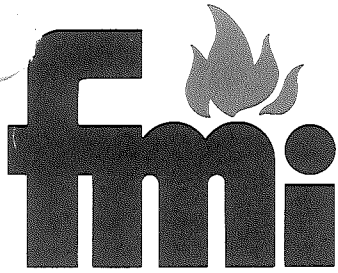


The Symbol of
Excellence

OLYMPIAD

MODEL 36GC

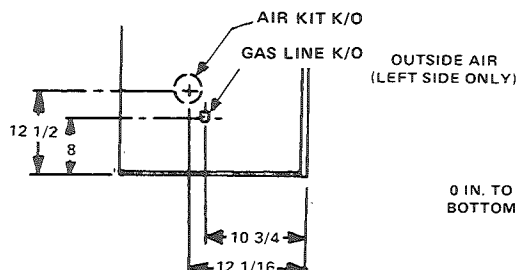
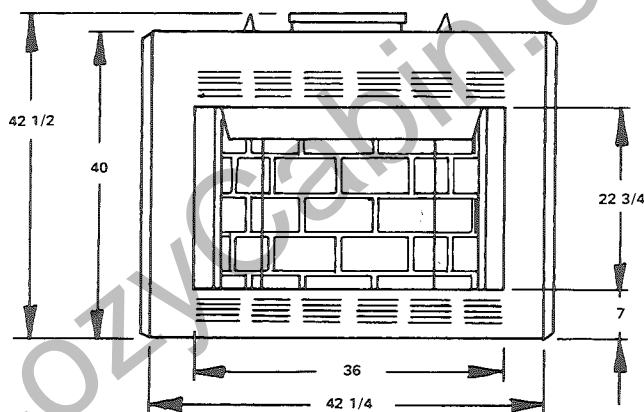
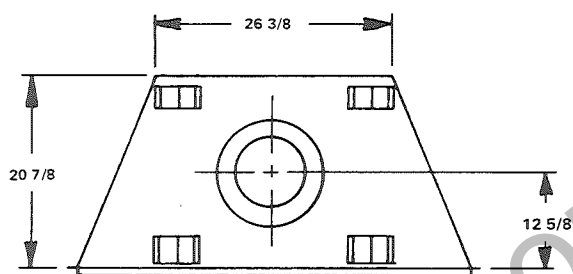


FIREPLACE SYSTEMS

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.



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

ROUND TOP
TERMINATION

ECONO-TOP
TERMINATION

STORM
COLLAR

FLASHING

FIRESTOP

2-IN. AIRSPACE TO
COMBUSTIBLE MATERIALS

COMBUSTIBLE
WALL BOARD

0 IN. TO
TOP SPACERS

3/4 IN. AIR SPACE TO
BACK AND SIDES

NO COMBUSTIBLE
MATERIAL ON FACE

0 IN. TO
BOTTOM

8 IN.
EACH SIDE

HEARTH EXTENSION
52 IN. X 16 IN.

NOT LESS
THAN 14 IN. TO
PERPENDICULAR
SIDEWALL

15 TYP
W/ 27
SEE
36GC

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 system, 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, blower fans, air inlet system and damper control.
 - b) Use of any component part not manufactured or approved by FMI in combination with a FMI fireplace system.
- **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 in side chase dimension is required as a minimum size.

PROTECTIVE WALL SHIELD

The distance to a perpendicular side wall may be reduced to 12" provided a FMI PWS-36 is installed. See PWS-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 80 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. 1 or Fig. 2, or Fig. 2A.

