

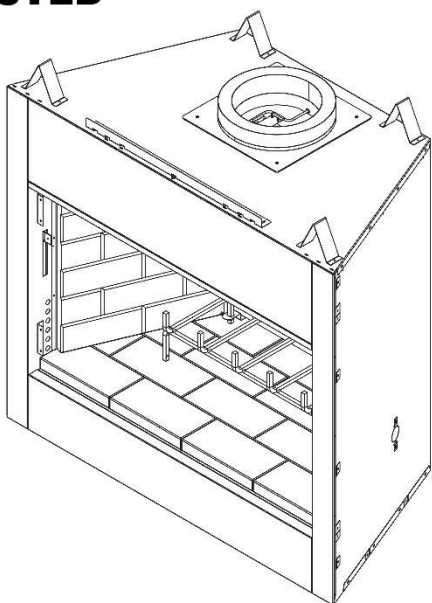
**Installer:** Leave this manual with the party responsible for use and operation.

**Owner:** Retain this manual for future reference.

This Fireplace uses **8" Ventis Class-A Factory Built Chimney Systems**. A 2" clearance to combustibles and building insulation is required between the chimney pipe and any combustible material.



**Models:**  
**OCV-RR-36**  
**OCV-RR-42**



**WARNING!** The information in this manual must be followed exactly or a fire or explosion may result which can cause property damage, injury, or death.

- DO NOT over fire this fireplace as it will void your warranty.
- DO NOT store or use gasoline or other flammable liquids in the vicinity of this fireplace.
- All clearances to combustibles in this manual must be followed exactly. A failure to comply may result in a house fire.



**WARNING! HOT SURFACES!**  
Glass and other surfaces are hot during operation and cool down.

- DO NOT touch the glass until it is cooled
- Keep children away from the fireplace
- Carefully supervise children that are in the same room as the fireplace



**WARNING! FIRE RISK:**

For use with solid wood fuel, processed solid fuel fire logs, unvented decorative gas logs, or vented gas logs only. Other fuels may overfire and generate poisonous gases.



**WARNING! HIGH TEMPERATURES!**  
Alert adults and children to the hazards of high temperatures.

- High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, drapes, and other flammable materials away from the fireplace.

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## 1. General Product & Safety Information

The quality and workmanship of Olympia Chimney & Venting's Forever Firebox (OCV-RR-36/42) is reflected in the recognition Underwriters Laboratories has given these products. The rigorous UL testing and listing requirements is your assurance of consistent quality in materials and manufacturing standards used for this appliance.

This Fireplace is Listed by UL to UL127 for installation and operation in the United States.

The Fireplace must be installed, by a qualified professional, according to these installation and maintenance instructions. Read through and become familiar with these installation instructions before installing this product. Failure to follow these instructions may void the manufacturer's warranty, the UL listing status of this product, and may result in a hazardous installation.

Keep these instructions for future reference.



### **WARNING! RISK OF FIRE!**

The following actions will cause Olympia Chimney & Venting to void the warranty and listing.

#### **DO NOT**

- Install or operate a damaged fireplace.
- Modify this fireplace in any way.
- Install the fireplace in a way that does not follow this manual.
- Over fire the fireplace.
- Install venting that is not listed with this fireplace.

#### **NOTICE:**

- Illustrations and images reflect typical installations and are for **design intents only**.
- Diagrams are not drawn to scale.
- Actual installation/appearance may vary due to individual design preference.
- Olympia Chimney & Venting reserves the right to alter its products.

## 2. Design & Installation Considerations

### **Check building codes prior to installation**

Installation must comply with local, regional, state, and national building codes and regulations.

Consult your insurance carrier, local building inspector, fire official or authority that has jurisdiction over restrictions, installations, inspections, and permits.

#### **Prior to installation, determine the following:**

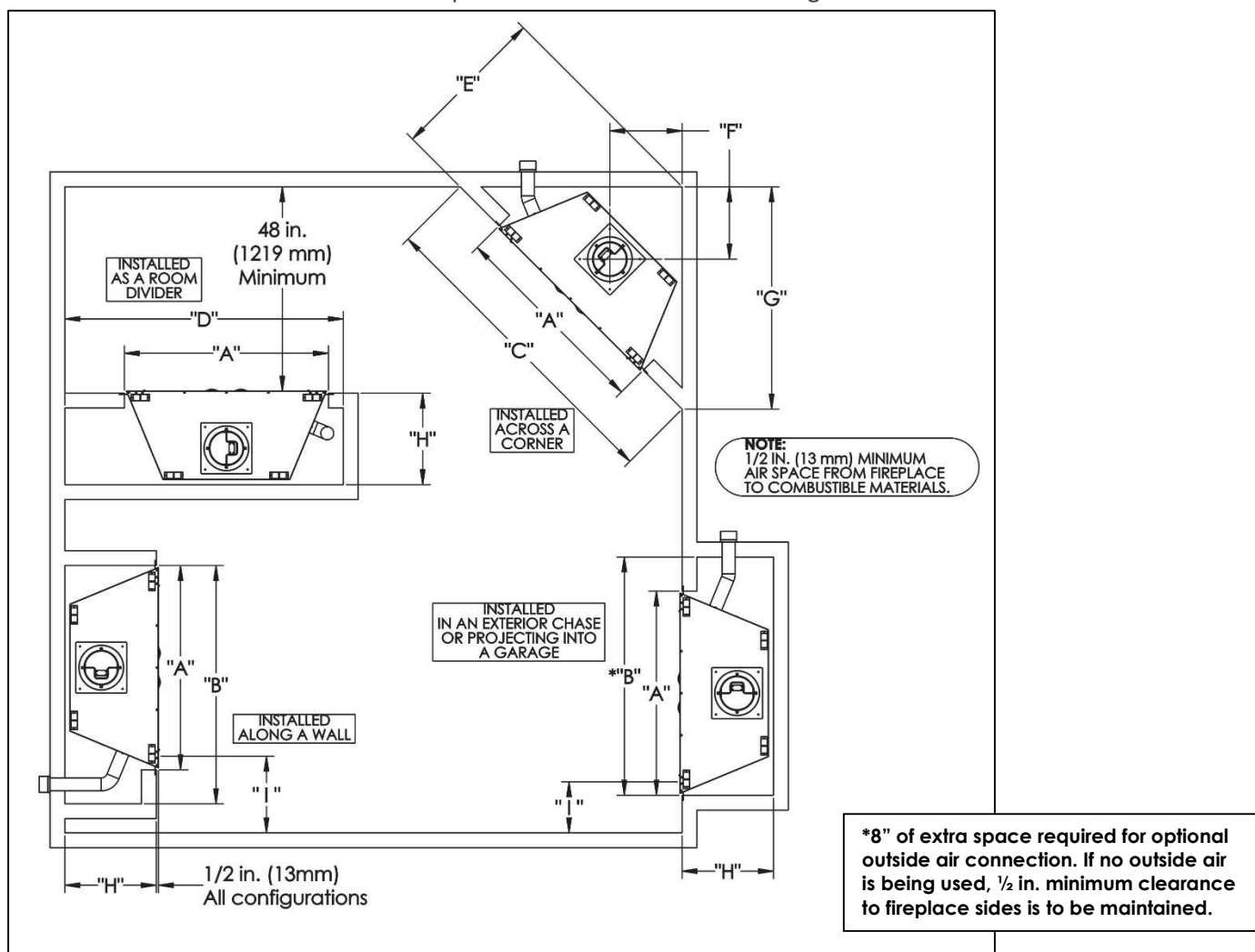
- Where the fireplace is to be installed.
- The vent configuration that will be used.
- Gas supply piping if necessary.
- Framing details.

**NOTE: A raised hearth extension-built level with the fireplace opening or less than 4 inches below the fireplace opening requires the fireplace to be installed on a non-combustible surface.**

## 3. Fireplace Location Selection

This fireplace can be installed as a room divider, across a corner wall, along a standard wall, or in an exterior chase or projecting into a garage.

Figure 1.1 shows the 4 installation examples from above with framing dimensions



**Note:** Measurements are framing dimensions only and do not include drywall in either the cavity of or on the interior walls.

Model	Units	A	B	C	D	E	F	G	H	I
OCV-RR-36	inches	42	50	67-7/8	59-1/2	34	14	48	21-1/2	12 in. (305 mm) Min from fireplace opening to any perpendicular wall.
	mm	1067	1270	1724	1511	864	356	1219	546	
OCV-RR-42	inches	48	56	73-7/8	65-1/2	37-1/4	17	52-1/4	21-1/2	12 in. (305 mm) Min from fireplace opening to any perpendicular wall.
	mm	1219	1422	1876	1664	946	432	1327	546	

Locating the fireplace near frequently opened doors, a central heat outlet or other areas that have considerable air movement can affect the fireplace performance.

Please take these factors into consideration prior to deciding on a location.

## 4. Fireplace & Chimney Location

Location of the fireplace will affect performance.

- Install within the warm airspace enclosed by the building envelope as this will help to produce draft.
- Installing the fireplace in a basement is not recommended.
- Endeavor to penetrate the roof at its highest point as this will minimize wind loading.
- Locate the Chimney Termination Cap away from trees, adjacent walls or buildings, other structures, uneven roof lines or obstructions.
- Minimize the use of offsets (elbows).
- Take into consideration the attic joists when selecting a space for the fireplace.
- Avoid installing the fireplace near doors or walkways.
- Take into consideration the chimney termination requirements in the chimney section of this manual.

## 5. Equipment, Tools, & Hardware

### Tools:

Reciprocating Saw	Plumb Bob
Keyhole Saw	Level
Drill	Tape Measure
Hammer	Caulk Gun
Metal Snips	Screwdrivers

### Equipment:

Ladder  
Safety Glasses  
Protective Gloves

### Hardware:

#8-1 ½" & 2 ½" Screws  
Framing Nails  
Roofing Nails  
High-Temp Sealant  
Silicone Sealant

## 6. Inspect the Fireplace & Components



### **WARNING! RISK OF FIRE AND/OR EXPLOSION!**

DO NOT install damaged, incomplete, or substitute components as this can affect the fireplace's safe operation.

- Inspect the fireplace and its components for damage.
- Report any damaged components directly to your dealer.
- Read all these instruction prior to starting the installation.

Use of any parts or materials not specified in this installation manual may not provide a listed system and may void the warranty. Do not attempt matching components with another manufacturer's products. Do not use damage or modified parts.

## 7. Fireplace System

This fireplace system requires the following items:

- Refractory Panels (3) - included
- Refractory Bricks (18) – included
- Refractory Brick Base - included
- Fire screen – included
- Stainless Steel Grate – included
- Protective Hearth Strips – included
- 8" Ventis Class-A Pipe – sold separately
- Ventis Attic insulation shield – sold separately
- Ventis Firestops – sold separately
- Ventis Termination Cap – sold separately

## 8. Safety Considerations



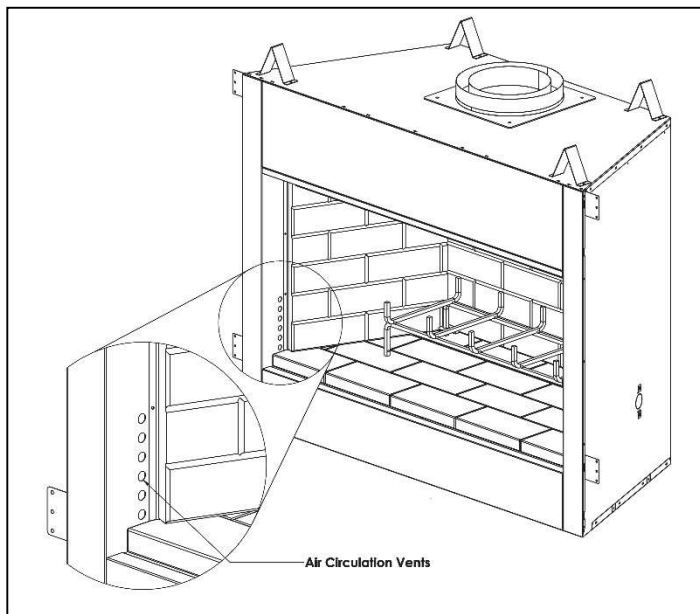
**Caution:** The ends of the chimney sections, edges of the cap, roof flashings, and other components can be sharp! We strongly recommend the use of gloves during installation.



**Warning:** Watch out for overhead power lines during installation. Be sure to check above and around the chimney for antennas, power lines, or any other obstacles before beginning the installation. Be sure that the chimney does not come into contact with electrical or any other wires.

