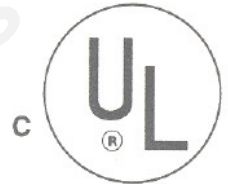


# heatilator®

*The first name in fireplaces*

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



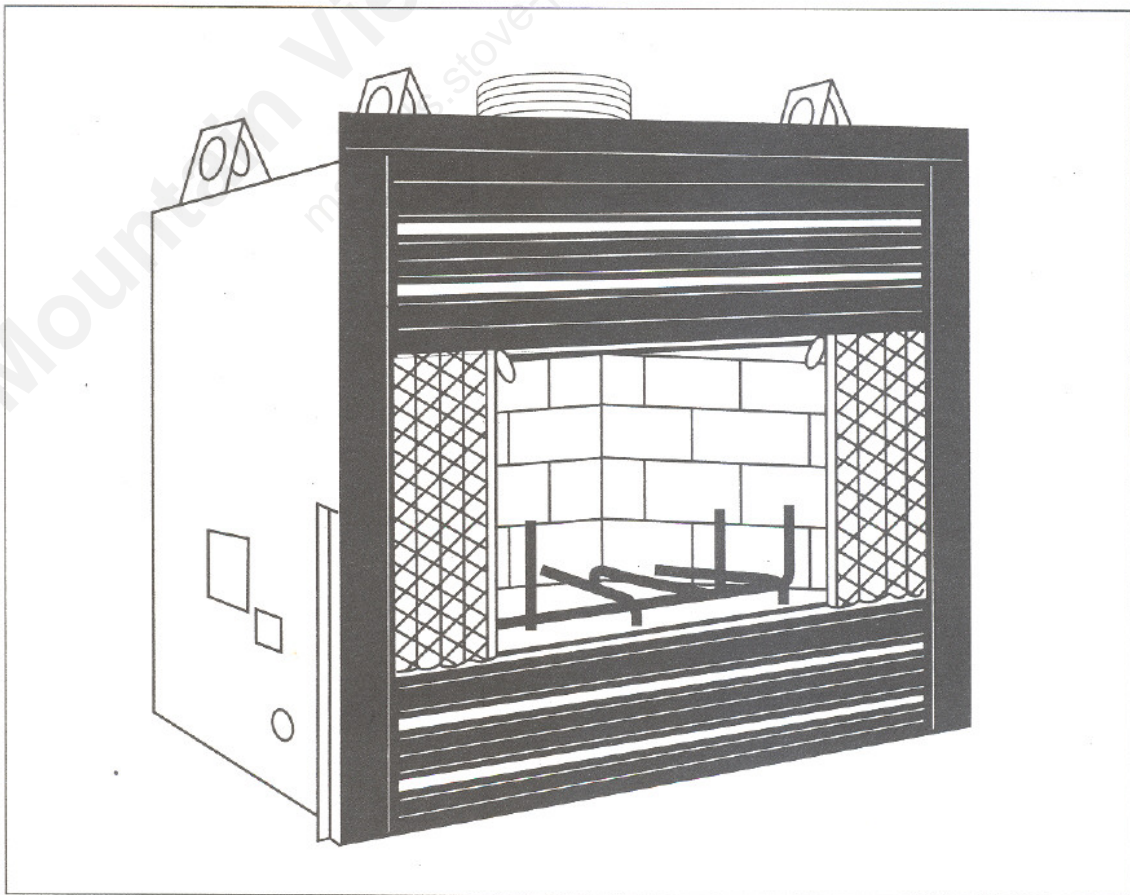
## DX36AI

### WOODBURNING FIREPLACE

### INSTALLATION & OPERATING

### INSTRUCTIONS

### FOR RESIDENTIAL USE



DX36AI

**PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.**

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**Safety Precautions**

1. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause a fireplace malfunction resulting in serious injury and/or property damage.
2. Always check your local building codes prior to installation. The installation must comply with all local, regional, state and national codes and regulations.
3. An adequate supply of replacement combustion air from outside the house must be available to the fire for the fireplace to operate properly. To achieve this, the use of an optional outside air kit is highly recommended.

In the event the home is unusually tight, the optional combustion air kit may not provide all the air required to support combustion. Heatilator is not responsible for any smoking or related problems that may result from the lack of adequate combustion air. It is the responsibility of the builder/contractor to ensure that adequate combustion air has been provided for the fireplace.

4. The DX36AI woodburning fireplace must be installed with the SL300 Series chimney system.

The chimney system must always terminate outside the building. Be sure to follow all chimney specifications given in these installation instructions.

5. NEVER leave children unattended when there is a fire burning in the fireplace.
6. This fireplace is built for solid fuel only. NEVER use gasoline, gasoline type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in this fireplace. Keep any flammable liquids a safe distance from the fireplace.
7. DO NOT use chimney cleaners or flame colorants in your fireplace.
8. The flue damper must be open at all times when the fireplace is in use.
9. While servicing this fireplace, always shut off any electricity or gas to the fireplace. This will prevent possible electrical shock or burns. Also, make sure the unit is completely cooled before servicing.
10. To ensure a safe fireplace system and to prevent the buildup of soot and creosote, inspect and clean the fireplace and chimney prior to use and periodically during the burning season.



## LISTINGS AND CODE APPROVALS

The DX36AI fireplace system has been tested and listed to the UL 127 Standard and the ULC-S610 Standard for Factory-Built Fireplaces by Underwriters Laboratories Inc. This fireplace system has been listed for installation and operation in the United States and Canada as described in these Installation & Operating Instructions.

The model DX36AI fireplace has been tested and listed for use with the components listed on pages 4 & 5. Some of these components may be purchased separately and installed at a later date. However, installation of an outside air kit will require significant recon-

struction and should be installed at the time of the initial fireplace installation.

Check with your local building code agency prior to installing this fireplace to ensure compliance with local codes, including the need for permits and follow-up inspections. If any assistance is required during installation, please contact your local dealer or the Heatilator Customer Relations Department, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641.

HEATILATOR® is a registered trademark of Heatilator Inc., a HON INDUSTRIES company.

### 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 BEFORE STARTING YOUR INSTALLATION AND FOLLOW THEM CAREFULLY THROUGHOUT YOUR PROJECT.**

## DESCRIPTION OF THE FIREPLACE SYSTEM

The HEATILATOR® fireplace system consists of the following:

1. Fireplace/Integral Grate
2. Chimney Terminal Cap
3. Hearth Extension
4. Chimney System

Optional components include:

1. Glass Doors
2. Outside Air Kit System
3. Heat Circulating Fans

**NOTE:** Illustrations throughout these instructions reflect "typical installations" and are for design purposes only. Actual installation may vary slightly due to individual design preferences. However, minimum and maximum clearances must be maintained at all times.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

### Tools and Building Supplies Normally Required

Tools	Building Supplies
Saw material	Hearth extension
Pliers	Wall-finishing materials
Hammer	Framing material
Phillips screwdriver	Fireplace surround
Tape measure	Caulking material
Plumb line	
Leveler	
Electrical drill and bits	
Square	



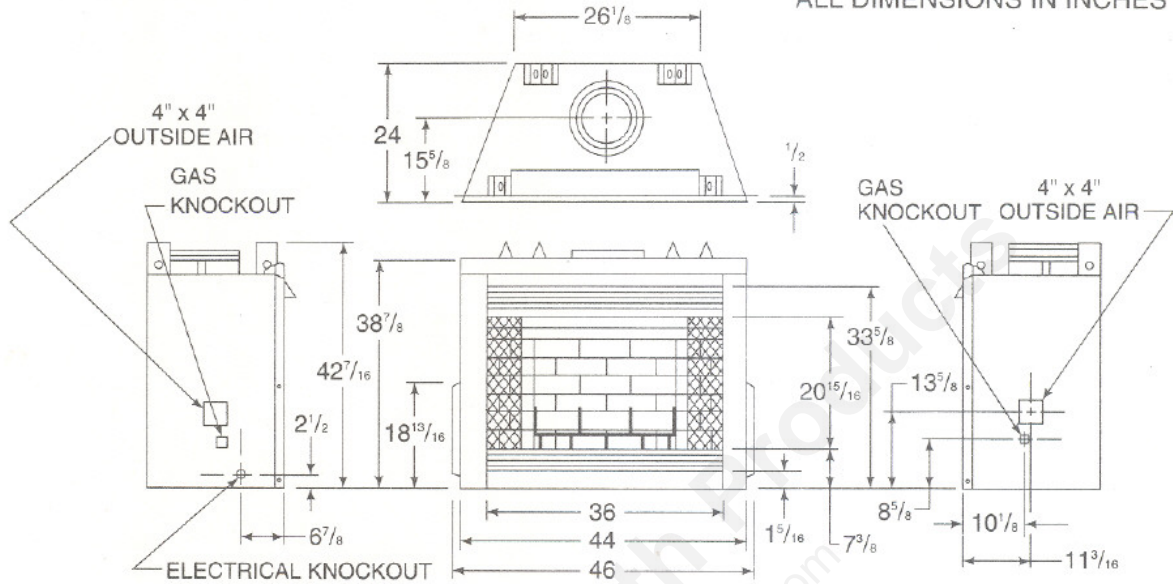
## FIREPLACE SYSTEM COMPONENTS

The table below shows only those components which may be safely used with this fireplace.

