



Heatilator Inc.  
1915 W. Saunders Street  
Mt. Pleasant, IA 52641  
Division, HON INDUSTRIES

# ST42A INSTALLATION & OPERATING INSTRUCTIONS FOR RESIDENTIAL USE

## I. LISTINGS AND CODE APPROVALS

This fireplace system has been tested in accordance with Underwriters Laboratories Inc. Standards, and has been LISTED by them for installation and operation as described in these Installation Instructions and in the Operating Instructions accompanying each fireplace.

Fireplace Catalog Number ST42A has been tested and LISTED for use with the Optional Components described in Section II of these Instructions. These Optional Components may be purchased separately and installed either at the time of initial installation or at some later date. However, installation of the Outside Air Kit will require significant reconstruction, and should be installed at the time of initial installation. Installation of the Outside Air Kit is recommended. Glass Doors are required on this fireplace system. Glass Door Kits suitable for this model are listed on Page 2 under THE FIREPLACE SYSTEM COMPONENTS.

Check with your local building code agency before you begin installation to ensure compliance with local codes, including the need for "permits" and follow-up inspections. If any problems are encountered regarding code approvals, or if you wish clarification of any of the instructions contained here, contact: Customer Relations Department, Heatilator Inc., 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641. HEATILATOR® is a registered trademark of Heatilator Inc., Division, HON INDUSTRIES.

### WARNING

**THIS HEATILATOR FIREPLACE AND ITS COMPONENTS ARE DESIGNED TO BE INSTALLED AND OPERATED AS A SYSTEM. ANY ALTERATION TO OR SUBSTITUTION FOR ITEMS IN THIS SYSTEM UNLESS ALLOWED BY THESE INSTALLATION INSTRUCTIONS WILL VOID THE UNDERWRITERS LABORATORIES LISTING AND MAY VOID THE PRODUCT WARRANTY. IT MAY ALSO CREATE A HAZARDOUS INSTALLATION. READ THROUGH THESE INSTRUCTIONS THOROUGHLY PRIOR TO STARTING YOUR INSTALLATION AND FOLLOW THEM CAREFULLY THROUGHOUT YOUR PROJECT.**

## II. DESCRIPTION OF THE FIREPLACE SYSTEM

The HEATILATOR® fireplace system consists of the following:

- |                     |                     |
|---------------------|---------------------|
| 1. Fireplace        | 4. Chimney System   |
| 2. Glass Doors      | 5. Roof Termination |
| 3. Hearth Extension |                     |

Optional components include:

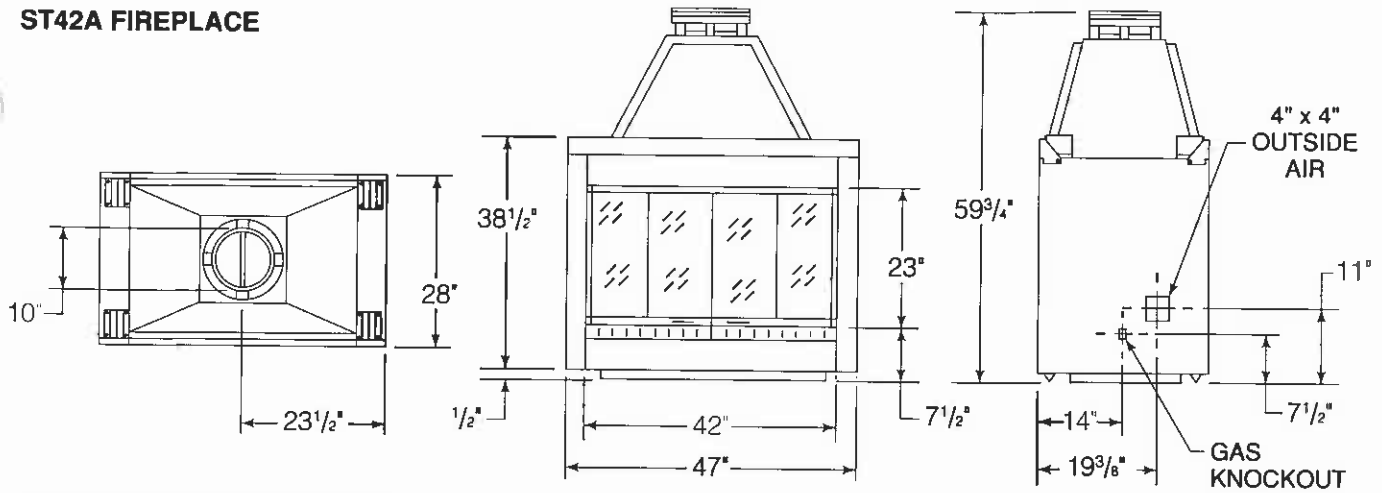
1. Outside Combustion Air System

### THE FIREPLACE SYSTEM COMPONENTS

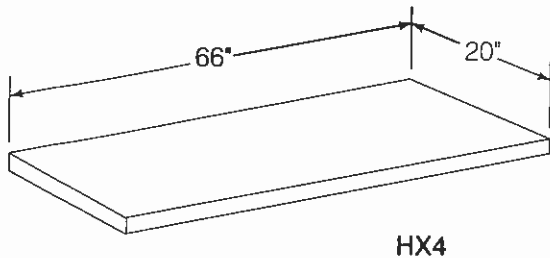
The table below, together with the following pictures, show only those components which may be safely used with this fireplace.

Catalog Number	Description
ST42A	See-Thru Non-Circulating Fireplace
HX4	Hearth Extension
GT42A1	Glass Doors - Bifold, Clear-View, Antique Solid Brass
GT42B1	Glass Doors - Bifold, Clear-View, Bright Solid Brass
A1242B	Designer Series Arch Bifold Glass Doors - Polished Brass Finish
C1242A	Classic Bifold Glass Doors - Brushed Brass Finish
C1242B	Classic Bifold Glass Doors - Polished Brass Finish
C1242C	Classic Bifold Glass Doors - Chrome Finish
C2242A	Classic Cabinet Glass Doors - Brushed Brass Finish
C2242B	Classic Cabinet Glass Doors - Polished Brass Finish
C2242C	Classic Cabinet Glass Doors - Chrome Finish
D1242B	Designer Series Bifold Glass Doors - Polished Brass Finish
AK17	Outside Air Kit (Included)
ID4	Insulated Duct/Outside Air
UD4	Uninsulated Duct/Outside Air
SL406	Chimney Section - 6 inch long
SL412	Chimney Section - 12 inch long
SL418	Chimney Section - 18 inch long
SL436	Chimney Section - 36 inch long
SL448	Chimney Section - 48 inch long
SL4	Chimney Stabilizer
SL430	Chimney Offset/Return - 30°
FS538	Firestop - Straight
FS540	Firestop - 30°
JB577	Chimney Joint Band
CB576	Chimney Bracket
RF570	Roof Flashing - Flat to 6/12 Pitch
RF571	Roof Flashing - 6/12 to 12/12 Pitch
RT492	Telescoping Chimney Terminal Cap - Round
RT494	Chimney Terminal Cap - Round
ST475	Chimney Terminal Cap - Square
ST476	Telescoping Chimney Terminal Cap - Square
CT56	Chase Top