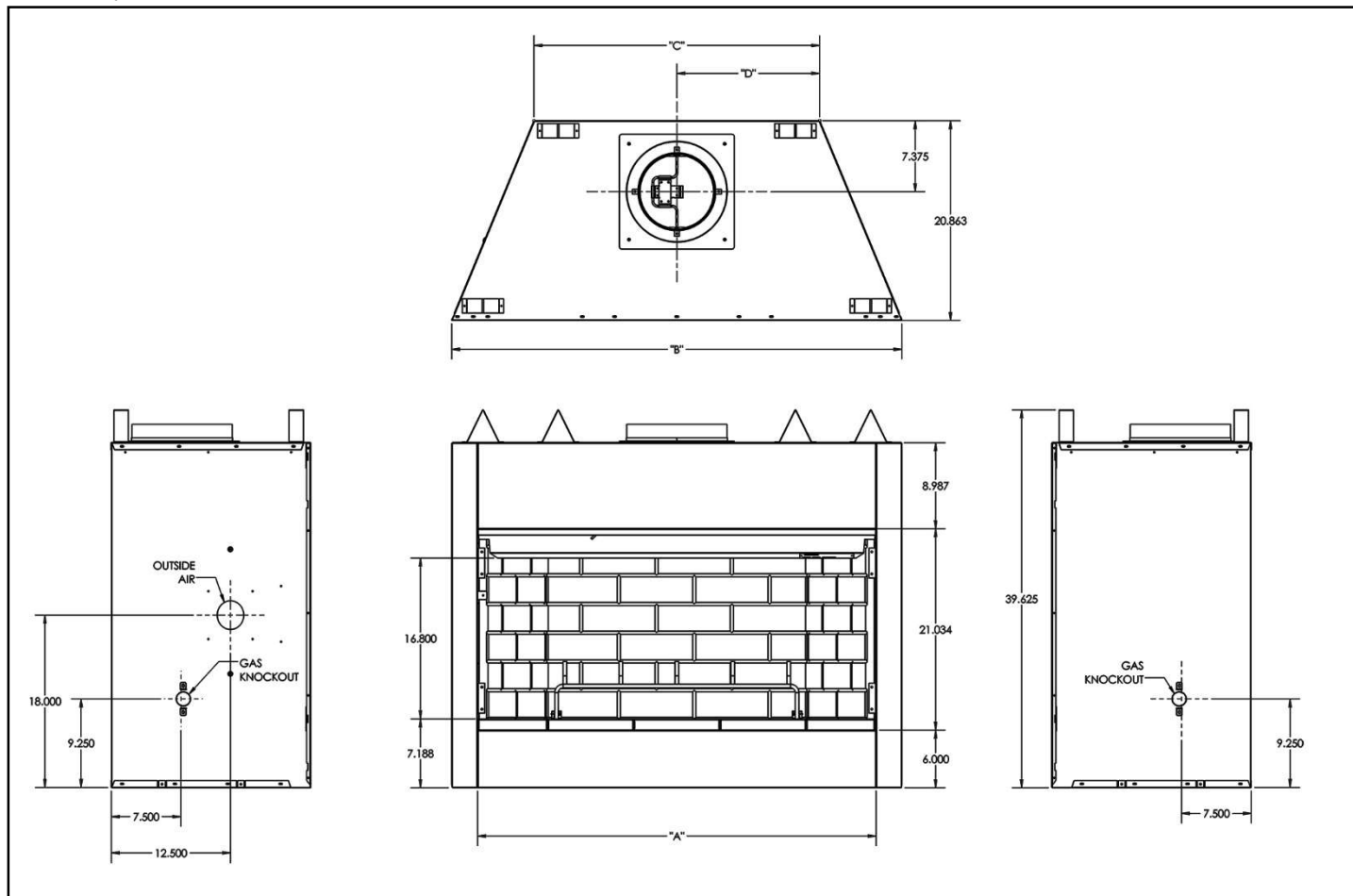


**Warning:** Do not block air circulation vents on either side of the fire chamber.





## 9. Fireplace Dimensions



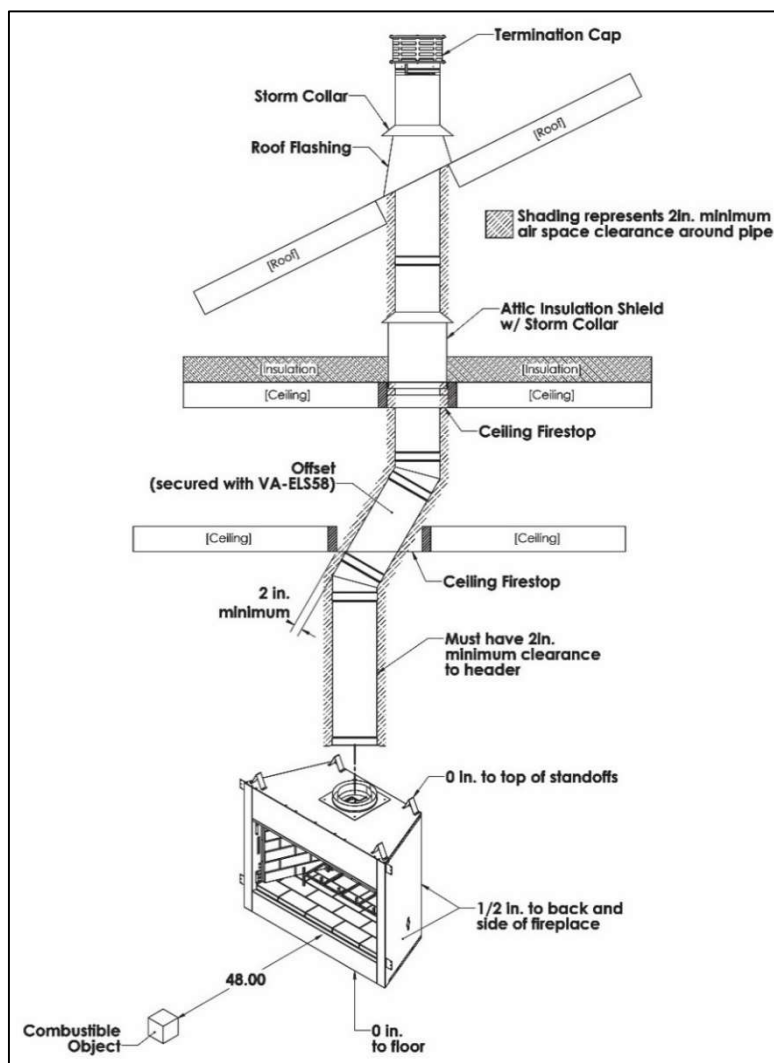
Model	A	B	C	D
OCV-RR-36	35-5/8	41	23-7/8	11-15/16
OCV-RR-42	41-5/8	47	29-7/8	14-15/16

## 10. Clearances

You must comply with all minimum air space clearances to combustibles shown in figure 3.2. Do not add insulation or other materials to required airspaces. Framing or finishing material that is closer than the minimum listed measurement must be constructed of a non-combustible material (Steel studs, concrete board, etc.) Failure to comply may cause a fire.

### Minimum Clearance to Combustibles

Within Enclosure Area	
Fireplace to backwall	½"
Fireplace to sidewall	½"
Stand-offs on top to the header	0"
Door opening to side wall	12"
Fireplace opening to combustible materials	48"
Mantel	
Minimum Mantel Height	12"
Maximum Mantel Depth	12"
Minimum Mantel Leg Width (OCV-RR-36)	41-5/8"
Minimum Mantel Leg Width (OCV-RR-42)	47-5/8"





## 11. Chase Construction

A chase is a vertical structure built to enclose the fireplace and venting system. Vertical chimneys that run on the outside of a building must be installed inside a chase. **Local Building Codes must be checked.**

In cold climates it is recommended to insulate the chase. The chase should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner. All outer walls must be insulated.

Building codes require a false ceiling and firestop at each floor of the chase or every 10 feet of clear space to control the spread of fire. Walls ceilings, and base plates at the first floor should be insulated (figure 3.3). Vapor and air infiltration barriers should be installed in the chase as per regional codes. Holes and other openings should be caulked or filled with insulation.



### WARNING!

You must install false ceilings and firestops at each floor of the chase or every 10 feet to control the spread of fire.

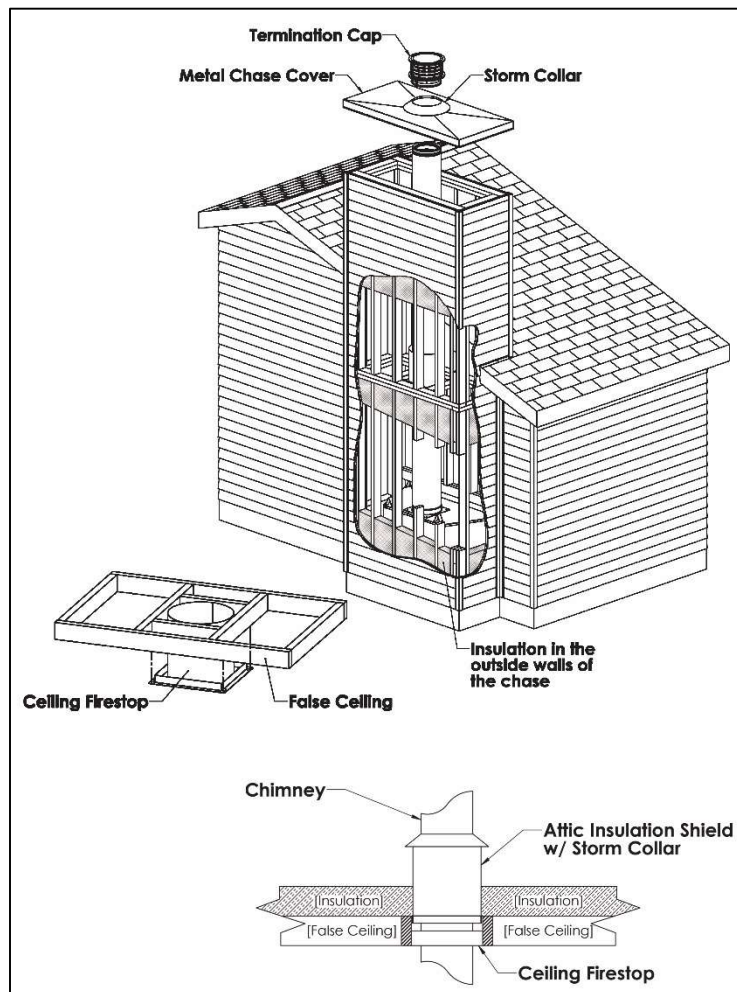


### WARNING! RISK OF FIRE

DO NOT seal the area between the firestop opening and the chimney pipe.

A chase is constructed using framing and siding materials. The factors below must be considered before building the chase.

- Maintain a 2-inch clearance around the chimney pipe.
- The chase top must be constructed of a noncombustible material.
- In cold climates the walls of the chase should be insulated to the level of the false ceiling. This will help reduce heat loss from the home around the fireplace.



### WARNING! RISK OF FIRE.

You must maintain a 2-inch air space clearance to insulation and other material surrounding the chimney system.

- Insulation in the chase must be firmly secured to prevent accidental contact with the chimney pipe.
- Openings must be blocked to prevent blown insulation from entering and making contact with the fireplace or chimney pipe.
- Failure to prevent contact between insulation or other material and the chimney system may cause overheating and fire.

## 12. Framing the Fireplace

**Notice:** Hearth extension design must be determined before installing the fireplace.

If the fireplace is placed on the floor, the maximum height of a finished raised hearth is 7-3/16". If you want a higher raised hearth, the fireplace must be placed on a platform.

### WARNING! RISK OF FIRE.

A raised hearth extension-built level with the fireplace opening or less than 4" below the fireplace opening requires the fireplace to be installed on a non-combustible surface.

Figure 3.4 shows a typical framing of the fireplace. All required clearances around the fireplace must be maintained. Any framing across the top of the fireplace must be above the level of the stand-offs.

### WARNING! RISK OF FIRE.

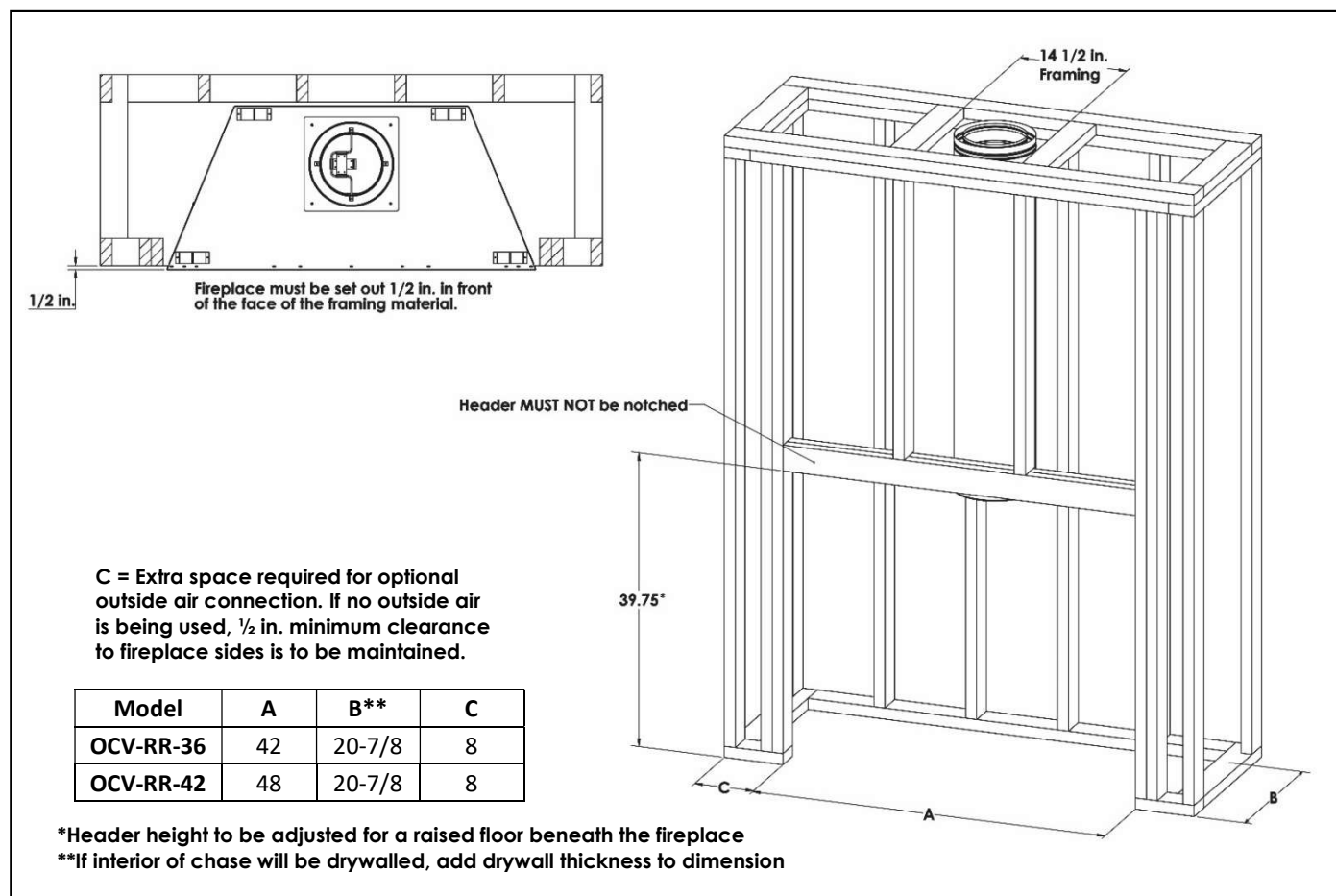
Comply with all minimum clearance specifications.

