

Model:
Cyclone-Cust

GAS-FIRED



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



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 or explosion may result causing property damage, personal injury, or death.

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

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.

⚠ WARNING



HOT SURFACES!

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

Hot glass will cause burns.

- Do not touch glass until it is cooled
 - NEVER allow children to touch glass
 - Keep children away
 - CAREFULLY SUPERVISE children in same room as fireplace.
 - Alert children and adults to hazards of high temperatures.
- High temperatures may ignite clothing or other flammable materials.**
- Keep clothing, furniture, draperies and other flammable materials 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.

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 Heat & Glo gas appliance—an elegant and clean alternative to wood burning appliances. The Heat & Glo 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 that 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 Heat & Glo gas appliance will give you years of durable use and trouble-free enjoyment. Welcome to the Heat & Glo family of appliance products!

<h3>Homeowner Reference Information</h3> <p>Model Name: _____ Date purchased/installed: _____</p> <p>Serial Number: _____ Location on appliance: _____</p> <p>Dealership purchased from: _____ Dealer Phone: _____</p> <p>Notes: _____</p> <p>_____</p>	<p><i>We recommend that you record the following pertinent information about your appliance.</i></p>
---	--

Listing Label Information/Location

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

Type of Gas →

Gas and Electric Information →

This product may be covered by one or more of the following patents: (Nos produits sont couverts par un ou plusieurs des brevets suivants): (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429485, 5452708, 5542407, 5601073, 5613487, 5647340, 5688598, 5762062, 5775406, 5890485, 5931861, 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, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408; or other U.S. and foreign patents pending (ou autres brevets américains et étrangers en attente).

HEAT & GLO Heat & Glo, a brand of Hearth & Home Technologies, Inc.
No one builds a better fire 7571 215th Street West, Lakeville, MN 55044

Not for use with solid fuel.
(Ne doit pas être utilisé avec un combustible solide).

Type of Gas (Sorte De Gaz): **NATURAL GAS** This appliance must be installed in accordance with local codes, if any; if not, follow ANSI Z223.1 in the USA or CAN/CGA B149 installation codes. *(Installer l'appareil selon les codes ou règlements locaux ou, en l'absence de tels règlements, selon les codes d'installation CAN/CGA-B149.)*

ANSI Z21XX-XXXX · CSA 2.XX-MXX · UL307B

Minimum Permissible Gas Supply for Purposes of Input Adjustment.

Approved Minimum (De Gaz) Acceptable	0.0 in w.c.	(Po. Col. d'eau)
Maximum Pressure (Pression)	0.0 in w.c.	(Po. Col. d'eau)
Maximum Manifold Pressure (Pression)	0.0 in w.c.	(Po. Col. d'eau)
Minimum Manifold Pressure (Pression)	0.0 in w.c.	(Po. Col. d'eau)

Total Electrical Requirements: 000Vac, 00Hz., less than 00 Amperes

MADE IN USA

GAS-FIRED

UL US LISTED

	IN CANADA	
ALTITUDE:	0-0000 FT. 0000-0000FT.	Model: (Modele):
MAX. INPUT BTUH:	00,000 00,000	XXXXXXXXXX
MIN. INPUT BTUH:	00,000 00,000	_____
ORIFICE SIZE:	#XXXXX #XXXXX	Serial (Serie):
		XXXXXXXXXX

Model Number →

Serial Number →

Table of Contents

1 Listing and Code Approvals

A. Appliance Certification	4
B. Glass Specifications	4
C. BTU Specifications	4
D. High Altitude Installations	4
E. Non-Combustible Materials Specification	4
F. Combustible Materials Specification	4
G. Electrical Codes	4
H. Requirements for the Commonwealth of Massachusetts	5

2 Getting Started

A. Design and Installation Considerations	6
B. Tools and Supplies Needed	6
C. Inspect Appliance and Components	6

3 Framing and Clearances

A. Selecting Appliance Location	7
B. Constructing the Appliance Chase	8
C. Clearances	8
D. Mantel Projections	9

4 Termination Locations

A. Vent Termination Minimum Clearances	10
--	----

5 Vent Information and Diagrams

A. Vent Table Key	12
B. Use of Elbows	12
C. Measuring Standards	12
D. Vent Diagrams	13

6 Vent Clearances and Framing

A. Pipe Clearances to Combustibles	17
B. Wall Penetration Framing	17
C. Vertical Penetration Framing	18

7 Appliance Preparation

A. Securing and Leveling the Appliance	19
--	----

8 Installing Vent Pipe

A. Assembly of Vent Sections	20
B. Disassembly of Vent Sections	22
C. Installing Heat Shield and Horizontal Termination Cap	23
D. Installing Roof Flashing and Vertical Termination Cap	24

9 Gas Information

A. Fuel Conversions	26
B. Gas Pressures	26
C. Gas Connection	26

10 Electrical Information



A. Recommendation for Wire	28
B. Connecting to the Appliance	29
C. Hot Surface Ignition Wiring	29

11 Finishing

A. Mantel Projections	30
B. Facing Material	30

12 Appliance Setup

A. Remove Shipping Materials	31
B. Clean the Appliance	31
C. Accessories	31
D. Glass Assembly Installation	31

13 Operating Instructions

A. Before Lighting Appliance	32
B. Lighting Appliance	33
C. After Appliance is Lit	34
D. Frequently Asked Questions	34

14 Maintaining and Servicing Appliance

A. Fan Motor Service	35
B. Maintenance Tasks	37

15 Reference Materials

A. Appliance Dimension Diagram	38
B. Vent Components Diagrams	39
C. Service Parts	42
D. Limited Lifetime Warranty	44
E. Contact Information	46

➔ = Contains updated information.

