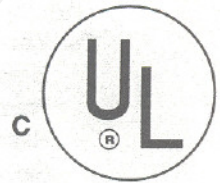


heatilator®

The first name in fireplaces

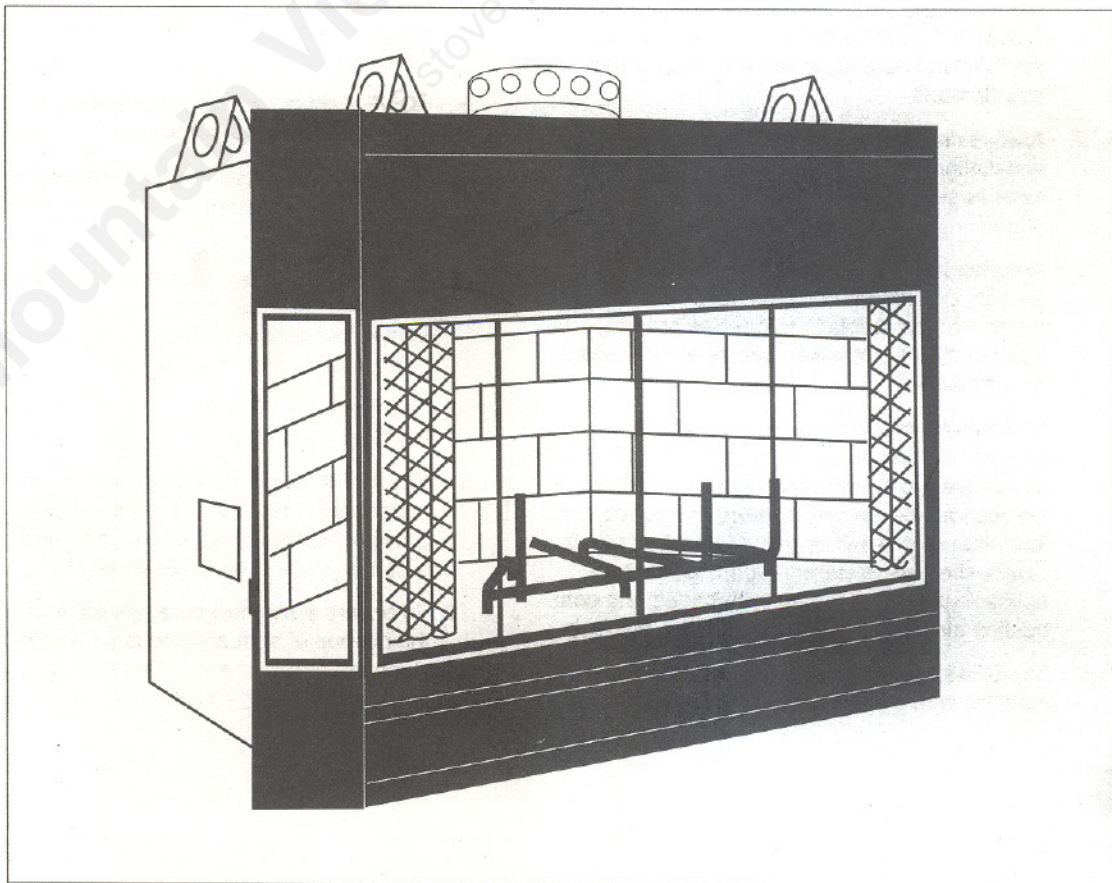
Heatilator Inc.
1915 W. Saunders Street
Mt. Pleasant, IA 52641
a HON INDUSTRIES company



SF48A

WOODBURNING FIREPLACE INSTALLATION & OPERATING INSTRUCTIONS

FOR RESIDENTIAL USE



PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE.

Table of Contents

Listings and Code Approvals3
 Description of the Fireplace System3
 Fireplace System Components4
 Pre-Installation Preparation8
 Fireplace Locations and Space Requirements8
 Framing The Fireplace9
 Hearth Extensions10
 Sidewalls/Surrounds11
 Mantel11
 Chimney Requirements11
 Using Offsets and Returns11
 Chimney Height Requirements13
 Step-By-Step Installation of the Fireplace System14
 Constructing a Chase19
 Materials For The Chase19
 Installing a Terminal Cap on a Chase-Enclosed Chimney20
 Operating Instructions21

fire-parts.com

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, 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 SF48A 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. DO NOT use chimney cleaners or flame colorants in your fireplace.
 7. 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.
 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 SF48A fireplace system has been tested and listed in accordance with UL127 and ULC S610 standards and has been listed by Underwriters Laboratories Inc. for installation and operation in the United States and Canada as described in these Installation & Operating Instructions.

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 with Glass Doors and Integral Grate
2. Hearth Extension
3. Chimney System
4. Roof Termination

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

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

Building Supplies

Hearth extension material
Wall-finishing materials
Framing material
Fireplace surround
Caulking material