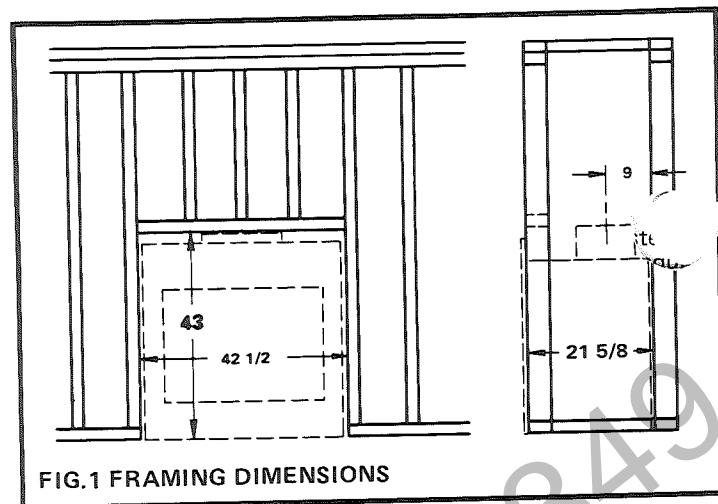


FIG. 1 FRAMING DIMENSIONS

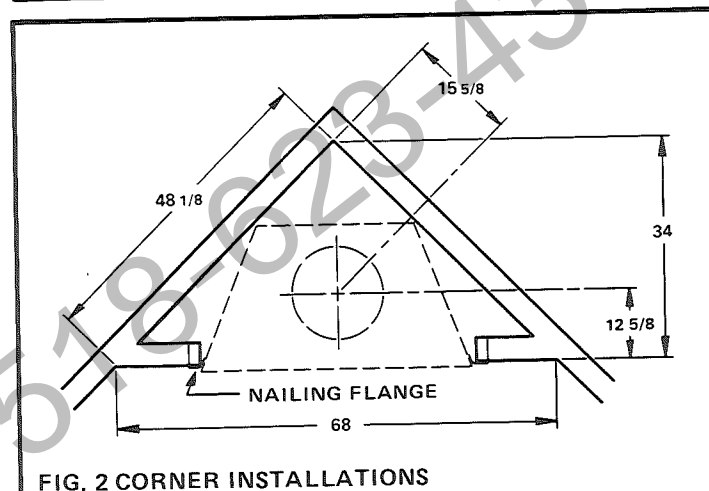


FIG. 2 CORNER INSTALLATIONS

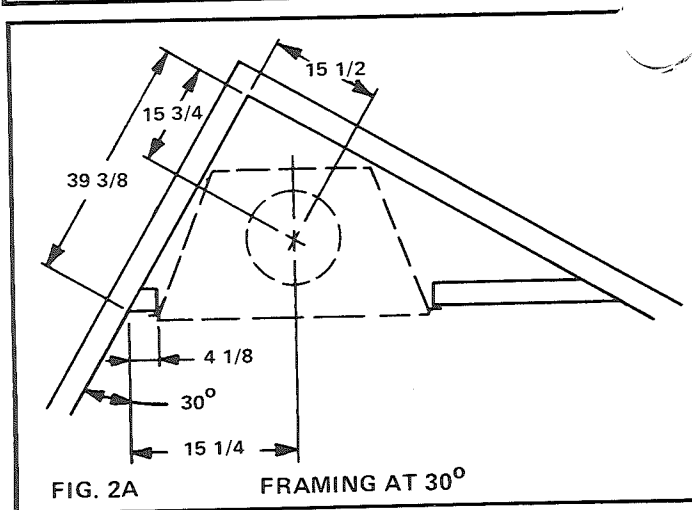


FIG. 2A FRAMING AT 30°

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 steel ember protector must be installed between the fireplace and the hearth extension as illustrated in Fig. 14.

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

NOTE: The 3/4" clearance is not required at the nailing edge (SEE FIG. 16A).

ASSEMBLING AND INSTALLING YOUR DOUBLE-WALL CHIMNEY SYSTEM

Each double wall chimney section consists of an outer pipe, an inner pipe, and one wire spacer. The pipe sections are not unitized 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 hemmed end down. The outer pipe section can then be installed over the flue pipe section with the hemmed end up. (see FIG. 3).

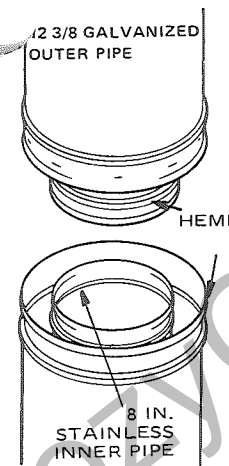
Press down on each pipe section until the lances securely engage the hem on the fireplace starter. The wire spacer will assure the proper spacing between the inner and outer pipe sections.

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.

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.

LINEAL GAIN: THE ACTUAL MEASURABLE LENGTH OF A PART AFTER TWO OR MORE PARTS ARE CONNECTED.



1/2 3/8 GALVANIZED OUTER PIPE

HEMMED END

8 IN. STAINLESS INNER PIPE

LINEAL GAIN		
PART NO.	DESCRIPTION	GAIN (IN.)
36GC	FIREPLACE	39
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
RT-8DM	ROUND TERMINATION	6
ET-8DM	CHASE TERMINATION	1 TO 12

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-8D firestop spacers 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.

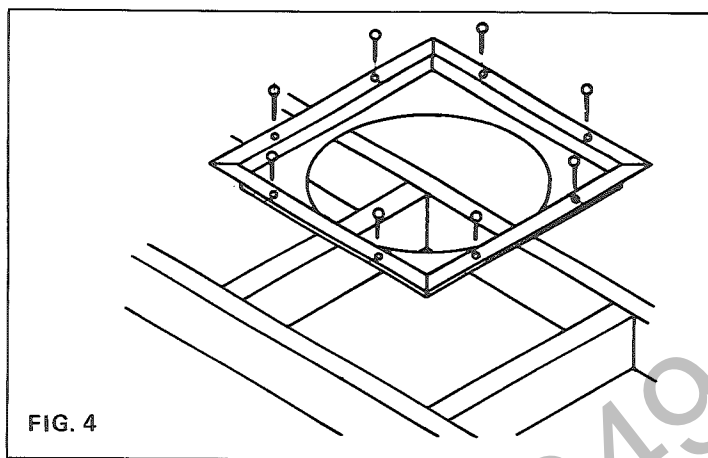


FIG. 4

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.