- A minimum 1/2" air clearance must be maintained at the back and sides of the fireplace.
- All chimney sections require a 2-inch air space clearance between the framing and the chimney pipe.

### WARNING! RISK OF FIRE.

You must comply with all minimum air space clearances to combustibles. Do Not pack required air spaces with insulation or other materials.

The finished cavity depth must be no less than 20-7/8" from the backwall to the outside of the front wall framing.



## 13. Mount & Level the Fireplace

This fireplace may be placed on either a combustible or noncombustible continuous flat surface. After framing, slide the fireplace into position. Be certain to provide the minimum  $\frac{1}{2}$ " air clearance at the sides and back of the fireplace

The fireplace should be positioned so the face of the non-combustible material on the fireplace will be flush with the face of the drywall on the walls.

### **WARNING! RISK OF FIRE.**

Prevent contact with sagging loose insulation.

- DO NOT install against vapor barriers or exposed insulation.
- Ensure that all insulation and vapor barrier are secured tightly.
- Ensure the required air space to combustibles are maintained at the sides and back of the fireplace.

## 14. Metal Hearth Strips

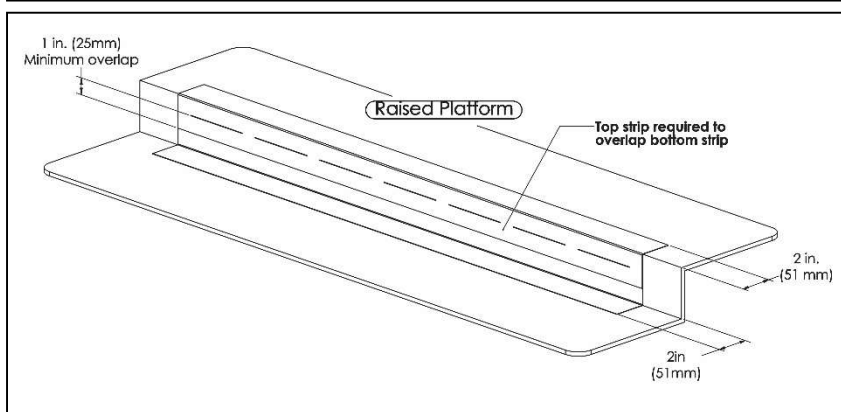
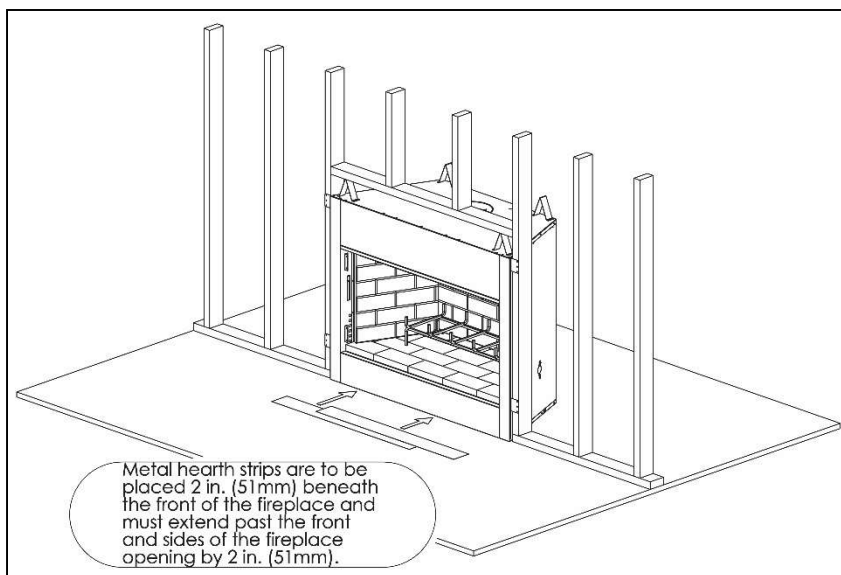
### **WARNING! RISK OF FIRE.**

Metal hearth strips must be installed on combustible materials. Do not cover the hearth strips with any combustible materials.

### **WARNING! RISK OF FIRE.**

High temperatures, sparks, embers, or other burning material falling from the fireplace may ignite flooring or concealed combustibles surfaces.

- Hearth extensions must be installed exactly as specified.
- Metal Hearth Strips must be installed.
- Locate the two metal hearth strips that were shipped with the fireplace.
- Slide each strip about 2" under the front edge of the fireplace.
- Overlap the strips by 1" minimum.
- The metal strips must extend past the front and sides of the fireplace by 2 inches. (see figures 7.1 and 7.2)

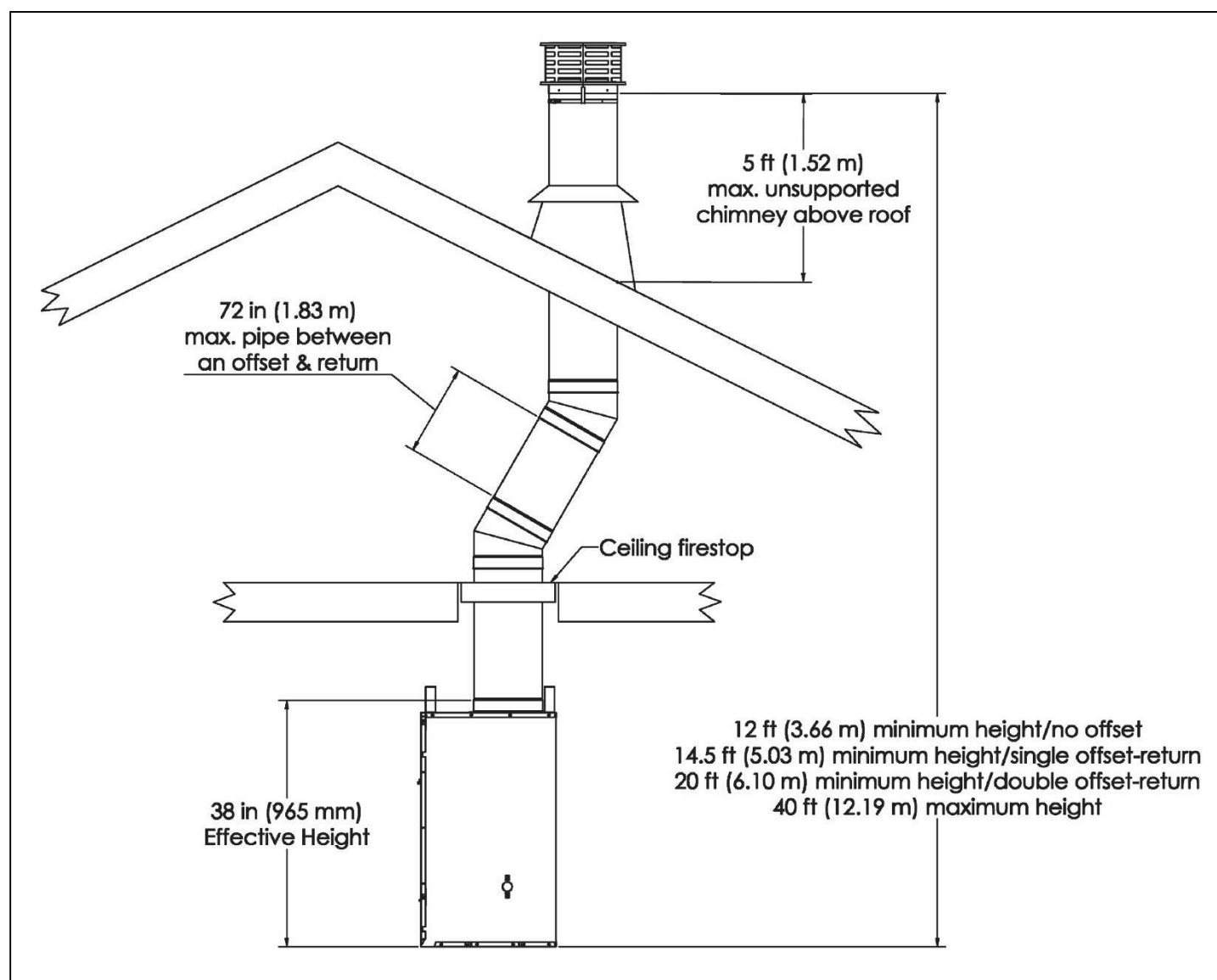


## 15. Chimney Requirements

Vertical distances are measured from the base of the fireplace as shown in figure 9.1.

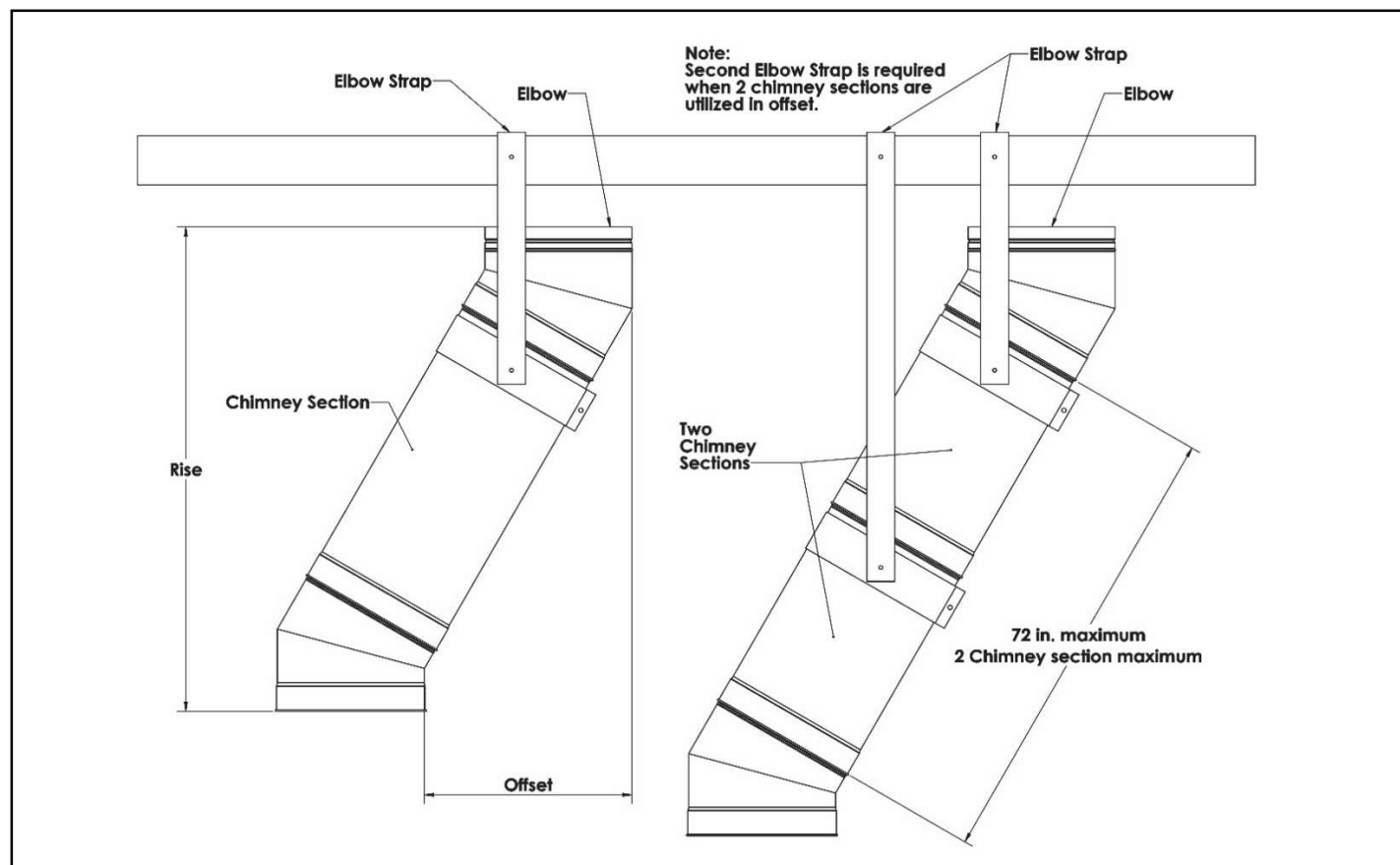
Minimum Straight height	12 feet
Minimum height with offset	14 feet
Maximum distance between chimney supports	8 feet
Maximum height	40 feet
Maximum unsupported chimney height above the roof	5 feet
Maximum distance between elbows	72 inches

Figure 9.1



## 16. Optional Offset/Elbow Installation

Since a completely vertical chimney provides optimal draft it is best to avoid elbows if possible. However, when elbows are necessary to avoid obstructions such as joists, rafters, etc. use no more than two pairs of elbows (total of four elbows) and do not exceed a maximum angle of 30 degrees or one set (total of 2 elbows). Refer to Table 2 to determine what elbows and chimney sections will be needed for the required offset.

