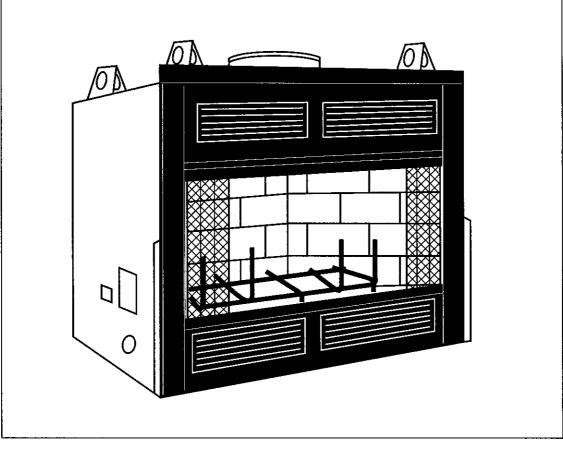


This appliance has been retired. Service parts pages within have been removed. For replacement parts, please refer to the individual service parts list located on the brand websites.



# HB36A HB36AI HB42A HB42AI WOODBURNING FIREPLACE INSTALLATION & OPERATING INSTRUCTIONS FOR RESIDENTIAL USE



Models HB36A, HB36AI, HB42A, HB42AI



# PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

# Table of Contents

Listings and Code Approvals	3
Description of the Fireplace System	3
Fireplace System Components	4
Pre-Installation Preparation	8
Fireplace Locations and Space Requirements	8
Framing The Fireplace	
Hearth Extensions	10
Sidewalls/Surrounds	11
Mantel	11
Chimney Requirements	11
Using Offsets and Returns	
Chimney Height Requirements	13
Step-By-Step Installation of the Fireplace System	14
Constructing a Chase	19
Materials For The Chase	
Installing a Terminal Cap on a Chase-Enclosed Chimney	
Operating Instructions	

# **Safety Precautions**

- 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.
- Always check your local building codes prior to installation. The installation must comply with all local, regional, state and national codes and regulations.
- 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, 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 HB Series 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.
- 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 HB Series fireplace system has been tested and listed in accordance with UL 127 and ULC-S610 Standards, and has been listed by Underwriters Laboratories for installation and operation in the United States and Canada as described in these installation & Operating Instructions.

The model HB Series fireplace has been tested and listed for use with the optional components given on page 3. These optional components may be purchased separately and installed at a later date. However, installation of an outside air kit 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<sup>®</sup> 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<sup>®</sup> fireplace system consists of the following:

- 1. Fireplace/Integral Grate
- 2. Hearth Extension

- 3. Chimney System
- 4. Chimney Termination Cap

- Optional components include:
  - 1. Glass Doors
  - 2. Outside Combustion Air System

**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.

# 3. Heat Circulating Fans

4. Chimney Air Kit (required in Canada)

# Tools and Building Supplies Normally Required

# Tools

Saw I Pliers N Hammer I Phillips screwdriver I Tape measure O Plumb line Leveler Electrical drill and bits Square

#### Building Supplies Hearth extension material Wall-finishing materials Framing material Fireplace surround Caulking material

