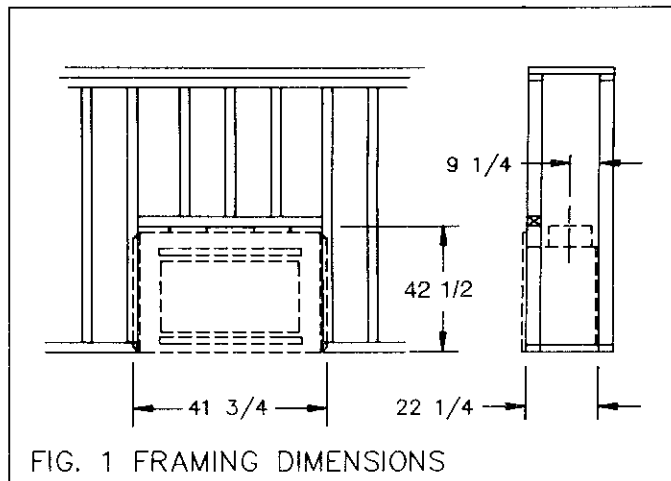
STEP 1: Frame the opening for the fireplace using the dimensions shown in FIG. 2 or FIG.2A.

STEP 2: Set the fireplace directly in front of this opening and slide the unit back until the mounting flanges touch the side framing.

STEP 3: Check the level of the fireplace and shim with sheet metal if necessary.

STEP 4: When the fireplace is installed upon a combustible floor a galvanized sheet ember protector must be installed between the fireplace and the hearth extension as illustrated in FIG.13.

STEP 5: Secure the fireplace to the framing through the flanges located on the sides on the fireplace with 8 nails.



ASSEMBLING AND INSTALLING YOUR DOUBLEWALL CHIMNEY SYSTEM

Each double wall chimney section consists of an outer pipe, inner pipe and one wire spacer. The pipe sections are not pre-assembled and must be assembled independently as the chimney is installed. When starting the chimney directly on the fireplace, the flue pipe section must be installed first, with the flared end with lances up. The outer pipe section can then be installed over the flue pipe section with the hemmed end up. (SEE FIG.3A)

Press down on each pipe section until the lances on the lower end securely engage the knurl on the fireplace starting collar. The wire spacer will assure the proper spacing between the inner and outer pipe sections.

WARNING: THE OPENINGS IN THE COLLAR AROUND THE BASE OF THE CHIMNEY AT THE TOP OF THE FIREPLACE MUST NOT BE OBSTRUCTED, NEVER USE BLOWN INSULATION TO FILL THE CHIMNEY ENCLOSURE. (SEE FIG.3B)

Continue to assemble chimney sections as outlined above, making sure that both inner and outer pipe sections are locked together. When installing double wall "snap lock" chimney together, it is important to assure the joint between the chimney sections are locked. Check by pulling chimney upward after locking. The chimney will not come apart if properly locked. It is not necessary to add screws to keep the chimney together.

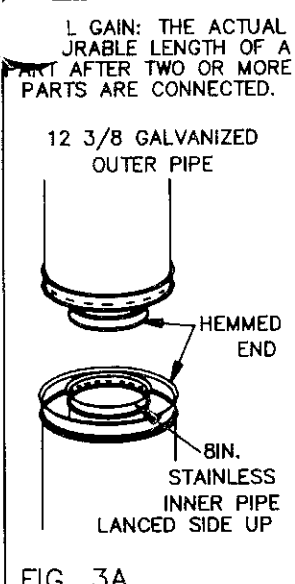
 <p>LINEAL GAIN: THE ACTUAL MEASURABLE LENGTH OF A PART AFTER TWO OR MORE PARTS ARE CONNECTED.</p>	LINEAL GAIN		
	PART NO.	DESCRIPTION	GAIN (IN.)
	36ECH	FIREPLACE	42
	12-8DM	PIPE SECTION	10 5/8
	18-8DM	PIPE SECTION	16 5/8
	36-8DM	PIPE SECTION	34 5/8
	48-8DM	PIPE SECTION	46 5/8
	RTL 8DM	ROUND TERMINATION	6
	ETL 8DM	CHASE TERMINATION	1 TO 12

