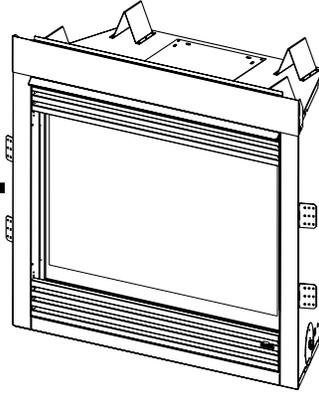


Models:
GNTC50
Direct Vent Gas Appliance



GAS-FIRED



CAUTION



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



⚠ WARNING



If the information in these instructions is not followed exactly, a fire 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.

⚠ WARNING



HOT! DO NOT TOUCH. SEVERE BURNS MAY RESULT. CLOTHING IGNITION MAY RESULT.

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

- Keep children away.
- CAREFULLY SUPERVISE children in same room as appliance.
- Alert children and adults to hazards of high temperatures.
- Do NOT operate with protective barriers removed or door open.
- Keep clothing, furniture, draperies and other combustibles away.

This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. Do NOT operate the appliance with the barrier removed.

Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

This appliance may be installed as an OEM installation in manufactured home (USA only) or mobile home and must be installed in accordance with the manufacturer's instructions and the manufactured home construction and safety standard, **Title 24 CFR, Part 3280** or **Standard for Installation in Mobile Homes, CAN/CSA Z240MH**.

This appliance is only for use with the type(s) of gas indicated on the rating plate.

In the Commonwealth of Massachusetts:

- installation must be performed by a licensed plumber or gas fitter;

See Table of Contents for location of additional Commonwealth of Massachusetts requirements.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies suggests NFI certified or factory-trained professionals, or technicians supervised by an NFI certified professional.

**Read this manual before installing or operating this appliance.
Please retain this owner's manual for future reference.**

Congratulations

Congratulations on selecting a Heatilator gas appliance—an elegant and clean alternative to wood burning appliances. The Heatilator gas appliance you have selected is designed to provide the utmost in safety, reliability, and efficiency.

As the owner of a new appliance, you'll want to read and carefully follow all of the instructions contained in this owner's manual. Pay special attention to all cautions and warnings.

This owner's manual should be retained for future reference. We suggest you keep it with your other important documents and product manuals.

The information contained in this owner's manual, unless noted otherwise, applies to all models and gas control systems.

Your new Heatilator gas appliance will give you years of durable use and trouble-free enjoyment. Welcome to the Heatilator family of appliance products!

Homeowner Reference Information	<i>We recommend that you record the following pertinent information about your appliance:</i>
Model Name: _____	Date purchased/installed: _____
Serial Number: _____	Location on appliance: _____
Dealership purchased from: _____	Dealer phone: _____
Notes: _____	

Listing Label Information/Location

The model information regarding your specific appliance can be found on the rating plate located in the control area of the appliance.

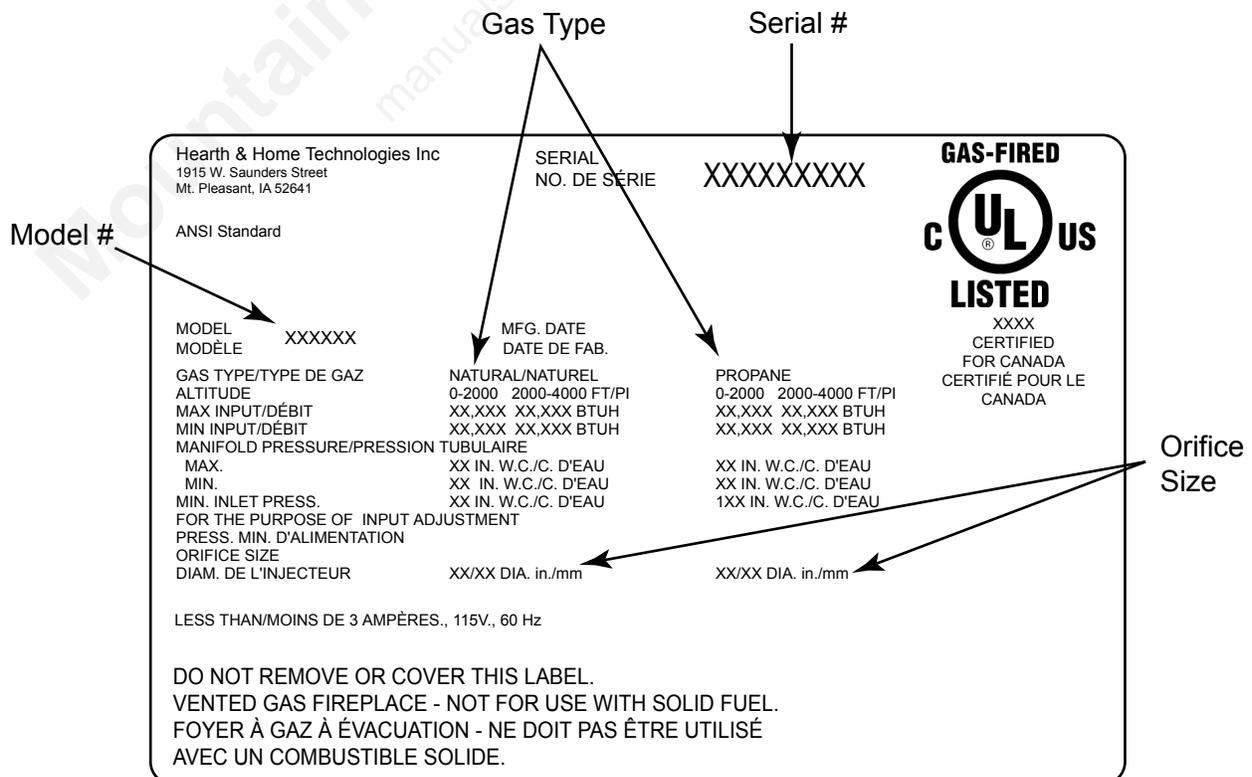


Table of Contents

1 Listing and Code Approvals	4	9 Gas Information	35
A. Appliance Certification	4	A. Fuel Conversion	35
B. Glass Specifications	4	B. Gas Pressure	35
C. BTU Specifications	4	C. Gas Connection	35
D. High Altitude Installations	4	D. High Altitude Installations	36
E. Non-Combustible Materials	4	10 Electrical Information	37
F. Combustible Materials	4	A. Connect to the Appliance	37
G. Requirements for the Commonwealth of Massachusetts	5	B. Standing Pilot Ignition System Wiring	37
2 Getting Started	6	C. Junction Box Installation	38
A. Design and Installation Considerations	6	11 Finishing	39
B. Tools and Supplies Needed	6	A. Mantel Projections	39
C. Inspect the Appliance and Components	6	B. Facing Material	39
3 Framing and Clearances	7	12 Appliance Setup	40
A. Select Appliance Location	7	A. Remove Glass Assembly	40
B. Construct the Appliance Chase	8	B. Remove the Shipping Materials	40
C. Clearances	9	C. Clean the Appliance	40
D. Mantel Projections	10	D. Install the Refractory	40
4 Termination Locations	11	E. Place the Lava Rock and Vermiculite	40
A. Vent Termination Minimum Clearances	11	F. Place the Rockwool	40
5 Vent Information and Diagrams	13	G. Log Assembly	41
A. Vent Table Key	13	H. Glass Assembly	41
B. Use of Elbows	13	I. Attach the Hood	42
C. Measuring Standards	13	J. Air Shutter Adjustment	42
D. Vent Diagrams	14	K. Accessories	42
6 Vent Clearances and Framing	23	13 Operating Instructions	43
A. Pipe Clearances to Combustibles	23	A. Before Lighting Appliance	43
B. Wall Penetration Framing	23	B. Lighting the Appliance	44
C. Install the Ceiling Firestop	24	C. After the Appliance is Lit	45
D. Install Attic Insulation Shield	25	D. Frequently Asked Questions	45
7 Appliance Preparation	26	14 Troubleshooting	46
A. Removal of the Vent Connectors	26	A. Standing Pilot Ignition System	46
B. Secure and Level the Appliance	28	15 Maintaining and Servicing the Appliance	48
8 Installing Vent Pipe	29	16 Reference Materials	50
A. Assemble Vent Sections	29	A. Appliance Dimension Diagram	50
B. Disassemble Vent Sections	31	B. Vent Components Diagrams	51
C. Install Heat Shield and Horizontal Termination Cap	32	C. Service Parts List	58
D. Install Roof Flashing and Vertical Termination Cap	33	D. Optional Components	62
E. Assemble and Install Storm Collar	34	E. Limited Lifetime Warranty	63
		F. Contact Information	64

Note: An arrow (➔) found in the text signifies change in content.

1 Listing and Code Approvals

A. Appliance Certification

MODELS: GNTC50
LABORATORY: Underwriters Laboratories, Inc. (UL)
TYPE: Direct Vent Gas Appliance
STANDARD: ANSI Z21.50b-2005/CSA2.22b-2005
• UL307B

This product is listed to ANSI standards for “Vented Gas Fireplaces” and applicable sections of “Gas Burning Heating Appliances for Manufactured Homes and Recreational Vehicles”, and “Gas Fired Appliances for Use at High Altitudes”.

NOT INTENDED FOR USE AS A PRIMARY HEAT SOURCE. This appliance is tested and approved as either supplemental room heat or as a decorative appliance. It should not be factored as primary heat in residential heating calculations.

B. Glass Specifications

Hearth & Home Technologies appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the Consumer Product Safety Commission (CPSC). The tempered glass has been tested and certified to the requirements of **ANSI Z97.1** 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 U.S. Code (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.

Note: This installation must conform with local codes. In the absence of local codes you must comply with the **National Fuel Gas Code, ANSI Z223.1-latest edition** in the U.S.A. and the **CAN/CGA B149 Installation Codes** in Canada.

C. BTU Specifications

GNTC50	SP
Max/Min Input Rate (NG)	21,000/15,000
Orifice Size (NG)	.093 in./2.36 mm
Max/Min Input Rate (LP)	21,000/15,000
Orifice Size (LP)	.056 in./1.42 mm

D. High Altitude Installations

U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 ft in the U.S.A. and Canada.

When installing this appliance at an elevation above 2000 ft, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 ft above a 2000 ft elevation in the U.S.A., or 10% for elevations between 2000 and 4500 ft in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

If installing this appliance at an elevation above 4500 ft (in Canada), check with local authorities.

E. Non-Combustible Materials

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

Materials that are reported as passing **ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750° C**, shall be considered non-combustible materials.

F. Combustible Materials

Materials made of or surfaced with wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame proofed or not, or whether plastered or unplastered shall be considered combustible materials.

WARNING

Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

NOTE: The following requirements reference various Massachusetts and national codes not contained in this document.

G. Requirements for the Commonwealth of Massachusetts

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

Installation of Carbon Monoxide Detectors

At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gas fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas fitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.

In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print size no less than one-half (1/2) inch in size, "**GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS**".

Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a)1 through 4.

Exemptions

The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:

- The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and
- Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

MANUFACTURER REQUIREMENTS

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies "special venting systems", the following requirements shall be satisfied by the manufacturer:

- The referenced "special venting system" instructions shall be included with the appliance or equipment installation instructions; and
- The "special venting systems" shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

See Gas Connection section for additional Commonwealth of Massachusetts requirements.

2 Getting Started

A. Design and Installation Considerations

Heatilator direct vent gas appliances are designed to operate with all combustion air siphoned from outside of the building and all exhaust gases expelled to the outside. No additional outside air source is required.

CAUTION

- Check building codes prior to installation.
- Installation **MUST** comply with local, regional, state and national codes and regulations.
 - Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.

When planning an appliance installation, it's necessary to determine the following information before installing:

- Where the appliance 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.



WARNING

- Keep appliance dry.
- Mold or rust may cause odors.
 - Water may damage controls.



B. Tools and Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

- | | |
|------------------------|-----------------------------------|
| Reciprocating saw | Framing material |
| Pliers | High temp caulking material |
| Hammer | Gloves |
| Phillips screwdriver | Framing square |
| Flat blade screwdriver | Electric drill and bits (1/4 in.) |
| Plumb line | Safety glasses |
| Level | Manometer |
| Voltmeter | Tape measure |
- Non-corrosive leak check solution
1/2 - 3/4 in. length, #6 or #8 self-drilling screws
One 1/4 in. female connection (for optional fan).

C. Inspect the Appliance and Components



WARNING

Inspect appliance and components for damage. Damaged parts may impair safe operation.



- Do NOT install damaged components.
- Do NOT install incomplete components.
- Do NOT install substitute components.

Report damaged parts to dealer.

- Carefully remove the appliance and components from the packaging.
- The vent system components and trim doors are shipped in separate packages.
- The gas logs may be packaged separately and must be field installed.
- Report to your dealer any parts damaged in shipment, particularly the condition of the glass.
- **Read all of the instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.**



WARNING

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance or vent system component.
- Modification of the appliance or vent system.
- Installation other than as instructed by Hearth & Home Technologies.
- Improper positioning of the gas logs or the glass door.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

3 Framing and Clearances

Note:

- Illustrations reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation may vary due to individual design preference.



WARNING

Fire Risk
Provide adequate clearance:

- Around air openings.
- For service access.

Locate appliance away from traffic areas.

Note: For actual appliance dimensions refer to Section 16.

A. Select Appliance Location

When selecting a location for your appliance it is important to consider the required clearances to walls (See Figure 3.1).

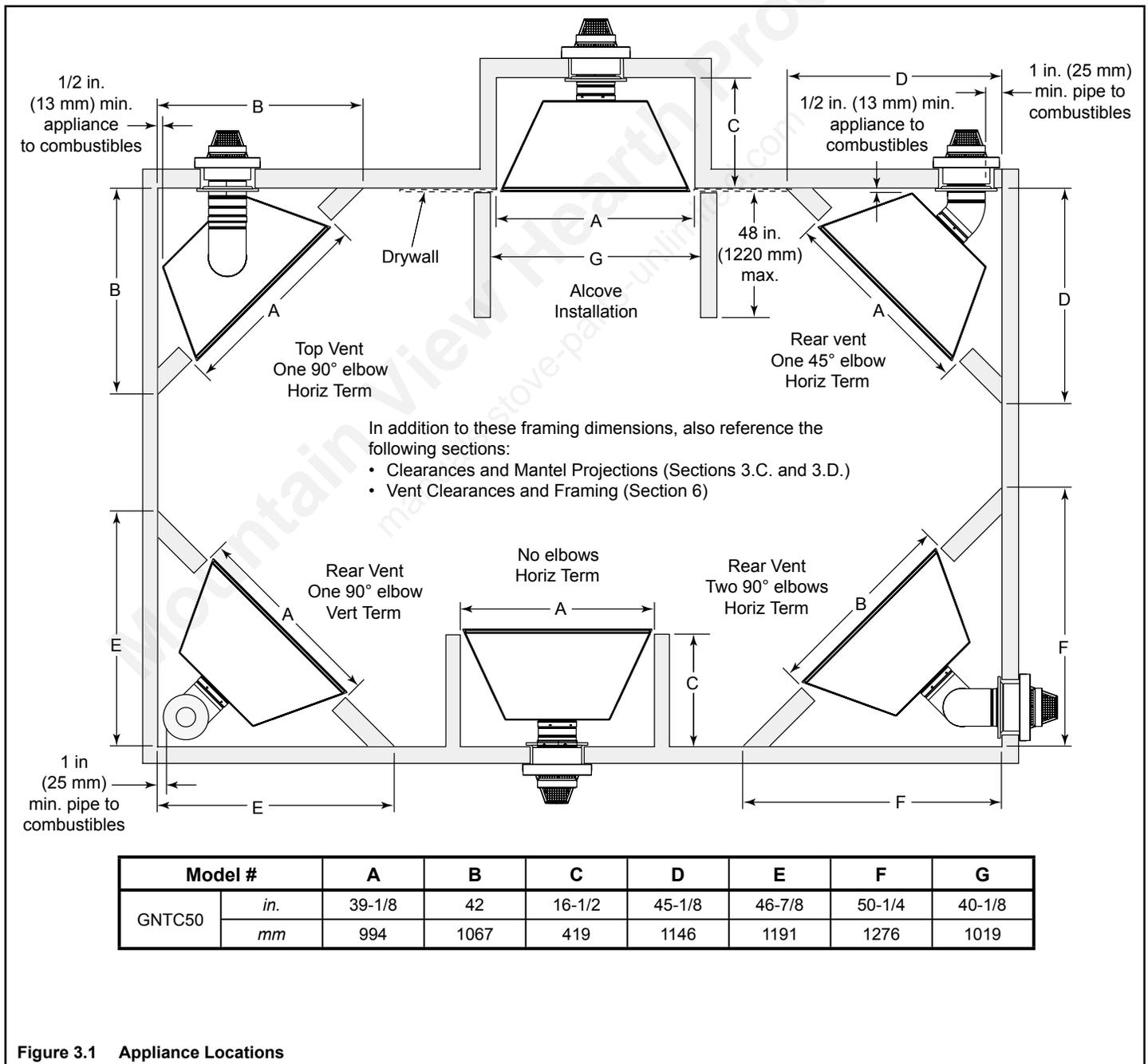


Figure 3.1 Appliance Locations

B. Construct the Appliance Chase

A chase is a vertical boxlike structure built to enclose the gas appliance and/or its vent system. Vertical vents that run on the outside of a building may be, but are not required to be, installed inside a chase.

Construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Local building codes MUST be checked.

Chases 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.

Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home. Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheet rocked and taped (or the use of an equivalent method) for maximum air tightness.

To further prevent drafts, the firestops should be caulked with high temperature caulk to seal gaps. Gas line holes and other openings should be caulked with high temperature caulk or stuffed with unfaced insulation. If the appliance is being installed on a cement slab, a layer of plywood may be placed underneath to prevent conducting cold up into the room.



WARNING

Fire Risk

- Construct chase to all clearance specifications in manual.
- Locate and install appliance to all clearance specifications in manual.

C. Clearances

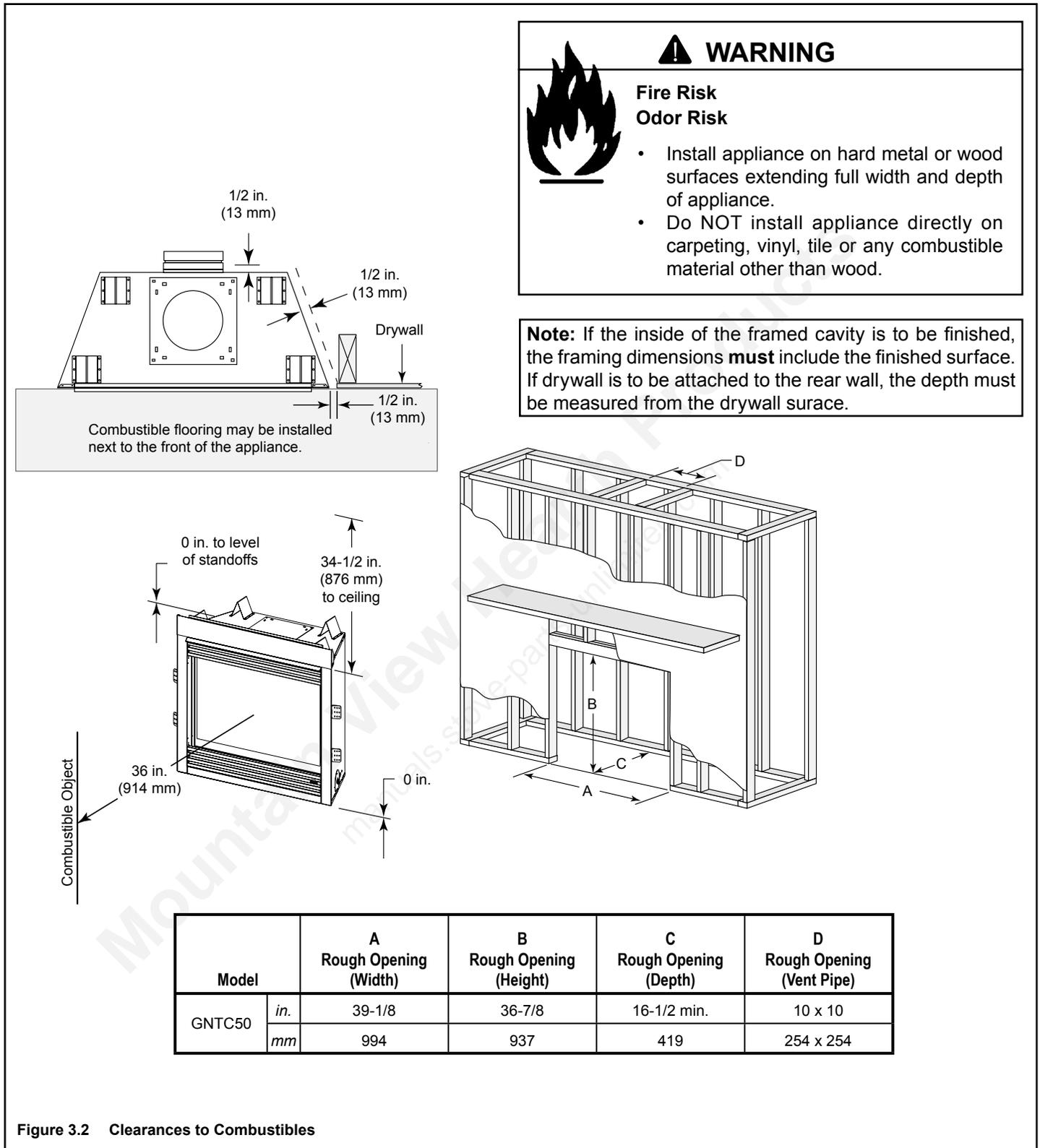
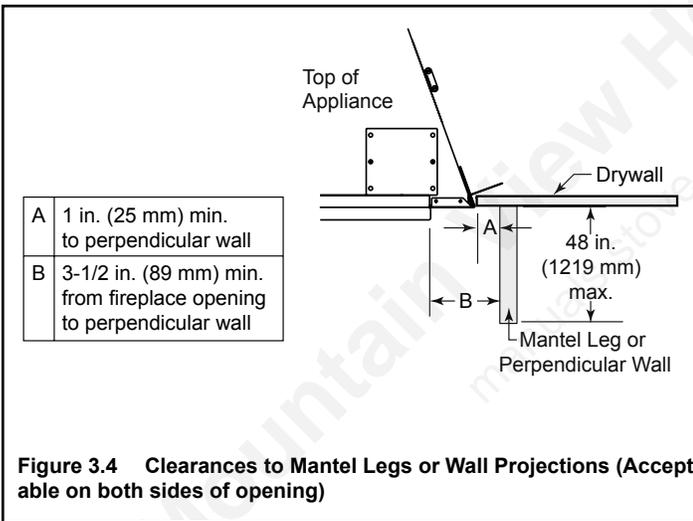
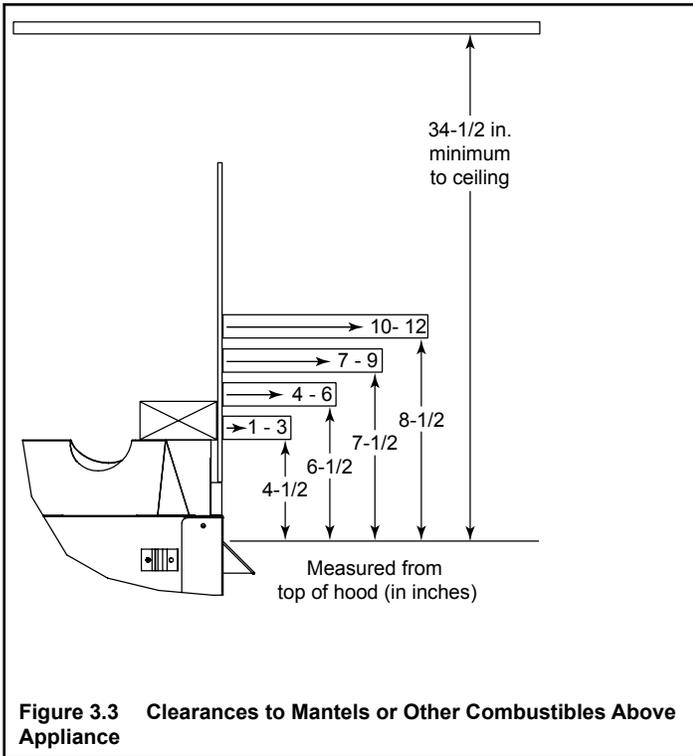


Figure 3.2 Clearances to Combustibles

D. Mantel Projections



4 Termination Locations

A. Vent Termination Minimum Clearances

WARNING

Fire Risk
Explosion Risk

Maintain vent clearance to combustibles as specified.

- Do not pack air space with insulation or other materials.

Failure to keep insulation or other materials away from vent pipe may cause fire.

Measure vertical clearances from this surface

Measure horizontal clearances from this surface.

(see Figure 4.4 for specific clearances)

Figure 4.1 Clearances from Cap Surfaces

Figure 4.2 specifies minimum vent heights for various pitched roofs.