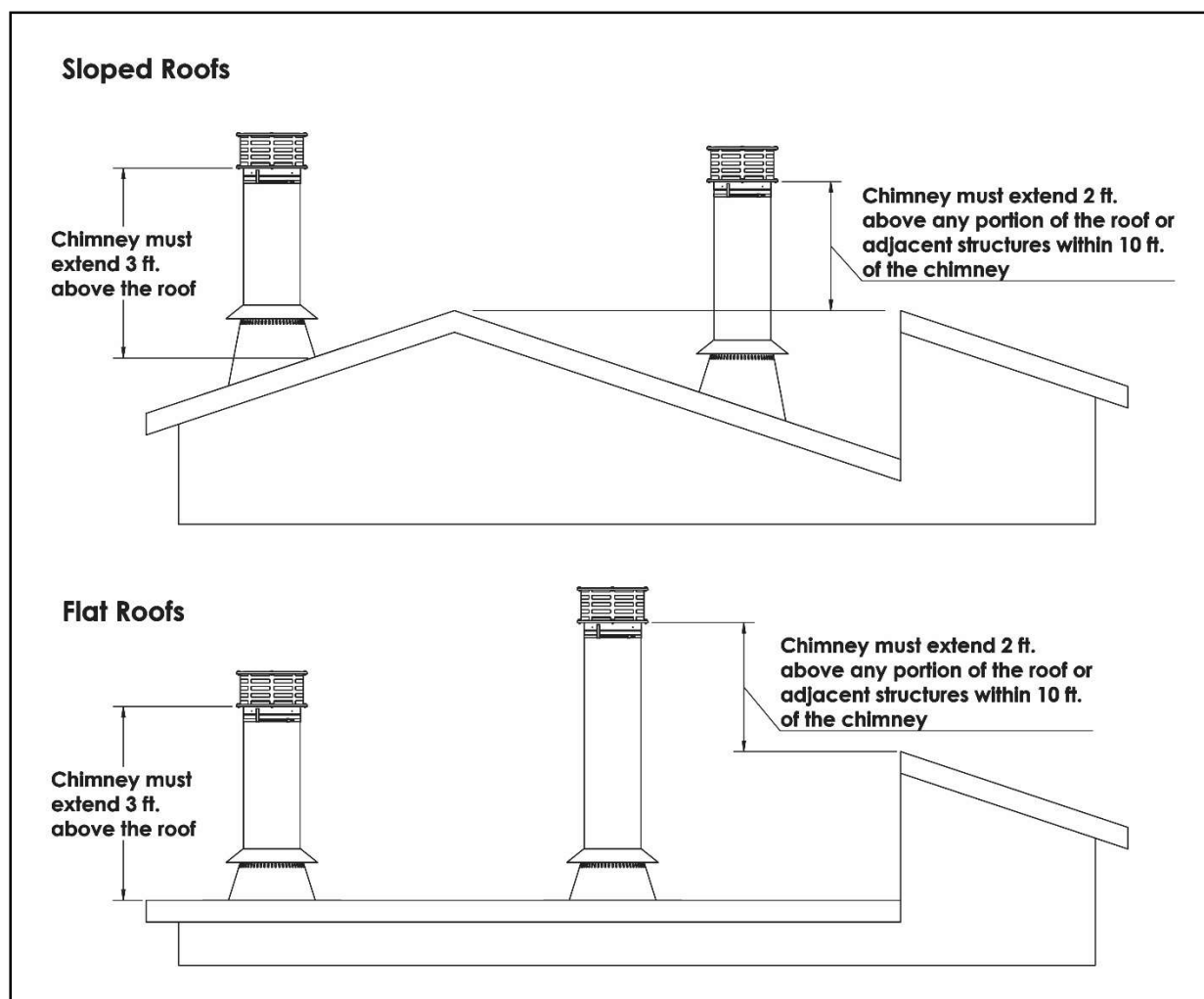


Lengths Between Elbows	15 Degree		30 Degree	
	Rise	Offset	Rise	Offset
0"	9 ½"	1 ¼"	11 ¼"	3"
12"	19 ½"	4"	20"	8"
18"	25 ¼"	5 ½"	25 ¼"	11"
24"	31"	7"	30 ½"	14"
36"	42 ½"	10"	40 ¾"	20"
48"	54 ¼"	13 ¼"	51 ¼"	26"
48" + 12"	64 ¼"	16"	60"	31 ¼"
48" + 18"	70"	17 ½"	65 ¼"	34 ¼"
48" + 24"	75 ¾"	19"	70 ½"	37 ¼"



## 17. Termination Requirements

- Install a termination cap that has been approved and listed for this fireplace system.
- Locate the cap where it will not become clogged by snow or other materials.
- Locate the cap away from trees or other structures.
- The bottom of the chimney cap must be at least 3 feet above the roof and at least 2 feet above any portion of the roof within 10 feet.



## 18. Chimney Installation

- Secure the first chimney section to the anchor plate mounted to the top of the fireplace.
- Continue installing the sections upwards using a minimum of three, #8 x ½" self-drilling screws per joint. Never use over-length screws that could penetrate the inner lining of the chimney.
- The final chimney height should be determined using the specifications in Section 8



## 19. Firestops



### **WARNING! RISK OF FIRE**

Ceiling firestops must be used whenever the chimney penetrates a ceiling/floor.

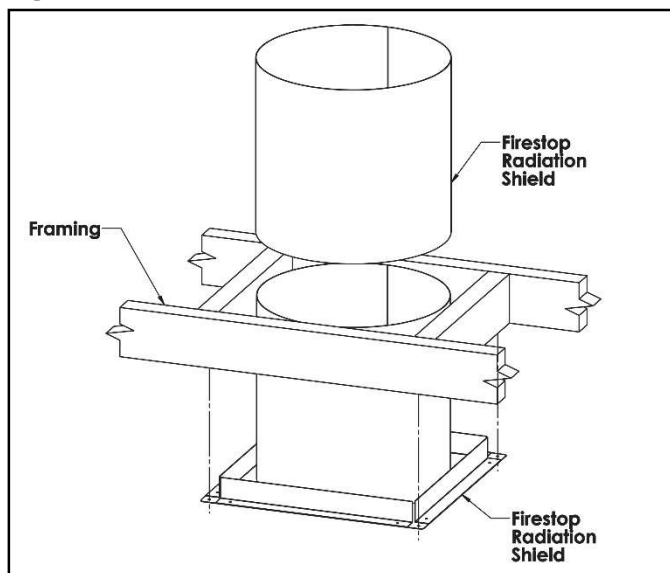
- Chase construction requires ceiling firestops at each floor or every 10 ft. of clear space.
- Ceiling firestops slow the spread of fire and reduces cold air infiltration.

Install a Firestop Radiation Shield at each floor penetration above the ceiling support including the opening into the attic.

- The Firestop Radiation Shield is installed from the bottom of the ceiling/floor rough opening with the tube section of the Firestop pointing upwards.
- Secure the Firestop to the rough opening with a minimum of one 8-penny nail or one #8 x 1 1/2" wood screw at each corner. Adjust the inner tube of the firestop upward to cover all framing of the floor/ceiling rough opening. See Figure 11.1
- Secure the inner tube to the outer tube using at least three sheet metal screws.

*Note: In the attic opening, a Firestop and an attic insulation shield extension will be used. A Firestop is not to be installed at the roof penetration.*

**Figure 11.1**



## 20. Attic Insulation Shield

The purpose of Attic Insulation Shielding is to maintain the required 2-inch air space clearance from debris, electrical wiring and insulation when the chimney passes into an attic.

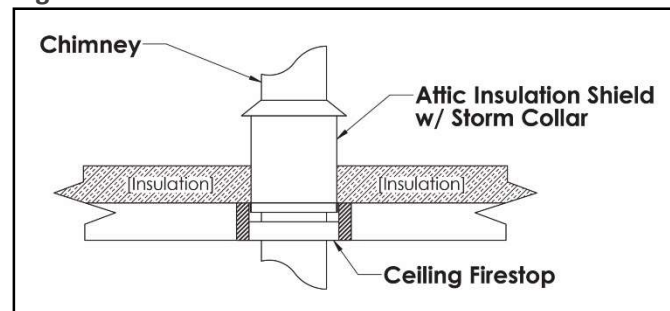
Use this method when a Firestop has been installed in the ceiling below the attic floor.

- In the attic, center the Attic Insulation Shield over the round ceiling support rough framed opening.
- Secure the four corners of the Shield into the rough framed opening with four 8-penny nails or four #8 x 1 1/2" screws.
- Once the chimney sections are in place, a storm collar will be fitted around a chimney section. Slide the storm collar down to fit against the Attic Insulation Shield. This prevents debris from entering the cavity between the chimney and the Attic Insulation Shield.

### **Attic shielding enclosures:**

*In certain attic scenarios, typically low attic installations, where the Attic Insulation Shield will not fit, you must enclose the attic portion of the chimney in a framed enclosure. The chimney within the enclosure must maintain the required 2-inch air space to combustibles.*

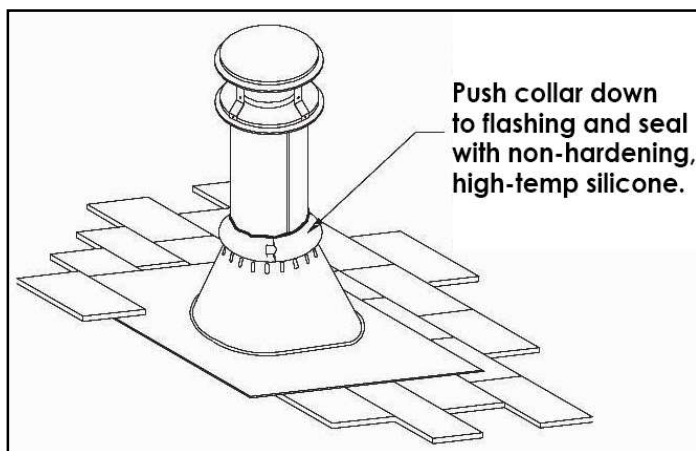
**Figure 12.1**



## 21. Complete the Top Termination

Ensure that a 2-inch air space clearance to combustibles is maintained as the chimney passes through the roof opening. It is recommended on steep roof slopes or when the chimney height above the roof exceeds 5 feet, that a roof support bracket is used to assist in stabilizing and leveling the chimney.

- Using a level, make sure the chimney is vertically plumb.
- Slide the roof flashing over the chimney and place the flashing under the upper shingles and on top of the lower shingles. Nail the flashing to the roof along the upper edge and down each side with 1-inch roofing nails, but do not nail the lower edge. Seal the nail heads with a water-proof silicone sealant.
- Install a storm collar around the chimney and slide down to fit against the roof flashing. Caulk the joint between the chimney and the storm collar with a waterproof silicone sealant.  
**Note: Do not caulk or seal the ventilating openings of a ventilated flashing.**
- Fit the rain cap to the top of the chimney. Attach by tightening the clamp band.



## 22. Chase Installation

A chase enclosed chimney: For installing the chimney system in a chase application, the chimney must extend a minimum of 6-inches above the chase cover. Please ensure that the chimney exterior has the required 2-inch air space clearance from all chase enclosure combustibles including the hole in the chase enclosure top sheathing. The chase enclosure top can be finished using either standard flat roofing materials or a custom fabricated metal chase cover.

Note 1: It is recommended, in colder climates, that exterior mounted chimney systems are enclosed to help reduce or limit condensation, creosote build-up and poor draft.

Note 2: It is recommended to provide some means of chase enclosure ventilation. This is usually accomplished by placing the storm collar approximately 2 inches above the chase collar.

## 23. Finishing the Fireplace



### WARNING! RISK OF FIRE

You must maintain clearances to combustibles.

- Do not cover the metal on the fireplace front with combustible materials.
- Install combustible materials only to specified clearances on the top and sides of the fireplace.
- Do not place combustible framing material below the stand-offs on the top of the fireplace.
- Complete the framing and install drywall over the framing.
- Facing material can be installed right against the metal face and metal columns of the fireplace.
- Use a bead of 400°F non-combustible sealant to close the gaps around the top and sides of the fireplace.

*Olympia Chimney and Venting is not responsible for discoloration, distortion, cracking, or other material failures of finishing materials due to heat or smoke.*

## 24. Hearth Extensions – Building & Finishing



### WARNING! RISK OF FIRE.

High temperatures. Sparks, embers, or other burning material falling from the fireplace may ignite flooring or other combustible surfaces.



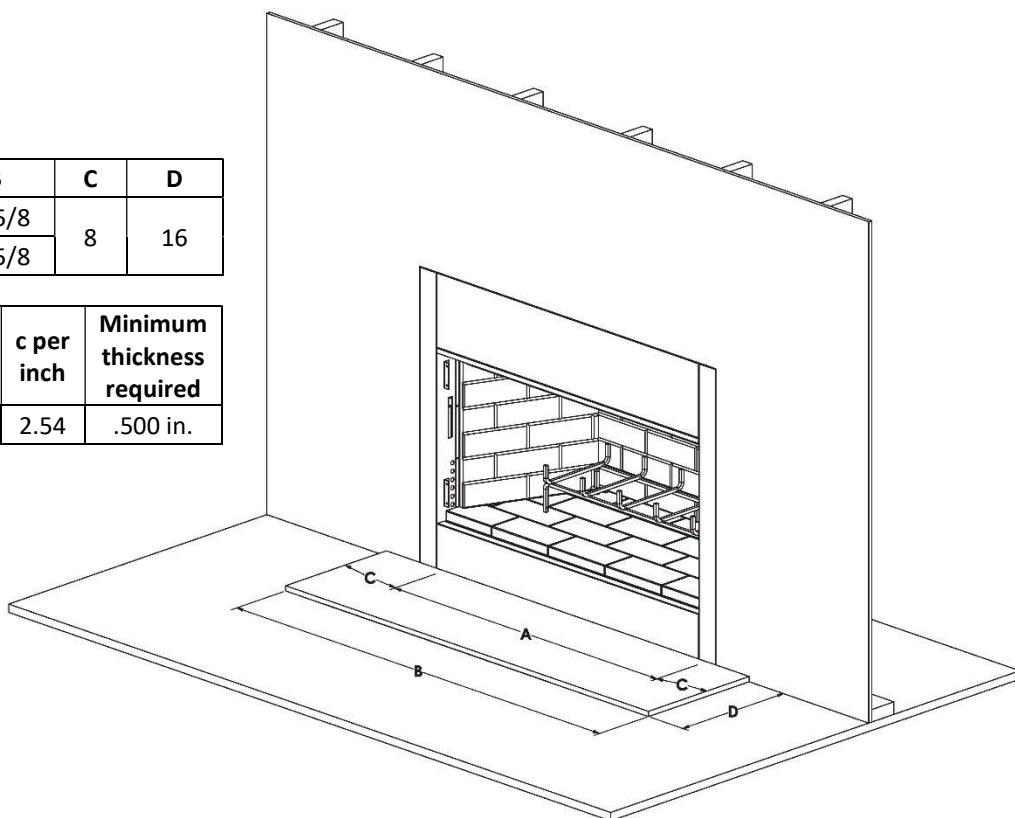
### WARNING! RISK OF FIRE.