FIG. 3A

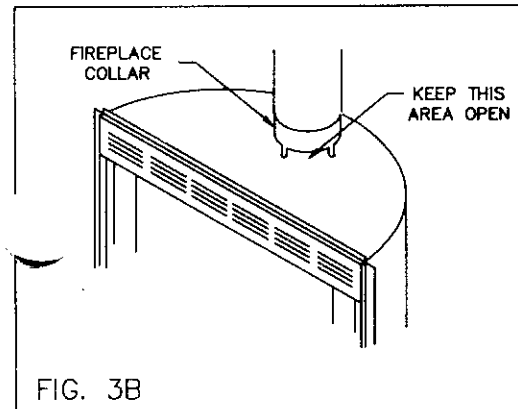
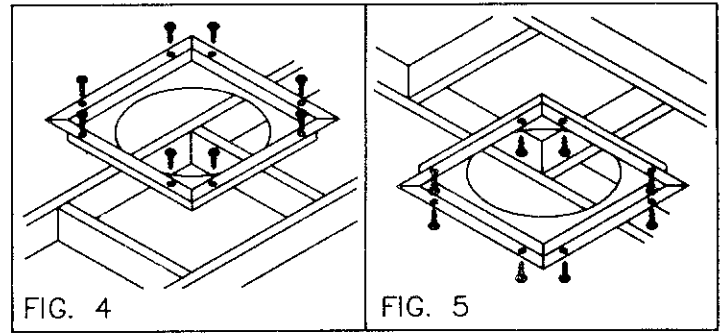


FIG. 3B



FIRESTOP SPACERS:

Firestop spacers are required at each point where the chimney penetrates a floor or ceiling joist space. Their purpose is two fold, they establish and maintain the required clearance between the chimney and combustible materials.

They also provide complete separation from one floor space to another floor or attic space as required by most codes. When penetrating a floor or ceiling at an angle PART 30 FS-8DM firestop should be used.

When the double wall pipe passes through a framed opening into an attic space, the firestop must be placed into the attic floor as in FIG.4. When the pipe passes through a framed opening into a living space above, the firestop must be placed onto the ceiling from below as in FIG.5.

SUPPORT SECTIONS:

The chimney support section is a 12 inch length double wall pipe with 4 straps. A chimney support is required every 30 feet above the fireplace after a straight chimney run, or above a return elbow after a straight chimney run (FIG.6). This support is designed to relieve the extra weight load on the fireplace and elbows when high chimneys are installed.

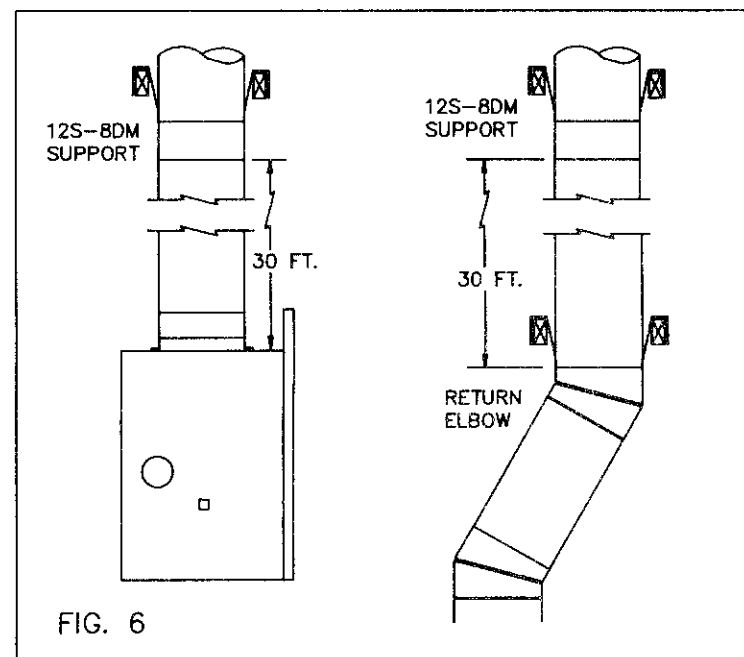


FIG. 6

INSTRUCTIONS WHEN OFFSET OF CHIMNEY IS NEEDED TO INSTALL ELBOWS

- To achieve desired offset, you may install combinations of 12 inch, 18 inch, 36 inch, 48 inch lengths of double wall pipe (see single offset chart and FIGS. 7 & 9).
- Chimney weight above offset rests on return elbow. Straps must be securely nailed to rafters or joists (See FIG. 8 details A & B).
- Maximum length of pipe between supports (return elbow or 12S-8DM) is 6 feet of angled run. Maximum of two (2) 6 feet angled run sections per chimney system (FIG. 9).

PENETRATING THE ROOF:

To maintain a 2 inch clearance to the pipe on a roof with a pitch a rectangular opening must be cut.

STEP 1: Determine the center point through which the pipe will penetrate the roof.

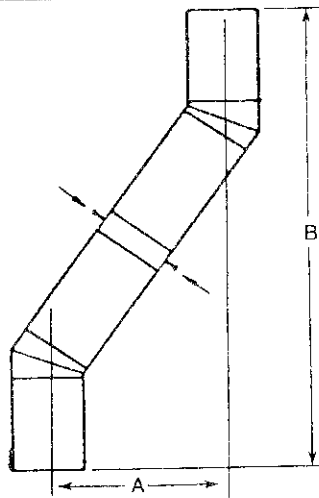
STEP 2: Determine the pitch of the roof. Pitch is the distance the roof drops over a given span, usually 12 inches. A 6/12 pitch means that the roof drops 6 inches for each 12 inches one measures horizontally down the roof.