Roof Pitch	H (Min.) Ft.	Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0*	Over 11/12 to 12/12	4.0
Over 6/12 to 7/12	1.25*	Over 12/12 to 14/12	5.0
Over 7/12 to 8/12	1.5*	Over 14/12 to 16/12	6.0
Over 8/12 to 9/12	2.0*	Over 16/12 to 18/12	7.0
Over 9/12 to 10/12	2.5	Over 18/12 to 20/12	7.5
Over 10/12 to 11/12	3.25	Over 20/12 to 21/12	8.0

* 3 ft. minimum in snow regions

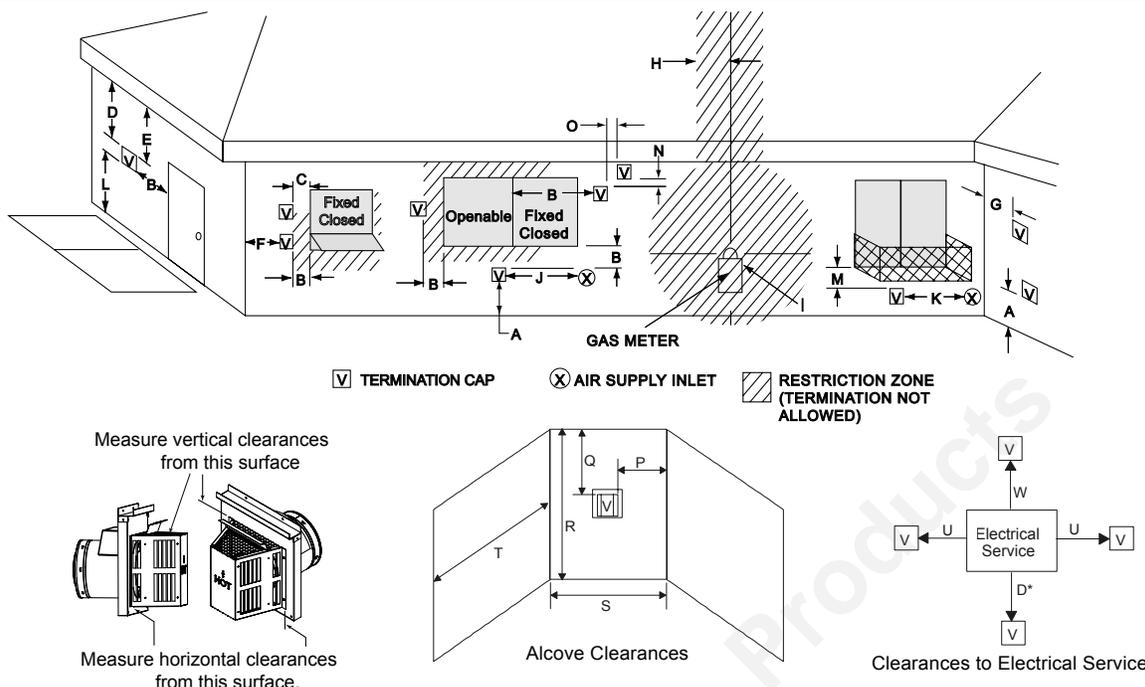
Figure 4.2 Minimum Height from Roof to Lowest Discharge Opening

A	Gas Termination	Wood or Fuel Oil Termination
B	6 in. (152 mm) min.	20 in. (508 mm) min.

Figure 4.3 Multiple Vertical Termination

Termination Caps Same Height

* If using decorative cap cover(s), this distance may need to be increased. Refer to the installation instructions supplied with the decorative cap cover.



Dimension Descriptions

- A Clearance above the ground, a veranda, porch, deck or balcony - 12 in. (30 cm) minimum. *
- B Clearance to window or door that may be opened – 10,000 BTUs or less, 6 in. (15 cm) minimum; 10,000-50,000 BTUs, 9 in. (23 cm) minimum; over 50,000 BTUs, 12 in. (30 cm) minimum. *
- C Clearance to permanently closed window – 12 in. (30 cm) minimum - recommended to prevent condensation on window.
- D Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 ft (60 cm) from the centerline of the termination – 18 in. (46 cm) minimum. **
- E Vertical clearance to unventilated soffit - 12 in. (30 cm) minimum. **
- F Clearance to outside corner - 6 in. (15 cm) minimum.
- G Clearance to inside corner - 6 in. (15 cm) minimum.
- H Not to be installed above a meter/regulator assembly within 3 ft (90 cm) horizontally* from the center line of the regulator (Canada only)
- I Clearance to service regulator vent outlet – 3 ft (.91 m) U.S. minimum and 3 ft (.91 m) Canada minimum. *
- J Clearance to non-mechanical air supply inlet into building or the combustion air inlet to any other appliance – 9" (23 cm) U.S. minimum and 12 in. (30 cm) Canada minimum. *
- K Clearance to mechanical air supply inlet - 3 ft (.91 m) U.S. minimum and 6 ft (1.8 m) Canada minimum. *
- L Clearance above a paved sidewalk or paved driveway located on public property - 7 ft (2.1 m) minimum.
A vent may not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
- M Clearance under veranda, porch, deck or balcony - 12 in. (30 cm) minimum. * Recommended 30 in. (76 cm) for vinyl or plastic.
Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor. *
- N Vertical clearance between two horizontal termination caps – 12 in. (30 cm) minimum.
- O Horizontal clearance between two horizontal termination caps – 12 in. (30 cm) minimum.

- P 6" - Non-vinyl sidewalls
12" – Vinyl sidewalls
- Q 18" – Non-vinyl soffit and overhang
42" – Vinyl soffit and overhang
- R 8 ft.

	S_{min}	T_{max}
1 cap	3 ft	2 x S actual
2 caps	6 ft	1 x S actual
3 caps	9 ft	2/3 x S actual
4 caps	12 ft	1/2 x S actual
S _{min} = # term caps x 3		T _{max} = (2/# term caps) x S (actual)

- U 6" min. – Clearance from sides of electrical service.
- W 12" min. – Clearance above electrical service.
- * As specified in CGA B149 Installation Codes

Note: Local codes or regulations may require different clearances.

- ** Clearance required to vinyl soffit material – 30 in. (76 cm) minimum.
Note: Location of the vent termination must not interfere with access to the electrical service.

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 wall, overhang and ground clearances as stated in the instructions.

Hearth & Home Technologies assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

Figure 4.4 Minimum Clearances for Termination

5 Vent Information and Diagrams

A. Vent Table Key

The abbreviations listed in this vent table key are used in the vent diagrams.

Symbol	Description
V ₁	First section (closest to appliance) of vertical length
V ₂	Second section of vertical length
H ₁	First section (closest to appliance) of horizontal length
H ₂	Second section of horizontal length


WARNING



Fire Risk



Explosion Risk



Asphyxiation Risk

Do NOT connect this gas appliance to a chimney flue serving a separate solid-fuel or gas burning appliance.

- Vent this appliance directly outside.
- Use separate vent system for this appliance.

May impair safe operation of this appliance or other appliances connected to the flue.

B. Use of Elbows

CAUTION

ALL vent configuration specifications MUST be followed.

- This product is tested and listed to these specifications.
- Appliance performance will suffer if specifications are not followed.

Diagonal runs have both vertical and horizontal vent aspects when calculating the effects. Use the rise for the vertical aspect and the run for the horizontal aspect (see Figure 5.1).

Two 45° elbows may be used in place of one 90° elbow. On 45° runs, 1 ft of diagonal is equal to 8.5 in. horizontal run and 8.5 in. vertical run. A length of straight pipe is allowed between two 45° elbows (see Figure 5.1).

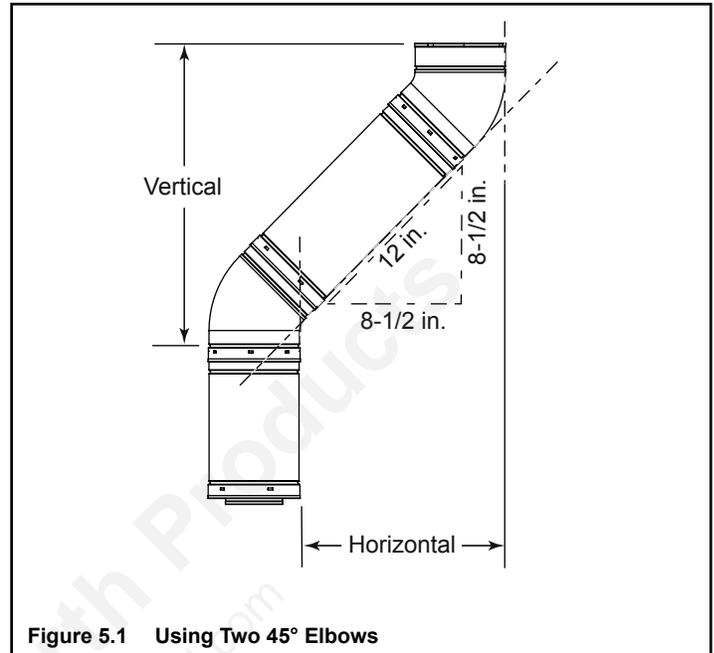
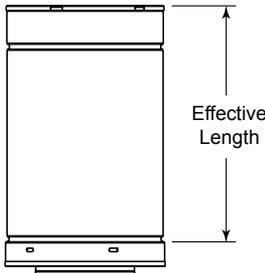


Figure 5.1 Using Two 45° Elbows

C. Measuring Standards

Vertical and horizontal measurements listed in the vent diagrams were made using the following standards.

- Pipe measurements are shown using the effective length of pipe (see Figure 5.2).
- Measurements are made from the appliance outer wrap, not from the standoffs.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap) (see Figure 4.1).
- Vertical terminations are measured to top of last pipe before termination cap.
- Horizontal pipe installed level with no rise.



DVP Pipe
(see chart)

Pipe	Effective Length
DVP4	4 in. (102 mm)
DVP6	6 in. (152 mm)
DVP12	12 in. (305 mm)
DVP24	24 in. (610 mm)
DVP36	36 in. (914 mm)
DVP48	48 in. (1219 mm)
DVP6A	3 to 6 in. (76 to 152 mm)
DVP12A	3 to 12 in. (76 to 305 mm)
DVP12MI	3 to 12 in. (76 to 305 mm)
DVP24MI	3 to 24 in. (76 to 610 mm)

Figure 5.2 DVP Pipe Effective Length

D. Vent Diagrams

⚠ WARNING	
	Fire Risk Explosion Risk
	Do NOT pack insulation or other combustibles between firestops. • ALWAYS maintain specified clearances around venting and firestop systems. • Install firestops as specified. Failure to keep insulation or other material away from vent pipe may cause fire.

To replace the first starter elbow with two 45° elbows, refer to Figure 5.4. All other 90° elbows can be replaced with two 45° elbows.

General Rules:

- SUBTRACT 3 ft/.91 m from the total H measurement for each 90° elbow installed horizontally. SUBTRACT 1-1/2 ft/.46 m from the total H measurement for each 45° elbow installed horizontally.
- A maximum of three 90° elbows (or six 45° elbows) may be used in any vent configuration. Some elbows may be installed horizontally. See Figure 5.6.
- Elbows may be placed back to back anywhere in the system except as shown in Figure 5.4.
- When penetrating a combustible wall, a wall shield firestop must be installed.
- When penetrating a combustible ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.

Top Vent—Horizontal Termination—One Elbow

Table 5.1

V ₁ min.	V ₁ max.	H ₁ max.
0*	-	24 in./635 mm
4 in./102 mm	-	4 ft/1.22 m
6 in./152 mm	-	6 ft/1.83 m
12 in./305 mm	-	11 ft/3.35 m
18 in./457 mm	-	18 ft/5.49 m
24 in./610 mm	-	25 ft/7.62 m
-	25 ft/7.62 m	25 ft/7.62 m

You may install the elbow directly on top of the appliance.

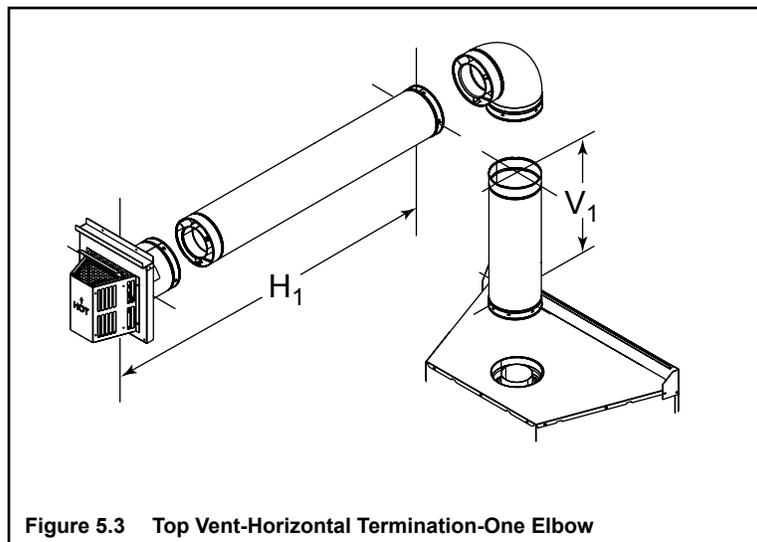
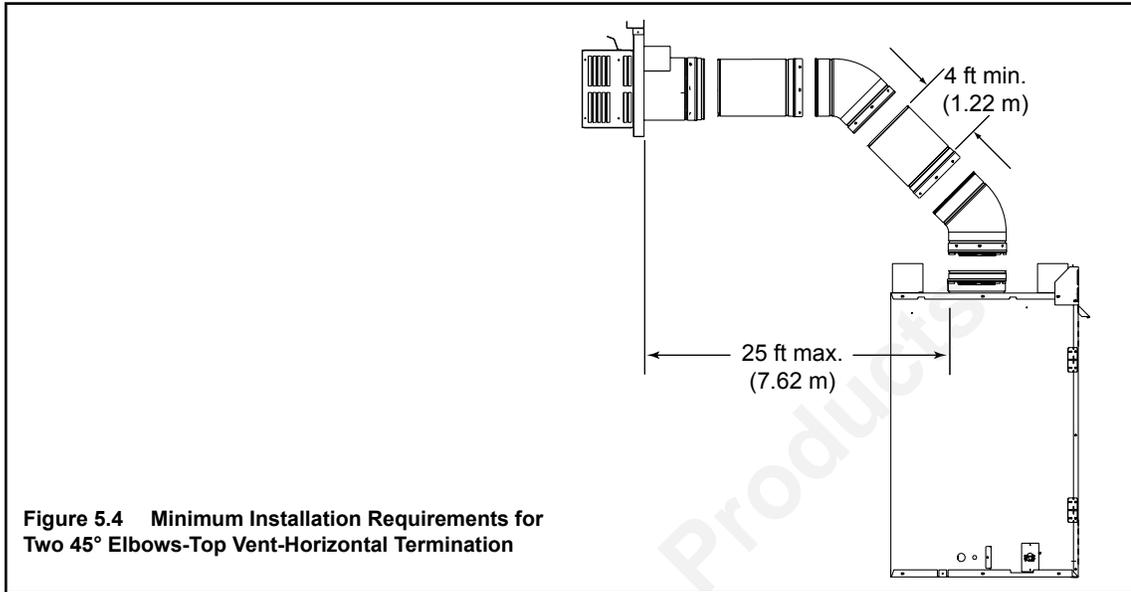


Figure 5.3 Top Vent-Horizontal Termination-One Elbow

Top Vent—Horizontal Termination—Two 45° Elbows

Installation requirements to replace the first 90° elbow with two 45° elbows:

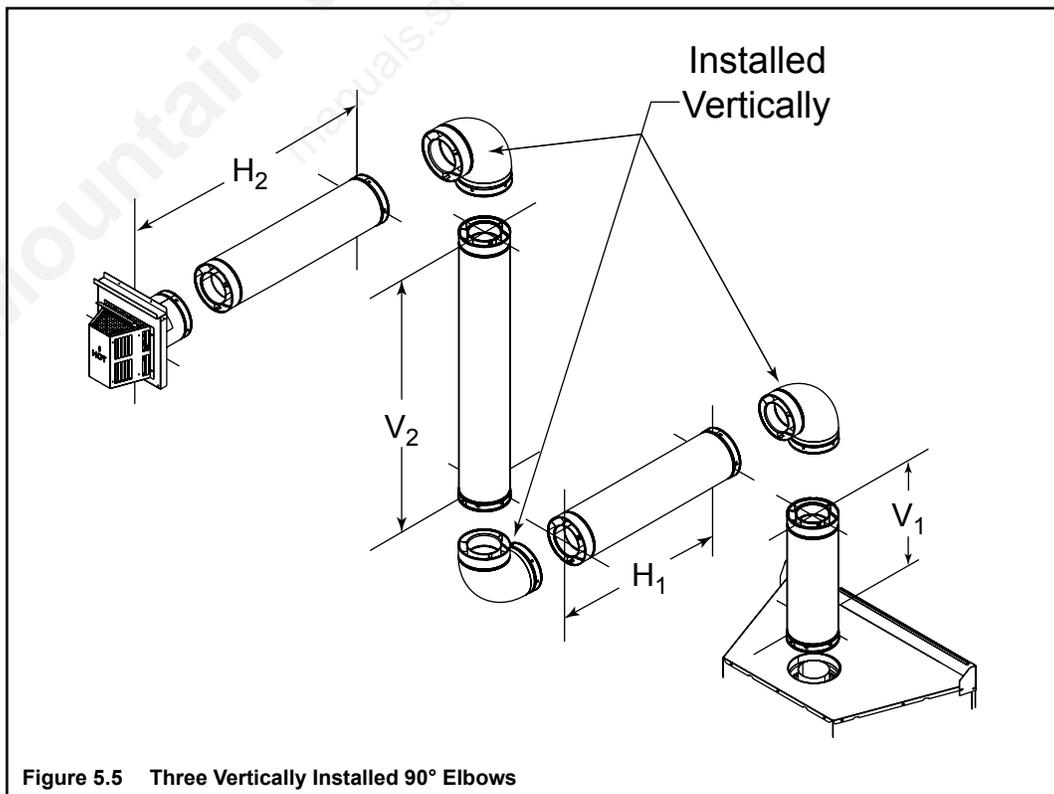


Top Vent—Horizontal Termination—Three Vertical Elbows

See Figure 5.6 for information about installing elbows horizontally.

Table 5.2

V_1 min.	V_1+V_2 max.	H_1+H_2 max.
1 ft/.305 m	24 ft/7.32 m	19 ft/5.79 m



Top Vent—Horizontal Termination—Two or Three Elbows

You may use a maximum of three 90° elbows (or six 45° elbows) in any vent configuration, Some may be installed horizontally.

Note: Subtract 3 ft./91 m from the total horizontal measurement for each 90° elbow installed horizontally. Subtract 1-1/2 ft./46 m from the total horizontal measurement for each 45° elbow installed horizontally.

Table 5.3

V ₁ min.	V ₁ max.	H ₁ +H ₂ max.	H ₁ +H ₂ +H ₃ max.
6 in./152 mm	x	6 ft/1.83 m	x
12 in./305 mm	x	11 ft/3.35 m	11 ft/3.35 m
18 in./457 mm	x	18 ft/5.49 m	18 ft/5.49 m
24 in./610 mm	x	25 ft/7.62 m	25 ft/7.62 m
x	25 ft/7.62 m	25 ft/7.62 m	25 ft/7.62 m