\*\*\*



# FIREPLACE SYSTEM COMPONENTS

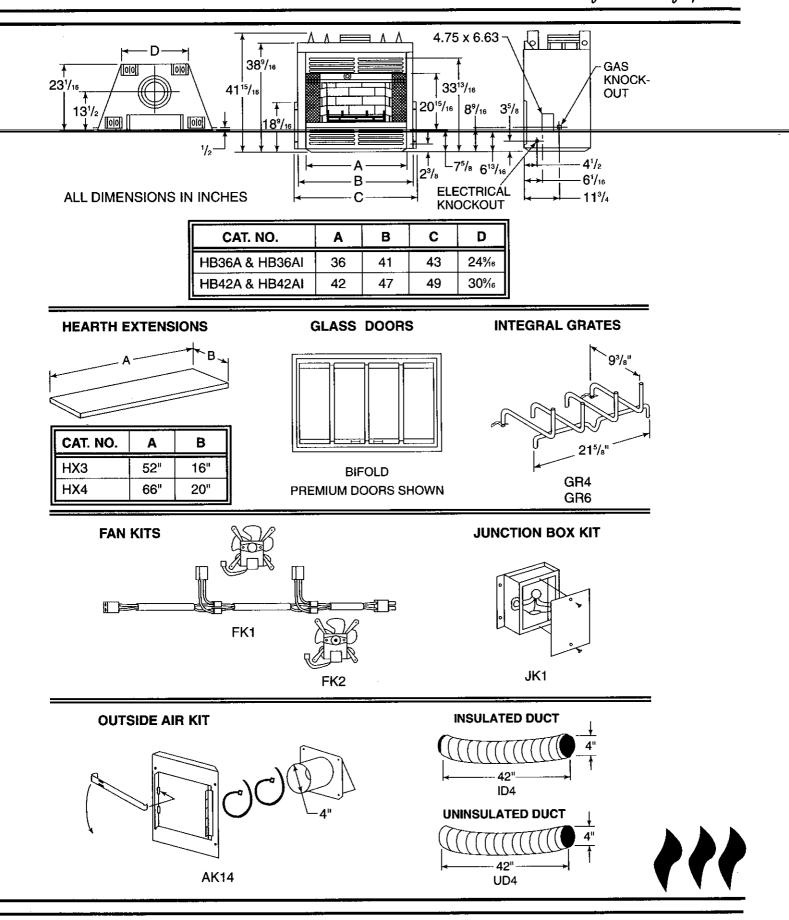
The table below, together with the following pictures, show only those components which may

be safely used with this fireplace.

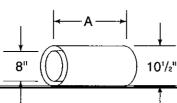
Catalog Number	Description
HB36A HB42A	Fireplace, includes integral grate and hearth protection strips
HB36AI HB42A	Fireplace (Insulated Outer Shell), incl. integral grate & hearth protection strips
НХЗ НХ4	Hearth Extension
DM1136 DM114	Designer Modular Bifold Glass Doors
DM1136A DM114	•
DM1136B DM114	-
C1136A C1142	Classic Bifold Glass Doors - Brushed Brass Finish
C1136B C1142	Classic Bifold Glass Doors - Polished Brass Finish
C1136C C1142	Classic Bifold Glass Doors - Chrome Finish
C2136A C2142	Classic Cabinet Glass Doors - Brushed Brass Finish
C2136B C2142	Classic Cabinet Glass Doors - Polished Brass Finish
C2136C C2142	Classic Cabinet Glass Doors - Chrome Finish
P1136B P1142	Premium Series Bi-fold Glass Doors - Polished Brass Finish
GR4 GR6	Integral Grate (included with Fireplace)
FK1	Fan Kit (Raceway and Single Fan)
FK2	Fan Kit (Add-on Fan - must be used with FK1)
JK1	Electrical Junction Box Kit
BC10	Motor Speed Control Kit
AK14	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° SI 200 Straight Attic Inculation Shield, 24"
AS8	SL300 Straight Attic Insulation Shield, 24"
JB877 CB876	Chimney Joint Band Chimney Bracket
RF370	Roof Flashing - Flat to 6/12 Pitch
RF370 RF371	Roof Flashing - 6/12 to 12/12 Pitch
TR342	Telescoping Chimney Terminal Cap - Round (Storm Collar Included)
TR344	Chimney Terminal Cap - Round (Storm collar included)
TS345	Pyramid Terminal Cap
TS345P	Painted Pyramid Terminal Cap

# The first name in fireplaces

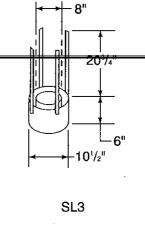
# **HB SERIES WOODBURNING FIREPLACE**



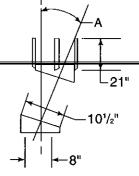
# **CHIMNEY SECTIONS**



1		4
CAT. NO.	Α	В
SL306	6"	43/4"
SL312	12"	<b>1</b> 0 <sup>3</sup> /4"
SL318	18"	16 <sup>3</sup> /4"
SL324	24"	22 <sup>3</sup> /4"
SL336	36"	34 <sup>3</sup> /4"
SL348	48"	463/4"