**ST42A FIREPLACE**

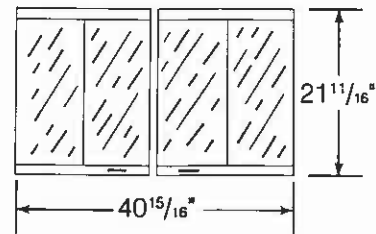


**HEARTH EXTENSION**



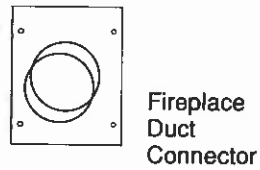
HX4

**GLASS DOORS**

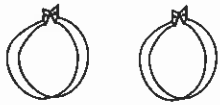


GT42A1, GT42B1, A1242B  
C1242A, C1242B, C1242C  
C2242A, C2242B, C2242C, D1242B

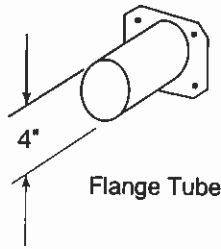
**AIR KIT**



Fireplace Duct Connector



Clamp Bands

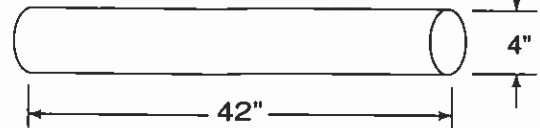


Flange Tube

AK17

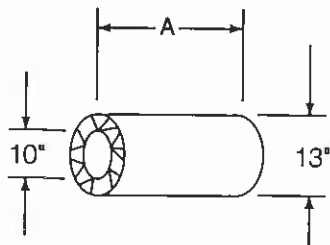


ID4



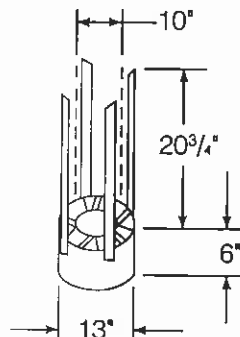
UD4

**CHIMNEY SECTIONS**



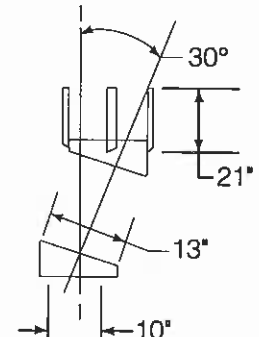
CAT. NO.	A
SL406	6"
SL412	12"
SL418	18"
SL436	36"
SL448	48"

**CHIMNEY STABILIZER**



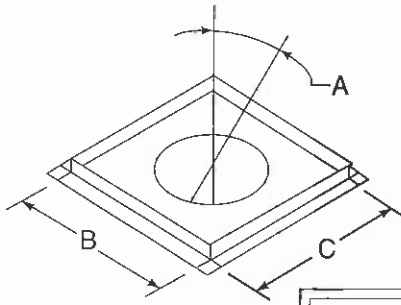
SL4

**OFFSET/RETURN**



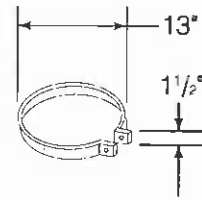
SL430

**FIRESTOP SPACERS**



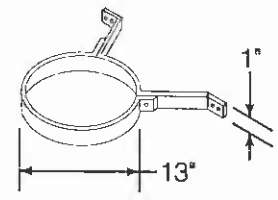
CAT. NO.	A	B	C
FS538	0°	17"	17"
FS540	30°	26"	17"

**JOINT BAND**



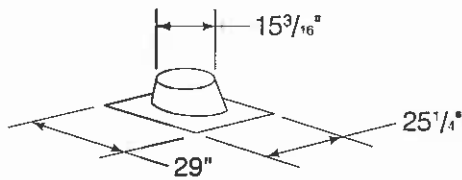
JB577

**CHIMNEY BRACKET**

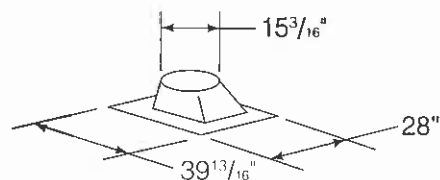


CB576

**ROOF FLASHINGS**

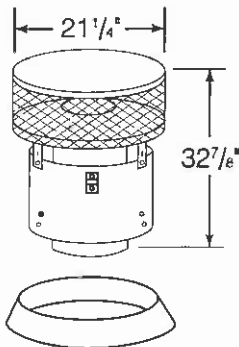


Flat to 6/12 Pitch  
RF570

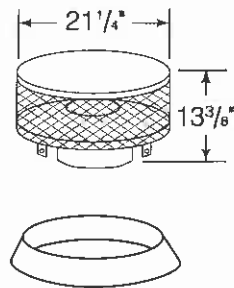


6/12 to 12/12 Pitch  
RF571

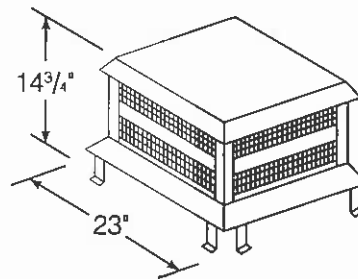
**CHIMNEY TERMINAL CAPS**



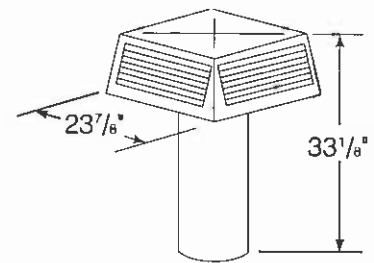
RT492  
ROUND  
TERMINAL CAP



RT494  
ROUND  
TERMINAL CAP

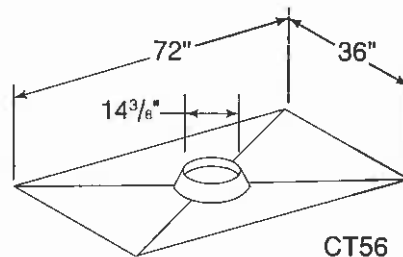


ST475  
SQUARE  
TERMINAL CAP



ST476  
SQUARE  
TERMINAL CAP

**CHASE TOP**



CT56

### III. FIREPLACE LOCATIONS, SPACE AND CONSTRUCTION REQUIREMENTS

The fireplace may be located as shown in Figure 1 depending on your unit.

Figure 1 shows the minimum distance to combustible surfaces for side walls and for walls facing the open front of the fireplace, as well as minimum Hearth Extension dimensions.

#### WARNING

**OUTSIDE AIR MUST NOT BE TAKEN FROM THE GARAGE SPACE. EXHAUST PRODUCTS OF GASOLINE ENGINES ARE HAZARDOUS.**

**DO NOT INSTALL OUTSIDE AIR DUCTS SUCH THAT THE AIR MAY BE DRAWN FROM ATTIC SPACES, BASEMENTS, OR ABOVE THE ROOFING WHERE OTHER HEATING APPLIANCES OR FANS AND CHIMNEYS EXHAUST OR UTILIZE AIR. THESE PRECAUTIONS WILL REDUCE THE POSSIBILITY FOR SMOKING OR FLOW REVERSAL.**

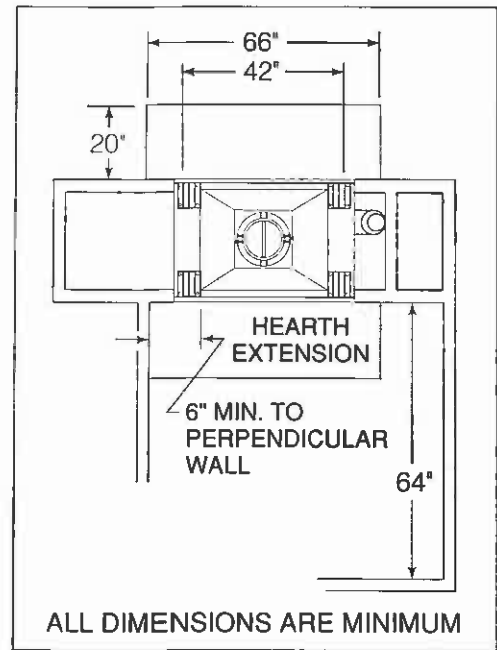


Figure 1  
Fireplace Location

Figure 2 shows a typical framing of the fireplace, assuming combustible materials are used. All required clearances to combustibles around the fireplace must be adhered to. Any enclosure on top of the fireplace must be above the top standoffs. Chimney Sections at any level require a minimum air space of two inches to the enclosure, including any framing, for the total chimney height.