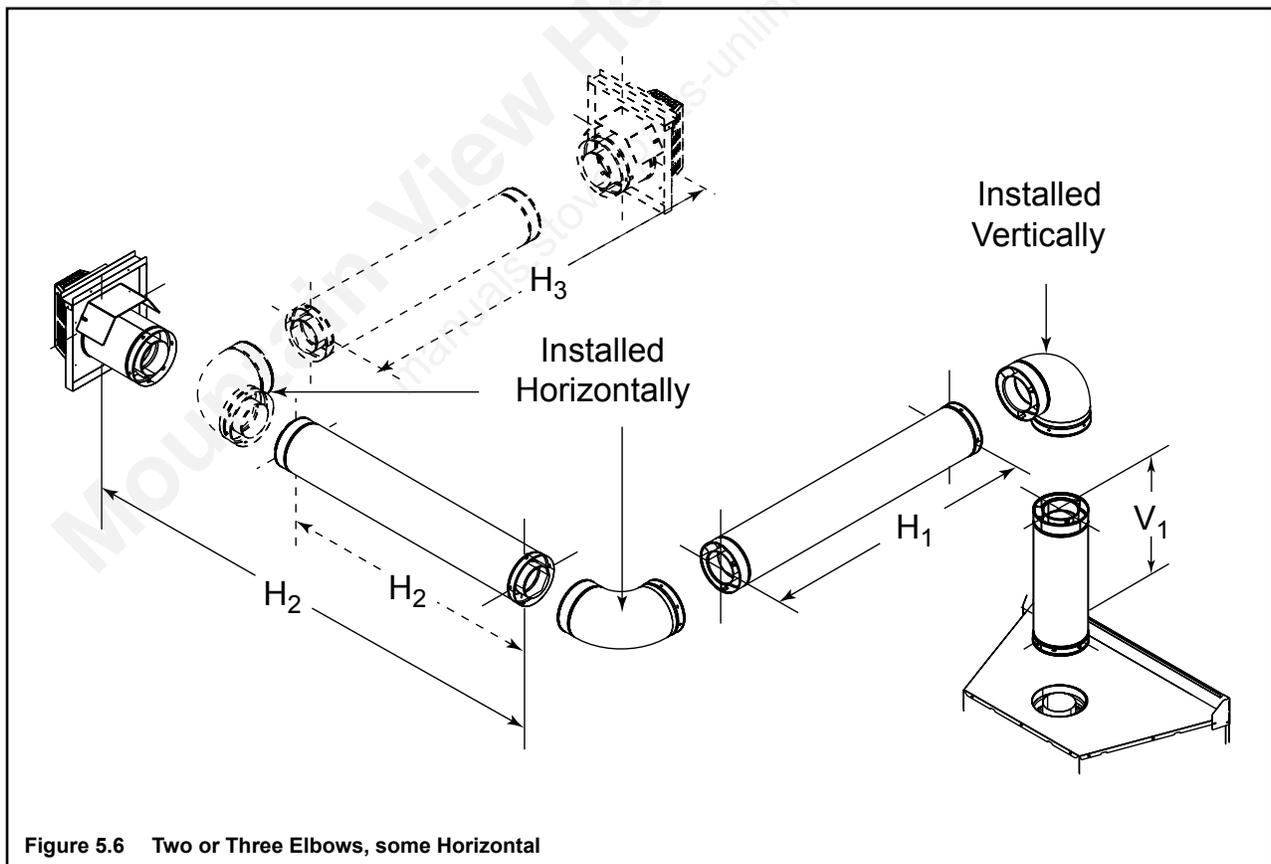


Figure 5.6 Two or Three Elbows, some Horizontal

Top Vent—Vertical Termination—No Elbows

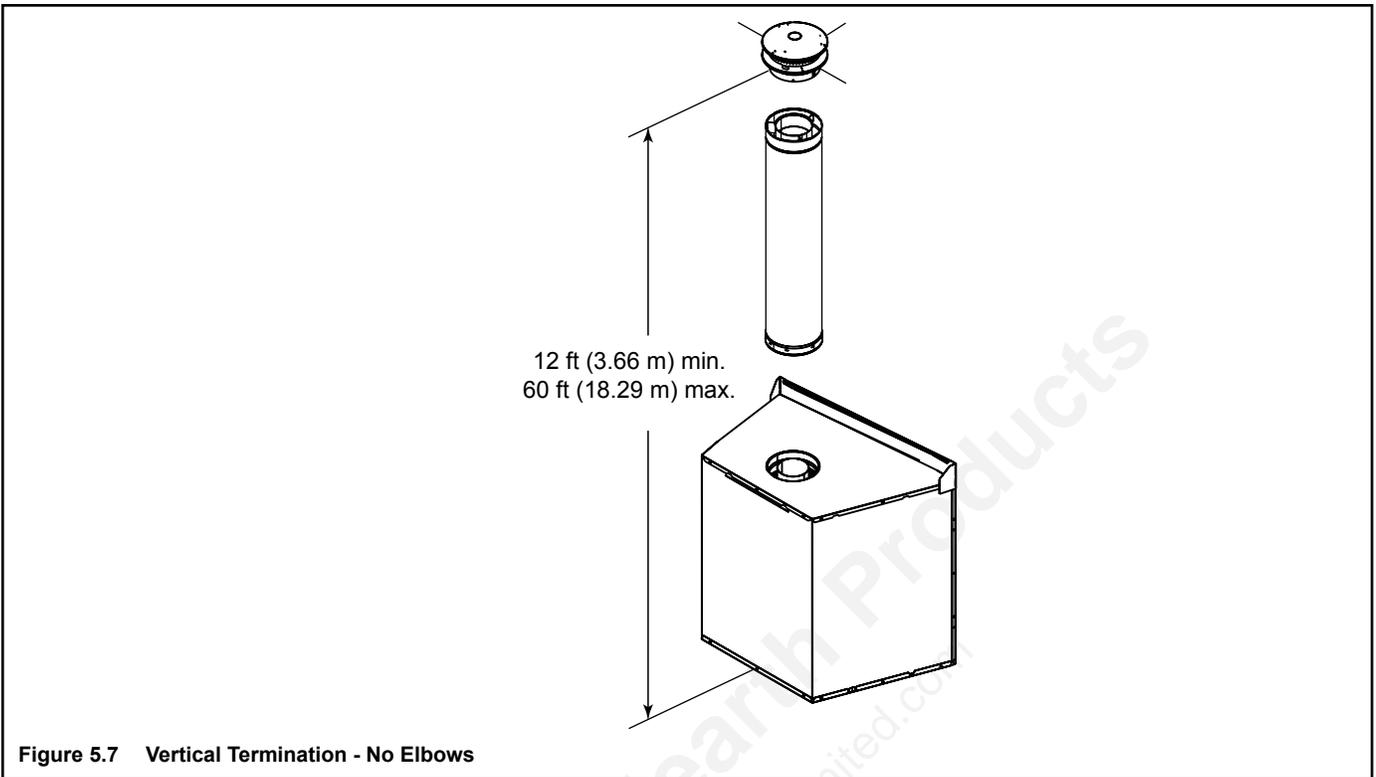


Figure 5.7 Vertical Termination - No Elbows

Top Vent—Vertical Termination—Two Elbows

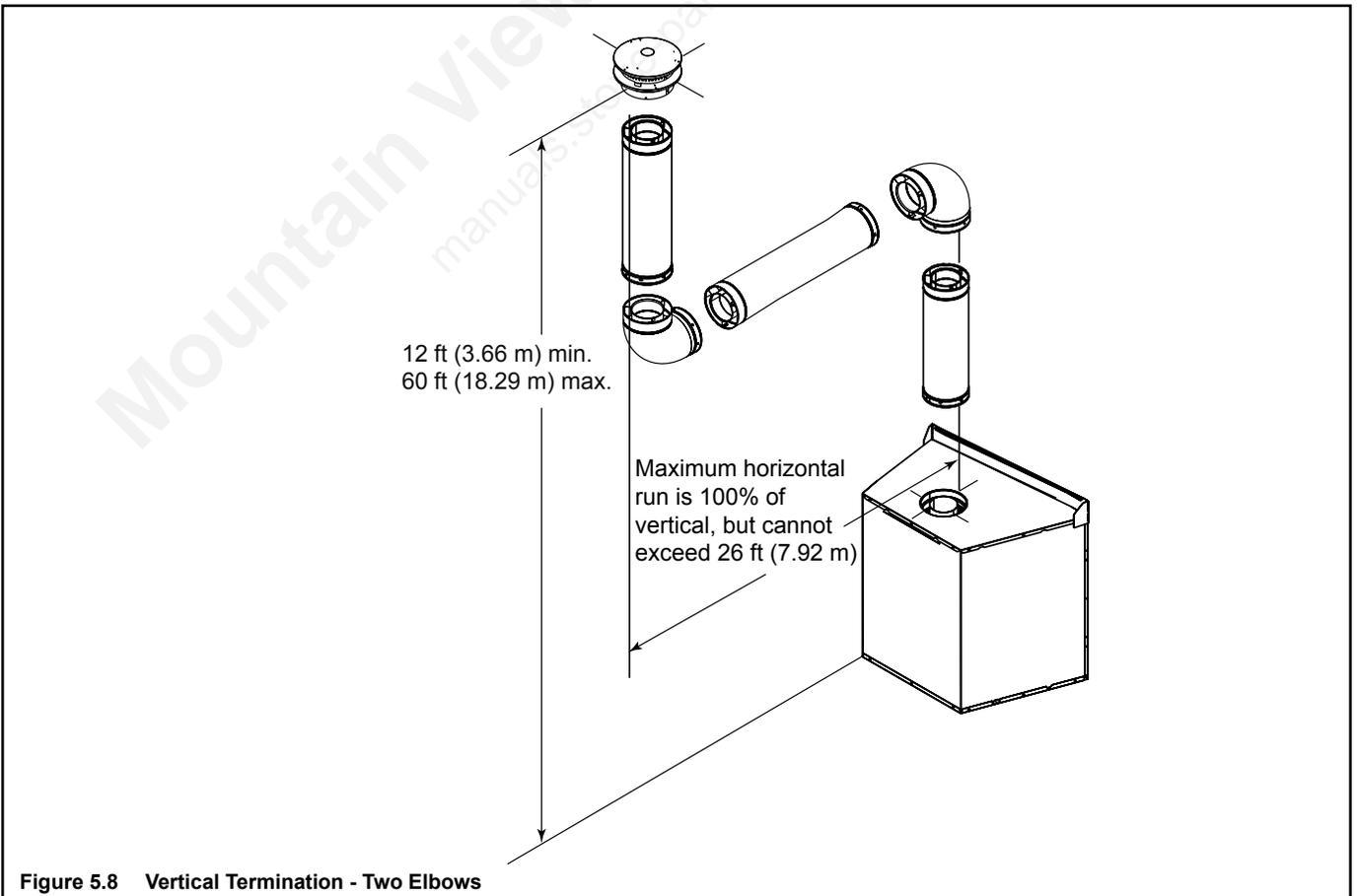
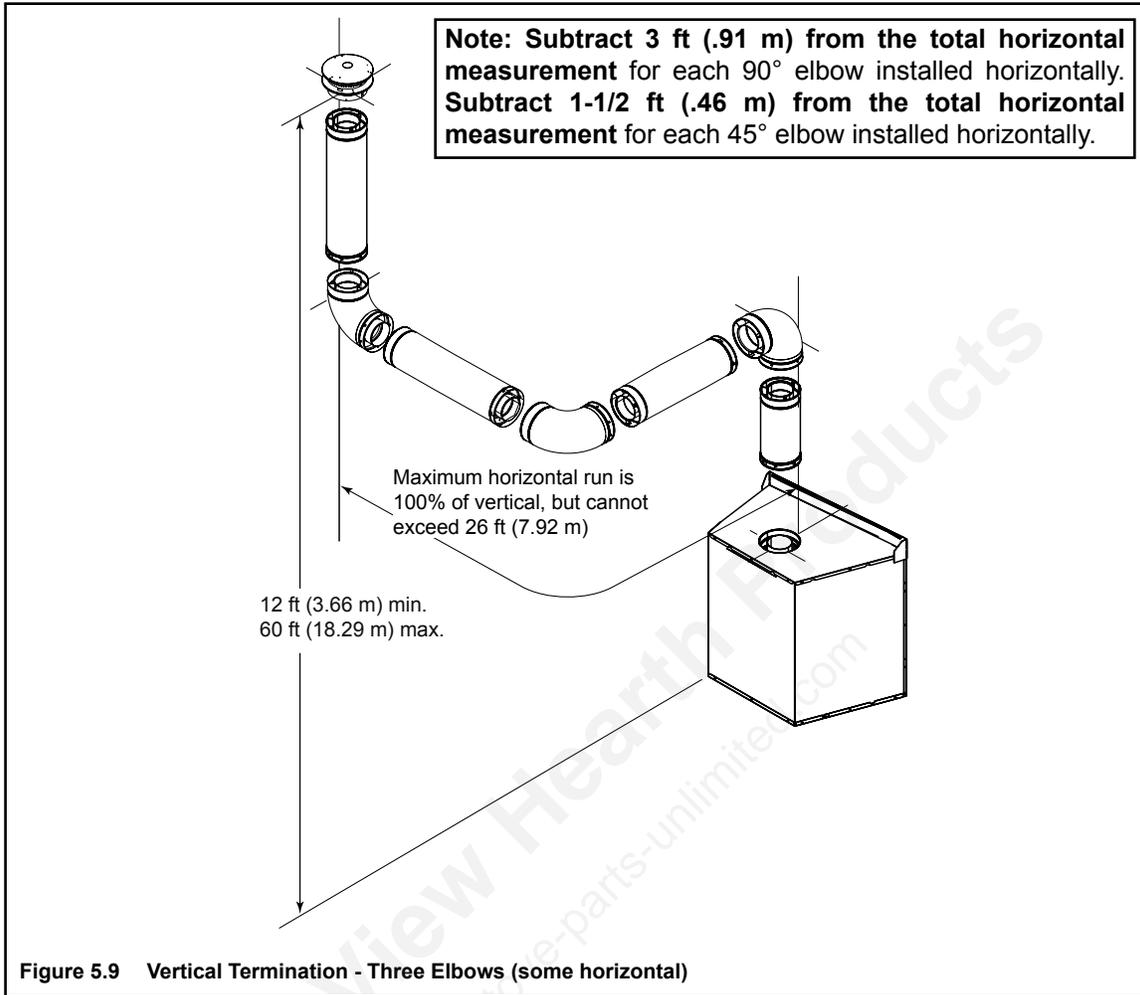
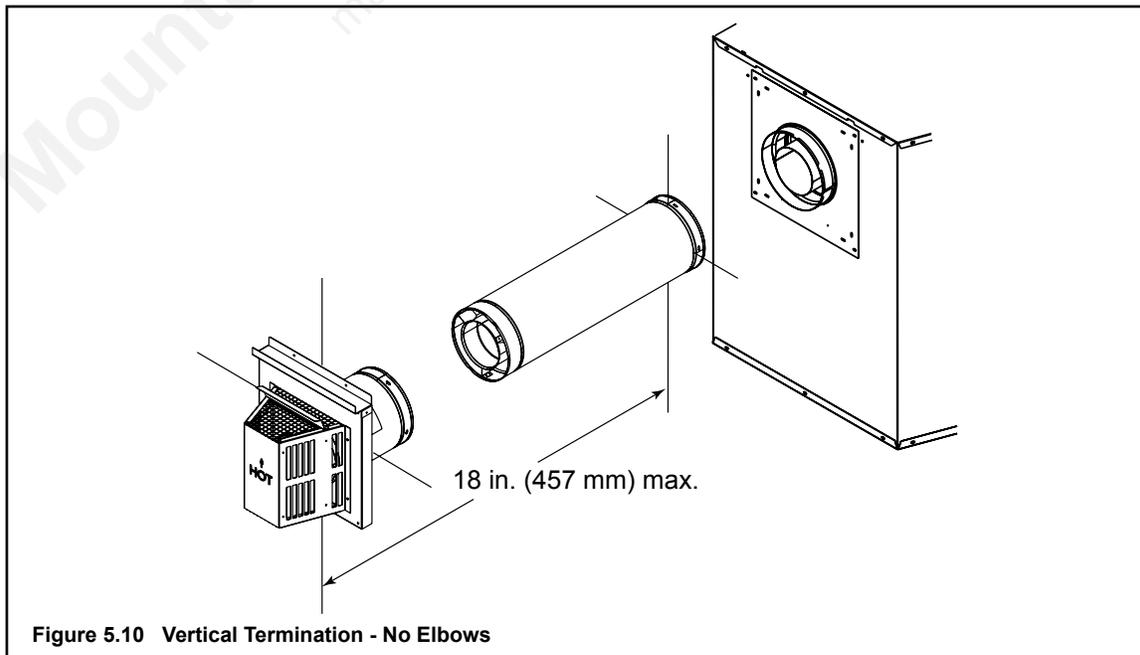


Figure 5.8 Vertical Termination - Two Elbows

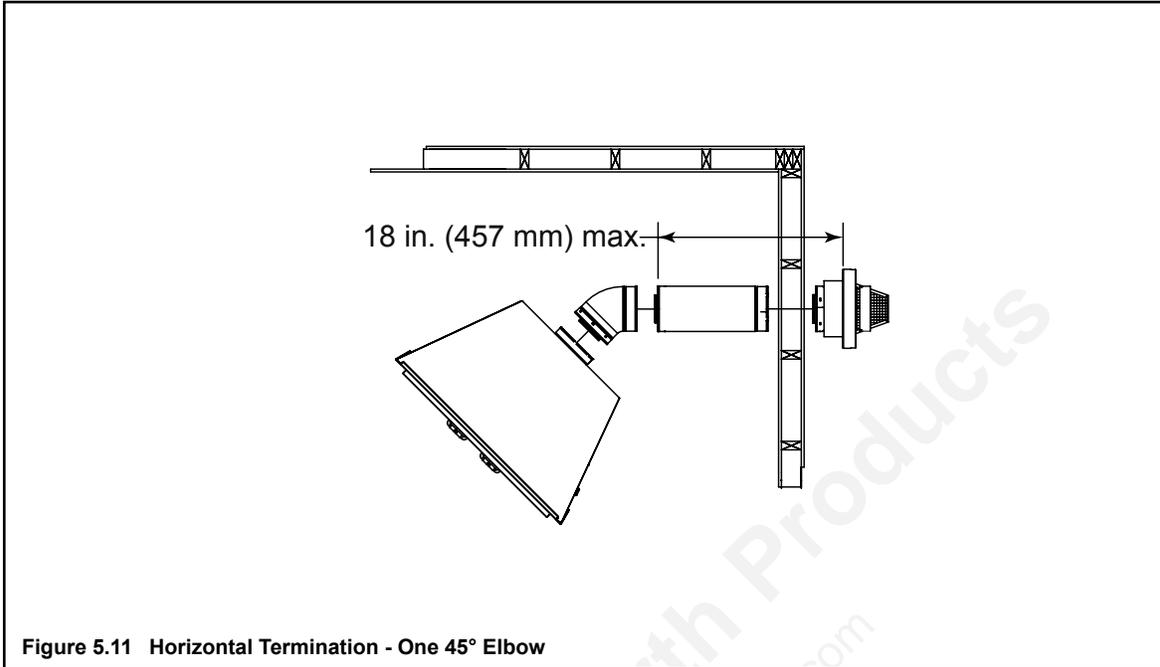
Top Vent—Vertical Termination—Three Elbows



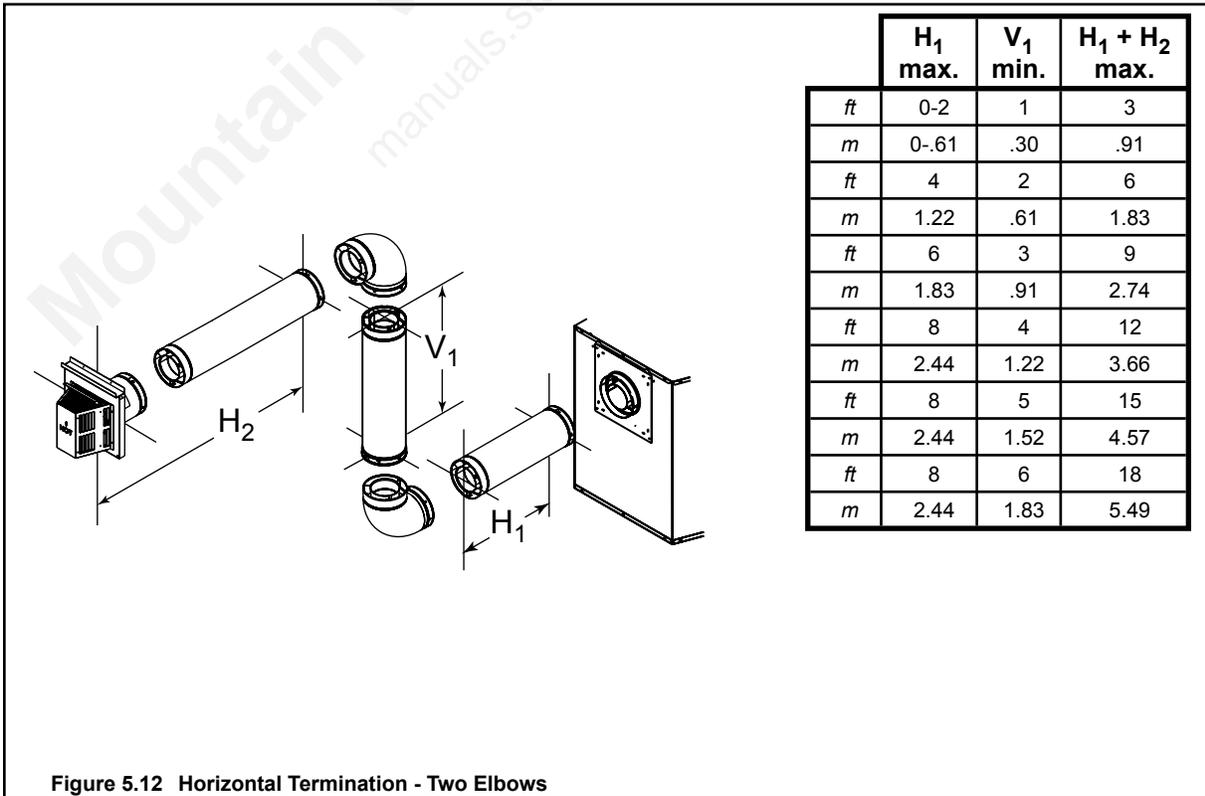
Rear Vent—Horizontal Termination—No Elbows



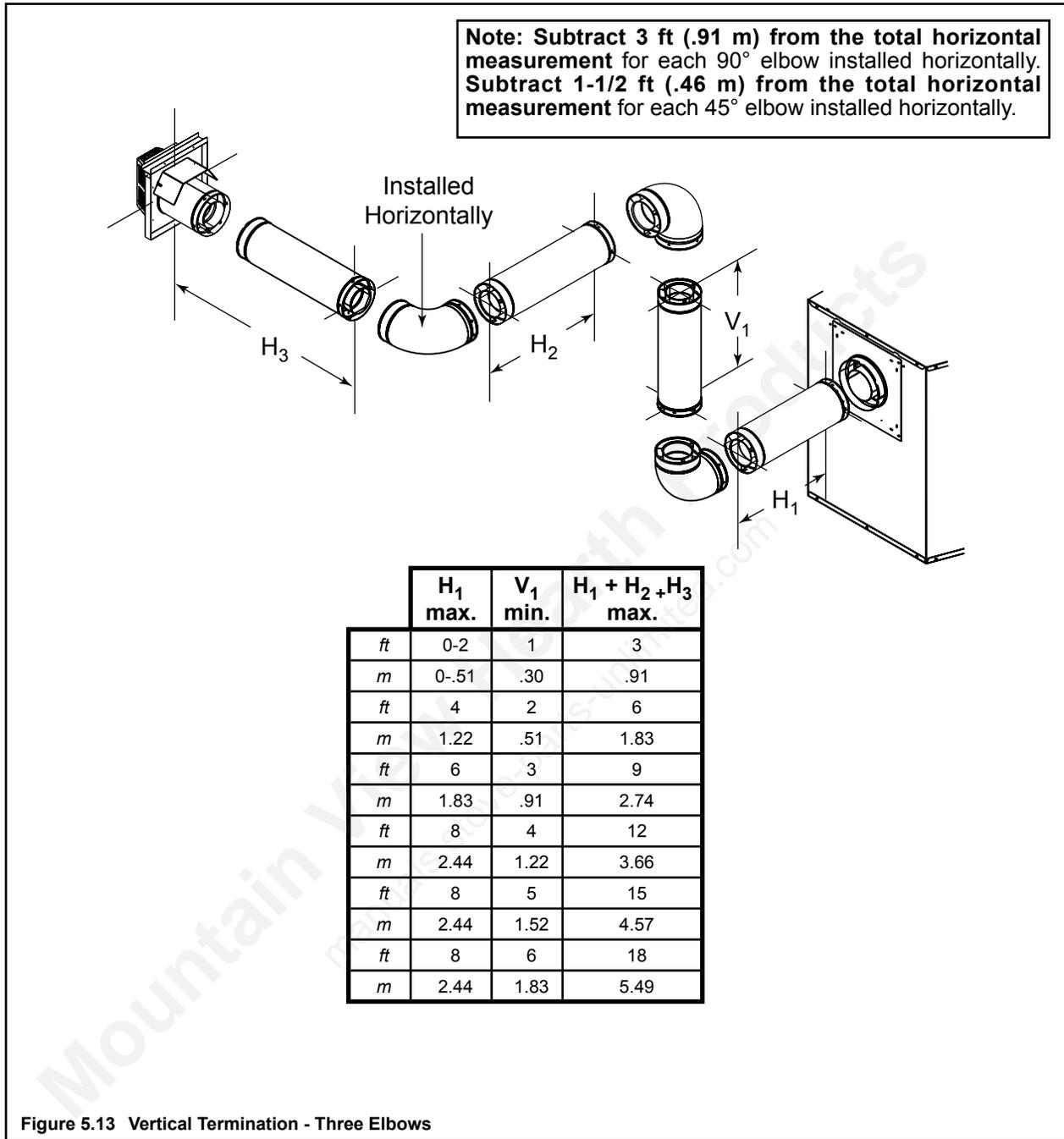
Rear Vent—Horizontal Termination—One 45° Elbow



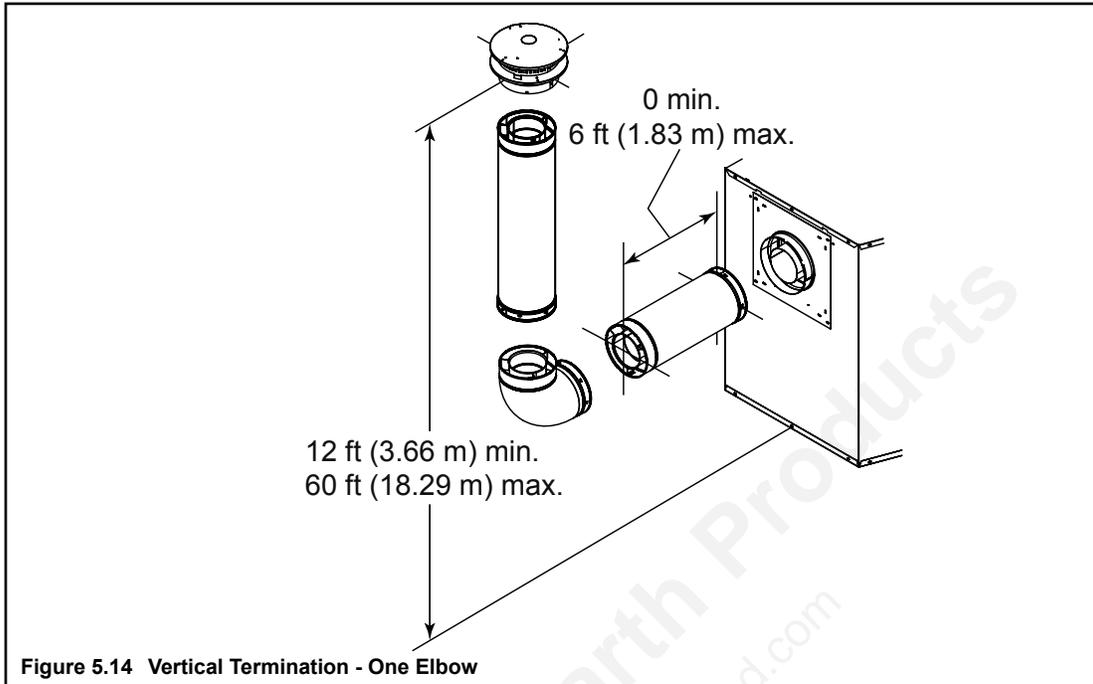
Rear Vent—Horizontal Termination—Two Elbows



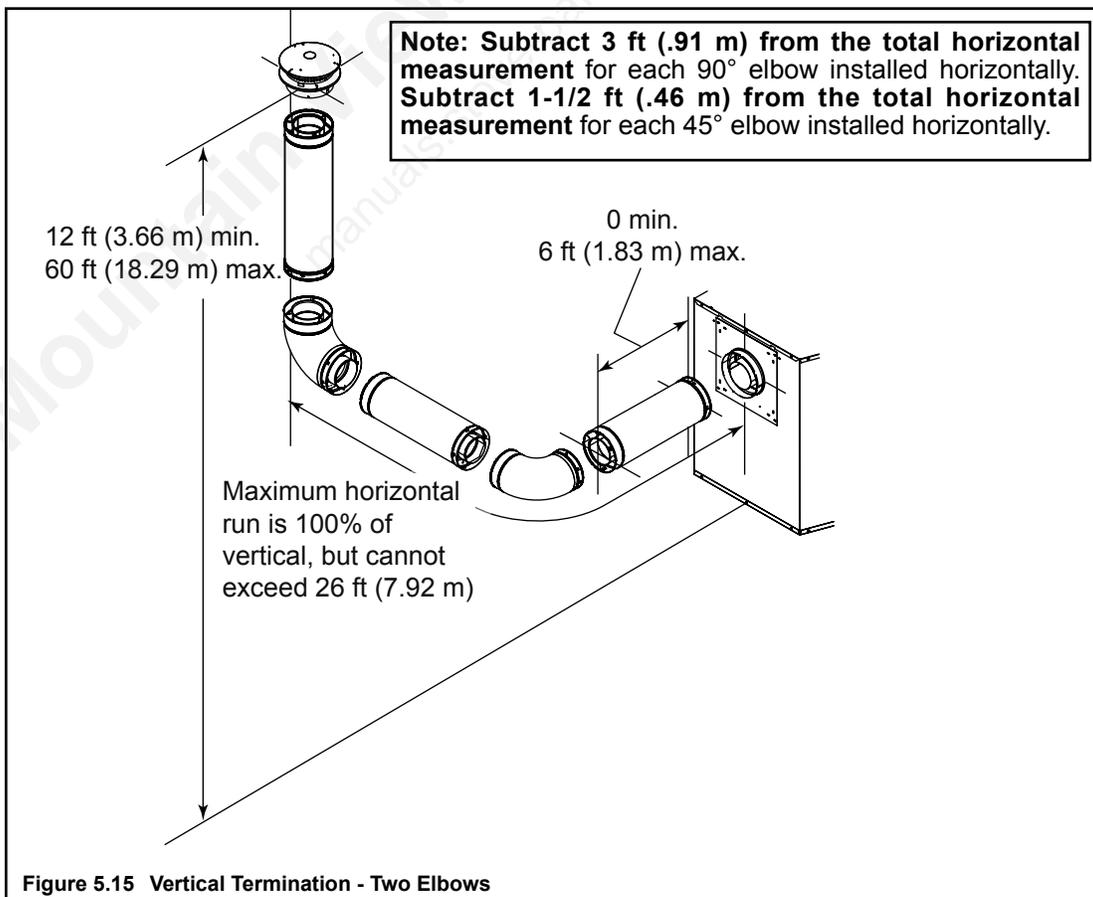
Rear Vent—Horizontal Termination—Three Elbows



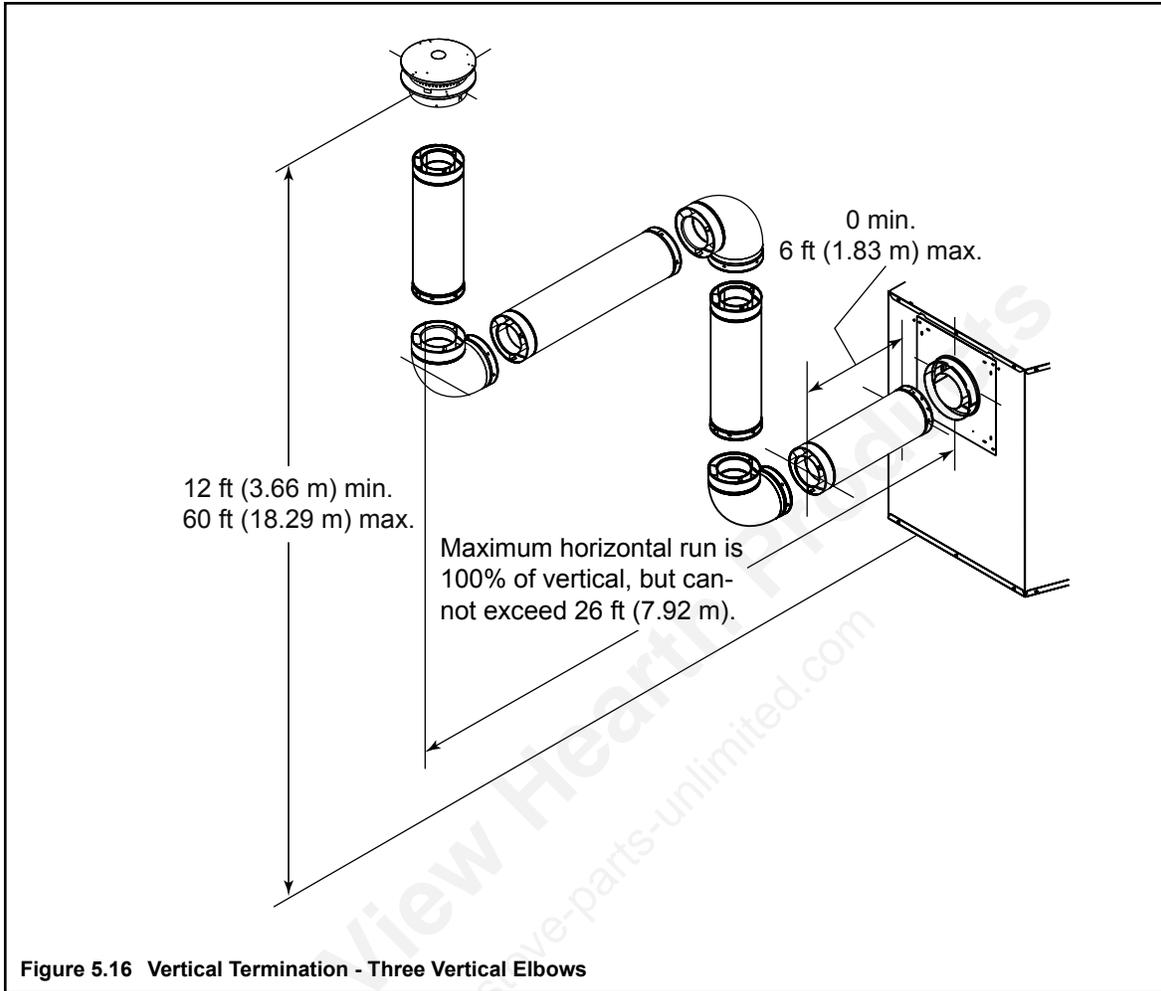
Rear Vent—Vertical Termination—One Elbow



Rear Vent—Vertical Termination—Two Elbows



Rear Vent—Vertical Termination—Three Vertical Elbows



6 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

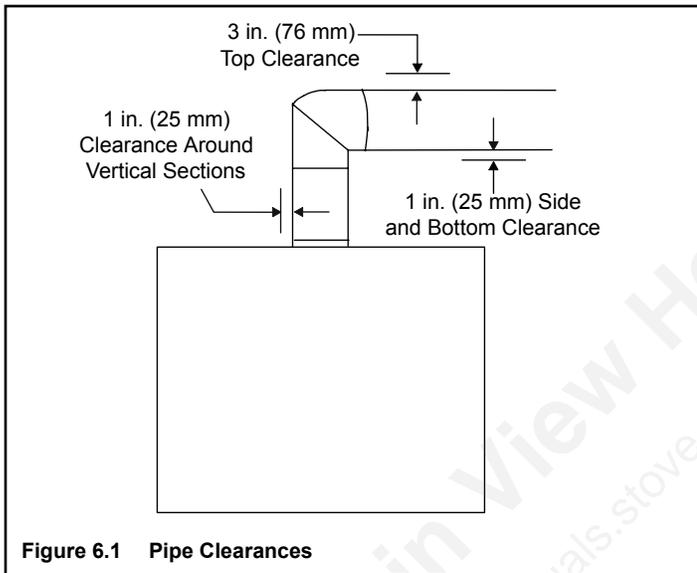
WARNING

Fire Risk
Explosion Risk

Maintain vent clearance to combustibles as specified.

