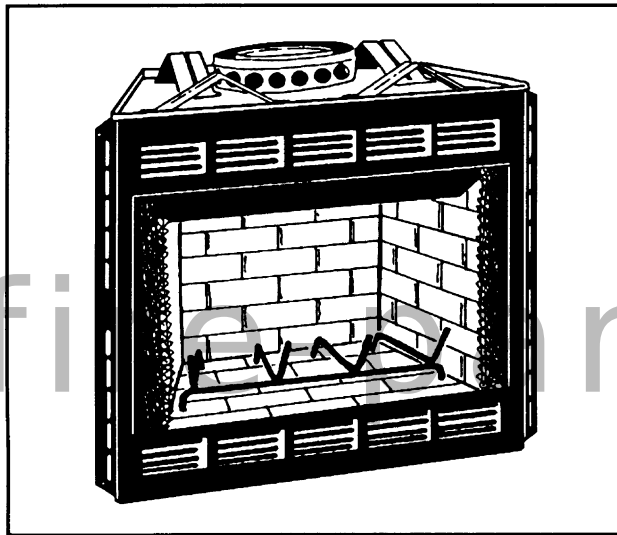


TEMCO FIREPLACE PRODUCTS, Inc.

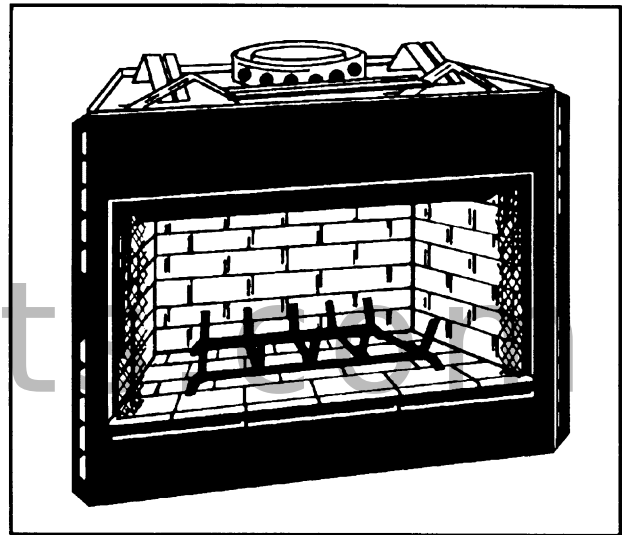
Installation Instructions for Low Profile, Front-Opening, Wood-Burning Fireplaces

Models TLC42-4, TLC42-4I, TLC42-4MB, TFC42-4, TLC39-3, TLC39-3I, TFC39-3, TLC36-3,
TLC36-3I, TLC36-3MB, TFC36-3, A42L-4, A42F-4, A39L-3, A39F-3, A36L-3 and A36F-3

READ AND SAVE THESE INSTRUCTIONS



36" Louvered Heat Circulating Fireplace



42" Flush Face Heat Circulating Fireplace

WARNING

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

FOR YOUR SAFETY

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Installation and service must be performed by a qualified installer. **Do not attempt to install this fireplace yourself!**



TEMCO 
FIREPLACE PRODUCTS

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A subsidiary of Temtex Industries, Inc.

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INTRODUCTION

This book contains your installation instructions and should be kept in a safe place. It will be a handy reference guide to operating your fireplace after installation. For you to realize all the advantages and use of the reliable service that has been engineered into your TEMCO fireplace, you must carefully follow all of the instructions contained in this book regarding installation and operation of the fireplace. These instructions should be read carefully in their entirety before beginning installation of the fireplace.

It is suggested that you wear work gloves and safety glasses to protect your hands and eyes when installing your fireplace.

NOTE: Authorities having jurisdiction (i.e. building inspectors, fire marshals, etc.) should be consulted before instal-

lation to determine the need to obtain a permit.

All models are listed for use in residential construction in the United States with a TEMCO double-wall 8" diameter air-cooled chimney and the components listed below.

BE SURE TO FOLLOW EXACTLY THE SPECIFIC INSTALLATION RESTRICTIONS THAT APPLY TO THE MODEL YOU ARE INSTALLING. The model number of the fireplace is located on a metal label behind the firescreen in the upper right corner of the front of the fireplace. Be sure you follow these rules exactly.

Listed in the United States by Underwriters Laboratories, Inc., #MH10105, ICBO Report #NER-492, SBCCI Report #8809, BOCA Report #87-31.

8" Diameter Double Wall Chimney System

Chimney Sections

8212D 12" Section
 8218D 18" Section
 8224D 24" Section
 8236D 36" Section
 8248D 48" Section

8204S Flue Support

SC1215-1 Storm Collar

8232E 30° Elbow Set

8204F-1 90° Firestop Spacer

8230F-1 30° Firestop Spacer

8206F 0 - 6/12 Roof Flashing

8212F 7 - 12/12 Roof Flashing

HSS-1 Hearth Safety Strip

Terminations

8203D Round Termination Cap

STD-22 Round Chase Cap

ARC-52 Architectural Cap

ARC-12 Architectural Cap

PRC-12 Pyramid Cap

LPC-12 Long Pyramid Cap

TCS-12 Conical Cap

AS-8-2 Shielded Slip Section

BEFORE YOU BEGIN ...A FEW BASIC RULES

- The instructions on the following pages were designed to make the installation of your TEMCO fireplace as quick as possible. It is important that they be followed. This fireplace is to be installed **only** by a qualified installer.
 - Use only TEMCO manufactured components, listed under **8" Diameter Chimney System** (on the prior page), when installing a TEMCO fireplace. **Substituting other manufacturers' components for, or altering TEMCO parts will void the UL listing and the TEMCO warranty.**
 - Check local building codes for restrictions which may not be contained in this manual.
 - The fireplace design permits installation and framing adjacent to combustible materials. Do not set the fireplace on vinyl flooring or carpets.
COMBUSTIBLE MATERIALS MAY NOT BE PLACED ON THE BLACK FACE SURROUNDING THE FIREPLACE.
 - ALL CHIMNEY SECTIONS, ELBOWS AND FLUE SUPPORTS REQUIRE AN ABSOLUTE MINIMUM OF 1" AIR SPACE CLEARANCE TO ALL COMBUSTIBLES.**
 - The minimum distance from the fireplace opening to an adjacent combustible wall is 15½". See page 6 for alternative wall shields and required R-factors.
 - If the floor in front of the fireplace is combustible, a protective hearth extension must be used. Raised or floor level extensions may be constructed. On flush face models only, a raised hearth extension may be flush with the fireplace hearth. For a raised hearth on louvered models, the fireplace must also be installed on a platform.
Minimum hearth dimensions:

36" models	36" x 52"
39" models	16" x 55"
42" models	20" x 66"
- Since many hearth extension materials are not insulating materials, a layer of noncombustible inorganic insulating material must be used also. See pages 6 and 7 for R-factor requirements.
- Adhere to the 10' Rule of Thumb for chimney height, (see page 9).
 - Chimney supports:
 - Flue support is required for every 35' of vertical system height.
 - Flue support is required for every 6' of offset chimney.
 - Guy wire stabilizer is required for chimneys extending more than 6' above roof line.
 - Only TEMCO model glass doors (see chart below) may be installed on these fireplaces.
 - The barometric damper on the Combustion Air Kit allows air to be drawn from above, below or behind the fireplace; but air must never be drawn from the attic or garage spaces. Refer to the air kit installation manual for complete installation and use information.
 - Check your local building code to determine if grounding is required and what procedure should be followed. Grounding is recommended by the manufacturer if you live in an area of high risk due to electrical storms.
 - System specifications:
 - Minimum system height (site-built construction): no elbows - 12'6"; two elbows - 13'6"; four elbows - 21'.
 - Maximum system height: 60'
 - Maximum 30° elbows per system: four
 - Maximum distance between elbows without support: 6'
 - Maximum run of inclined chimney: 20'
 - On louvered models, when installing a blower or fan kit, it is necessary to bring a power source to the fireplace before it is enclosed. See separate installation instructions.
 - For mobile home installation requirements, see page 13.
 - READ THE COMPLETE MANUAL BEFORE BEGIN-**

Models with Features and Listed Accessories					
MODEL	FACE/OPENING	DOORS	FAN	TRIM KITS	NOTES
TLC42-4	louvered 42" x 21 7/8"	CLS-6, CX-61	BL-1*	LPB42-4	
TLC42-4I	louvered 42" x 21 7/8"	CLS-6, CX-61	BL-1*	LPB42-4	insulated outer wrap
TLC42-4MB	louvered 42" x 21 7/8"	CLS-6, CX-61	BL-1*	LPB42-4	for mobile home installations, includes CX-61 doors and AIR-3 air kit.
TFC42-4 A42F-4	flush 42" x 21 7/8"	CLS-6, CX-61	N/A	LPB42-4	
TLC39-3 A39L-3	louvered 39" x 21 7/8"	CLS-4, CX-41	BL-1*	LPB39-3	
TLC39-3I	louvered 39" x 21 7/8"	CLS-4, CX-41	BL-1*	LPB39-3	insulated outer wrap
TFC39-3 A39F-3	flush 39" x 21 7/8"	CLS-4, CX-41	N/A	LPB39-3	
TLC36-3 A36L-3	louvered 36" x 21 7/8"	CLS-2, CX-21	BL-1*	LPB36, SPB36	
TLC36-3I	louvered 36" x 21 7/8"	CLS-2, CX-21	BL-1*	LPB36, SPB36	insulated outer wrap
TLC36-3MB	louvered 36" x 21 7/8"	CLS-2, CX-21	BL-1*	LPB36, SPB36	for mobile home installations, includes CX-21 doors and AIR-3 air kit.
TFC36-3 A36F-3	flush 36" x 21 7/8"	CLS-2, CX-21	N/A	LPB36, FPB36, SPB36	

Combustion Air Kits: All models except TLC36-3MB and TLC42-4MB accept combustion air kits AIR-5, AIR-5A, AIR-5B and AIR-7. TLC36-3MB and TLC42-4MB include AIR-3 air kit.

*BL-1 installation requires installation of junction box JB-2 or JB2-1.

PLANNING AHEAD

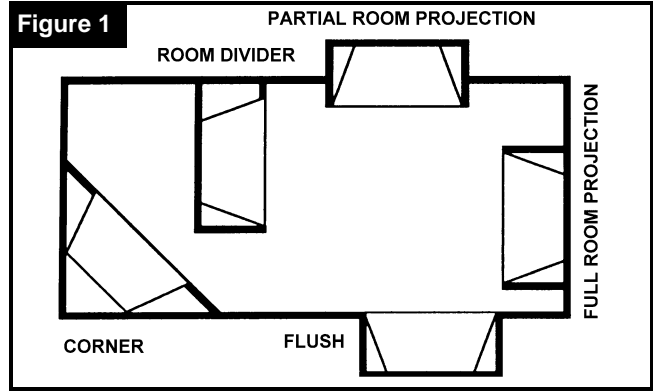
CHOOSING THE LOCATION FOR YOUR FIREPLACE:

Figure 1 shows some of the many ways your fireplace may be installed. Consider the traffic pattern in your room and the location of doors and windows. A corner location may be best where space is limited.