#### WARNING

**TO PREVENT CONTACT WITH SAGGING OR LOOSE INSULATION, THE FIREPLACE MUST NOT BE INSTALLED AGAINST VAPOR BARRIERS OR EXPOSED INSULATION. LOCALIZED OVERHEATING COULD OCCUR AND A FIRE COULD RESULT.**

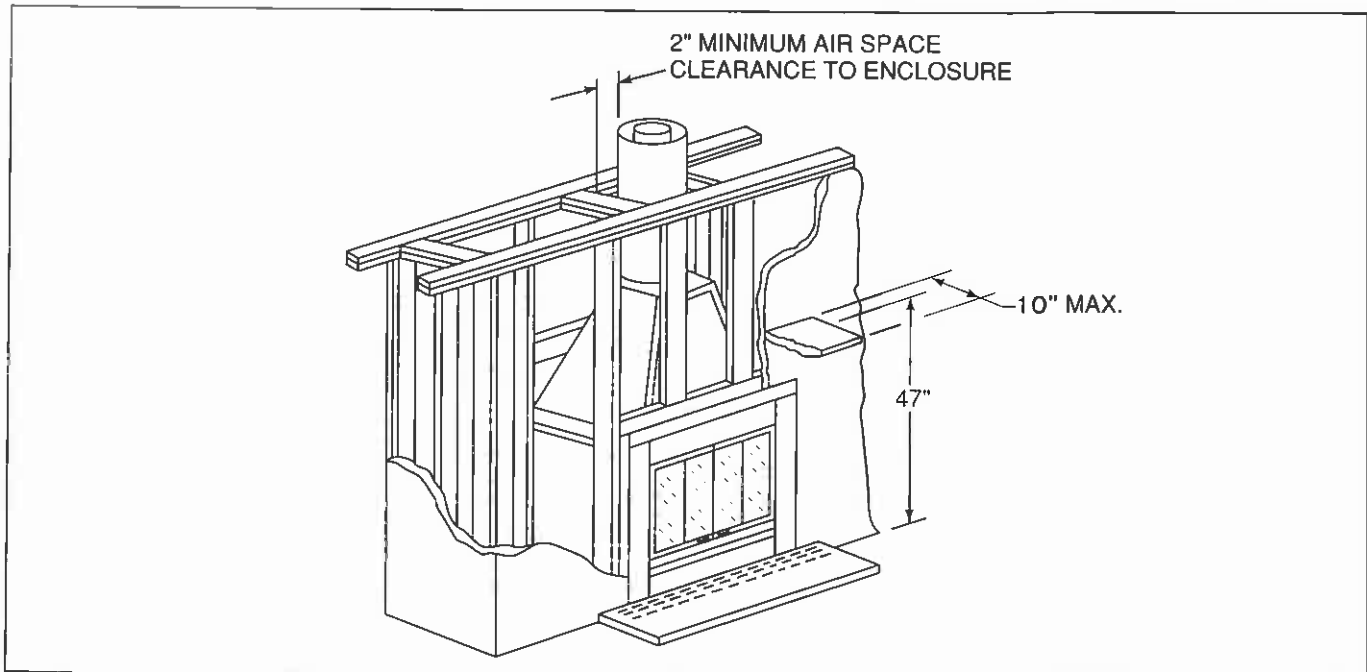
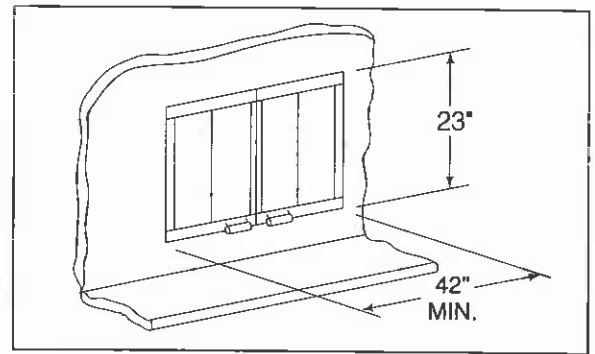


Figure 2  
Framing the Fireplace

After completing the framing and after applying the facing material over the framing, see Figure 3, a non-combustible sealant, one-half inch wide maximum, must be used to close off any gaps at the top and sides between the fireplace and facing, to prevent cold air leaks. A mantel of combustible material may be installed no less than 47 inches above the platform or floor upon which the fireplace is located. The mantel may extend no more than 10 inches from the wall.

Non-combustible materials may be used to cover the black fireplace front, but must not restrict the air flow to or from the front of the unit in any manner. The following is a description of materials specified in these instructions:



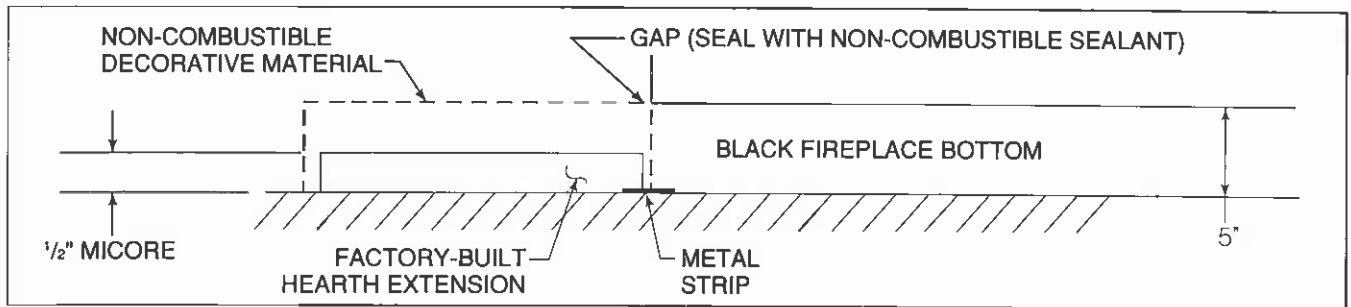
**Figure 3**  
Non-combustible Facing

**Combustible Material.** Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that will ignite and burn, whether flameproofed or not, or whether plastered or unplastered.

**Non-combustible Material.** Material which will not ignite and burn, such materials consisting entirely of steel, iron, brick, tile, concrete, slate, asbestos, glass or plasters, or combination thereof.

**Non-combustible Sealant Material.** General Electric RTV103 (Black), or equivalent. Rutland, Inc. Fireplace Mortar #63, or equivalent.

The use of factory-built Hearth Extensions is shown in Figure 4. These may be covered with a non-combustible decorative material with a maximum thickness of 4 1/2 inches. Seal gaps with non-combustible sealant.



**Figure 4**  
Factory-Built Hearth Extension

Field constructed Hearth Extensions may be used, but must be constructed in accordance with the following instructions. A typical construction is shown in Figure 5. In all cases of field construction, a minimum dimension of 20" to the front and extending 12" on either side of the fireplace opening must be used, and gaps must be sealed with non-combustible sealant.