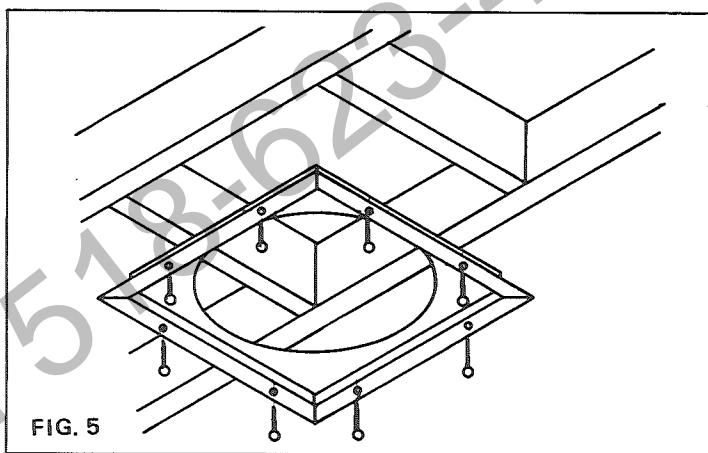


FIG. 5

SUPPORT SECTIONS:

The chimney support section is a 4 strap 12" length of pipe. A chimney support is required at the 30 feet level 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.

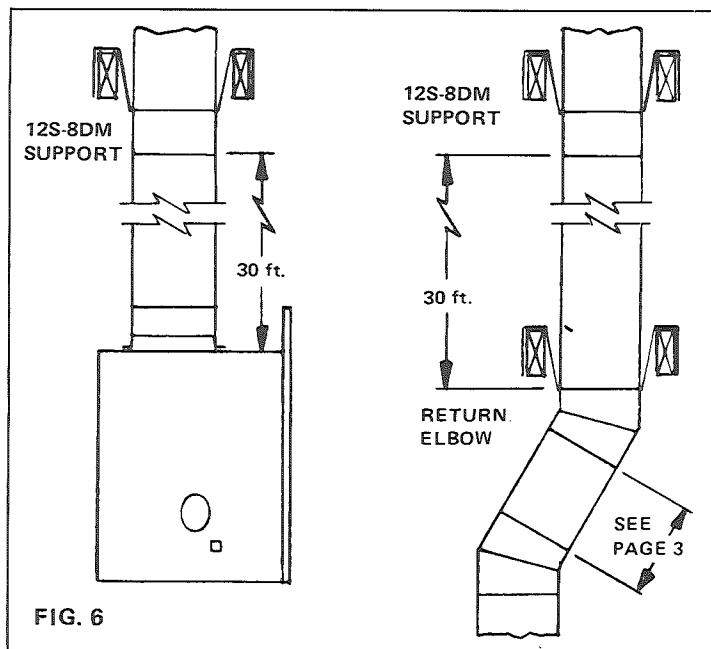


FIG. 6

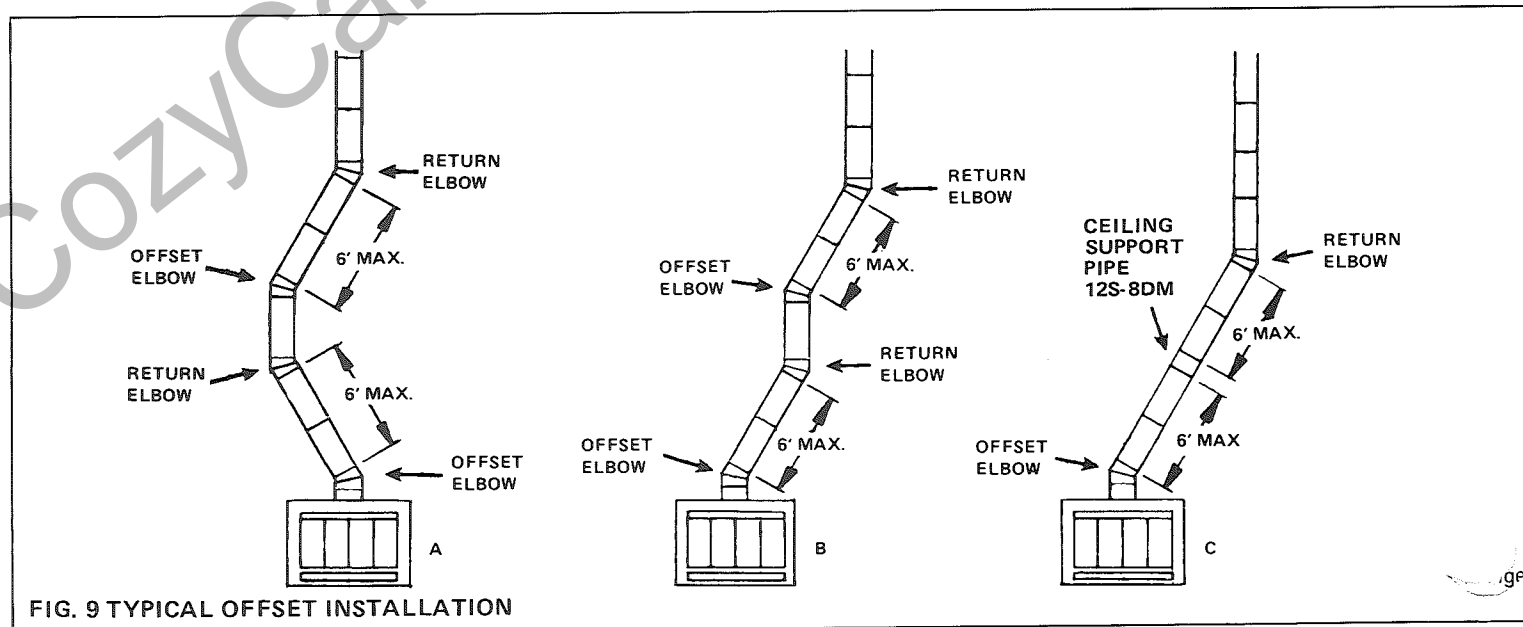
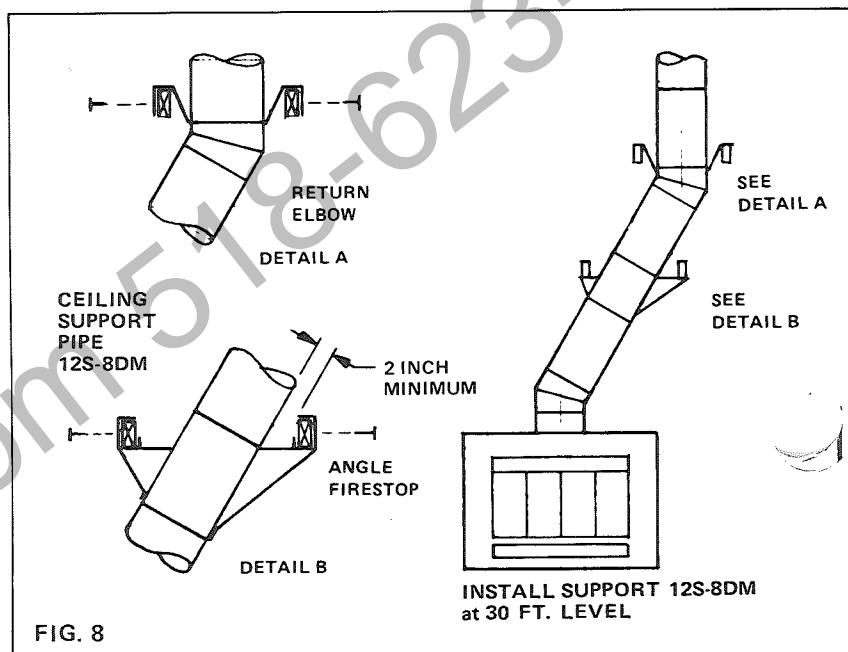
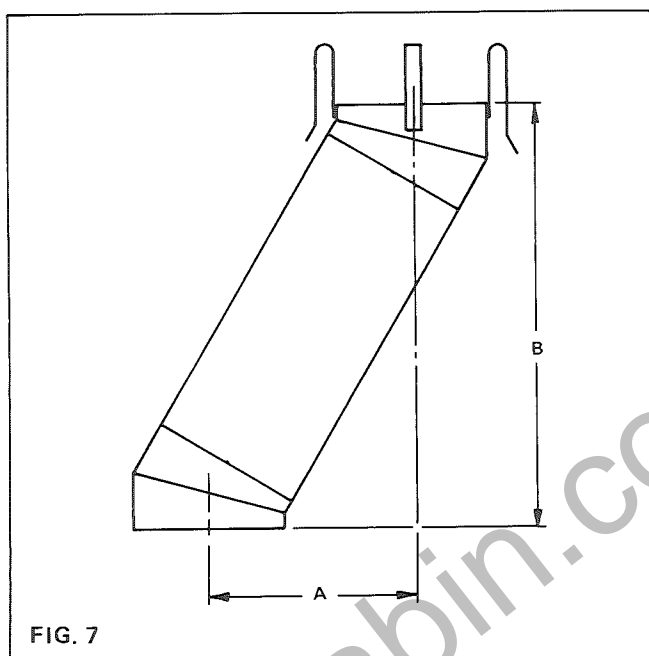
INSTRUCTIONS WHEN OFFSET OF CHIMNEY IS NEEDED

TO INSTALL ELBOWS

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

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	1
9 3/4	25 1/2				1	45	86 3/4		2			1
12 3/4	30 3/4			1		46 3/4	89 1/2	1		1	1	
15	34 3/4				2	51	97	1	1			
18	40			1	1	53 1/4	101		2	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:



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 17½ 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 (10½ inches above and below the center point).

6/12 to 12/12 pitches: Measure 26 inches (13 above and below).

12/12 to 18/12 pitches: Measure 32 ½ inches (16 ¼ above and below).

18/12 to 24/12 pitches: Measure 40 inches (20 above and below).

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

STEP 5: Add the next sections of 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 cut-out. Termination and chimney must extend a minimum of 36 inches above highest point where it passes through roof. See 10' 2" RULE (FIG. 10)

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.