Your fireplace weighs no more than some of your fine furniture. If the fireplace is located near a load bearing wall, additional supports to the foundation will not be necessary.

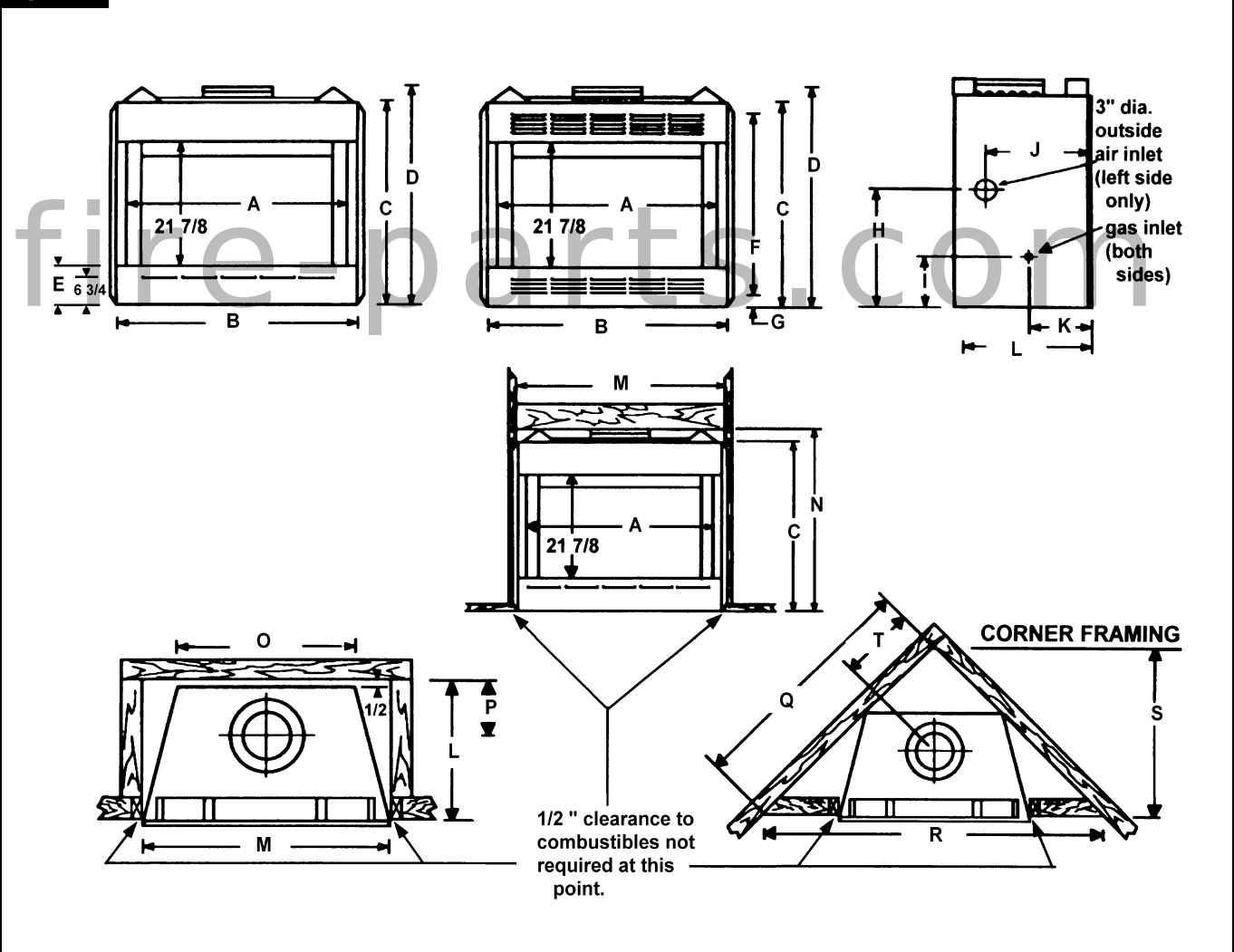
HEAVY FACINGS SUCH AS BRICK, STONE, ETC., MAY REQUIRE ADDITIONAL FOUNDATION SUPPORT.

ALTHOUGH THIS UNIT MAY BE INSTALLED ON COMBUSTIBLE SURFACES, IT MUST NOT BE INSTALLED



ON CARPET OR VINYL.

Figure 2 Fireplace and Framing Dimensions



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
TFC36/A36F	36	38 1/2	35	37 3/4	7	31 1/4	2	12 1/8	8 5/8	15 1/2	9	21	38 3/4	38	22	8 7/8	46	65	32 1/2	14 3/8
TLC36/A36L	36	38 1/2	35	37 3/4	7	31 1/4	2	12 1/8	8 5/8	15 1/2	9	21	38 3/4	38	22	8 7/8	46	65	32 1/2	14 3/8
TFC39/A39L	39	41 9/16	39	41 1/2	8	33	3	17	9 3/4	18	10 1/2	22	41 13/16	41 3/4	29	8 1/2	51 15/16	73 7/18	36 3/4	16 7/16
TLC42/A42F	39	41 9/16	39	41 1/2	8	33	3	17	9 3/4	18	10 1/2	22	41 13/16	41 3/4	29	8 1/2	51 15/16	73 7/18	36 3/4	16 7/16
TFC42/A42F	42	44 9/16	39	41 1/2	8	33	3	17	9 3/4	18	10 1/2	22	44 13/16	41 3/4	32	8 1/2	54	76 1/4	38 1/8	17 5/8
TLC42/A42L	42	44 9/16	39	41 1/2	8	33	3	17	9 3/4	18	10 1/2	22	44 13/16	41 3/4	32	8 1/2	54	76 1/4	38 1/8	17 5/8

OUTSIDE AIR KIT AND GLASS DOOR ACCESSORIES

A fireplace needs a steady supply of air in order to draw properly. Many houses and apartments which are well sealed lack sufficient air for normal operation. IN SUCH HOUSES, IT IS RECOMMENDED THAT A COMBUSTION AIR KIT BE INSTALLED. A combustion air kit will improve the efficiency of any fireplace, especially if used in conjunction with glass doors, because it allows you to use outside air for combustion instead of heated room air.

Installing the fireplace on an outside wall will simplify the installation of the combustion air kit and reduce the amount of necessary duct work. Install the air kit according to the separate installation instructions packed with it. If an air kit is to be installed, IT MUST BE INSTALLED AT THE TIME THE FIREPLACE IS INSTALLED, before its enclosure is finished.

The fireplace includes an integral barometric damper. The control lever is located on the left side behind the mesh screen.

GAS LOG

If you plan to install a gas log, the gas line must be installed before framing in the fireplace. The gas line must be installed by a licensed gas line installer. See p.12 for installation instructions.

DRAFTS

The location for the fireplace should be away from objects such as frequently opened doors and central heat air outlets and inlets that will create drafts and possibly hamper the normal flow of air into the fire.

LOCATING THE AREA WHERE THE FLUE PIPE WILL PASS THROUGH THE CEILING AND THE ROOF

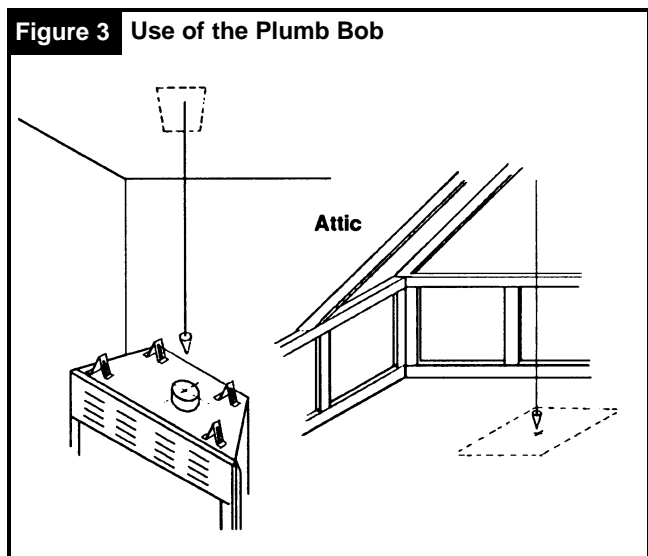
It is very important that you determine where the flue (chimney) will go through the ceiling and roof. Check the structure of your home to see that the location you have chosen will make installation as easy as possible. Using a plumb bob, hold the string from the ceiling and drop it, moving the string until the plumb bob is in the center of the flue collar opening, (see figure 3). Mark the spot on the ceiling. You may wish to drive a nail through the ceiling at this spot. Then go into the attic and find the nail. Using the plumb bob with the ceiling nail as the center point of the flue, mark the center of the area on the roof through which the flue will pass. This is to see if it is possible to cut your opening for the flue in both the ceiling and roof without cutting either roof rafters or ceiling joists. A location that requires cutting the least number of joists and rafters will simplify the installation and reduce the cost. The structural integrity of a home's floor, walls, ceiling and roof must be maintained. It is not recommended to cut roof trusses.

CHIMNEY OUTLET

Thought should be given to the proposed location of the chimney outlet on the roof. Objects such as trees, adjacent buildings or embankments that are too close to the chimney can create air circulation problems during windy weather that could affect the way the fireplace draws air.

After careful consideration, choose the location for your fireplace to achieve the simplest installation for maximum efficiency.

FIREBOX AND CHIMNEY SYSTEM CLEARANCES



The fireplace may be placed directly on a combustible floor, against a combustible wall at marked clearances or on a raised wooden platform.

If the fireplace is to be installed on a raised platform, the platform must be a continuous level surface.

The fireplace must be secured in place so it cannot shift positions. The nailing flanges on the sides of the firebox make securing the firebox to the frame quick and easy. The nailing flanges were designed to allow the installation of 1/2" wallboard or plywood flush with the face of the fireplace.

Only the header (see figure 4) may rest on the standoffs on top of the firebox.

Combustible materials may not cover any part of the black metal surrounding the firebox opening. See figure 4.

Do not install the firebox over vinyl floors or carpet.

Combustible floors in front and to the sides of the firebox opening must be protected by a noncombustible hearth extension as shown in figure 4.

THE CAUTIONS BELOW RELATE TO LOCATIONS ON FIGURE 4, (letters on pictures correspond with items below).

A. The hearth safety strip must be used under the crack between the fireplace and the hearth extension when the fireplace is installed on a combustible floor. Seal the crack with a noncombustible material such as mortar, grout, etc.