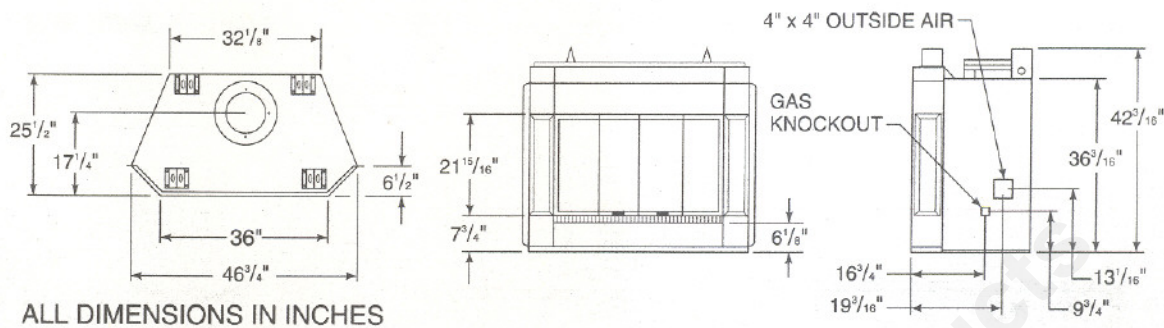


FIREPLACE SYSTEM COMPONENTS

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

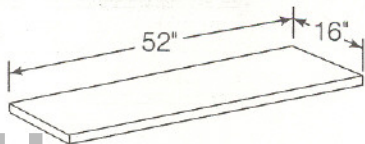
Catalog Number	Description
SF48A	Fireplace with P1136B Glass Door
HX3	Hearth Extension
P1136B	Premium Series Bifold Glass Doors- Polished Brass Finish (included with Fireplace)
GR2	Integral Grate (included with Fireplace)
AK17	Air Kit - Outside Air (included with Fireplace)
ID4	Insulated Duct/Outside Air
UD4	Uninsulated Duct/Outside Air
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°
JB877	Chimney Joint Bent
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
ST375	Chimney Terminal Cap - Square
ST376	Telescoping Chimney Terminal Cap - Square
CT35	Chase Top
TS344	Square Termination System
SK44	Square Termination Decorative Skirt
CAK4	Chimney Air Kit



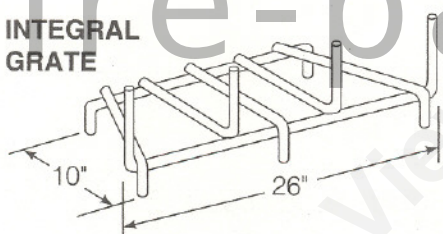


ALL DIMENSIONS IN INCHES

HEARTH EXTENSION

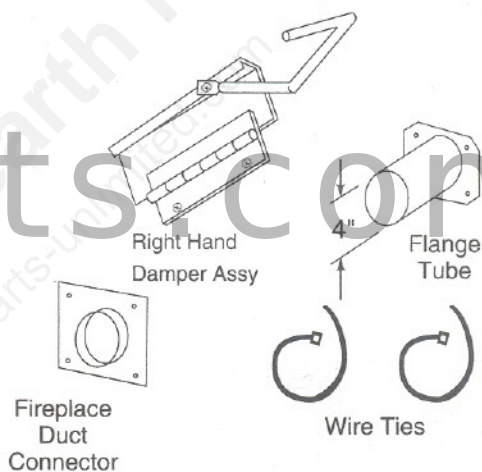


INTEGRAL GRATE

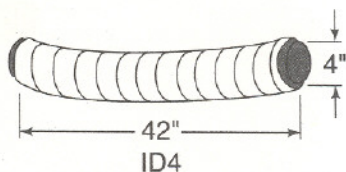


GR2

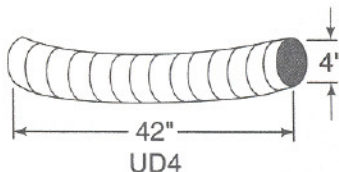
OUTSIDE AIR KIT - AK17



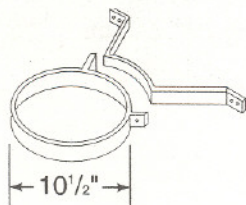
INSULATED DUCT



UNINSULATED DUCT

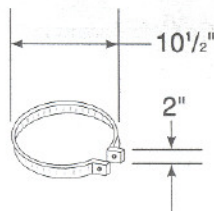


CHIMNEY BRACKET



CB876

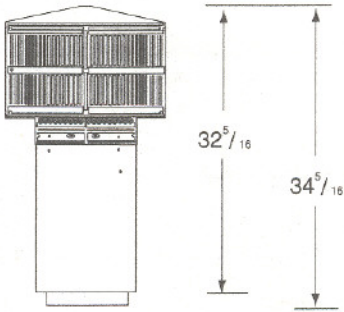
JOINT BAND



JB877



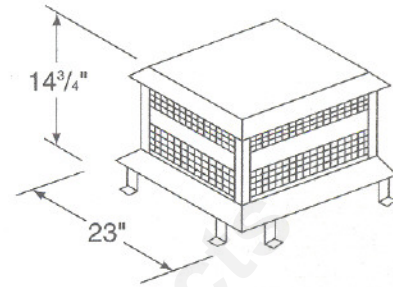
CHIMNEY TERMINAL CAPS & VENT SECTIONS



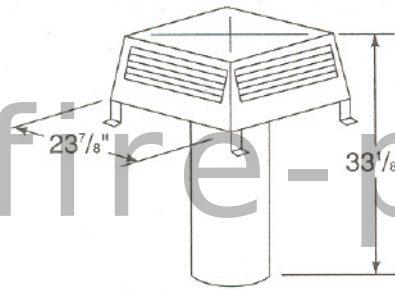
TR342
ROUND TELESCOPING
TERMINAL CAP



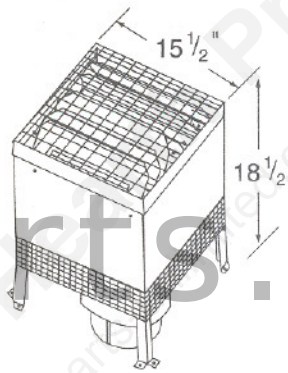
TR344
ROUND TERMINAL CAP
WITH STORM COLLAR



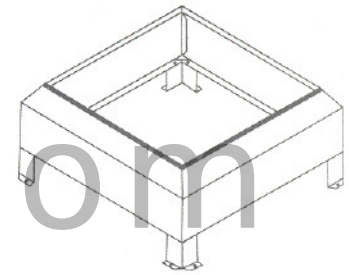
ST375
SQUARE TERMINAL CAP



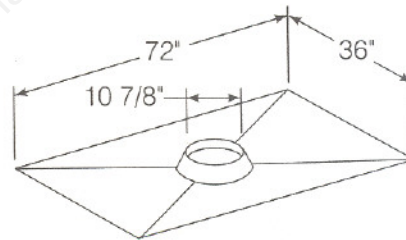
ST376
SQUARE TERMINAL CAP



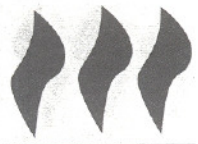
TS344
SQUARE SHROUD
TERMINATION SYSTEM



SK44
SQUARE TERMINATION
DECORATIVE SKIRT



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.