CAUTION

DO NOT SEAL VENTILATION OPENINGS ON THE ROOFTOP FLASHINGS. FOLLOW THE INSTALLATION INSTRUCTIONS PROVIDED WITH THE TERMINATION BEING USED.

FOR ROUND TOP TERMINATION:

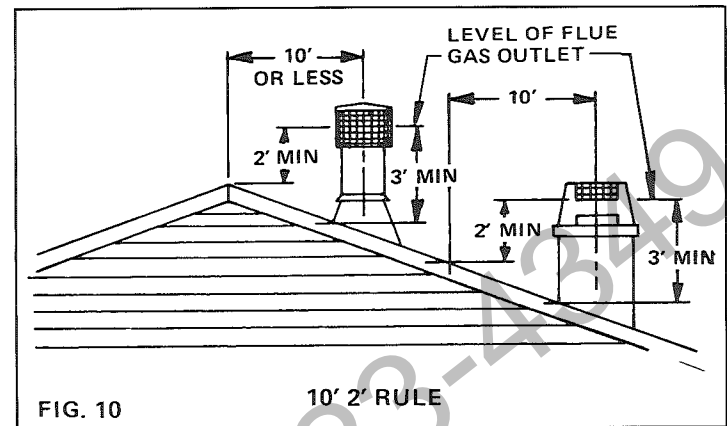
STEP 1: Slide the flashing over the pipe (no firestop is needed at the roof level). Tack the flashing down at the top two corners with roofing nails. Lay tiles over the top and sides of the flashing and secure them to the roof through the flashing with roof nails. Lay tiles under the lower edge and secure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

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).

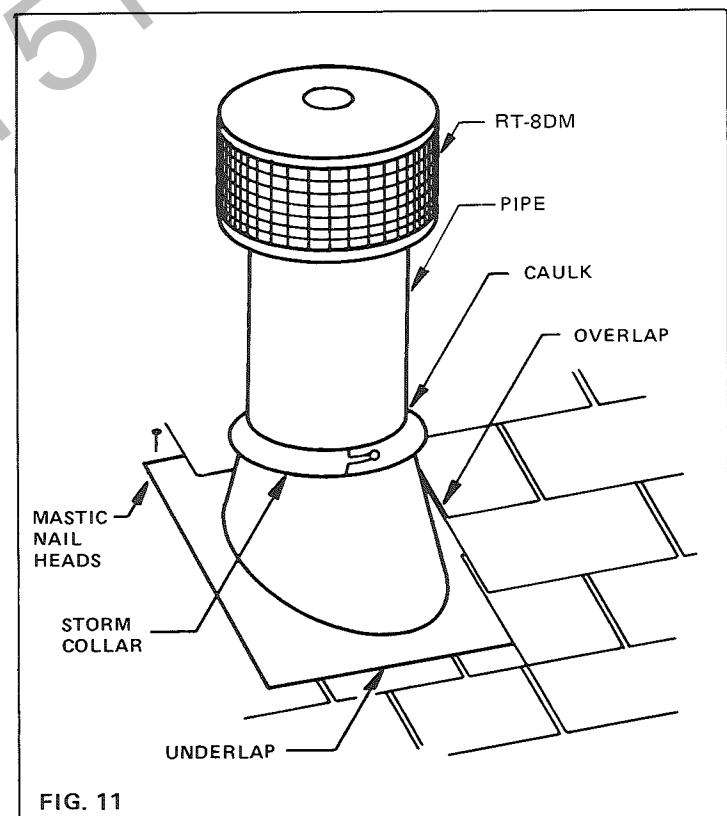
STEP 3: Place the RT-8DM onto the pipe end as illustrated and secure with the screws provided.

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)



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.



IMPORTANT: Install gas line before finishing fireplace. If desired a decorative gas appliance may be installed, use only iron pipe, ½" size and appropriate fittings. When installing a gas line, a valve designed for installation outside the fireplace is recommended.

To install, remove the gas line plug located in side firebrick approx. 2" 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.

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 leaks. Never operate any appliance with leaky connections.

The gas pipe is intended for use with a decorative gas appliance only, in accordance with the National Fuel Gas Code ANSI Z223, 1-1980. **CAUTION: WHEN USING A DECORATIVE APPLIANCE, THE DAMPER MUST BE REMOVED OR PERMANENTLY LOCKED IN OPEN POSITION.**