Catalog Number	Description
DX36AI	Fireplace (Insulated Outer Shell) includes integral grate and hearth protection strips
HX3	Hearth Extension
DM1136	Original Glass Doors - Bifold - Black Finish
DM1136A	Original Glass Doors - Bifold - Brushed Brass Finish
DM1136B	Original Glass Doors - Bifold - Polished Brass Finish
C1136A	Classic Bifold Glass Doors - Brushed Brass Finish
C1136B	Classic Bifold Glass Doors - Polished Brass Finish
C1136C	Classic Bifold Glass Doors - Chrome Finish
C2136A	Classic Cabinet Glass Doors - Brushed Brass Finish
C2136B	Classic Cabinet Glass Doors - Polished Brass Finish
C2136C	Classic Cabinet Glass Doors - Chrome Finish
P1136B	Premium Series Bi-fold Glass Doors - Polished Brass Finish
TK6CA	Classic Syle Brushed Brass Louvre Trim Kit
TK6CB	Classic Style Polished Brass Louvre Trim Kit
TK6CC	Classic Style Polished Chrome Louvre Trim Kit
TK301A	Antique Brass Trim Kit (5 bars, 1 hood)
TK301B	Polished Brass Trim Kit (5 bars, 1 hood)
GR11	Integral Grate (included with Fireplace)
FK6	Fan Kit
BC10	Motor Speed Control Kit
AK17U	Outside Air Kit
ID4	Insulated Duct/Outside Air
UD4	Uninsulated Duct/Outside Air
CAK4	Chimney Air Kit
SL306	Chimney Section - 6 inch long
SL312	Chimney Section - 12 inch long
SL318	Chimney Section - 18 inch long
SL324	Chimney Section - 24 inch long
SL336	Chimney Section - 36 inch long
SL348	Chimney Section - 48 inch long
SL3	Chimney Stabilizer
SL315	Chimney Offset/Return - 15°
SL330	Chimney Offset/Return - 30°
FS338	Firestop - Straight
FS339	Firestop - 15°
FS340	Firestop - 30°
AS8	SL300 Straight Attic Insulation Shield, 24"
JB877	Chimney Joint Band
CB876	Chimney Bracket
RF370	Roof Flashing - Flat to 6/12 Pitch
RF371	Roof Flashing - 6/12 to 12/12 Pitch
TR342	Telescoping Chimney Terminal Cap - Round
TR344	Chimney Terminal Cap - Round (Storm collar included)
TS345	8" I.D. SL300 Square Termination
TSP345	8" I.D. SL300 Square Termination - Painted
SK44	Square Termination Decorative Skirt
CT35	Chase Top



ALL DIMENSIONS IN INCHES

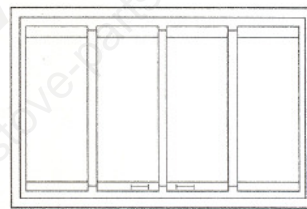


**HEARTH EXTENSION**



HX3

**GLASS DOORS**

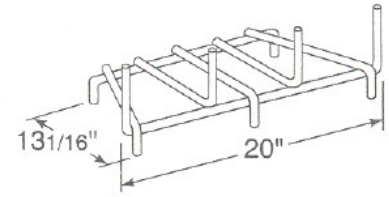


BIFOLD

PREMIUM DOORS SHOWN

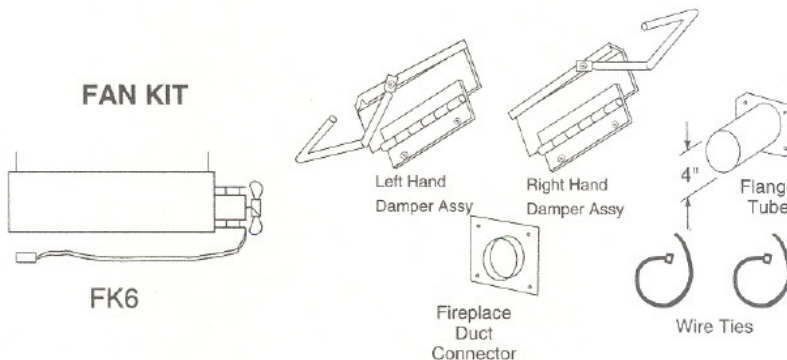
**INTEGRAL GRATE**

(supplied)



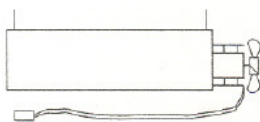
GR1

**OUTSIDE AIR KIT**



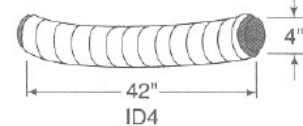
AK17U

**FAN KIT**

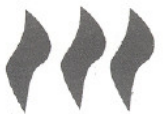
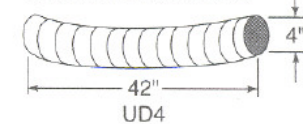


FK6

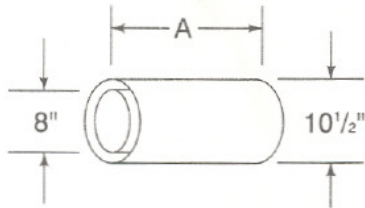
**INSULATED DUCT**



**UNINSULATED DUCT**



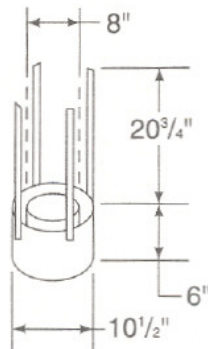
**CHIMNEY SECTIONS**



CAT. NO.	A	B
SL306	6"	4 <sup>3</sup> / <sub>4</sub> "
SL312	12"	10 <sup>3</sup> / <sub>4</sub> "
SL318	18"	16 <sup>3</sup> / <sub>4</sub> "
SL324	24"	22 <sup>3</sup> / <sub>4</sub> "
SL336	36"	34 <sup>3</sup> / <sub>4</sub> "
SL348	48"	46 <sup>3</sup> / <sub>4</sub> "

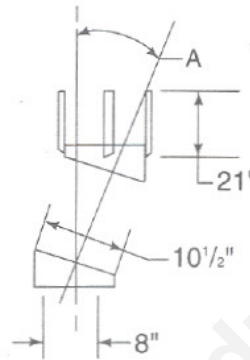
A= Actual length  
B= Effective length (length of chimney part after it has been snapped to another)

**CHIMNEY STABILIZER**



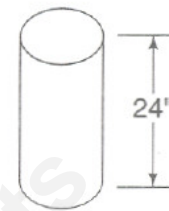
SL3

**OFFSETS RETURNS**



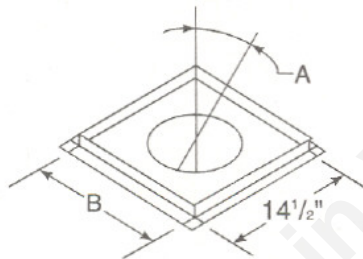
CAT. NO.	A
SL315	15°
SL330	30°

**STRAIGHT ATTIC INSULATION SHIELD**



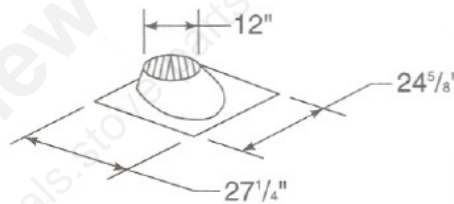
AS8

**FIRESTOP SPACERS**

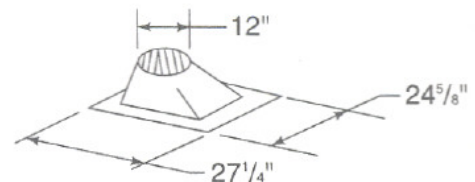


CAT. NO.	A	B
FS338	0°	14 <sup>1</sup> / <sub>2</sub> "
FS339	15°	18 <sup>3</sup> / <sub>8</sub> "
FS340	30°	22 <sup>15</sup> / <sub>16</sub> "

**ROOF FLASHINGS**

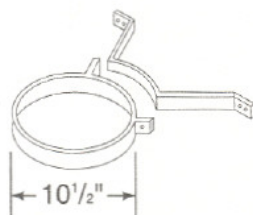


Flat to 6/12 Pitch  
RF370



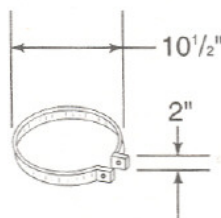
6/12 to 12/12 Pitch  
RF371

**CHIMNEY BRACKET**



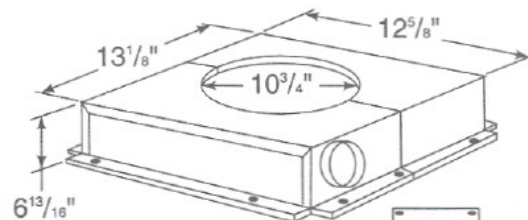
CB876

**JOINT BAND**



JB877

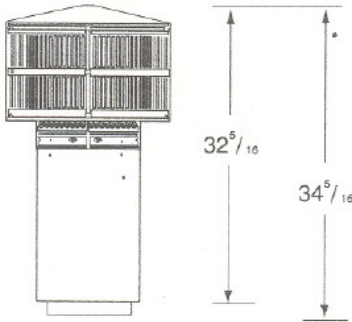
**CHIMNEY AIR KIT**



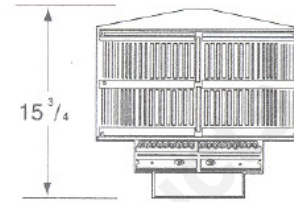
CAK4



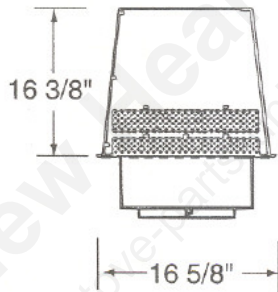
CHIMNEY TERMINAL CAPS & VENT SECTIONS



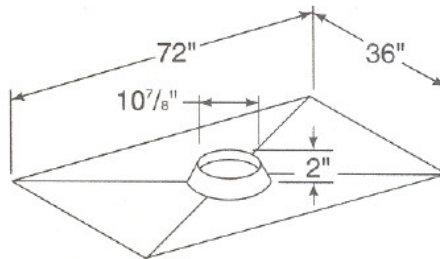
TR342  
ROUND TERMINAL CAP  
WITH STORM COLLAR