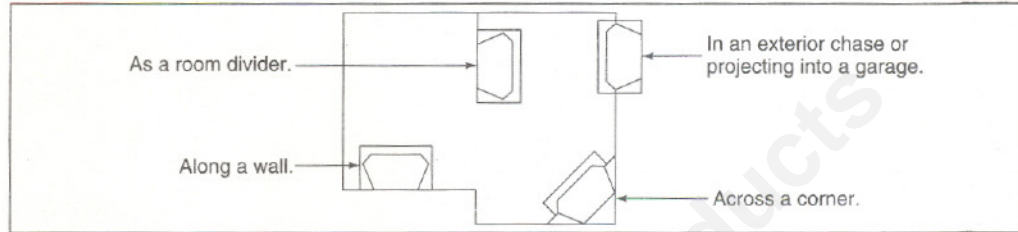


Figure 1
Fireplace Locations

Figures 2 and 3 show two typical installations assuming combustible materials are used. All required clearances to combustibles around the fireplace must be adhered to. Any enclosure on top of the fireplace

must be above the top standoffs. Chimney Sections at any level require a minimum air space of two inches to the enclosure, including any framing, for the total chimney height.

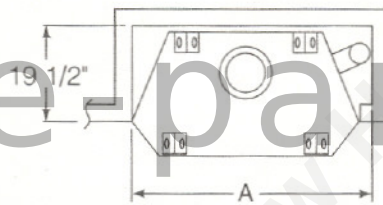


Figure 2
Installation along a wall or an exterior chase.

	A
WITHOUT OUTSIDE AIR	47 ⁵ / ₁₆ "
WITH OUTSIDE AIR	49 ¹ / ₄ "

* A minimum of 1/2" air clearance must be maintained between the firebox and wall.

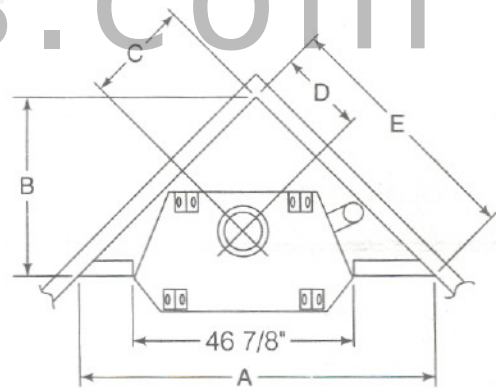


Figure 3
Corner Installation

	A	B	C	D	E
WITHOUT OUTSIDE AIR	70 ³ / ₄ "	35 ³ / ₈ "	17 ⁹ / ₆₄ "	17 ¹ / ₁₆ "	50"
WITH OUTSIDE AIR	75 ¹ / ₄ "	37 ¹⁵ / ₁₆ "	20 ² / ₃₂ "	17 ² / ₃₂ "	52 ¹⁵ / ₁₆ "

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

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 enclosure across the top of the fireplace must be positioned

above the top standoffs. Chimney Sections **at any level** require a minimum air space of two inches to the enclosure, including any framing, for the total chimney height.

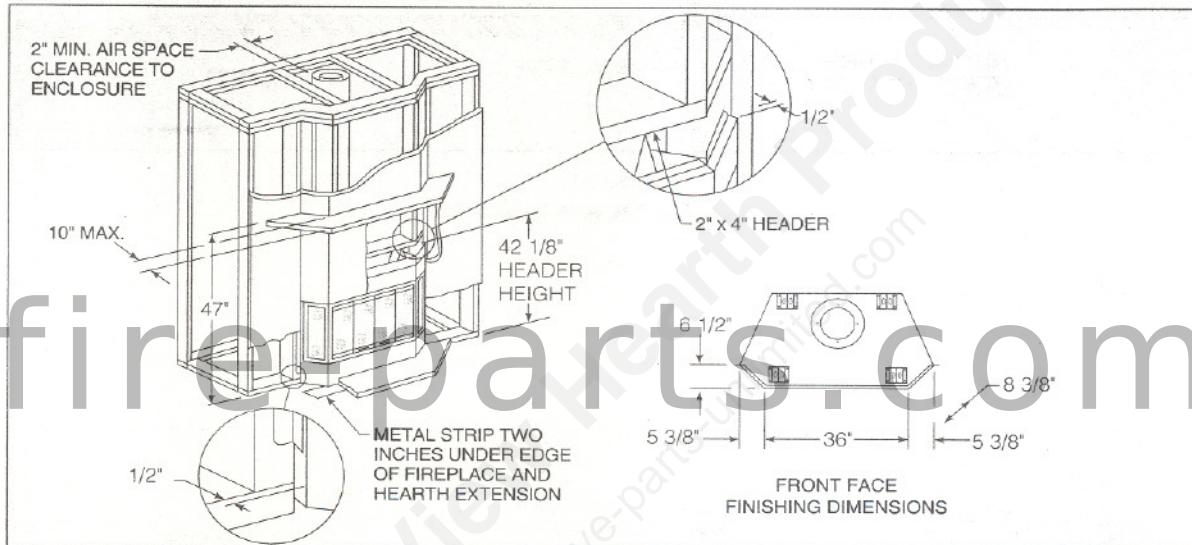


Figure 4
Framing the Fireplace

After completing the framing and after applying the facing material 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 prevent cold air leaks. Non-combustible materials may be used to cover the black non-louvered fireplace front, but must not restrict the air flow to or from the front of the unit in any manner. The following is a description of materials specified in these Instructions:

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 prevent cold air leaks.

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

WARNING

DO NOT APPLY FINISH MATERIALS OVER THE AIR SLOTS LOCATED BELOW THE GLASS DOOR. THIS WILL BLOCK THE FLOW OF COOLING AIR AND MAY CAUSE DANGEROUSLY HIGH TEMPERATURES ON COMBUSTIBLE SURFACES OR ON THE FIREPLACE ITSELF.



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 factory-built 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 3/4". Seal gaps between the hearth extension and the front of the fireplace with a non-combustible sealant.