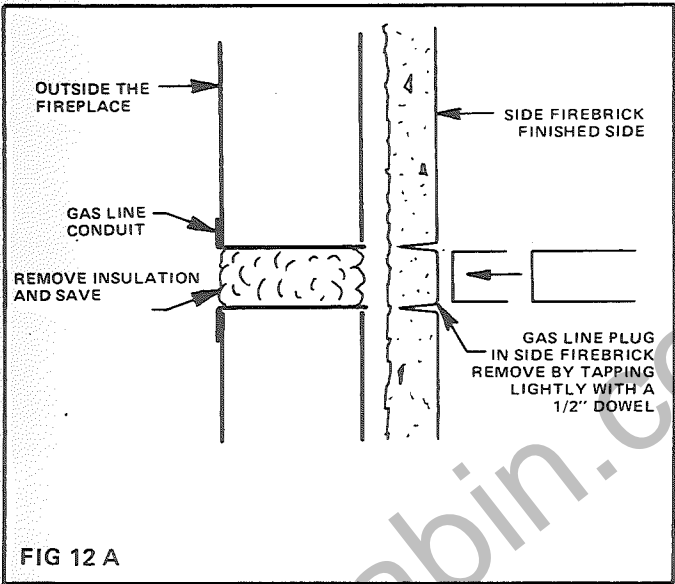


FIG 12 A

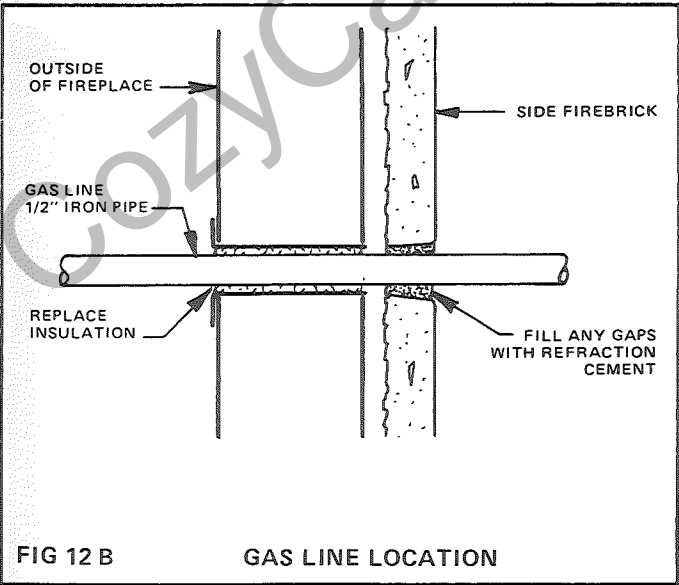


FIG 12 B GAS LINE LOCATION

BLOWER ASSEMBLY:

A blower assembly is available for use with this fireplace as an optional accessory. They are designed to be installed on FMI factory prewired fireplaces only. The blower assembly model CBK II can be installed prior to or after installation of the fireplace. Use of blowers or fans other than manufactured by FIRE-PLACE Mfg. Inc. voids the warranty.

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

Electrical connections are made through the cover on the side of the fireplace illustrated in FIG. 13. Use 14 AWG copper wire for all connections. Be certain the fireplace is properly grounded.

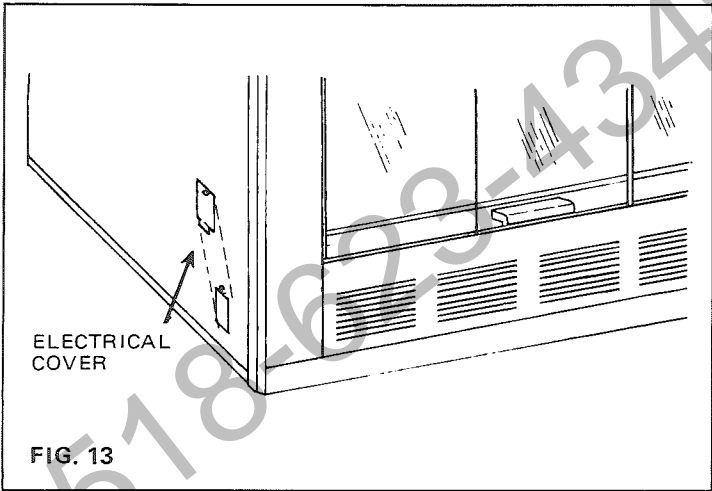


FIG. 13

COMBUSTION AIR KIT: (MODEL AK-4)

Remove air inlet cover plate and attach the air inlet collar into the 4" hole on left side only.

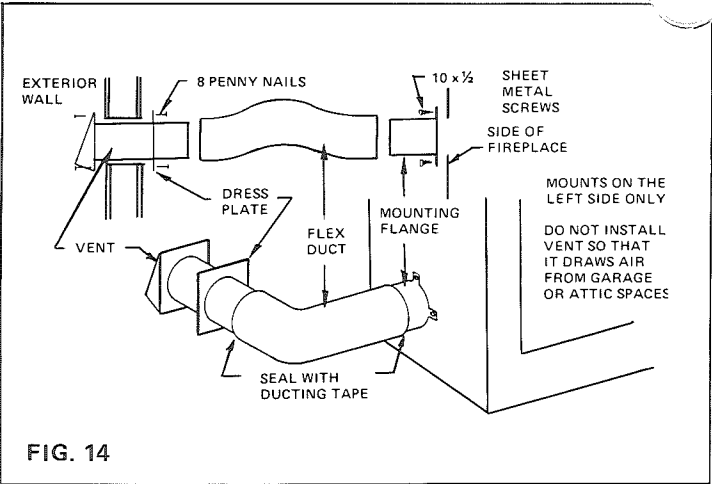


FIG. 14

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 combustion air inlet duct to outside air inlet. (SEE FIG. 14)