STEP 3: From the center point determined in STEP 1, measure an opening 17 1/4 inches wide (8 5/8 inches to each side of the center point). For a roof pitch between 0/12 (flat) and 6/12 measure an opening 21 inches long (10 1/2 inches above and below the center point). 6/12 to 12/12 pitches: Measure 26 inches (13 above and below) 12/12 and 18/12 pitches: Measure 32 1/2 inches (16 1/4 above and below) 18/12 to 24/12 pitches: Measure 40 inches (20 above and below).

RISE AND OFFSETS												
A	B	48	36	18	12	A	B	48	36	18	12	12S
4 3/8	16 3/8					41 1/4	80 1/4		1	1	1	
9 3/4	25 1/2				1	45	86 3/4		2			
12 3/4	30 3/4			1		46 3/4	89 1/2	1		1		
15	34 3/4				2	51	97	1	1			1
18	40			1	1	53 1/4	101		2	1		1
21 1/4	46 1/4		1			56 1/4	106 1/4	2				1
23 3/4	49 1/4			1	2	59 1/4	111 1/2	1	1	1		1
27 3/4	56 3/4	1				61 3/4	115 1/2	2			1	1
30	60 3/4		1	1		64 3/4	120 3/4	2		1		1
33	66	1			1	68 1/4	127	1	2			1
36	71	1		1		70	130	2		1	1	1
38 1/4	75		2			74 1/4	137 1/2	1	2		1	1
						76 3/4	141 1/2	1	2	1		1
						79 3/4	146 3/4		4			1

NOTE: ANY OFFSET GREATER THAN 6 FEET MUST USE A 12S-8DM.

FIG. 7



All joints between offset shall be secured with two screws, only on the outer pipe, and shall not penetrate the inner stainless.