A raised hearth extension-built level with the fireplace opening or less than 4" below the fireplace opening requires the fireplace to be installed on a non-combustible surface.

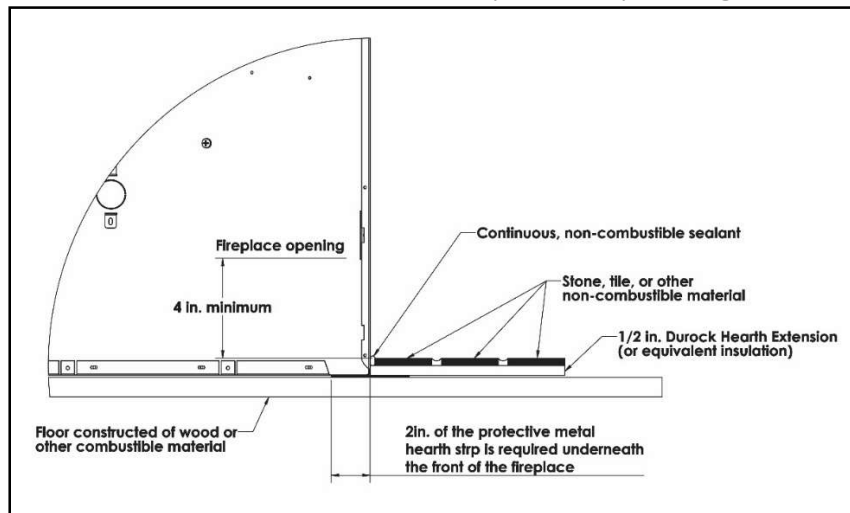
- You **MUST** use a hearth extension with this fireplace.
- Hearth extensions must be installed exactly as specified.
- A heart extension must be installed with all fireplaces to protect the combustible floor in the front of the fireplace from both radiant heat and sparks.
- This fireplace has been tested and approved with ½" Durock (See material factors below) or equivalent as the hearth extension material.
- The hearth extension material must be covered with stone, tile, or other non-combustible material.
- Refer to figure 16.1 for required dimensions.

Model	A	B	C	D
OCV-RR-36	35-5/8	51-5/8	8	16
OCV-RR-42	41-5/8	57-5/8		

Material	k per inch	r per inch	c per inch	Minimum thickness required
Durock	1.92	.52	2.54	.500 in.



## 25. Hearth Extension 4" or more Below Fireplace Opening

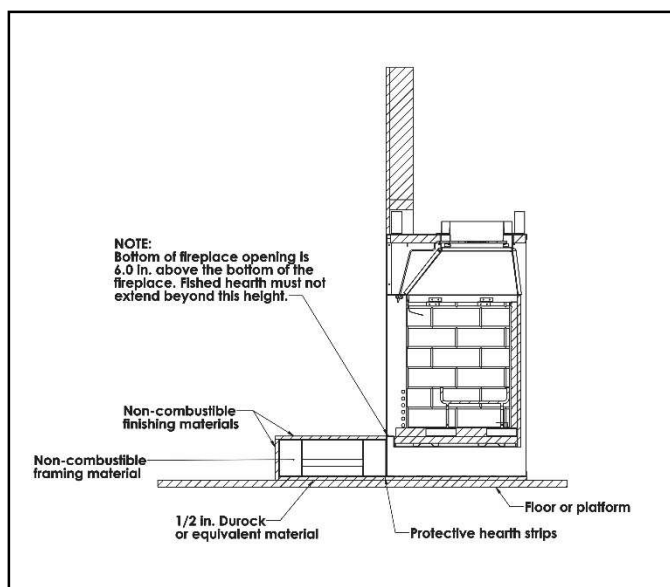
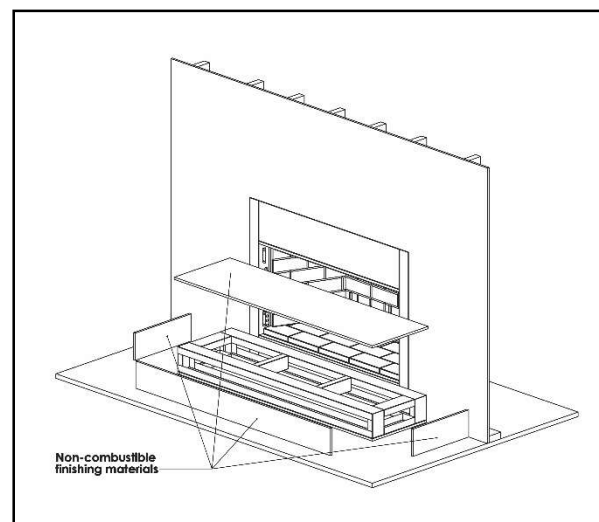
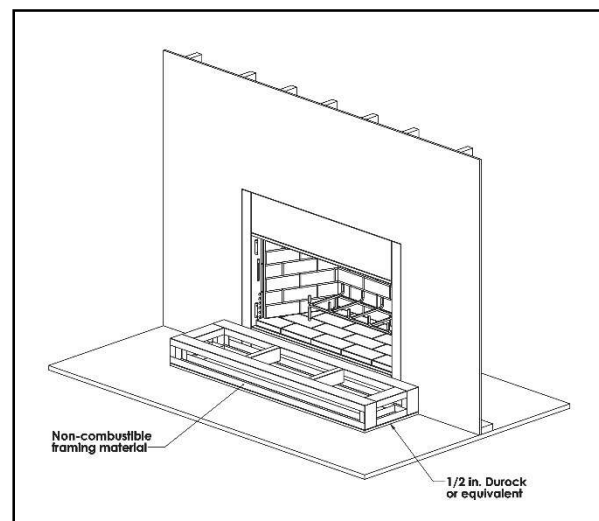


## 26. Hearth Extension Less Than 4" Below Fireplace Opening

The hearth framing must be constructed of non-combustible materials (such as metal framing or equivalent materials) and placed on 1/2" Durock or equivalent material. See Figures 7.4 and 7.5.

When building the platform, account for the thickness of the non-combustible finishing materials.

Seal gaps between the hearth extension and the front of the fireplace with a bead of non-combustible sealant or grout.

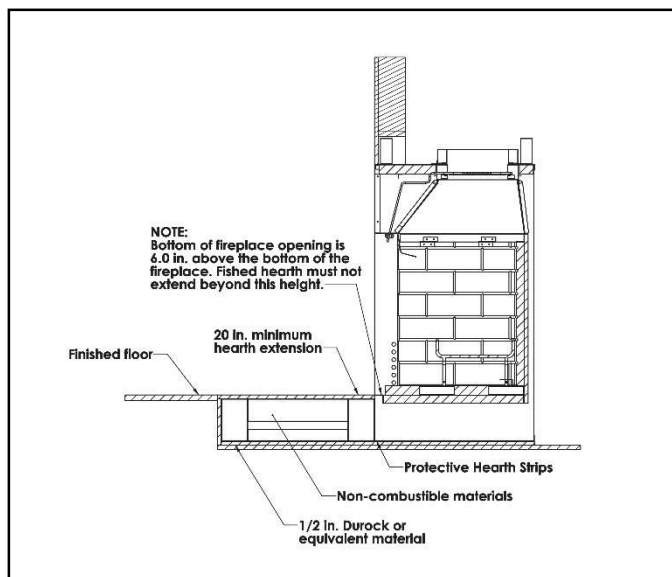


## 27. Fireplace Opening & Hearth Extensions Flush with the Floor

Non-combustible flooring a minimum of 20 inches in front of the fireplace and 12 inches past each side of the fuel opening is required.

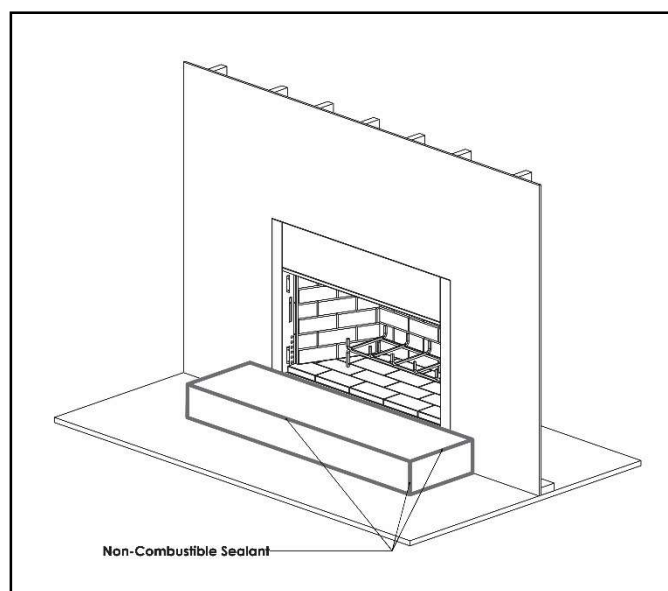
The hearth framing must be constructed of non-combustible materials (such as metal framing or equivalent material).

- When creating the platform, allow for the thickness of the non-combustible finishing material. See Figure 16.4
- Seal the gaps between the hearth extensions and the front of the fireplace with a bead of non-combustible sealant or grout.



## 28. Non-Combustible Sealant Material

After completing the framing and applying the facing materials over the framing. A bead of non-combustible sealant must be used to close off any gaps at the top and sides between the fireplace and hearth.





## 29. Mantel & Wall Protection

The combustible mantel may have a depth of 12 inches when positioned 12 inches above the fireplace opening. Combustible trim pieces that project no more than 1-1/2" from the face of the fireplace can be placed no closer than 6 inches from the top of the fireplace opening. (See Figure 16.7)

Combustible trim must not cover:

- The metal surfaces on the fireplace.
- The space between the metal face of the fireplace and the framing.
- Where the non-combustible board is placed over metal surfaces.



### WARNING! RISK OF FIRE.

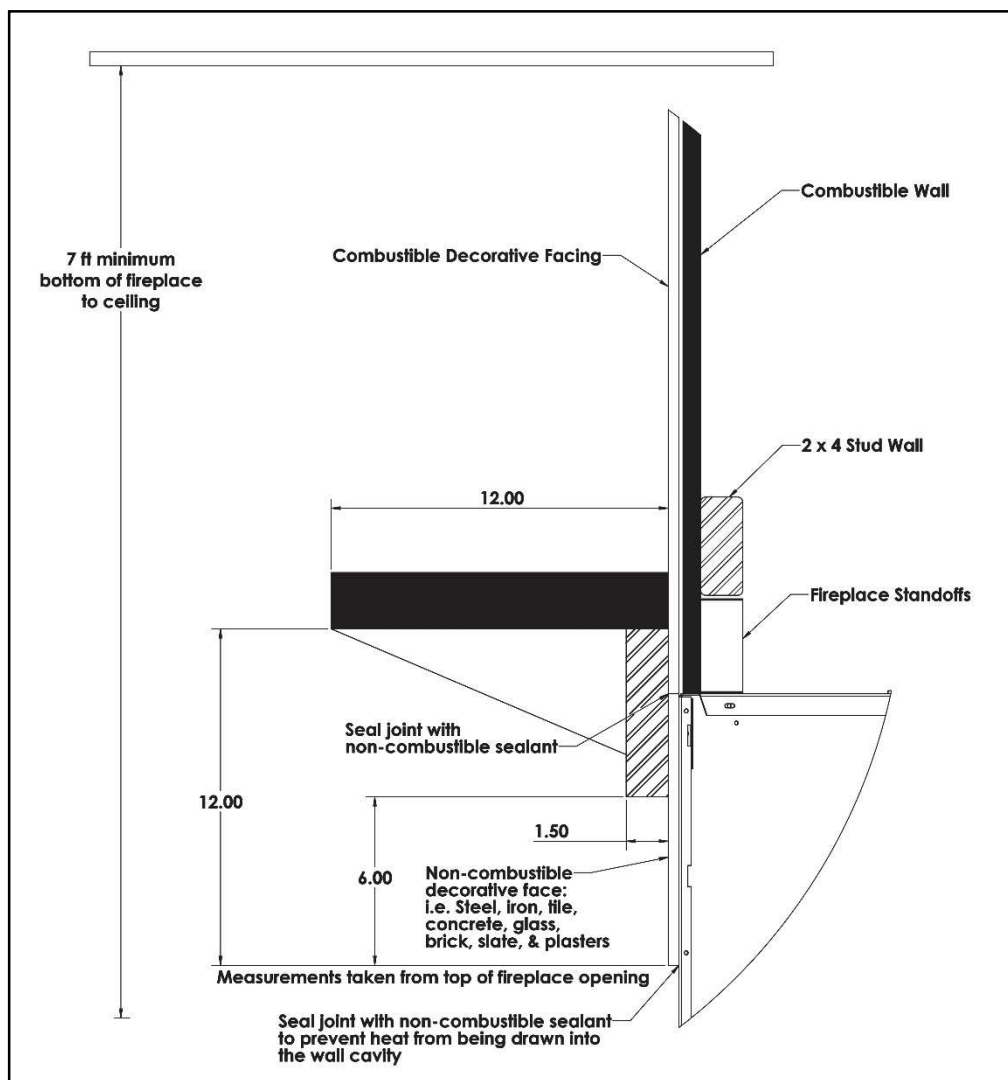
You must seal around the finishing material to the fireplace.