TR344  
ROUND TERMINAL CAP  
WITH STORM COLLAR



TS345  
SQUARE TERMINATION  
TS345P  
SQUARE TERMINATION  
(PAINTED)



CT35  
CHASE TOP

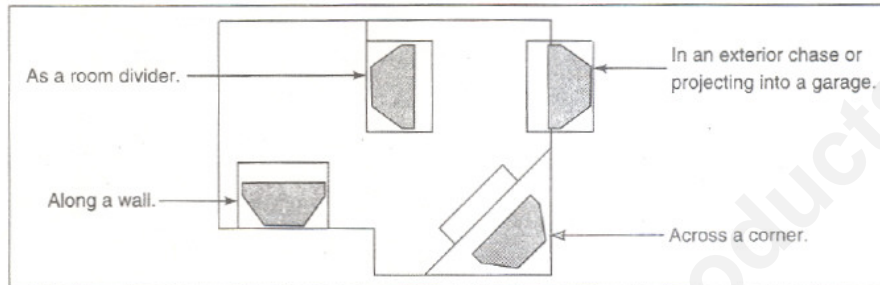


## PRE-INSTALLATION PREPARATION

### FIREPLACE LOCATIONS AND SPACE REQUIREMENTS

Several options are available to you when choosing a location for your fireplace. This fireplace may be used

as a room divider, installed along a wall, across a corner or use an exterior chase. See Figure 1.

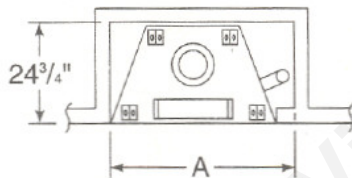


**Figure 1**  
**Fireplace Locations**

Figures 2 and 3 show two typical installations assuming an outside air kit is being used. Therefore, an allowance must be made for 90° bends. Less space is

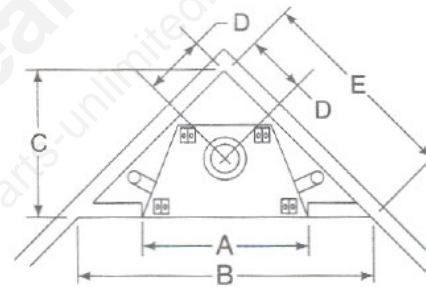
required when ducting goes directly outside without forming elbows.

\* A minimum of 3/4" air clearance must be maintained between the firebox and wall.



**Figure 2**  
**Installation along a wall or an exterior chase.**

OUTSIDE AIR	A
WITHOUT	45"
WITH *	50 1/2"



**Figure 3**  
**Corner Installation**

OUTSIDE AIR	A	B	C	D	E
WITHOUT	45"	76 1/4"	38 1/8"	15 15/16"	53 15/16"
WITH	45"	77 5/8"	38 13/16"	16 1/8"	54 1/8"

\* Add additional 6" if dual outside air kits are installed.

#### WARNING

**DO NOT DRAW OUTSIDE AIR FROM GARAGE SPACES. 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.**

#### 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.**

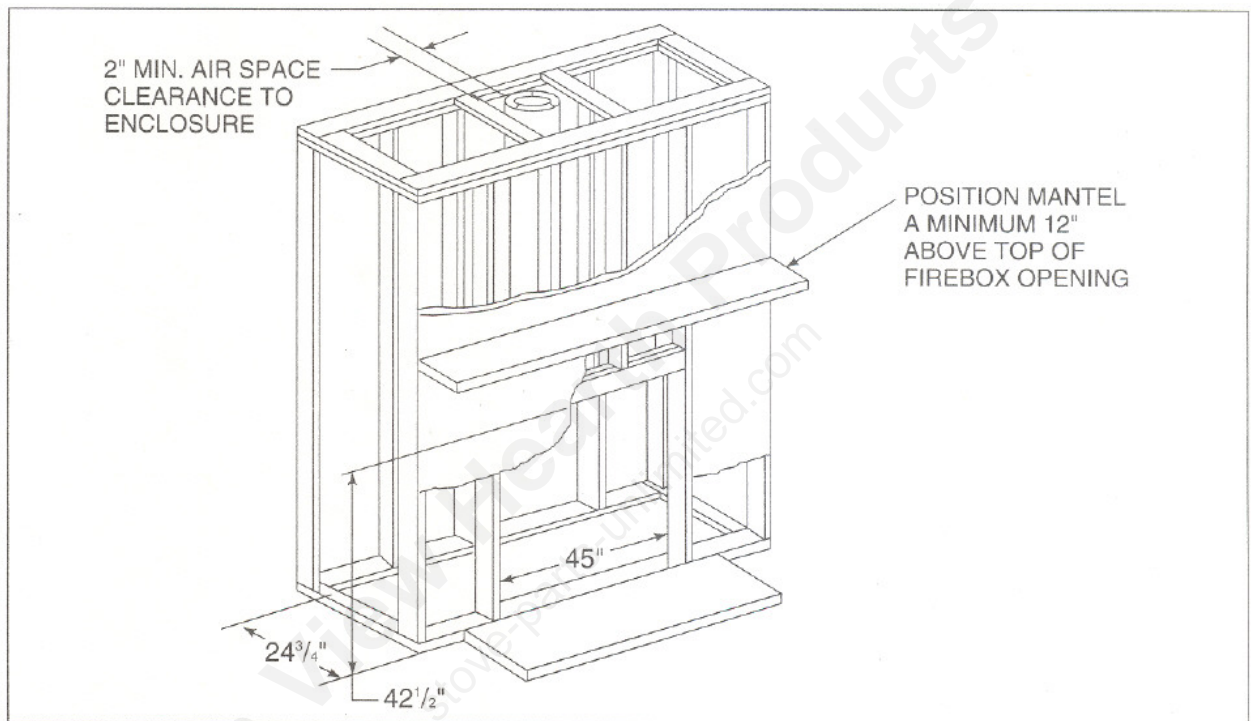


## FRAMING THE FIREPLACE

The DX36AI fireplace will fit a framed opening of 45" wide x 42½" tall. The finished cavity depth must be no less than 24¾".

Figure 4 shows a typical framing (using 2 x 4 lumber) of the fireplace, assuming combustible materials are used. All required clearances to combustibles around

the fireplace must be adhered to. Any framing on top of the fireplace must be above the top standoffs. A ¾" air clearance must be maintained at the back and sides of the firebox assembly. Chimney Sections **at any level** require a two inch minimum air space clearance between the framing and chimney section.



**Figure 4**  
Framing the Fireplace

**Combustible Material.** Material made of or surfaced with wood, compressed paper, plant fibers, plastics, or any material capable of igniting and burning, whether flame proofed or not, plastered or unplastered.

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

**Non-combustible Sealant Material.** Sealants that will not ignite and burn; General Electric RTV103

(Black), or equivalent. Rutland, Inc. Fireplace Mortar #63, or equivalent.

After completing the framing and applying the facing material (dry wall) over the framing, 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 ensure adequate insulation.

Only non-combustible materials may be used to cover the non-louvered portion of the black metal fireplace front.

### WARNING

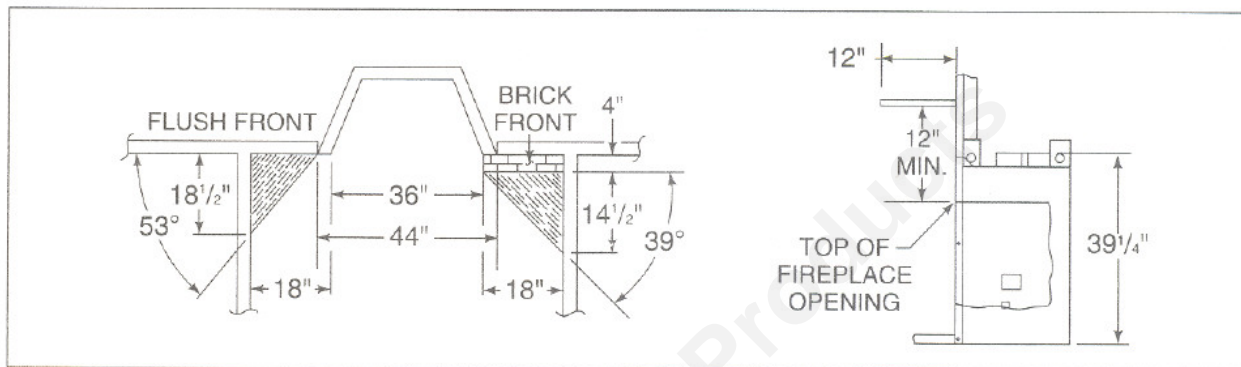
**DO NOT APPLY COMBUSTIBLE FINISHING MATERIALS OVER ANY PART OF THE BLACK METAL FACE OF THIS FIREPLACE OR A STRUCTURE FIRE MAY RESULT. THE NON-LOUVERED BLACK METAL FACE MAY ONLY BE COVERED WITH NON-COMBUSTIBLE MATERIALS.**



## SIDEWALLS/SURROUNDS

Adjacent combustible side walls must be located a minimum of 18" from the fireplace opening. See Figure 7. If you are using a decorative surround constructed of combustible material, it must be located

within the shaded area defined in Figure 7. Short stub walls are also acceptable if they are contained within the shaded area.