**CHIMNEY STABILIZER** 

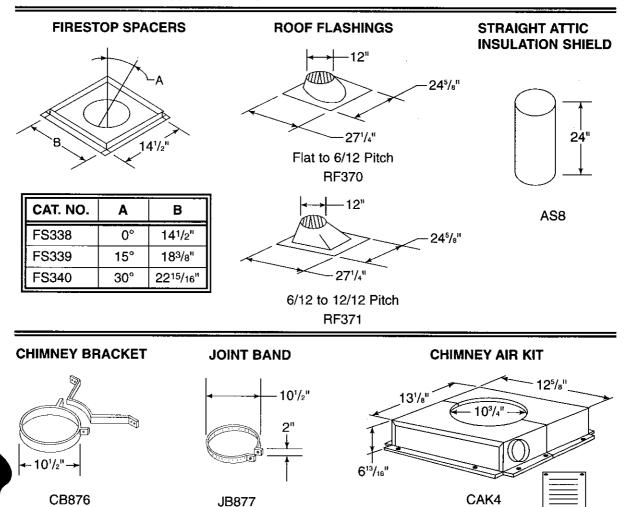


**OFFSETS/RETURNS** 

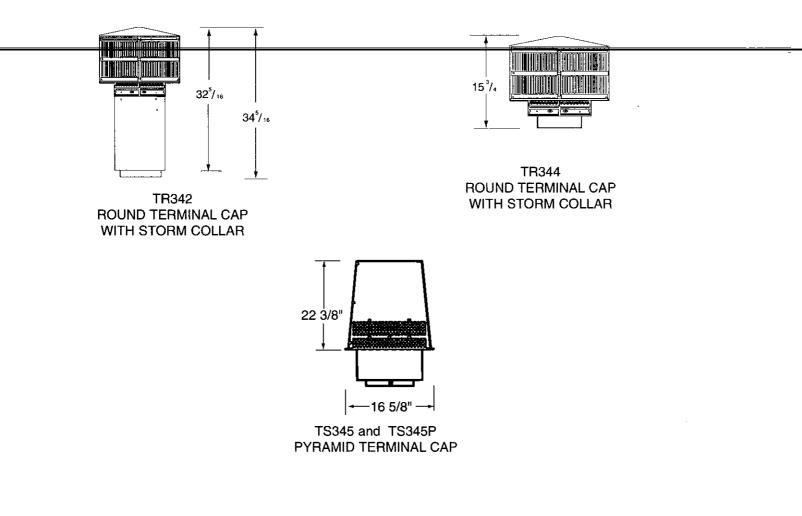
CAT. NO.	Α
SL315	15°
SL330	30°

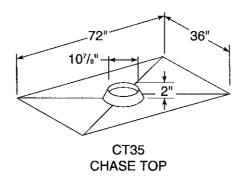
A= Actual length

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



# **CHIMNEY TERMINAL CAPS & VENT SECTIONS**







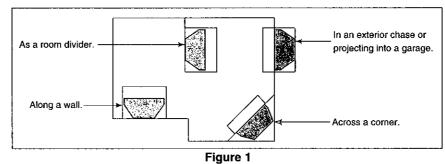


# **PRE-INSTALLATION PREPARATION**

# FIREPLACE LOCATIONS AND SPACE REQUIREMENTS

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

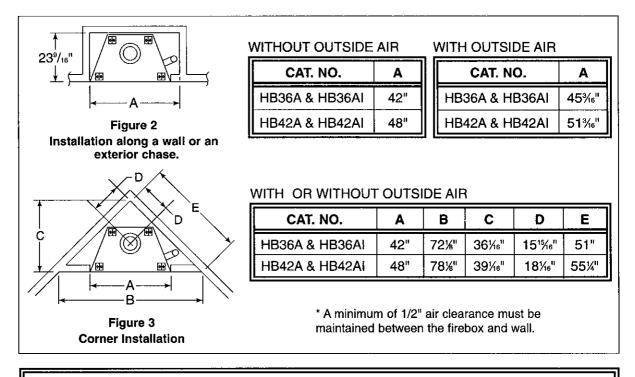
used as a room divider, installed along a wall, across a corner or use an exterior chase. See Figure 1.