**NOTE:** Do not cover any air grilles with a raised Hearth Extension.

NON-COMBUSTIBLE DECORATIVE COVERING OR .018 MIN. SHEET METAL

INSULATION MIN. R VALUE 1.16

EXAMPLES OF INSULATION		
	REQUIRED THICKNESS	K VALUE
USG MICORE CV230	1/2"	0.43

(THERMAL CONDUCTIVITY) "K" = BTU in./hr. ft<sup>2</sup> °F


TO SUBSTITUTE ALTERNATE INSULATION MATERIAL YOU NEED TO KNOW THE "K" FACTOR FOR THAT MATERIAL. TO CALCULATE THE REQUIRED THICKNESS FOR THE ALTERNATE MATERIAL USE THE FOLLOWING FORMULA:

$$\frac{K \text{ ALT.}}{.43} \times 5 = \text{THICKNESS OF ALTERNATE MAT (INCHES)}$$

EXAMPLE: "K" OF BRICK = 5

$$\frac{5}{.43} \times 5 = 5.81 \text{ IN. OF BRICK}$$

**Figure 5**  
Field Constructed Hearth Extensions

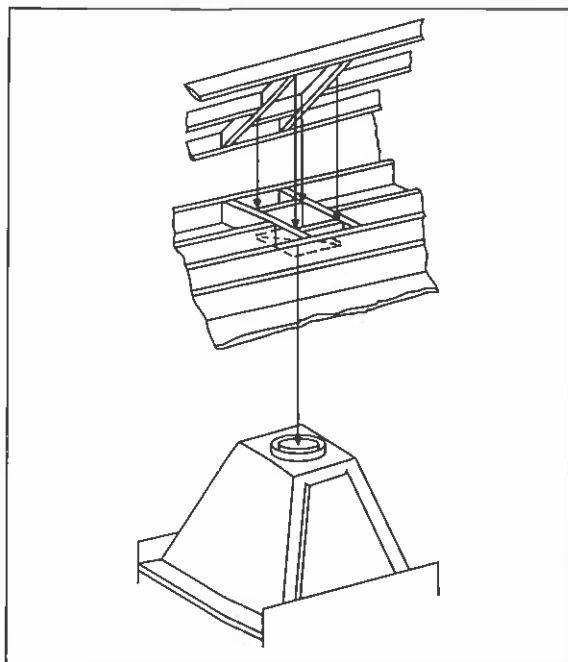
The construction illustrated in Figure 5 may require that the fireplace or Hearth Extension be raised on a platform. A metal strip must be used between the fireplace and the field constructed Hearth Extension. Depending on the construction, a special (  ) shape may be needed. Each horizontal leg must be 2" wide and the length must be at least equal to the length of the Metal Strip provided with each fireplace. The fireplace must rest on a continuous, level surface.

**WARNING**

**HEARTH EXTENSIONS ARE TO BE INSTALLED ONLY AS ILLUSTRATED TO PREVENT HIGH TEMPERATURES FROM OCCURRING ON CONCEALED COMBUSTIBLE MATERIALS. METAL STRIPS PREVENT BURNING OR HOT PARTICLES FROM INADVERTENTLY FALLING DIRECTLY ON COMBUSTIBLE SURFACES IN THE EVENT THE BUILDING SHOULD SETTLE AND DISTURB THE ORIGINAL CONSTRUCTION.**

When planning your fireplace location, the chimney construction and necessary clearance must be considered. Figure 6 illustrates a typical one floor with attic space installation in which joists and rafters may require modification. The fireplace system and chimney components have been tested to provide the following flexibility in construction.

Minimum straight height	14 ft.
Minimum height with Offset/Return	16 ft. 2 in.
Maximum height	90 ft.
Maximum chimney length between an Offset/Return	8 ft.
Maximum distance between Chimney Stabilizers	35 ft.
Double Offset/Return minimum height	22 ft.
Maximum unsupported chimney length between Offset/Return	6 ft.
Maximum straight unsupported chimney height above firebox	25 ft.



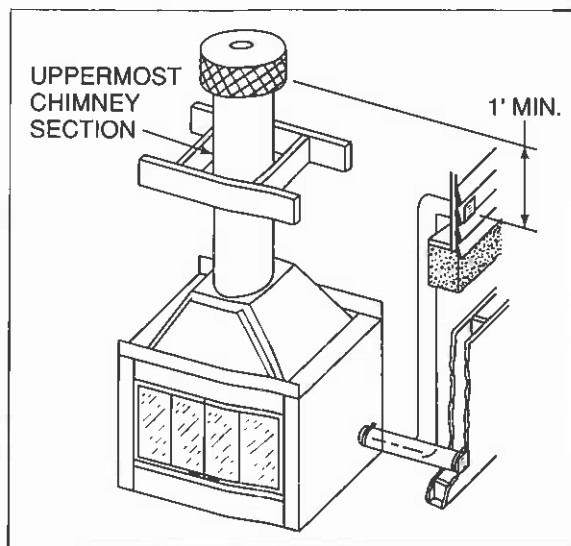
**Figure 6**  
Ceiling and Attic Construction

If Outside Combustion Air is used, Figure 7 illustrates only two of many possible locations - a basement fireplace with a vertical outside air arrangement; and a horizontal, direct exit from the fireplace side.

**NOTE:** A minimum height difference must be maintained from the top of the uppermost Chimney Section to the Outside Combustion Air inlet.

Major building codes specify a minimum chimney height above the roof top. These specifications are summarized in what is known as the "Ten Foot Rule". This rule states:

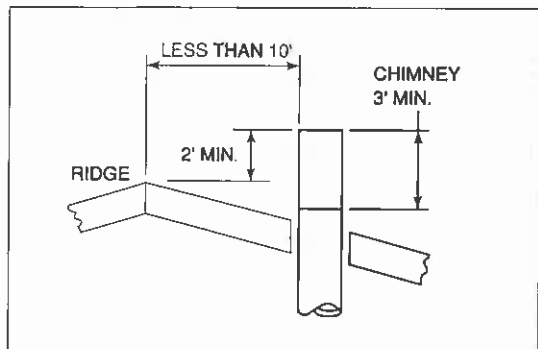
1. If the horizontal distance from the side of the chimney to the peak of the roof is 10 feet or less, the top of the chimney must be at least 2 feet above the peak of the roof, but never less than 3 feet in height above the highest point where it passes through the roof. See Figure 8.



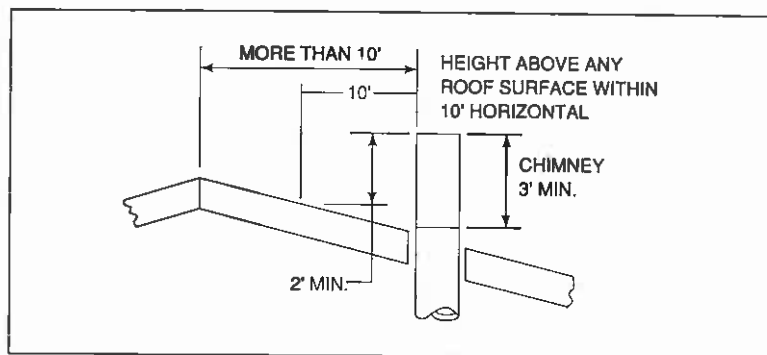
**Figure 7**  
Outside Locations

2. If the horizontal distance from the side of the chimney to the peak of the roof is more than 10 feet, a chimney height reference point is established on the surface of the roof a distance of 10 feet from the side of the chimney in a horizontal plane. The top of the chimney must be at least 2 feet above this reference point, but never less than 3 feet in height above the highest point where it passes through the roof. See Figure 9.

These chimney heights are necessary in the interest of safety and do not assure smoke-free operation. Trees, buildings, adjoining roof lines, adverse wind conditions, etc., may require a taller chimney should smoking occur.