B. COMBUSTIBLE MATERIALS MUST NOT BE INSTALLED OVER OR TOUCH ANY BLACK PAINTED SURFACE.

DO NOT BLOCK HEAT CIRCULATING AIR INLETS OR OUTLETS. DOING SO MAY RESULT IN A POTENTIAL FIRE HAZARD.

C. If the floor in front of the fireplace is combustible, either a raised or floor-level protective hearth extension must

	X	Y
36" models	16"	52"
39" models	16"	55"
42" models	20"	66"

be constructed. For flush-face models only, a raised hearth extension may be flush with the fireplace hearth. To construct a raised hearth extension with louvered models, the fireplace must rest on a raised platform. A

A hearth extension installed directly on the floor must be a minimum of 16" x 52" and be constructed of materials with an R-factor equal to or greater than .80. If combustible materials are used to construct the hearth extension, they must not touch the black surface of the fireplace. The same material that is used to protect the top of the hearth extension must be placed between the combustible hearth and the black face of the fireplace. The hearth extension must be fastened to the floor to prevent shifting and the gap between the fireplace and the hearth extension must be sealed with a noncombustible material. These materials (listed below) may be used for a wall shield as well.

- D. The framing header must rest on top of the standoffs.
- E. The minimum distance from the fireplace opening to an adjacent combustible wall is 15½". The minimum distance to an adjacent combustible wall may be reduced to 12" when an approved wall shield is used on the wall. The wall shield must be 40" x 40" and be constructed of a noncombustible, inorganic material having a thermal resistance of R = 1.49.

Determining the R-Values

The hearth extension must be constructed of non-combustible materials which have a total thermal resistance (R factor) equal to or greater than .80 for floor level hearth extensions or 1.20 for raised hearth extensions and be a minimum size as shown in the table on page 5. Choose the desired materials and obtain the K value at 75° mean temperature. The C value and the R value may be calculated with the following formulas:

K = Thermal conductivity. K = BTUs-ins./hrs.-ft.²°F
 T = thickness C= Thermal conductance

R = Thermal resistance K/T = C; 1/C = R

Example: 3/4" Marble with 3/8" Micore

Determine the R value for each material used as follows:

Marble:K/T= 11/.75=14.66.

1/C = 1/14.66 = 0.068 (R factor)

Micore 300: K/T = .458/.375 = 1.22.

1/C = 1/1.22=0.82 (R factor)

After the R value is obtained on each material in this hearth, add the R values to obtain total thermal resistance (R).

Total R factor = 0.068 + 0.82=0.89

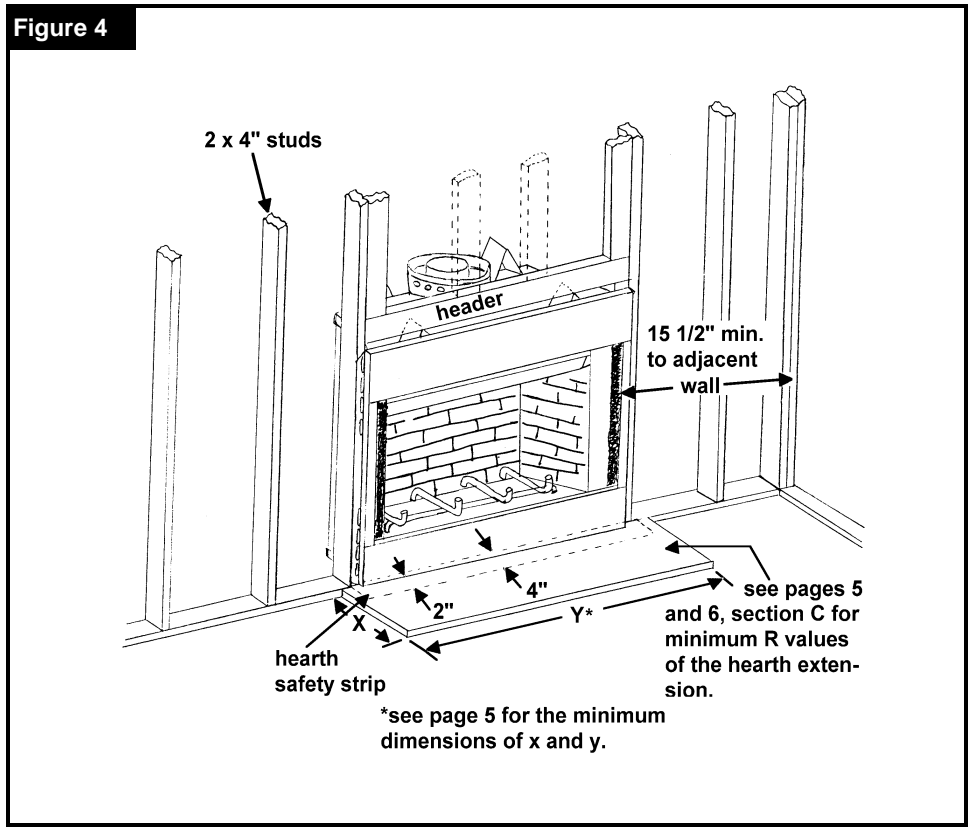
The total must be equal to or greater than specified above. Typical materials: Micore 300 has a K of .458; Micore 230 has a K of .43; Micore 180 has a K of .34; Ceraboard has a K of .34; common brick has a K of 5; cement mortar has a K of 5; marble has a K of 11; limestone has a K of 6.5; tile has a K of 12; slate has a K of 21; Wonder Board has a K value of 3.2.

MICORE NC 180-300, manufactured by U.S. GYPSUM CORPORATION

CONWED SPEC 300, manufactured by CONWED CORPORATION

CERA FORM TYPE 106R board, manufactured by JOHNS-MANVILLE.

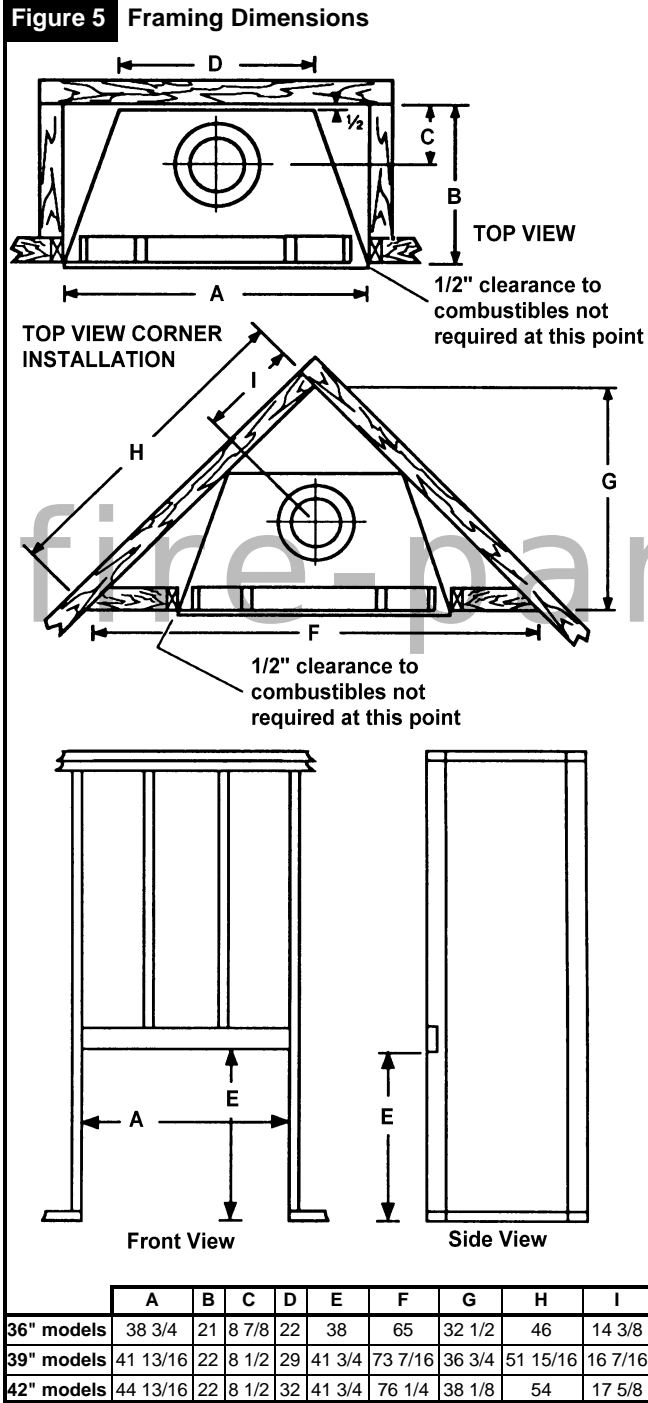
WONDER BOARD, manufactured by GOLD BOND BUILDING PRODUCTS.



FIREPLACE INSTALLATION

This list of specific instructions will help you make certain that every installation operation is done correctly. Complete the installation steps in the sequence shown.

Local building codes should be consulted in all cases as to the particular requirements concerning the installation of factory built fireplaces. Select the location for the fireplace by taking into consideration the factors previously outlined



in the **Planning Ahead** section of the manual.

INSTALLING THE FIREBOX

STEP 1. FRAMING THE FIREBOX

When framing the opening for the fireplace, make certain that the header is the correct height above the surface upon which the fireplace will sit. The header must be level. The

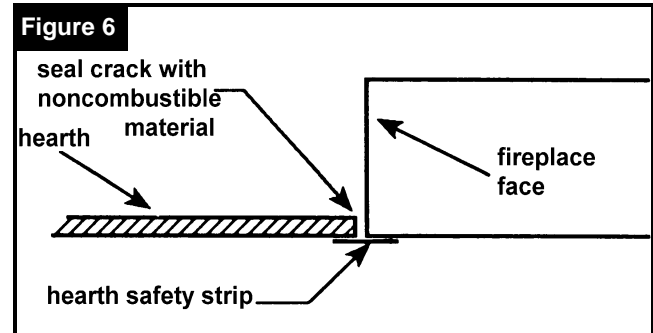
header and framing may be installed as shown in figure 5 or figure 7 according to the installer's preference.

The entire fireplace can be elevated above the floor to achieve a raised hearth effect. This can be done by adding a small platform to achieve the desired height.

The nailing flanges on the side of the firebox were designed to allow the installation of 1/2" wallboard or plywood flush with the face of the firebox.

STEP 2. HEARTH SAFETY STRIP

A Hearth Safety Strip must be installed under the fireplace when the fireplace is installed on a combustible floor. This strip must be positioned on the floor to extend 2" under the



fireplace, 2" under hearth extension and 6" on either side of the fireplace opening at the point where the hearth extension meets the fireplace. See Figures 4 and 6.