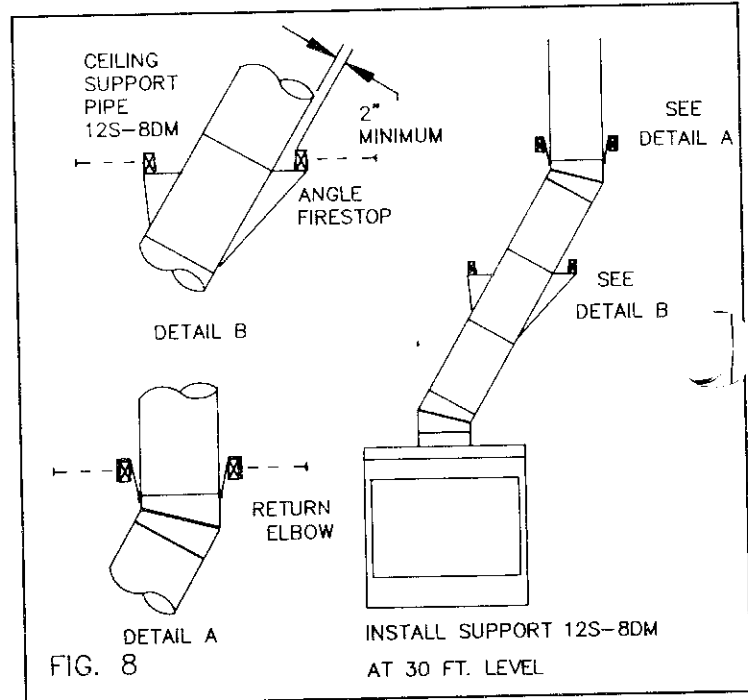


FIG. 8

INSTALL SUPPORT 12S-8DM AT 30 FT. LEVEL

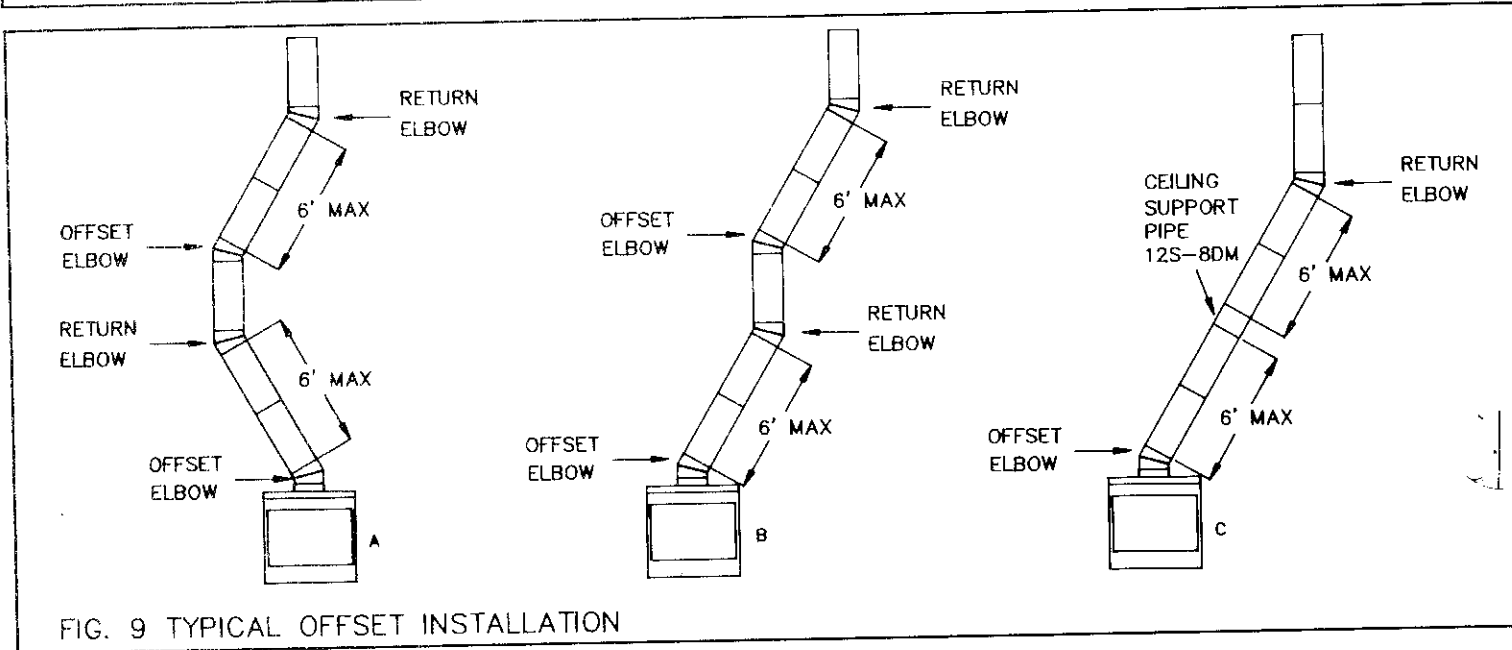


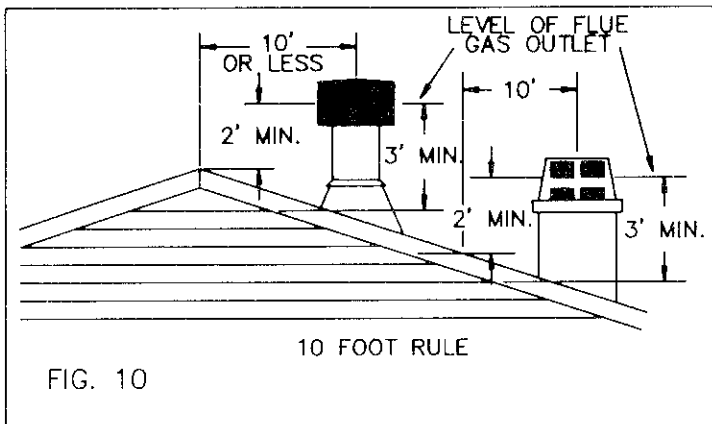
FIG. 9 TYPICAL OFFSET INSTALLATION

STEP 4: Remove the shingles around the opening measured and cut out this section.

STEP 5: Add the next sections of the pipe until the end penetrates the roof line. Check to see that proper clearances are maintained. Extend chimney by adding sections of double wall pipe until pipe is a minimum of 30 inches above highest point of roof cutout. Termination and chimney must extend a minimum of 36 inches above highest point where it passes through roof. See 10', 2' RULE (FIG. 10).

10 FOOT RULE

All chimney terminations must extend a minimum of 3 feet in height above the highest point where it passes through the roof and must be at least 2 feet above the peak of the roof if within a horizontal distance of 10 feet from the peak (See FIG. 10).



STEP 2: Install storm collar on double wall chimney, apply waterproof caulking around flashing top and push storm collar down securely on sealer and flashing, (SEE FIG.11).

STEP 3: Place the RTL-8DM TERMINATION onto the pipe end as illustrated in FIG.11 and secure with screws provided.

IMPORTANT: If an exposed portion of chimney is greater than 5 feet 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, provided the screws are not long enough to penetrate the inner flue pipe.

CAUTION: Do not seal ventilation openings on the roof-top flashing. Follow the installation instructions provided with the termination being used.