**Figure 7**  
Sidewalls/Surrounds

## MANTEL

A combustible mantel may be positioned no lower than 12" above the opening of the firebox. The mantel may extend no more than 12" from the wall. Combustible trim materials, projecting no more than 1 1/2" from the face of the fireplace, can be placed no closer than 6" from the top and side of the firebox opening.

Decorative combustible materials, such as a surround or mantel support brackets may be located within the shaded area on each side of the firebox, as defined in Figure 7. This mantel clearance is in accordance with Section 7-3.3.3 of ANSI/NFPA 211.

## CHIMNEY REQUIREMENTS

When planning your fireplace location, the chimney construction and necessary clearances must be considered. The fireplace system and chimney components have been tested to provide the following flexibility in construction. The following figures are the minimum distances from the base of the unit.

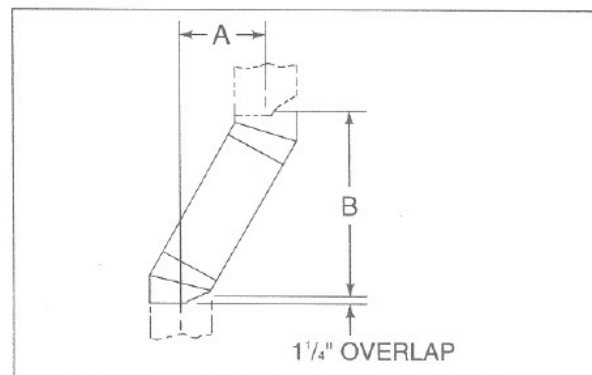
Minimum overall straight height	14 ft.
Minimum height with Offset/Return	14.5 ft.
Maximum height	90 ft.
Maximum chimney length between an Offset/Return	10 ft.
Maximum distance between Chimney Stabilizers	35 ft.
Double Offset/Return minimum height	20 ft.
Maximum unsupported chimney length between Offset/Return	6 ft.
Maximum straight unsupported chimney height above firebox	25 ft.

## USING OFFSETS AND RETURNS

To bypass any overhead obstructions, the chimney may be offset using a 15° offset/return (SL315) or a 30° offset/return (SL330). Perform the following steps to determine the correct chimney component combination for your particular installation.

An offset and return may be attached together or a chimney section(s) may be used between an offset and return. However, the distance between two elbows must never exceed 10 feet in total length.

1. Measure how far the chimney needs to be shifted to enable it to avoid the overhead obstacle. See Figure 8, dimension "A".



**Figure 8**  
Chimney Offset/Return

2. After determining the offset dimension, refer to Table 1 and find the "A" dimension closest to **but not less than** the distance of shift needed for your installation.
3. The "B" dimensions that coincides with the "A" dimensions represent the required vertical clearance that is needed to complete the offset and return.
4. Read across the chart and find the number of chimney sections required and the model number of those particular chimney parts.
5. Whenever the chimney penetrates a floor/ceiling, a firestop spacer must be installed.

than 14½" is 14⅝" using a 30° offset/return. It is then determined from the table that you would need 33⅙" (Dimension "B") between the offset and return. The chimney components that best fit your application are two SL312's.

**CAUTION**

**DO NOT COMBINE OFFSETS TO CREATE AN OFFSET GREATER THAN 30° FROM VERTICAL.**

Example: Your "A" dimension from Figure 8 is 14½". Using Table 1, the dimension closest to but not less

**TABLE 1**

Offset Chart\*

(Dimensions in inches)

15°		30°		SL306	SL312	SL318	SL324	SL336	SL348
A	B	A	B						
1⅝	13⅝	3⅝	14⅞	—	—	—	—	—	—
2⅝	17⅝	6⅝	18⅞	1	—	—	—	—	—
—	—	8⅝	22⅞	2	—	—	—	—	—
4⅞	23⅞	9⅝	23⅞	—	1	—	—	—	—
—	—	11⅝	27⅞	1	1	—	—	—	—
6	29⅞	12⅝	28⅞	—	—	1	—	—	—
7⅞	34	14⅝	33⅞	—	2	—	—	—	—
—	—	15⅝	34⅞	—	—	—	1	—	—
—	—	17⅝	38⅞	1	—	—	1	—	—
—	—	20⅝	43⅞	—	—	2	—	—	—
10⅝	46⅞	21⅝	44⅞	—	—	—	—	1	—
11⅞	51⅞	23⅝	48⅞	1	—	—	—	1	—
—	—	26⅝	53⅞	—	—	—	2	—	—
13⅝	58⅞	27⅝	55⅞	—	—	—	—	—	1
15	62⅞	29⅝	59⅞	1	—	—	—	—	1
16½	68⅞	32⅝	64⅞	—	1	—	—	—	1
18⅞	74⅞	35⅝	69⅞	—	—	1	—	—	1
—	—	38⅝	74⅞	—	—	—	1	—	1
—	—	41	78⅞	1	—	—	1	—	1
22⅝	91⅞	44⅝	85⅞	—	—	—	—	1	1
24	96⅞	47	89⅞	1	—	—	—	1	1
25⅞	103⅞	50⅝	95⅞	—	—	—	—	—	2

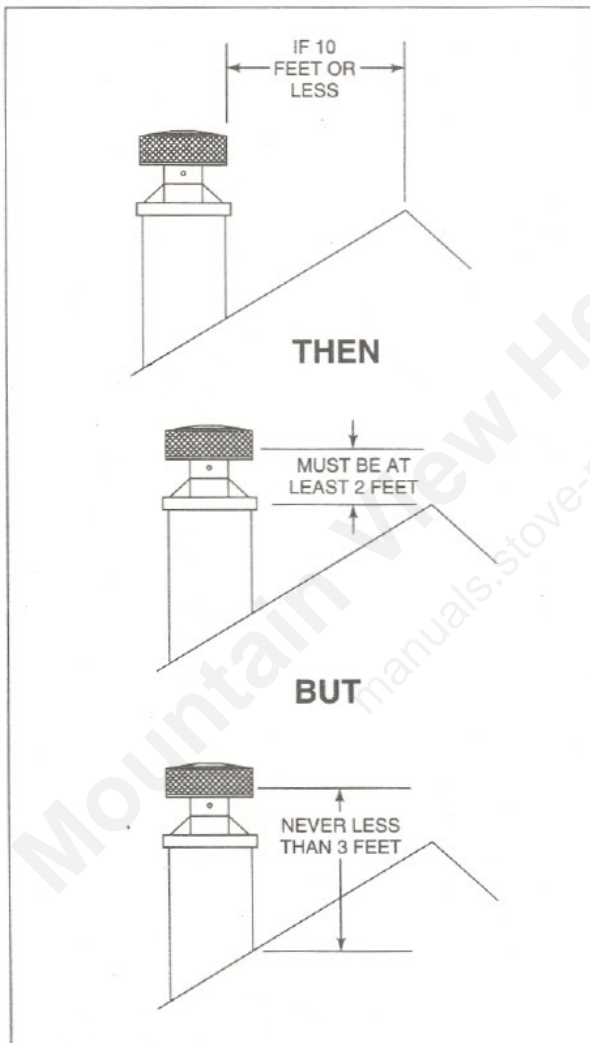


\*Proper assembly of air cooled chimney parts result in an overlap at chimney joints of 1⅞". Effective length is built into this chart.

**CHIMNEY HEIGHT REQUIREMENTS  
(Above the roof line)**

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:

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 overall height above the highest point where it passes through the roof. See Figure 9.



**Figure 9  
Chimney Height**

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.

These chimney heights are necessary in the interest of safety and do not ensure smoke-free operation. Trees, buildings, steeply pitched roofs, adjoining roof lines, adverse wind conditions, etc., may create a need for a taller chimney should smoking occur.

**DETERMINING THE NUMBER OF CHIMNEY SECTIONS REQUIRED**

To determine the number of chimney components needed to complete your particular installation, follow the below steps:

1. Determine the total vertical height of the fireplace installation. This dimension is measured from the base of the firebox assembly to the point where the smoke exits the terminal cap.
2. Subtract the height of the firebox assembly (39 1/4") from the overall height of the fireplace installation. See Figure 7 (page 11).
3. Reference the below chart to determine what components must be selected to complete the fireplace installation.
4. Determine the number of firestop spacers, stabilizers, roof flashing, etc., required to complete the fireplace installation.