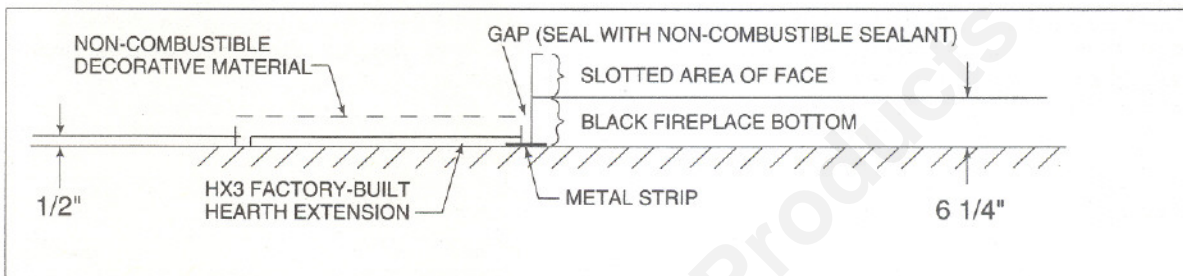


Figure 5
Factory-Built Hearth Extension

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

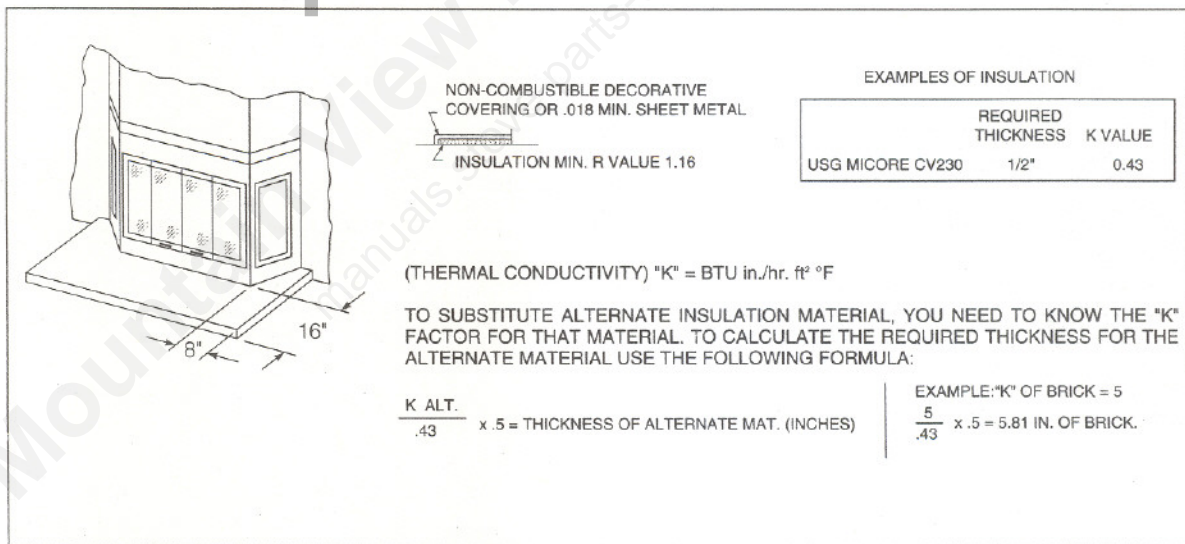


Figure 6
Hearth Extension



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 12" from the fireplace opening. See Figure 7.

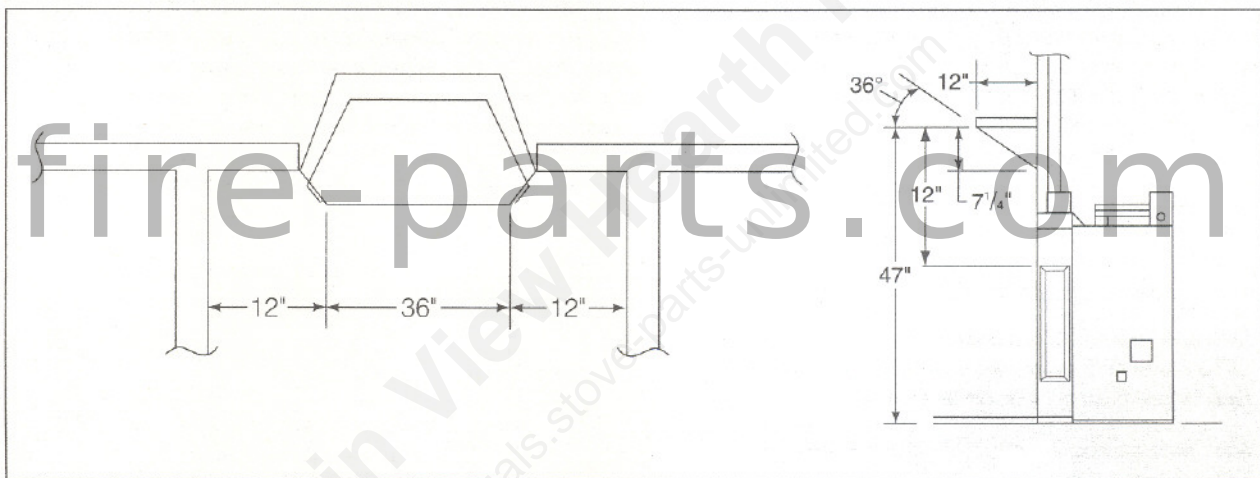


Figure 7
Sidewalls/Surrounds

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. 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	14 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.
3. 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.

Example: Your "A" dimension from Figure 8 is 14½". Using Table 1, the dimension closest to but not less than 14½" is 14¾" using a 30° offset/return. It is then determined from the table that you would need 33¾" (Dimension "B") between the offset and return. The chimney components that best fit your application are two SL312's.

