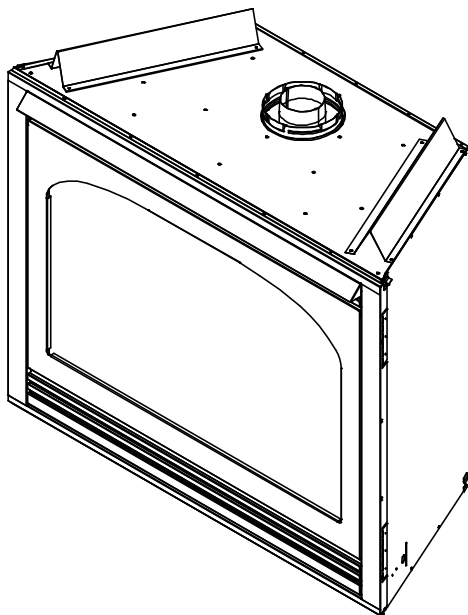


This appliance has been retired.
Service parts pages within have been removed.
For replacement parts, please refer to the individual
service parts list located on the brand websites.

HEAT-N-GLO
No one builds a better fire

**Model:
Grand-50-D**



Installers Guide

UL US
LISTED
Underwriters
Laboratories Listed

WARNING: IF THE INFORMATION IN THESE INSTRUCTIONS IS NOT FOLLOWED EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY, OR DEATH.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **What to do if you smell gas**
 - Do not try to light any appliance.
 - Do not touch any electrical switch.
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the gas supplier.

READ THIS MANUAL BEFORE INSTALLING OR OPERATING THIS APPLIANCE. THIS *INSTALLERS GUIDE* MUST BE LEFT WITH APPLIANCE FOR FUTURE REFERENCE.

WARNING: IMPROPER INSTALLATION, ADJUSTMENT, ALTERATION, SERVICE OR MAINTENANCE CAN CAUSE INJURY OR PROPERTY DAMAGE. REFER TO THIS MANUAL. FOR ASSISTANCE OR ADDITIONAL INFORMATION CONSULT A QUALIFIED INSTALLER, SERVICE AGENCY, OR THE GAS SUPPLIER.


1. This appliance may be installed in an aftermarket, permanently located, manufactured (mobile) home, where not prohibited by local codes.
2. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.


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Heat-N-Glo, a division of Hearth Technologies Inc.
20802 Kensington Boulevard, Lakeville, MN 55044


Please contact your Heat-N-Glo dealer with any questions or concerns. For the number of your nearest Heat-N-Glo dealer, please call 1-888-427-3973.

This product is covered by one or more of the following patents: (United States) 4,112,913; 4,408,594; 4,422,426; 4,424,792; 4,520,791; 4,793,322; 4,852,548; 4,875,464; 5,000,162; 5,016,609; 5,076,254 5,191,877; 5,218,953; 5,328,356; 5,429,495; 5,452,708; 5,542,407; 5,613,487; (Australia) 543790; 586383; (Canada) 1,123,296; 1,297,746; 2,195,264; (Mexico) 97-0457; (New Zealand) 200265; or other U.S. and foreign patents pending.


SAFETY AND WARNING INFORMATION


 **READ** and **UNDERSTAND** all instructions carefully before starting the installation. **FAILURE TO FOLLOW** these installation instructions may result in a possible fire hazard and will void the warranty.


 Prior to the first firing of the fireplace, **READ** the Using Your Fireplace section of the *Owners Guide*.


 **DO NOT USE** this appliance if any part has been under water. Immediately **CALL** a qualified service technician to inspect the unit and to replace any part of the control system and any gas control which has been under water.


 **THIS UNIT IS NOT FOR USE WITH SOLID FUEL.**


 Installation and repair should be **PERFORMED** by a qualified service person. The appliance and venting system should be **INSPECTED** before initial use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is **IMPERATIVE** that the unit's control compartment, burners, and circulating air passageways **BE KEPT CLEAN** to provide for adequate combustion and ventilation air.


 Always **KEEP** the appliance clear and free from combustible materials, gasoline, and other flammable vapors and liquids.


 **NEVER OBSTRUCT** the flow of combustion and ventilation air. Keep the front of the appliance **CLEAR** of all obstacles and materials for servicing and proper operations.


 Due to the high temperature, the appliance should be **LOCATED** out of traffic areas and away from furniture and draperies. Clothing or flammable material **SHOULD NOT BE PLACED** on or near the appliance.


 Children and adults should be **ALERTED** to the hazards of high surface temperature and should **STAY AWAY** to avoid burns or clothing ignition. Young children should be **CAREFULLY SUPERVISED** when they are in the same room as the appliance.


 These units **MUST** use one of the vent systems described in the Installing the Fireplace section of the *Installers Guide*. **NO OTHER** vent systems or components **MAY BE USED**.


 This gas fireplace and vent assembly **MUST** be vented directly to the outside and **MUST NEVER** be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance **MUST USE** a separate vent system. Common vent systems are **PROHIBITED**.


 **INSPECT** the external vent cap on a regular basis to make sure that no debris is interfering with the air flow.


 The glass door assembly **MUST** be in place and sealed, and the trim door assembly **MUST** be in place on the fireplace before the unit can be placed into safe operation.

 **DO NOT OPERATE** this appliance with the glass door removed, cracked, or broken. Replacement of the glass door should be performed by a licensed or qualified service person. **DO NOT** strike or slam the glass door.

 The glass door assembly **SHALL ONLY** be replaced as a complete unit, as supplied by the gas fireplace manufacturer. **NO SUBSTITUTE** material may be used.

 **DO NOT USE** abrasive cleaners on the glass door assembly. **DO NOT ATTEMPT** to clean the glass door when it is hot.

 Turn off the gas before servicing this appliance. It is recommended that a qualified service technician perform an appliance check-up at the beginning of each heating season.

 Any safety screen or guard removed for servicing must be replaced before operating this appliance.


 **DO NOT** place furniture or any other combustible household objects within 36 inches of the fireplace front.

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◆ = Contains updated information.

1

Approvals and Codes

Appliance Certification

The Heat-N-Glo fireplace models discussed in this *Installers Guide* have been tested to certification standards and listed by the applicable laboratories.

Certification
MODEL: Grand-50-D
LABORATORY: Underwriters Laboratories
TYPE: Direct Vent Gas Fireplace
STANDARD: ANSI Z21.50•CGA2.22•UL307B

Installation Codes

The fireplace installation must conform to local codes. Before installing the fireplace, consult the local building code agency to ensure that you are in compliance with all applicable codes, including permits and inspections.

In the absence of local codes, the fireplace installation must conform to the National Fuel Gas Code ANSI Z223.1 (in the United States) or the CAN/CGA-B149 Installation Codes (in Canada). The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes with the National Electric Code ANSI/NFPA No. 70 (in the United States), or to the CSA C22.1 Canadian Electric Code (in Canada).

These models may be installed in a bedroom or bed-sitting room in the U.S.A. and Canada.

High Altitude Installations

U.L. Listed gas fireplaces are tested and approved for elevations from 0 to 2,000 feet in the U.S.A. and from 0 to 4,500 feet in Canada.

When installing this fireplace at an elevation above 2,000 feet (in the United States), it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input should be reduced four percent (4%) for each 1,000 feet above sea level, unless the heating value of the gas has been reduced, in which case this general rule will not apply. To identify the proper orifice size, check with the local gas utility.

When installing this fireplace at an elevation between 2,000 and 4,500 feet (in Canada), the input rating must be reduced by ten percent (10%).

When installing this fireplace at an elevation above 4,500 feet (in Canada), check with local authorities.

Consult your local gas utility for assistance in determining the proper orifice for your location.



Heat-N-Glo Quality
Systems registered
by SGS ICS

2

Getting Started

Introducing the Heat-N-Glo Gas Fireplaces

Heat-N-Glo direct vent gas fireplaces are designed to operate with all combustion air siphoned from outside of the building and all exhaust gases expelled to the outside.

The information contained in this *Installers Guide*, unless noted otherwise, applies to all models and gas control systems. Gas fireplace diagrams, including the dimensions, are shown in this section.

Pre-install Preparation

This gas fireplace and its components are tested and safe when installed in accordance with this *Installers Guide*. Report to your dealer any parts damaged in shipment, particularly the condition of the glass. **Do not install any unit with damaged, incomplete, or substitute parts.**

The vent system components are shipped in separate packages. The gas logs are packaged separately and must be field installed.

Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit. Failure to follow these instructions will void the owner's warranty and may present a fire hazard.

The Heat-N-Glo Warranty will be voided by, and Heat-N-Glo disclaims any responsibility for, the following actions:

- Installation of any damaged fireplace or vent system component.
- Modification of the fireplace or direct vent system.
- Installation other than as instructed by Heat-N-Glo.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not manufactured and approved by Heat-N-Glo, notwithstanding any independent testing laboratory or other party approval of such component part or accessory.

ANY SUCH ACTION MAY POSSIBLY CAUSE A FIRE HAZARD.

When planning a fireplace installation, it's necessary to determine:

- Where the unit is to be installed.
- The vent system configuration to be used.
- Gas supply piping.
- Electrical wiring.
- Framing and finishing details.
- Whether optional accessories—devices such as a fan, wall switch or remote control—are desired.

If the fireplace is to be installed on carpeting or tile, or on any combustible material other than wood flooring, the fireplace should be installed on a metal or wood panel that extends the full width and depth of the fireplace.

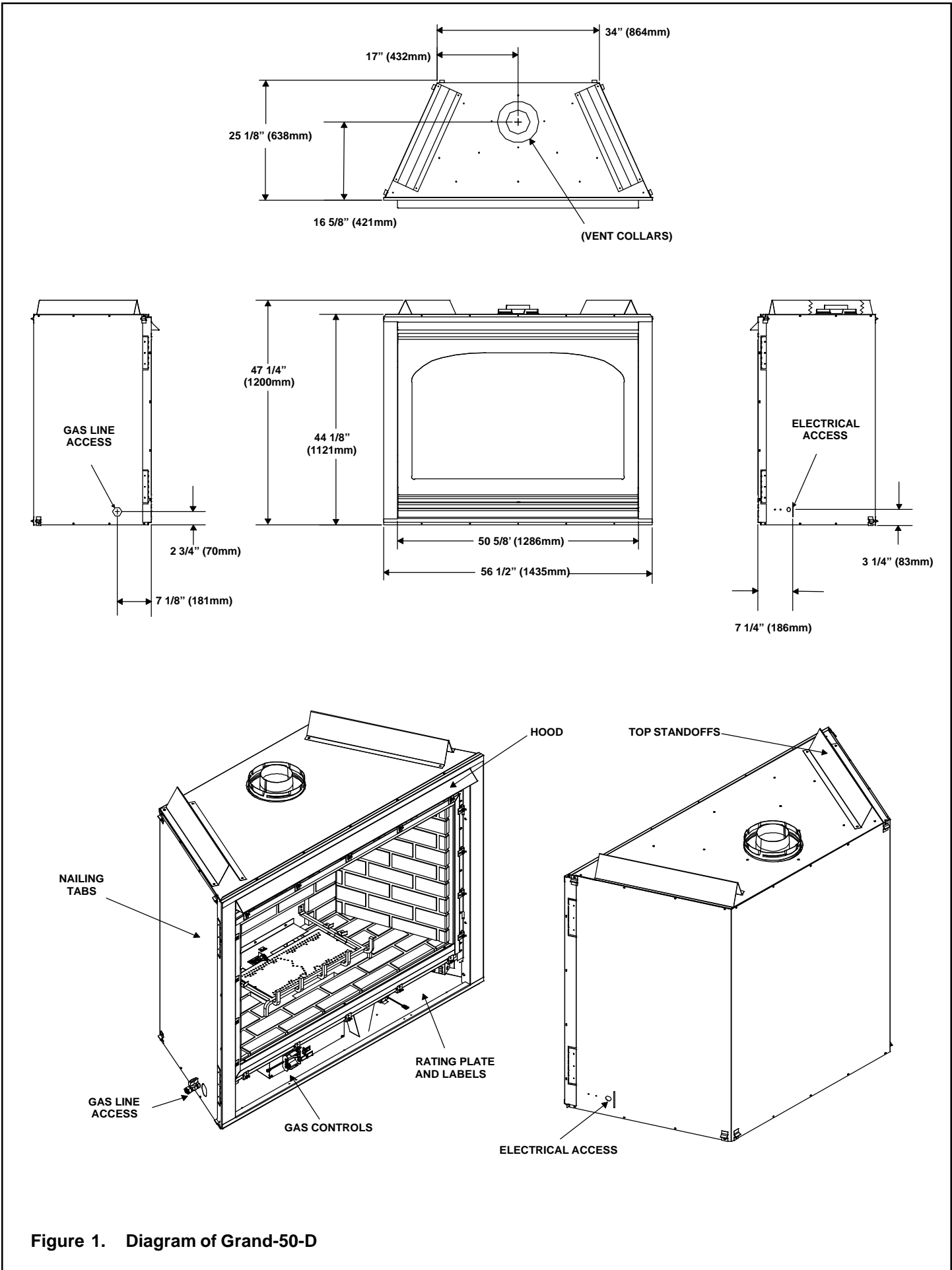


Figure 1. Diagram of Grand-50-D

3

Installing the Fireplace

Step 1. Locating the Fireplace

The diagram below shows space and clearance requirements for locating a fireplace within a room.