STEP 3. INSTALL THE FIREBOX

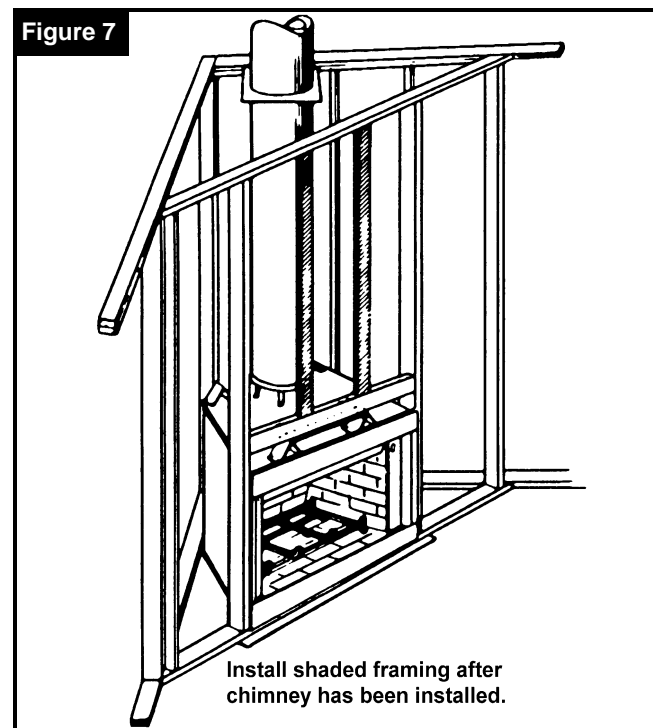
Install fireplace into the framed opening by setting the unit directly in front of the opening and then sliding it into the proper position.

STEP 4. LEVEL THE FIREBOX

Check the level of the fireplace by placing a level on the top edge of the fireplace face. Shim with sheet metal if necessary.

STEP 5. SECURE THE FIREBOX

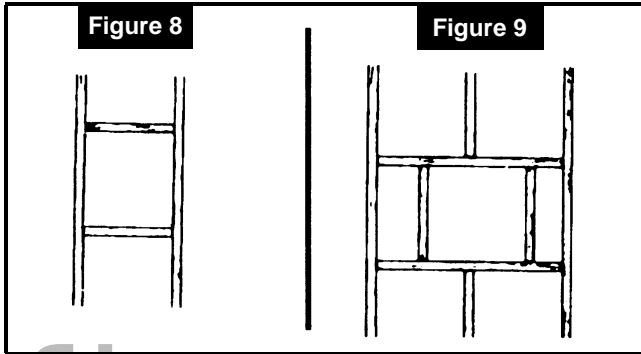
Secure the fireplace to the framing. The nailing flanges on



STEP 6. FRAMING CEILING AND ROOF OPENING

SEE FIGURE 17 FOR INSTRUCTIONS IF THE FLUE-PIPE WILL BE OFFSET BELOW THE FIRST CEILING LEVEL.

If you are not using elbows in this installation frame, the ceiling and roof openings are directly above one another in the locations you chose in the Planning Ahead section of this manual. The flue should go straight up to the chimney termination. Firestops must be used at each ceiling level. A firestop is not required at the roof line. The roof framing must be 2 x 6's or 2 x 4's and must be securely nailed because the chimney termination and flashing are anchored to this construction and must withstand heavy loads. The opening in the ceiling should be square. Use the nail you previously put in the ceiling as the center of the square. See below for framing alternative detail. Repeat this procedure

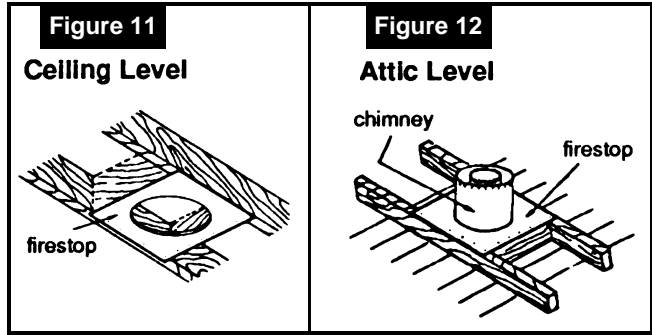


to cut and frame an opening in each ceiling level.

STEP 7. INSTALLING FIRESTOP SPACER

Install a firestop at each ceiling level. The angles on the firestop are to maintain clearances. Nail the firestop to the joist and headers around the ceiling opening. No firestop is to be used at the roof level. The firestop should be installed from the underside of the ceiling, (see figure 11), except at the attic level where it should be installed on top at the framing members, (see figure 12). A MINIMUM OF 1" AIR SPACE CLEARANCE MUST BE MAINTAINED FROM THE CHIMNEY PIPE TO ALL COMBUSTIBLES.

When the chimney penetrates the ceiling at a 90° angle, use firestop spacer 8204F-1, 14 1/2" x 14 1/2" framed opening.



When the chimney penetrates the ceiling at a 30° angle, use firestop spacer 8230F-1, 14 1/2" x 22" framed opening.

INSTALLING THE CHIMNEY

Double Wall Chimney pipe has two sections: the inner and the outer sections. It is very important that both sections be installed for each length of chimney used in the system.

STEP 8.

Insert the inner (8") pipe with the male end pointing DOWN into the inner collar. The inner flue section fits inside the inner collar. Push the pipe until it bottoms and the snap locks engage. Check each joint to ensure that the sections are securely locked together.

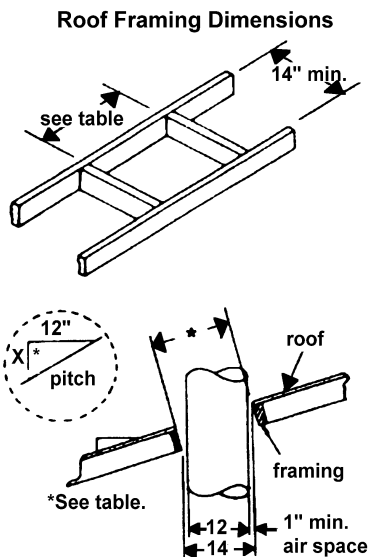
STEP 9.

Slip the outer (12") pipe with the male end UP over the other pipe and over the outer collar. The outer flue section fits on the outside of the outer flue collar. Push the pipe until it bottoms and the snap locks engage. Screws may be used only in the outer pipe for additional support if desired.

STEP 10.

Continue this process of adding chimney pipe sections on top of each other until the pipe penetrates the roof opening enough to allow you to install the flashing and storm collar. Chimney sections must be supported by either guy wires or 3/4" conduit flattened on the ends when the chimney extends 6' or more above the roof. The chimney may be extended to a maximum of 12' above the roof. A flue support must be used when the system is 35' or higher.

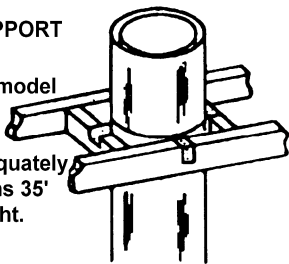
Figure 10



ROOF CUT TO NEAREST 1/8" ABOVE Roof Framing Lumber					
Pitch	2 x 4	2 x 6	2 x 8	2 x 10	2 x 12
0/12	14 x 14	14 x 14	14 x 14	14 x 14	14 x 14
1/12	12 x 14 1/2	14 x 14 5/8	14 x 14 3/4	14 x 14 7/8	14 x 15 1/8
2/12	14 x 15	14 x 15 1/4	14 x 15 1/2	14 x 15 3/4	14 x 16 1/4
3/12	14 x 15 1/2	14 x 16	14 x 16 1/4	14 x 16 3/4	14 x 17 1/2
4/12	14 x 16 1/4	14 x 16 7/8	14 x 17 1/4	14 x 17 7/8	14 x 18 3/4
5/12	14 x 17	14 x 17 1/4	14 x 17 5/8	14 x 18 1/8	14 x 19 1/4
6/12	14 x 17 7/8	14 x 18 7/8	14 x 19 3/8	14 x 20 3/8	14 x 21 3/4
7/12	14 x 18 3/4	14 x 19 5/8	14 x 20 1/2	14 x 21 5/8	14 x 23 1/4
8/12	14 x 19 3/4	14 x 21	14 x 21 3/4	14 x 23	14 x 24 7/8
9/12	14 x 20 3/4	14 x 22 1/4	14 x 23	14 x 24 1/2	14 x 26 1/2
10/12	14 x 21 3/4	14 x 23 1/2	14 x 24 3/8	14 x 26	14 x 28 1/4
11/12	14 x 23	14 x 24 3/4	14 x 25 3/4	14 x 27 1/2	14 x 30
12/12	14 x 24 1/8	14 x 26 1/8	14 x 27 1/8	14 x 28 1/8	14 x 31 7/8

Figure 13**FLUE SUPPORT**

A flue support model 8204S must be installed at the 35' level to adequately support systems 35' or more in height.

**Installation Requirements**

Maintain a 1" min. air space clearance to all combustibles from the chimney sections.

Minimum system height

without elbows: 12"6"
with two elbows: 13"6"
with four elbows: 21'

Maximum height: 60'

Four 30° elbows maximum per system

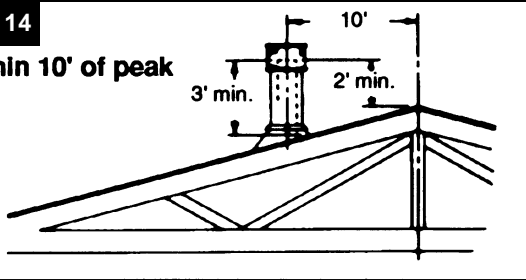
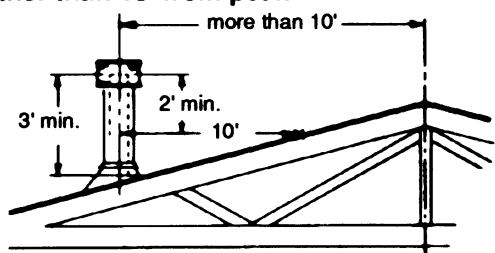
Lineal Gain Chart

Model #	Lineal Gain
36" fireplaces	37 3/4"
39" & 42" fireplaces	41 1/2"
8212D Chimney	10 3/4"
8218D Chimney	16 3/4"
8224D Chimney	22 3/4"
8236D Chimney	34 3/4"
3248D Chimney	46 3/4"
8232E Elbow set	14 5/8"
8204S Flue Support	3"
8203D Round termination ...	6"

OFFSET INSTALLATIONS**RULES GOVERNING OFFSET INSTALLATIONS**

Sometimes it is necessary to use elbows to create an inclined run of pipe (offset installation) that will make installation easier by avoiding plumbing, wiring or other obstructions. The following rules apply to offset installations.