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.



# 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 OVER-HEATING COULD OCCUR AND A FIRE COULD RESULT.

### FRAMING THE FIREPLACE

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 across the top of the fireplace must be above the level of the

top standoffs. A 1/2" 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.

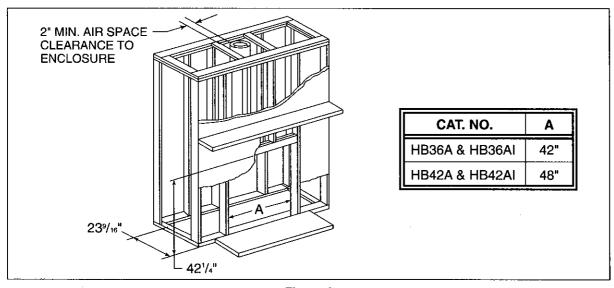


Figure 4 Framing the Fireplace

**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 FACE OF THIS FIREPLACE OR A STRUCTURE FIRE MAY RESULT. THE NON-LOUVERED PORTION OF THE METAL FACE MAY ONLY BE COVERED WITH NON-COMBUSTIBLE MATERIALS.



# **HEARTH EXTENSIONS**

A hearth extension must be installed with all fireplaces. It is to protect the combustible floor in front of the fireplace from both radiant heat and sparks.

The construction of and materials used for a factorybuilt hearth extension are shown in Figure 5. A hearth extension of this construction may be covered with any non-combustible decorative material and may have a maximum thickness of 2¼". Seal gaps between the hearth extension and the front of the fireplace with a non-combustible sealant.

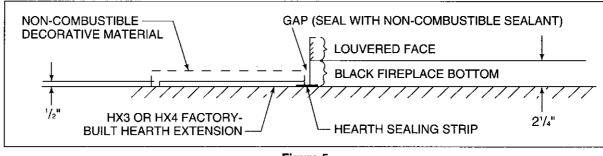


Figure 5 Factory-Built Hearth Extension

Field constructed Hearth Extensions should be constructed in accordance with the minimum dimensions provided in Figure 6.

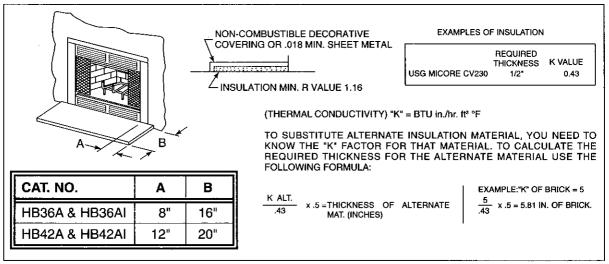


Figure 6 Hearth Extension

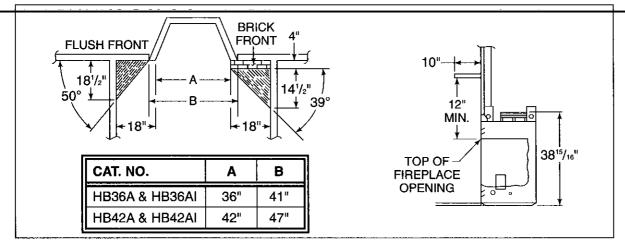
# WARNING

HEARTH EXTENSIONS ARE TO BE INSTALLED ONLY AS ILLUSTRATED TO PREVENT HIGH TEMPERATURES FROM OCCURRING ON CONCEALED COMBUSTIBLE MATERIALS. HEARTH SEALING 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.



# 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 top of the firebox opening. The combustible mantel may have a maximum depth of 12". 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. (See the shaded areas on each side of the firebox, as defined in Figure 7.) Combustible trim must not cover the black metal surfaces of the fireplace. 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	13 ft.
Minimum height with Offset/Return	14.5 ft.
Maximum height	90 ft.
Maximum chimney length between an Offset/Return	12 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 12 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 (page 12), dimension "A".
- 2. After determining the offset dimension, refer to Table 1 (page 13) and find the "A" dimension closest to **but not less than** the distance of shift needed for your installation.
- The "B" dimensions that coincide 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.