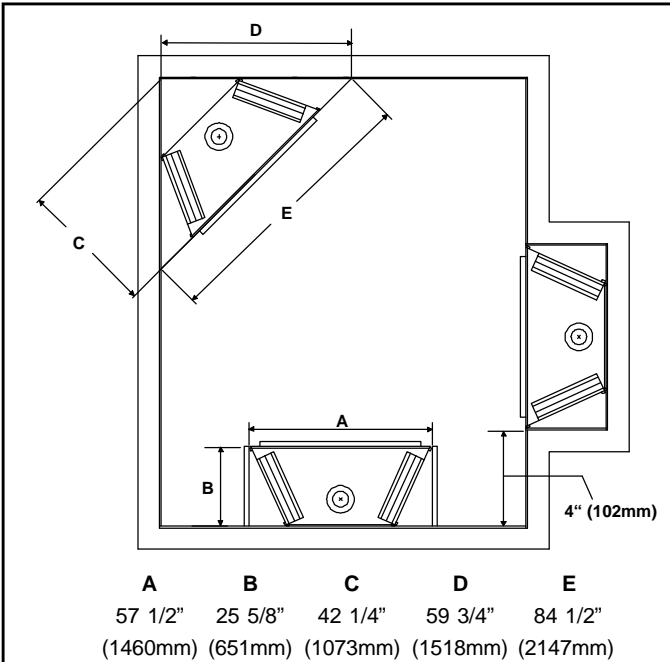


Figure 2. Fireplace Dimensions, Locations, and Space Requirements

Clearance Requirements

The top, back, and sides of the fireplace are defined by stand-offs. The minimum clearance to a perpendicular wall extending past the face of the fireplace is 4 inches (102 mm). The back of the fireplace may be recessed 25 1/8 inches (638mm) into combustible construction.

Minimum Clearances from the Fireplace to Combustible Materials		
	Inches	mm
Glass Front	36	914
Floor	0	0
Rear	1/2	13
Sides	1/2	13
Top	3 1/2	89
Ceiling*	31	787

* The clearance to the ceiling is measured from the top of the unit, excluding the standoffs (see Figure 27).

The distance from the unit to combustible construction is to be measured from the unit outer wrap surface to the combustible construction, **NOT** from the screw heads that secure the unit together.

Minimum Clearances from the Vent Pipe to Combustible Materials		
	Inches	mm
Vertical Sections	1	25
Horizontal Sections		
Top	3*	75
Bottom	1	25
Sides	1	25
At Wall Firestops		
Top	2 1/2	63.7
Bottom	1/2	13
Sides	1	25

*Additional clearance and/or installation of a heat shield is required above the first 90° elbow (see Figure 12).

For minimum clearances of direct vent termination see Figures 19 and 20.

Step 2. Framing the Fireplace

Fireplace framing can be built before or after the fireplace is set in place. Framing should be positioned to accommodate wall coverings and fireplace facing material. The diagram below shows framing reference dimensions.

CAUTION: MEASURE FIREPLACE DIMENSIONS AND VERIFY FRAMING METHODS AND WALL COVERING DETAILS BEFORE FRAMING.

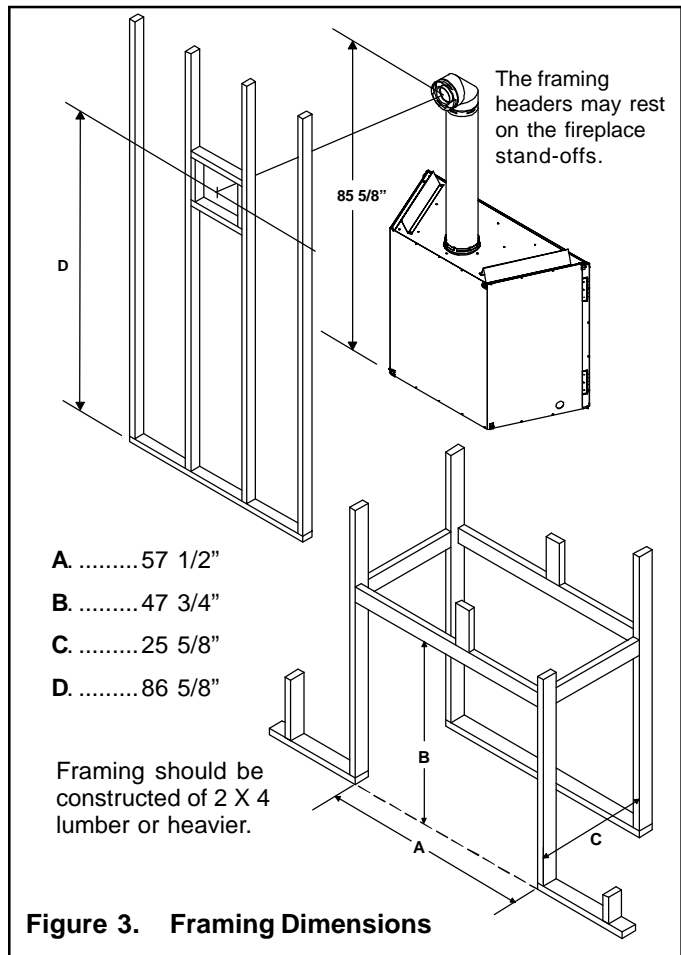
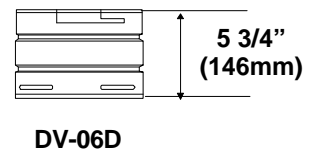
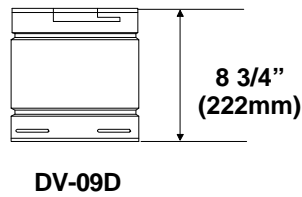
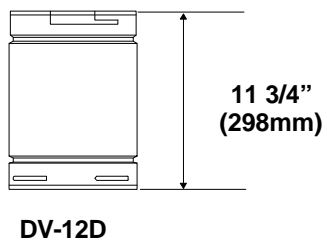
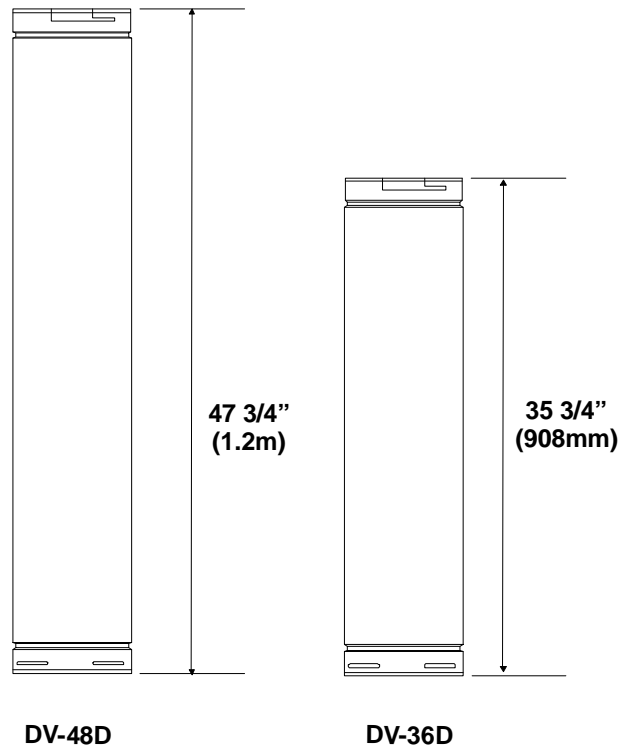
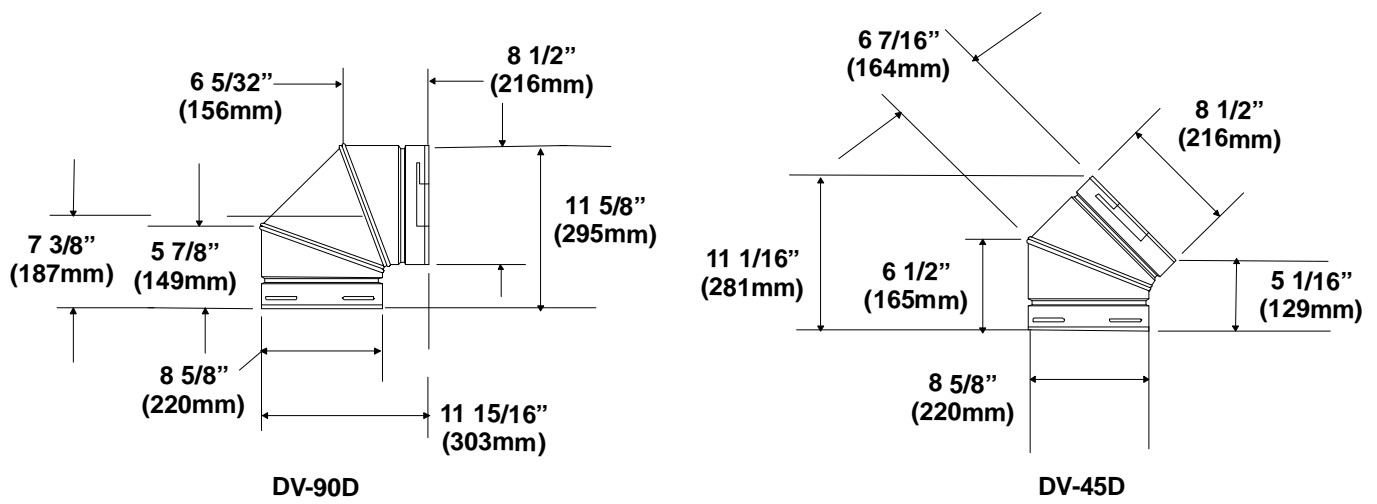


Figure 3. Framing Dimensions



NOTE: PIPES OVERLAP 1-3/8 INCHES (34.93 mm) AT EACH JOINT.

Figure 4. D-Series Direct Vent Component Specifications
(5-inch inner pipe / 8 5/8-inch outer pipe)

Step 3. Installing the Vent System

A. Vent System Approvals

This model is approved to use D-series direct vent components and terminations (Figures 4 and 5). Approved vent system components are labeled for identification. This pipe is tested and listed as an approved component of the fireplace. The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall. There is no required pitch for horizontal vent runs. **NO OTHER VENTING SYSTEMS OR COMPONENTS MAY BE USED.**

Detailed installation instructions are included with each vent termination kit and should be used in conjunction with this *Installers Guide*.

The flame and ember appearance may vary based on the type of fuel burned and the venting configuration used.

Identifying Vent Components

The vent systems installed on this gas fireplace may include one, two or three 90° elbow assemblies. The relationships of vertical rise to horizontal run in vent configurations using 90° elbows **MUST BE** strictly adhered to. The rise to run relationships are shown in the venting drawings and tables. Refer to the diagrams on the next several pages.

NOTE: Two 45° elbows may be used in place of one 90° elbow. Rise to run ratios in the vent system must be followed if 45° elbows are used.

WARNING: A 3-FOOT LENGTH OF STRAIGHT PIPE (MINIMUM) MUST BE THE FIRST VENT COMPONENT ATTACHED TO THE UNIT.

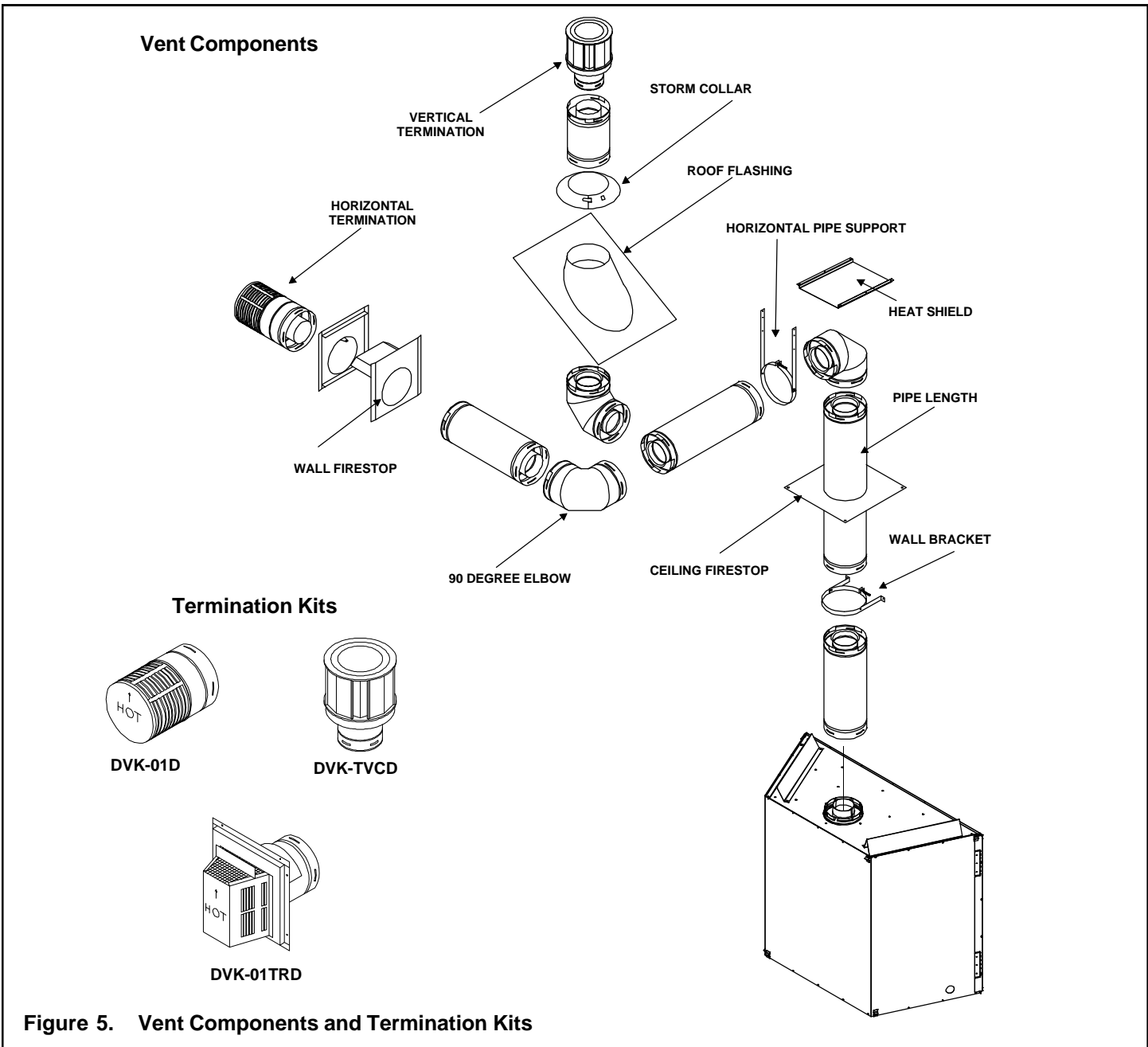


Figure 5. Vent Components and Termination Kits

**STRAIGHT UP
VERTICAL VENTING**

V (FT.)
30' MAX. (9.3 M)