**Figure 8**  
Chimney Height



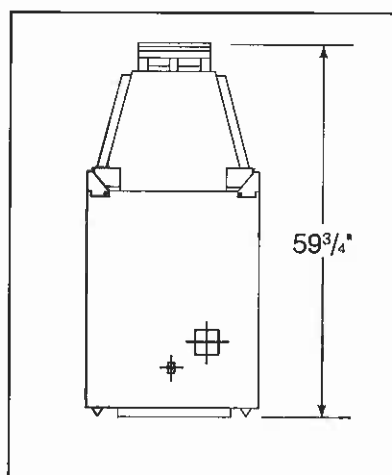
**Figure 9**  
Chimney Height

### SELECTING THE CHIMNEY COMPONENTS

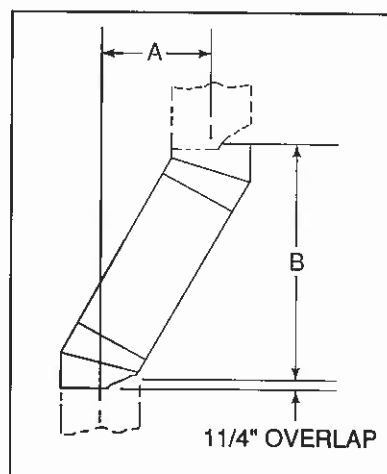
Figure 10 illustrates the height from the bottom of the fireplace to the top of the Chimney Adapter. Proper assembly of Air Cooled Chimney Sections results in an overlap at chimney joints of 1 1/4".

Figure 11 and Table 1 enable selection of the appropriate chimney components when using Offsets and Returns.

1. Determine amount of offset required to extend the chimney through a wall or around an obstacle. See Figure 11, dimension "A".
2. Refer to the following 30° offset chart and find the "A" dimension closest to but not less than the amount of offset required in your installation.



**Figure 10**  
Fireplace (Side View)



**Figure 11**  
Chimney Offset/Return

### WARNING

**DO NOT COMBINE OFFSETS TO CREATE AN OFFSET GREATER THAN 30° FROM VERTICAL. THIS MAY CREATE A FIRE HAZARD SINCE THE NATURAL DRAFT MAY BE RESTRICTED.**



3. Find the "B" dimension on the chart and determine if it is compatible with your installation.
4. Read across the chart and find the Catalog Number and number of Chimney Sections required.
5. Refer to the Step-By-Step Installation Instructions following the chart.
6. All joist areas must be Firestopped.

**TABLE 1**  
**30° Offset Chart** (Dimensions in Inches)

A	B	SL406	SL412	SL418	SL436	SL448
3 <sup>7</sup> / <sub>8</sub>	14 <sup>7</sup> / <sub>16</sub>	-	-	-	-	-
6 <sup>1</sup> / <sub>4</sub>	18 <sup>9</sup> / <sub>16</sub>	1	-	-	-	-
9 <sup>1</sup> / <sub>4</sub>	23 <sup>3</sup> / <sub>4</sub>	-	1	-	-	-
12 <sup>1</sup> / <sub>4</sub>	28 <sup>15</sup> / <sub>16</sub>	-	-	1	-	-
14 <sup>5</sup> / <sub>8</sub>	33 <sup>1</sup> / <sub>16</sub>	-	2	-	-	-
17 <sup>5</sup> / <sub>8</sub>	38 <sup>1</sup> / <sub>4</sub>	-	1	1	-	-
21 <sup>1</sup> / <sub>4</sub>	44 <sup>9</sup> / <sub>16</sub>	-	-	-	1	-
23 <sup>5</sup> / <sub>8</sub>	48 <sup>11</sup> / <sub>16</sub>	1	-	-	1	-
27 <sup>1</sup> / <sub>4</sub>	55 <sup>3</sup> / <sub>4</sub>	-	-	-	-	1
29 <sup>5</sup> / <sub>8</sub>	59 <sup>1</sup> / <sub>16</sub>	1	-	-	-	1
32 <sup>5</sup> / <sub>8</sub>	64 <sup>1</sup> / <sub>4</sub>	-	1	-	-	1
35 <sup>5</sup> / <sub>8</sub>	69 <sup>7</sup> / <sub>16</sub>	-	-	1	-	1
38	73 <sup>9</sup> / <sub>16</sub>	-	2	-	-	1
41	78 <sup>3</sup> / <sub>4</sub>	-	1	1	-	1
44 <sup>5</sup> / <sub>8</sub>	85 <sup>1</sup> / <sub>16</sub>	-	-	-	1	1
47	89 <sup>1</sup> / <sub>8</sub>	1	-	-	1	1
50 <sup>5</sup> / <sub>8</sub>	95 <sup>7</sup> / <sub>16</sub>	-	-	-	-	2

#### IV. STEP-BY-STEP INSTALLATION OF THE FIREPLACE SYSTEM

**WARNING**

**BEFORE STARTING, DO THE FOLLOWING:**

1. WEAR GLOVES AND SAFETY GLASSES FOR PROTECTION.
2. KEEP HAND TOOLS IN GOOD CONDITION. SHARPEN CUTTING EDGES AND MAKE SURE TOOL HANDLES ARE SECURE.
3. ALWAYS MAINTAIN THE MINIMUM AIR SPACE REQUIRED TO THE ENCLOSURE TO PREVENT FIRE.

**STEP 1**

Position the fireplace and secure the unit to the vertical framing.

**STEP 2**

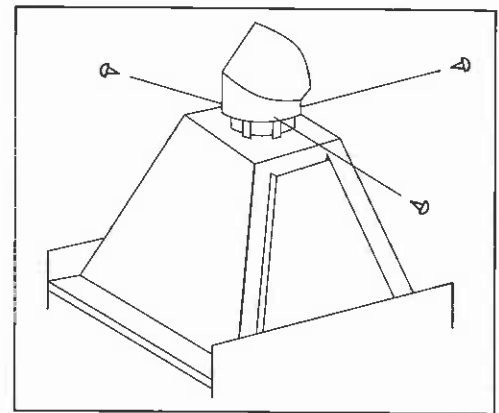
Slide the metal strip two inches under the front edge and bottom standoffs of the fireplace. When the metal strip is not provided as a single piece, then the individual pieces must overlap each other approximately one inch.

**STEP 3**

Level the fireplace side-to-side and front-to-back. Shim with non-combustible material as necessary.

**STEP 4**

Assemble either a straight Pipe Section or an Offset to the fireplace. Always secure all Offsets with the screws provided. See Figure 12.



**Figure 12**  
Offset Secured to Fireplace

**WARNING**

**FOLLOW THE INSTRUCTIONS FOR ASSEMBLY OF THE PIPE AND OTHER PARTS, WHICH ARE PACKED WITH EVERY PIPE SECTION AND ALL OTHER COMPONENTS NEEDED TO INSTALL THIS FIREPLACE SYSTEM. FAILURE TO DO SO MAY RESULT IN A FIRE, ESPECIALLY IF COMBUSTIBLES ARE TOO CLOSE TO THE FIREPLACE OR CHIMNEY AND AIR SPACES ARE BLOCKED PREVENTING THE FREE MOVEMENT OF COOLING AIR.**

**STEP 5**

Mark and cut out an opening in the ceiling for the particular Firestop Spacer being utilized. Frame the opening with the same size lumber used in the ceiling joists. See Chapter 25 of the Uniform Building Code for general construction requirements when "Framing Around Openings".

**STEP 6**

Install the Firestop Spacer FS538 (Straight), or FS540 (30° Offset, if Offset is located in the ceiling joist area). These Firestop Spacers are designed to provide the minimum two inch air space around the chimney. In all situations, the Firestops are to be nailed to the ceiling joists from the bottom or fireplace side, EXCEPT, when the space above the ceiling is an attic space. In this situation, the Firestop must be nailed from the attic side to ensure against loose or later blow-in-type insulation from falling into the required two inch air space around the chimney. Firestop Spacers must be used at all ceiling levels where the chimney penetrates a living space.