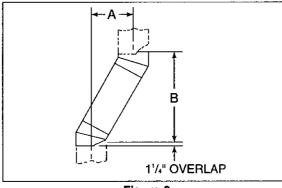


Figure 8 Chimney Offset/Return

Example: Your "A" dimension from Figure 8 is 14/". Using Table 1, the dimension closest to but not less than 14/2" is 14/3" using a 30° offset/return. It is then determined from the table that you would need 33/4" (Dimension "B") between the offset and return. The chimney components that best fit your application are two SL312's.

# WARNING

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

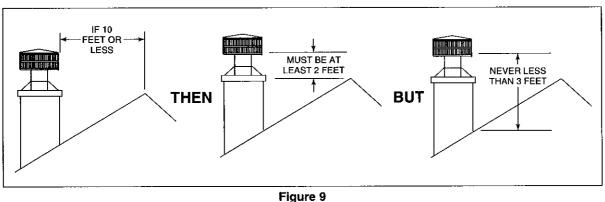
TABLE 1				Offset	Chart*		(Dime	ensions i	n inches)
15°		30°							
Α	В	A	В	SL306	SL312	SL318	SL324	SL336	SL348
1%	13%	3%	141/16	-	-	_		-	_
2%	17¾	6¼	18‰	1	-		-	-	-
-	_	8%	<b>22</b> <sup>1</sup> / <sub>16</sub>	2	-	_ ·	-	-	-
41/16	23‰	9¼	23¾	-	1	-	_	-	-
_	-	11%	27%	1	1	_	-	_	-
6	29%	12¼	<b>28¹</b> 5⁄16	-		1	-	_	-
73/16	34	14%	331/16	-	2	-	-		· —
_	-	15¼	34%	-	-	-	1	_	-
-	-	17%	38¼	1	-	_	1	-	
-	-	20%	431/16	-	-	2	-	-	-
10%	46¾	21¼	44%		-	-	-	1	-
11%	51%	23%	4811/16	1	-	-	-	1	-
—	_	26%	53 <sup>1</sup> %	-	-	-	2	-	-
13¾	58%	27¼	55%	-	-	-	-	-	1
15	6215/16	29%	591/16	1	-	_	- 1	-	1
16½	68%	32%	64¼	-	1	-	-	-	1
181%	74%	35%	69%	-	-	1	-	-	1
-	_	38%	74%	-	-	-	1	-	1
-	_	41	78¾	1	-	-	1	í	1
22¾	91%	44%	851/16	-	-	-	-	1	1
24	96½	47	89%	1		-		1	1
25%	103½	50%	95%	-	-	_	-		2



\*Proper assembly of air cooled chimney parts result in an overlap at chimney joints of 1/2". 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.



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

# DETERMINING THE NUMBER OF CHIMNEY SECTIONS REQUIRED

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

- 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.
- Subtract the height of the firebox assembly (38<sup>15</sup>/<sub>6</sub>") 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	4¾"			
Firestop Spacers				
FS338	0			
FS339	0			
FS340	0			
Offset/Returns				
SL315	13%"			
SL330	141⁄16"			
Roof Flashings				
RF370	0			
RF371	0			
Chimney Sections*				
SL306	4¾"			
SL312	10¾"			
SL318	16¾"			
SL324	22¾"			
SL336	34¾"			
SL348	46¾"			

\*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 1/2" 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

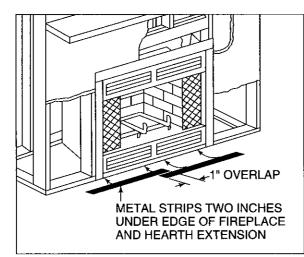
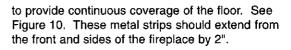


Figure 10 Positioning the metal strips



#### 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.

#### WARNING

CAREFULLY FOLLOW THE INSTRUC-TIONS 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.