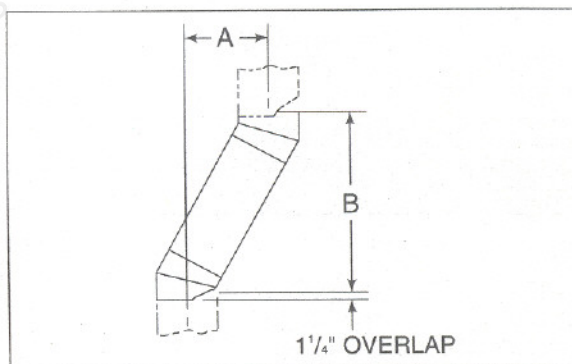


Figure 8
Chimney Offset/Return



WARNING

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

TABLE 1 Offset Chart* (Dimensions in inches)

15°		30°		SL306	SL312	SL318	SL324	SL336	SL348
A	B	A	B						
1½	13¾	3¾	14⅞	—	—	—	—	—	—
2½	17¾	6¼	18⅞	1	—	—	—	—	—
—	—	8¾	22⅞	2	—	—	—	—	—
4⅞	23¾	9¾	23¾	—	1	—	—	—	—
—	—	11¾	27¾	1	1	—	—	—	—
6	29¾	12¾	28⅞	—	—	1	—	—	—
7⅞	34	14¾	33⅞	—	2	—	—	—	—
—	—	15¾	34¾	—	—	—	1	—	—
—	—	17¾	38¾	1	—	—	1	—	—
—	—	20¾	43¾	—	—	2	—	—	—
10¾	46¾	21¾	44¾	—	—	—	—	1	—
11¾	51¾	23¾	48⅞	1	—	—	—	1	—
—	—	26¾	53⅞	—	—	—	2	—	—
13¾	58¾	27¾	55¾	—	—	—	—	—	1
15	62⅞	29¾	59¾	1	—	—	—	—	1
16½	68¾	32¾	64¾	—	1	—	—	—	1
18⅞	74¾	35¾	69¾	—	—	1	—	—	1
—	—	38¾	74¾	—	—	—	1	—	1
—	—	41	78¾	1	—	—	1	—	1
22¾	91¾	44¾	85⅞	—	—	—	—	1	1
24	96¾	47	89¾	1	—	—	—	1	1
25¾	103¾	50¾	95¾	—	—	—	—	—	2

*Proper assembly of air cooled chimney parts result in an overlap at chimney joints of 1¼". Effective length is built into this chart.

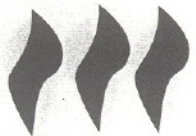


Figure 9 illustrates the height from the bottom of the fireplace to the top of the Chimney Starter Section. Proper assembly of Air Cooled Chimney Sections results in an overlap at chimney joints of 1 1/4".

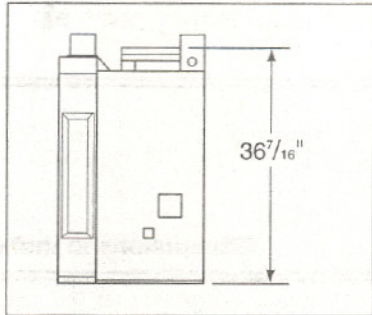


Figure 9
Fireplace (Side View)

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 10.

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, adjoining roof lines, adverse wind conditions, etc., may create a need for a taller chimney should smoking occur.

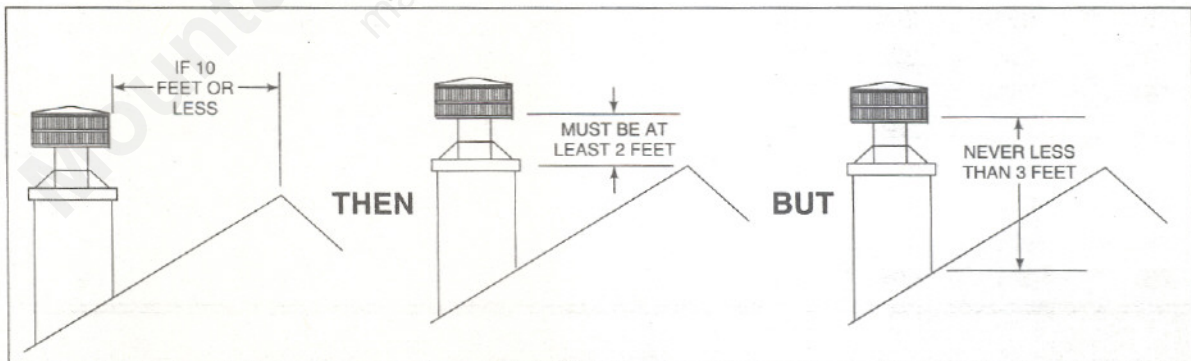


Figure 10
Chimney Height



We recommend that Outside Combustion Air be used. Figure 11 illustrates only two of many possible locations - a basement fireplace with a vertical outside air arrangement; and a horizontal, direct exit from the fireplace side.

NOTE
A 3' MINIMUM HEIGHT DIFFERENCE MUST BE MAINTAINED FROM THE TOP OF THE UPPERMOST CHIMNEY SECTION TO THE OUTSIDE COMBUSTION AIR INLET.

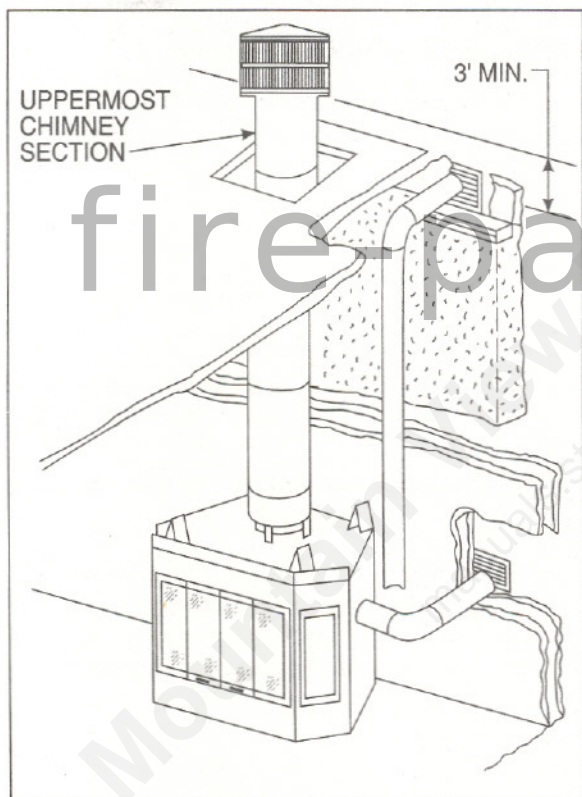


Figure 11
Outside Air Location

DETERMINING THE NUMBER OF CHIMNEY SECTIONS REQUIRED

To determine the 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 (36⁷/₁₆") from the overall height of the fireplace installation.
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 / ₁₆ "
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 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 a metal hearth strip measuring approximately 49" x 4". This strip is used to provide added protection where the fireplace and hearth extension meet.