Height of Chimney Components	
Chimney Stabilizer	
SL3	4 3/4"
Firestop Spacers	
FS338	0
FS339	0
FS340	0
Offset>Returns	
SL315	13 3/8"
SL330	14 1/8"
Roof Flashings	
RF370	0
RF371	0
Chimney Sections*	
SL306	4 3/4"
SL312	10 3/4"
SL318	16 3/4"
SL324	22 3/4"
SL336	34 3/4"
SL348	46 3/4"

\*Dimensions reflect effective height.



## 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 - Positioning the fireplace

This fireplace may be placed on either a combustible or non-combustible continuous surface. Follow the instructions for framing on page 9. **Be sure to provide the minimum 3/4" air clearance at the sides and back of the firebox assembly.**

### STEP 2 - Placing the protective metal hearth strips

Included with your fireplace you will find two metal hearth strips measuring approximately 23" x 4". These strips are used to provide added protection where the fireplace and hearth extension meet.

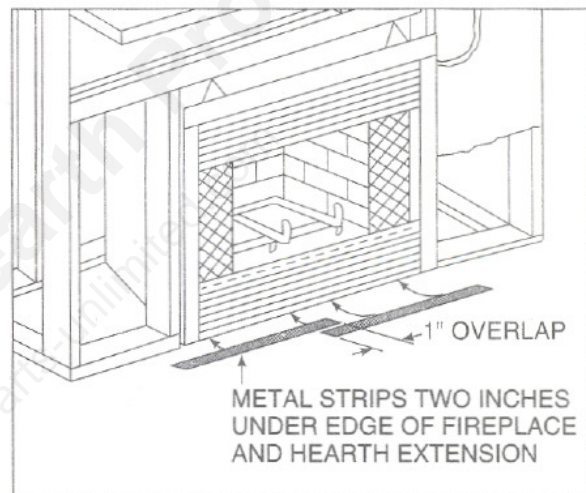
Slide the metal strips two inches under the front edge of the fireplace. The individual pieces must overlap each other by one inch in the middle of the fireplace to provide continuous coverage of the floor. See Figure 10. These metal strips should extend from the front and sides of the fireplace by 2".

### STEP 3 - Leveling the fireplace

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

**Important:** To ensure proper fit of the glass doors, check the firebox opening for squareness. Measure diagonal distances of the opening to make sure they are equal. If they do not equal, continue to shim the firebox until those diagonals correspond.

Secure the fireplace by utilizing the nailing flanges located on either side of the fireplace to the vertical framing.



**Figure 10**  
Positioning the metal strips

### WARNING

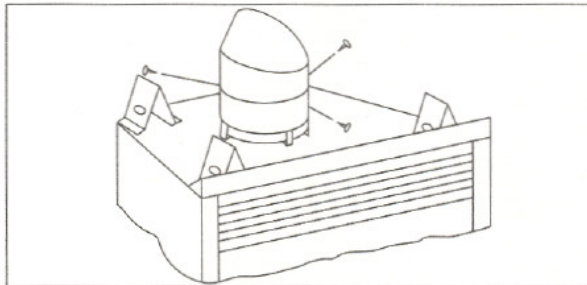
**CAREFULLY FOLLOW THE INSTRUCTIONS FOR ASSEMBLY OF THE PIPE AND OTHER PARTS NEEDED TO INSTALL THIS FIREPLACE SYSTEM. FAILURE TO DO SO MAY RESULT IN A FIRE, ESPECIALLY IF COMBUSTIBLES ARE TOO CLOSE TO THE FIREPLACE OR CHIMNEY AND AIR SPACES ARE BLOCKED PREVENTING THE FREE MOVEMENT OF COOLING AIR.**



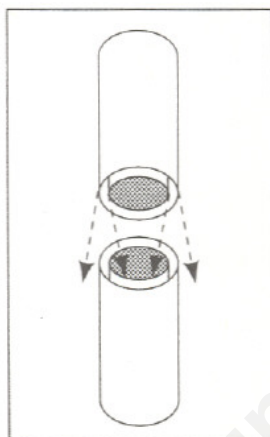
**DX36AI WOODBURNING FIREPLACE**

**STEP 4 - Assembling chimney sections**

Attach either a straight chimney section or an offset/return to the top of the fireplace. Chimney sections are locked together by pushing downward until the top section meets the stop bead on the lower section. When using offsets/ returns, the offset and return sections must be secured in place with screws to ensure proper orientation. See Figure 11.



**Figure 11**  
**Offset Secured to Fireplace**



**Figure 12**  
**Connecting Chimney Sections**

**NOTE:** The inner flue is placed to the **inside** of the flue section below it. The outer casing is placed **outside** the outer casing of the chimney section below it. See Figure 12.

**STEP 5 - Preparing the ceiling for firestop spacers**

Mark and cut out an opening in the ceiling for the particular firestop spacer being utilized (14½" x 14½" for an FS338, 14½" x 18⅛" for an FS339, or 14½" x 22⅞" for an FS340). Frame the opening with the same dimension lumber used in the ceiling joists.

**STEP 6 - Installing the firestop spacers**

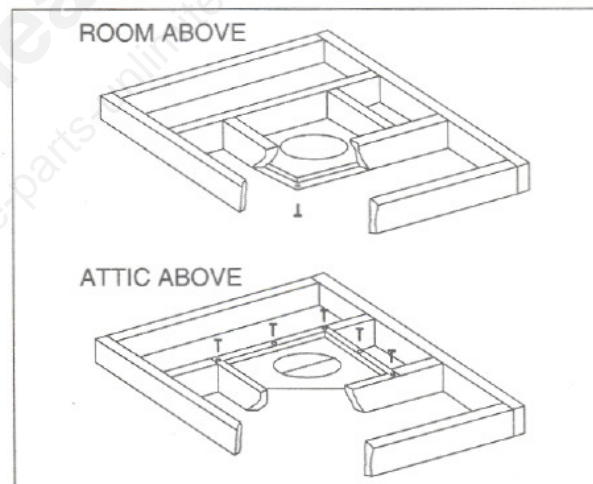
Install the firestop spacer FS338 (Straight), FS339 (if a 15° offset located in the ceiling joist area) or FS340 (if a 30° offset is located in the ceiling joist area). Nail the four sides of the firestop spacer to the joists using a minimum of three (3) nails per side.

**CAUTION**

**INNER FLUE AND OUTER LINER SECTIONS CANNOT BE DISASSEMBLED ONCE LOCKED TOGETHER. PLAN AHEAD TO INSURE THE PROPER INSTALLATION HEIGHT IS ACHIEVED WITH THE SELECTED CHIMNEY COMPONENTS.**

These firestop spacers are designed to provide the minimum two inch air space required around the chimney. In all situations, the firestop spacers are to be nailed to the ceiling joists from the bottom or fireplace side, **EXCEPT** when the space above is an insulated ceiling or attic space. In this situation, the firestop spacer must be nailed from the top side to prevent loose insulation from falling into the required two inch air space around the chimney.

Firestop spacers must be used whenever the chimney penetrates a ceiling/floor area.

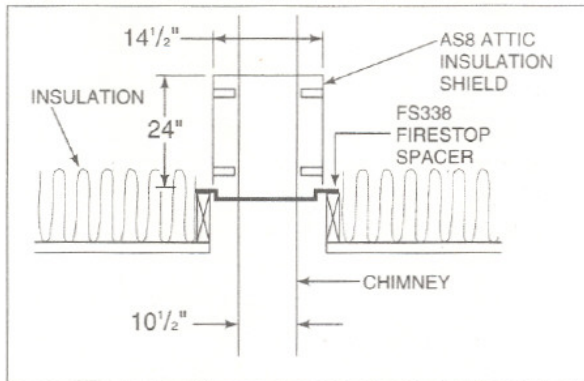


**Figure 13**  
**Installing the firestop spacer**

**STEP 7 - Installing an AS8 insulation shield**

An AS8 insulation shield should be installed when there is a possibility of insulation coming into contact with the factory-built chimney system. The AS8 is installed by positioning it over the vertical chimney section where it penetrates an FS338 firestop spacer. The FS338 will support the AS8. See Figure 14 (page 16). When the factory-built chimney penetrates an insulated ceiling at either 15 or 30 degrees from vertical, an insulation dam should be constructed from plywood or sheet metal. A minimum 2" air space must be provided between the insulation dam and the factory-built chimney system.





**Figure 14**  
Installing an AS8

**STEP 8 - Double-checking chimney assembly**

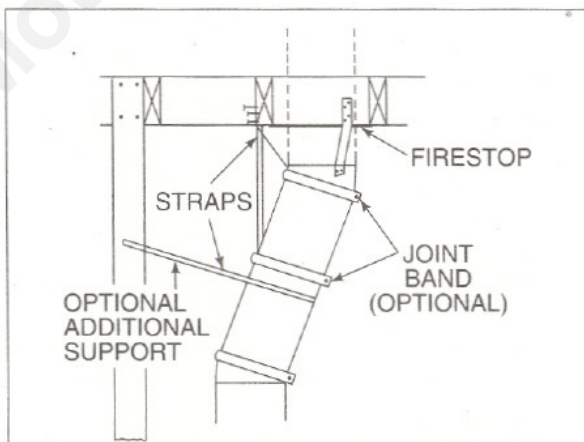
Continue assembling the chimney sections up through the firestop spacers as needed. While doing so, be aware of the height and unsupported chimney length limitations that are given on page 11 under "Chimney Requirements".