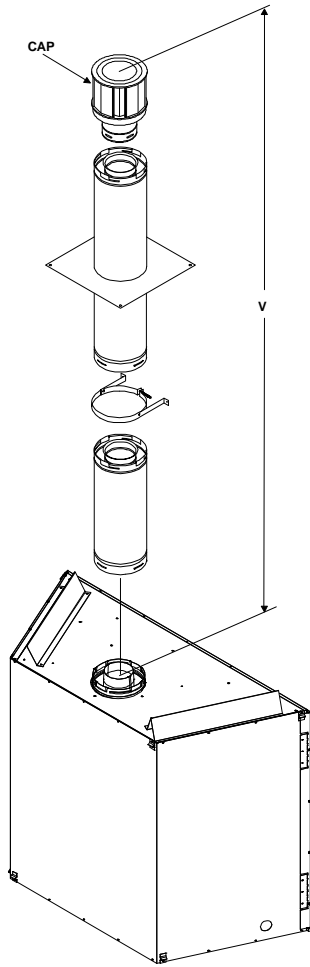


Figure 6. Straight Up Vertical Venting

VENTING WITH ONE (1) 90° ELBOW

V (FT.)	H (FT.)
3' MIN. (914 mm)	6' MAX. (1.9m)
4' MIN. (1.2m)	8' MAX. (2.4m)
5' MIN. (1.6m)	10' MAX. (3.1m)
6' MIN. (1.9m)	12' MAX. (3.6m)
V + H = 30' MAX. (9.3 m)	
Ratio V to H = 1:2	
	H = 20' MAX. (6.2m)

NOTE: SRV570-290 Heat Shield is required above elbow if clearance is less than 4 inches (102mm).

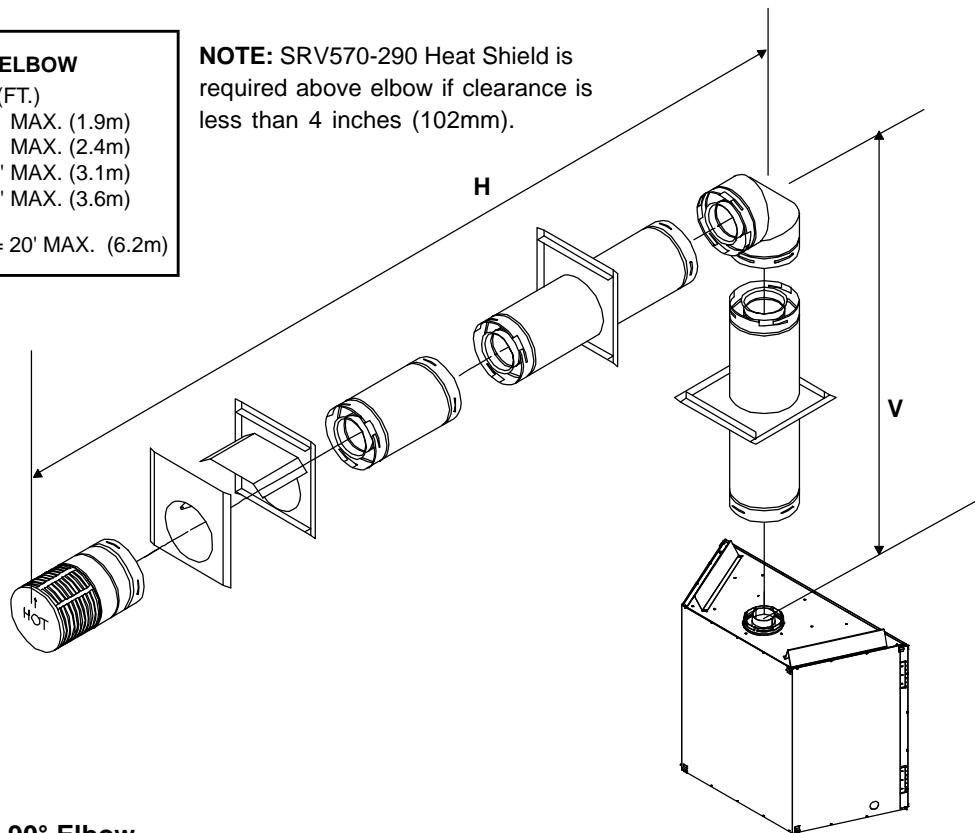
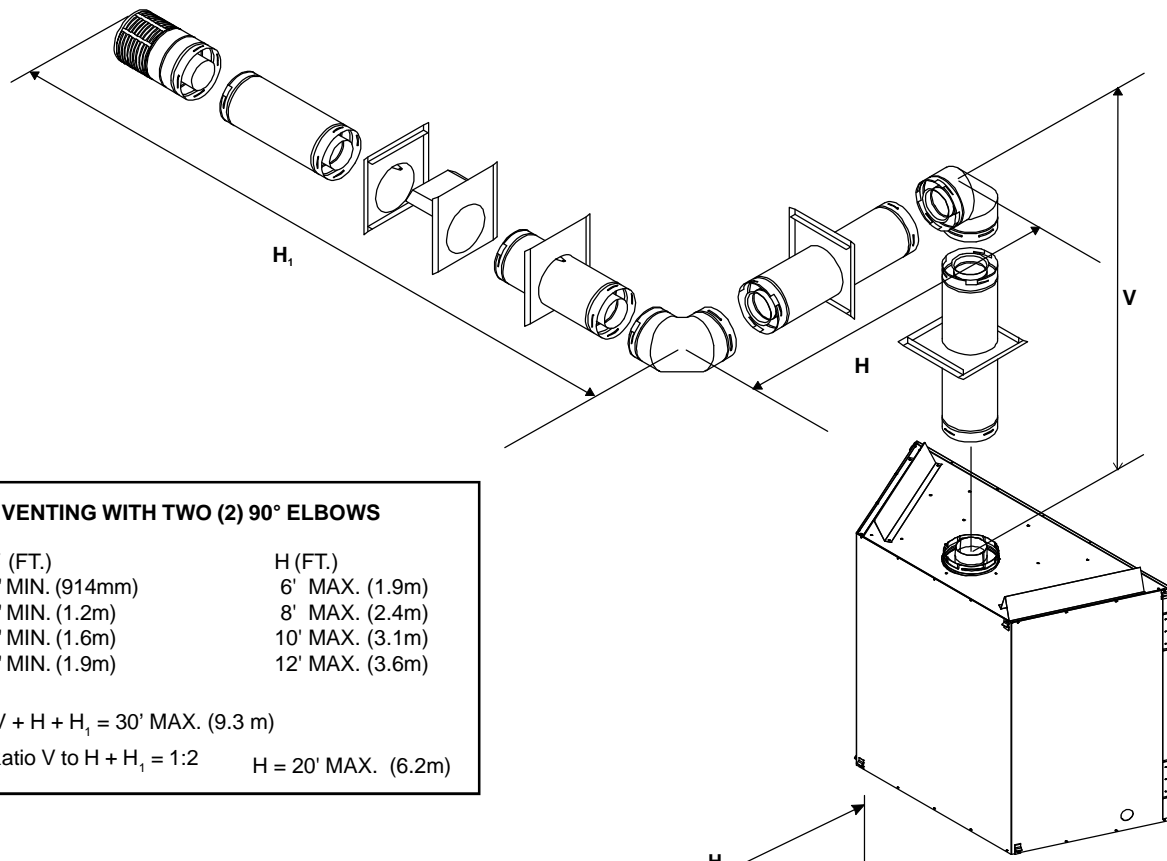


Figure 7. Venting with One 90° Elbow



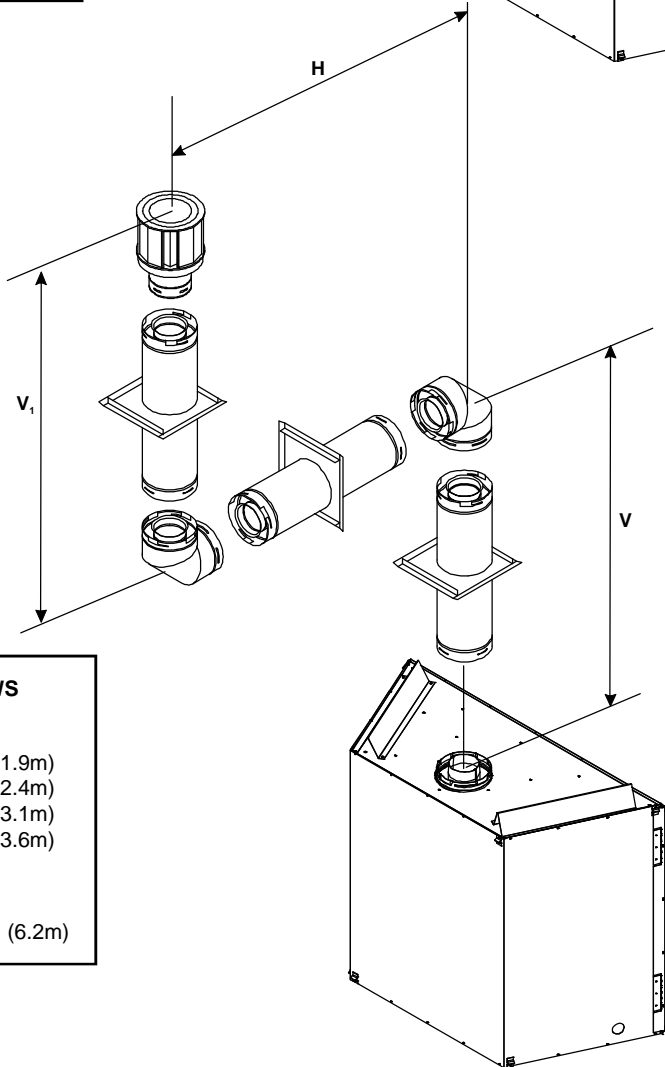
VENTING WITH TWO (2) 90° ELBOWS

V (FT.)	H (FT.)
3' MIN. (914mm)	6' MAX. (1.9m)
4' MIN. (1.2m)	8' MAX. (2.4m)
5' MIN. (1.6m)	10' MAX. (3.1m)
6' MIN. (1.9m)	12' MAX. (3.6m)

V + H + H₁ = 30' MAX. (9.3 m)

Ratio V to H + H₁ = 1:2 H = 20' MAX. (6.2m)

NOTE: SRV570-290 Heat Shield is required above elbow if clearance is less than 4 inches (102mm).



VENTING WITH TWO (2) 90° ELBOWS

V (FT.)	H (FT.)
3' MIN. (914 mm)	6' MAX. (1.9m)
4' MIN. (1.2m)	8' MAX. (2.4m)
5' MIN. (1.6m)	10' MAX. (3.1m)
6' MIN. (1.9m)	12' MAX. (3.6m)

V + V₁ + H₁ = 30' MAX. (9.3 m)

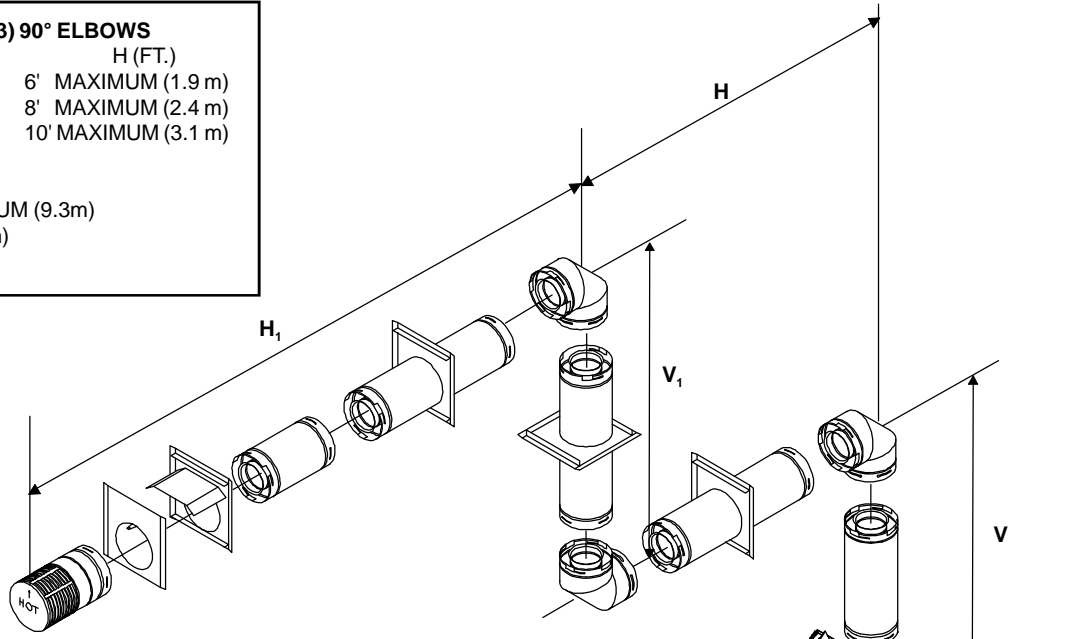
Ratio V to H = 1:2 H = 20' MAX. (6.2m)