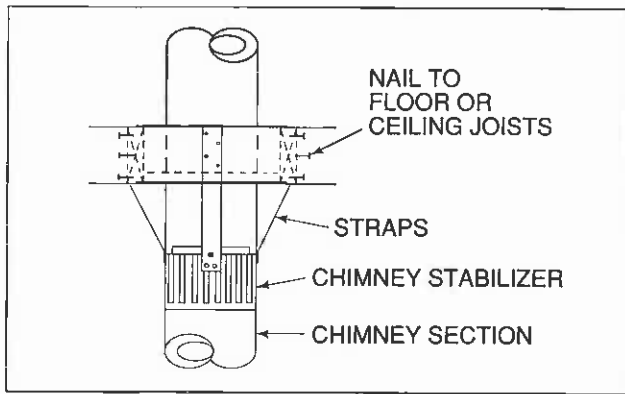
**STEP 7**

Continue assembling Chimney Sections up through the Firestop Spacers as needed. Check height and unsupported chimney length limitations described on Page 7.

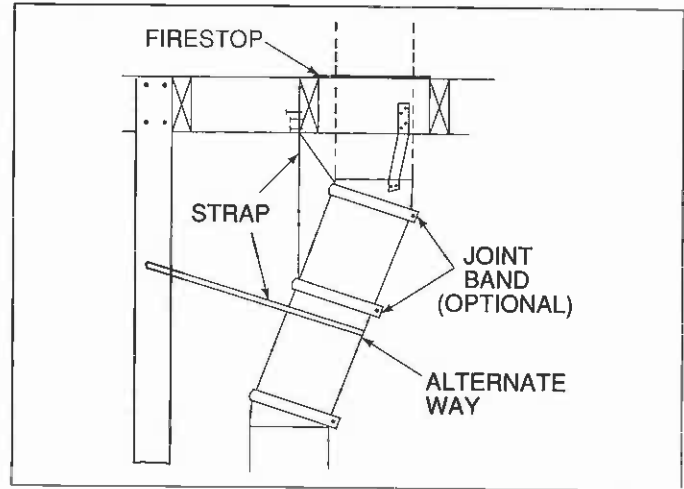
The maximum straight unsupported height is 25 feet above the firebox and 35 feet between Chimney Stabilizers.

**STEP 8**

When Offsets>Returns are joined to straight Pipe Sections, they must be locked in position with the size 10 sheet metal screws provided, using the predrilled holes. Offsets>Returns and Chimney Stabilizers have straps for securing these parts to joists or rafters. Plumbers tape may be purchased locally and used in conjunction with Joint Bands to secure the chimney as an alternate method. Chimney Brackets may be used to stabilize the chimney. See Figures 13 and 14.



**Figure 13**  
Chimney with Stabilizer



**Figure 14**  
Offset/Return Installation

**WARNING**

**WHEN CHIMNEY SECTIONS EXCEEDING 6 FEET IN LENGTH ARE INSTALLED BETWEEN AN OFFSET/RETURN, STRUCTURAL SUPPORT MUST BE PROVIDED TO REDUCE OFF-CENTER LOADING AND PREVENT CHIMNEY SECTIONS FROM SEPARATING AT THE CHIMNEY JOINTS.**

**STEP 9**

Locate the point where the chimney will exit the roof by plumbing down to the center of the chimney. Drive a nail through the roof to mark the center.

**STEP 10**

Measure to either side of the nail and mark the 17" x 17" opening required. This 17" x 17" is measured on the horizontal; actual length may be larger depending on the pitch of the roof. Cut out and frame the opening. See Chapter 25 of the Uniform Building Code for Roof Framing details.

**STEP 11**

Continue to add Chimney Sections through the roof opening, maintaining at least a 2" air space.

**STEP 12**

Install the Roof Flashing appropriate to the roof pitch and install one of these Terminal Caps: RT492 (Telescoping-Round) or RT494 (Round) following the Instructions shipped with these accessories. For chase installations, Terminal Caps ST475 (Square) or ST476 (Telescoping-Square) may be installed utilizing a Chase Top.

**WARNING**

**DETAIL INSTRUCTIONS FOR INSTALLATION OF THE ROOF FLASHING, STORM COLLAR AND TERMINAL CAP ARE FOUND PACKAGED WITH THESE PARTS. TO AVOID DANGER OF FIRE, ALL INSTRUCTIONS MUST BE STRICTLY FOLLOWED, INCLUDING THE PROVISION OF AIR SPACE CLEARANCE BETWEEN CHIMNEY SYSTEM AND COMBUSTIBLE ENCLOSURE. TO PROTECT AGAINST EFFECTS OF METAL CORROSION OF THE ABOVE PARTS, FIRST WASH THEM WITH A SOLVENT OR VINEGAR, RINSE WITH WATER, AND THEN PAINT WITH A RUST RESISTANT PAINT.**

### □ STEP 13

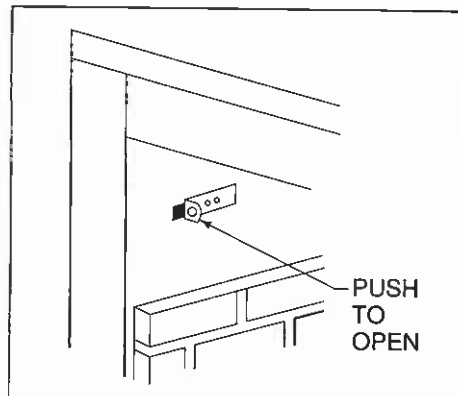
Installation of Outside Air is optional, but recommended. To install the Outside Air Kit, mark and cut out the location selected on the building for air entry. Apply caulking and/or insulation to the building side of the flange tube, and fasten it to the building.

Remove the Outside Air cover from the side of the unit and install the fireplace duct connector, using the same screws. Follow the instructions enclosed with the AK17 Outside Air Kit.

**NOTE:** If Insulated Duct, Catalog Number ID4, is used for Outside Air, the studs will compress the side of the Insulated Duct about 3/4 inch. Insulated or Uninsulated Duct, UD4, must be ordered separately.

#### **OUTSIDE AIR CONTROL HANDLE**

The outside air control handle is located in the upper left corner of the opening inside the firebox. See Figure 15. To open, push the handle towards the center of the fireplace opening.



**Figure 15**  
Outside Air Control

#### **CAUTION**

**SIGNIFICANT COLD AIR MAY INFILTRATE THROUGH THE DUCT OR OTHER PARTS OF THIS SYSTEM. TO GUARD AGAINST THIS, CHECK FOR LIGHT LEAKS WITH A FLASHLIGHT AND SEAL THESE WITH DUCT TAPE AND/OR INSULATION.**

### □ STEP 14

Finish framing the fireplace enclosure, allowing space for outside air ducts and gas piping if desired. Care must be taken with any electrical wiring to avoid exposure to high temperatures or mechanical damage to wire insulation. A minimum clearance of 1/2" must be maintained between the fireplace sides and the combustible enclosure. Check to make sure the blocks from STEP 1 have been removed.

### □ STEP 15

Knockouts are provided in the refractory to allow for connection of a decorative gas appliance incorporating an automatic shutoff device and complying with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60. The decorative gas appliance should be installed in accordance with the National Fuel Code, ANSI Z223.1-1980. This refractory is designed to allow 1/2" iron pipe to pass through. Use a non-combustible sealant to seal any opening between the gas pipe and refractory on the inside. Repack the insulation removed, to seal around the gas pipe where it exits the side of the fireplace.

#### **CAUTION**

- 1. WHEN USING THE DECORATIVE APPLIANCE, THE FIREPLACE DAMPER MUST BE SET IN THE FULLY OPEN POSITION.**
- 2. A FULLY OPEN DAMPER ENSURES PROPER VENTING OF COMBUSTION PRODUCTS.**

### □ STEP 16

Glass Doors are required on this fireplace system. Glass Doors suitable for installation on this appropriate model of fireplace are listed on Page 2 under the table THE FIREPLACE SYSTEM COMPONENTS. Protect Glass Doors from breakage by temporarily removing them until all construction is complete.