Check each section by pulling up slightly from the top to ensure proper engagement before installing the succeeding sections. If they have been connected correctly, they will not disengage when tested.

**STEP 9 - Securing chimney system**

When offsets and returns are joined to straight pipe sections, they must be locked into position with the screws provided, using the predrilled holes. To prevent gravity from pulling the chimney sections apart, the returns and the chimney stabilizers have straps for securing these parts to joist or rafters. See Figure 15.

**NOTE:** Be sure to provide support for the pipe **during** construction and check to be sure inadvertent loading has not dislodged the chimney section from the fireplace or at any chimney joint.



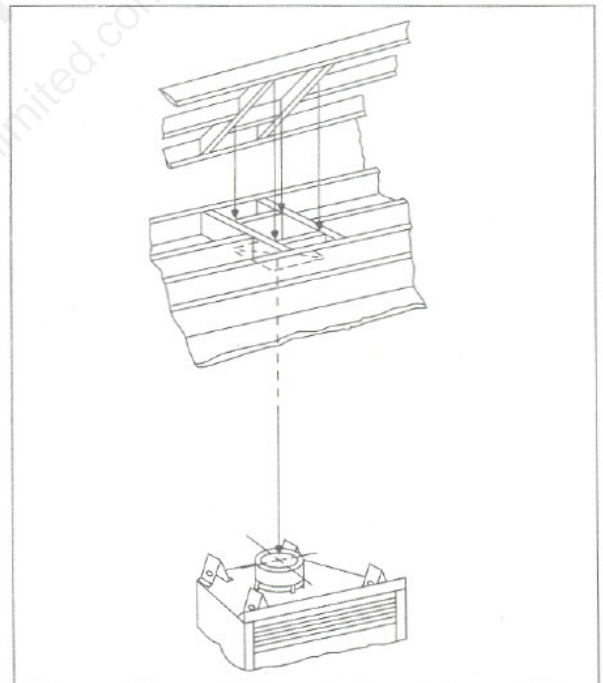
**Figure 15**  
Offset/Return with stabilizer

**WARNING**

**WHEN CHIMNEY SECTIONS EXCEEDING SIX 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 10 - Marking the exit point of the roof**

Locate the point where the chimney will exit the roof by plumbing down to the center of the chimney. Drive a nail up through the roof to mark the center. See Figure 16.



**Figure 16**  
Ceiling and attic construction

**STEP 11 - Cutting out the hole in the roof.**

Measure to either side of the nail and mark the 14 1/2" x 14 1/2" opening required. This 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. Be sure to maintain a 2" minimum air space between the chimney section and the roof.



**DX36AI WOODBURNING FIREPLACE**

**STEP 12 - Assembling chimney sections**

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

**STEP 13 - Installing the CAK4**

When installing a CAK4 chimney air kit, follow the instructions provided with this accessory. The CAK4 is required in Canada.

**STEP 14 - Installing an outside combustion air kit**

Install the AK17U outside air if desired or required by local code, using the instructions supplied with the AK17U air kit. The use of outside air is strongly recommended.

**In a tightly constructed structure, install an outside air kit on both the left and right hand sides of the firebox assembly for optimum performance.**

Complete the fireplace enclosure, allowing space for outside air ducts and gas piping if desired. Electrical wiring should not come in contact with the unit. A minimum clearance of 1/2" must be maintained between the fireplace sides and the enclosure as well as the fireplace back and the enclosure. See Figure 2 for framing details. NOTE: It is recommended to utilize the shortest duct run to optimize the performance of the outside air kit. The outside air kit inlet thimble should be positioned no higher than 4' above the ground level, in a manner that will not allow snow, leaves, etc. to block the inlet.

**STEP 15 - Installing a fan kit (optional)**

The FK6 fan kit can only be installed after the electrical junction box has been wired. Follow the instructions supplied with the fan kit for proper installation. It is recommended that you wire the junction box during construction even if fans are not initially desired - this allows for adding a fan kit at a later date. In line with this junction box, you must have an on/off switch or a BC10 Motor Speed Control. To wire the junction box:

Remove the lower grille by removing the (6) screws and lifting it up and outward.

The electrical junction box has been installed on the left side of the fireplace. Remove the junction box cover and the 1" electrical knockout on the outer shell. Insert the conduit through this hole and into the fireplace. Attach the conduit connector (provided in the fastener package) to the end of the conduit.

Attach the conduit with conduit connector to the junction box with the conduit connector lock nut.

Bring the supply wires to the inside of the junction box. Firmly attach the ground wire with the green headed screw (provided in the fastener package) and connect the supply wires using the wire nuts provided in the fastener package.

Replace the junction box cover.

Proceed to installation of the fan kit if desired. See the instructions supplied with this kit for details.

Replace the lower grille.

**WARNING**

**DISCONNECT POWER BEFORE STRIPPING OR JOINING ANY SUPPLY WIRES. ONLY PERSONS QUALIFIED FOR MAKING ELECTRICAL INSTALLATIONS (ELECTRICIANS) AS RECOGNIZED BY LOCAL OR NATIONAL GOVERNMENTAL BODIES SHOULD ATTEMPT TO MAKE THE INCOMING SUPPLY WIRE CONNECTIONS.**

**EDGES ARE SHARP. HAND PROTECTION IS RECOMMENDED. RECHECK ALL FASTENERS BEFORE LEAVING JOB.**

NOTE: A BC10 motor speed control kit is available for use with this fan kit. Refer to the instructions packed with it for proper installation. If a speed control option is desired, it is recommended that you use the BC10 kit to insure proper function.



**STEP 16 - Completion of fireplace enclosure**

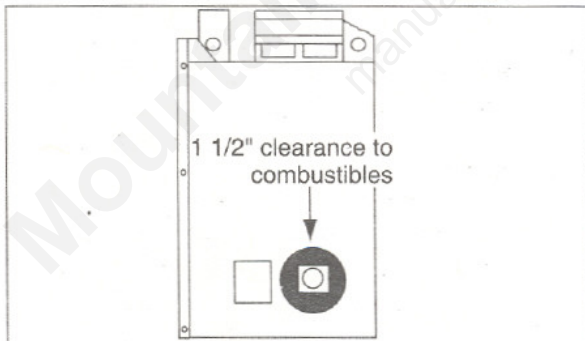
Complete the fireplace enclosure, allowing space for outside air ducts and gas piping, if desired. Electrical wiring should not come in contact with the unit. A minimum clearance of 3/4" must be maintained between the fireplace sides and the enclosure as well as the fireplace back and the enclosure. See Figure 4 for framing details.

**STEP 17 - Provisions for an optional gas log set**

Knockouts are provided on both sides of the fireplace to allow for connection of a certified gas log lighter or a decorative gas appliance with a maximum input of 100,000 BTU/hr. incorporating an automatic gas shut-off device and complying with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSIZ21.60. The decorative gas appliance should be installed in accordance with the National Fuel Gas Code, ANSI Z223.1-1980. The side refractories are designed to allow 1/2" iron pipe to pass through. Use a non-combustible sealant to seal any opening between the gas pipe and the refractory on the inside. Repack the insulation removed, to seal around the gas pipe where it exits the side of the fireplace. A minimum 1 1/2" air clearance must be provided to the 1/2" iron pipe. See Figure 17.

**STEP 18 - Installing the glass doors**

If desired, or required by local building codes, install the glass doors using the instructions supplied with the particular set of doors you have chosen.



**Figure 17**  
Gas knockout location

**CAUTION**

**WHEN USING A GAS LOG SET, THE FIREPLACE DAMPER MUST BE SET IN THE FULLY OPEN POSITION. THIS ENSURES A PROPER VENTING OF COMBUSTION PRODUCTS.**



**WARNING**

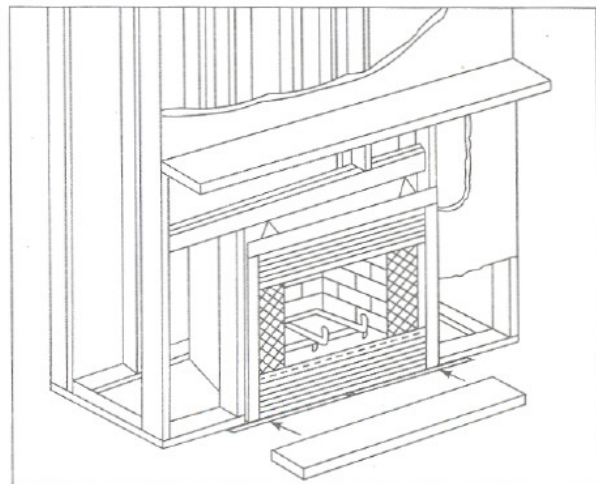
**THIS FIREPLACE WAS NOT TESTED BY THE FIREPLACE MANUFACTURER FOR USE WITH AN UNVENTED GAS LOG HEATER. DO NOT INSTALL AN UNVENTED GAS LOG HEATER IN THIS FIREPLACE UNLESS IT HAS BEEN SPECIFICALLY TESTED AND LISTED BY UNDERWRITERS LABORATORIES INC FOR USE IN THIS SPECIFIC MODEL FIREPLACE. UNLESS THE UNVENTED GAS LOG HEATER IS TESTED AND LISTED FOR USE IN THIS FACTORY-BUILT FIREPLACE, A FIRE HAZARD MAY BE CREATED THAT CAN RESULT IN A STRUCTURE FIRE.**

**STEP 19 - Positioning the hearth extension**

Position and secure the hearth extension over the protective metal strips that have been placed partially under the firebox front. See Figure 18. These strips should be protruding approximately two inches from under the fireplace front. Seal the crack between the hearth extension and fireplace with a non-combustible sealant.