Slide the metal strip two inches under the front edge of the fireplace. If a two piece strip is provided, the individual pieces must overlap each other by one inch in the middle of the fireplace to provide continuous coverage of

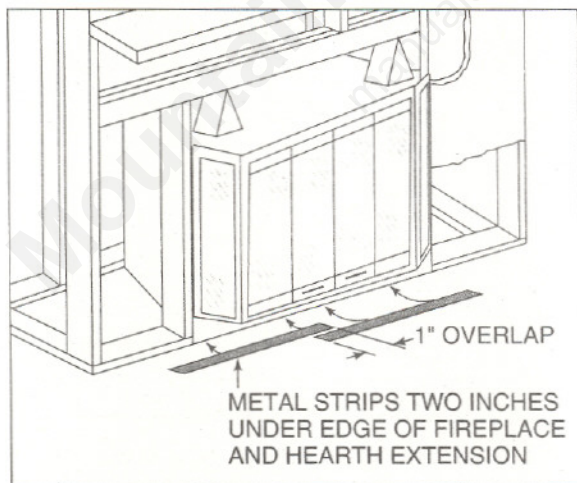


Figure 12
Positioning the metal strips

the floor. See Figure 12. 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.

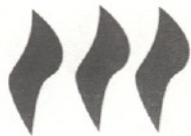
Secure the fireplace by utilizing the nailing flanges located on either side of the fireplace to the vertical framing.

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.

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 13.



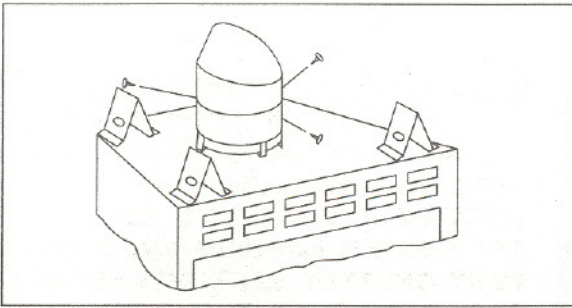


Figure 13
Offset Secured to Fireplace

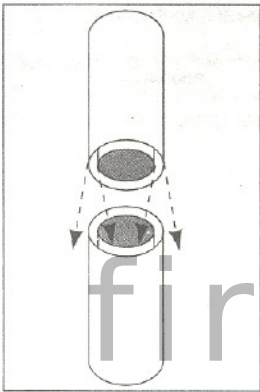


Figure 14
Connecting Chimney Sections

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 14.

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 18½" for an FS339, or 14½" x 22½" 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 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.

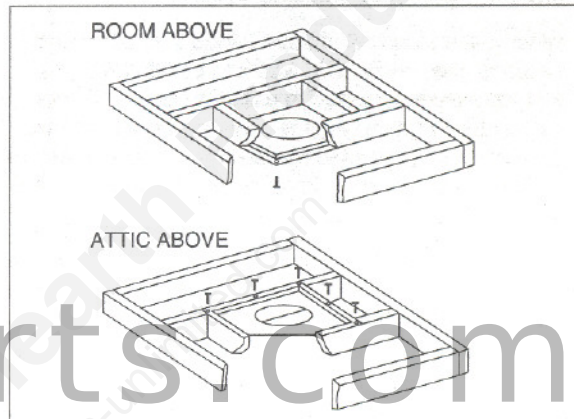


Figure 15
Installing the firestop spacer

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 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.

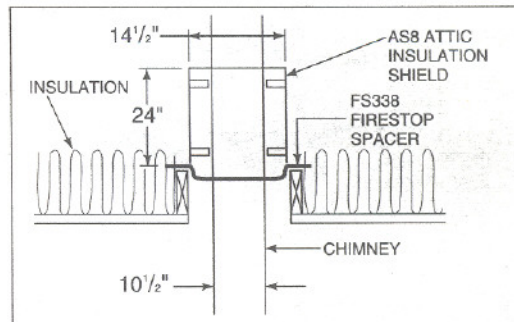


Figure 16
Installing an AS8



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 12 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 joists or rafters. See Figures 17 and 18.

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.

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 19.