### WARNING! RISK OF FIRE.

Olympia Chimney & Venting is not responsible for discoloration, cracking or other material failures of finishing materials due to heat exposure or smoke.

- **Choose finishing materials carefully!**





## 30. Gas Log Provision



### **WARNING! RISK OF FIRE OR ASPHYXIATION**

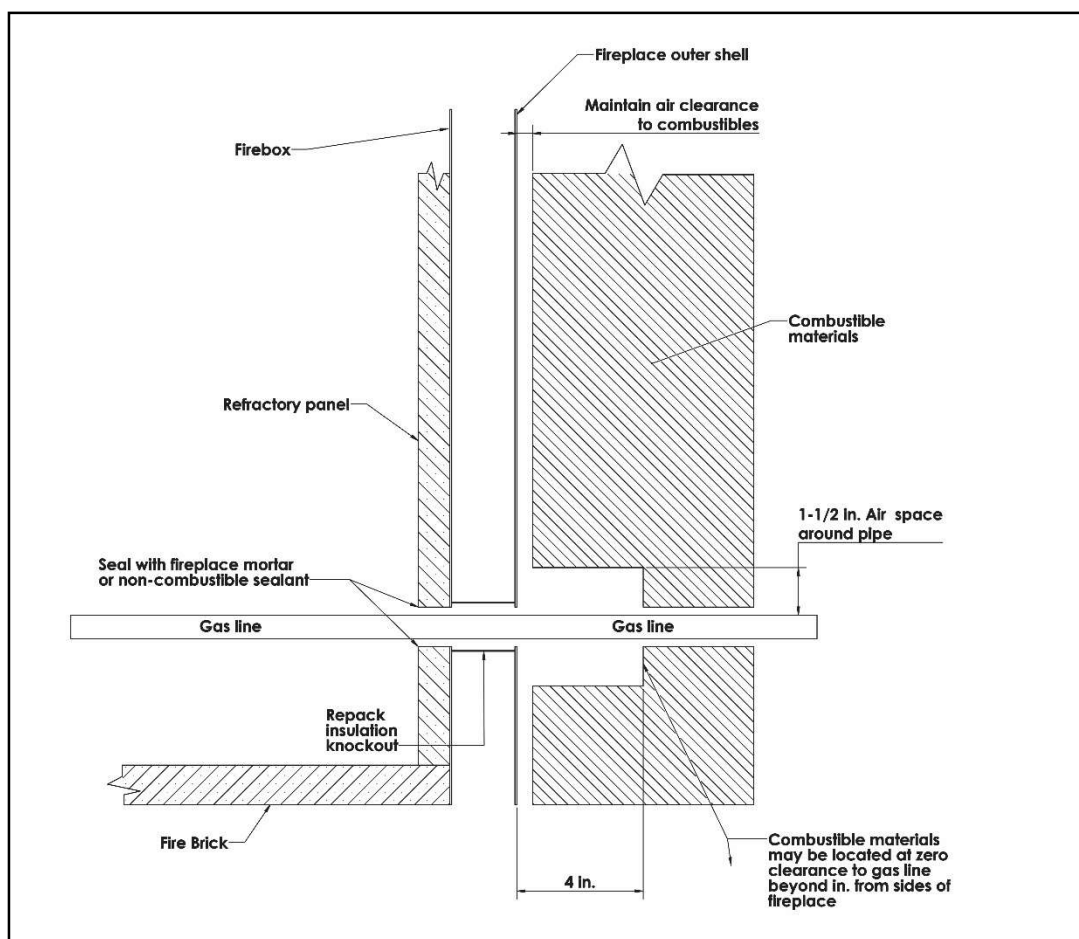
Use with solid wood fuel, decorative, unvented gas logs, or vented gas logs only. Gas fire generates fumes.

**Damper must be fully closed when operating unvented gas logs.**

**Damper must be fully opened when operating vented gas logs.**

A certified gas log set can be installed into this fireplace.

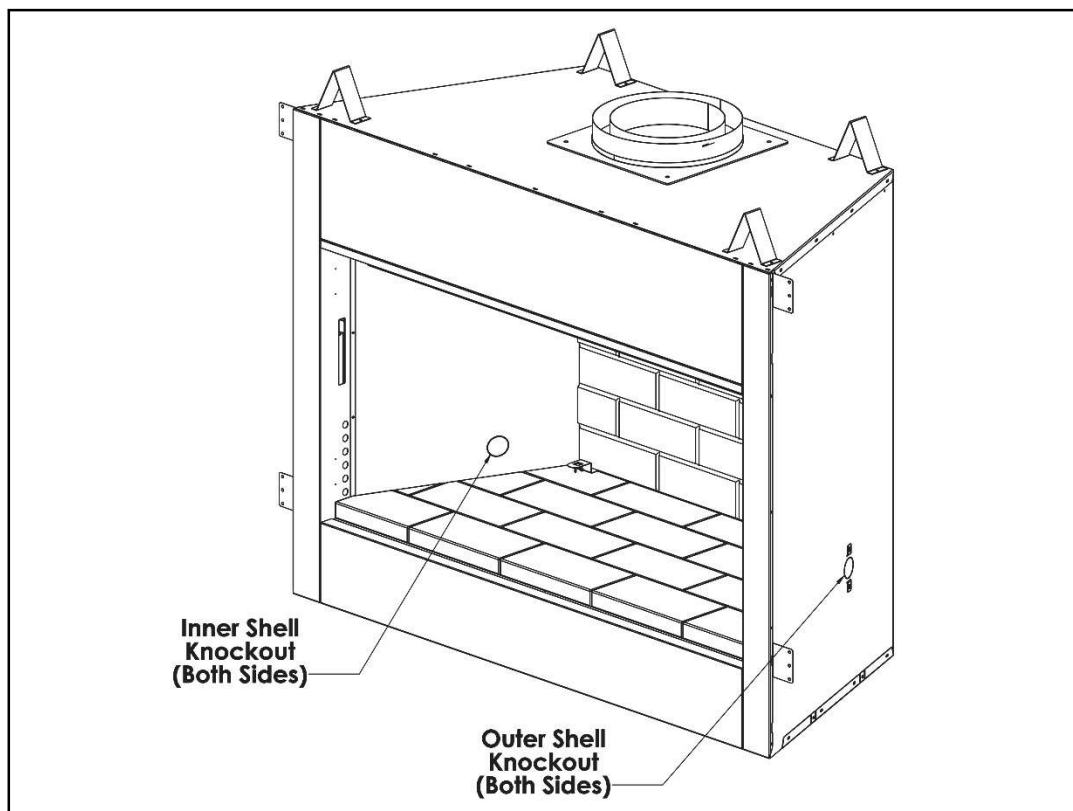
- Maximum input is 39,000 BTU's for unvented gas log sets.
- Vented gas appliances must be certified to ANSI Z21.88/CSA 2.33 Standard for Vented gas fireplace heaters.
- Decorative gas appliances must be certified to ANSI Z21.60/CSA 2.26 Standard for Decorative Gas Appliances.
- The gas log set must be installed in accordance with the National Fuel Gas Code, ANSI Z223.1 and Natural Gas Installation Code, CAN/CGA-B149.1-M95 or the Propane Installation Code, CAN/CGA-B149.2-M95.
- The gas log set **MUST** have a gas shut-off.
- The refractory panel must be sealed around the pipe with fireplace mortar or non-combustible sealant(see Figure 17.1)



## 31. Gas Log Conversion

To convert the firebox to be used with decorative, unvented or vented gas logs complete the following:

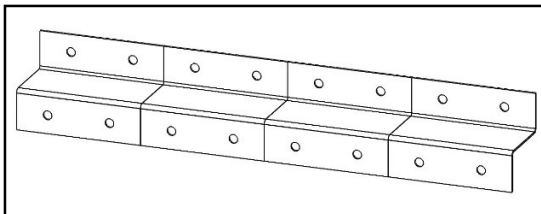
1. Using a power drill with 3/8" hex bit, remove the self-tapping screws from the retaining clips at the top of the refractory panel.
2. Carefully remove the refractory panel from the firebox.
3. Locate the gas-line knockout towards the bottom/rear of the firebox.
4. Using a screwdriver, press the top or bottom of the laser-perforated knockout forward.
5. Using a pair of pliers, grasp the now angled knockout and rotate the knockout to break the tie-in and remove the knockout.
6. Repeat steps 4 & 5 for the knockout on the outer shell of the fireplace.
7. Remove the packed insulation from in between the inner and outer shell of the fireplace.
8. Using a diamond coated hole saw & the provided template, cut the gas-line hole in the refractory panel removed previously.
9. Replace refractory panel & retaining clip.
10. Run gas line.
11. Repack insulation around pipe in between inner and outer shell of firebox.
12. Seal refractory around gas-line pipe with fireplace mortar or a non-combustible sealant.



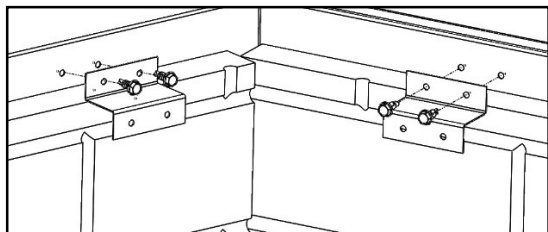
## 32. Assembling Loose Parts/Brackets

### a. Refractory Panel Retaining Clips

Locate and separate the joined Refractory Panel Retaining Clips shipped loose with the Forever Firebox.

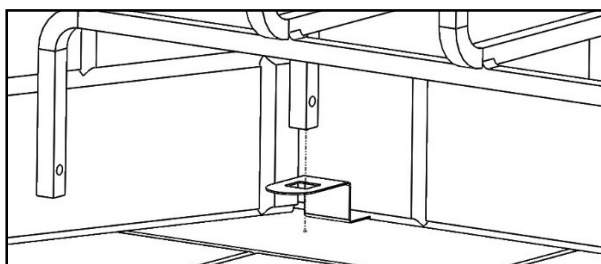


After installing the refractory panels, screw the brackets in to the rear and sides of the fire chamber using the pre-drilled holes and the provided self-tapping sheet metal screws.

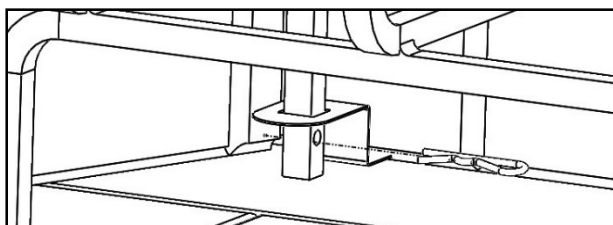


### b. Log Grate

Insert the back legs of the Log Grate into the retaining clips pre-installed in the fire chamber.

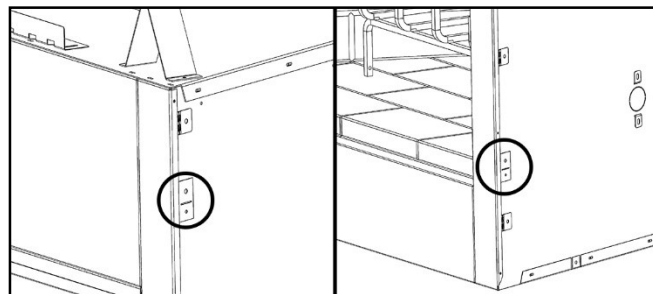


Insert the retaining pins into the holes located on the legs of the Log Grate.

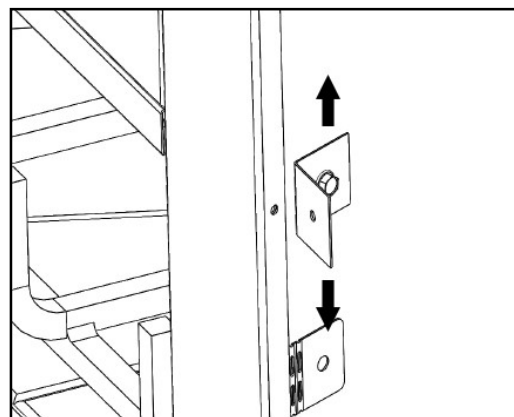


### c. Break-Away Stud Nailing Flanges

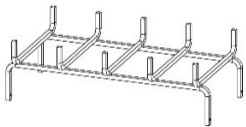
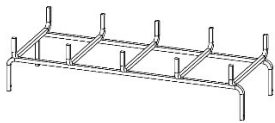
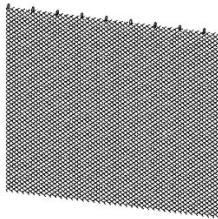
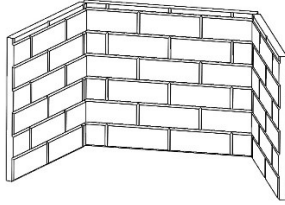
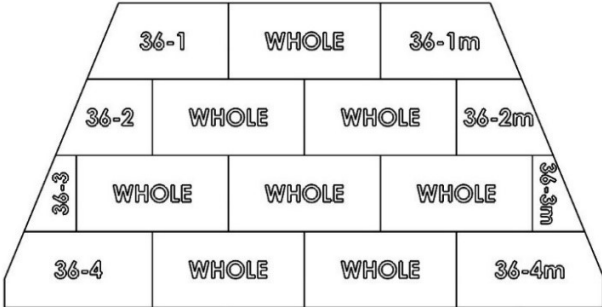
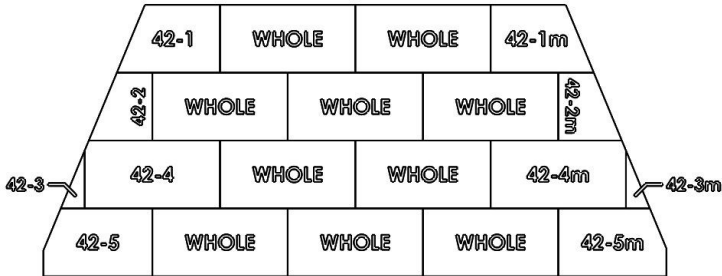
If you require additional nailing flanges other than the flip-out flanges, locate the Break-Away flanges attached near the top & bottom of the fireplace sides. Pry the tabs forward and backward until they release from the firebox.