Figure 8. Venting with two 90° elbows

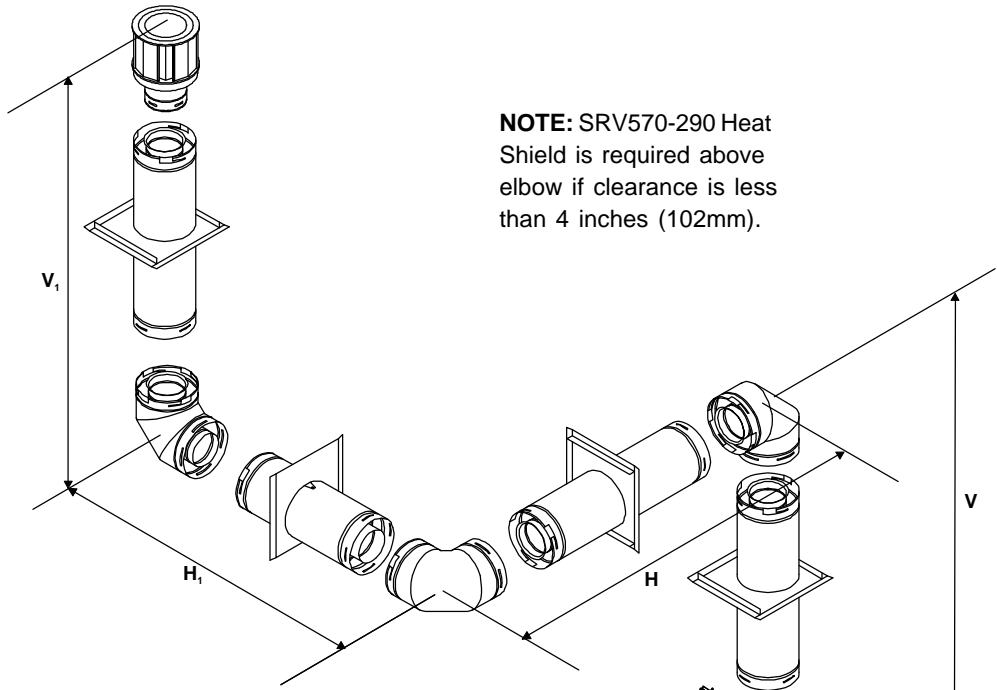
VENTING WITH THREE (3) 90° ELBOWS

V (FT.)	H (FT.)
3' MINIMUM (914 mm)	6' MAXIMUM (1.9 m)
4' MINIMUM (1.2 m)	8' MAXIMUM (2.4 m)
5' MINIMUM (1.6 m)	10' MAXIMUM (3.1 m)

RATIO V TO H = 1:2
 $V + V_1 + H + H_1 = 30'$ MAXIMUM (9.3 m)
 $H + H_1 = 20'$ MAXIMUM (6.2 m)
 $H = 10'$ MAXIMUM (3.1 m)



NOTE: SRV570-290 Heat Shield is required above elbow if clearance is less than 4 inches (102mm).



VENTING WITH THREE (3) 90° ELBOWS

V (FT.)	H + H ₁ (FT.)
3' MINIMUM (914 mm)	6' MAXIMUM (1.9 m)
4' MINIMUM (1.2 m)	8' MAXIMUM (2.4 m)
5' MINIMUM (1.6 m)	10' MAXIMUM (3.1 m)
6' MINIMUM (1.9 m)	12' MAXIMUM (3.6 m)

$V + V_1 + H + H_1 = 30'$ MAXIMUM (9.3 m)
 $H + H_1 = 20'$ MAXIMUM (6.2 m)
 RATIO V TO H + H₁ = 1:2

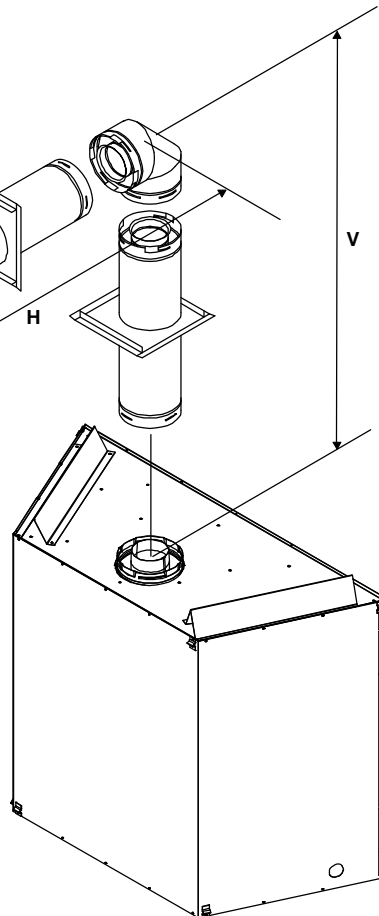


Figure 9. Venting with three 90° elbows

B. Installing Vent Components

1. Attach the First Vent Component to the Starting Collars

To attach the first vent component (3 foot straight pipe minimum) to the starting collars of the fireplace:

- Apply a 3/8 inch (9.5mm) bead of stove cement around the inner pipe fireplace starting collar.
- Make sure that the fireplace rope gasket supplied with the fireplace seals between the first 8-5/8 inch (219mm) vent component and the fireplace top.
- Lock the vent components into place by sliding the concentric pipe sections with four (4) equally spaced interior beads into the fireplace collar or previously installed component end with four (4) equally spaced indented sections.
- When the internal beads of each pipe line up, rotate the pipe section clockwise about one-quarter (1/4) turn. The vent pipe is now locked together.

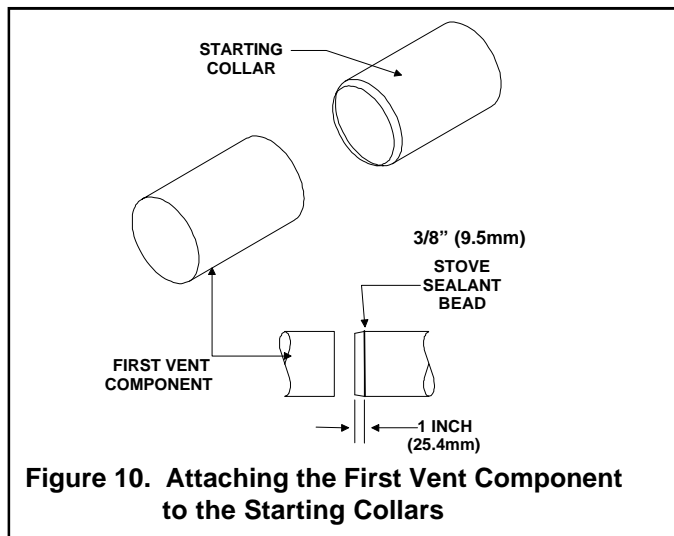


Figure 10. Attaching the First Vent Component to the Starting Collars

! WARNING: A 3/8 INCH (9.5MM) BEAD OF STOVE CEMENT MUST BE PLACED AROUND THE INNER PIPE FIREPLACE STARTING COLLAR BEFORE ATTACHING THE FIRST VENT COMPONENT. FAILURE TO SEAL THIS JOINT MAY CAUSE THE FIREPLACE TO OPERATE IMPROPERLY. SEE THE DIAGRAM .

! WARNING: ENSURE THAT THE FIBERGLASS ROPE GASKET SUPPLIED WITH THE FIREPLACE SEALS BETWEEN THE FIRST VENT COMPONENT AND THE FIREPLACE TOP.

2. Continue Adding Vent Components

- Continue adding vent components, locking each succeeding component into place.
- Ensure that each succeeding vent component is securely fitted and locked into the preceding component in the vent system.
- 90° elbows may be installed and rotated to any point around the preceding component's vertical axis. If an elbow does not end up in a locked position with the preceding component, attach with a minimum of two (2) sheet metal screws.

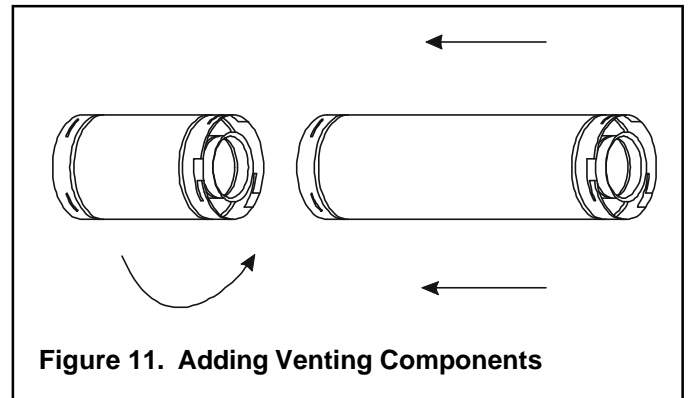


Figure 11. Adding Venting Components

! WARNING: MODEL GRAND-50-D REQUIRES SHIELD SRV570-290 ABOVE THE FIRST 90° ELBOW IN THE SYSTEM IF CLEARANCE IS LESS THAN 4 INCHES (102MM). SEE INSTALLATION SHEET AND HEAT SHIELD SUPPLIED WITH FIREPLACE.

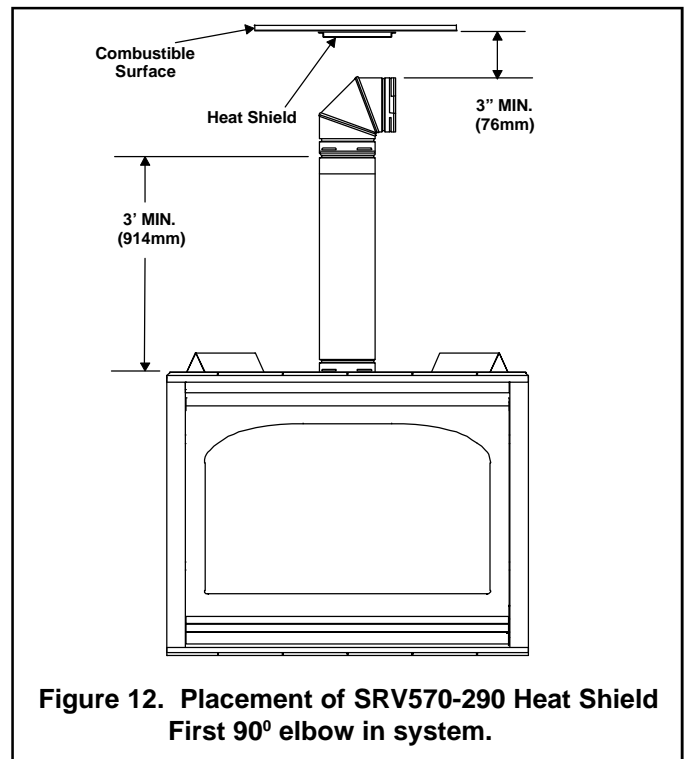


Figure 12. Placement of SRV570-290 Heat Shield First 90° elbow in system.

3. Install Support Brackets

For Horizontal Runs - The vent system must be supported every five (5) feet of horizontal run by a horizontal pipe support.

To install support brackets for horizontal runs:

- Place the pipe supports around the vent pipe.
- Nail the pipe supports to the framing members.

For Vertical Runs - The vent system must be supported every eight (8) feet (2.4m) above the fireplace flue outlet by wall brackets.

To install support brackets for vertical runs:

- Attach wall brackets to the vent pipe and secure the wall bracket to the framing members with nails or screws.

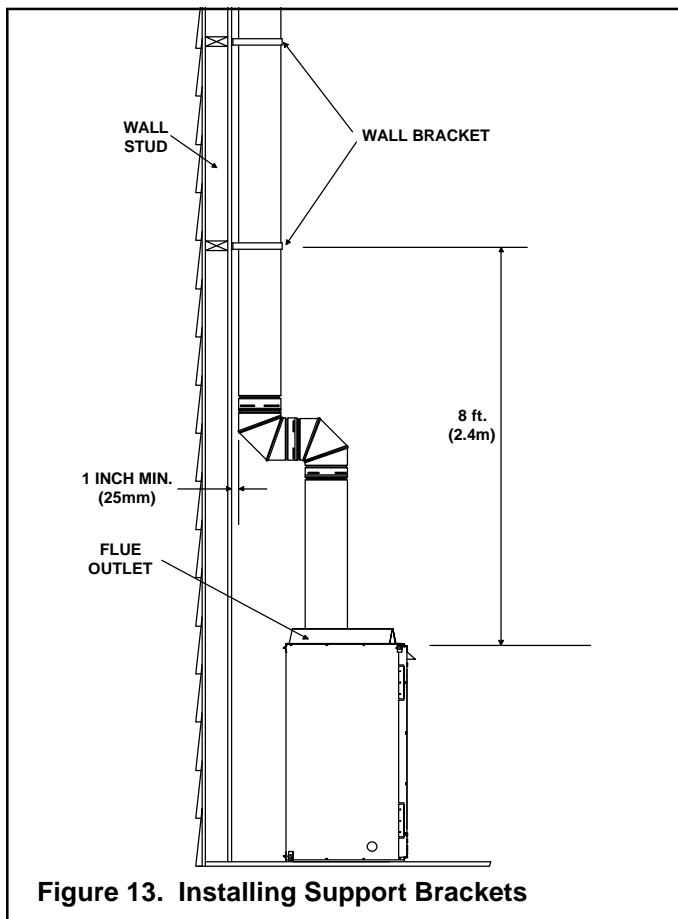


Figure 13. Installing Support Brackets

4. Install Firestops

For Horizontal Runs - Firestops are **REQUIRED** on both sides of a combustible wall through which the vent passes.