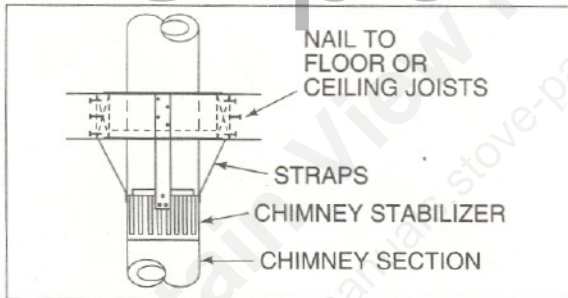


Figure 17
Chimney with stabilizer

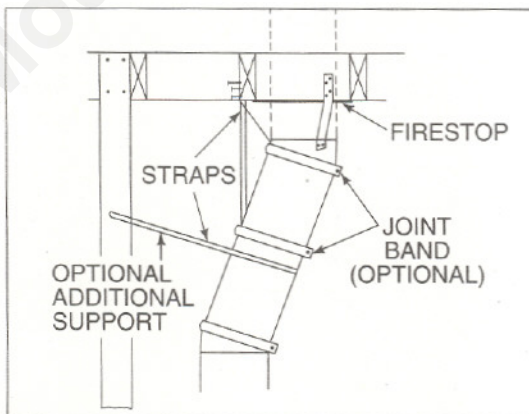


Figure 18
Offset/Return with stabilizer

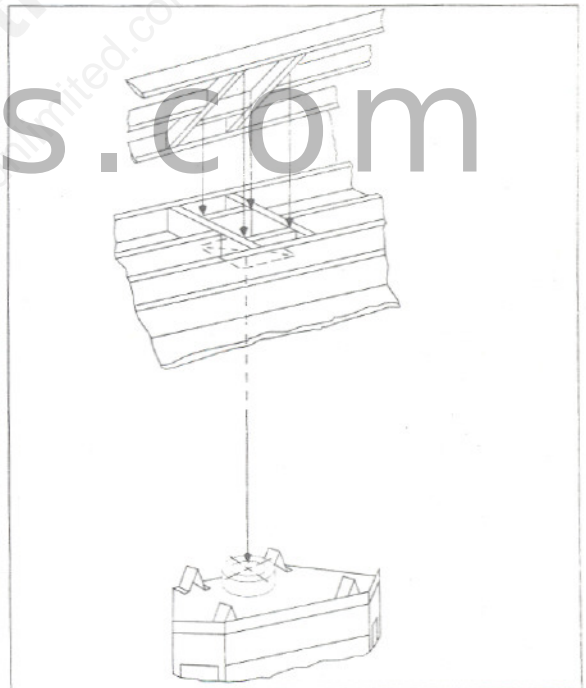


Figure 19
Ceiling and attic construction

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 - 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 14 - Installing the roof flashing

Install the roof flashing appropriate to the roof pitch and install a TR344 terminal cap (round) following the instructions shipped with these accessories.

STEP 15 - Installing the CAK4

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

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

STEP 16 - Installation of Outside Combustion Air Kit

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

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

NOTE

IF INSULATED DUCT, CATALOG NUMBER ID4, IS USED FOR OUTSIDE AIR, THE STUDS WILL COMPRESS THE SIDE OF THE INSULATED DUCT ABOUT 3/4 INCH. INSULATED OR UNINSULATED DUCT, UD4, MUST BE ORDERED SEPARATELY.

CAUTION

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

STEP 17 - Provisions for an optional gas log set

Knockouts are provided on both sides of the fireplace for the 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 shutoff device and complying with The Standard for Decorative Gas Appliances for Installation in Vented Fireplaces, ANSI Z21.60. The decorative gas appliance should be installed in accordance with the National Fuel 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 20 for shaded area.



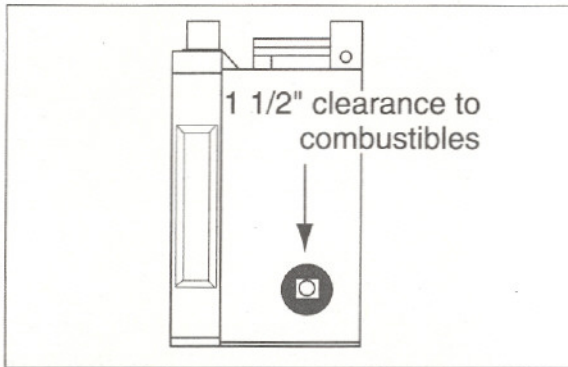


Figure 20
Gas knockout location

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.

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.

STEP 18 - 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 mid-point of the fireplace side.

STEP 19 - Installing the glass doors

Install the Glass Door included with the firebox assembly. Position the door frame into the fireplace opening and secure the bottom of the door frame to the fireplace using the long counter-sunk head screw provided in the fastener package. Secure the top of the door frame to the fireplace using the long counter-sunk head screw provided in the fastener package.

STEP 20 - 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 21. 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 21 - 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 non-louvered face of the fireplace. Refer to Figure 7 for combustible material information.

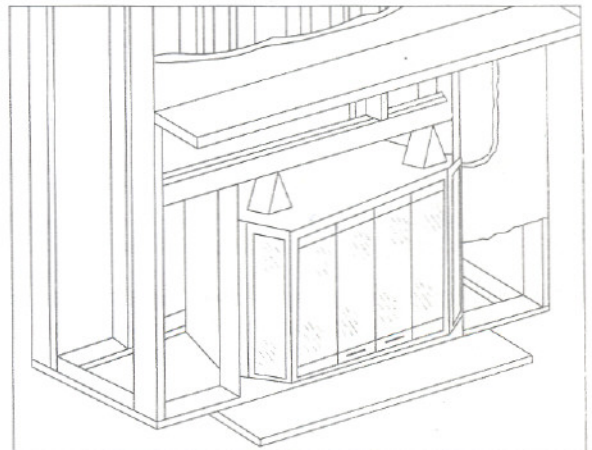


Figure 21
Positioning the hearth extension



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 22.

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

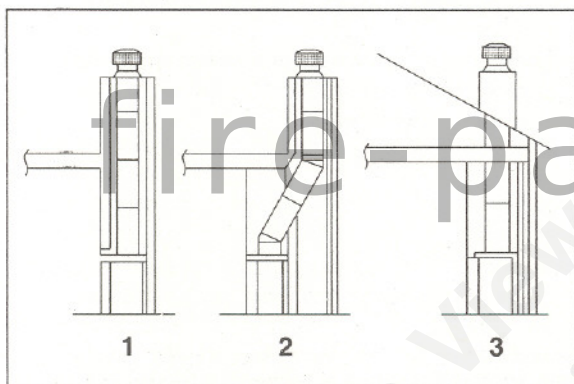


Figure 22
Chase Constructions

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 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 23. This will help prevent heat loss from the home around and through the fireplace.

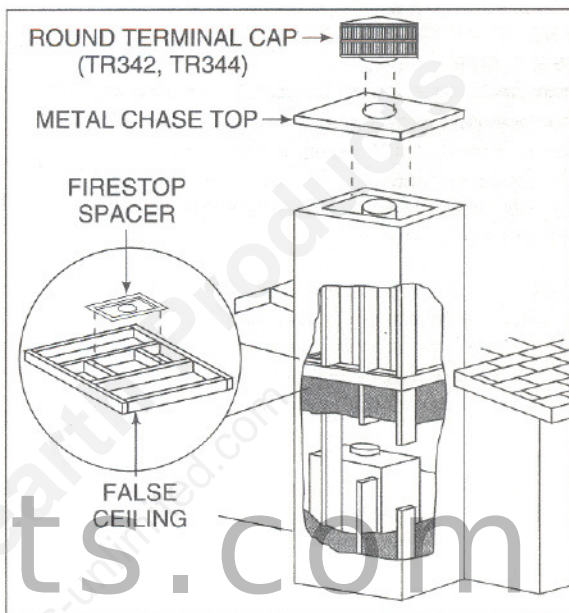


Figure 23
Chase Assembly

WARNING

DETAIL 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 CORROSION ON THOSE PARTS 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 round terminal cap (TR344), 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 utilizing a square terminal cap (ST375), the last chimney section must not be more than 4" below the chase top. See Figure 24.