- 60' maximum system height.
- Four 30° elbows (two pairs) maximum per system. Each offset elbow must be used with a return elbow. The chimney pipe must be vertical when it penetrates the roof.
- The chimney offset is to be a maximum of 30° from vertical.
- Maximum inclined chimney run of 20'.
- Additional support is to be provided every 6' of inclined run of chimney. Use flue support 8204S.
- Minimum height of fireplace using two elbows (one pair)

Figure 14**Within 10' of peak****Figure 15****Farther than 10' from peak**

is 13'6"; four elbows (two pairs) is 21'.

- Elbows may be used directly off the top of the firebox and may be mounted with the return elbow directly on top of the offset elbow.
- A MINIMUM OF 1" AIR SPACE CLEARANCE MUST BE MAINTAINED FROM THE CHIMNEY PIPE AND ELBOWS TO ALL COMBUSTIBLES.
- Local building codes must be followed in all cases as to the particular requirements concerning the installation of factory built fireplaces.

TO INSTALL ELBOWS

- Place the offset elbow (no straps) on top of the firebox or chimney section and point the upper half in the direction you require the chimney to incline. Snap lock all sections permanently in place.
- Adjust the inner section of the elbow into the inside of the inner collar of the firebox or the inner section of the chimney pipe.
- Adjust the outer section of the elbow over the outer section of the flue collar or outer section of the chimney pipe. Snaplock all sections permanently into place.
- The return elbow has 18" support straps. The support straps should be nailed to the framing in the manner indicated in figure 16. It may be necessary to add framing or lengthen the straps with hanger iron to support chimney pipe and elbows.

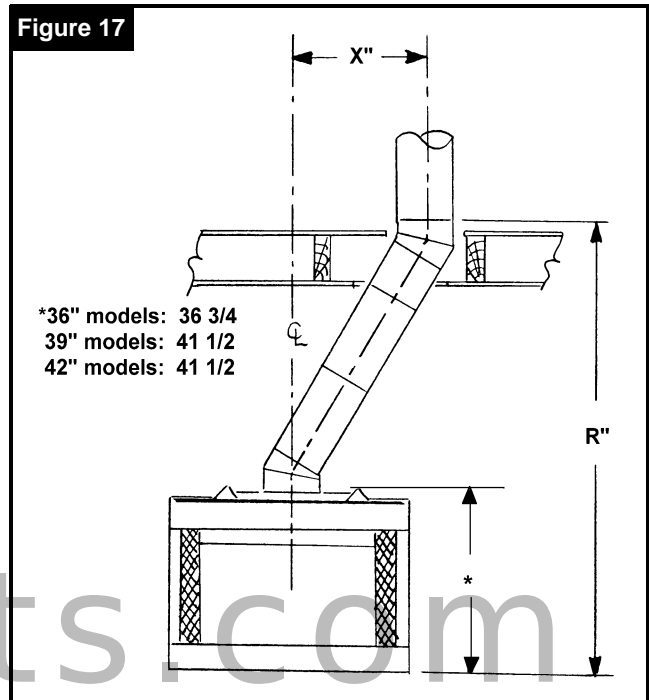
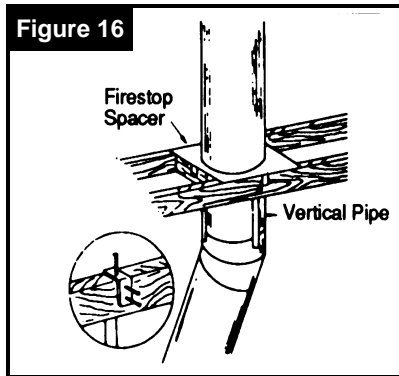
**CHIMNEY TERMINATION HEIGHT
10 FOOT RULE OF THUMB**

Under most conditions the fireplace system will draw properly if the chimney height is determined in accordance with the following guidelines:

- If your chimney penetrates the roof within 10' of its peak, it must extend at least 24" above your roof's peak and be at least 36" above the highest point of the roof opening (see figure 14).
- If the chimney penetrates the roof farther than 10' from its peak, measure from the center line of the chimney to a point 10' away, between the chimney and the peak of the roof. The top of the chimney must be at least 24" above this point and at least 36" above the highest point of the roof opening. (See figure 15).
- When figuring required chimney height, the termination counts as 6" of effective chimney height. The balance of the required height will consist of chimney sections and the effective height of the firebox.
- The 10' Rule of Thumb is a guide for calculating chimney height that works under most conditions. However, many factors can cause the need for additional chimney height beyond what the 10' Rule of Thumb would indicate. Topographical factors can cause high pressure zones which prevent a chimney from drawing. This can occur if the house is located in a low lying area, in a valley or near the base of a cliff or hillside. The same situation can occur if the chimney is near other steep roof lines or tall buildings. Areas with high winds also frequently require higher than normal chimneys. Certain styles of architecture tend to interfere with a fireplace's proper draw. If the room in which the fireplace is located has a very high ceiling, smoke may enter the room unless the chimney is terminated at a level higher than that of the ceiling, even if the 10' Rule of Thumb indicates

5. See figure 17 for offset calculation: Locate the center point of the flue on the ceiling with a plumb bob as shown on page 5. The center of the correct location for the ceiling opening will be the amount of the offset dimension away from the ceiling nail. See figure 17. The "X" dimension in the drawing is the amount of the offset. Be sure to consider the direction that your offset will incline. To achieve the minimum offset, (see table), attach the return elbow to the first elbow. To achieve further offset, you may install various lengths of pipe between the elbows to a maximum length of 72 inches without a flue

support.
6. When the flue penetrates the ceiling at a 30° angle, install firestop spacer 8230F. (See step 7 for construction detail.)



Lineal Gain of Offset with Two Elbows

Components	Offset (ins.) Dimension "X"	Rise (ins.) Dimension "R"	NOTES:
Elbows only	3 7/8	14 5/8	Rise dimension "R" (except for line 1, elbows only) includes firebox height (37 3/4 for 36" models, 41 1/2" for 39" and 42" models). If one of the elbows is not mounted on the firebox as pictured in figure 17, subtract the appropriate amount from the "R" dimension in the table to get the actual rise when elbows are mounted anywhere else in the system. If the required offset is not shown in this table, but is less than the maximum allowed (125"), additional chimney sections can be added to any of the listed combinations
Elbows with firebox	3 7/8	49 5/8	
One 12" section	9 1/4	58 7/8	
One 18" section	12 1/4	64	
Two 12" sections	14 5/8	68 1/4	
One 12" and one 18" section	17 5/8	73 1/4	
Two 18" sections	20 5/8	78 5/8	
One 36" section	21 1/4	79 5/8	
One 12" and one 36" section	26 5/8	88 7/8	
One 48" section	27 1/4	90	
One 18" and one 36" section	29 5/8	94	
One 12" and one 48" section	32 5/8	99 1/4	
One 18" and one 48" section	35 5/8	104 3/8	
Two 36" section	38 5/8	109 5/8	
One 36" and one 48" section and one flue support	48 1/8	122 5/8	

Components	Add to Dimension "X"	Add to Dimension "R"
12 " section	55	93
18" section	83	14 1/2
36" section	17 3/8	30
48" section	23 3/8	40 3/8
Flue Support	17	29

STEP 11. INSTALLING FLASHING

Place the flashing over the chimney pipe where it penetrates the roof and mark the outline of the flashing on the roof. Remove the nails from the shingles inside this outline and to the bottom edge of the roof cutout. Coat the roof area under the shingles with roofing cement. Slide the flashing under the shingles on the sides of the flashing and re-nail the top and side shingles. DO NOT nail through the lower portion of the flashing. If necessary, cover the side and top of the flashing with the salvaged shingles. The flashing should cover the lower side of the roof opening as pictured in figure 18.

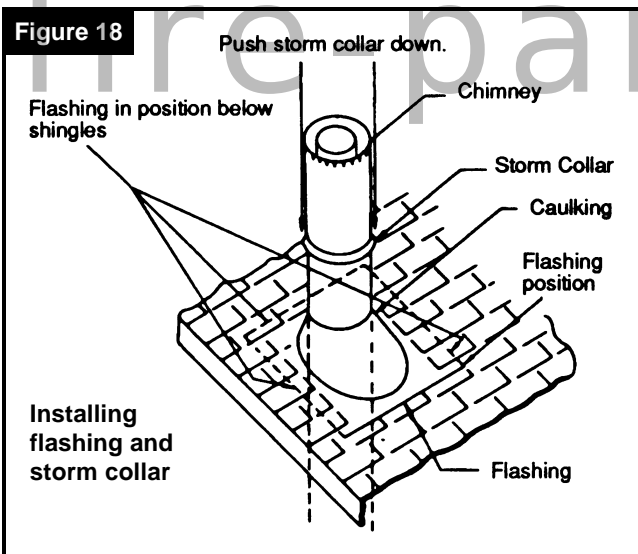
STEP 12. INSTALLING THE STORM COLLAR

The storm collar is assembled to the chimney system next. Holding the adjustable storm collar with the tab of the collar in your right hand, put the collar around the flue pipe. Push the tab on the collar through the slot provided. Pull the tab through and bend it just enough so that the collar may be raised upward.

Apply waterproof caulking around the flashing where the collar fits around the top of the flashing. Push the storm collar down securely on the sealer and flashing. To secure the collar, pull the tab through the slot as far as possible and bend the tab over to hold it in place.

STEP 13. INSTALLING THE TERMINATION CAP

A chimney termination is required to finish the installation. The following instructions are for the 8203D termination. Refer to the instructions packed with the termination for ad-



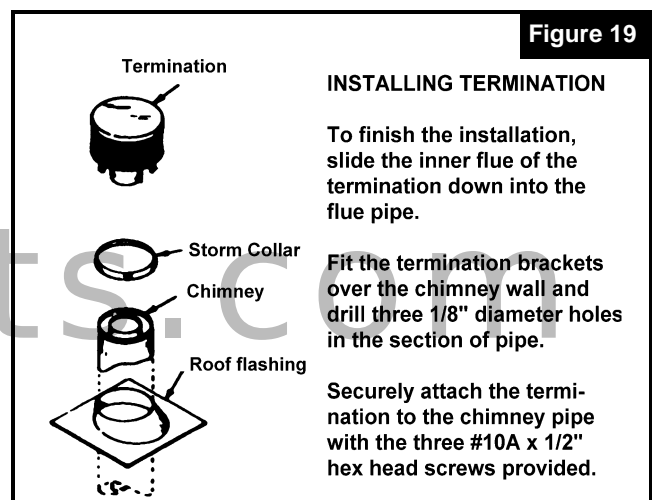
ditional information.