NOTE: Model DVK-01TRD does not need an exterior firestop on an exterior combustible wall.

To install firestops for horizontal runs that pass through either interior or exterior walls:

- Cut a 12" x 12" (305mm x 305mm) hole through the wall.

NOTE: The center of the hole is one (1) inch (25.4mm) above the center of the horizontal vent pipe.

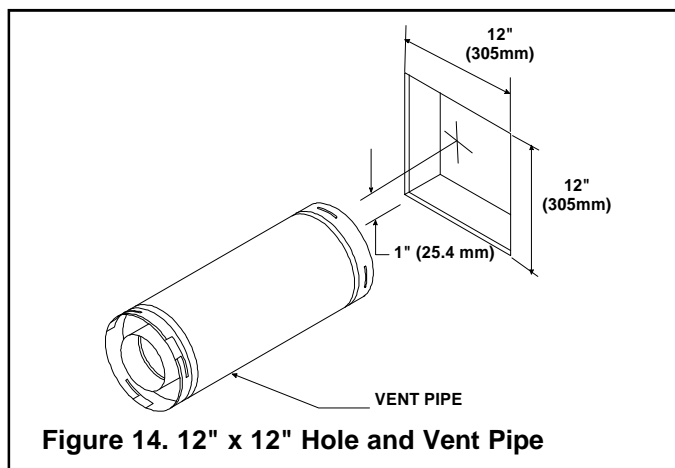


Figure 14. 12" x 12" Hole and Vent Pipe

- Position the firestops on both sides of the hole previously cut and secure the firestops with nails or screws.
- The heat shields of the firestops **MUST BE** placed towards the top of the hole.

- Continue the vent run through the firestops.

NOTE: There must be NO INSULATION or other combustibles inside the framed firestop opening.

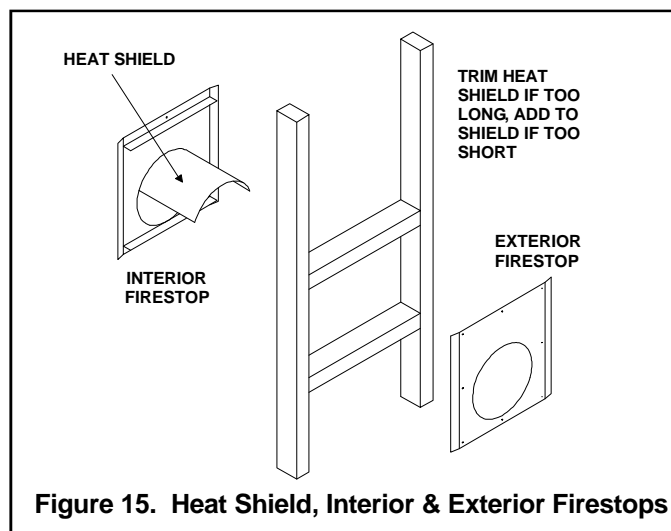


Figure 15. Heat Shield, Interior & Exterior Firestops

For Vertical Runs - One ceiling firestop is **REQUIRED** at the hole in each ceiling through which the vent passes.

To install firestops for vertical runs that pass through ceilings:

- Position a plumb bob directly over the center of the vertical vent component.
- Mark the ceiling to establish the centerpoint of the vent.
- Drill a hole or drive a nail through this centerpoint.
- Check the floor above for any obstructions, such as wiring or plumbing runs.
- Reposition the fireplace and vent system, if necessary, to accommodate the ceiling joists and/or obstructions.
- Cut an 11-inch X 11-inch (280mm X 280mm) hole through the ceiling, using the centerpoint previously marked.
- Frame the hole with framing lumber the same size as the ceiling joists.

NOTE: There must be NO INSULATION or other combustibles inside the framed firestop opening.

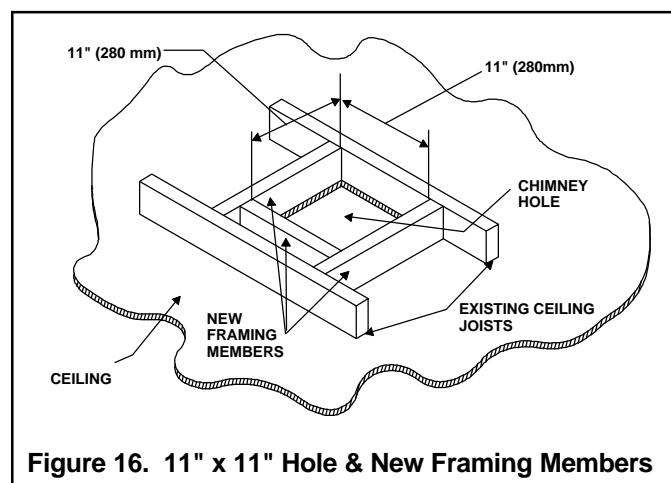


Figure 16. 11" x 11" Hole & New Framing Members

If the area above the ceiling is **NOT** an attic, position and secure the ceiling firestop on the ceiling side of the previously cut and framed hole.

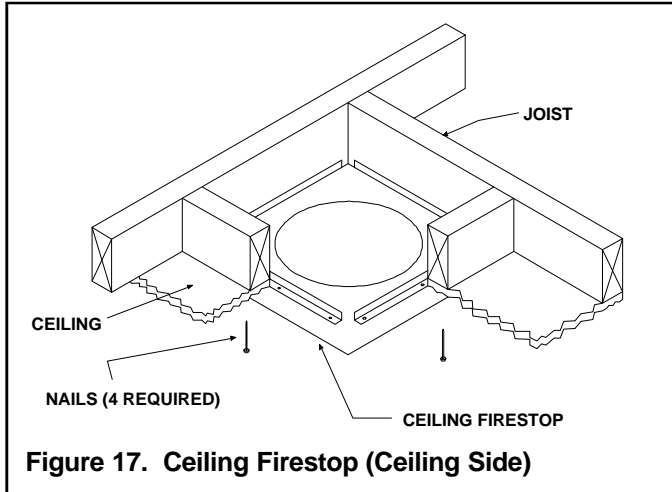


Figure 17. Ceiling Firestop (Ceiling Side)

If the area above the ceiling **IS** an attic, position and secure the firestop on top of the previously framed hole.

NOTE: Keep insulation away from the vent pipe at least 1 inch (25mm).

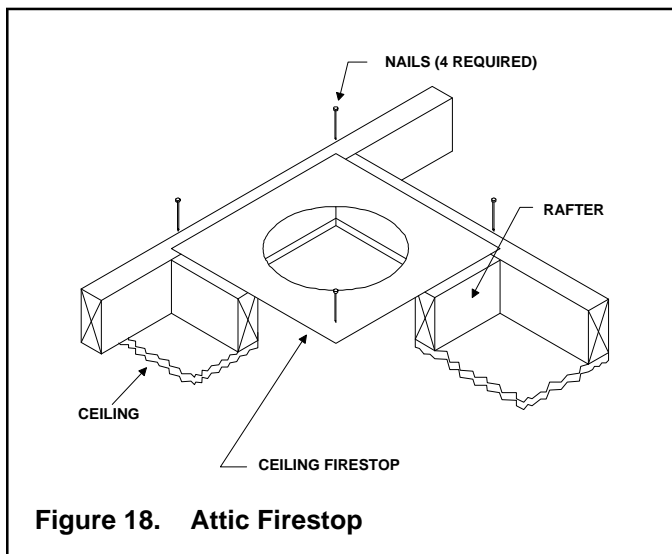


Figure 18. Attic Firestop

C. Vent Termination

For Horizontal Terminations - To attach and secure the termination to the last section of horizontal vent:

- Rotate and interlock the ends as described at the beginning of the Installing Vent Components section.
- The termination kit should pass through the wall firestops from the exterior of the building.
- Adjust the termination cap to its final exterior position on the building.



WARNING: THE TERMINATION CAP MUST BE POSITIONED SO THAT THE ARROW IS POINTING UP.

For roundcap termination kits:

- Use the exterior pipelock hole provided on the round flange of the wall firestop to secure the vent pipe in place.

For trapezoidal cap termination kits:

- Using screws secure the cap to the exterior wall through the flanges in the cap.



WARNING: THE BOTTOM OF THE VENT TERMINATION CAP MUST BE A MINIMUM OF 12 INCHES (305 MM) ABOVE GROUND LEVEL (GRADE). THE TOP OF THE CAP MUST BE A MINIMUM OF 36 INCHES (914 MM) BELOW COMBUSTIBLE MATERIAL, SUCH AS A DECK. THE SIDE OF THE CAP MUST BE A MINIMUM OF 6 INCHES (152 MM) AWAY FROM A PARALLEL OUTSIDE WALL. VENTING TERMINALS SHALL NOT BE RECESSED INTO A WALL OR SIDING. SEE FIGURE 20 FOR VENT TERMINATION CLEARANCES.

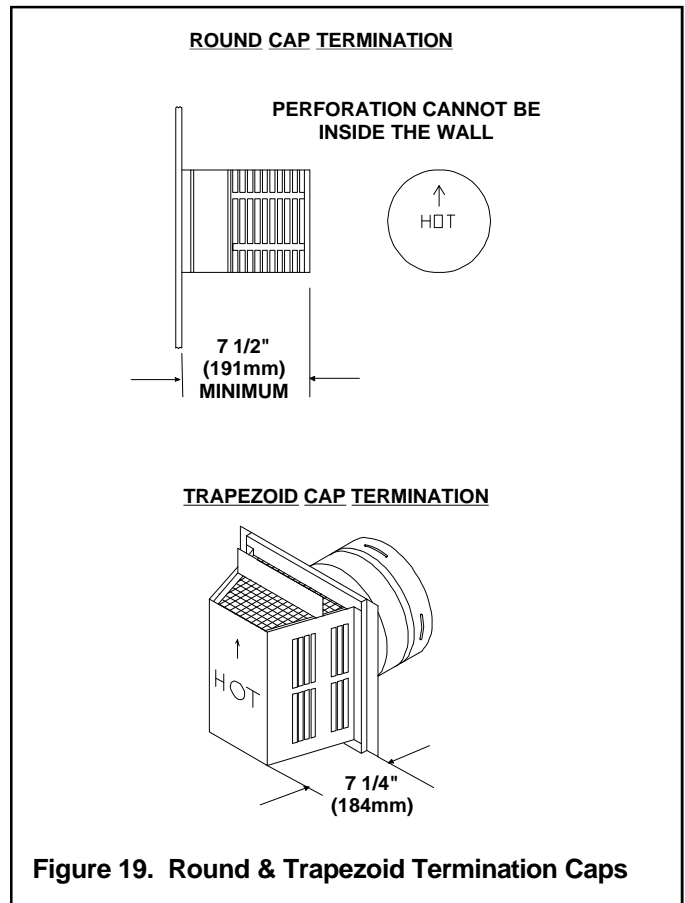
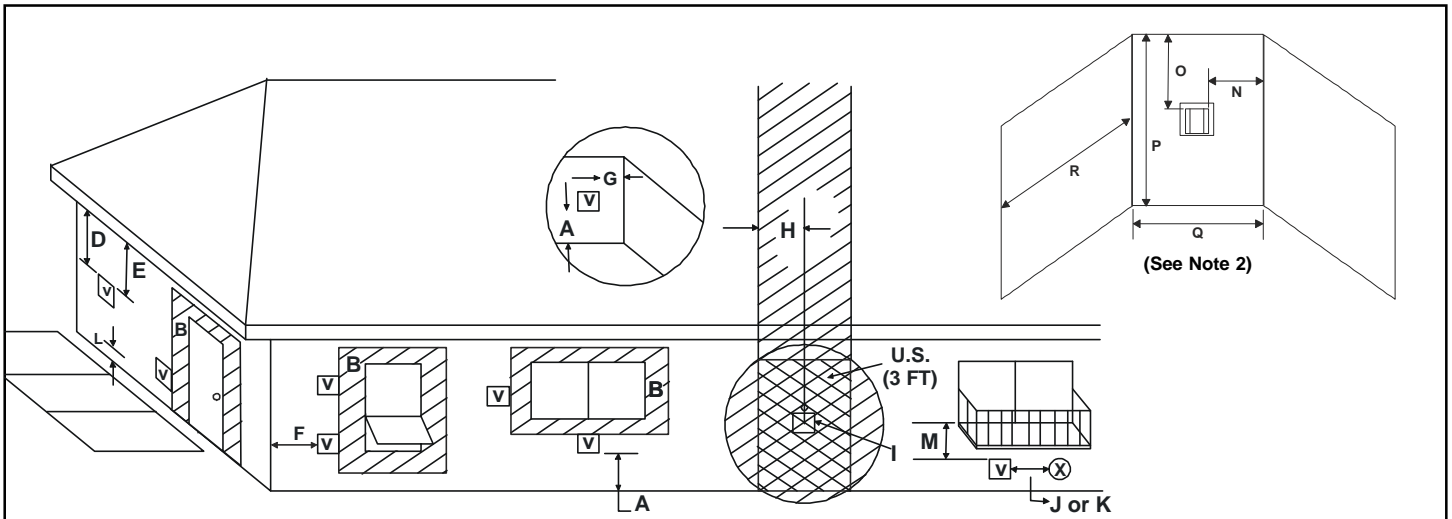


Figure 19. Round & Trapezoid Termination Caps



V = VENT TERMINAL **X** = AIR SUPPLY INLET **▨** = AREA WHERE TERMINAL IS NOT PERMITTED

- | | |
|---|--|
| <p>A = 12" clearances above grade, veranda, porch, deck or balcony
(See Note 1)</p> <p>B = 12" clearances to window or door that may be opened, or to permanently closed window.</p> <p>D* = 36" vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60 cm) from the center-line of the terminal</p> <p>E* = 36" clearance to unventilated soffit</p> <p>F = 9" clearance to outside corner</p> <p>G = 6" clearance to inside corner</p> <p>H = 3 ft. (Canada) not to be installed above a gas meter/regulator assembly within 3 feet (90cm) horizontally from the center-line of the regulator</p> <p>I = 3 ft. (U.S.A.)
6 ft. (Canada) clearance to service regulator vent outlet and electric service</p> | <p>J = 9" (U.S.A.)
12" (Canada) clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance</p> <p>K = 3 ft. (U.S.A.)
6 ft. (Canada) clearance to a mechanical air supply inlet</p> <p>L** = 7 ft. clearance above paved sidewalk or a paved driveway located on public property
(See Note 1)</p> <p>M*** = 36" clearance under veranda, porch, deck or balcony</p> <p>N = 6" non-vinyl soffit and siding
12" vinyl soffit and siding</p> <p>O = 18" non-vinyl soffit and siding
42" vinyl soffit and siding</p> <p>P = 8 ft.</p> |
|---|--|

	Q _{MIN}	R _{MAX}
1 cap	3 feet	2 x Q _{ACTUAL}
2 caps	6 feet	1 x Q _{ACTUAL}
3 caps	9 feet	2/3 x Q _{ACTUAL}
4 caps	12 feet	1/2 x Q _{ACTUAL}
Q _{MIN} = # termination caps x 3		R _{MAX} = (2 / # termination caps) x Q _{ACTUAL}

* 5 foot minimum for vinyl clad soffits.