#### STEP 17

Position the Hearth Extension over the metal protective strip which should project two inches in front of the fireplace bottom front. See Figure 4. Seal the crack between the Hearth Extension and fireplace with a non-combustible sealant. Hearth Extensions are required on both sides of this fireplace.

#### STEP 18

Apply the finish materials of your choice. Do not install combustible materials over the black face of the fireplace or over the cooling air inlet slots in the firebox opening. You may use non-combustible material over the black face of the fireplace.

#### STEP 19

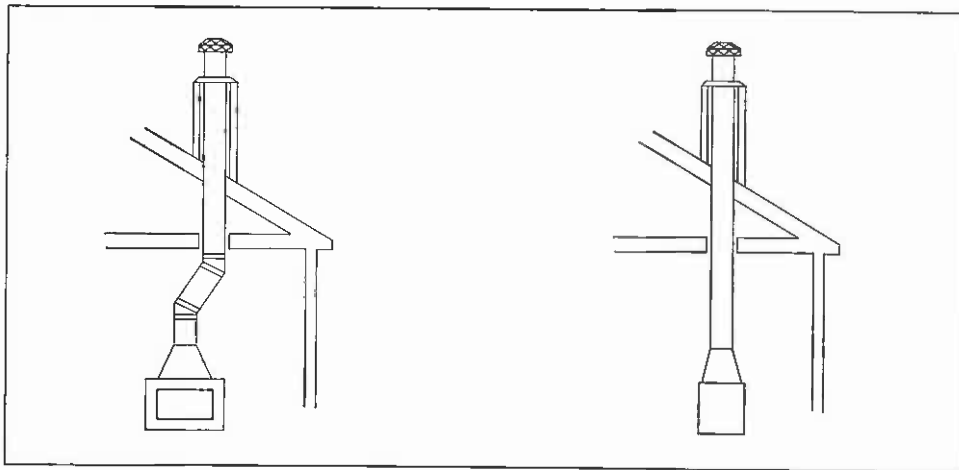
Prior to building your first fire in your fireplace, please read the "Operating Instructions" section that follows.

#### **WARNING**

**DO NOT PACK REQUIRED AIR SPACES WITH INSULATION OR OTHER MATERIALS. THIS PREVENTS THE NATURAL CONVECTION COOLING WHICH MUST TAKE PLACE. THE REQUIRED CLEARANCES ARE TO THE ENCLOSURE AND SHOULD NOT BE REDUCED BY THE ADDITION OF OTHER MATERIALS WHETHER OF NON-COMBUSTIBLE OR COMBUSTIBLE MATERIAL. COMBUSTIBLE MATERIALS AS WELL AS THE NON-COMBUSTIBLE MATERIALS USED IN THE FIREPLACE MAY HAVE THEIR USEFUL LIFE REDUCED.**

### **V. CONSTRUCTING A CHASE**

The chase may be constructed for the fireplace and chimney or for the chimney only. A chase is an enclosure built around the system. Figure 16 illustrates examples of a chase constructed on a roof.



**Figure 16**  
Chase Construction

### **MATERIALS FOR CHASE**

The chase is constructed much the same as the walls in your home. A variety of materials may be used including brick, stone, veneer brick, or standard siding materials.

In constructing the chase, several factors must be considered.

1. Maintain a 2" air space clearance around the chimney.
2. The Chase Top must be constructed of a non-combustible material.
3. The walls of the chase should be insulated to prevent heat leaking from the home around and through the fireplace.

## TO INSTALL TERMINAL CAP ON CHASE - ENCLOSED CHIMNEY

1. Construct chase of desired materials maintaining a minimum 2" air space around the chimney.

### WARNING

**NEVER INSTALL A SINGLE WALL SLIP SECTION OR SMOKE-PIPE IN A CHASE STRUCTURE. THE HIGHER TEMPERATURE OF THIS SINGLE WALL PIPE MAY RADIATE SUFFICIENT HEAT TO COMBUSTIBLE CHASE CONSTRUCTION MATERIALS TO CAUSE A FIRE.**

2. Install the Chimney Sections up through the chase. When using a Round Terminal Cap (RT494), the last section of Pipe must extend above the Chase Top to allow installation of the Storm Collar and Terminal Cap. For installations utilizing a Telescoping Round Terminal Cap (RT492), the last Chimney Section must not be more than 15" below or 3" above the Chase Top. If a Square Terminal Cap (ST475 or ST476) is utilized, see separate Installation Instructions.

### WARNING

**DETAIL INSTRUCTIONS FOR INSTALLATION OF THE CHASE TOP, STORM COLLAR AND TERMINAL CAP ARE FOUND PACKAGED WITH THESE PARTS. TO AVOID DANGER OF FIRE, ALL INSTRUCTIONS MUST BE STRICTLY FOLLOWED, INCLUDING THE PROVISION OF AIR SPACE CLEARANCE BETWEEN CHIMNEY SYSTEM AND COMBUSTIBLE ENCLOSURE. TO PROTECT AGAINST EFFECTS OF METAL CORROSION OF PARTS SUCH AS CHASE TOP AND THOSE ABOVE CHASE TOP, FIRST WASH THEM WITH A SOLVENT OR VINEGAR, RINSE WITH WATER, AND THEN PAINT WITH A RUST RESISTANT PAINT.**

3. Attach the Chase Top (CT56) to the top of the chase.
4. Install the Terminal Cap, using the Instructions packaged with it.

# OPERATING INSTRUCTIONS

## NOTICE

**SAVE AND PASS THESE OPERATING INSTRUCTIONS AND THE INSTALLATION INSTRUCTIONS TO SUBSEQUENT OWNERS. THE INFORMATION PROVIDED IS INTENDED TO NOTIFY AND WARN THEM ABOUT MAKING UNSAFE FUTURE MODIFICATIONS SUCH AS THE ADDITION OF SHELVES OR THE USE OF UNAUTHORIZED PARTS AND REPAIRS.**

## CAUTION

**EDGES ARE SHARP. HAND PROTECTION IS RECOMMENDED.**

Before starting a fire in your new or existing fireplace, use the following check list:

- A. **FLUE DAMPER.** When the lever is free to move (not locked in a notch), the lever should move toward the full open position. Verify by looking up from the inside of the firebox. Then lock it in this full open position.

## WARNING

**THE FIREPLACE MUST BE OPERATED WITH THE DAMPER IN THE FULL OPEN POSITION.**

- B. **CHIMNEY INSPECTION.** Visually inspect the chimney internally for obstructions and construction damage. Flue pipe joints and seams must be continuous and mechanically tight. In a used chimney, additional inspection is needed for the following:

“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. When 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 creosote build-up has occurred.

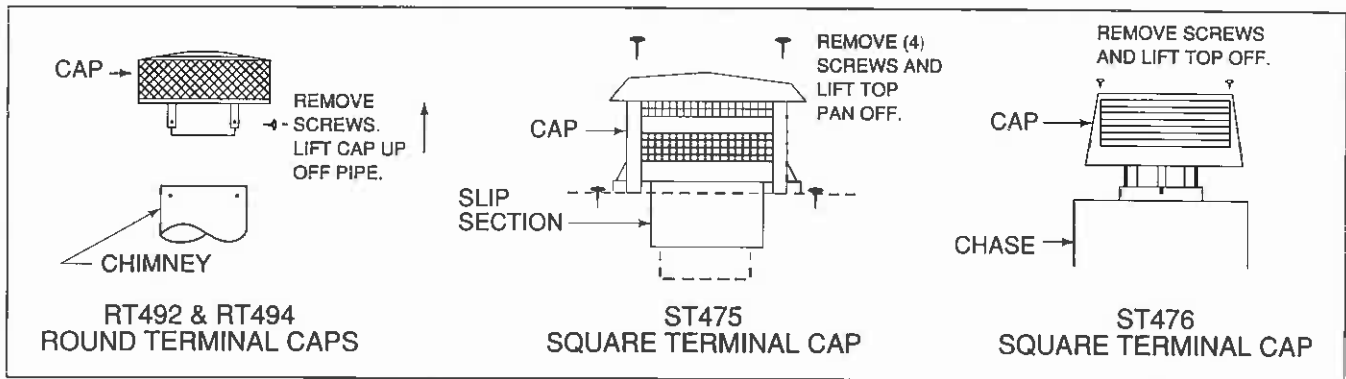
If creosote has accumulated, it should be removed to reduce the risk of a chimney fire.”