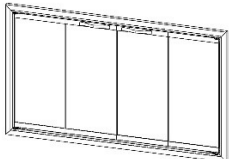
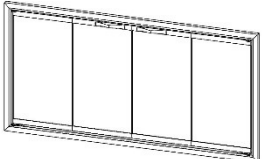

Bend the tab 22.5° and position where it is needed. Anchor to the outer box using the provided self tapping screws.




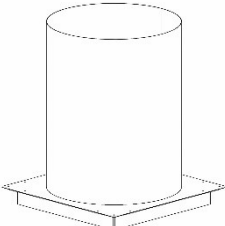
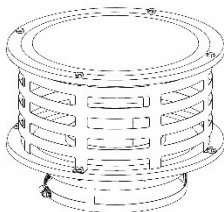
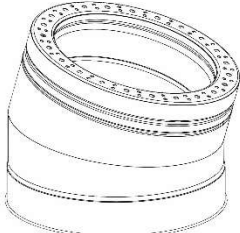
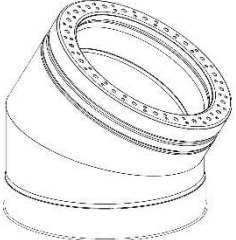
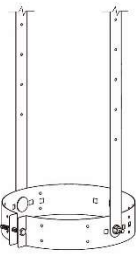
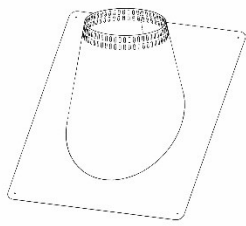
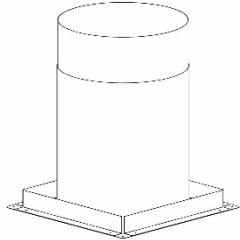
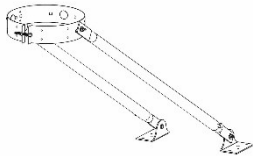

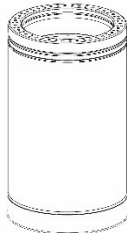
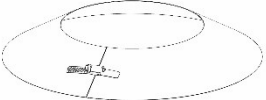
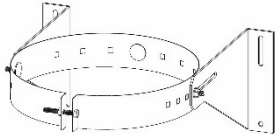
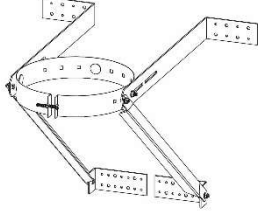
## 33. Replacement Firebox Components

Ventis Forever Firebox Replacement Components (Part No.)			
			
36" Log Grate (OCV-RR-LG36)	42" Log Grate (OCV-RR-LG42)	Fireplace Screen (FS-2419)	Refractory Set (ZRR36 or ZRR42)
 <p>36" Firebricks (Z FB36-1, Z FB36-2, etc...) (Z FIREBRICK = Whole uncut brick)</p>		 <p>42" Firebricks (Z FB42-1, Z FB42-2, etc...) (Z FIREBRICK = Whole uncut brick)</p>	

## 34. Optional Components

Optional Components		
		
36" Bi-Fold Fireplace Doors (ZRRD36)	42" Bi-Fold Fireplace Doors (ZRRD42)	Fresh Air Kit (OCV-RR-FAI)

## 35. Chimney Components

8" Ventis Class-A Chimney Components (Part No.)			
			
Chimney Pipe (VAzzz-08yy)	Attic Insulation Shield (VA-AIS08)	Rain Cap (VA-C08)	Elbow – 15° (VA-EL0815)
			
Elbow – 30° (VA-EL0830)	Elbow/Offset Support (VA-ELS58)	Vented Roof Flashing (VA-F08YY)	Firestop (VA-FS08)
			
Extended Roof Brace (VA-RB58)	Roof Support (VA-RS58)	Telescoping Pipe (VA-TEL08)	Storm Collar (VA-SC08SS)
			
Wall Support (VA-WS58)	Extended Wall Support (VA-WSE58)		





## **WARNING! HOT SURFACES!**

Glass and other surfaces are hot during operation and cool down.

- DO NOT touch the glass until it is cooled
- Keep children away from the fireplace
- Carefully supervise children that are in the same room as the fireplace



## **WARNING! HIGH TEMPERATURES!**

Alert adults and children to the hazards of high temperatures.

- High temperatures may ignite clothing or other flammable materials.
- Keep clothing, furniture, drapes, and other flammable materials away from the fireplace.

## 36. General Operating Parts



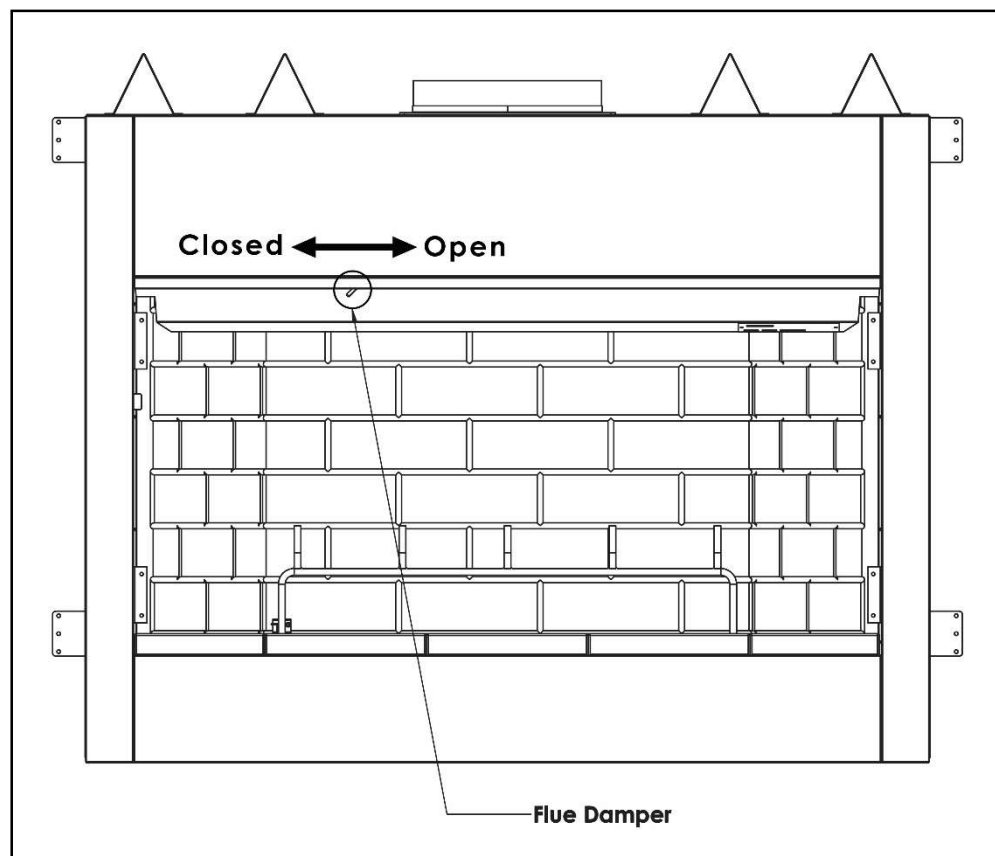
## **WARNING! RISK OF FIRE.**

DO NOT operate fireplace before reading and understanding operating instructions.

Failure to operate fireplace according to operating instructions could cause fire or injury.

### a. Flue Damper

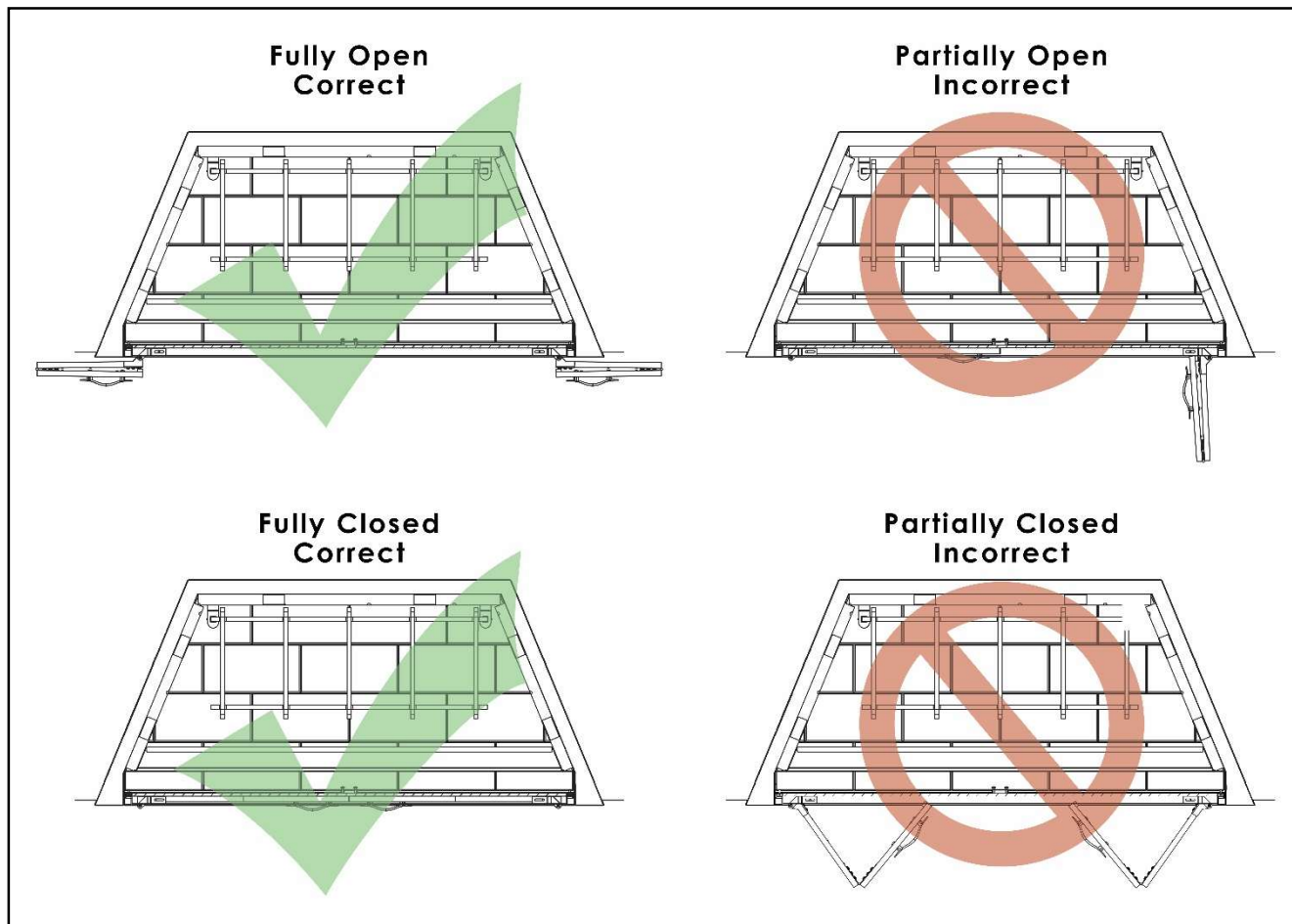
Prior to lighting the fireplace, verify the damper is fully opened by looking up from the inside of the fire chamber.





## b. Glass Doors

- Bi-fold glass doors are optional.
- Refer to Figure 33-b for the proper use of the doors.



### **WARNING! RISK OF FIRE AND SMOKE.**

Fireplaces equipped with doors should be operated only with doors fully open or doors fully closed. If doors are left partly open, gas and flame may be drawn out of the fireplace opening.

## 37. Creosote & Soot Formation

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 once every 2 months during the heating season to determine if a creosote or soot buildup has occurred.

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

- Never over fire your stove or appliance.
- The high temperatures caused by over firing can damage the stove and stove pipe and may overheat nearby combustible walls.
- Do not burn driftwood or treated lumber.

## 38. Maintenance Procedures (Professional)

It is important that the chimney system be checked and cleaned annually. This is for the safety of the homeowner and necessary to meet the warranty requirements of Ventis Class-A chimney pipe & Ventis Forever Firebox. In the case of solid fuel burning appliances, more frequent maintenance may be required, depending on use. The entire system, from the connection at the appliance to the top of the chimney must be completely inspected and cleaned.

**To clean the chimney lining system it is recommended to perform the following:**

1. Remove cap by either removing the 4 bolts on the cap lid or by loosening the clamp band.
2. Select the proper sized chimney brush to clean the chimney. Be sure the brush head passes throughout the complete length of the liner, including the connectors, terminals and tees.
3. Inspect and clean the chimney cap. Spark arrestors and other screens may be necessary or required in some areas, but may be susceptible to blockage from creosote or through freezing moisture in areas of low ambient temperature.
4. Reinstall chimney cap
5. Before the initial firing of the appliance, check the appliance's operating instructions for initial firing precautions.