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

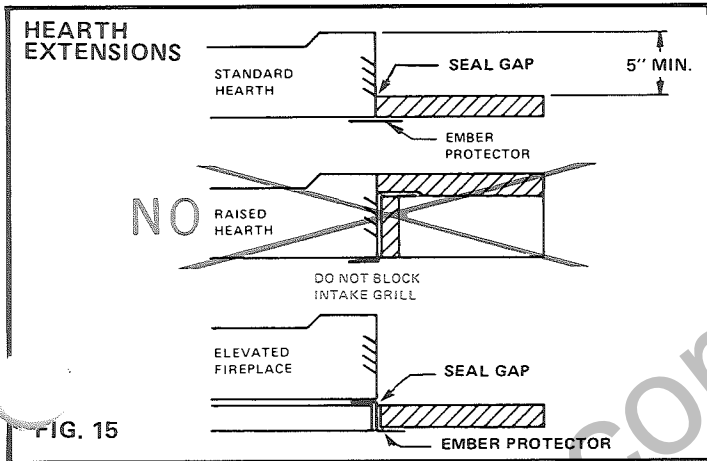
Avoid installing outside air eyebrow in areas where inlet opening may be blocked by snow, bushes or other obstacles. Maximum height of air inlet above platform of fireplace is 20'. This increased to within 3ft below the termination exhaust provided a FMI back draft damper is installed (BDK 4).

FINISHING YOUR FIREPLACE:

Combustible materials may make direct contact with the sides and 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 combustion products.

HEARTH EXTENSION

A hearth extension projecting a minimum of 16" in front of and a minimum of 8" 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 $K=0.84 \text{ BTU IN./FT. HR. F}$ (or less) at 1" thick. Example of determining hearth extension equivalent. If the material selected has a K factor of 0.25, such as glass fiber, then the following formula would apply: $0.25/0.84 \times 1" = .30" \text{ thk.}$ 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. 15)

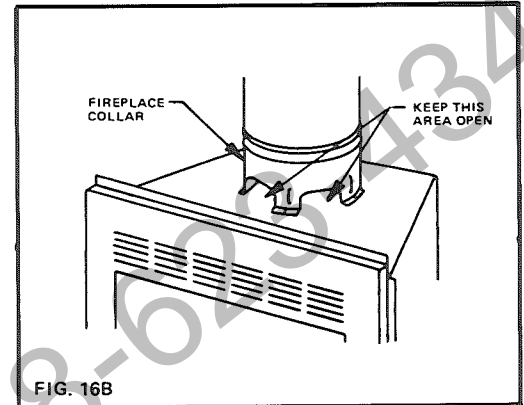
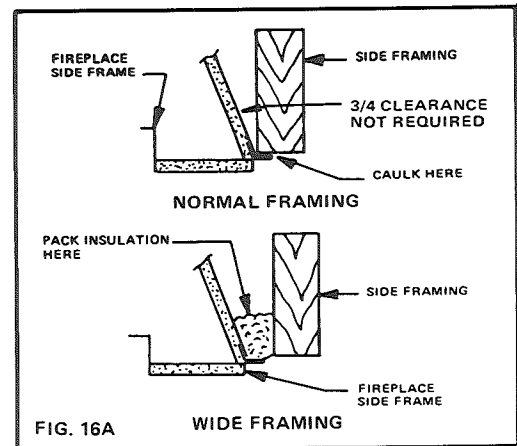


WARNING:

HEARTH EXTENSION IS TO BE INSTALLED ONLY AS ILLUSTRATED.

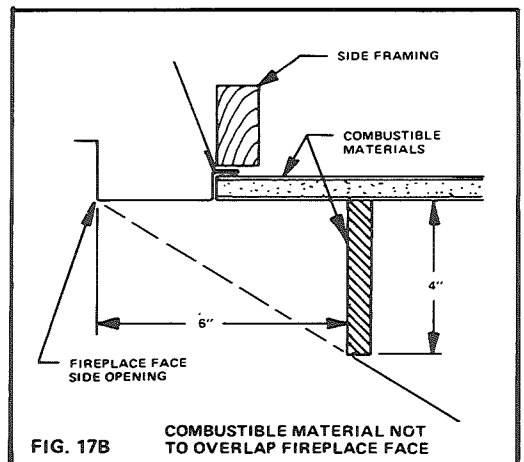
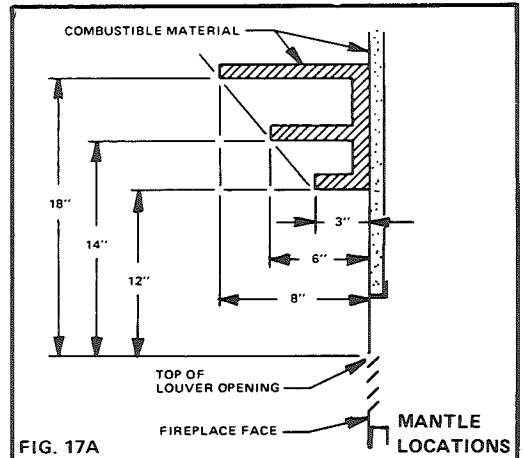
FIREPLACE ENCLOSURE: COLD CLIMATE INSTALLATIONS:

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. (SEE FIG. 16A) Inspect the fireplace joints 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. The opening around the base of the chimney must remain open and free to circulate outside air for keeping the chimney cool as designed (SEE FIG. 15B). The fireplace must be set on a continuous platform to prevent cold air from conducting through the metal bottom. The platform bottom may be constructed of any wood product or other materials such as cement.