- Do not pack air space with insulation or other materials.

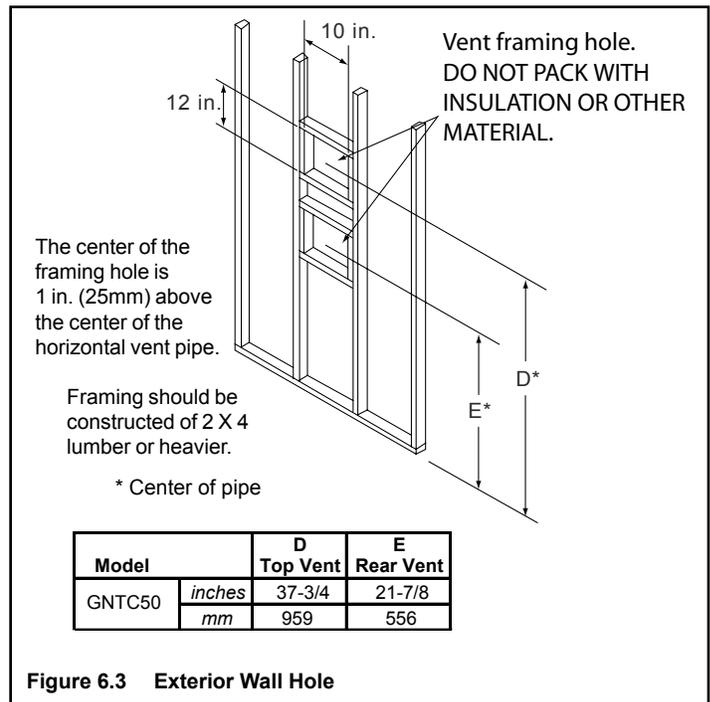
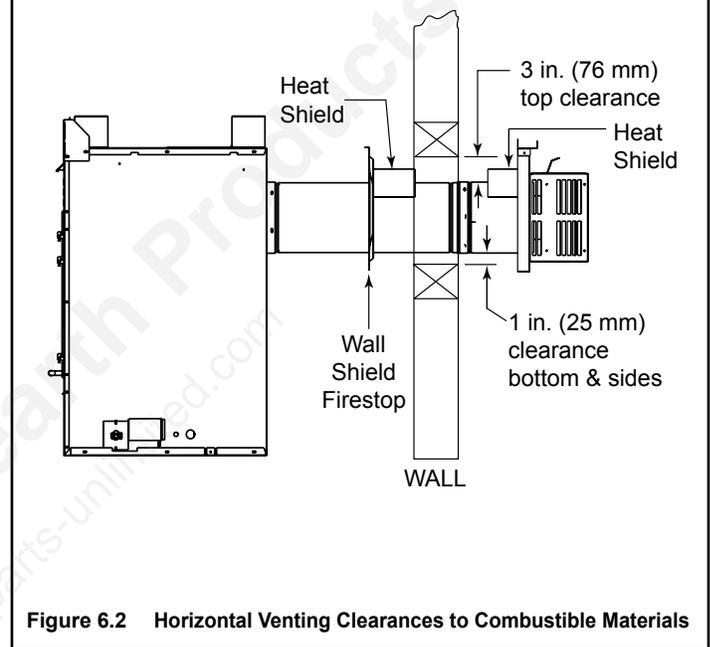
Failure to keep insulation or other materials away from vent pipe may cause fire.



B. Wall Penetration Framing

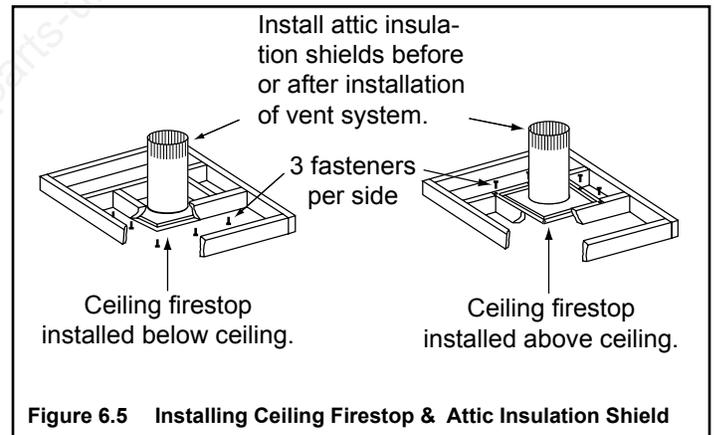
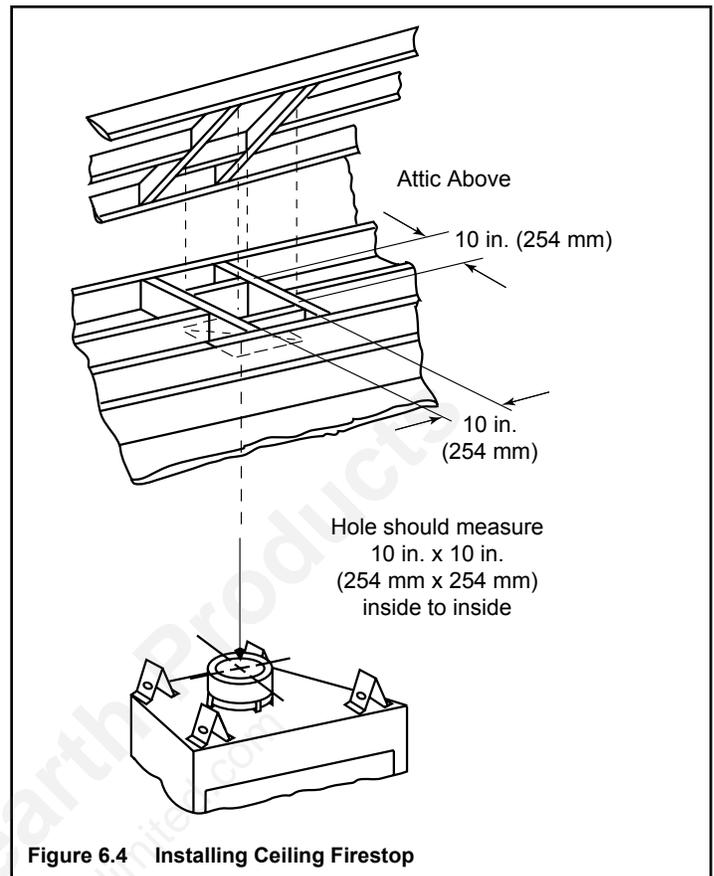
- Frame a hole in a combustible wall for an interior wall shield firestop (Figures 6.1 through 6.3) whenever a wall is penetrated. Use same size framing materials as those used in the wall construction. The wall shield firestop maintains minimum clearances and prevents cold air infiltration.
- If the hole being penetrated is surrounded by non-combustible materials such as concrete, a hole with diameter 1 in. greater than the pipe is acceptable.

Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm). **The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.** If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. (184 mm) a DVP-HSM-B will be required.



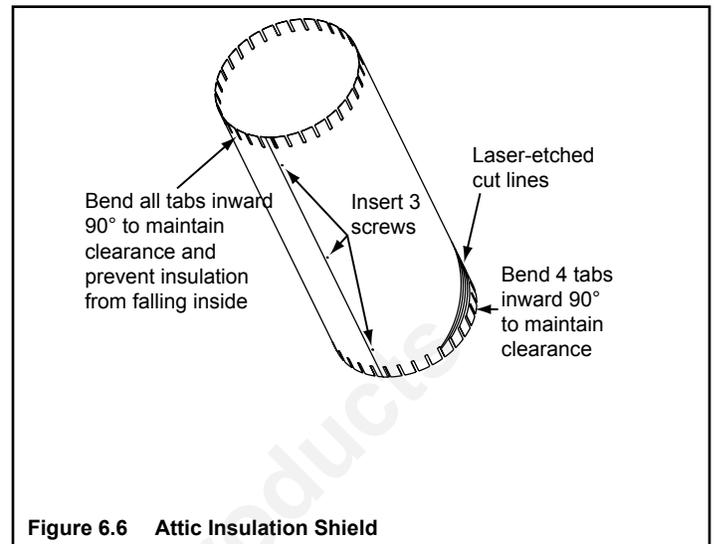
➔ C. Install the Ceiling Firestop

- Frame an opening 10 in. by 10 in. whenever the vent system penetrates a ceiling/floor (see Figure 6.4).
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- When installing a top vent vertical termination appliance the hole should be directly above the appliance, unless the flue is offset.
- The ceiling firestop may be installed above or below the ceiling. Refer to Figure 6.5.
- Secure with three fasteners on each side.
- Do not pack insulation around the vent. Insulation must be kept away from the pipe.



➔ D. Install Attic Insulation Shield

	⚠ WARNING
	Fire Risk Keep loose materials or blown insulation from touching the vent pipe. <ul style="list-style-type: none">• National building codes recommend using attic shield to keep loose materials/blown insulation from contacting vent.• Hearth & Home Technologies requires the use of an attic shield.



Flat Ceiling Installation

- Remove one shield from box.
Note: Cut previously installed batt insulation to make room for the attic insulation shield.
- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- Bend four tabs inward on bottom of shield where it rests on the ceiling firestop to maintain the air space between the pipe and shield. Cover the resulting holes with aluminum tape. Set the shield on the ceiling firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blow-in insulation from getting between the shield and vent pipe, and to maintain clearance.

Vaulted Ceiling Installation

- The attic insulation shield has been laser-etched with cut lines and ceiling pitches to make field trimming easier.
- Remove one shield from box.
Note: Cut previously installed batt insulation to make room for the attic insulation shield.
- Cut the attic insulation shield (if application is for vaulted ceiling) using a laser-etched cut line, to fit your ceiling pitch. Snip cut edge to create three bend tabs.
- Wrap shield around pipe if pipe is already installed in area to be insulated.
- Match the three holes in each side and fasten with three screws to form a tube.
- Bend four of the remaining tabs inward 90° on bottom of shield to maintain the air space between the pipe and shield. Cover the resulting holes with aluminum tape. Set the shield on the ceiling firestop.
- Bend all tabs inward 90° around the top of the shield. These tabs must be used to prevent blow-in insulation from getting between the shield and vent pipe, and to maintain clearance.

7 Appliance Preparation

CAUTION



Sharp Edges

- Wear protective gloves and safety glasses during installation.

A. Removal of the Vent Connectors

This appliance may be vented either off the rear of the appliance or off the top. Depending on your specific installation, a vent cover must be removed from either the top or rear of the appliance and the inner and outer collars attached.

The appliance is shipped with vent components on the top of the appliance. See Figure 7.1. To remove the vent components from the appliance remove the two screws located in the corners. Remove the insulated top cover plate, back flue cover plate, top flue cover plate, 8 in. outer collar with gasket, and 5 in. inner collar with gasket.

WARNING



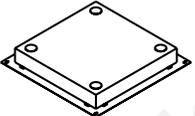
Fire Risk



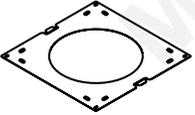
Asphyxiation Risk

All covers **MUST** be sealed.

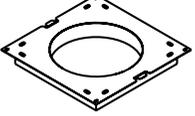
- Heat could ignite combustible materials.
- Combustion gases could leak into the room.



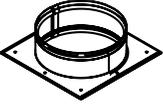
The insulated top cover plate is used to close the appliance top when rear venting. (Plate inverted for clarity.)



The back flue cover is used for rear venting.



The top flue cover plate is used for top venting.



8 in. Outer Collar



5 in. Inner Collar

Figure 7.1 Venting Components (in order of disassembly)

Convert to Top Vent

- Remove the outer cover plate, then the inner cover plate by removing the screws.
- Place the 5 in. inner collar into the appliance with the screws removed from the cover plate.
- Attach the 8 in. outer collar to the appliance top using the screws removed. Make sure the gaskets for the inner and outer collars seal tightly.
- Place the 12 in. top cover plate with insulation and an 8 in. hole over the outer collar and secure with screws from the parts bag. See Figure 7.2.

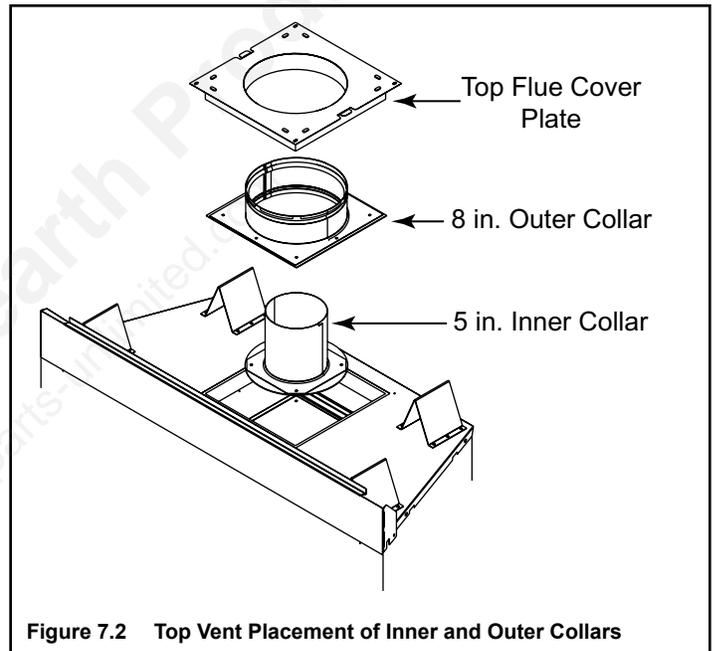
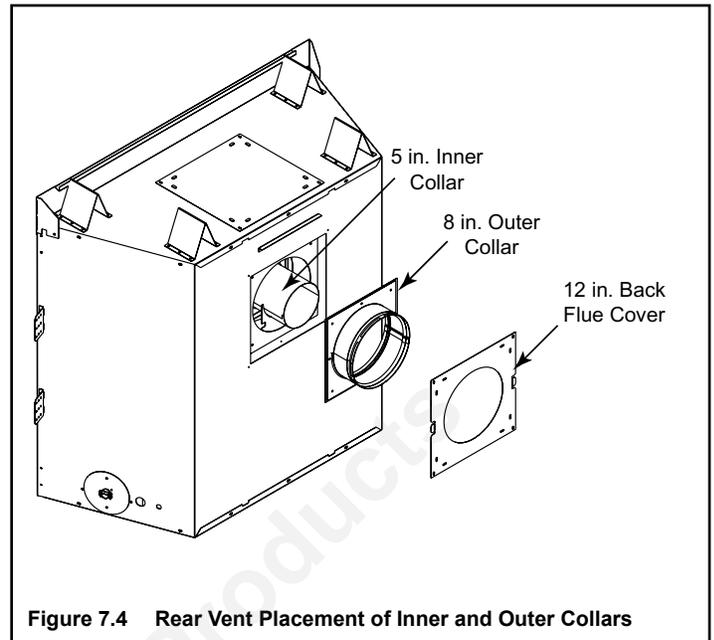


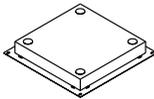
Figure 7.2 Top Vent Placement of Inner and Outer Collars

Convert to Rear Vent

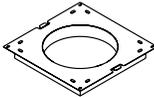
- Remove the back cover plate, outer cover plate and inner cover plate by removing the screws.
- Place the 5 in. inner collar in the appliance with the screws removed from the cover plates.
- Attach the 8 in. outer collar to the appliance back using the screws removed. Make sure the gaskets for the inner and outer collars seal tightly.
- Place the 12 in. back flue cover with an 8 in. hole over the outer collar and secure with screws removed. See Figures 7.3 and 7.4.
- Place the top cover plate with insulation and without the 8 in. hole on the top of the appliance and secure with screws from the parts bag.



When rear venting, seal the unused top opening with the insulated top cover plate. Install with the insulation down.



When top venting, use the insulated top flue cover plate with an 8 in. opening. Install with the insulation down.



The opening on the top of the appliance must be sealed with an insulated cover.

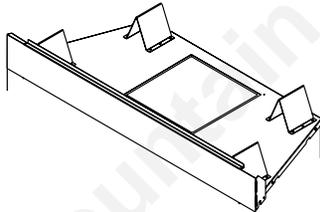


Figure 7.3 Insulated Top Covers

B. Secure and Level the Appliance



WARNING

Fire Risk!

- Prevent contact with sagging, loose insulation.
- Do NOT install against combustible materials such as exposed insulation, plastic and insulation backer.

The diagram shows how to properly position, level, and secure the appliance (see Figure 7.5). Nailing tabs are provided to secure the appliance to the framing members.

- Rear venting - refer to Vent Clearances and Framing (Section 6) for hole location.
- Place the appliance into position.
- Level the appliance from side to side and front to back.
- Shim the appliance as necessary. It is acceptable to use wood shims.
- Bend out nailing tabs on each side.
- Keep nailing tabs flush with the framing.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.



WARNING

Fire Risk

- ALWAYS maintain specified clearances around the appliance.
- Do NOT notch into the framing around the appliance spacers.

Failure to keep insulation or other materials away from vent pipe may cause fire.

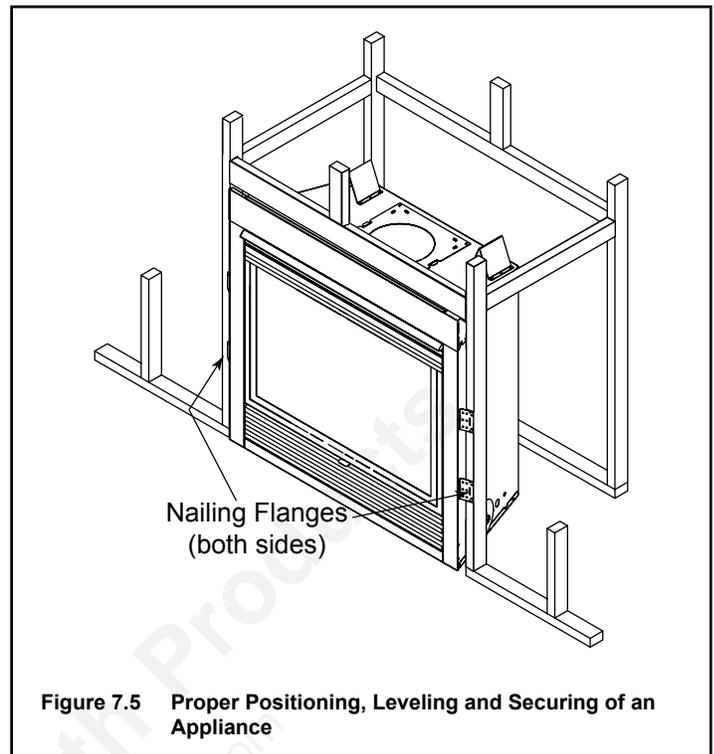


Figure 7.5 Proper Positioning, Leveling and Securing of an Appliance

CAUTION

Do NOT notch into the framing around the appliance spacers.

8 Installing Vent Pipe

A. Assemble Vent Sections

	WARNING
	Fire Risk Exhaust Fumes Risk
	<ul style="list-style-type: none">• Overlap pipe slip sections at least 1-1/2 in.• Use pilot holes for screws.• Screws must not exceed 1 in. long.• Pipe may separate if not properly joined.

Attach Vent to the Firebox Assembly

To attach the first pipe section to the collars, slide the male end of the inner vent of the pipe section over the inner collar on the firebox assembly. At the same time, slide the outer flue over the outer collar on the appliance. Push the pipe section into the appliance collar until all the lances (see Figure 8.1) have snapped in place. Tug slightly on the section to confirm it has completely locked into place.

Commercial, Multi-family (multi-level exceeding two stories), or High-rise Applications

For installation into a commercial, multi-family (multi-level exceeding two stories), or high-rise application: All outer pipe joints must be sealed with high temperature silicone, including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections. See Figure 8.1.
- Only outer pipes are to be sealed. Do not seal the inner flue. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

Note: The end of the pipe sections with the lances/tabs on it will face towards the appliance.

	WARNING
	Fire Risk Explosion Risk
	If slip section seals are broken during the removal of the termination cap, gas will leak and a fire or explosion may occur.
	do not break silicone seals on slip sections.

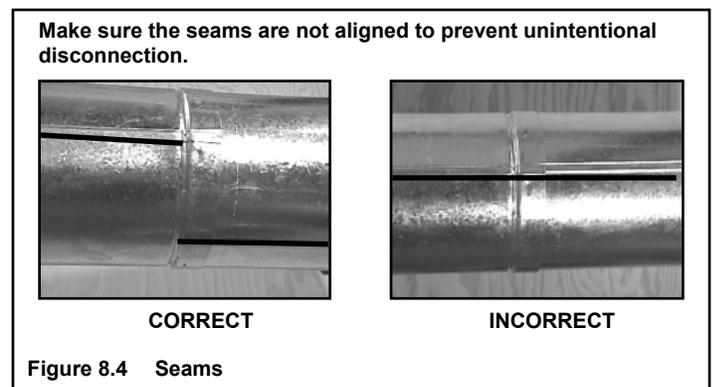
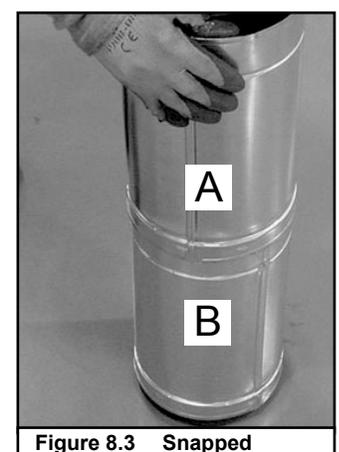
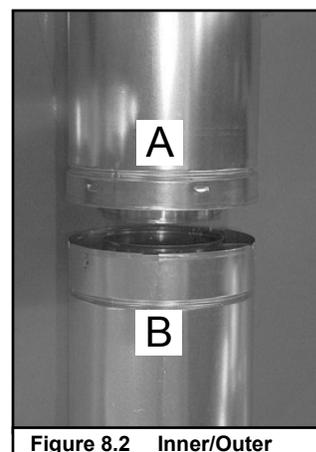
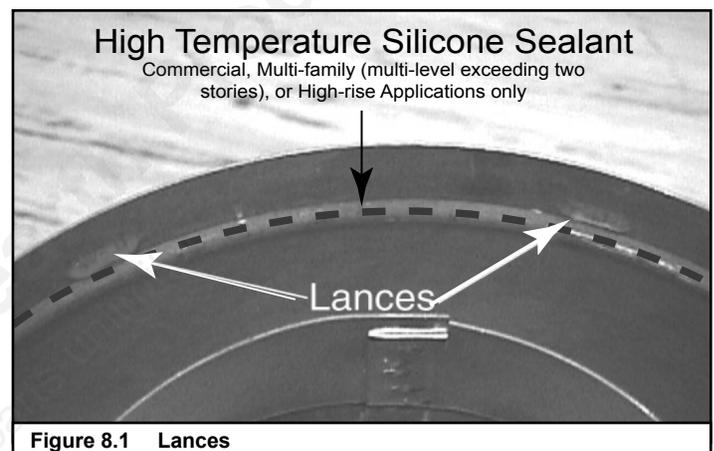
Assemble Pipe Sections

Insert the inner flue of section A into the flared inner flue of section B.