## 39. Safety & Operating Information

### c. General Fireplace Safety

Most problems are caused by improper installation of the fireplace. To provide proper fire safety, the following needs to be given serious consideration:

- The fireplace should NEVER be used without supervision
- The fireplace system inspection should be performed annually
- Install at least one smoke detector on each floor home and test them regularly to ensure your safety
- Install a Type ABC fire extinguisher in an easy to reach location near the fireplace
- Devise and practice an evacuation plan that includes at least two routes of escape
- Should a chimney fire occur immediately evacuate and notify the fire department



#### **WARNING! RISK OF FIRE.**

Olympia Chimney & Venting claims no responsibility for, and the warranty and agency listing will be voided by the following actions.

#### **DO NOT:**

- Operate a fireplace that is damaged
- Modify the fireplace in any way
- Overfire the fireplace
- Install a vented or unvented gas log set that does not meet the specifications in this manual (See section 30)
- Install any component that is not approved by Olympia Chimney & Venting
- Operate the fireplace without fully assembling all components

**Improper installation, adjustment, modification, or improper service and maintenance can cause injury or property damage.**

### d. Clear Space

Combustible materials must not be stored on the hearth extension. Room furnishings such as chairs, drapes, curtains, or other combustibles must be at least 4 feet from the front of the fireplace.

**Combustible** materials are materials made of or surfaced with any of the following materials:

- Wood (Hardwood, plywood, OSB, etc...)
- Compressed paper
- Plant Fibers
- Plastic
- Drywall
- Any material that can ignite and burn, flame proofed or not, plastered or un-plastered.

**Non-combustible** materials are materials which will not ignite and burn, composed of any combination of the following:

- Metals (Excluding aluminum)
- Masonry (Concrete, brick, slate, etc...)
- Glass
- Tile
- Plaster



#### **WARNING! RISK OF FIRE.**

Keep combustible materials, gasoline and other flammable vapors and liquids clear of the fireplace.

#### **DO NOT:**

- Store flammable material close to the fireplace
- Use flammable liquids such as gasoline or charcoal lighter fluid to start or "freshen up" a fire in this fireplace

## e. Log Grate

The log grate is designed to keep logs in place and allow proper air circulation around the fire.

This fireplace was designed to be used with the grate supplied by Olympia Chimney & Venting.



### **WARNING! RISK OF FIRE.**

Use only the integral grate supplied by Olympia Chimney & Venting.

## f. Firebrick & Refractory

The firebrick and refractory are supplied to contain and radiate heat and provide an attractive interior.

They will break down over time and will need occasional replacement. Small hairline cracks and discoloration are normal and do not affect its safety.



### **WARNING! RISK OF FIRE.**

**DO NOT** burn fireplace without refractory or firebricks. Use only the refractory and firebrick supplied by Olympia Chimney & Venting.

## g. Fireplace Screen

The fireplace screens are provided to control sparks. Keep the screens closed when the fireplace is in use.



### **WARNING! RISK OF FIRE OR BURNS.**

Screen will not prevent burning material from falling out of the fireplace. Screen pulls or handles may be hot.

## h. Flue Damper

The flue damper must be in the fully open position when burning solid wood fuel or vented gas logs during the operation of this fireplace



### **WARNING! RISK OF FIRE AND ASPHYXIATION.**

Open damper prior to operating fireplace with solid wood fuel or vented gas logs. A closed damper overfires the fireplace and spills smoke and flames into the room.

**NOTE: When operating the fireplace with approved unvented gas logs, the damper must be in the fully closed position.**

## i. Glass Doors

Glass doors are optional



### **WARNING! RISK OF FIRE.**

Only install doors supplied by Olympia Chimney & Venting



### **WARNING! RISK OF FIRE AND SMOKE.**

A fireplace equipped with doors should only be operated with doors fully open or doors fully closed. If doors are left partly open, gas and flame may be drawn out of the fireplace opening.

## j. Chimney Fire

In the event of a chimney fire:

- Have the chimney and adjoining structure inspected by qualified professionals. Olympia Chimney & Venting recommends that Certified professionals conduct a minimum of an NFPA 211 Level 2 inspection of the chimney.
- Replace components of the chimney and fireplace as specified by the professionals.
- Ensure all joints are properly engaged and the chimney is properly secured.



### **WARNING! RISK OF FIRE.**

A chimney fire can permanently damage your chimney system. Failure to replace damaged components and make proper repairs can cause a structure fire.

## 40. Overfiring



### **WARNING! RISK OF FIRE.**

DO NOT over fire.

Overfiring may ignite creosote or damage the fireplace and chimney.

To prevent overfiring your fireplace, DO NOT:

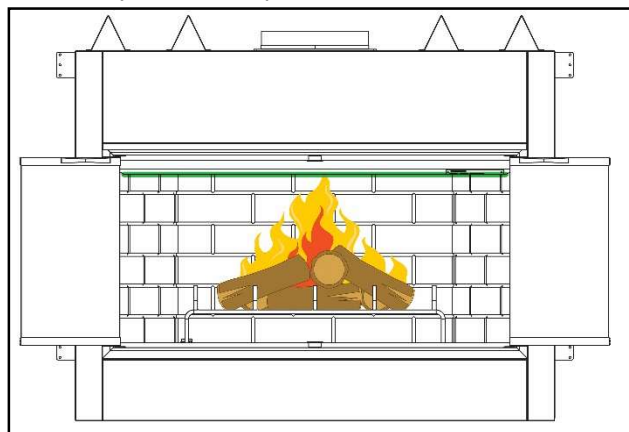
- Allow too much air into the fire
- Overload the fire with wood
- Use flammable liquids
- Burn large quantities of scrap lumber
- Burn trash

Symptoms of overfiring may include one or more of the following:

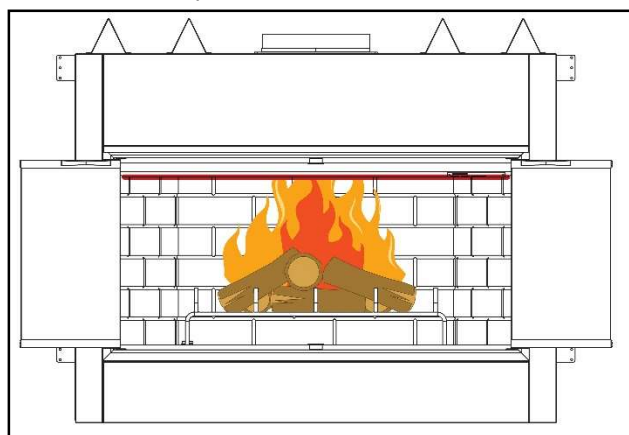
- Roaring, rumbling noises
- Loud cracking or banging noises
- Metal warping
- Chimney connector or fireplace glowing
- Chimney fire

As a rule of thumb, maintain a flame that is below the top of the viewable area of the fireplace to prevent overfiring.

Correctly fired fireplace:



Overfired fireplace:





## 41. Fuel



### **WARNING! USE SOLID WOOD FUEL ONLY**

Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).

### **Softwood/Hardwood**

Fireplace performance is dependent on the quality of firewood you decide to use. All seasoned wood contains around 8,000 BTUs per pound (In terms of energy content, the variation in wood species is very little). Hardwoods are more dense than softwoods. A cord of a hardwood, such as Maple, contains around 60% more potential energy than a cord of a softwood, such as Spruce.

### **Softwood**

Most softwoods are coniferous (trees with needle-like leaves that remain green throughout the year). Softwoods require less drying time, are easier to ignite, and burn faster than hardwoods due to them being more porous than hardwoods. **Douglas Fir, Cedar, Pine, and Spruce** are examples of coniferous trees.

### **Hardwood**

Hardwood trees are deciduous (broadleaf trees that lose their leaves in the fall). Hardwoods take more time to dry, are usually harder to ignite, and burn slower than softwoods. **Birch, Hickory, Maple, Oak, and Apple** are examples of deciduous trees.

### **Your Wood Pile**

You will obviously use the type of wood that is most readily available in your area. But, the best arrangement is have a mix of softwood and hardwood, if at all possible. With a mix of softwood and hardwood, you can use the softwood for starting your fire, giving off quick heat which will bring the fireplace up to operating temperature and then add the hardwood for a longer burn time and slow, even heat.

## 42. Moisture Content



### **WARNING! RISK OF FIRE**

DO NOT burn wet or green wood. Wet, unseasoned wood can cause an accumulation of creosote.

Most of the problems fireplace owners face are caused by attempting to burn wet, unseasoned firewood. Freshly cut fire wood can have a moisture content of 50%, meaning the log is as much water as it is wood. (If a freshly cut log weighs 16 pounds, with 50% moisture content, trying to burn that would be the same as trying to burn a gallon of water.) Dead wood that has been lying on the forest floor is considered wet and will require full seasoning time. Standing dead wood, if cut during the dry time of the year, can be considered 2/3 seasoned.

Burning unseasoned wood will produce less heat output because it requires heat energy to evaporate the water trapped inside. This energy, that should be heating your home, is wasted. As this moisture evaporates it creates steam which will cool your firebox and chimney system. Combining this steam with tar and other organic vapors from burning wood, will form creosote which will condense in the relatively cool firebox and chimney.

Dry wood contains at least 15% moisture, and should be burned hot enough to keep the chimney hot as long as it takes to dry the wood out, which is around one hour.

Check the ends of your logs to see if the wood is dry enough to burn. If there are cracks radiating from the center in all directions, it is dry. If your wood sizzles in the fire it may not be fully cured, even though the surface is dry.

## 43. Seasoning Firewood

Seasoned firewood is wood that has been cut to size, split, and air dried long enough to achieve a moisture content around 20%. The key to seasoning wood is to be sure that it has been split. This exposes the wet interior and increases the surface area of each piece. If you don't split a tree that was cut down a year ago, it is likely to have as high a moisture content as it did when it was first cut.

### To season firewood:

- Cut logs to length
- Split logs to 6 in. pieces or less
- Air dry to a moisture content of around 20%
  - Softwoods – around 9 months
  - Hardwoods – arounds 18 months

### NOTICE!

Seasoning time may vary depending on conditions.

## 44. Storing Wood

Splitting firewood before storing it reduces drying time. To ensure properly seasoned firewood:

- Stack the wood to allow space air to circulate freely around and through the wood pile.
- Lift the wood pile off the ground for air circulation underneath.
- Any piece of wood over 6 in. diameter should be split. (Smaller pieces dry faster)
- Since more drying occurs through the cut ends than the sides (even for split wood), the wood should be stacked so both ends are exposed to air.
- Store wood under cover (In a shed or covered with a tarp, plastic, scrap plywood, etc....). Uncovered wood can absorb moisture from rain or snow, delaying the drying process. Avoid completely covering the ends and sides as this may trap moisture from the ground and obstruct air circulation.

## 45. Processed Solid Fuel Fire logs

Manufactured fire logs may be used with this fireplace. Olympia Chimney & Venting recommends using UL Classified processed fuel fire logs. Follow the manufacturer's lighting and safety instructions.

Do not poke or stir the logs while they are burning. Use only fire logs that have been evaluated for the application in manufactured fireplaces and refer to fire log warnings and caution markings on packaging prior to use.



### WARNING! RISK OF FIRE.

Using fire logs may require more frequent chimney inspections and cleaning.

## 46. First Fire

Before you light your first fire in the fireplace, be sure that the refractory is in place and that all labels have been removed.

## 47. Lighting Instructions

### NOTICE!

You must establish a good draft to prevent smoke spillage into the room.

**Your first three or four fires should be of a smaller size to allow the refractory and firebrick to cure. You may notice an industrial smell your first few fires, this is normal.**

Always burn properly seasoned firewood.

- Open the flue damper to the fully open position. (See Section 33)
- Place crumpled paper under the log grate.
- Loosely arrange kindling or small pieces of wood to form a "tent" on the log grate.
- Hold a rolled-up piece of burning newspaper under the flue damper for a few moments. This will pre-warm the flue to establish a draft and reduce smoke spillage during startup.
- Light the crumpled paper under the log grate. This paper will ignite the kindling on top of the log grate.
- Add small pieces of wood to the fire until a hot bed of coals and embers has been established.
- Add a minimum of three average pieces of seasoned firewood. Arrange them to allow combustion air and flames between them.



### WARNING! RISK OF FIRE.

Keep combustible materials, gasoline and other flammable vapors and liquids clear of the fireplace.

### DO NOT:

- Store flammable material close to the fireplace
- Use flammable liquids such as gasoline or charcoal lighter fluid to start or "freshen up" a fire in this fireplace

## 48. Ash Removal

Ashes need to be removed from the fireplace by the homeowner as needed. To do this you will need a metal container with a tight-fitting lid, a metal shovel, and a fireplace broom.



### WARNING! RISK OF FIRE.

DO NOT remove ashes until the fire is out and the fireplace is cold.

- When removed from the fireplace, ashes are to be placed in the metal container with tight-fitting lid.
- The closed container of ashes must be placed on a non-combustible floor or the ground, far enough away from all combustible materials, prior to final disposal.
- Ashes should be kept in the metal container until all cinders have thoroughly cooled if they are to be buried in soil, or otherwise locally dispersed.

## 49. Log Grate Inspection

The log grate needs to be inspected by the homeowner after each ash removal. You should inspect the grate for warping or sagging (1-½" or more), broken welds, and burn through of grate bars.

### NOTICE!

For safe operation, only replace the log grate with one supplied by Olympia Chimney & Venting.

## 50. Glass Cleaning

The glass of the bi-fold doors (if installed) should be cleaned by the homeowner as necessary using a non-abrasive glass cleaner or vinegar and a soft towel

## 51. Refractory/Firebrick Inspection

The refractory and firebrick need to be inspected regularly by the homeowner. Replace if crumbling or otherwise deteriorated.

### NOTICE!

For safe operation, only replace the refractory with panels supplied by Olympia Chimney & Venting.



# INSTALLATION & OWNER'S MANUAL

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Olympia Chimney & Venting

600 Sanders Street

Scranton, PA 18505