**STEP 20 - Applying finishing materials on the hearth extension**

Apply the non-combustible finishing material of your choice to the hearth extension. **Do not install combustible materials over the black face of the fireplace. This poses a safety hazard and may start a fire.** You may only use non-combustible material over the black face of the fireplace. Refer to Figure 7 for combustible material information.



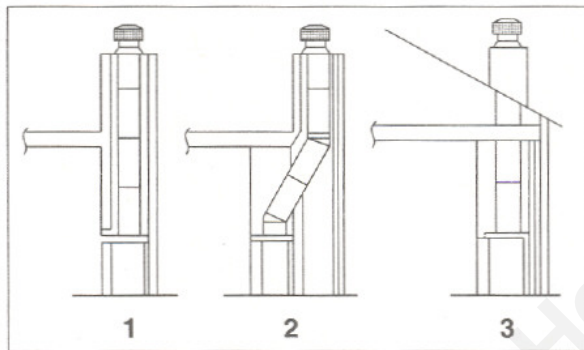
**Figure 18**  
Positioning the hearth extension

## CONSTRUCTING A CHASE

A chase is a vertical box-like enclosure built around the chimney and firebox. A chase may be constructed for the fireplace *and* chimney or for the chimney only. It is most commonly constructed on an outside wall.

In cold climates, it is recommended that the chase floor be insulated using batt type insulation between the floor joists.

Three examples of chase applications are shown in Figure 19.



**Figure 19**  
Chase Constructions

1. Fireplace and chimney enclosed in an exterior chase.
2. Chimney offset through exterior wall and enclosed in chase.
3. Chase constructed on roof.

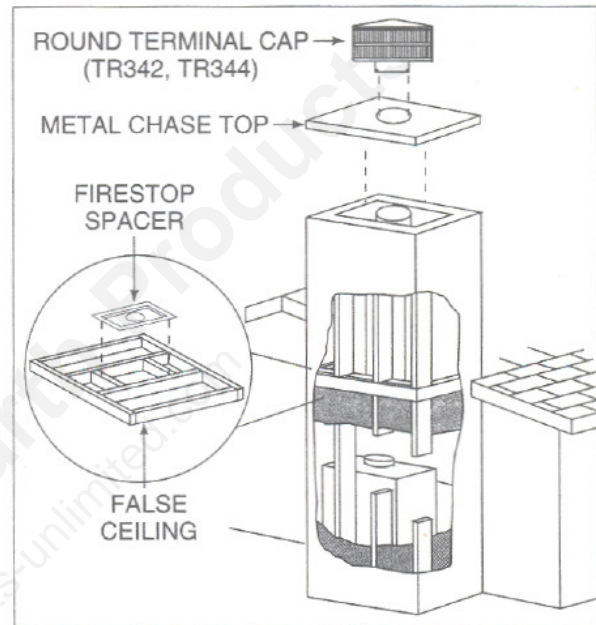
### Materials for the chase

The chase is constructed using framing materials 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 3/4" minimum air space around the firebox.
2. Maintain a 2" air space around the chimney.
3. The chase top must be constructed of a non-combustible material.
4. In cold climates a firestop spacer should be installed in an insulated false ceiling at the 8 foot level above the firebox assembly. This prevents heat loss through the fireplace.

5. In cold climates, the walls of the chase should be insulated to the level of the false ceiling as shown in Figure 20. This will help prevent heat loss from the home around and through the fireplace.



**Figure 20**  
Chase Assembly

### WARNING

**INSTRUCTIONS FOR INSTALLATION OF THE CHASE TOP, STORM COLLAR AND TERMINAL CAP ARE 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 ENCLOSURE. TO PROTECT AGAINST EFFECTS OF METAL CORROSION ON THOSE EXPOSED TO THE WEATHER, WE RECOMMEND THAT THE CHASE TOP AND TERMINAL CAP BE PAINTED WITH A RUST RESISTANT PAINT.**



## Installing a terminal cap on a chase enclosed chimney

Construct a 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.

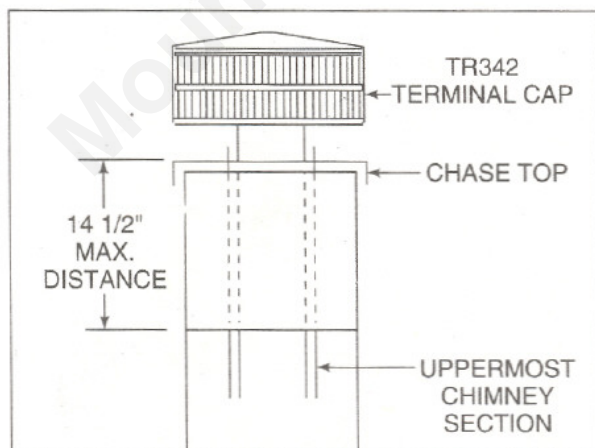
Install the chimney sections up through the chase enclosure. When using a TR344 round terminal cap, the last section of pipe must extend above the top of the chase cone to allow installation of the storm collar and terminal cap. See Figure 21.

For installations utilizing a telescoping round terminal cap (TR342), the last chimney section must be below the top of the chase top, but not more than 14 1/2" below the top of the chase top flashing collar.

When installing a TS345 Square Termination, the upper most chimney section must be no less than 2" below the top of the chase top or more than 3" above the top of the chase top.

Attach the chase top (CT35) to the top of the chase.

Install the terminal cap, using the instructions provided with it.



**Figure 21**  
Installing a terminal cap

## OPERATING INSTRUCTIONS

### WARNING

DO NOT OPERATE THIS FIREPLACE WITH THE FLUE DAMPER IN THE CLOSED POSITION. COMBUSTION PRODUCTS MUST VENT UP THE CHIMNEY SYSTEM TO PREVENT CARBON MONOXIDE POISONING, AND TO PREVENT HOT COMBUSTION GASES FROM CONTACTING AND OVERHEATING COMBUSTIBLE SURFACES. FAILURE TO OPERATE THIS FIREPLACE WITH THE DAMPER IN THE OPEN POSITION MAY RESULT IN ASPHYXIA-TION OR A STRUCTURE FIRE.

This fireplace is intended to operate as a supplemental heat source for a single room. It is not designed to function as a primary heat source for a structure.

Fireplaces, as well as other woodburning appliances, have been used safely for many years. It has been our experience that most problems are caused by improper installation and operation of the unit. Make certain that installation and operation of the fireplace system is in accordance with these instructions.

It is extremely important that the fire be supervised whenever the fireplace is in use. It is also recommended that an annual inspection be performed on the fireplace system to determine if the flue system needs to be cleaned, or as in the case of any appliance, if minor repairs are required to maintain the system in top operating condition.

**INTENDED USAGE.** This factory-built fireplace is intended for use with either solid fuel (firewood) or a decorative gas appliance that has been tested and listed to the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60. **When operating your fireplace, the flue damper must be in the open position.**

This fireplace was not tested and listed for use with an unvented gas log heater. Do not install an unvented gas log heater in this fireplace and operate it with the flue damper in the full closed position unless the unvented gas log has been specifically tested and listed for use in this fireplace by Underwriters Laboratories Inc. Use of an unvented gas log heater in this factory-built fireplace may create a fire hazard that can result in a structure fire.



**NOTICE**

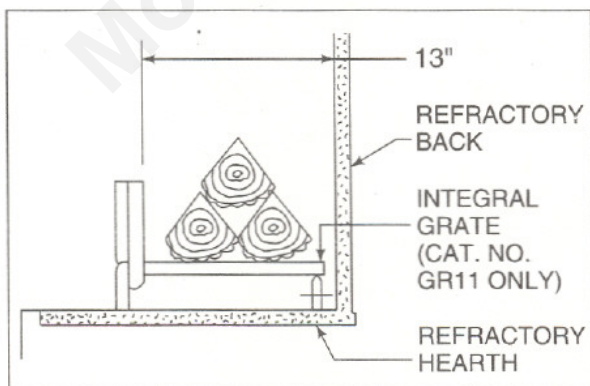
**SAVE AND PASS THESE OPERATING INSTRUCTIONS AND THE INSTALLATION INSTRUCTIONS TO SUBSEQUENT OWNERS. THE INFORMATION PROVIDED IS INTENDED TO NOTIFY AND WARN THEM ABOUT MAKING UNSAFE FUTURE MODIFICATIONS SUCH AS THE ADDITION OF SHELVES OR THE USE OF UNAUTHORIZED PARTS AND REPAIRS.**

**CAUTION**

**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.**

**STARTING THE FIRE.** Check the flue damper to be certain it is in the full open position. Place crumpled or twisted paper under the fireplace grate. Loosely arrange kindling and small pieces of wood to form a layer above the paper. Light the paper and add small pieces of wood until a hot bed of embers has been established. At this point add progressively larger pieces of wood until you are able to position 4" diameter split logs as shown in Figure 23.