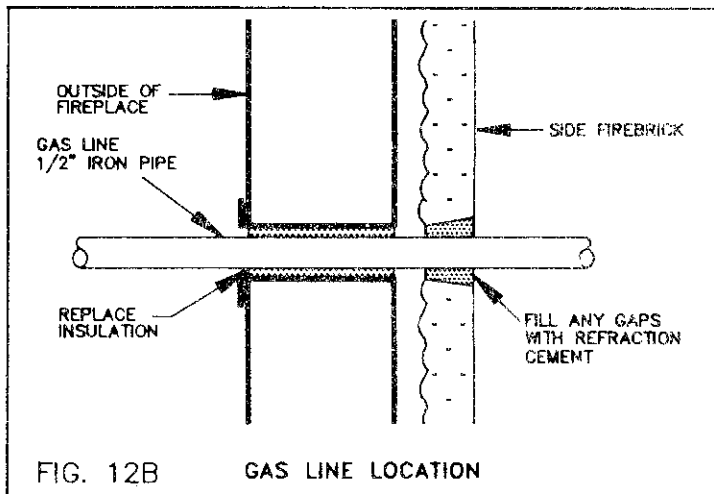
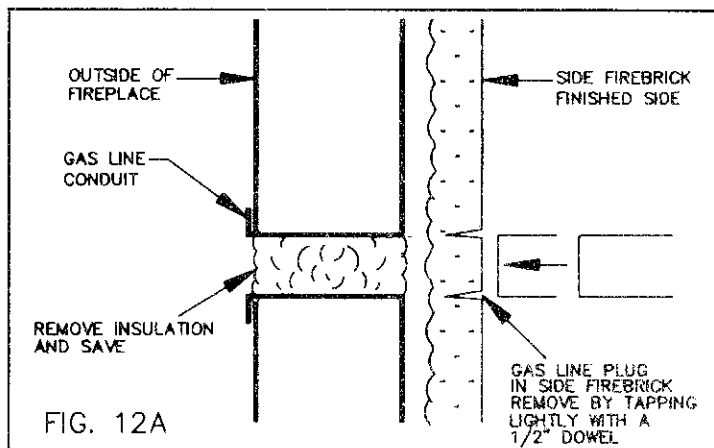
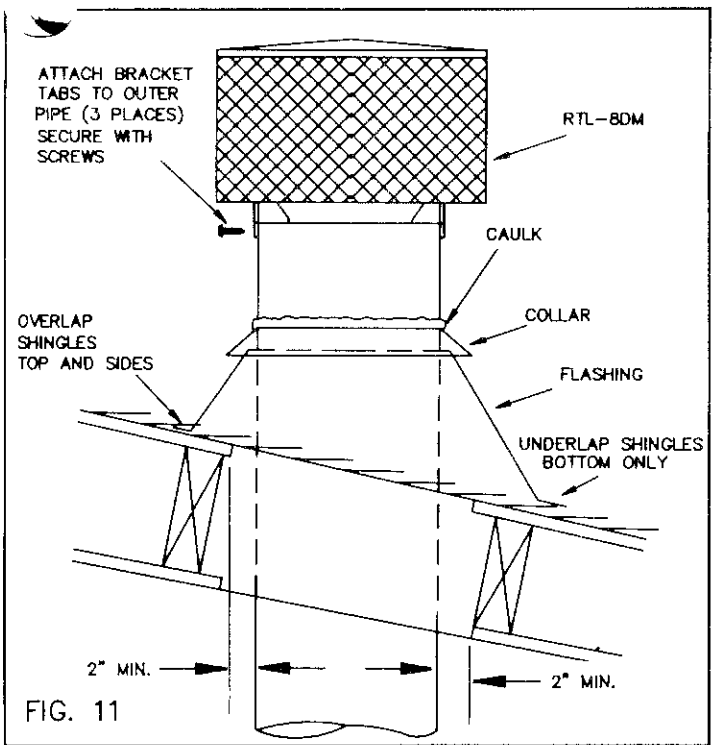
IMPORTANT: Install gas line before finishing fireplace. If desired, a decorative gas appliance may be installed, use only iron pipe, 1/2 inch size, and appropriate fittings. When installing a gas line, a valve designed for installation outside the fireplace is recommended.

The gas line is intended only for connection to a decorative gas appliance only, in accordance with the National Fuel Gas Code ANSI Z223.1. and also (1) incorporating an automatic shutoff device and (2) complying with the Standard for Decorative Gas Appliances for installation in Vented Fireplaces, ANSI Z21.60.

To install the gas line, remove the gas line plug located in the side firebrick approx. 2 inch above the bottom. The plug must be tapped out from the finished side towards the unfinished side. See FIG.12A. Insert the gas line parallel to the face. Fill any gap between the gas line and the hole in the firebrick with refractory cement or commercial furnace cement. See FIG.12B.

TERMINATIONS:

The fireplace and chimney system must be vented to the out-of-doors and must be terminated with the listed round top or chase terminations. If a chase termination is desired, refer to the instructions supplied with the termination.



FOR ROUND TOP TERMINATION:

1: Slide the flashing over the pipe (no firestop is needed above the roof level). Tack the flashing down at the top two corners with roofing nails. Lay tiles over the top and sides of the flashing and secure them to the roof through the flashing with the roof nails. Lay tiles under the lower edge and secure these to the roof. Mastic all nail heads.