When installing a TS344 Square Termination, the upper most chimney section must be no less than 3" 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.

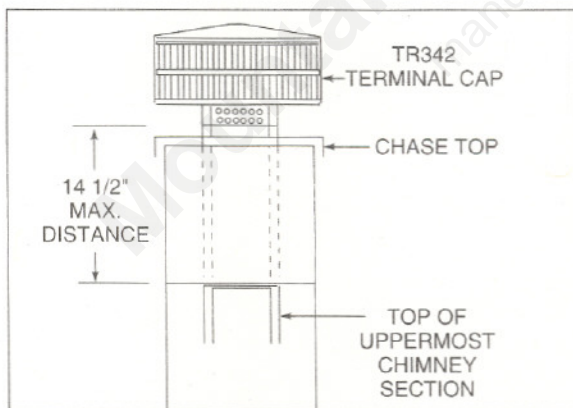


Figure 24
Installing a terminal cap

OPERATING INSTRUCTIONS

NOTICE

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

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.



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 ASPHYXIATION OR A STRUCTURE FIRE.

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 25.

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.

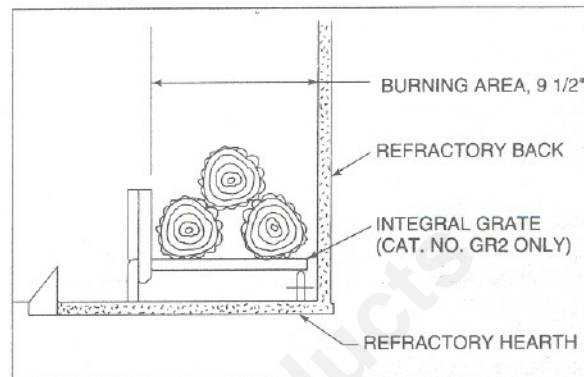


Figure 25
Sectional View of Fireplace

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.

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. Only HEATILATOR glass doors, model numbers P1136B may be used on the SF48A fireplace. See Figure 26.

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.

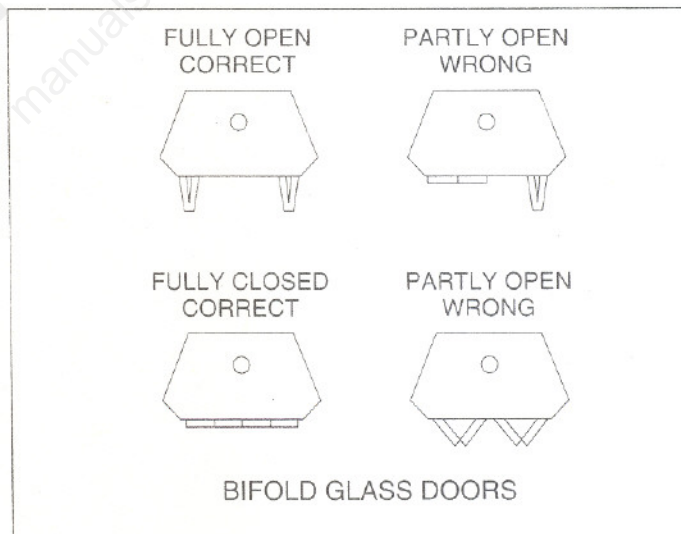


Figure 26
Recommended Operating Positions of Doors



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.

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 SF48A 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.

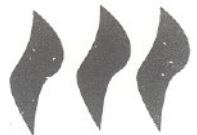
When wood is burned slowly, it produces tar and other organic vapors, which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote 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 27.
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.



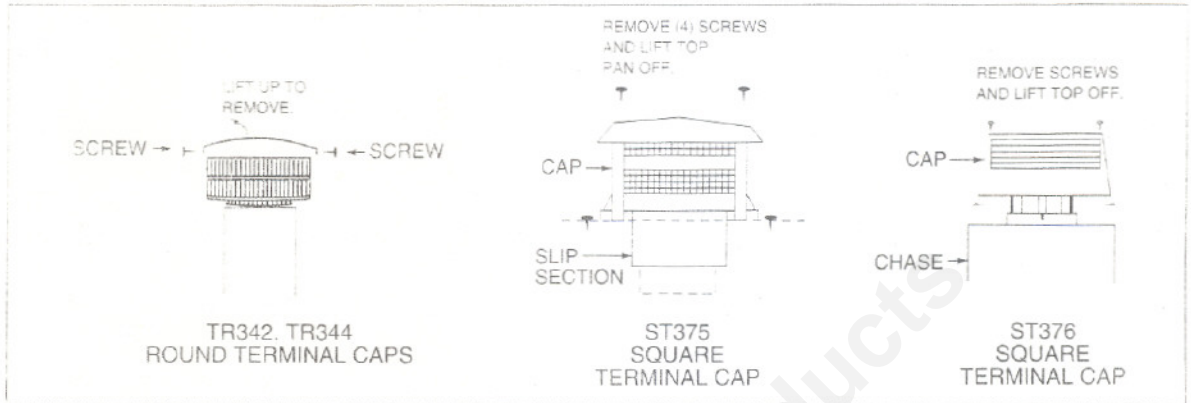


Figure 27
Terminal Caps

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.

CAUTION

WHEN LEFT CLOSED WHILE BURNING YOUR FIREPLACE, FIRE-SCREENS AND GLASS DOORS WILL BE HOT. HANDLE WITH CARE.

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 SF48A fireplace. Combustible materials must not be stored in this area. Combustible walls perpendicular to the front of the fireplace must be at least 12 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 25. Use only model number GR2 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.

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.



THIS PAGE LEFT BLANK INTENTIONALLY

fire-parts.com



Attention

FIREPLACE INSTALLER

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

heatilator
The first name in fireplaces

Heatilator Inc.
1915 W. Saunders Street
Mt. Pleasant, IA 52641
a HON INDUSTRIES company
319/385-9211 FAX 319/385-9225