CHASE INSTALLATIONS

1. A chase is an enclosure for the fireplace and/or chimney that is attached to the outside of the house. It may start at the basement floor line, at the first level or at some point on the side of the wall. A chase may also be used to enclose a chimney from the point where it penetrates the roof, to slightly below the termination cap.
2. The floor under the fireplace must be a solid, continuous level surface. Many local building codes also require a firestop spacer in the chase at the ceiling level in the house. Consult your local building codes to determine the requirements for chase installations in your area. Remember that all chimney components must have an absolute minimum of 1" air space from combustible materials. Plan the dimensions of your chase accordingly.
3. A chase should be constructed and insulated like any

other exterior wall in your home.

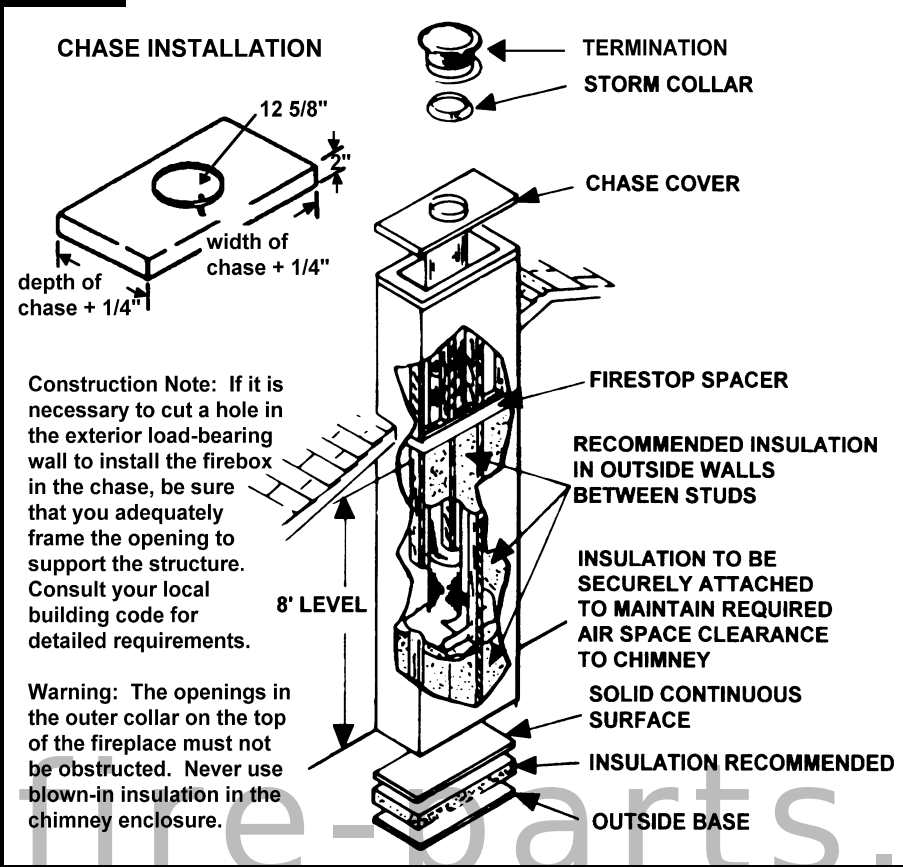
4. A metal cover made by a local sheet metal shop is required to complete a chase installation. This cover becomes a flashing that prevents water from entering the chase. The chase cover should be sealed at the corners. A minimum 1" high collar is required at the point where the chimney pipe or slip section will penetrate the chase cover. It requires 12 5/8" diameter collar for 36" models, 13 5/8" for 39" and 42" models. The seam at the base of the collar must be watertight. It may be necessary to support the chase cover with framing members if the cover is large or has multiple caps. Required clearance to combustibles must be maintained. Spacers (1/4" high) should be used to space the chase cover above the wood framing to minimize conduction of heat to the wood.
5. These fireplaces may be installed in a chase using Model 8203D termination cap. **All sections of the chimney must extend 6" above the chase cover when the 8203D termination is used.** Install the storm collar over the 1" collar on the chase cover and caulk between storm



collar and pipe. The termination is installed to the chimney pipe above the chase cover as described in figure 19.

6. If a flush mount is desired, model STD-22 Round Chase Cap, ARC-52 or ARC-12 Architectural Caps, PRC-12 or LPC-12 Pyramid Caps, or TCS12 Conical Cap may be used. When used, the last chimney section must be no more than 12" below the chase cover collar. All slip sections require a minimum 3" lap into the last chimney section. Refer to separate installation instructions for each termination for details.
7. It is recommended, but not required, that you insulate underneath the fireplace and between the studs on the outside wall of the chase to reduce heat loss in cold climates. Be sure to use noncombustible insulation without paper or plastic backing. **Never use blown-in type insulation in a chase. Insulation should never cover the top or sides of the fireplace or any part of the chimney system.** To further reduce heat loss, it is recommended that 1/2" gypsum wallboard be installed over the insulation on the inside of the chase. Plan chase dimensions accordingly.
8. Chases with two or more chimneys should be constructed wide enough to allow chimneys to be spaced at least 24" on center from each other. When chimneys are closer than this, smoke from one may be drawn down the flue of the adjacent chimney. When chimneys must be installed closer than this, smoke transfer may be prevented by vertically offsetting adjacent terminations by 12" to 18" or by installing 12" to 18" high sheet metal

Figure 20



NOTE: A minimum 1/2" clearance from the gas pipe must be maintained within 4" of the fireplace, (see figure 21).

To install the gas line, use a hammer and punch gently to knock a hole through the refractory at the emboss. Remove the insulation from the inlet tube. Run the line to just outside the gas inlet hole of the fireplace. Slide a 1/2" gas line nipple through the tube and attach to the line. Finish installation by either capping gas line inside fireplace or by attaching an approved gas appliance in accordance with its installation instructions. Re-install insulation around the gas line to seal between the gas line and gas conduit. Seal around the gas line and the refractory with refractory cement.

CAUTION: When using a decorative appliance, the fireplace damper must be set in the fully open position.

RECOMMENDED COLD CLIMATE INSTALLATIONS

The insulation and sealing of the enclosure around the fireplace is very important in cold climates. If the enclosure is insulated and sealed properly, you can avoid future cold air problems. The time taken to install the firebox correctly is well worthwhile. The following steps are

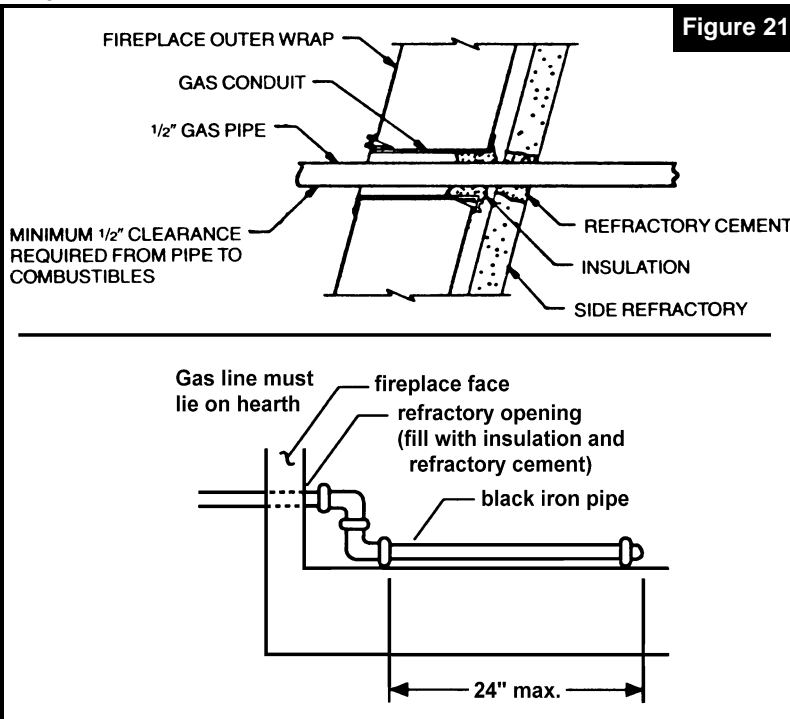
INSTALLING A GAS LINE

All Temco fireplaces are designed to accept a 1/2" gas line for a decorative gas appliance complying with Z21.60 Standard for decorative gas appliances for installation in vented fireplaces. The decorative appliance must be installed in accordance with its installation instructions and the National Fuel Gas Code ANSI Z223.1. The fireplace has a factory installed tube for insertion of the gas line. Refer to page 4 for gas line inlet location.

recommended to stop potential cold air problems.

INSULATION OF THE FIREPLACE ENCLOSURE

When in a chase or on an outside wall, the fireplace enclosure should be insulated like any other outside wall. Insulation should be installed on the outside walls and the wall above the fireplace. It is also recommended in chase installations to install a firestop at the first ceiling level above the fireplace and seal the remaining area with either sheet metal or 1/2" gypsum wallboard. Insulation may then be



installed above the sheeting material. Required clearances to the chimney pipe must be maintained. Lining the interior walls of the fireplace enclosure with gypsum wallboard will further reduce cold air infiltration, (see figure 22.)

INSULATE TO SEAL UNDER THE FIREPLACE

Insulating under the fireplace is beneficial for installations on a concrete slab. The fireplace should be placed on insulating board. It is important that a hard, rigid surface be maintained, so do not use fiberglass insulation for this purpose. In a chase that cantilevers outside the house, it is beneficial to insulate between the floor joists.

CAUTION: When installing a fireplace in an insulated enclosure, be sure to maintain all marked air spaces.

SEAL SEAMS

Seal between the fireplace and finishing materials. Use high temperature caulk. See figure 23 for the details of sealing spaces between the fireplace and finishing materials. Note the small amount of insulation installed across the top of the fireplace and down the sides as a backing for the caulk.