Start the outer flue of section A over the outer flue of section B (see Figure 8.2).

Once both inner and outer flues are started, press section A onto section B firmly until all lances have snapped into place. Check to make sure they have snapped together (see Figure 8.3) and the seams are not aligned (see Figure 8.4). Tug slightly on section A to confirm it has completely locked into place. It is acceptable to use screws no longer than 1 in. (25 mm) to hold outer pipe sections together. If predrilling holes, do NOT penetrate inner pipe.

For 90° and 45° elbows that are changing the vent direction from horizontal to vertical, one screw minimum should be put in the outer flue at the horizontal elbow joint to prevent the elbow from rotating. Use screws no longer than 1 in. (25 mm). If predrilling holes, do NOT penetrate inner pipe.



Assemble Minimum Installation (MI) Sections

MI sections are non-unitized so that they can be cut to a certain length. Cut these sections to length from the non-expanded end (see Figure 8.5).

They can then be attached by first connecting the expanded end of the MI inner flue with the inner pipe from the adjacent pipe section and securing with three screws. The expanded portion of the MI inner flue must overlap completely with the unexpanded end of the adjacent pipe section.

The outer flue can then be inserted into the adjacent outer flue expanded end and attached to the next pipe section with three screws. The other end of the MI pipe section can then be attached by fitting another pipe section to it and snapping it together, as normal.

Assemble Slip Sections

The outer flue of the slip section should slide over the outer flue of the pipe section and into (inner flue) the last pipe section (see Figure 8.6).

Slide together to the desired length, making sure that a 1-1/2 in. outer flue overlap is maintained between the pipe section and slip section.

The pipe and slip section need to be secured by driving two screws through the overlapping portions of the outer flues using the pilot holes (see Figure 8.7).

This will secure the slip section to the desired length and prevent it from separating. The slip section can then be attached to the next pipe section.

If the slip section is too long, the inner and outer flues of the slip section can be cut to the desired length.

Note: When installing a vent system with an HRC termination cap, all pipe system joints shall be sealed using a high-temperature silicone sealant.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections.
- Only outer pipes are sealed, sealing the inner flue is not required. All unit collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner.

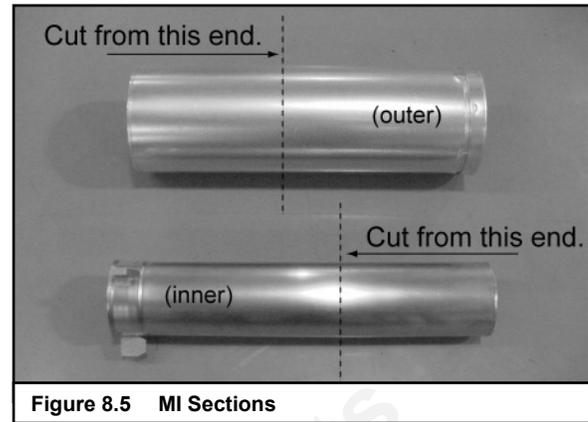


Figure 8.5 MI Sections

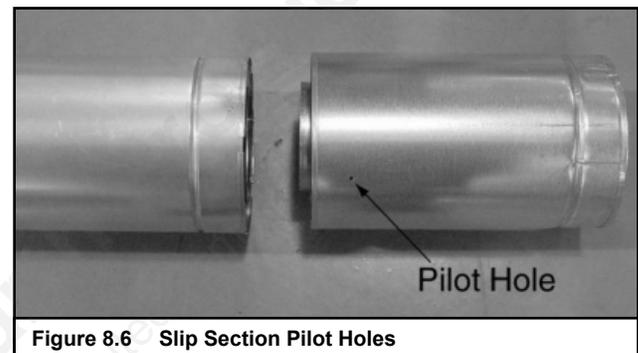


Figure 8.6 Slip Section Pilot Holes

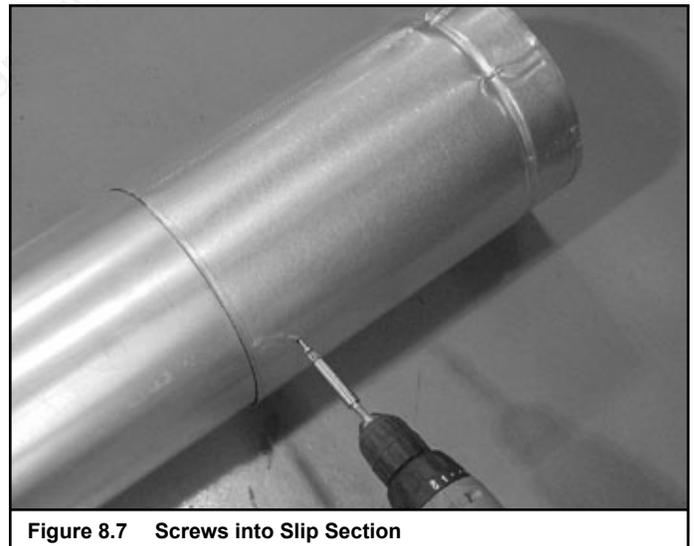


Figure 8.7 Screws into Slip Section

Secure Vent Sections

Vertical sections of pipe must be supported every 8 ft after the 25 ft maximum unsupported rise. The vent support or plumber's strap (spaced 120° apart) may be used to do this (see Figures 8.8 and 8.9).

Horizontal sections of vent must be supported every 5 ft with a vent support or plumber's strap.

B. Disassemble Vent Sections

To disassemble any two pieces of pipe, rotate either section (see Figure 8.10), so that the seams on both pipe sections are aligned (see Figure 8.11). They can then be carefully pulled apart.

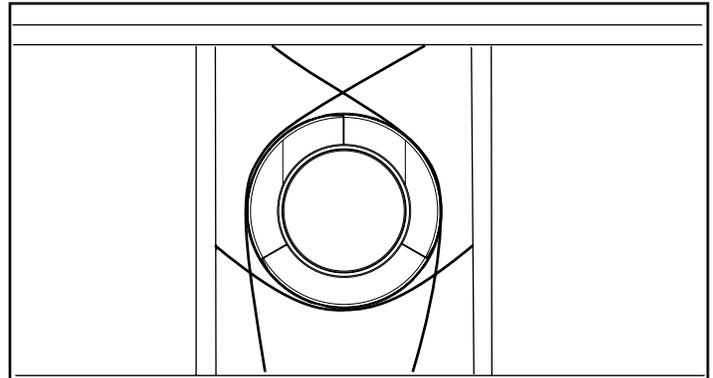


Figure 8.8 Securing Vertical Pipe Sections

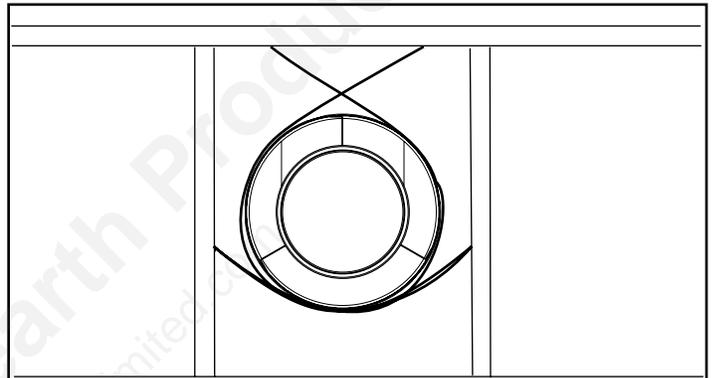


Figure 8.9 Securing Horizontal Pipe Sections

	WARNING
	Fire Risk Explosion Risk Asphyxiation Risk
	Use vent run supports per installation instructions. Connect vent sections per installation instructions
	<ul style="list-style-type: none">• Maintain all clearances to combustibles.• Do NOT allow vent to sag below connection point to appliance.
	Improper support may allow vent to sag or separate.

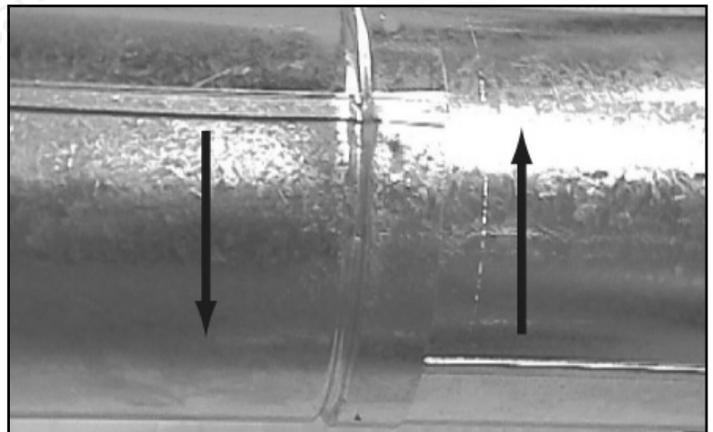


Figure 8.10 Rotate Seams for Disassembly

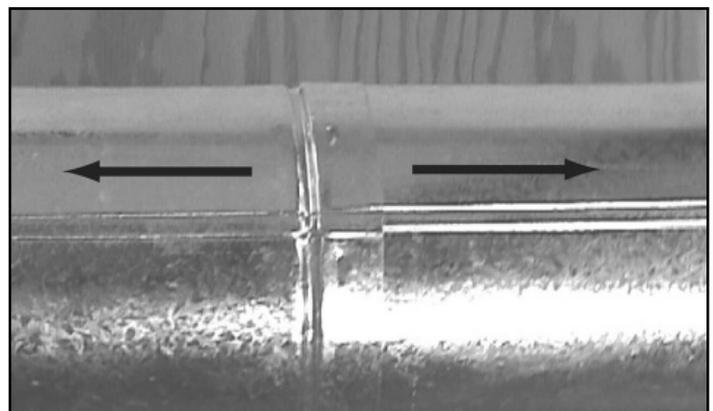


Figure 8.11 Align and Disassembly Vent Sections

C. Install Heat Shield and Horizontal Termination Cap



⚠ WARNING

Fire Risk
Impaired performance of appliance.

- Telescoping flue section of termination cap **MUST** be used when connecting pipe section to termination cap.
- Maintain a 1-1/2 in. minimum overlap on telescoping flue section of termination cap.



⚠ WARNING

Fire Risk
Exhaust Fumes Risk
Impaired performance of appliance.



- Overlap pipe slip sections at least 1-1/2 in.
- Use pilot holes for screws.
- Screws must not exceed 1 in. long.
- Pipe may separate if not properly joined.

Heat Shield Requirements for Horizontal Termination

For all horizontally vented appliances, a heat shield **MUST** be placed 1 in. (25 mm) above the top of the vent between the wall shield firestop and the base of the termination cap.

There are two sections of the standard heat shield. One section is factory-attached to the wall shield firestop. The other section is factory-attached to the cap. See Figure 3.1.

If the wall thickness does not allow the required 1-1/2 in. (38 mm) heat shield overlap when installed, an extended heat shield must be used.

Important Notice: Heat shields may NOT be field constructed.

The extended heat shield may need to be cut to length. You will attach the cut heat shield to the existing cap heat shield or wall shield firestop heat shield (refer to Figure 3.1) using the supplied screws. You **MUST** maintain a 1-1/2 in. (38 mm) overlap of the extended heat shield and the existing shields (both ends of the heat shield). The small leg on the extended heat shield should rest on the top of the vent (pipe section) to properly space it from the pipe section.

Install Horizontal Termination Cap

Vent termination must not be recessed in the wall. Siding may be brought to the edge of the cap base.

Flash and seal as appropriate for siding material at outside edges of cap.

When installing a horizontal termination cap, follow the cap location guidelines as prescribed by current **ANSI Z223.1** and **CAN/CGA-B149** installation codes.



⚠ WARNING

Burn Risk

- Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.

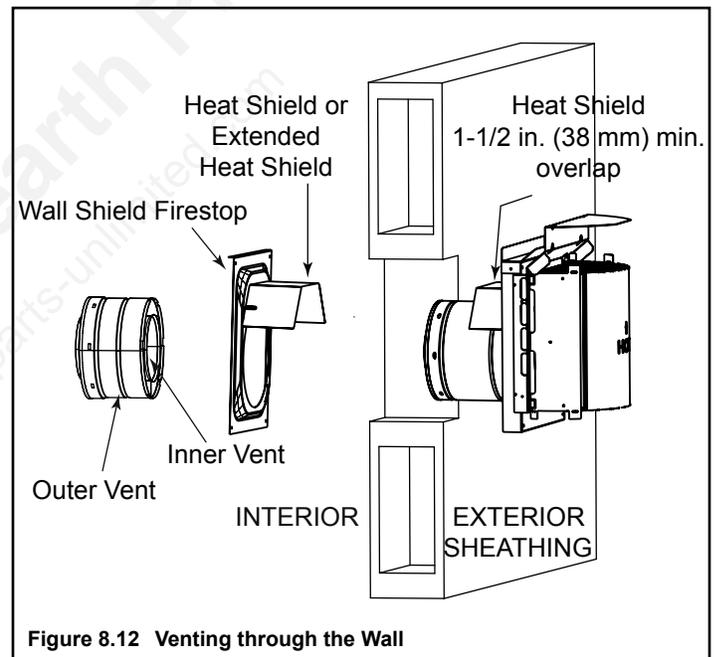


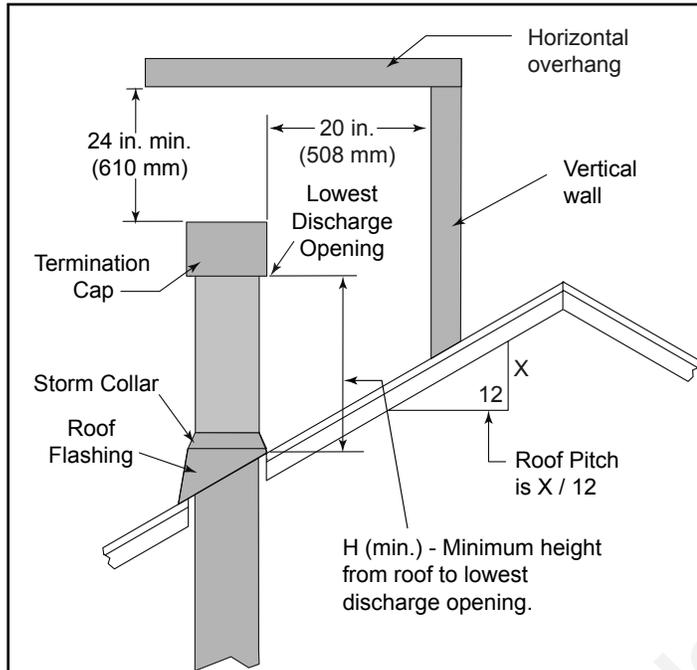
Figure 8.12 Venting through the Wall

Note: Where required, an exterior wall flashing is available. When penetrating a brick wall, a brick extension kit is available for framing the brick.

D. Install Roof Flashing and Vertical Termination Cap

To install roof flashing see Figures 8.13 and 8.14.

For installation of vertical termination cap see minimum vent heights for various pitched roofs (Figure 8.13) .



Roof Pitch	H (Min.) Ft.	Roof Pitch	H (Min.) Ft.
Flat to 6/12	1.0*	Over 11/12 to 12/12	4.0
Over 6/12 to 7/12	1.25*	Over 12/12 to 14/12	5.0
Over 7/12 to 8/12	1.5*	Over 14/12 to 16/12	6.0
Over 8/12 to 9/12	2.0*	Over 16/12 to 18/12	7.0
Over 9/12 to 10/12	2.5	Over 18/12 to 20/12	7.5
Over 10/12 to 11/12	3.25	Over 20/12 to 21/12	8.0

* 3 ft. minimum in snow regions

Figure 8.13 Minimum Height from Roof to Lowest Discharge Opening

Caulk the gap between the roof flashing and the outside diameter of the pipe. Caulk the perimeter of the flashing where it contacts the roof surface. See Figure 4.4.

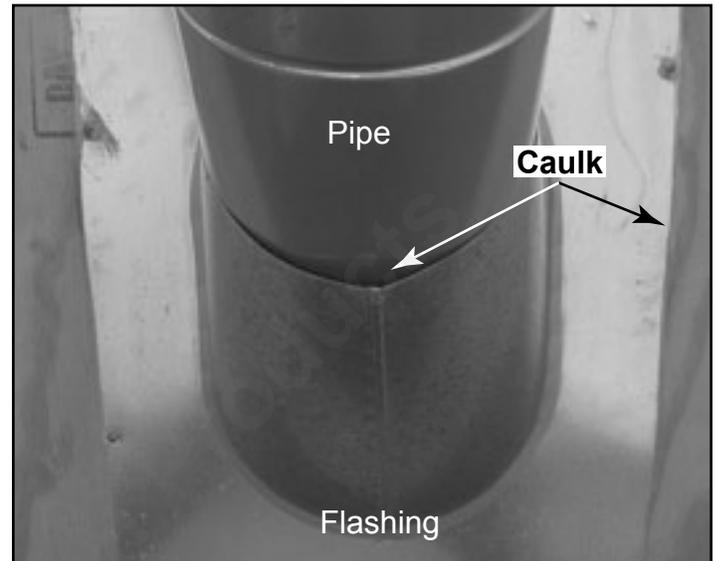


Figure 8.14 Caulk the Gap

To attach the vertical termination cap, slide the inner collar of the cap into the inner flue of the pipe section and place the outer collar of the cap over the outer flue of the pipe section.

Secure with three screws into the outer flue. Secure the cap by driving the three self-tapping screws (supplied) through the pilot holes in the outer collar of the cap into the outer flue of the pipe (see Figure 8.14).

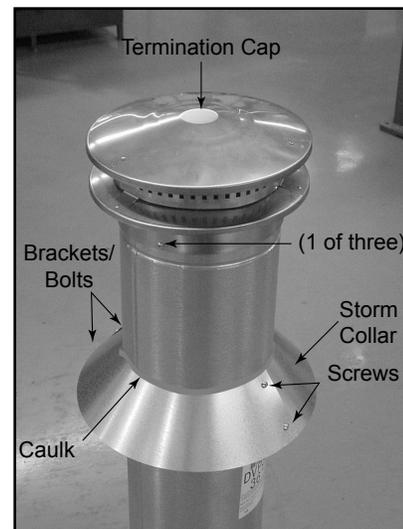


Figure 8.15 Secure with Screws

WARNING

Fire Risk
Explosion Risk

Inspect external vent cap regularly.

- Ensure no debris blocks cap.
- Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.

E. Assemble and Install Storm Collar

CAUTION	
	Sharp Edges!
	<ul style="list-style-type: none">• Wear protective gloves and safety glasses during installation.
	

Connect both halves of the storm collar with two screws (see Figure 8.16).

Wrap the storm collar around the exposed pipe section and align brackets. Insert a bolt (provided) through the brackets and tighten the nut to complete the storm collar assembly. Make sure the collar is tight against the pipe section. See Figure 8.17.

Slide the assembled storm collar down the pipe section until it rests on the roof flashing.

Caulk around the top of the storm collar (see Figure 8.15).

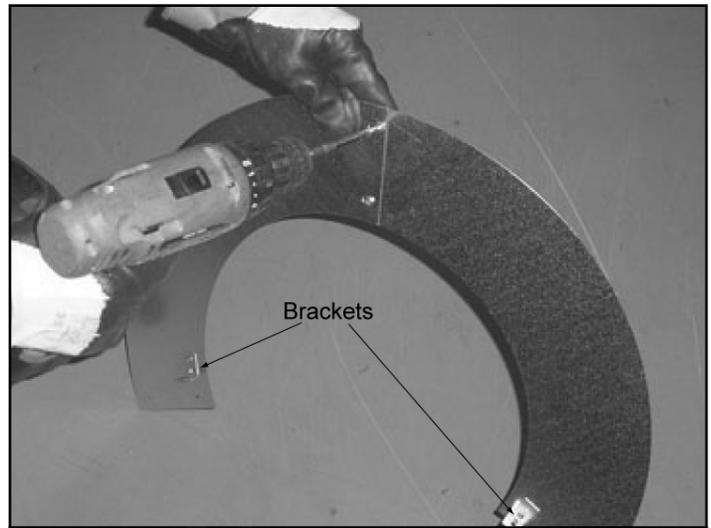


Figure 8.16 Assembling the Storm Collar



Figure 8.17 Assembling the Storm Collar Around the Pipe

9 Gas Information

A. Fuel Conversion

Before making gas connections ensure appliance being installed is compatible with the available gas type.

Any natural or propane gas conversions necessary to meet the appliance and locality needs must be made by a qualified technician using Hearth & Home Technologies specified and approved parts.

B. Gas Pressure

Proper input pressures are required for optimum appliance performance. Gas line sizing requirements need to be made following **NFPA51**.

 **WARNING**




Fire Risk
Explosion Risk

High pressure will damage valve.

- Disconnect gas supply piping **BEFORE** pressure testing gas line at test pressures above 1/2 psig.
- Close the manual shutoff valve **BEFORE** pressure testing gas line at test pressures equal to or less than 1/2 psig.

 **WARNING**




Fire Risk
Explosion Risk

Verify inlet pressures.

- High pressure may cause overfire condition.
- Low pressure may cause explosion.
- Verify minimum pressures when other household gas appliances are operating.

Install regulator upstream of valve if line pressure is greater than 1/2 psig.

Pressure requirements for appliance are shown in table below. Minimum pressures must be met when other household gas appliances are operating.

Pressure	Natural Gas	Propane
Minimum Inlet Pressure	5.0 in. w.c.	11.0 in. w.c.
Maximum Inlet Gas Pressure	7.0 in. w.c.	14.0 in. w.c.
Manifold Pressure	3.5 in. w.c.	10.0 in. w.c.

C. Gas Connection

Note: Have the gas supply line installed in accordance with local building codes, if any. If not, follow **ANSI 223.1**. Installation should be done by a qualified installer approved and/or licensed as required by the locality. (In the Commonwealth of Massachusetts installation must be performed by a licensed plumber or gas fitter.)

Note: A listed (and Commonwealth of Massachusetts approved) 1/2 in. (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 in. (13 mm) control valve inlet.

- If substituting for these components, please consult local codes for compliance.

Refer to Reference Section 16 for location of gas line access in appliance.

Note: Gas line may be run from either side of appliance provided the hole in the outer wrap does **NOT** exceed 2-1/2 in. in diameter and does not penetrate the firebox.

 **WARNING**



Gas Leak Risk

- Support control when attaching pipe to prevent bending gas line.

Note: The gap between supply piping and gas access hole may be caulked with high temperature caulk or stuffed with non-combustible, unfaced insulation to prevent cold air infiltration.

- Ensure that gas line does not come in contact with outer wrap of appliance. Follow local codes.
- Incoming gas line should be piped into the valve compartment and connected to the 1/2 in. connection on the manual shutoff valve.

	WARNING
 	<p>Fire Risk Explosion Risk</p> <ul style="list-style-type: none"> • Gas build-up during line purge may ignite. • Purge should be performed by qualified technician. • Ensure adequate ventilation. • Ensure there are no ignition sources such as sparks or open flames.

- A small amount of air will be in the gas supply lines. When first lighting appliance it will take a short time for air to purge from lines. When purging is complete the appliance will light and operate normally.

	WARNING
  	<p>CHECK FOR GAS LEAKS Fire Risk Explosion Risk Asphyxiation Risk</p> <ul style="list-style-type: none"> • Check all fittings and connections. • Do not use open flame. • After the gas line installation is complete, all connections must be tightened and checked for leaks with a commercially available, non-corrosive leak check solution. Be sure to rinse off all leak check solution following testing. <p>Fittings and connections may have loosened during shipping and handling.</p>

	WARNING
	<p>Fire Risk</p> <p>Do NOT change the valve settings.</p> <ul style="list-style-type: none"> • This valve has been preset at the factory. • Changing valve settings may result in fire hazard or bodily injury.

D. High Altitude Installations

U.L. listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 ft in the USA and Canada.

When installing this appliance at an elevation above 2000 ft, it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Input rate should be reduced by 4% for each 1000 ft above a 2000 ft elevation in the U.S.A., or 10% for elevations between 2000 and 4500 ft in Canada. If the heating value of the gas has been reduced, these rules do not apply. To identify the proper orifice size, check with the local gas utility.

If installing this appliance at an elevation above 4500 ft (in Canada), check with local authorities.

10 Electrical Information

A. Connect to the Appliance

WARNING

Shock Risk
Explosion Risk

Do NOT wire 110V to valve.
Do NOT wire 110V to wall switch

- Incorrect wiring will damage millivolt valves.

Note: This appliance must be electrically wired and grounded in accordance with local codes or, in the absence of local codes, with **National Electric Code ANSI/NFPA 70-latest edition** or the **Canadian Electric Code CSA C22.1**.

B. Standing Pilot Ignition System Wiring

- This standing pilot ignition system wiring does not require a 110 VAC supply to operate.
- It is recommended that a 110 VAC junction box be installed for use with a fan or remote control. (See Figure 10.3 for junction box wiring.)