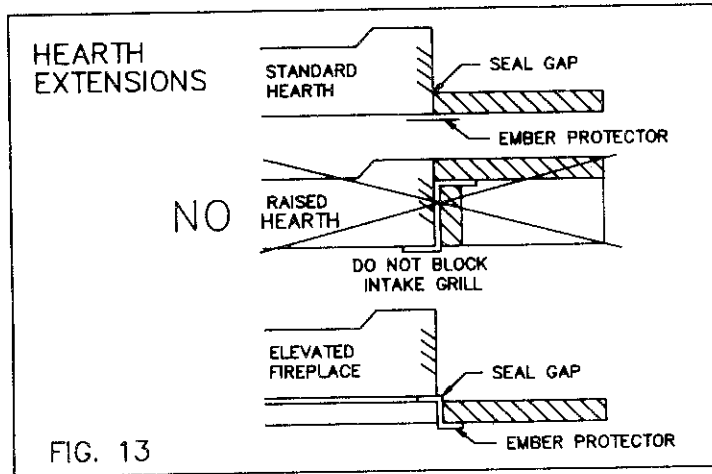
TEST FOR GAS LEAKS:

All gas piping and connections must be tested for leaks after the installation is completed. Be sure gas valve is turned on. Apply soap suds solution to all connections and joints. If bubbles appear, leaks can be detected and corrected. DO NOT use a match or open flame of any kind to test for leaks. Never operate any appliance with leaky connections.

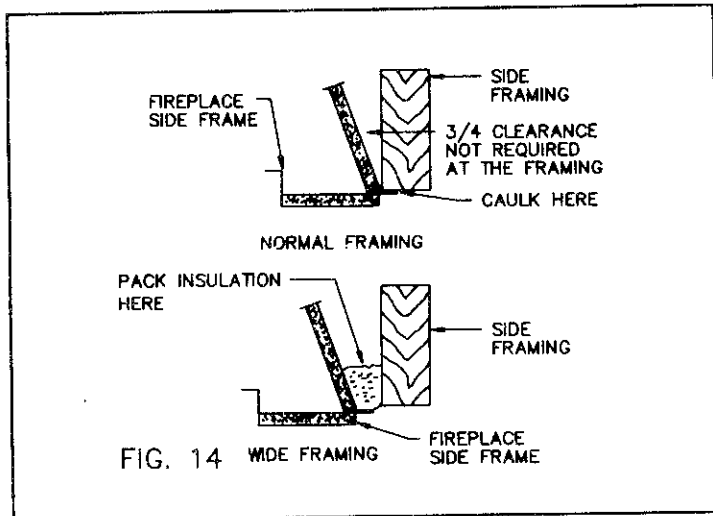
CAUTION: WHEN USING A DECORATIVE APPLIANCE, THE DAMPER MUST BE REMOVED OR PERMANENTLY LOCKED IN THE OPEN POSITION.

HEARTH EXTENSION:

A hearth extension projecting a minimum of 16 inches in front of and a minimum of 8 inches beyond each side of the fireplace opening is required to protect combustible floor construction in front of the fireplace. Use FMI hearth extension HE 36 or a layer of non-combustible inorganic material having a thermal conductivity of $k=0.84$ BTU IN./FT. SQ. HR F (or less) at 1" thick. For example, if the material selected has a K Factor of 0.25, such as glass fiber, then the following formula would apply: $0.25/0.84 \times 1" = .30$ thick. This must be covered by any non-combustible material such as tile, slate, brick, concrete, metal, glass, marble, stone, etc. Fasten the hearth extension to the floor to prevent shifting and seal the gap between the fireplace frame and hearth extension with a non-combustible material (SEE FIG.13).



WARNING: HEARTH EXTENSION IS TO BE INSTALLED ONLY AS ILLUSTRATED.

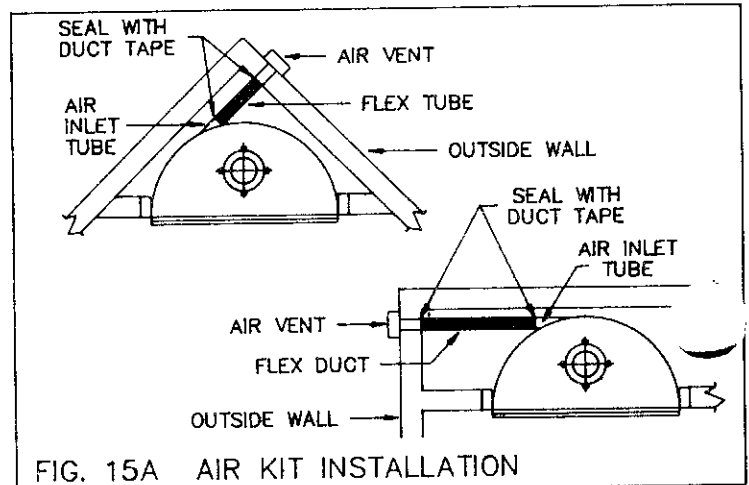


FIREPLACE ENCLOSURE: COLD WEATHER CLIMATE

Before finishing the enclosure around the fireplace, inspect all joints around the fireplace. Any gaps between the nailing flanges and the framing should be sealed with non-combustible insulation or caulking. Inspect the fireplace for possible gaps caused by shipping or mishandling during installation. These should be sealed with non-combustible materials. If the fireplace is mounted on a raised platform, insulate below the platform to prevent the entry of cold air through the fireplace bottom by means of conduction. The above steps are important, especially if the fireplace is installed in cold weather climate, SEE FIG.14.