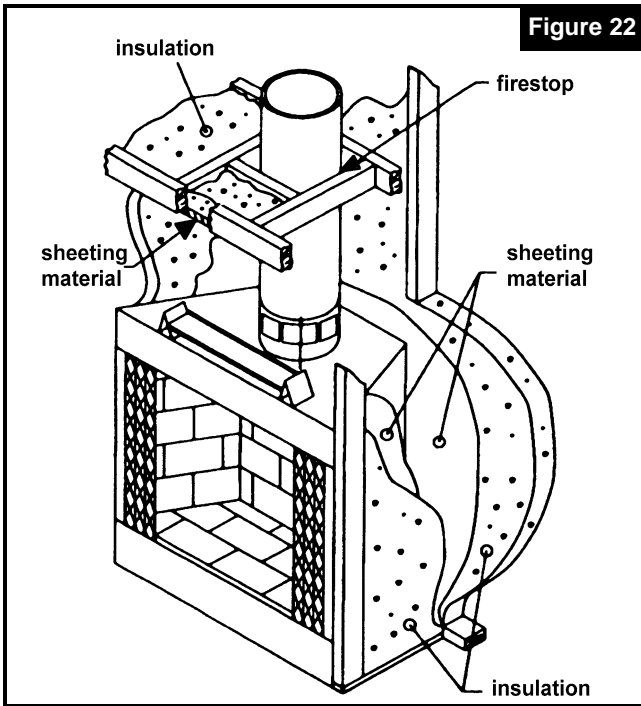


Figure 22

MOBILE HOME INSTALLATION

TLC36-3MB and TLC42-4MB fireplaces are Underwriters Laboratories listed for installation in a mobile home with TEMCO double-wall 8" air-cooled chimney and components. The installation of this fireplace in a mobile home is similar to its installation in site construction with the following exceptions:

1. The fireplace must be secured to the floor of the mobile home by means of tabs on each side.
2. Only one elbow set may be used per fireplace system. A minimum height of 13'6" must be maintained when elbows are used.
3. TEMCO glass doors, firestop thimble and model AIR-3B combustion air kit and BL-1 must be installed for mobile home use. The duct for the combustion air kit may go through the floor or the side wall of the mobile home.
4. See figure 24 for minimum system height. The height of the system is measured from the base of the fireplace and includes 6" of the chimney cap.

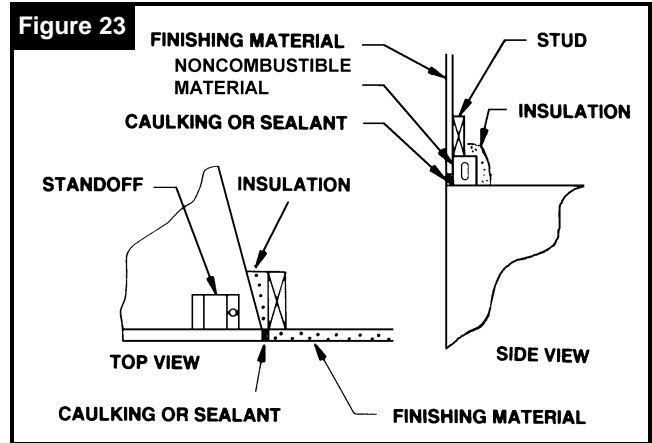


Figure 23

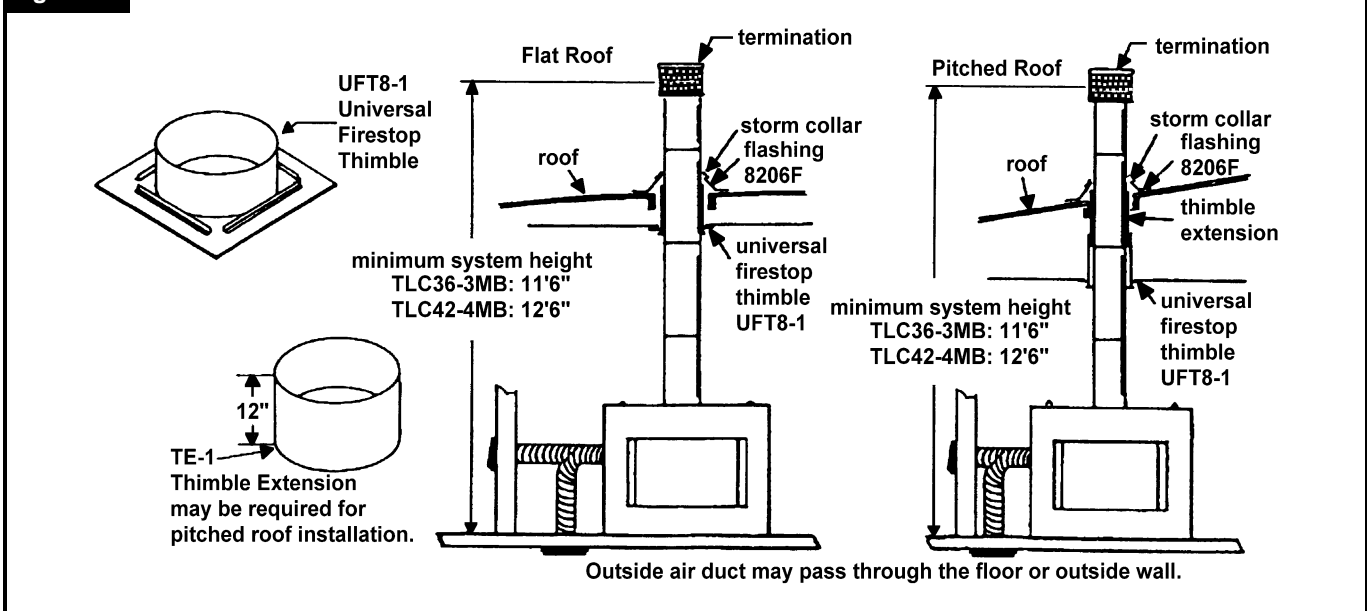
5. A firestop thimble is required in all mobile home installations. The TEMCO Model UFT8-1 universal firestop thimble may be used for flat and vaulted mobile home ceilings (0° to 30°).

The firestop thimble is designed to eliminate the need to cut trusses when installing the 8" chimney between standard mobile home roof trusses fabricated on 16" centers. Locate and mark the center of the chimney on the mobile home ceiling. Cut a 14 1/2" square in the ceiling. Position the firestop thimble with the flanges up and with the cylindrical portion extending up into the hole. Nail the firestop thimble securely to the framing. The firestop thimble has a 10" sleeve that functions as a heat shield. This collar must extend from the ceiling level into the roof flashing. A firestop thimble extension model TE-1 is required if the thickness of the ceiling is such that the heat shield on the thimble does not extend into the roof flashing. The thimble extension slips into the firestop thimble and is fastened to the thimble with sheet metal screws. A model 8206F roof flashing, storm collar, and the TEMCO 8203D termination cap are required to complete the installation.

WARNING: Do not install a fireplace in a sleeping room of a mobile home.

6. See BL-1 instructions for wiring procedures.
- CAUTION: The structural integrity of the mobile home floor, wall, ceiling, roof trusses and any other struc-**

Figure 24 Mobile Home Installa-



FINISHING YOUR FIREPLACE

There are a wide variety of finishing materials available for your TEMCO fireplace from formal wall treatments with marble and mantels to rustic wood paneling, stone or brick. It is important that the black face of the fireplace not be covered with any type of combustible material. Non-combustible facing materials such as marble, brick or ceramic tile may overlap the black face of the fireplace but must not cover louvered vents above and below the opening. Seal all joints between the black fireplace face and the wall covering with a heat-resistant material such as rock wool insulation or mortar. Be sure to use high temperature adhesive or mortar when anchoring brick, stone or tile to the face of the fireplace. Check to see whether man-made brick

and stone are made of non-combustible materials before using them on the face of the fireplace. Some of these products contain combustible materials. Combustible wall coverings such as paneling or wallboard may not overlap the black face of the fireplace. The space between the wall covering and the fireplace should be sealed with a heat-resistant material such as rock wool insulation or mortar.

NOTE: An "L" shaped steel lintel must be installed across the top of the firebox opening where facing materials such as brick or stone are used on the face of the firebox. It acts as a support/firestop. It should be attached to the face of the fireplace with screws and sealed to the fireplace with a heat-resistant sealer.

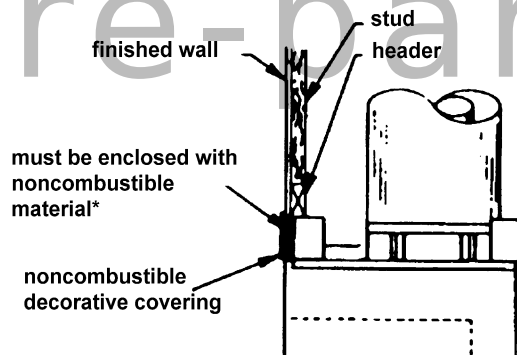
Figure 25

WALL TREATMENTS

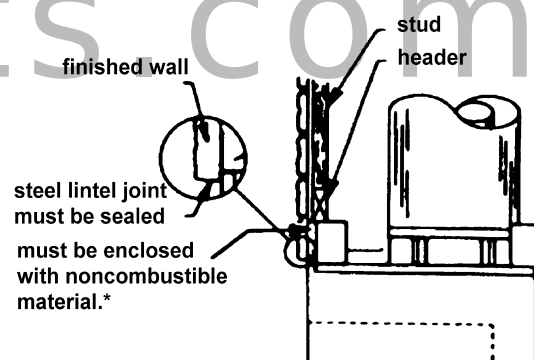
Louvered Models: Noncombustible decorative facing materials may cover the black face up to the louvered air inlets and outlets. Louvers above and below the screened opening and air inlets behind the screened opening must not be blocked.

Flush Face Models: Noncombustible decorative facing materials may cover the black face up to the screened opening except for the air inlets below the opening on 39" and 42" models. Air inlets below and behind the screened opening must not be blocked.

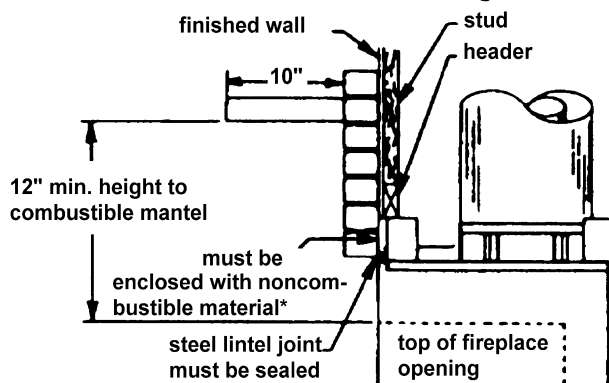
A. Wallboard with Marble, Slate or Tile Facing



B. Brick or Stone Facing

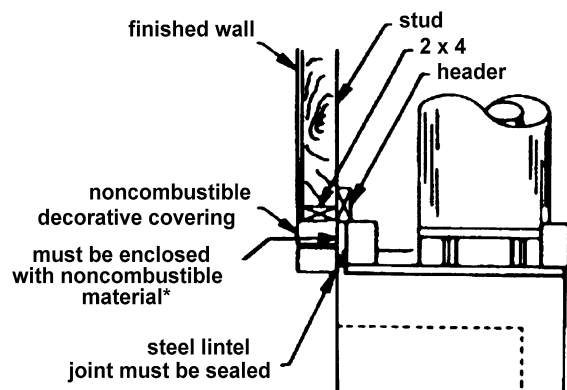


C. Wall and Facing Are Flush Combustible Mantel Height



* Noncombustible material must enclose space between top of standoff and top of fireplace front. Examples of noncombustible materials are:

D. Wall and Facing Are Not Flush



*NON-COMBUSTIBLE MATERIALS

- U.S. Gypsum Sheetrock Firecode "C"
- U.S. Gypsum Micore MC180 to MC300
- Johns-Manville Cera Form Board
- Conwed Corp. Conwed Spec 300
- Other inorganic materials

Figure 26

MANTEL PROJECTION
Mantel legs may project along the radiation line as illustrated.