### **STEP 4 - Assembling chimney sections**

Attach either a straight chimney section or an offset to the top of the fireplace depending on your installation requirement. 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.

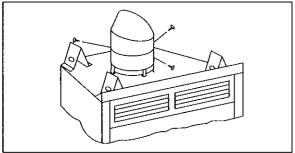
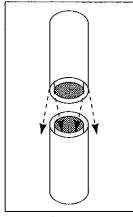


Figure 11 Offset Secured to Fireplace



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.

Figure 12 Connecting Chimney Sections

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

Mark and cut out an opening in the ceiling for the particular firestop spacer being utilized  $(14\%" \times 14\%"$  for an FS338,  $14\%" \times 18\%"$  for an FS339, or  $14\%" \times 22\%"$  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 is 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 DISASSEM-BLED ONCE LOCKED TOGETHER. PLAN AHEAD TO INSURE THE PROP-ER 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.

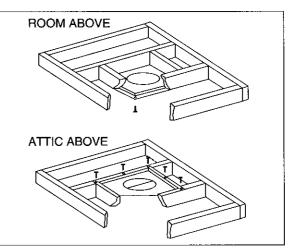


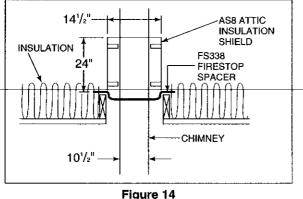
Figure 13 Installing the firestop spacer

#### 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.







Installing an AS8

# STEP 8 - Double-checking chimney assembly

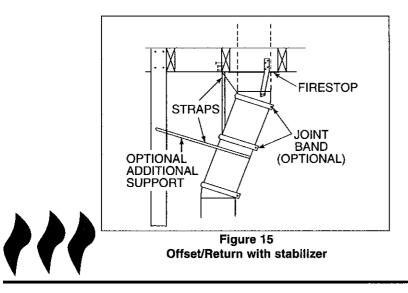
Continue assembling the chimney sections up through the firestop spacers as needed. While doing so, be aware of the height and unsupported chimney length limitations that are given on page 11 under "Chimney Requirements".

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 fire-place or at any chimney joint.



WARNING

WHEN CHIMNEY SECTIONS EXCEED-ING SIX FEET IN LENGTH ARE INSTALLED BETWEEN AN OFFSET/ RETURN, STRUCTURAL SUPPORT MUST BE PROVIDED TO REDUCE OFF-CENTER LOADING AND PRE-VENT 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.

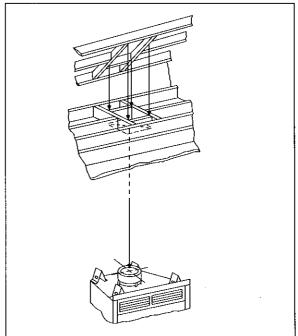


Figure 16 Ceiling and attic construction

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

Measure to either side of the nail and mark the 14½" x 14½" 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.

# 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 roof flashing (optional)

If a roof flashing is to be used, install the roof flashing appropriate to the roof pitch and install a TR344 terminal cap (round) following the instructions shipped with these accessories.

# STEP 14 - Installing the CAK4

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

# STEP 15 - Installing an outside combustion air kit

The use of a combustion outside air kit on this fireplace is highly recommended to minimize the effects of negative pressure within the structure. 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.

The outside air kit may be installed on either the left hand or right hand side of the fireplace. Remove the cover plate from the side of the firebox assembly where the air kit is to be installed. Install the AK14 outside air kit as detailed in the instructions provided with the outside air kit.

# STEP 16 - Installing a fan kit (optional)

If a fan kit is desired, first install the JK1 electrical junction box kit. In line with this junction box, you must have an on/off switch or a BC10 Motor Speed Control. Fan kits FK1 and FK2 can only be installed after the JK1 junction box kit has been installed. Follow the instructions supplied with the fan kit for proper installation. It is recommended that you install the JK1 junction box kit during initial construction even if fans are not initially desired - this allows you to add a fan kit at a later date.