Note: Do not wire 110V to the millivolt valve! This will damage the valve.

Optional Accessories Requirements

Wiring for optional accessories should be done now to avoid reconstruction.

- This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.
- If using thermostat use one compatible with a millivolt gas valve system.
- Follow parameters for locating thermostat (see individual thermostat instructions) to ensure proper operation of appliance.
- Use low resistance thermostat wire for wiring from ignition system to the wall switch and thermostat.
- Keep wire lengths short as possible by removing any excess wire length.
- Low voltage and 110 VAC voltage cannot be shared within the same wall box.

CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

WARNING

Shock Risk

- Replace damaged wire with type 105° C rated wire.
- Wire must have high temperature insulation.

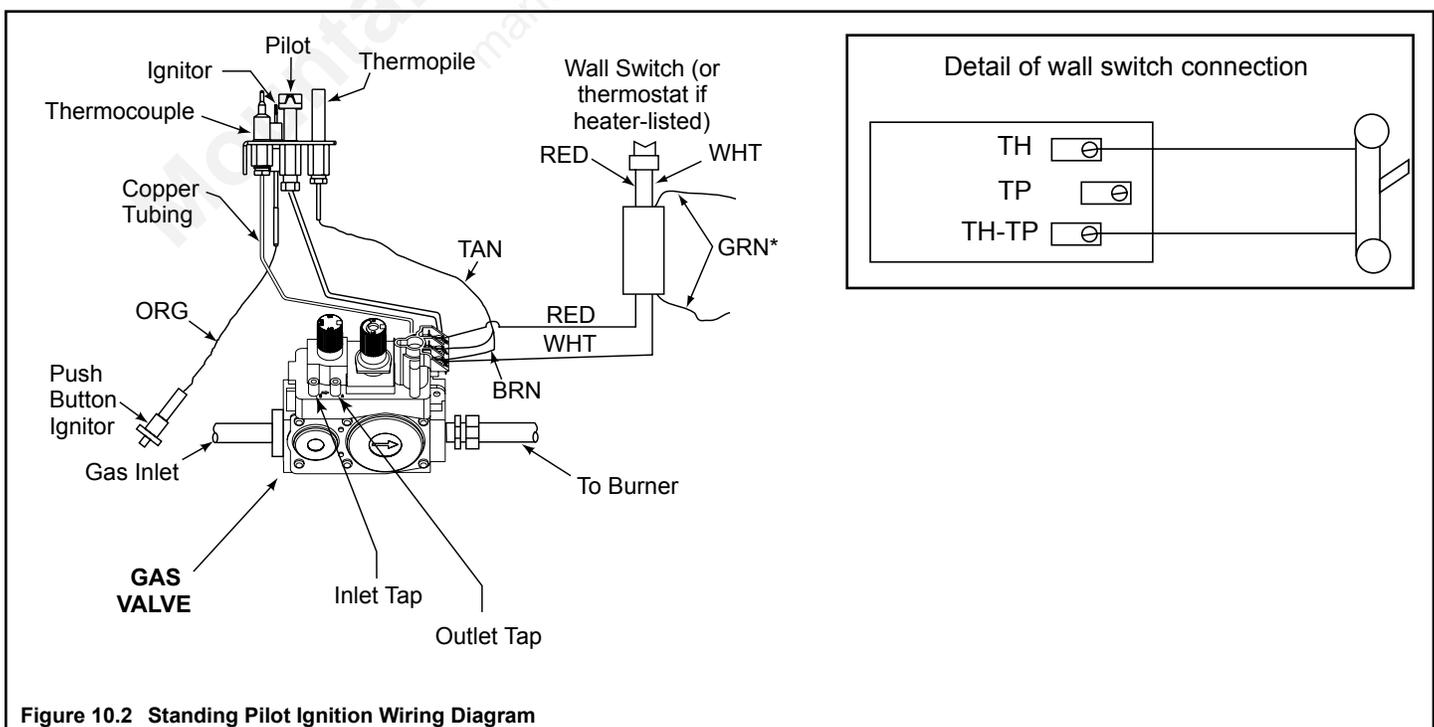


Figure 10.2 Standing Pilot Ignition Wiring Diagram

C. Junction Box Installation

Remove the junction box assembly from the valve compartment.

If the box is being wired from the **OUTSIDE** of the appliance:

- Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
- Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
- Attach the junction box assembly to the outside of the appliance with the two screws provided.

If the box is being wired from the **INSIDE** of the appliance:

- Pull the electrical wires from outside the appliance through this opening into the valve compartment.
- Loosen the two screws on the Romex connector, feed the necessary length of wire through the connector and tighten the screws.
- Make all necessary wire connections to the receptacle and assemble the receptacle and cover to the junction box.
- Attach the junction box assembly to the inside of the appliance with the two screws provided.

If the box is not wired at the time of appliance installation, assemble the receptacle and cover to the box and install on the inside of the appliance.

14-3 with ground Romex is the recommended wiring to the appliance junction box. This allows the outlet for the fan to be powered independently from other accessories.

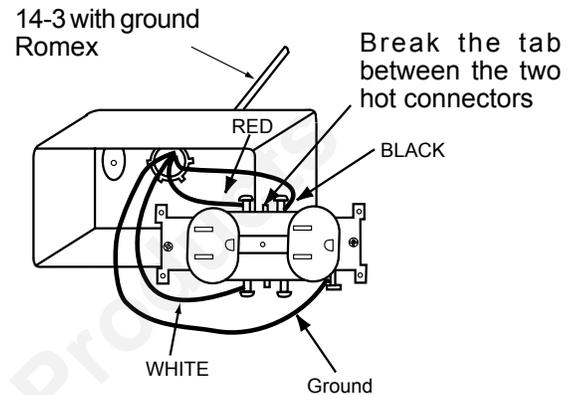
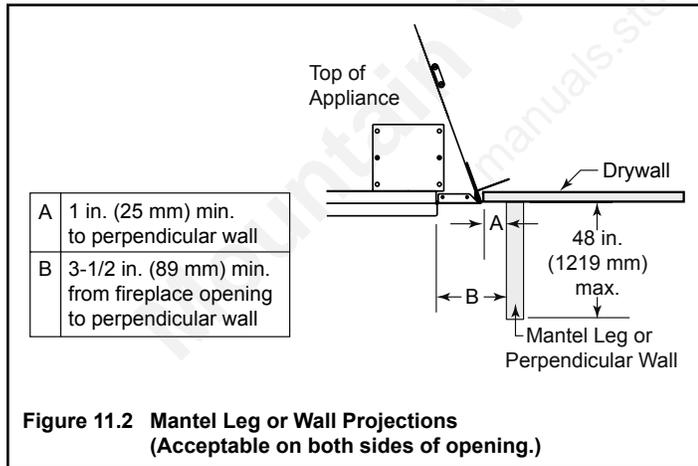
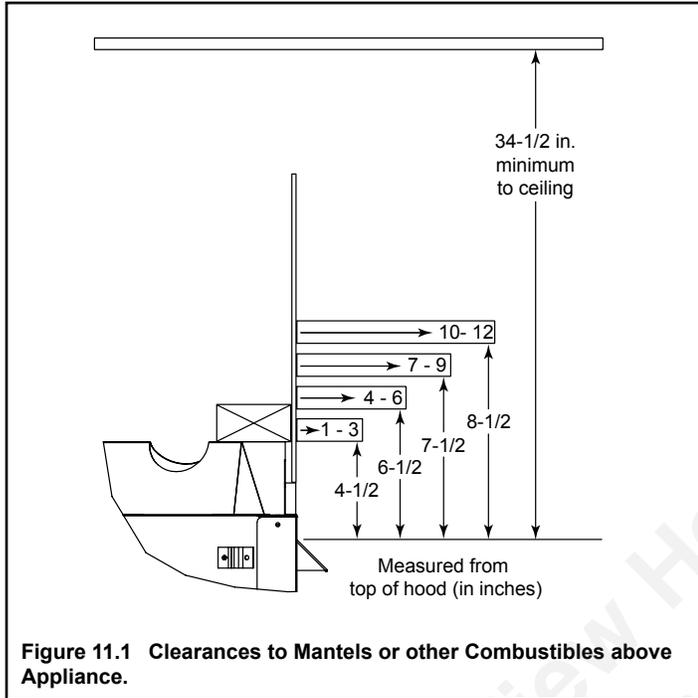


Figure 10.3 Junction Box Detail

11 Finishing

A. Mantel Projections

Figure 11.1 shows the minimum vertical and corresponding maximum horizontal dimensions of appliance mantels or other combustible projections above the top front edge of the appliance.



WARNING

Fire Risk
Explosion Risk

- Facing and/or finishing materials must never overhang into the glass opening.
- Overhanging materials may ignite.
- May interfere with proper operation of glass assembly.

B. Facing Material

WARNING

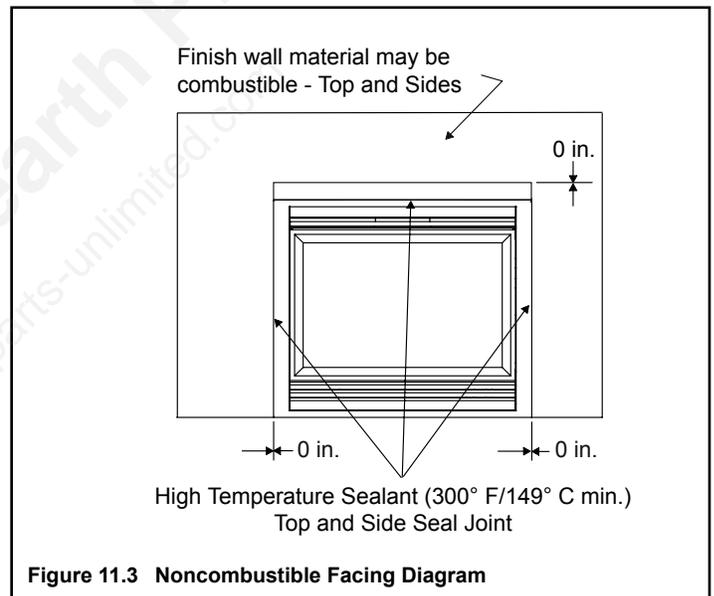
Fire Risk

Do NOT obstruct air inlet or outlet grilles. Do NOT modify grilles.

- Modifying or covering grilles could cause temperature rise and fire hazard.

Finishing materials must not interfere with:

- Air flow through grilles or louvers.
- Operation of louvers or doors.
- Access for service.



WARNING

Fire Risk

Finish all edges and fronts to clearances and specifications listed in manual.

- Metal appliance front may be covered with non-combustible material only.
- Do NOT overlap combustible materials onto appliance front.
- Install combustible materials only up to specified clearances on top, front and sides.
- Seal joints between the finished wall and appliance top and sides using only a 300° F minimum sealant.

12 Appliance Setup

A. Remove Glass Assembly

See Section 12.H.

B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox.

C. Clean the Appliance

Clean/vacuum any sawdust that may have accumulated inside the firebox or underneath in the control cavity.



Figure 12.2 Placing the Vermiculite

⚠ WARNING

Shock Risk
Fire Risk

Use ONLY optional accessories approved for this appliance.

- Using non-listed accessories voids warranty.
- Using non-listed accessories may result in a safety hazard.
- Only Hearth & Home Technologies approved accessories may be used safely.

F. Place the Rockwool

- Place a small amount of 1/2 in. diameter pieces (dime-size) of rockwool on the burner pan so the rockwool touches but does not cover the holes in the burner pan. See Figures 12.3 and 12.4. It is not necessary to use the entire bag.
- Save the remaining rockwool for future use.

D. Install the Refractory

Follow instructions included with the optional refractory kit.

E. Place the Lava Rock and Vermiculite

See Figures 12.1 and 12.2 for lava rock and vermiculite placement. It is not necessary to use the entire bag of either item. Save the remaining product for future use.



Figure 12.3 Placing the Rockwool



Figure 12.1 Placing the Lava Rock

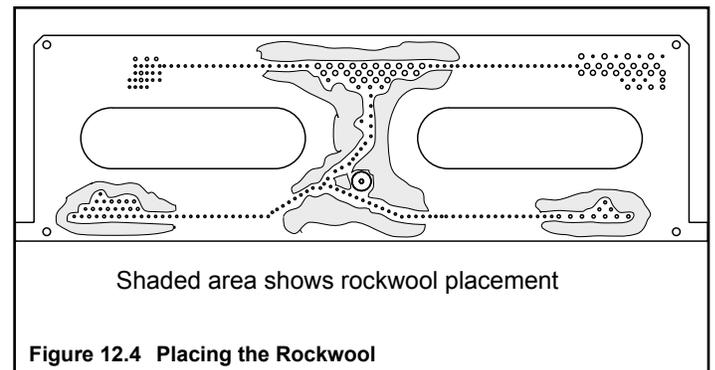


Figure 12.4 Placing the Rockwool

⚠ WARNING

Explosion Risk

- Follow rockwool placement instructions in this manual.
- Do NOT place rockwool directly over burner ports.
- Replace rockwool material annually.

Improperly placed rockwool interferes with proper burner operation.

G. Log Assembly

Inspect the log set. The log set is shipped in one piece and should look similar to that in Figure 12.5.

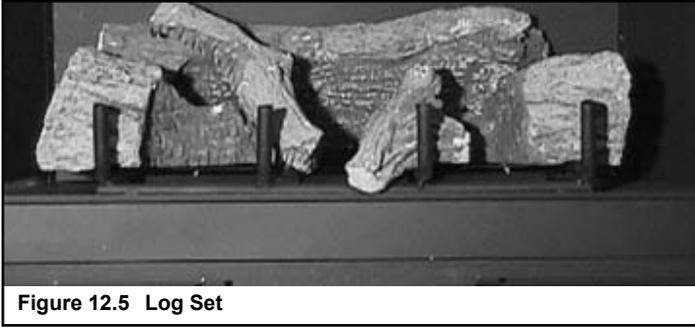


Figure 12.5 Log Set

H. Glass Assembly

The glass assembly will be removed and replaced as shown in Figure 12.6.

	WARNING
	<p>Handle glass doors with care.</p> <ul style="list-style-type: none">• Inspect the gasket to ensure it is undamaged.• Inspect the glass for cracks, chips or scratches.• Do NOT strike, slam or scratch glass.• Do NOT operate appliance with glass door removed, cracked, broken or scratched.• Replace glass door assembly as a complete assembly.

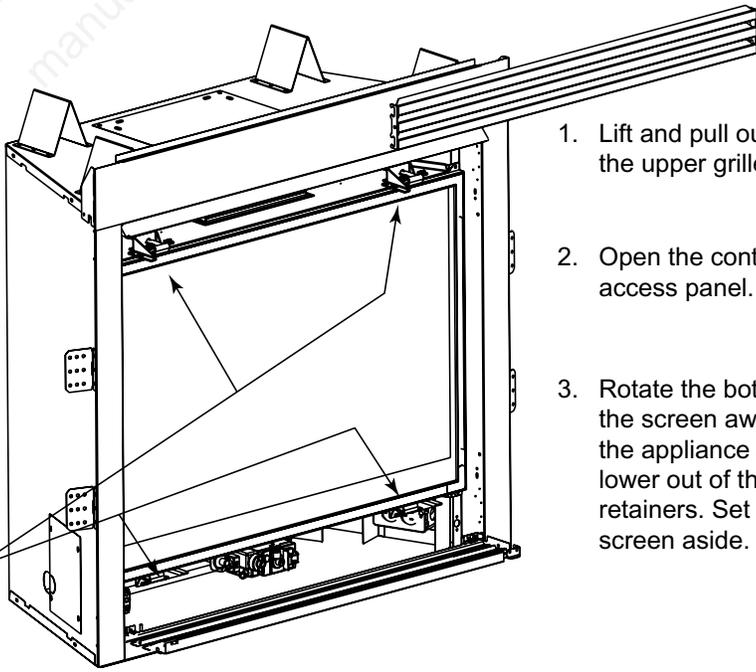
<p>8. Reattach the four Quick Access Latches.</p>	<p>9. Place the screen into the top screen retainers, lift and rotate towards the appliance. Place on the bottom retainers.</p>	<p>10. Close the control access panel and replace the upper grille.</p>
<p>7. To replace, place the glass on the bottom retainers. Glass must be firmly seated on the bottom glass retainers.</p>	<p>6. Set the glass on a nonabrasive surface. Clean using a nonabrasive, mild cleaning solution (i.e. Brasso).</p>	<p>1. Lift and pull out the upper grille.</p>
<p>5. Pull the top of the glass away from the appliance.</p>	<p>4. Pull and release four Quick Access Latches™.</p>	<p>2. Open the control access panel.</p>
<p>3. Rotate the bottom of the screen away from the appliance and lower out of the top retainers. Set the screen aside.</p>		

Figure 12.6 Removing/Replacing Glass Assembly

I. Attach the Hood

The hood must be attached or a fire hazard may result.

- Located above the upper grille panel.
- Loosen the four screws just inside the upper section of the appliance.
- Position the hood and tighten the screws.
See Figure 12.7.

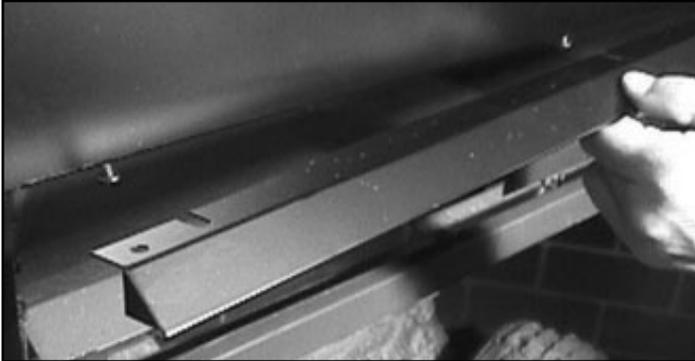


Figure 12.7 Attaching the Hood

J. Air Shutter Adjustment

To prevent the possibility of soot buildup, we have provided your appliance with an adjustable air shutter set at 1/4 in. open for natural gas and fully open for propane gas. In the event soot is accumulating in your [natural gas] appliance, the air shutter should be opened farther.

K. Accessories

Install approved accessories per instructions included with accessories.

13 Operating Instructions

A. Before Lighting Appliance

Before operating this appliance, have a qualified technician:

- Verify all shipping materials have been removed from inside and/or underneath the firebox.
- Review proper placement of logs, rockwool, lava rock and vermiculite.
- Check the wiring.
- Check the air shutter adjustment.
- Ensure that there are no gas leaks.
- Ensure that the glass is sealed and in the proper position.
- Ensure that the flow of combustion and ventilation air is not obstructed (front grilles and vent caps).

	WARNING
	Fire Risk Asphyxiation Risk
	Glass door MUST be in place when appliance is operating. Do NOT operate appliance with glass door removed.
	<ul style="list-style-type: none">• Open viewing glass for servicing only.• Glass door MUST be in place and sealed before operating appliance.• Only use glass doors certified for use with the appliance.• Glass replacement should be done by qualified technician.

	WARNING
	Fire Risk Burn Risk HOT! DO NOT TOUCH. SEVERE BURNS MAY RESULT. CLOTHING IGNITION MAY RESULT
	Glass and other surfaces are hot during operation and cool down.
	<ul style="list-style-type: none">• Keep children away.• CAREFULLY SUPERVISE children in same room as appliance.• Alert children and adults to hazards of high temperatures.• Do NOT operate with protective barriers open or removed.• Keep clothing, furniture, draperies and other combustibles away.
	<i>This appliance has been supplied with an integral barrier to prevent direct contact with the fixed glass panel. Do NOT operate the appliance with the protective barrier removed.</i>
	Contact your dealer or Hearth & Home Technologies if the barrier is not present or help is needed to properly install one.

WARNING
Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

WARNING
Do NOT use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

B. Lighting the Appliance

Standing Pilot Ignition

FOR YOUR SAFETY READ BEFORE LIGHTING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

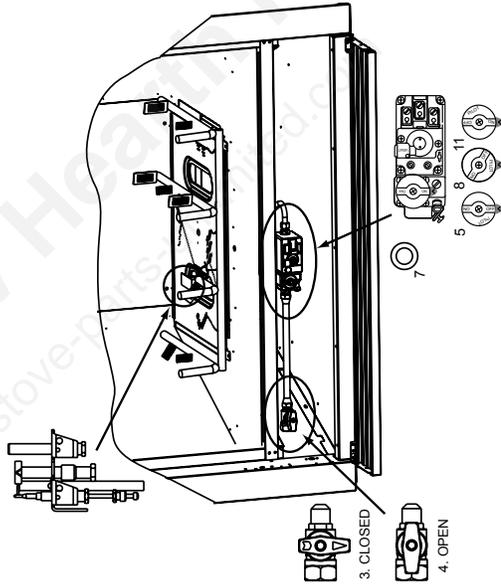
- This appliance has a pilot which must be lighted by hand. When lighting the pilot, follow these instructions exactly.
- BEFORE LIGHTING** smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
WHAT TO DO IF YOU SMELL GAS
 - Do not try to light any appliance.
 - Do not touch any electric 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.
- Use only your hand to push in or turn knob. Never use tools. If the manual gas valve will not push in or turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

Stop! Read the safety information above on this label.

- Turn wall switch to the "OFF" position or thermostat to the lowest setting.
- Remove control access panel.
- Turn manual gas valve to **CLOSED**. Wait five [5] minutes to clear out any gas. If you then smell gas, **STOP!** Follow "B" in the safety information above on this label. If you don't smell gas, go to next step.
- Turn gas line to "OPEN".
- Turn pilot knob clockwise to "OFF". (Knob may have to be depressed to pass "PILOT" position.)
- Locate pilot assembly inside appliance.
- Locate red ignitor button.
- Turn pilot knob to "PILOT" and push in.
- Continue to hold in pilot knob and push the red ignitor button 12-15 times until small blue pilot flame appears.
- Continue to hold in pilot knob for approximately one minute. Pilot should remain lit. If pilot goes out, wait 5 minutes and repeat Steps 3-9.
- Release and turn knob counterclockwise to "ON".
- If appliance will not operate, follow the instructions "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.

NOTE: To light main burner, turn wall switch to "ON". Do not light by hand.



TO TURN OFF GAS TO APPLIANCE

- Turn off wall switch or set thermostat to lowest setting.
- Remove control access panel.
- Turn manual gas valve to "CLOSED" position. Do not force.
- Replace control access panel.

Due to high surface temperatures, keep children, clothing and furniture away.

Keep burner and control compartment clean. See installation and operating instructions accompanying the appliance.

29097D

This appliance needs fresh air for safe operation and must be installed so there are provisions for adequate combustion and ventilation air.

This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 or, in Canada, current CAN/CGA-B149.

This appliance must be properly connected to a venting system in accordance with the manufacturer's installation instructions.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with the appliance. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

CAUTION: Hot while in operation. Do not touch. Keep children, clothing, furniture, gasoline and other liquids having flammable vapors away.

WARNING RISK OF FIRE

This appliance is intended to burn a specified gas fuel only. Do not attempt to use with solid wood fuel or another type of fuel. Do not attempt to modify or use any other type of gas burner system.

WARNING: Disconnect the electric power before servicing. If for any reason the original wire supplied with the appliance must be replaced, it must be replaced with 105°C or its equivalent.

For use with natural gas or propane. A conversion kit as supplied by the manufacturer shall be used to convert this appliance to the alternative fuel.

* Also certified for installation in a bedroom or a bed-sitting room.
* For U.S. only!

Natural Gas

C. After the Appliance is Lit

Initial Break-in Procedure

When you light the appliance, you may notice that it produces heat which does have an associated odor or smell. If you feel this odor is excessive it may require the initial three to four hour continuous burn on high followed by a second burn up to 12 hours to fully drive off any odor from paint and lubricants used in the manufacturing process. Condensation of the glass is normal

Note: This appliance should be run three to four 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 appliance for an additional 12 hours. This will help cure the products used in the paint and logs.

During this break-in period it is recommended that some windows in the house be opened for air circulation. This will help avoid setting off smoke detectors, and help eliminate any odors associated with the appliance's initial burning.





WARNING

Fire Risk
High Temperatures
 Keep combustible household items away from appliance.
 Do NOT obstruct combustion and ventilation air.

- Do NOT place combustible items on top of or in front of appliance.
- Keep furniture, draperies away from appliance.

CAUTION

- Prevent accidental appliance operation when not attended.
- Unplug or remove batteries from remote control if absent or if appliance will not be used for an extended period of time.
- Property damage possible from elevated temperatures.

CAUTION

Smoke and odors are released during initial operation.

- Open windows for air circulation.
- Leave room during initial operation.
- Smoke may set off smoke detectors.

Smoke and odors may be irritating to sensitive individuals.





WARNING

Fire Risk
 Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the vicinity of the appliance.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids in this appliance.

Combustible materials may ignite.

D. Frequently Asked Questions

Issue	Solutions
1. Condensation on the glass.	1. This is a result of gas combustion and temperature variations. As the appliance warms, this condensation should disappear.
2. Blue flames.	2. This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 20-40 minutes.
3. Odor from appliance.	3. When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off any oils remaining from manufacturing.
4. Film on the glass.	4. This is a normal result of the curing process of the paint and logs. Glass should be cleaned within 3-4 hours of initial burning to remove deposits left by oils from the manufacturing process. A non-abrasive cleaner such as a gas fireplace glass cleaner may be necessary. See your dealer.
5. Metallic noise.	5. Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
6. Is it normal to see the pilot flame burn continually?	6. In a standing pilot system the pilot will always stay on.

14 Troubleshooting

With proper installation, operation and maintenance your gas appliance will provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service person in the diagnosis of a problem and the corrective action to be taken. This troubleshooting guide can only be used by a qualified service technician.