** a vent shall not terminate directly above a sidewalk or paved driveway which is located directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.

*** only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor.

NOTE 1: On private property where termination is less than 7 feet above a sidewalk, driveway, deck, porch, veranda or balcony, use of a listed cap shield is suggested.

NOTE 2: Termination in an alcove space (spaces open only on one side and with an overhang) are permitted with the dimensions specified for vinyl or non-vinyl siding and soffits. 1. There must be 3 feet minimum between termination caps. 2. All mechanical air intakes within 10 feet of a termination cap must be a minimum of 3 feet below the termination cap. 3. All gravity air intakes within 3 feet of a termination cap must be a minimum of 1 foot below the termination cap.

NOTE 3: Local codes or regulations may require different clearances.

NOTE 4: Termination caps may be hot. Consider their proximity to doors or other traffic areas.

WARNING: In the U.S: Vent system termination is **NOT** permitted in screened porches. You must follow side wall, overhang and ground clearances as stated in the instructions.

In Canada: Vent system termination is **NOT** permitted in screened porches. Vent system termination is permitted in porch areas with two or more sides open. You must follow all side walls, overhang and ground clearances as stated in the instructions.

Heat-N-Glo assumes no responsibility for the improper performance of the fireplace when the venting system does not meet these requirements.

◆ **Figure 20. Vent Termination Minimum Clearances**

CAUTION: IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS NECESSARY TO INSTALL THE VINYL PROTECTOR KIT TO THE TOP OF THE EXTERIOR FIRESTOP (FOR ALL ROUND TERMINATION CAPS). IT IS STRONGLY RECOMMENDED WHENEVER POSSIBLE TO USE THE VINYL PROTECTOR KIT.

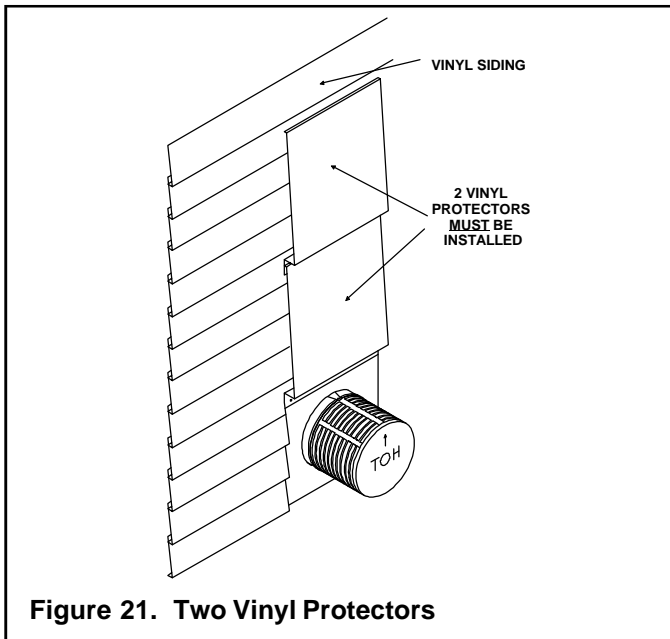


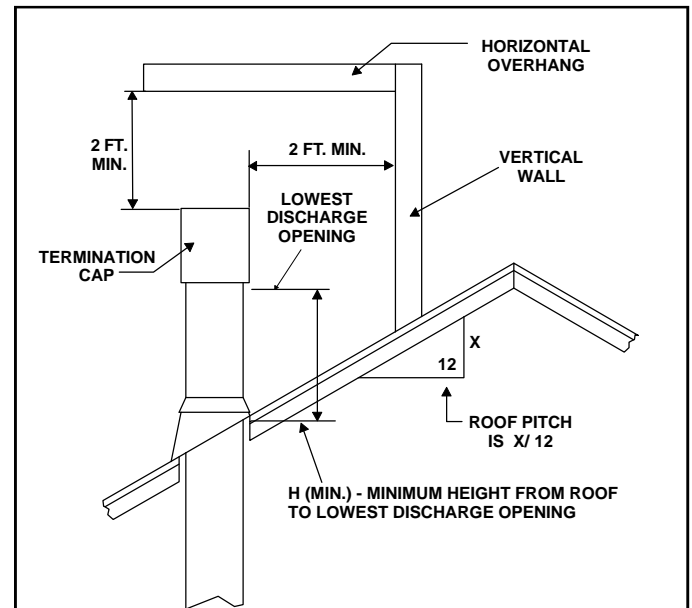
Figure 21. Two Vinyl Protectors

For Vertical Terminations - To locate the vent and install the vent sections:

- Locate and mark the vent centerpoint on the underside of the roof, and drive a nail through the centerpoint.
- Make the outline of the roof hole around the centerpoint nail.
- The size of the roof hole framing dimensions depend on the pitch of the roof. There **MUST BE** a 1-inch (25.4mm) clearance from the vertical vent pipe to combustible materials.
- Mark the roof hole accordingly.
- Cover the opening of the installed vent pipes.
- Cut and frame the roof hole.
- Use framing lumber the same size as the roof rafters and install the frame securely. Flashing anchored to the frame must withstand heavy winds.
- Continue to install concentric vent sections up through the roof hole (for inside vent installations) or up past the roof line until you reach the appropriate distance above the roof (for outside terminations).

To seal the roof hole, and to divert rain and snow from the vent system:

- Attach a flashing to the roof using nails, and use a non-hardening mastic around the edges of the flashing base where it meets the roof.
- Attach a storm collar over the flashing joint to form a water-tight seal. Place non-hardening mastic around the joint, between the storm collar and the vertical pipe.
- Slide the termination cap over the end of the vent pipe and rotate the pipe clockwise 1/4 turn.



Roof Pitch	H (min.) ft.
flat to 6/12	1.0
6/12 to 7/12	1.25
over 7/12 to 8/12	1.5
over 8/12 to 9/12	2.0
over 9/12 to 10/12	2.5
over 10/12 to 11/12	3.25
over 11/12 to 12/12	4.0
over 12/12 to 14/12	5.0
over 14/12 to 16/12	6.0
over 16/12 to 18/12	7.0
over 18/12 to 20/12	7.5
over 20/12 to 21/12	8.0

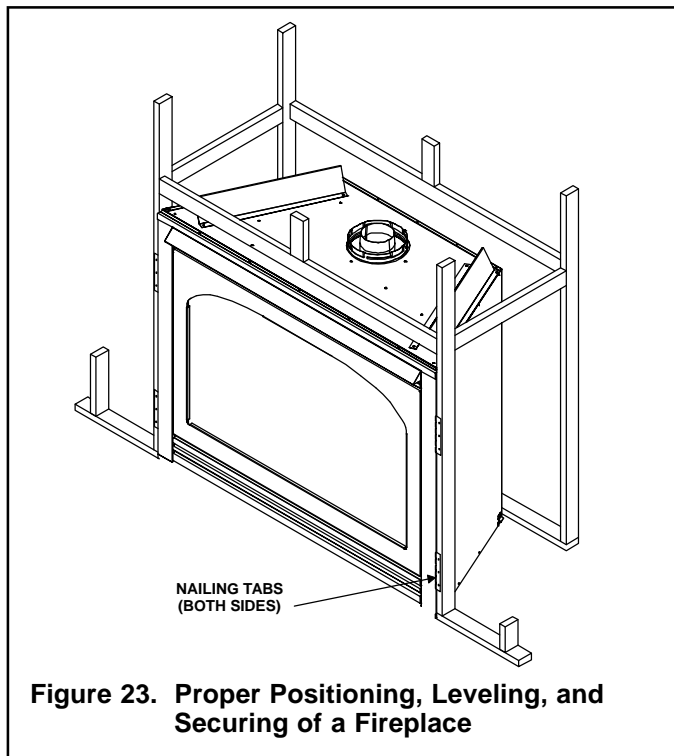
Figure 22. Minimum Height from Roof to Lowest Discharge Opening

WARNING: MAJOR U.S. BUILDING CODES SPECIFY MINIMUM CHIMNEY AND/OR VENT HEIGHT ABOVE THE ROOF TOP. THESE MINIMUM HEIGHTS ARE NECESSARY IN THE INTEREST OF SAFETY. SEE THE FOLLOWING DIAGRAM FOR MINIMUM HEIGHTS, PROVIDED THE TERMINATION CAP IS AT LEAST TWO (2) FEET FROM A VERTICAL WALL AND 2- FEET BELOW A HORIZONTAL OVERHANG.

NOTE: This also pertains to vertical vent systems installed on the outside of the building.

Step 4. Positioning, Leveling, and Securing the Fireplace

The diagram below shows how to properly position, level, and secure the fireplace.



- Place the fireplace into position.
- Level the fireplace from side to side and from front to back.
- Shim the fireplace with non-combustible material, such as sheet metal, as necessary.
- Secure the fireplace to the framing by driving nails or screws through the nailing tabs.

Step 5. The Gas Control System



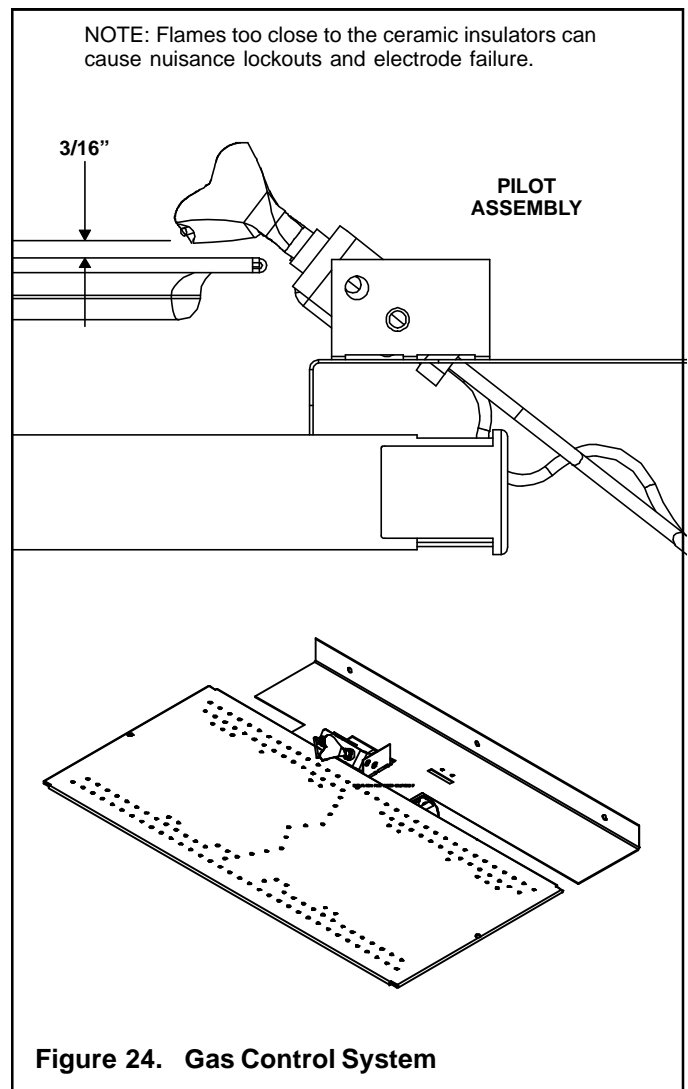
WARNING: THIS UNIT IS NOT FOR USE WITH SOLID FUEL.

Intermittent Pilot Ignition (IPI) System

The gas control system used with this model is *Intermittent Pilot Ignition (IPI)*. This system includes a 3V control valve, electronic module, and intermittent pilot.



WARNING: CONTINUOUS 110-120 VAC SERVICE MUST BE WIRED DIRECTLY TO THE FIREPLACE JUNCTION BOX.



Step 6. The Gas Supply Line

NOTE: Have the gas supply line installed in accordance with local building codes by a qualified installer approved and/or licensed as required by the locality. (In the state of Massachusetts installation must be performed by a licensed plumber or gas fitter).