# WARNING

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

EDGES ARE SHARP. HAND PRO-TECTION 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 17 - 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 1/2" 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 18 - Provisions for a gas log set or gas log lighter

Knockouts are provided on both sides of the fireplace for the connection of a decorative gas appliance with a maximum input of 100,000 Btu/hr input or a certified gas log lighter. The decorative gas appliance must comply with the Standard for Decorative Gas Appliances for Installation in Vented Fireplaces. These devices must be installed in compliance with the National Fuel Gas Code, ANSI Z223.1-1980. The side refractories are designed to allow 1/2" iron pipe to pass through. A gas tube is factory installed on the right hand side of the firebox assembly that allows that gas pipe to penetrate into the fire chamber. To utilize the left hand knockout, the gas tube must be moved from the right hand side of the unit to the left hand side. Install the cover plate removed from the left hand side to the opposite side. Use a non-combustible sealant to seal any opening between the gas pipe and the refractory on the inside of the fire chamber. Repack the insulation removed from the gas tube 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.

# CAUTION

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

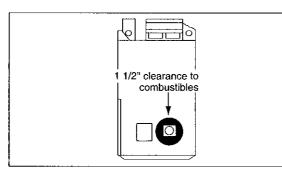


Figure 17 Gas knockout location

### STEP 19 - Installing the firescreen

Attach the firescreen to the fireplace side, utilizing the (2) hairpin clips from the enclosed fastener package. Use pliers to insert the clip through the last strand of screen wire and into the hole at the midpoint of the fireplace side.

### STEP 20 - 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.

### STEP 21 - 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 22 - 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 metal face of the fire-place.** This poses a safety hazard and may start a fire. You may only use non-combustible material over the black non-louvered face of the fireplace. Refer to Figure 7 for combustible material informa-

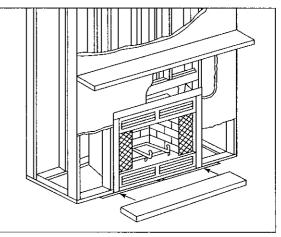


Figure 18 Positioning the hearth extension





# **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.

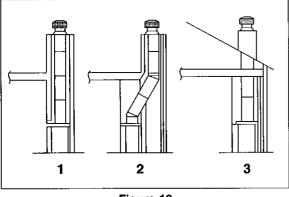


Figure 19 Chase Constructions

- 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 1/2" minimum air space around the firebox.
- 2. Maintain a 2" air space around the chimney.
- 3. The chase top must be constructed of a noncombustible 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 minimizes 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.

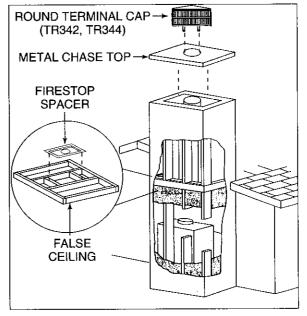


Figure 20 Chase Assembly

# WARNING

INSTRUCTIONS FOR INSTALLATION OF THE CHASE TOP, STORM COLLAR AND TERMINAL CAP ARE PACKAGED WITH THESE PARTS. TO AVOID DAN-GER OF FIRE, ALL INSTRUCTIONS MUST BE STRICTLY FOLLOWED, INCLUDING THE PROVISION OF AIR SPACE CLEARANCE BETWEEN CHIM-NEY SYSTEM AND ENCLOSURE. TO PROTECT AGAINST EFFECTS OF CORROSION ON THOSE PARTS EXPOSED TO THE WEATHER, WE RECOMMEND THAT THE CHASE TOP AND TERMINAL CAP BE PAINTED WITH A RUST RESISTANT CAP.



# 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 TEMPERA-TURE OF THIS SINGLE WALL PIPE MAY RADIATE SUFFICIENT HEAT TO COMBUSTIBLE CHASE CONSTRUC-TION MATERIALS TO CAUSE A FIRE.