A. Standing Pilot Ignition System

Symptom		Possible Causes		Corrective Actions
1.	After repeated triggering of the red or black piezo ignitor button, the spark ignitor will not light the pilot.	A.	Defective ignitor.	Check the spark at the electrode and pilot. If there is no spark and the electrode wire is properly connected, replace the ignitor.
		B.	Defective pilot or misaligned electrode (spark at electrode).	Using a match, light the pilot. If the pilot lights, turn off the pilot and trigger the red or black piezo ignitor button again. If the pilot lights, an improper gas/air mixture caused the bad lighting and a longer purge period is recommended. If the pilot will not light, ensure the gap at the electrode and pilot is 1/8 in. to have a strong spark. If the gap is OK, replace the pilot.
		C.	No gas or low gas pressure.	Check the remote shut-off valves from the appliance. There is usually a valve near the gas main. There can be more than one valve between the appliance and the main.
		D.	No LP in tank.	Check the LP (propane) tank. You may be out of fuel.
2.	The pilot will not stay lit after carefully following the lighting instructions	A.	Defective thermocouple.	Check that the pilot flame impinges on the thermocouple. Clean and/or adjust the pilot for maximum flame impingement. Ensure that the thermocouple connection at the gas valve is fully inserted and tight (hand tighten plus 1/4 turn). Disconnect the thermocouple from the valve, place one millivolt meter lead wire on the tip of the thermocouple and the other meter lead wire on the thermocouple copper lead. Start the pilot and hold the valve knob in. If the millivolt reading is less than 15mV, replace the thermocouple.
		B.	Defective valve.	If the thermocouple is producing more than 15 millivolts, replace faulty valve.
3.	The pilot is burning, there is no gas burning, the valve knob is in the ON position, and the ON/OFF switch is in the ON position.	A.	ON/OFF switch or wires are defective.	Check the ON/OFF switch and wires for proper connections. Place the jumper wires across the terminals at the switch. If the burner comes on, replace the defective switch. If the switch is OK, place the jumper wires across the switch wires at the gas valve. If the burner comes on, the wires are faulty or connections are bad.
		B.	Thermopile may not be generating sufficient millivoltage.	If the pilot flame is not close enough physically to the thermopile, adjust the pilot flame. Be sure the wire connections from the thermopile at the gas valve terminals are tight and that the thermopile is fully inserted into the pilot bracket. Check the thermopile with a millivolt meter. Take the reading at TH-TP&TP terminals of the gas valve. The meter should read 325 millivolts minimum while holding the valve knob depressed in the pilot position, with the pilot lit, and the ON/OFF switch in the OFF position. Replace the faulty thermopile if the reading is below the specified minimum. With the pilot in the ON position, disconnect the thermopile leads from the valve. Take a reading at the thermopile leads. The reading should be 325 millivolts minimum. Replace the thermopile if the reading is below the minimum.
		C.	Defective valve.	Turn the valve knob to the ON position. Place the ON/OFF switch in the ON position. Check the millivolt meter at the thermopile terminals. The millivolt meter should read greater than 125mV. If the reading is acceptable, and if the burner does not come on, replace the gas valve.
		D.	Plugged burner orifice.	Check the burner orifice for stoppage. Remove stoppage.
		E.	Wall switch or wires are defective.	Follow the corrective action in Symptom and Possible Cause 1.A. above. Check the switch and wiring. Replace where defective.

Symptom		Possible Causes		Corrective Actions
4.	Frequent pilot outage problem.	A.	Pilot flame may be too high, too low, or blowing (high), causing pilot safety to drop out.	Clean and adjust the pilot flame for maximum flame impingement on thermocouple. Follow lighting instructions carefully.
5.	The pilot and main burner extinguish while in operation.	A.	No LP in the tank.	Check the LP (propane) tank. Refill the fuel tank.
		B.	Inner vent pipe is leaking exhaust gases back into the system.	Check venting system for damage. Replace/repair improperly assembled pipe sections.
		C.	Glass is too loose and air tight packet leaks in corners after usage.	Replace glass panel assembly.
		D.	Bad thermopile or thermocouple.	Replace if necessary.
		E.	Improper vent cap installation.	Check for proper installation and freedom from debris or blockage.
6.	Glass soots.	A.	Flame impingement.	Adjust the log set so that the flame does not excessively impinge on it.
		B.	Improper air shutter setting.	Adjust the air shutter located on the control panel.
		C.	Debris around air shutter.	Inspect the opening at the base of the burner. NO MATERIAL SHOULD BE PLACED IN THIS OPENING.
7.	Flame burns blue and lifts off burner.	A.	Insufficient oxygen being supplied.	Ensure that the vent cap is installed properly and free of debris. Ensure that the vent system joints are tight and have no leaks. Ensure that no debris has been placed at the base of, or in the area of the air holes in the center of, the base pan beneath the burner. Ensure that the glass is tightened properly on the appliance, particularly on top corners.

15 Maintaining and Servicing the Appliance

Although the frequency of appliance servicing and maintenance will depend on use and the type of installation, a qualified service technician should perform an appliance check-up at the beginning of each heating season.

WARNING

Risk of injury or property damage

Before servicing:

- Turn off gas.
- Turn off electricity to appliance.
- Disable remote control, if one is present.
- Ensure appliance is completely cooled.

After Servicing:

- Replace any screen or barrier that was removed.
- Reseal and reinstall any venting removed for servicing.

WARNING



Annual inspection by qualified technician recommended.

Check:

- Condition of doors, surrounds and fronts.
- Condition of glass, glass assembly and glass seal.
- Obstructions of combustion and ventilation air.
- Condition of logs.
- Condition of firebox.
- Burner ignition and operation.
- Burner air shutter adjustment.
- Gas connections and fittings.
- Obstructions of termination cap.

Clean:

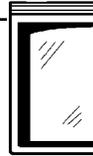
- Glass.
- Air passageways, grilles, control compartment.
- Burner, burner ports.

Risk of:

- Fire
- Delayed ignition or explosion
- Exposure to combustion fumes
- Odors



CAUTION



Handle glass assembly with care.

Note: Clean glass after initial 3-4 hours operation. **Longer operation without cleaning glass may cause a permanent white film on glass.**

When cleaning glass door:

- Avoid striking, scratching or slamming doors.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Do NOT clean glass when it is hot.
- Turn off appliance after 3-4 hours of operation and ALLOW TO COOL.
- Remove and clean glass assembly.
- Replace glass assembly and operate appliance for an additional 12 hours.

Refer to maintenance instructions.

WARNING



Fire Risk!

Explosion Risk!

Inspect external vent cap regularly.

- Ensure no debris blocks cap.
- Combustible materials blocking cap may ignite.
- Restricted air flow affects burner operation.



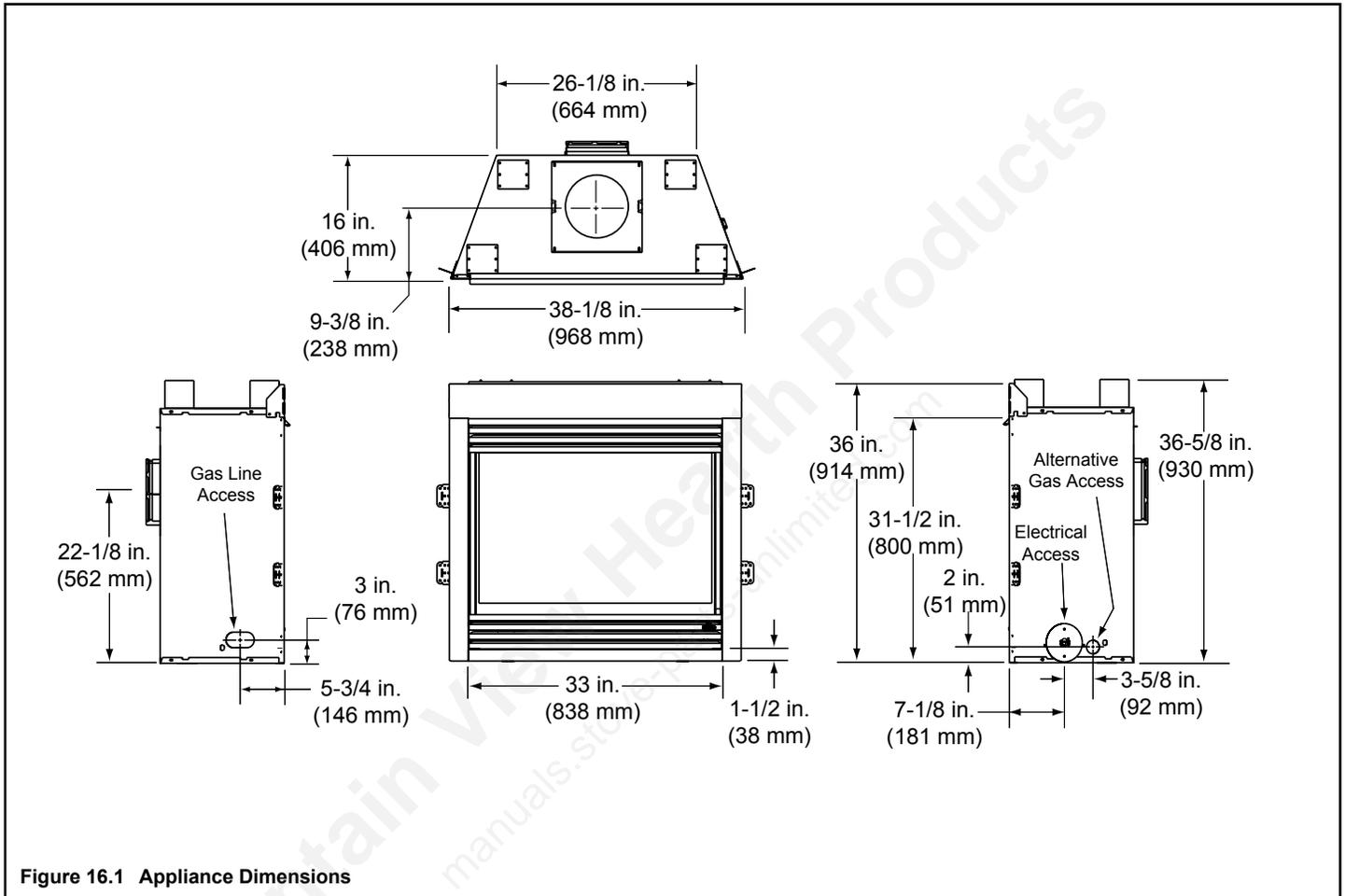
Maintenance and Service Tasks:

Inspect	Maintenance Tasks
Doors, surrounds and fronts	<ol style="list-style-type: none"> 1. Access condition of screen and replace as necessary. Recommend addition of screen if one is not present. 2. Inspect for scratches, dents or other damage and repair as necessary. 3. Verify no obstructions to airflow through the louvers. 4. Verify proper clearance to combustible household objects is maintained.
Gasket seal, glass assembly and glass	<ol style="list-style-type: none"> 1. Inspect gasket seal and its condition. 2. Inspect glass panels for scratches and nicks that can lead to breakage when exposed to heat. 3. Confirm there is no damage to glass or glass frame. Replace as necessary. 4. Verify that latches engage properly, clip studs are not stripped, and glass attachment components are intact and operating properly. Replace as necessary. 5. Clean glass using a nonabrasive cleaner such as Brasso®. Replace glass assembly if severely coated with silicate deposits that cannot be removed.
Valve compartment and firebox top	<ol style="list-style-type: none"> 1. Vacuum and wipe out dust, cobwebs, debris or pet hair. Use caution when cleaning these areas. Screw tips that have penetrated the sheet metal are sharp and should be avoided. 2. Remove any foreign objects. 3. Verify unobstructed air circulation.
Logs	<ol style="list-style-type: none"> 1. Inspect for broken, damaged, or missing logs. Replace as necessary. 2. Verify correct log placement and no flame impingement causing sooting. Correct as necessary.
Firebox	<ol style="list-style-type: none"> 1. Inspect for paint condition, warpage, corrosion or perforation. Sand and repaint as necessary. 2. Replace appliance if firebox has been perforated.
Burner ignition and operation	<ol style="list-style-type: none"> 1. Verify burner is properly secured and aligned with pilot or ignitor. 2. Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary. 3. Replace rock wool with new dime-sized and shaped pieces. Do not block ports or obstruct lighting paths. 4. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay. 5. Inspect for lifting or other flame problems. 6. Verify air shutter is clear of dust and debris. 7. Inspect orifice for soot, dirt or corrosion. 8. Verify manifold and inlet pressures. Adjust regulator as required. 9. Inspect pilot flame strength. Clean or replace orifice as necessary. 10. Inspect thermocouple/thermopile for soot, corrosion and deterioration. Clean with emery cloth or replace as required. 11. Verify millivolt output. Replace as necessary.
Venting	<ol style="list-style-type: none"> 1. Inspect venting for blockage or obstruction such as birds' nests, leaves, etc. 2. Confirm that termination cap remains clear and unobstructed by plants, etc. 3. Verify that termination cap clearance to subsequent construction (building additions, decks, fences or sheds) has been maintained. 4. Inspect for corrosion or separation. 5. Verify weather stripping sealing and flashing remain intact. 6. Inspect draft shield to verify it is not bent, damaged or missing.
Remote controls	<ol style="list-style-type: none"> 1. Verify operation of remote. 2. Replace batteries in remote transmitters and battery-powered receivers.

16 Reference Materials

A. Appliance Dimension Diagram

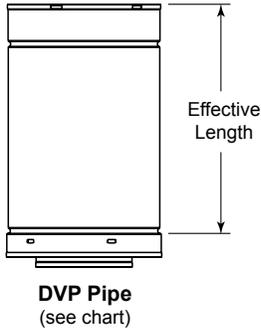
Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 3.



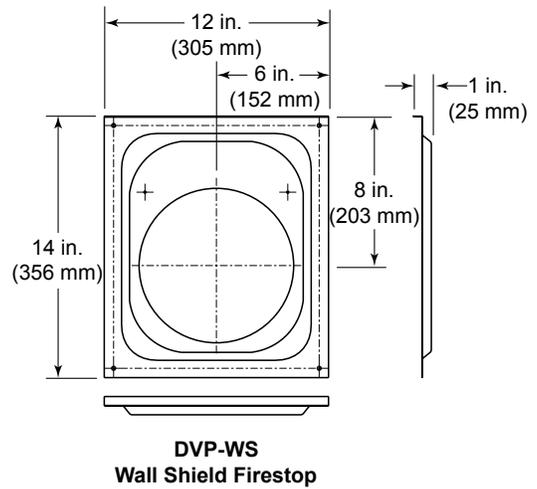
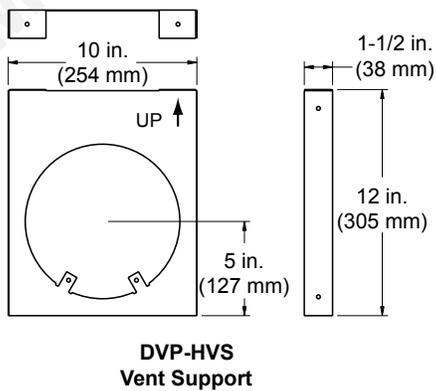
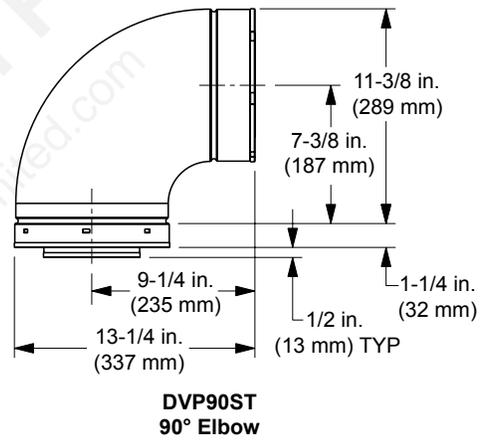
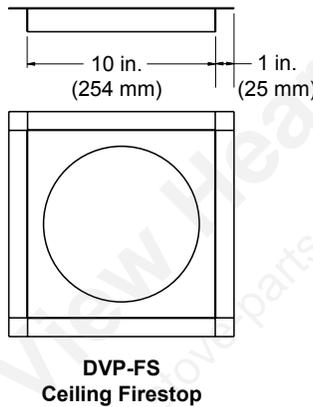
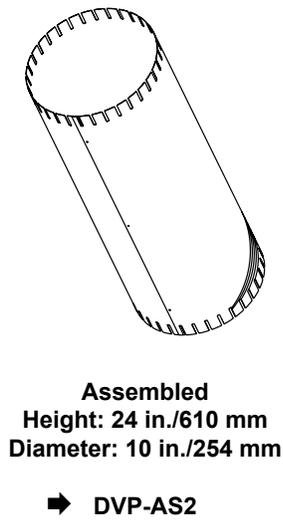
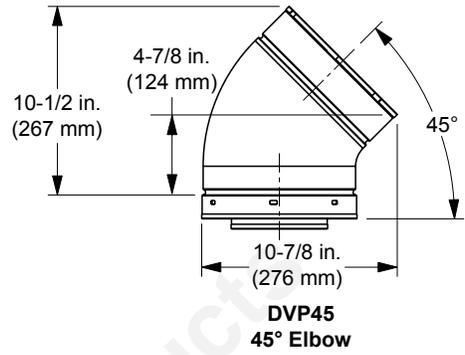
B. Vent Components Diagrams

Components	Description
DVP4	4 in. length Vent Pipe
DVP6	6 in. length Vent Pipe
DVP12	12 in. length Vent Pipe
DVP24	24 in. length Vent Pipe
DVP6A	3 in. - 6 in. Slip Section Vent Pipe (to be used with another piece of pipe)
DVP36	36 in. length Vent Pipe
DVP48	48 in. length Vent Pipe
DVP12A	3 in. - 12 in. Slip Section Vent Pipe (to be used with another piece of pipe)
DVP12MI	12 in. Vent Pipe - non-unitized (can be cut to length)
DVP24MI	24 in. Vent Pipe - non-unitized (can be cut to length)
DVP45	45° Elbow
DVP90ST	90° Elbow
DVP-AS2	Attic Insulation Shield
DVP-FS	Ceiling Firestop
DVP-HVS	Vent Support - Horizontal
DVP-WS	Wall shield firestop (used to ensure horizontal clearances)
RF6M	Roof Flashing (vertical termination for 0/12 to 6/12 pitch) - pack of four
RF12M	Steep Pitch Roof Flashing (for 7/12 to 12/12 pitch) - pack of six
BEK	Brick Extension Kit - 10 pcs.
DVP-BEK2	Brick Extension Kit for High Performance Cap
DVP-TRAPFL	Trap Cap Rain Flashing - qty. 4
COOL-ADDM	Cap Shield (for DVP-TRP) - pack of six
DRC-RADIUS	Cap Shield (for DVP-TRAP and DVP-HPC)
DVP-TVHW	Vertical Termination Cap (High Wind). Includes storm collar and fastener pack.
PVK-80	Power Vent Kit
DVP-TV	Vertical Termination Cap - Includes storm collar & fastener pack.
DVP-TB1	Basement/window well termination cap. Includes fastener pack.
DVP-FBHT	Fire Brick Termination Cap
DVP-TRAP	Rear Vent Horizontal Termination Cap
DVP-TRAP1	Horizontal Termination Cap with 1-7/8 in. telescoping flue, wall shield firestop with heat shield & fastener. pack.
DVP-TRAPK1	Top Vent Horizontal Kit with DVP-TRAP1 Termination Cap, wall shield firestop with heat shield, 90° elbow & fastener pack.
DVP-TRAP2	Horizontal Termination Cap with 4 in. telescoping flue, wall shield firestop with heat shield & fastener pack.
DVP-TRAPK2	Top Vent Horizontal Kit with DVP-TRAP2 Termination Cap, wall shield firestop with heat shield, 90° elbow & fastener pack.
DVP-HPC1	Horizontal Termination Cap with 2-1/8 in. telescoping flue, wall shield firestop with heat shield & fastener pack.
DVP-HPC2	Horizontal Termination Cap with 4-1/8 in. telescoping flue, wall shield firestop with heat shield & fastener pack.
DVP-HSM-B	Extended Heat Shield
DVP-HRC-SS	High Rise Termination Cap - Unpainted Stainless Steel (not approved for all units)
DVP-HRC-ZC-SS	High Rise Termination Cap - Zero Clearance - Unpainted Stainless Steel (not approved for all units)
4033-016	DVP-TRAP to DVP-HPC Side Filler Kit

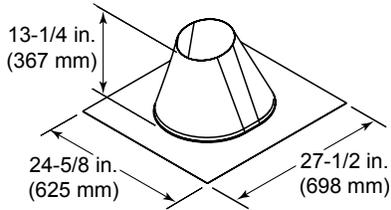
Vent Components Diagrams (con't)



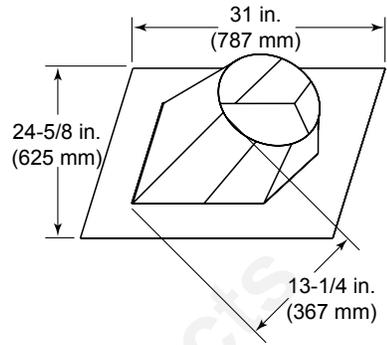
Pipe	Effective Length
DVP4	4 in. (102 mm)
DVP6	6 in. (152 mm)
DVP12	12 in. (305 mm)
DVP24	24 in. (610 mm)
DVP36	36 in. (914 mm)
DVP48	48 in. (1219 mm)
DVP6A	3 to 6 in. (76 to 152 mm)
DVP12A	3 to 12 in. (76 to 305 mm)
DVP12MI	3 to 12 in. (76 to 305 mm)
DVP24MI	3 to 24 in. (76 to 610 mm)



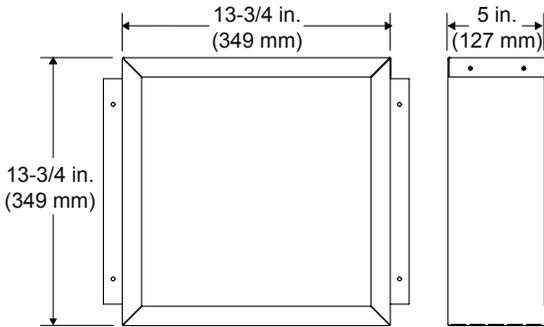
Vent Components Diagrams (con't)



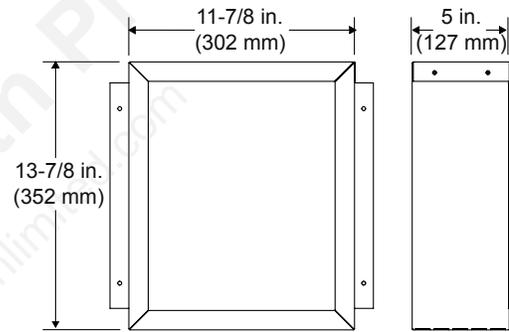
RF6M
Roof Flashing Multi-pak



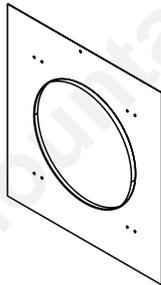
RF12M
Roof Flashing Multi-pak



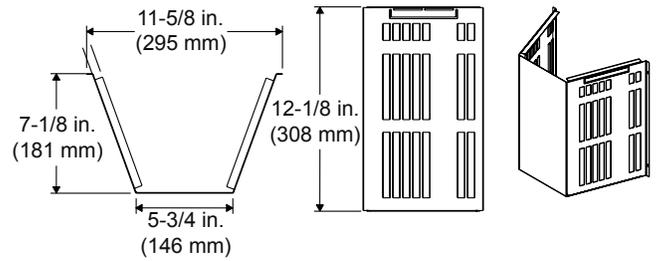
BEK
Trap Cap Brick Extension



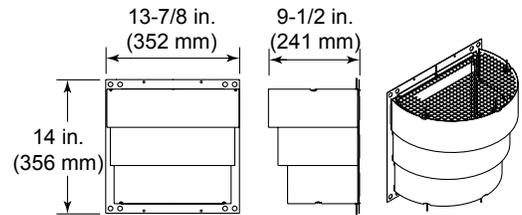
DVP-BEK2
DVP-HPC Cap Brick Extension



DVP-TRAPFL
Flashing

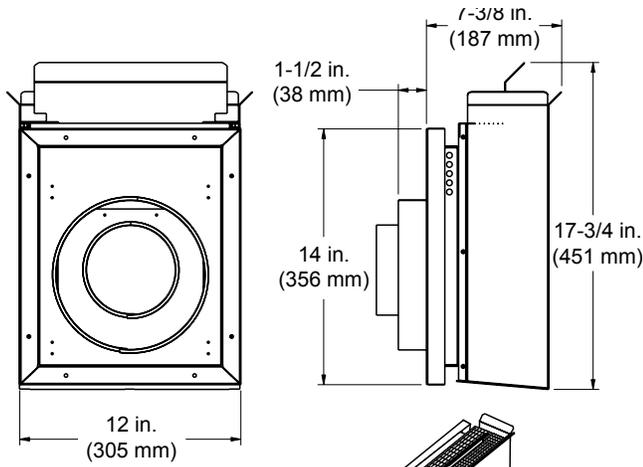


COOL-ADD
Cap Shield

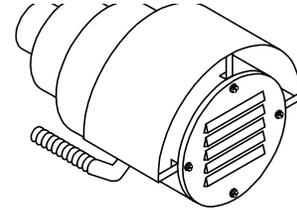


DRC-RADIUS
Cap Shield

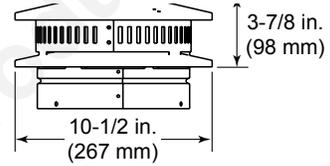
Vent Components Diagrams (con't)



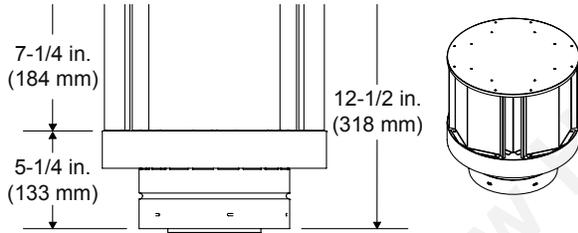
DVP-TB1
Basement Vent Cap



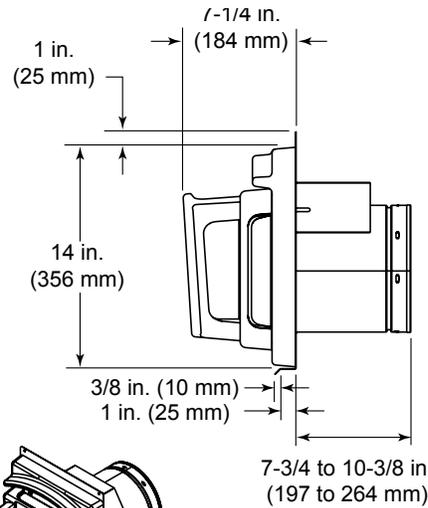
PVK-80
(For use with IPI and DSI appliances only.)