- C. **CHIMNEY CLEANING.** If you do detect a build-up of creosote, contact a qualified chimney sweep or clean it yourself.

1. Open the damper.
2. Hang a damp sheet across the fireplace opening to stop dirt and soot from entering the room.
3. Remove the Terminal Cap. See Figure 17.
4. Clean with a stiff bristled brush attached to a pole,

OR

- 4A. Tie a rope to a burlap bag filled with straw and several stones. Work up and down the flue until clean.
5. Replace the Terminal Cap.



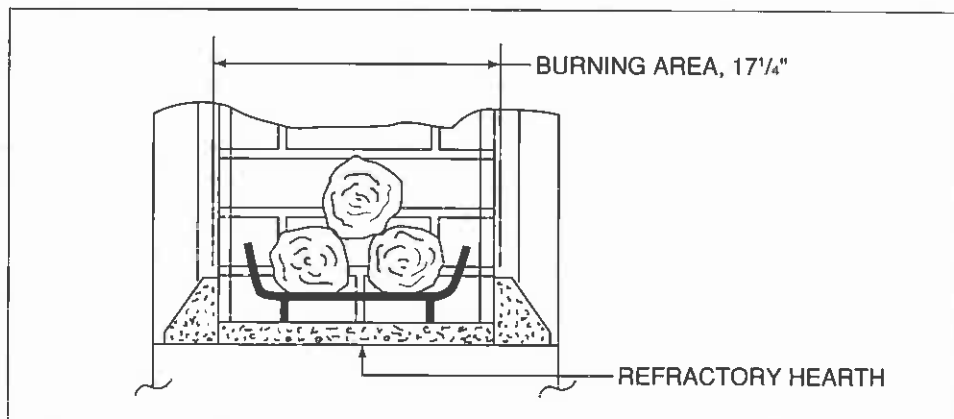
**Figure 17**  
Terminal Caps

- D. **CLEAR SPACE NEAR FIREPLACE.** Hearth Extensions must extend as shown in Figure 1. Combustible materials must not be stored in this area. Room furnishings such as drapes, curtains, chairs, or other combustibles must be at least 64 inches from the open fronts of the fireplace.
- E. **FIRESCREEN.** Firescreens are always provided to control sparks. Both firescreens must be closed whenever the fireplace is in use. Glass Doors or firescreens must not be used to hold burning material inside the fireplace as might occur when overfilling the fireplace with empty boxes or branches. Only those Glass Door units specifically tested and listed for use with the specific fireplace model should be used. Screens should be closed when the Glass Doors are closed.
- F. **OUTSIDE AIR.** A damper allows control of the Outside Air inlet of your fireplace. In a tightly sealed or well insulated home, replacement of combustion air is necessary to keep harmful gases from entering living spaces.

**CAUTION**

**FIREPLACE OPERATION DOES REQUIRE AIR. DO NOT TAKE AIR FROM OTHER FUEL BURNING APPLIANCES WHICH CAN RESULT IN IMPROPER VENTING (SMOKING) OR AIR DILUTION. ALWAYS PROVIDE ADEQUATE MAKE-UP AIR.**

- G. **SETTING THE FIRE.** Check the flue damper to be sure it is fully open. Place crumpled or twisted paper on to the hearth floor. Loosely arrange kindling or small pieces of wood to form a layer above the paper. Place three logs in a rough pyramid as shown in Figure 18, being sure to allow free air space between the logs. Small sticks of wood may be used to separate the logs. Use only solid wood fuel or a listed decorative gas appliance. Do not use a fireplace insert or other products not specified for use with this fireplace. **NOTE: When heated the first time, the temperature of the fireplace must be raised gradually, to prevent moisture within the refractory from causing cracks, and to allow the binders in the insulation to dissipate.**



**Figure 18**  
Section Through Fireplace



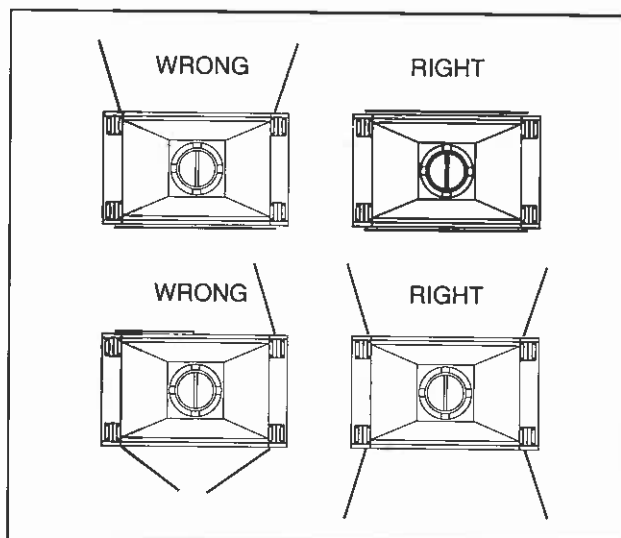
### CAUTION

**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 TO AVOID THE RISK OF FIRE.**

- H. **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 non-combustible 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.
- I. **GLASS DOORS.** With certain fireplace installations, it may be necessary to operate the fireplace with the Glass Doors in the closed position in order to prevent smoke spillage into the structure. When the fireplace is not in use, Glass Doors will reduce loss of room heat through the chimney. Only HEATILATOR® Glass Doors, Catalog Numbers GT42A1, GT42B1, A1242B, C1242A, C1242B, C1242C, C2242A, C2242B, C2242C or D1242B must be used.

### WARNING

**FIREPLACES EQUIPPED WITH DOORS SHOULD BE OPERATED ONLY WITH DOORS FULLY 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.**



**Figure 19**  
Recommended Operating  
Positions of Doors

### J. OPERATING YOUR FIREPLACE.

### WARNING

**CONTINUED OVERFIRING CAN PERMANENTLY DAMAGE YOUR FIREPLACE SYSTEM. EXAMPLES OF OVERFIRING ARE:**

- 1. QUANTITIES OF SCRAP LUMBER, PINE BRANCHES OR CARDBOARD BOXES WHICH EXCEED THE VOLUME OF THE "NORMAL LOG FIRE". THESE MATERIALS PRODUCE MANY SPARKS AND MUST NOT BE USED.**
- 2. THE "NORMAL LOG FIRE" IS THREE LOGS, EACH FOUR INCHES IN DIAMETER, WITH THE LENGTH NO GREATER THAN 24 INCHES. THE RATE OF FIRING MUST NOT EXCEED THESE THREE LOGS PER HOUR.**

K. **SAFETY - A FINAL WORD.** Fireplaces as well as other woodburning appliances have been used safely for many years. Our own experience is that most problems are caused by improper installation, fueling, and operating. All dimensions specified are minimum and increasing distances to combustibles decreases risk. Such common practice as surrounding the fireplace with loose fill insulation, and especially leaving the fire unattended, will increase the risk of fire. Additionally, an annual inspection of all fireplace systems should be performed as, like any appliance, minor repairs may be required to maintain the system in top operating condition.



# *Attention*

## **FIREPLACE INSTALLER**

***Please return these  
Operating & Installation  
Instructions to the  
Firebox  
for Consumer Use***

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