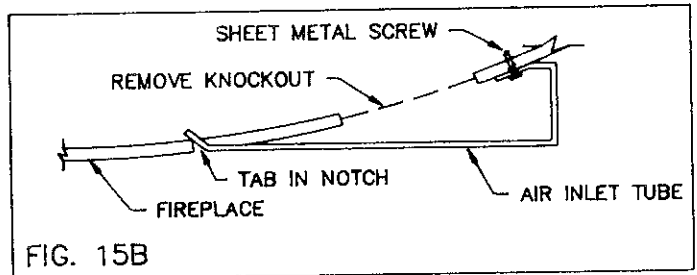
COMBUSTIBLE AIR KIT (MODEL AK-4E)

An air kit is available for use with model 36ECII fireplace as an optional accessory. The outside air vent can be installed through an outside wall or a ventilated crawl space. A plaster ground is provided for use on unfinished walls prior to applying finish surface. Attach flex tube to air vent and air inlet tube. Seal with duct tape (SEE FIG. 15A).



CAUTION: AIR INLET DUCTS ARE NOT TO TERMINATE IN ATTIC SPACE.

Avoid installing outside air eyebrow in areas where inlet opening may be blocked by snow, bushes or other obstacles. Maximum height of air inlet above platform of fireplace is within 3 feet below the termination exhaust height.



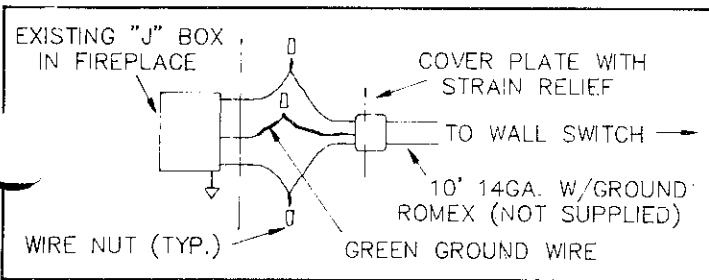
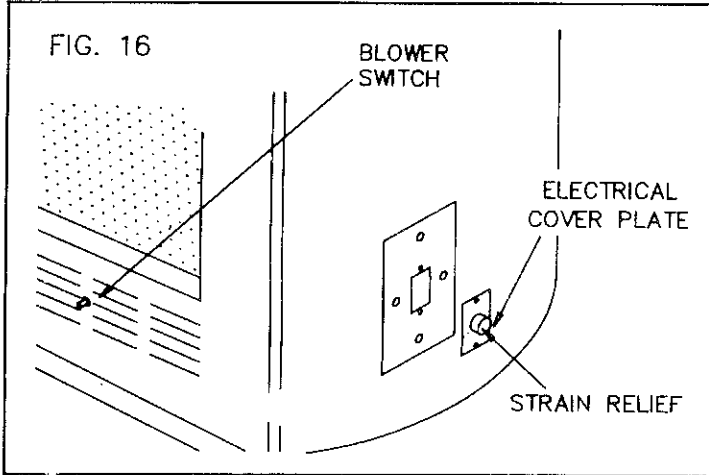
BLOWER ASSEMBLY

A blower assembly is available for use with this fireplace as an optional accessory. It is designed to be installed on a factory prewired fireplace only. The optional blower assembly model CBK-III can be installed prior to, or after installation of the fireplace. Use of blowers or fans other than those manufactured by FIREPLACE Mfg. Inc. voids the warranty.

The optional blower is operated by a switch located on the lower face. Flipping the switch turns the blowers on or off.

NOTE: Fireplace must be wired to the house electrical system in order for the blowers to operate. This blower system does not require a wall switch. Refer to the CBK-III blower assembly installation instructions for details.

Electrical connections are made through the cover on the right side of the fireplace as illustrated in FIG. 16. Use 14 AWG copper wire for all connections. Be certain the fireplace is properly grounded to the green wire.