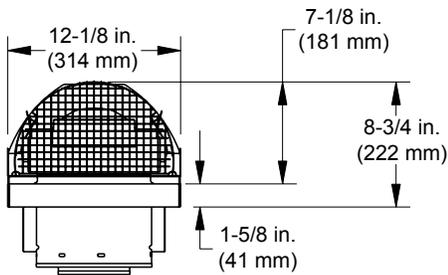
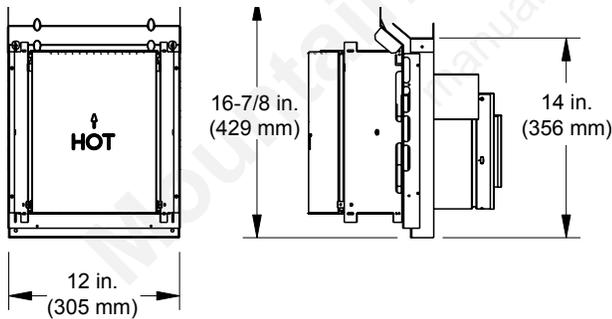
DVP-TV
Vertical Termination Cap



DVP-TVHW
Vertical Termination Cap (High wind)



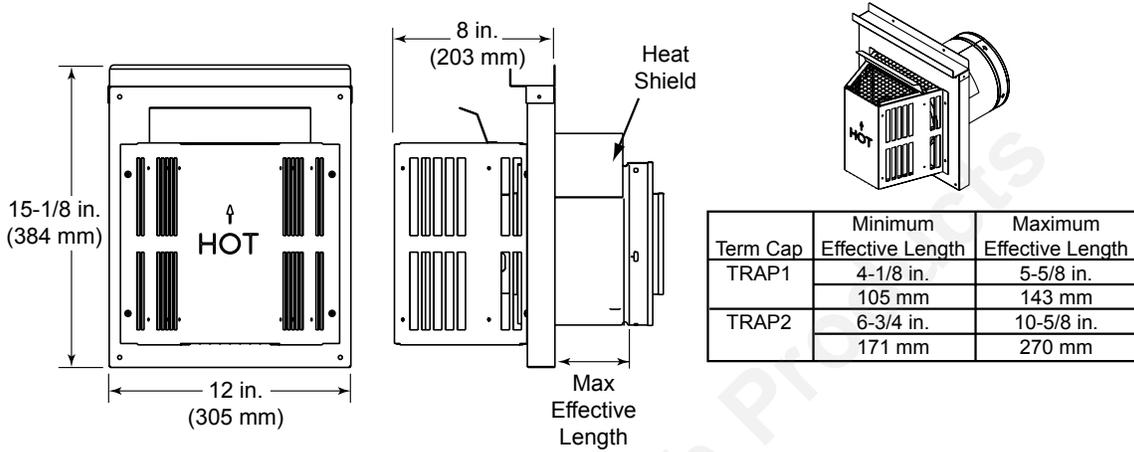
DVP-FBHT
Fire Brick Termination Cap



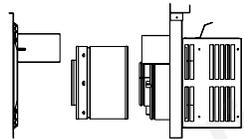
DVP-HPC
High Performance Cap

Vent Components Diagrams (con't)

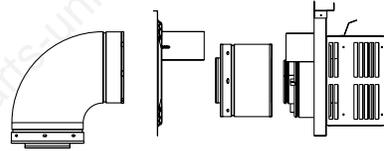
Note: Heat shields **MUST** overlap by a minimum of 1-1/2 in. (38 mm). **The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.** If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4 in. (184 mm) a DVP-HSM-B will be required.



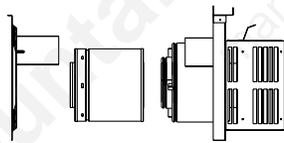
DVP-TRAP
Horizontal Termination Cap



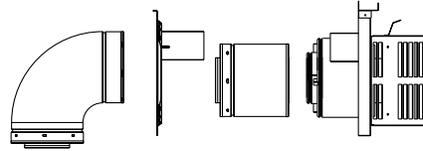
DVP-TRAP1



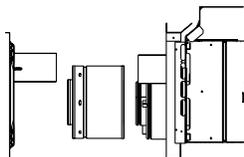
DVP-TRAPK1



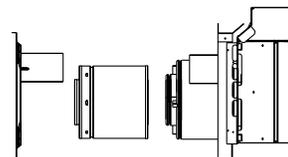
DVP-TRAP2



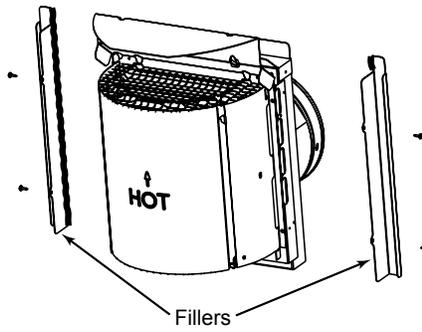
DVP-TRAPK2



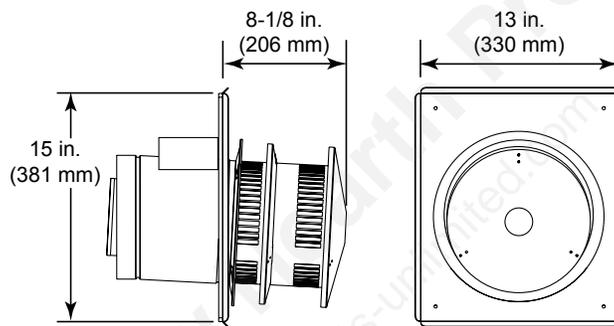
DVP-HPC1



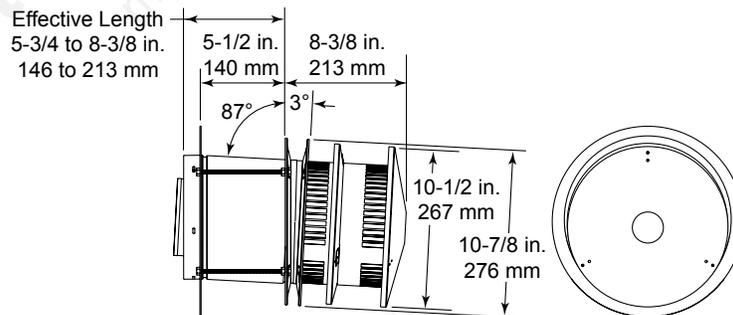
DVP-HPC2



DVP-TRAP to DVP-HPC Side Filler Kit



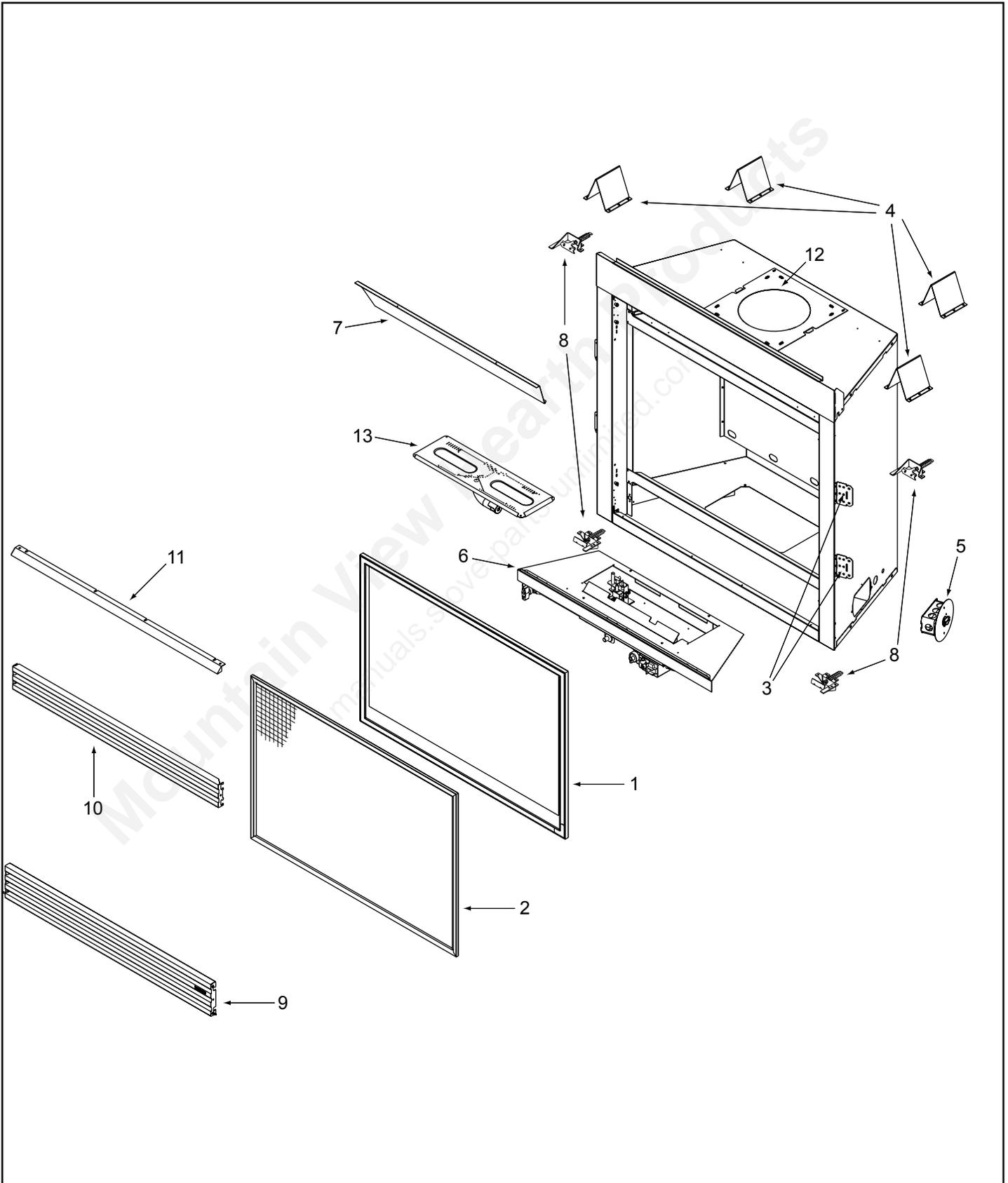
DVP-HRC-SS



DVP-HRC-ZC-SS

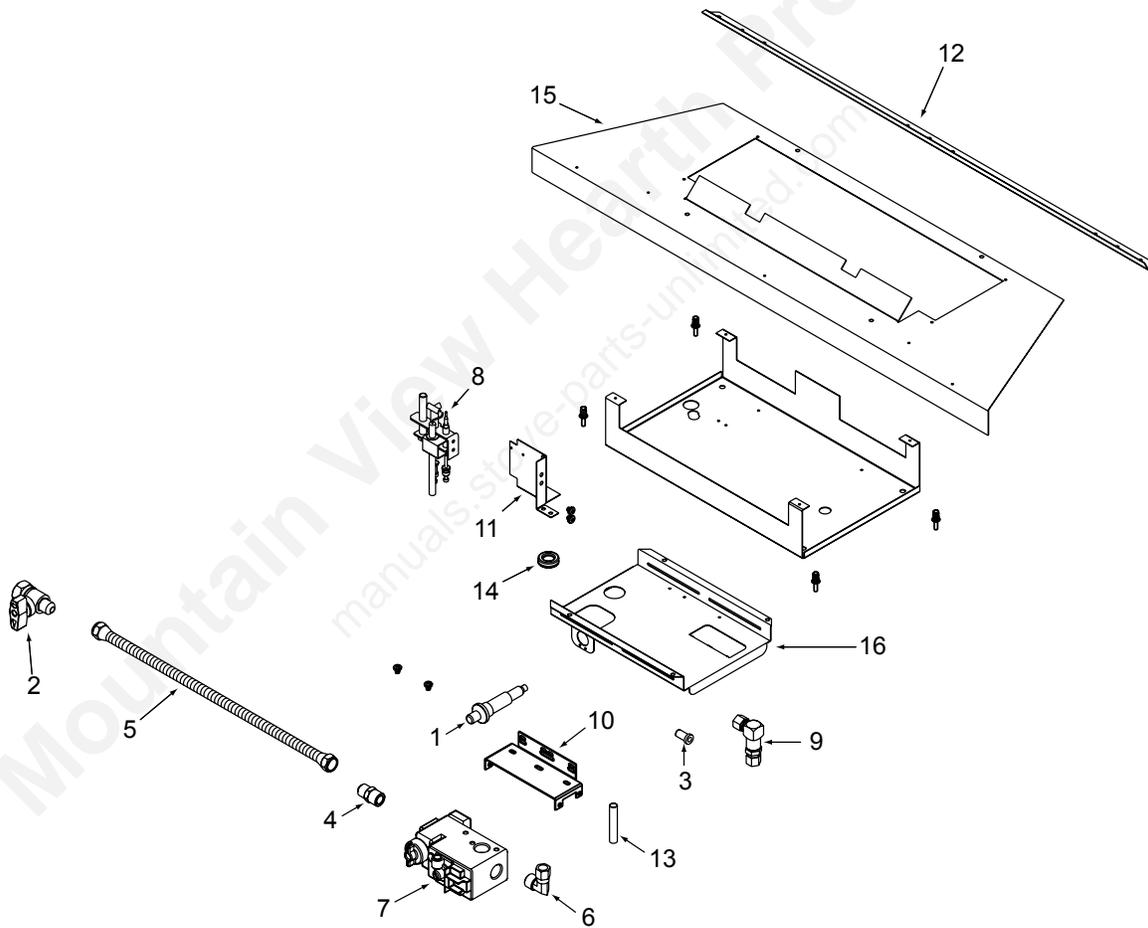
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Mountain View Hearth Products
manuals.stove-parts-unlimited.com



#	Description of Part	GNTC50	Qty. req.
	Glass Kit w/Screen	22125	1
1	Glass & Frame Assembly - Low-E	4031-540	1
	Glass Gasket	28091	10 ft
2	Screen Assembly	26803	1
	Screen Bracket	28159	2
3	Nailing Flange	31190	4
4	Top Standoff	13433	4
5	Junction Box Kit	31581	1
	Junction Box	21878	1
6	Valve Assembly - pre Serial #	31562	1
	Valve assembly - post Serial #	4002-088	1
	Exhaust Cover Plate	25840	2
	Intake Cover Plate	25844	2
	Exhaust Gasket	31238	2
	Flue Baffle	31790	1
7	Glass Heat Shield	31910	1
8	Glass Latch Assembly - pre 05/04	27066	2
8	Glass Clip Support Assembly - post 05/04	33858	4
	Flue Gasket - pre 15/03	26849	2
	Flue Gasket - post 15/03	4000-225	2
9	Lower Grille Assembly	21581	1
10	Upper Grille Assembly	22122A	1
11	Hood - pre 05/03	21992	1
11	Hood - post 05/03	4018-012	1
	Log/Grate Assembly	31663	1
	Log Support	31662	1
	Back Log	31925	1
	Top Right Log	31926	1
	Top Left Log	31927	1
	Middle Right Log	31928	1
	Middle Left Log	31929	1
	Flue Adapter Assembly	31642	1
12	Flue Adapter Plate w/Hole	4000-226	1
	Intake Collar Assembly	4003-036	1
	Exhaust Collar Assembly	4003-038	1
13	Burner Pan Assembly	31789	1

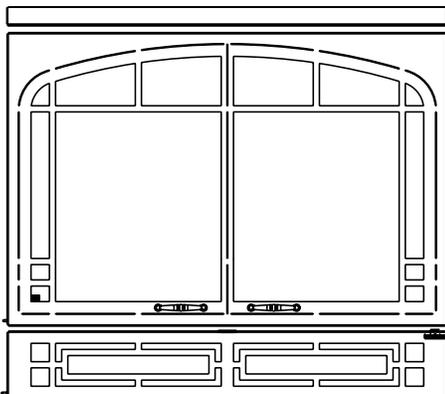
#18 Valve Assy DV NG 4002-088



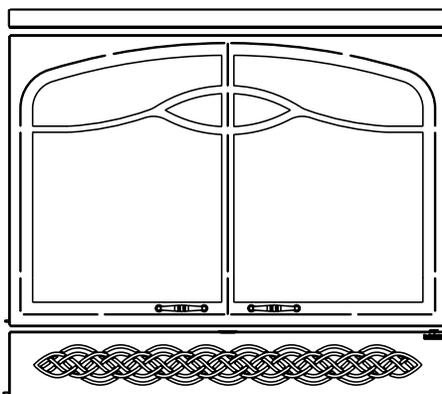
#	Description of Part	GNTC50	Qty. req.
18	Valve Assembly - (pre Serial # GA1542189)	31562	1
18	Valve Assembly - (post Serial # GA1542188)	4002-088	1
1	Push Button Ignitor	291-513	1
	Silicone Seal (Red)	13427A	1
	Cord Clip	14218	2
2	ON/OFF Valve	15697	1
3	Orifice (.093) - NG	16752	1
4	Brass Connector - Male - Flex	17069	1
5	16 in. Stainless Steel Flex Gas Line	17245B	1
6	Brass Elbow	17524	1
7	Valve - (pre Serial # GA1542189)	23363	1
7	Valve - (post Serial # GA1542188)	230-0710	1
8	Pilot Assembly (Flex Tube)(pre Serial # GA1542189)	25660	1
8	Pilot Assembly (Flex Tube)(post Serial # GA1542188)	4021-330	1
9	Bulkhead	26457	1
10	Valve Bracket - (pre Serial # GA1542189)	26851	1
	Valve Bracket - (post Serial # GA1542188)	30060	1
11	Pilot Bracket - (pre Serial # GA1542189)	26872	1
	Pilot Bracket - (post Serial # GA1542188)	4018-027	1
12	Lava Rock Retainer	26953	1
13	Burner Supply Tube	27002	1
14	Grommet	27763	1
	Wall Switch Wire Assembly	28602	1
15	Hearth Pan	31567	1
16	Valve Bracket - (pre Serial # GA1542189)	31824	1
	Valve Bracket - (post Serial # GA1542188)	26851	1
	Conversion Kit to Natural Gas		1
	Conversion Kit to Propane		1
	Wool, Rock, Vermiculite	30840	1
	Mineral Wool	14333B	1
	Vermiculite	28746	1
	Lava Rock (2lb Bag)	4021-296	1
	Gas Operations Manual	71680	1
	Installation Instructions & Owner's Manual - (Pre Serial # GA1542189)	34612	1
	Installation Instructions & Owner's Manual - (post Serial # GA1542188)	4002-095	1

D. Optional Components

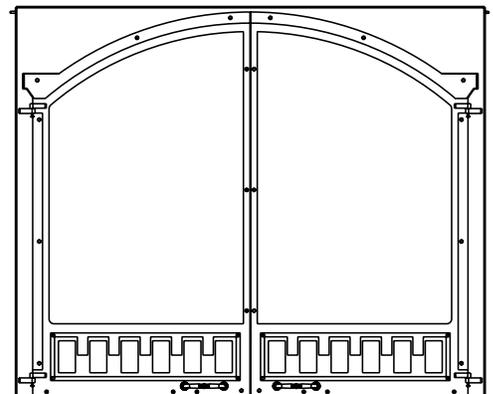
Component	Description
BC10	Fan motor rheostat control, wall mounted
GFK4B	Transaxial fan
GFK4MB	Multi-pak of 12 GFK4B transaxial fan kits
RCTS-MLT-HTL	Remote Control Kit (SIT Valve only)
RCT-MLT-HTL	Remote Control Kit (Robertshaw Valve only)
RC-BATT-HTL	Battery operated remote control
RC-SMART-HTL	Remote control (requires 110v or rewiring)
SMART-STAT-HTL	Multi-functional remote: On/Off, room temp., thermostat temp., timer
SMART-BATT-HTL	Multi-functional remote: On/Off, thermostat temp., timer
WSK-MLT-HTL	Multi-Function Wall Switch (Robertshaw Valve only)
SCKVP-B	L.P. gas conversion kit
SCKVN-B	Natural gas conversion kit
CKVP	L.P. gas conversion kit (Robertshaw only)
CKVN	Natural gas conversion kit (Robertshaw only)
MF1	Manual flame modulator control (Robertshaw, standing pilot, natural gas only)
MF2	Manual flame modulator control (Robertshaw, standing pilot, L.P. gas only)
TKN33B	Polished brass louver trim kit (5 pieces)
TKN33S	Stainless steel louver trim kit (5 pieces)
TKN33PT	Pewter louver trim kit (5 pieces)
TKN33BN	Brushed nickel louver trim kit (5 pieces)
TKN35B	Polished brass accent trim kit (2 pieces)
TKN35S	Stainless steel accent trim kit (2 pieces)
TKN35PT	Pewter accent trim kit (2 pieces)
TKN35BN	Brushed nickel accent trim kit (2 pieces)
DFN3B	Fixed bi-fold polished brass glass doors
DFN3S	Fixed bi-fold stainless steel glass doors
DFA33	Fixed cabinet-style, arched, black finish glass doors
DFA33B	Fixed cabinet-style, arched, polished brass glass doors
DFA33S	Fixed cabinet-style, arched, stainless steel glass doors
FFM33	Modernist-style black decorative front
FFM33PT	Modernist-style pewter decorative front
FFM33BN	Modernist-style brushed nickel decorative front
FFM33AC	Modernist-style antique copper decorative front
FFAC33	Arts & Crafts style black decorative front
FFAC33PT	Arts & Crafts style pewter decorative front
FFAC33BN	Arts & Crafts style brushed nickel decorative front
FFAC33AC	Arts & Crafts style antique copper decorative front



Arts & Crafts Decorative Front



Modernist Decorative Front



Jamestown Decorative Front

E. Limited Lifetime Warranty



Gas Appliance (Fireplace) Limited Lifetime Warranty

HEARTH & HOME TECHNOLOGIES INC. ("HHT") extends the following warranty for HEATILATOR® gas appliances installed in the United States of America or Canada (the "Appliance"). Dealers and employees of HHT have no authority to make any warranty or authorize any remedies in addition to or inconsistent with the terms of this warranty.

Limited Lifetime Warranty

HHT warrants the Appliance for component failure due to a manufacturing defect of any of the following components: combustion chamber, burner pan, and logs. The Limited Lifetime Warranty specified above is subject to the conditions, exclusions and limitations listed below, is for the period the Appliance is owned by the original homeowner only, and is nontransferable.

1 Year Limited Warranty

HHT warrants the Appliance to be free from failure of any of the following components for a period of one year after installation: valve, flexible gas line connector, glass panel, fan, direct vent chimney components, factory paint, gasket, piezo ignitor, thermopile, thermocouple, junction box, pilot assembly, shutoff valve, high limit switch, refractory liners, transformer, and control box. If the Heatilator Appliance is found to be defective in either material or workmanship within one year of the date of original installation, HHT will provide replacement parts at no charge and pay reasonable labor and freight costs, and is for the period of one year following the date of original installation of the Appliance.

Conditions, Exclusions, & Limitations of Liability

- A. Both the Limited Lifetime and 1 Year Limited Warranties supplied by HHT apply only while the Appliance is in its location of original installation. HHT's obligation under this warranty does not extend to damages resulting from (1) installation, operation or maintenance of the Appliance not in accordance with the Installation Instructions, Operating Instructions, and the Listing Agent Identification Label furnished with the Appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure, air handling devices such as exhaust fans or forced air furnaces, or other causes; (5) use of fuels other than those specified in the Operating Instructions; (6) installation or use of components not supplied with the Appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the Appliance not expressly authorized and approved by HHT in writing. This warranty is limited to only the component parts manufactured or supplied by HHT.
- B. HHT's liability under both the Limited Lifetime Warranty and the 1 Year Limited Warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) or at HHT's discretion, providing replacement parts at no charge and paying reasonable labor and freight costs.
- C. **EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.**
- D. Some states do not allow exclusions or limitations of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights which vary from state to state.

How to Obtain Service

To obtain service under this warranty you must:

1. Send written notice of the claimed condition to Heatilator Technical Service Department, Hearth & Home Technologies, 1915 W. Saunders Street, Mt. Pleasant, Iowa 52641-1563. You may also register your claim online at www.heatilator.com.
2. Provide proof of purchase, model number, serial number, and manufacturing date code to HHT.
3. Provide HHT reasonable opportunity to investigate the claim, including reasonable opportunity to inspect the Appliance prior to any repair or replacement work and before the Appliance or any component of the Appliance has been removed from the place of original installation.
4. Obtain HHT's consent to any warranty work before the work is done.

ADDITIONAL INFORMATION:

If you would like information on current HEATILATOR products or want to locate a dealer in your area, call 1-800-927-6841.

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F. Contact Information

heatilator®

The first name in fireplaces

Hearth & Home Technologies Inc.
1915 W. Saunders Street
Mt. Pleasant, Iowa 52641
www.heatilator.com

Please contact your Heatilator dealer with any questions or concerns.
For the number of your nearest Heatilator dealer, please visit www.heatilator.com.

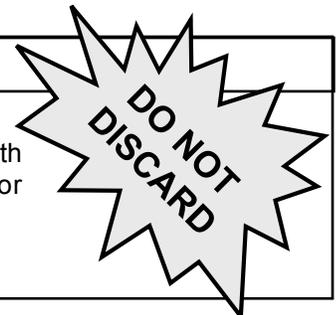
- NOTES -

CAUTION



DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.