NOTE: Before the first firing of the fireplace, the gas supply line should be purged of any trapped air.

NOTE: Consult local building codes to properly size the gas supply line leading to the 1/2 inch (13 mm) hook-up at the unit.

This gas fireplace is designed to accept a 1/2 inch (13 mm) gas supply line.

To install the gas supply line:

- A listed (and State of Massachusetts approved) 1/2 inch (13mm) tee-handle manual shut-off valve and a listed flexible gas connector are connected to the 1/2 inch (13mm) inlet of the control valve. **NOTE:** If substituting for these components, please consult local codes for compliance.
- Locate the gas line access hole in the outer casing of the fireplace.
- Insert the gas supply line through the gas line hole, and connect it to the shut-off valve.
- When attaching the pipe, support the control so that the lines are not bent or torn.
- After the gas line installation is complete, use a soap solution to carefully check all gas connections for leaks.



WARNING: DO NOT USE AN OPEN FLAME TO CHECK FOR GAS LEAKS.

- At the gas line access hole, use insulation to re-pack the space around the gas pipe.
- Insert insulation from the outside of the fireplace and pack the insulation tightly to totally seal between the pipe and the outer casing.

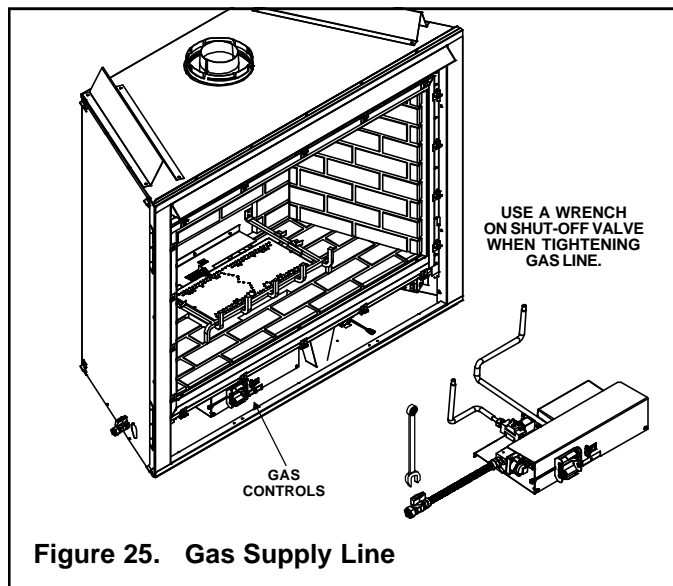


Figure 25. Gas Supply Line

Step 7. Gas Pressure Requirements

Pressure requirements for Heat-N-Glo gas fireplaces are shown in the table below.

Pressure	Natural Gas	Propane
Minimum Inlet Pressure	7.0 inches w.c.	12.0 inches w.c.
Maximum Inlet Gas Pressure	14.0 inches w.c.	14.0 inches w.c.
Manifold Pressure	3.5 inches w.c.	10.0 inches w.c.

Connections are provided on the front of the gas control valve for both inlet and manifold pressures. To use these the valve cover must be removed and the small slotted screw inside the pressure tap loosened. Manifold pressure should be checked with main burner turned on and rear log off. *This screw must be retightened carefully after pressure gauge is removed to avoid a gas leak.*

The fireplace and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of one-half (1/2) psig (3.5 kPa).

The fireplace must be isolated from the gas supply piping system by closing its individual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than one-half (1/2) psig (3.5 kPa).

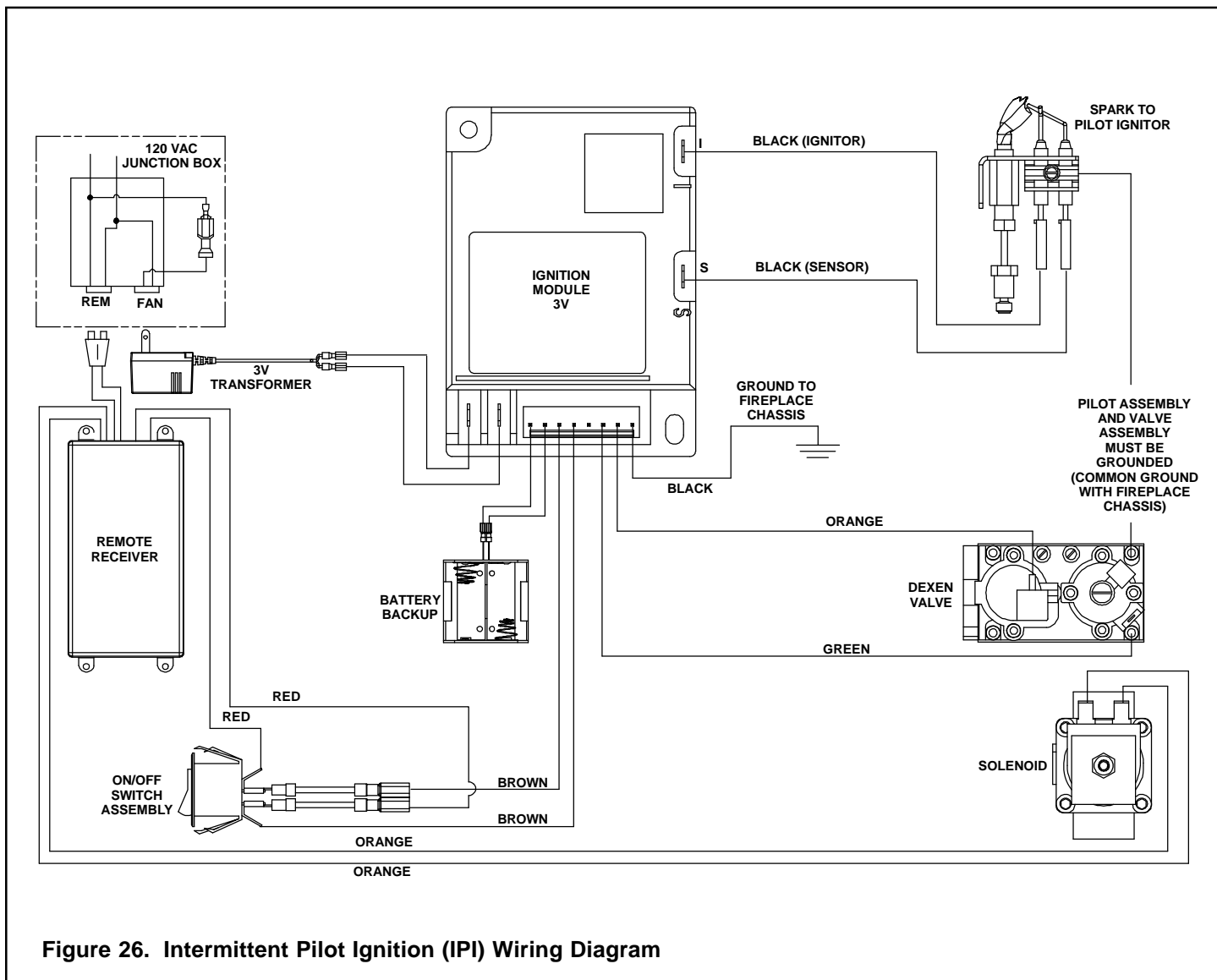


Figure 26. Intermittent Pilot Ignition (IPI) Wiring Diagram

Step 8. Wiring the Fireplace

NOTE: Electrical wiring must be installed by a licensed electrician.

CAUTION: DISCONNECT REMOTE CONTROLS BY UNPLUGGING FROM THE JUNCTION BOX IF ABSENT FOR EXTENDED TIME PERIODS. THIS WILL PREVENT ACCIDENTAL FIREPLACE OPERATION.

For Intermittent Pilot Ignition (IPI) Wiring

Appliance Requirements

This appliance requires that 110-120 VAC be wired to the factory installed junction box. Maintain correct polarity when wiring the junction box.

NOTE: Remove twist-tie from male cord to remote receiver and plug into electric box terminal marked "remote". Female cord is used if fan kit is to be installed.

Remove transformer from shipping position by cutting and removing cable tie.

Plug transformer into electric box terminal marked "fan".

Check that antenna wire is held in place by two clips on the lower flange (see Figure 35).

Optional Fan Kits

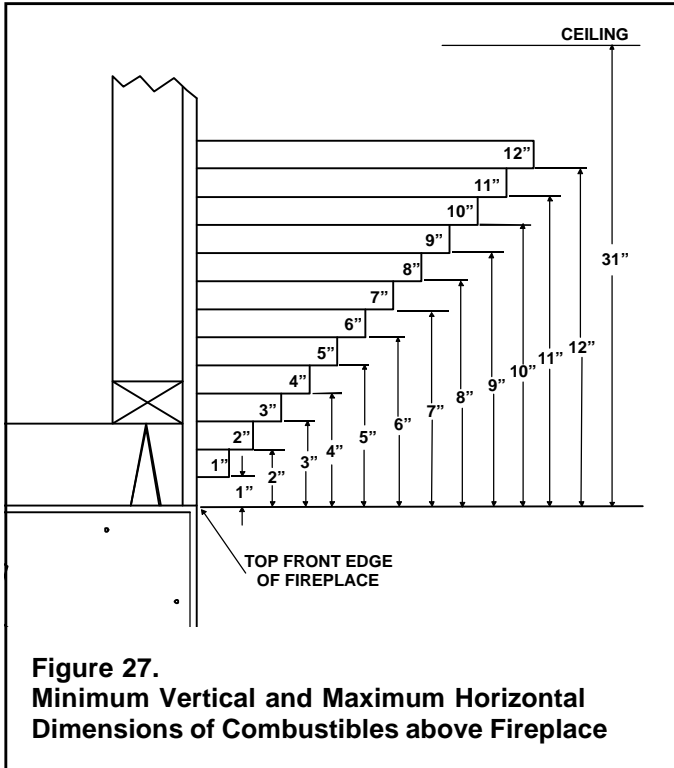
Fan kits can be installed by plugging into cord from remote receiver. (The fan will have three speeds controlled by the remote and will not use the rheostat or temperature control provided with the fan kit).

CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVICING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DANGEROUS OPERATION. VERIFY PROPER OPERATION AFTER SERVICING.

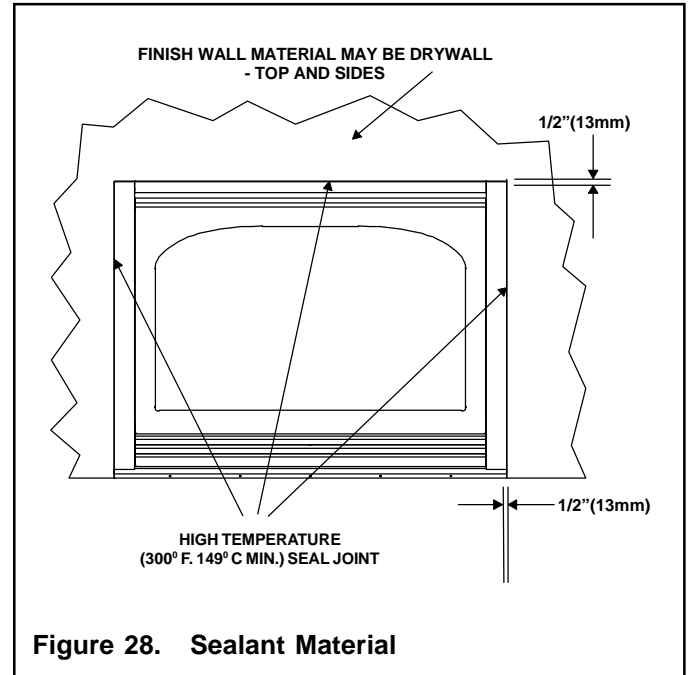
Step 9. Finishing

Figure 27 shows the minimum vertical and corresponding maximum horizontal dimensions of fireplace mantels or other combustible projections above the top front edge of the fireplace. See Figures 2 and 3 for other fireplace clearances.

Only non-combustible materials may be used to cover the black fireplace front.



CAUTION: IF JOINTS BETWEEN THE FINISHED WALLS AND THE FIREPLACE SURROUND (TOP AND SIDES) ARE SEALED, A 300° F. MINIMUM SEALANT MATERIAL MUST BE USED. THESE JOINTS ARE NOT REQUIRED TO BE SEALED. ONLY NON-COMBUSTIBLE MATERIAL (USING 300° F. MINIMUM ADHESIVE, IF NEEDED) CAN BE APPLIED AS FACING TO THE FIREPLACE SURROUND. SEE THE DIAGRAM BELOW.



Hearth Extensions

A hearth extension may be desirable for aesthetic reasons. However, ANSI or CAN/CGA testing standards **do not** require hearth extensions for gas fireplace appliances.



WARNING: WHEN FINISHING THE FIREPLACE, NEVER OBSTRUCT OR MODIFY THE AIR INLET/OUTLET GRILLES IN ANY MANNER.

Step 10. Installing Trim, Refractory, Logs and Ember Material

Installing the Trim

Combustible materials may be brought up to the specified clearances on the side and top front edges of the fireplace, but **MUST NEVER** overlap onto the front face. The joints between the finished wall and the fireplace top and sides can only be sealed with a 300° F. (149° C) minimum sealant.



WARNING: WHEN FINISHING THE FIREPLACE, NEVER OBSTRUCT OR MODIFY THE AIR INLET/OUTLET GRILLES IN ANY MANNER.

Install optional marble and brass trim surround kits as desired. Marble, brass, brick, tile, or other non-combustible materials can be used to cover up the gap between the sheet rock and the fireplace.

When overlapping on both sides, leave enough space so decorative door is accessible.