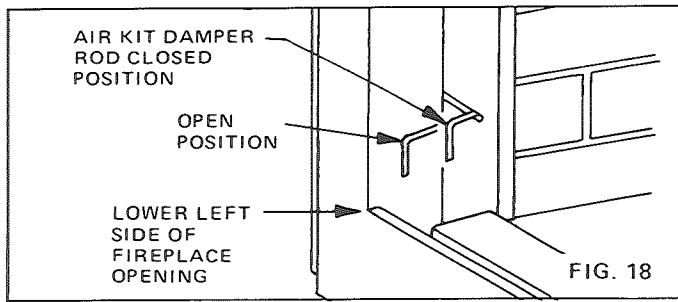
MANTLE:

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

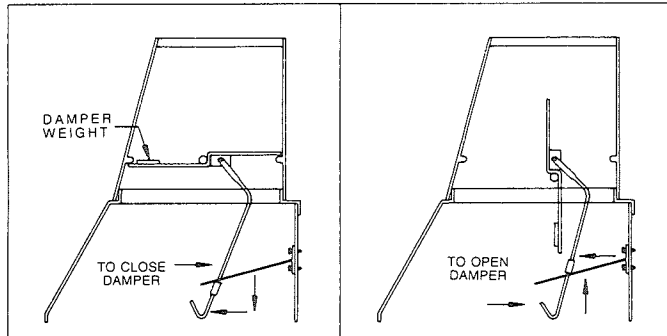


AIR KIT OPERATION

The damper rod for the air kit is located inside the face opening at the lower left corner. Pull the rod to open the air kit and push the rod to close. (SEE FIG. 18)



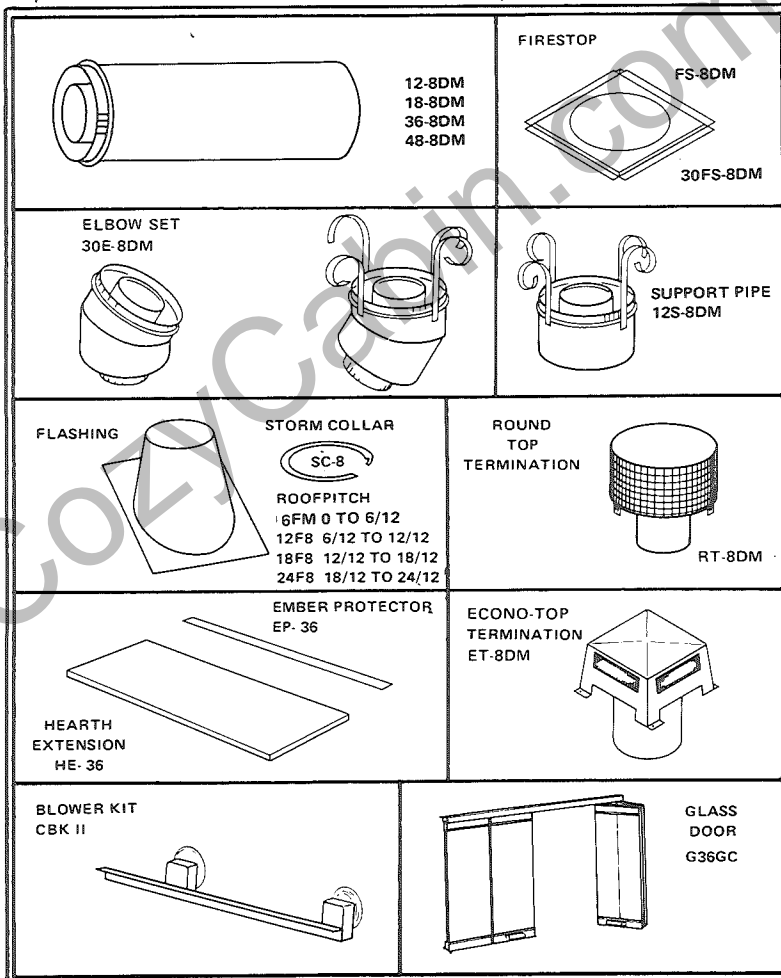
DAMPER OPERATION



BLOWER OPERATION

The switch for the blower is the lever that protrudes from the louver on the lower left side. Push up for on, and down for off.

WARNING! Risk of Fire Damage. When replacing grate replace with FMI Model 36GR Grate only.



COMPONENT PARTS