When first lighting your fireplace, it may be necessary to pre-warm the flue to establish a draft. This is done by holding a rolled up piece of burning newspaper under the flue damper for a few moments. This will prevent smoke spillage during start-up.



**Figure 23**  
**Sectional View of Fireplace**

Firewood should be seasoned for at least 6 months before it can be burned as a fireplace fuel. Improperly seasoned (green or wet) wood will cause the fireplace to smoke, will allow creosote deposits to rapidly buildup in the chimney system and may cause roof stains to develop.

Fuel products with abnormal burning characteristics, including synthetic logs that contain wax binders, scrap lumber, wax or plastic coated cardboard and other highly volatile fuels that burn at excessive temperatures, may cause the fireplace to operate in an unsafe manner. Flammable liquid fuels are explosive and must never be used to start or freshen a fire. Heatilator does not warrant the structural or functional performance of the fireplace system when such synthetic fuels or flammable liquids have been used.

**NOTE:** When heated for the first several times, the fireplace should be heated gradually to prevent moisture in the refractory from causing cracks and to allow binders in the insulation to dissipate. You will notice an industrial odor during the first few fires that are burned. This is considered to be normal.

Use only a solid wood fuel or a listed Heatilator gas log set. Do not use a fireplace insert or products not specifically tested and listed for use in this fireplace.

Use common sense when burning this fireplace. The fire must be built on the fireplace grate, without danger of the burning fuel falling out of the firebox.

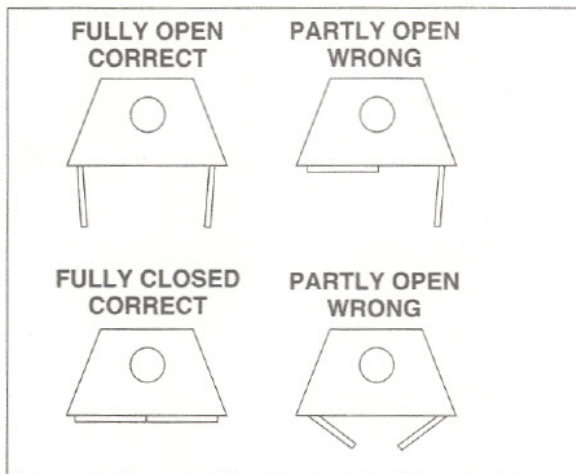
**CAUTION**

**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 A HOSTILE FIRE.**

**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 embers have thoroughly cooled.

**GLASS DOORS.** The greatest heat output is realized when operating the fireplace with the glass doors open. When the doors are open, the screen must be closed. When the fireplace is not in use, Glass Doors will prevent loss of room heat through the chimney. Only HEATILATOR Glass Doors, model numbers DM1136, DM1136A, DM1136B, C1136A, C1136B, C1136C, C2136A, C2136B, C2136C or P1136B may be used.





**Figure 24**  
**Recommended Operating Positions of Doors**

**WARNING**

**FIREPLACES EQUIPPED WITH DOORS SHOULD BE OPERATED ONLY WITH DOORS FULLY OPEN OR FULLY CLOSED. IF DOORS ARE LEFT PARTIALLY OPEN, GAS AND FLAME MAY BE DRAWN OUT OF THE FIREPLACE OPENING, CREATING THE RISK OF BOTH FIRE AND SMOKE.**

**FAN KIT.** A HEATILATOR FK6 heat circulating fan may be used with this fireplace. An external ON/OFF switch must be provided, or a BC10 motor speed control may be used.

**WARNING**

**CONTINUED OVER-FIRING CAN PERMANENTLY DAMAGE YOUR FIREPLACE SYSTEM. EXAMPLES OF OVER-FIRING ARE:**

- 1. THE "NORMAL LOG FIRE" SHOULD BE CONTAINED IN THE GRATE, WITH THE LENGTH OF LOGS NO GREATER THAN THE BACK WALL OF THE FIREPLACE.**
- 2. THE FOLLOWING MATERIALS MUST NOT BE USED IN THIS FIREPLACE: QUANTITIES OF SCRAP LUMBER, PINE BRANCHES, PROCESSED FIRE LOGS AND FIRE STARTERS, OR CARDBOARD BOXES WHICH EXCEED THE VOLUME OF THE "NORMAL LOG FIRE". THESE MATERIALS PRODUCE MANY SPARKS AND MUST NOT BE USED.**

Before starting a fire in your DX Series fireplace, use the following check list:

**FLUE DAMPER.** The flue damper is operated by moving the handle from left to right, which should place the damper in a fully open position. Verify this by looking up from the inside of the firebox. Always operate this fireplace with the damper fully open. Please note, down drafts, obstructions, damage or poor (wet) fuels can cause smoke spillage.

**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 creosote build-up which is the formation of a flammable sediment.

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.

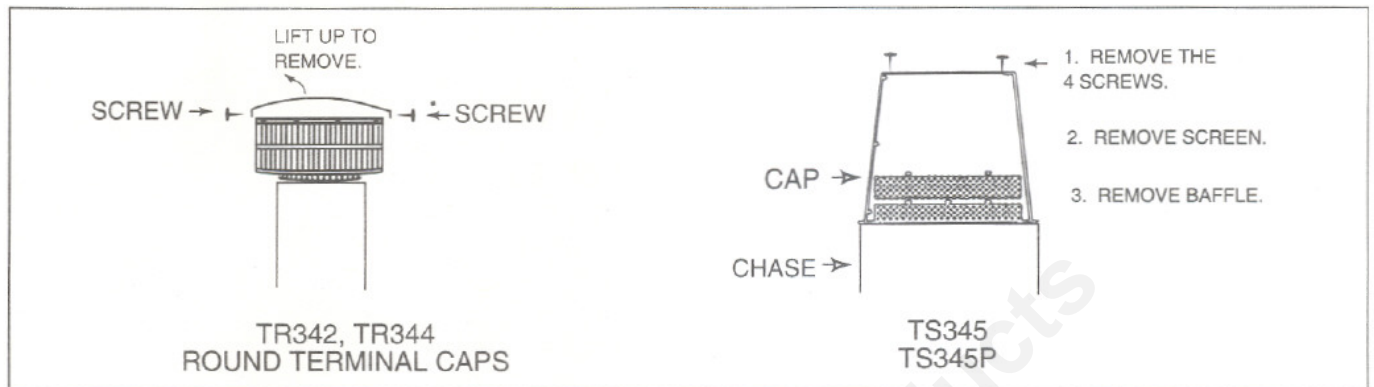
The chimney should be inspected at least twice a year during the heating season to determine if creosote build-up has occurred.

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

**CHIMNEY CLEANING.** If you do detect a build-up of creosote, contact a qualified chimney sweep or clean it yourself. To do this, perform the following steps:

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 or Housing Top. See Figure 25.
4. Clean with a stiff nylon brush attached to a pole **OR** tie a rope to a burlap bag filled with straw and several small stones or sand. Work up and down the flue until clean.
5. Replace the terminal cap or housing top.





**Figure 25**  
Terminal Caps

**WARNING**

**A CHIMNEY FIRE CAN PERMANENTLY DAMAGE YOUR CHIMNEY SYSTEM. THIS DAMAGE CAN ONLY BE REPAIRED BY REPLACING THE DAMAGED COMPONENT PARTS. CHIMNEY FIRES ARE NOT COVERED BY THE LIMITED WARRANTY AND BUYER PROTECTION PLAN.**

**CLEAR SPACE NEAR FIREPLACE.** The hearth extension must extend at least 16 inches to the front and 8 inches to the sides of the firebox opening. Combustible materials must not be stored in this area. Combustible walls perpendicular to the front of the fireplace must be at least 18 inches from the fireplace opening. Room furnishings such as drapes, curtains, chairs, or other combustibles must be at least 4 feet from the open front of the fireplace.

**GRATE.** The factory installed integral grate must be used to hold the logs from falling out of an open fireplace and to allow air to pass between the burning logs. It is important to keep the fire off the hearth and to allow the ashes to collect beneath the fire, thereby forming a layer of additional heat protection. See Figure 23. Use only model number GR11 integral grate for replacement.

**FIRESCREEN.** A firescreen is always provided to control sparks. It must be closed whenever the fireplace is in use. Glass doors or firescreens must not be used to hold burning material inside the fireplace. 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.

**CAUTION**

**WHEN LEFT CLOSED WHILE BURNING YOUR FIREPLACE, FIRESCREENS AND GLASS DOORS WILL BE HOT. HANDLE WITH CARE.**

**NEGATIVE AIR PRESSURE WITHIN THE STRUCTURE.** This fireplace will operate correctly only if adequate ventilation is provided to allow proper draft to the fireplace system. Heatilator assumes no responsibility for the improper performance of the fireplace system caused by inadequate draft due to environmental conditions, downdrafts, tight sealing construction of the structure, or mechanical exhausting devices which create a negative air pressure within the structure where the fireplace is located.

**OUTSIDE AIR KIT OPERATION.** A damper control handle allows the individual control of the outside air inlets if your fireplace is equipped with this option. Use of outside air for combustion is highly recommended to conserve heated air within the structure and to provide make up air to keep the fireplace venting properly.



# *Attention*

## **FIREPLACE INSTALLER**

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