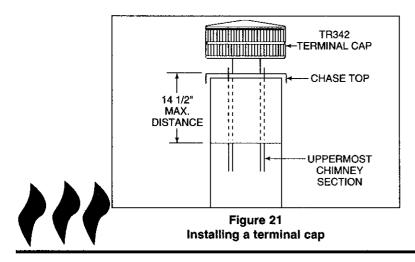
Install the chimney sections up through the chase enclosure. When using a TR344 Round Terminal Cap, the last section of pipe must extend above the top of the chase cone to allow installation of the storm collar and terminal cap.

For installations utilizing a telescoping round terminal cap (TR342) or telescoping square terminal cap (ST376), the uppermost 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.

For installations where you want a decorative terminal cap, or where a custom shroud is desired, a TS345 Pyramid Terminal Cap is available. When utilizing the TS345 Pyramid Terminal Cap, the uppermost chimney section must not be more than 3" below the lever of the chase top pan. Follow all instructions provided with the TS345 termination system.

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

Install the terminal cap, using the instructions pro-



# **OPERATING INSTRUCTION**

# NOTICE

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

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 apliance 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.

# WARNING

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

### CAUTION

FIREPLACE OPERATION DOES RE-QUIRE AIR. DO NOT TAKE AIR FROM OTHER FUEL BURNING APPLIANCES WHICH CAN RESULT IN IMPROPER VENTING (SMOKING) OR AIR DILU-TION. 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 22.

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.

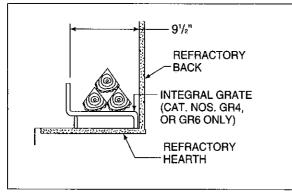


Figure 22 Sectional View of Fireplace

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 FIRE-PLACE. 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 on the HB36A or HB36AI fireplace. Model numbers DM1142, DM1142A, DM1142B, C1142A, C1142B, C1142C, C2142A, C2142B, C2142C or P1142B may be used on the HB42A or HB42AI.



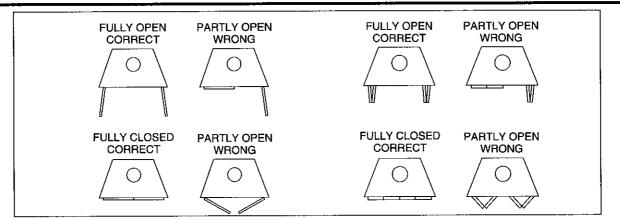


Figure 23 Recommended Operating Positions of Doors

### WARNING

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

**FAN KIT.** HEATILATOR FK1/FK2 heat circulating fans may be used with these fireplaces. An external ON/OFF switch must be provided, or a BC10 motor speed control may be used.

# WARNING

CONTINUED OVER-FIRING CAN PER-MANENTLY DAMAGE YOUR FIRE-PLACE 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 FIRE-PLACE.

2. THE FOLLOWING MATERIALS MUST NOT BE USED IN THIS FIRE-PLACE: QUANTITIES OF SCRAP LUM-BER, 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 HB 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 buildup 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.

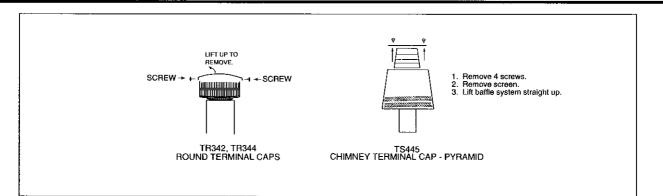
The chimney should be inspected at least twice a year during the heating season to determine if creosote build-up has occurred.

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.





### Figure 24 Terminal Caps

- 3. Remove the Terminal Cap or Housing Top. See Figure 24.
- 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.

### WARNING

A CHIMNEY FIRE CAN PERMANENTLY DAMAGE YOUR CHIMNEY SYSTEM. THIS DAMAGE CAN ONLY BE REPAIRED BY REPLACING THE DAM-AGED COMPONENT PARTS. CHIM-NEY 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 for the HB36A and HB36AI fireplaces; and 20" to the front and 12" to the sides of the firebox opening for the HB42A and HB42AI fireplaces. 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 22. Use only model number GR4 or GR6 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 BURN-ING YOUR FIREPLACE, FIRE-SCREENS 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.