FINISHING YOUR FIREPLACE:

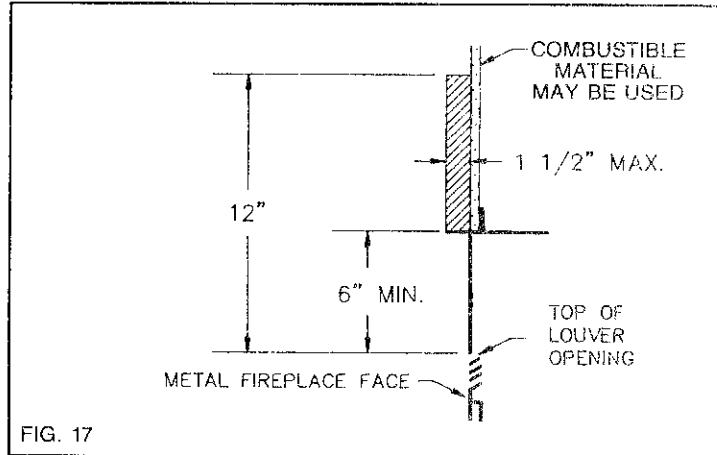
Combustible materials may make direct contact with the sides and the top of the fireplace face. It is important that combustible materials do not overlap the face itself. Brick, tile or other non-combustible materials may be applied to the face provided that any gap between the material around the fireplace opening be caulked to prevent the seepage of combustible products.

CAUTION: DO NOT COVER UP THE FACE LOUVERS TOP AND BOTTOM.

MANTLE:

A mantle may be installed if desired. SEE FIG. 17 for minimum heights above and beyond opening of fireplace face.

Woodwork, such as wood trim and mantels, and other combustible material, shall not be placed within 6 inches of a fireplace opening. Combustible material above and projecting more than 1 1/2 inches from a fireplace opening shall not be placed less than 12 inches from the top of the fireplace opening. NFPA STANDARD 211 Section 7-3.3.3.

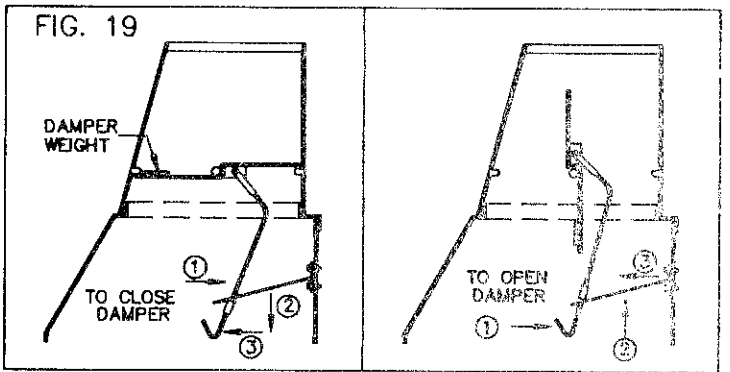


DAMPER OPERATION:

The flue gas damper is located inside the firebox similar to a conventional masonry fireplace. Look within the top of the fireplace and locate the damper handle extending from the damper. See FIG.19 for operating the damper. This can be easily accomplished with a fireplace poker.

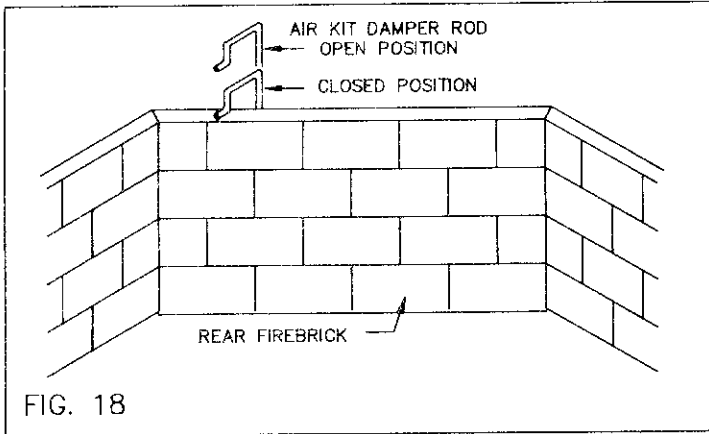
WARNING: Risk of fire damage. When replacing grate, replace with FMI model 36 GR grate only.

FIRE: Use wood or when using decorative gas appliance use natural gas or propane only.



AIR KIT OPERATION:

The damper rod for the air kit is located inside the face opening, above the upper left top of the rear firebrick. Push the rod up to open the air intake, and down to close it. (SEE FIG. 18)



	WALL SHIELD PWS-36		FIRESTOP FS-8DM 30FS-8DM
		DELUXE BLOWER KIT CBK-III	
	FLUE PIPE 12-8DM 18-8DM 36-8DM 48-8DM		36 GR
	ELBOW SET 30E-8DM		SUPPORT PIPE 12S-8DM
	VSC-8 STORM COLLAR ROOF PITCH 6F8 0 TO 6/12		FLASHING
	EMBER PROTECTOR EP-36		RTL-8DM ROUND TOP TERMINATION
	HEARTH EXTENSION HE-36		ETL-8DM ECONO-TOP TERMINATION
	GLASS DOOR KIT G36E/EC DG36E/EC		AIR KIT AK-4E

COMPONENT PARTS