Positioning the Refractory

To install refractory and logs the door assembly and glass must be removed. Door can be removed by lifting approximately 1/2 inch on both sides and pulling outward. Glass can then be removed by removing wing nuts and glass clips (see Figure 31). Remove packaged logs and all packing materials from inside of fireplace.

1. Remove refractory from separate box and remove packaging material.
2. Position left and right rear refractory pieces against the back wall of the fireplace (see Figure 29).
3. Place the rear refractory panel such that it sits on left and right rear pieces. Hold in place until Step 4 is complete.
4. Slide right refractory panel along the right side until it contacts rear pieces.
5. Repeat Step 4 for the left refractory panel.

Positioning the Logs

The logs have been packaged separately, refer to the instructions included. **Save the log instructions with this manual.**

If sooting occurs, the logs might need to be repositioned slightly to avoid excessive flame impingement.

Placing the Ember Material

Three bags of ember material are shipped with this gas fireplace. The bag labeled Golden Ember (GE-93) is flame colorant material. The two bags labeled Glowing Ember (050-721) are standard glowing ember material. To place the ember material:

- Place dime size pieces of ember material about 1/2 inch apart near port holes in burner top. Do NOT press embers into burner ports. Cover the top of the burner near front and center ports with a single layer of ember material.
- Sprinkle GE-93 on top of the burner.
- Save the remaining ember materials for use during fireplace servicing.
- Use of ember material is optional.

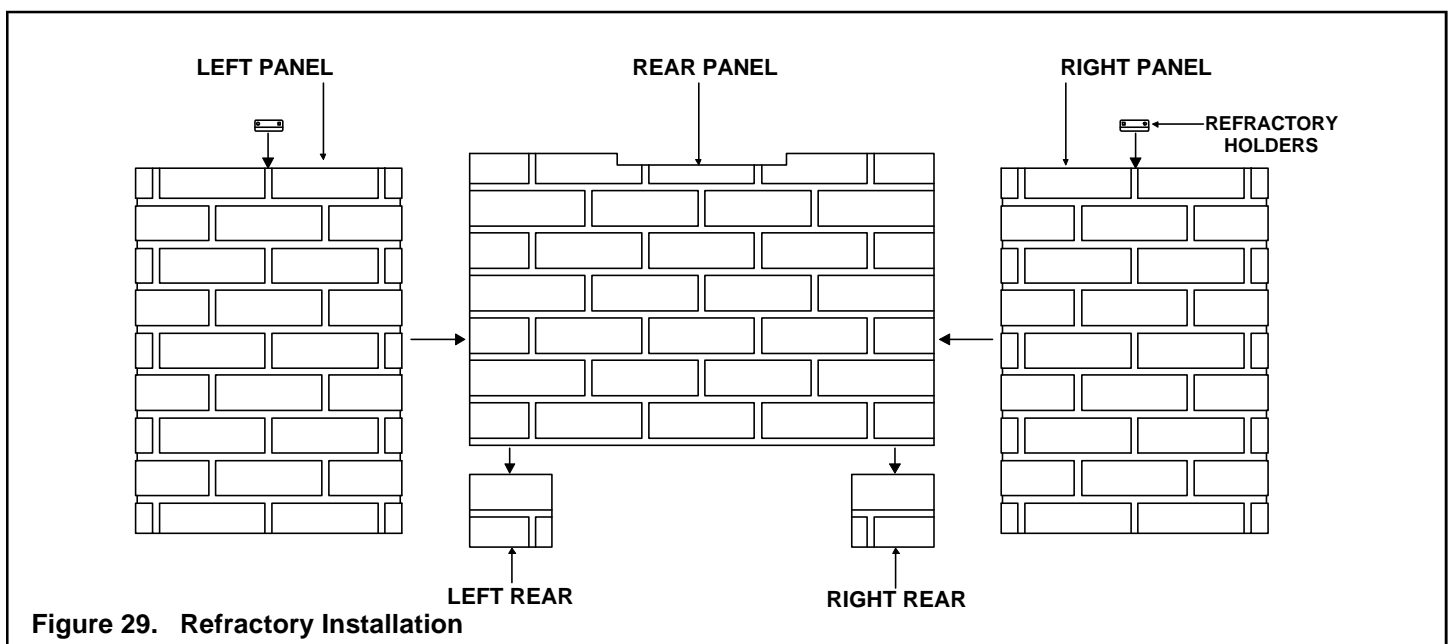


Figure 29. Refractory Installation

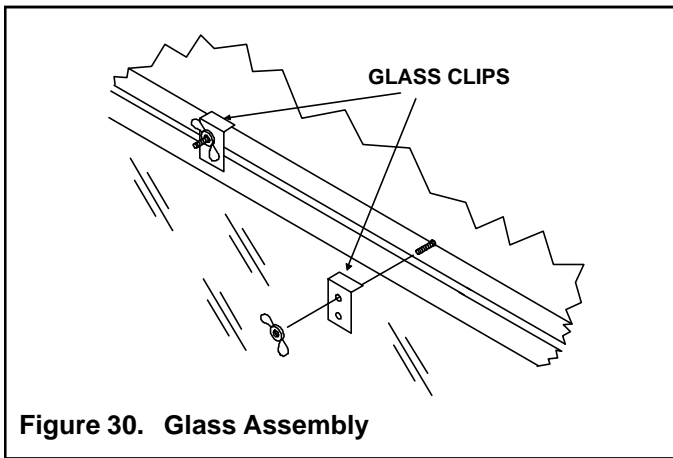


Figure 30. Glass Assembly

- Glass can now be reinstalled, followed by glass clips and wing nuts (see Figure 30). Wing nuts should be hand tightened only. Finish the installation by installing decorative door.

Glass Specifications: GRAND-50-D 30" x 48" TEMPERED

Heat-N-Glo fireplaces manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the CPSC. The tempered glass has been tested and certified to the requirements of ANSI Z97.1-1984 and CPSC 16 CFR 1202. (Safety Glazing Certification Council SGCC # 1595 and 1597. Architectural Testing, Inc. Reports 02-31919.01 and 02-31917.01.)

This statement is in compliance with CPSC 16 CFR Section 1201.5 "Certification and labeling requirements" which refers to 15 USC 2063 stating "...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered."

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

Step 11. Before Lighting the Fireplace

BEFORE lighting the fireplace, be sure to do the following:

- **Remove** all paperwork from underneath the fireplace.
- **Review** all cautions, and Safety and Warnings section at the beginning of this Installers Guide.
- **Double-check** the unit for possible gas leaks.
- **Double-check** the unit for possible obstructions that could be blocking the vent terminations.
- **Double-check** for faulty components: Any component that is found to be faulty **MUST BE** replaced with an approved component. Tampering with the fireplace components is **DANGEROUS** and voids all warranties.

A small amount of air will be in the gas supply lines. When first lighting the fireplace, it will take a few minutes for the lines to purge themselves of this air. Once the purging is complete, the fireplace will light and will operate normally.

Subsequent lightings of the fireplace will not require this purging of air from the gas supply lines, **unless the gas valve has been turned to the OFF position**, in which case the air could have to be purged again.

NOTE: The fireplace should be run 3 to 4 hours on the initial start-up. Turn it off and let it cool completely. Remove and clean the glass. Replace the glass and run the fireplace for an additional 8 hours. This will help to cure the chemicals used in the paint and logs.

Step 12. Lighting the Fireplace

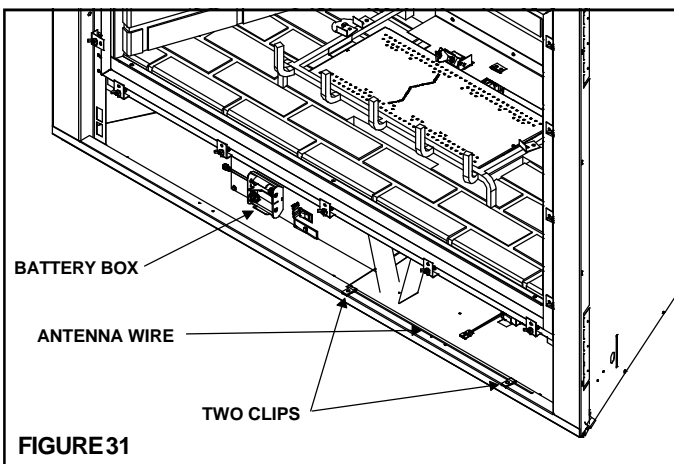
After reviewing all safety warnings, checking the fireplace for gas leaks, checking that the vent system is unobstructed, and checking for faulty components, be sure power is on and proceed with lighting fireplace.

WARNING: PLEASE REFER TO THE USER'S MANUAL FOR ALL CAUTIONS, SAFETY, AND WARNING INFORMATION PERTAINING TO THE LIGHTING AND OPERATION OF THE FIREPLACE.

FIREPLACE OPERATION

This fireplace is designed to be operated with the remote control found in the manual bag. To start main burner fire, push the on-off button on the left while pointing remote in direction of fireplace.

If the remote control does not start the fire, check that the antenna wire is installed on the two clips located below the lower louver and on top of the lower flange (see Figure 31).



In certain situations the remote control will be more effective if pointed slightly away from remote receiver within the fireplace.

When flames appear from main burner, the rear log may be lit if desired by pushing center button (marked with flames). It is recommended that the rear log always be turned off before turning off main burner.

The third button is used to control the optional fan. If a fan is installed it can be turned to high, medium, low, or off with this button.

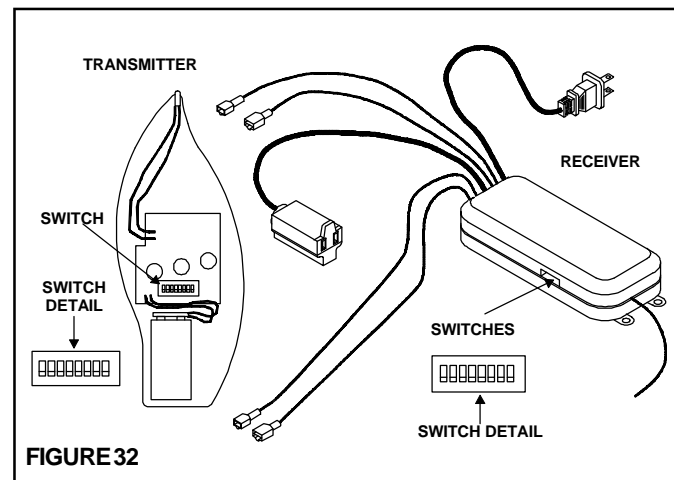
To avoid accidental lighting or if fireplace is not going to be used for an extended period the remote receiver should be unplugged from the electrical box (inside the lower louver on the far right side).

In the event of a power failure the fireplace main burner can be operated by inserting two D-cell batteries into the battery box located left of center behind the lower louver, and turning on the rocker switch to the right of it. Batteries should be removed when power is restored, as normal operation will drain them. Switch must also be returned to off position to allow operation by the remote control.

IMPORTANT SAFETY FEATURE

A private code can be set to prevent operation by other transmitters near by.

1. Unplug remote from electric box at lower right side of fireplace.
2. Remove back cover of transmitter (see figure 32).



3. Slide the code switches to your choice of UP and DOWN positions.
4. Remove valve cover from valve plate by removing two screws at bottom of cover.
5. Remove receiver from valve plate behind cover by removing two screws (1/4" hex head). Receiver can then be slid out and turned over without disconnecting wiring.
6. Remove cover from receiver by removing 4 Phillips head screws.
7. Locate code switches in receiver. Slide the numbered switches to exactly match settings on transmitter.
8. Replace cover and check operation by plugging remote in and turning fireplace on and off before reinstalling receiver.
9. Unplug remote again and reinstall remote and valve cover.
10. Plug remote into electric box.

After the Installation

LEAVE THIS INSTALLATION MANUAL WITH THE APPLIANCE FOR FUTURE REFERENCE.

4

Maintaining and Servicing Your Fireplace

Fireplace Maintenance

Although the frequency of your fireplace servicing and maintenance will depend on use and the type of installation, you should have a qualified service technician perform an appliance check-up at the beginning of each heating season. See the table below for specific guidelines regarding each fireplace maintenance task.

IMPORTANT: TURN OFF THE GAS BEFORE SERVICING YOUR FIREPLACE.

Replacing old ember material

Frequency: Once annually, during the checkup.

By: Qualified service technician.

Task: Brush away loose ember material near the burner. Replace old ember material with new dime-size and shape pieces of Golden Ember (DE-93) and Glowing Ember (050-721). Save the remaining ember material and repeat this procedure at your next servicing. For more information, see **Placing Ember Material**.

Cleaning Burner and Controls

Frequency: Once annually.

By: Qualified service technician.

Task: Brush or vacuum the control compartment, fireplace logs and burner areas surrounding the logs.

Checking Flame Patterns, Flame Height

Frequency: Periodically.

By: Qualified service technician/Home owner.

Task: Make a visual check of your fireplace's flame patterns. Make sure the flames are steady - not lifting or floating. See Figure 33. The flame sensor tips should be covered with flame. See Figure 24.

Checking Vent System

Frequency: Before initial use and at least annually thereafter, more frequently if possible.

By: Qualified service technician/Home owner.

Task: Inspect the external vent cap on a regular basis to ensure that no debris is interfering with the flow of air. Inspect entire vent system for proper function.

Cleaning Glass Door

Frequency: After the first 3 to 4 hours of use. As necessary after initial cleaning.

By: Home owner.

Task: Remove and clean glass after the first 3 to 4 hours of use. After the initial cleaning, clean as necessary, particularly after adding new ember (flame colorant) material. Film deposits on the inside of the glass door should be cleaned off using a household glass cleaner. **NOTE: DO NOT handle or attempt to clean the door when it is hot and DO NOT use abrasive cleaners.**