A	B
6" min.	2 5/8"
7" min.	3"
8" min.	3 1/2"
10" min.	4 3/8"
12" min.	5 1/4"

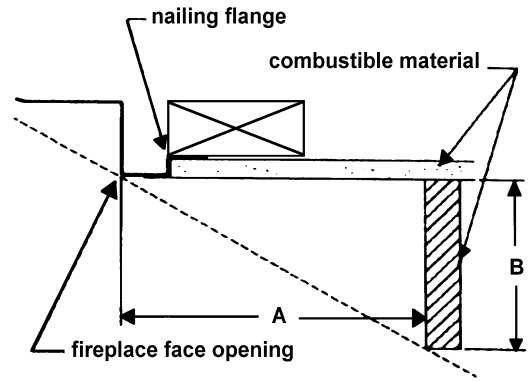
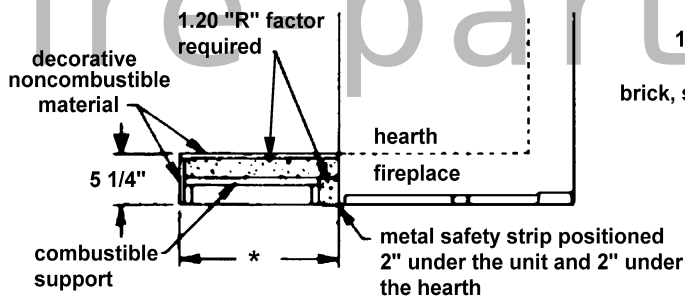
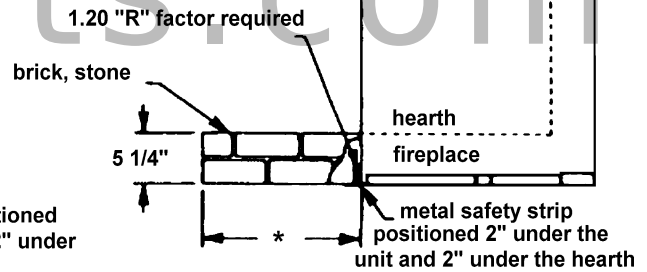


Figure 27 Hearth Installa-

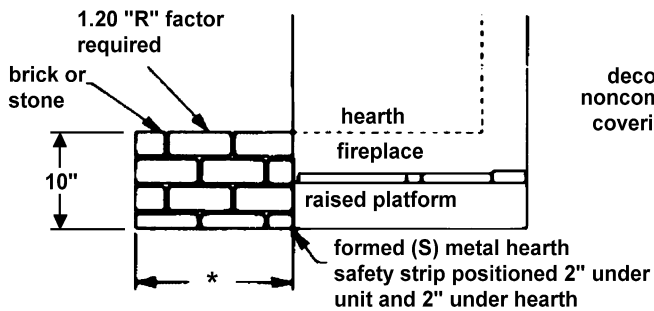
A. RAISED HEARTH INSTALLATIONS (see pages 6 & 7 for Flush Face models only R-Factor detail)



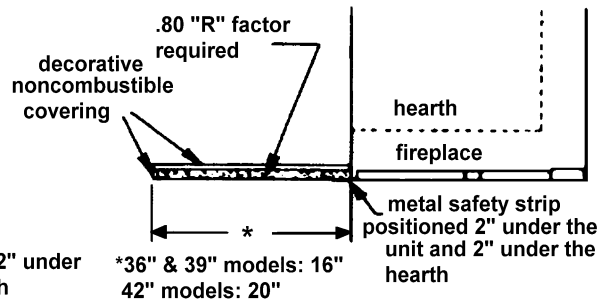
C. RAISED HEARTH: Flush Face models only



B. RAISED HEARTH, RAISED FIREPLACE: Flush Face models only
(No combustible support for the hearth)



D. HEARTH FLAT ON FLOOR: All models



USING YOUR FIREPLACE

1. Open the firescreen by grasping the handles and pushing them back to each side.
2. The flue damper rod is located behind the mesh screens. To open the damper, slide the rod to the right. To close, slide the rod to the left.
3. If the combustion air kit has been installed, the inlet air damper should be in a fully open position before you start a fire. Reach behind the screen and release the control rod on the front of the left side of the firebox. To open, turn the control until it is pointing down. To close the damper, rotate the control rod counterclockwise until it is pointing to the three o'clock position. The control rod will lock in the closed position and swing free in the open position.
4. A TEMCO fireplace grate must be used in this fireplace. It is pre-installed at the factory as an integral part of the fireplace.
5. Light a piece of crumpled paper and hold it high inside the fireplace. This will warm the flue and start the chimney "drawing".
6. Light the paper in the grate and add kindling. As the kindling catches, add more or heavier wood until the fire is well established. Be careful not to "smother" the fire.
7. **WARNING: NEVER USE GASOLINE, GASOLINE-TYPE LANTERN FUEL, KEROSENE, CHARCOAL LIGHTER FLUID OR SIMILAR LIQUIDS TO START OR FRESHEN UP A FIRE IN THIS FIREPLACE. KEEP ALL SUCH LIQUIDS WELL AWAY FROM THE FIREPLACE WHILE IT IS IN USE.**
8. Close the right firescreen first and then the left firescreen, being sure that they overlap. Keep the firescreens closed at all times except when adding fuel.
9. Ashes that build up from burning logs must be removed periodically to allow space for air to move under and up through the fuel for combustion. If these ashes are allowed to accumulate until the air flow is blocked, the grate may become badly warped from excessive heat.
10. A fireplace needs a steady supply of air in order to draw properly. Many houses or apartments which are well sealed lack sufficient air for normal operation. Ventilating fans, exhaust hoods or central heating systems often cause fireplaces to smoke by stealing the fireplace's combustion air. If the volume is enough, it can reverse the flow of air in the fireplace and cause smoking.
11. **Use solid wood for fuel. Use dry and well seasoned wood. Do not burn scrap construction lumber; it produces excessive sparks. Never use woods dipped in tar, pitch, creosote, etc. as this produces sputtering, smoking fires with toxic fumes. Do not use wood products with synthetic binders like plywood or artificial logs as these produce abnormally high temperatures and may cause deterioration of chimney material.**
12. **DO NOT OVER-FIRE WITH EXCESSIVE FUEL LOADS SUCH AS LUMBER, WRAPPING PAPER, CHRISTMAS TREES, ETC. THE FIREPLACE IS OVER-FIRED IF THE TOP OF THE FLAMES ARE GOING UP INTO THE CHIMNEY OR LICKING OUT OF THE FIREBOX. OVER-FIRING WITH THE GLASS DOORS IN THE CLOSED POSITION CAN CAUSE THE GLASS TO SHATTER RESULTING IN PROPERTY DAMAGE AND/OR PERSONAL INJURY. TEMCO DOES NOT WARRANT THE GLASS AND IS NOT RESPONSIBLE FOR CONSEQUENTIAL PROPERTY DAMAGE AS STATED IN THE SEPARATE GLASS DOOR WARRANTY.**
13. **Creosote Formation and Need for Removal:** When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. If ignited, this creosote makes an extremely hot fire. The chimney should be inspected at least twice a year during the heating season to determine if a creosote buildup has occurred. If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.
14. **CHARCOAL AND COAL MAY NOT BE BURNED IN THIS FIREPLACE.**
15. **NEVER CLOSE ANY DAMPERS UNTIL YOU ARE CERTAIN THAT THERE ARE NO WARM EMBERS.**
16. When the fire has gone completely out, close all dampers. This will prevent excessive heat loss up the chimney and excessive water on the hearth. If a combustion air kit is installed, close the inlet air damper.
17. The brick-like refractory on the floor, back and sides is reinforced with steel but can be cracked and broken. Don't drop logs or build fires directly against refractories. A careful "burn-in" of your fireplace is recommended during initial use. For the first few fires, build modest fires. This will cure the refractories properly. Hairline cracks may appear in the refractories but do no harm to their performance.
18. It is important for the chimney to be high enough to draw properly. The chimney should extend 3' above the highest point where it passes through the roof and 2' above any portion of the roof horizontally within 10'. See pages 9 and 10.
19. **Disposal of Ashes:** Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.
20. **WARNING: THIS FIREPLACE IS NOT INTENDED TO BE USED WITH ANY COMPONENTS OTHER THAN THOSE SPECIFIED IN THIS MANUAL (i.e. FIREPLACE INSERTS, BLOWERS, GLASS DOOR EXTENSIONS, HEAT CIRCULATORS). USE OF THESE ITEMS COULD RESULT IN A SERIOUS FIRE HAZARD.**
21. **Access to chimney for cleaning:** To remove the termination cap, remove the three #10A x 7 hex-head screws from the termination brackets. Grasp the skirt with one hand on each side and pull up. To replace the cap, reposition the termination cap on the chimney pipe and align the termination brackets with the holes in the pipe. Securely attach the termination cap to the chimney with the three screws removed earlier.
22. **WARNING: FIREPLACES EQUIPPED WITH DOORS SHOULD BE OPERATED ONLY WITH DOORS FULLY**



RIGHT



WRONG



RIGHT

OPEN OR DOORS FULLY CLOSED. IF DOORS ARE LEFT PARTLY OPEN, GAS AND FLAME MAY BE DRAWN OUT OF THE FIREPLACE OPENING, CREATING RISKS OF BOTH FIRE AND SMOKE.

REPLACEMENT PARTS**The following replacement parts are available from your TEMCO dealer.**

Description	Quantity	Part #		
		42"	39"	36"
1. Firescreen rod, straight	2	3T65864	3T65730	3T65648
2. Screws for screen rods	2	1A68188	1A68188	1A68188
3. Firescreen with rings	2	1T62197	1T66146	1T66146
4. Screen retainer	4	1A62222	1A62222	1A62222
5. Refractory retainer, right side	1	2B70358	2B70358	2B68316
6. Refractory retainer, left side	1	2B70358	2B70358	2B68339
7. Refractory retainer, front	1	-	-	2C68372
8. Screws for refractory retainers	2	1A68188	1A68188	1A68188
9. Right side refractory	1	2D70355	2D70355	2D68337
10. Left side refractory	1	2D70355	2D70355	2D68338
11. Back refractory	1	2D70357	2D70425	2D66993
12. Bottom refractory	1	2D70354	2D70424	2D68336
13. Integral grate	1	1D70361	1D68373	1D68373
14. Grate retaining bracket	2	2B66130	2B66130	2B66130

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