1 Listing and Code Approvals

A. Appliance Certification

MODELS: Cyclone-Cust
LABORATORY: Underwriters Laboratories, Inc. (UL)
TYPE: Direct Vent Gas Fireplace
STANDARD: ANSI Z21.50-2000 • CSA2.33-2000 • 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)

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

Models (U.S. or Canada)		Maximum Input BTU/h	Minimum Input BTU/h	Orifice Size (DMS)
Cyclone-Cust	US (0-2000 FT)	13,500	-	50
	CANADA (2000-4500 FT)	12,150	-	51

D. High Altitude Installations

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

When installing this appliance at an elevation above 2000 feet, 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 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet 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 feet (in Canada), check with local authorities.

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.

E. Non-Combustible Materials Specification

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 Specification

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.

G. Electrical Codes

NOTICE: 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.**

- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

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

H. 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

Heat & Glo 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 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—such as a 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	Hi temp caulking material
Hammer	Gloves
Phillips screwdriver	Framing square
Flat blade screwdriver	Electric drill and bits (1/4 in.)
Plumb line	Safety glasses
Level	1/2 - 3/4 inch length, #6 or #8 Self-drilling screws
Manometer	Voltmeter
Tape measure	Noncorrosive leak check solution
One 1/4 inch female connection (for optional fan).	

C. Inspect 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.
- 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 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.

A. Selecting Appliance Location

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

⚠ WARNING



Fire Risk

Provide adequate clearance:

- Around air openings
- To combustibles
- For service access

Locate appliance away from traffic areas.

Note: For actual appliance dimensions refer to Section 15.

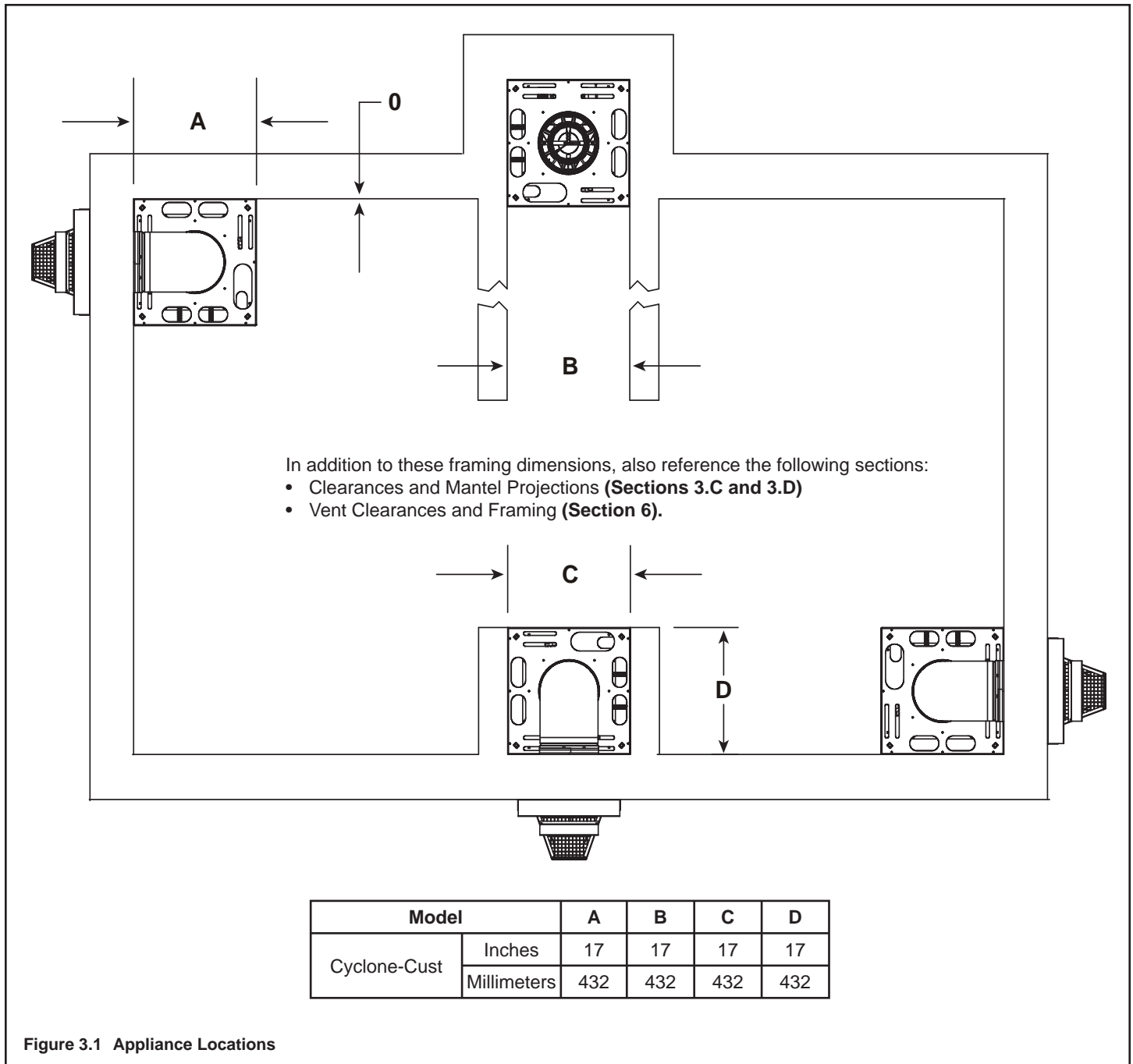


Figure 3.1 Appliance Locations

B. Constructing 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 sheetrocked and taped for maximum airtightness.

To further prevent drafts, the wall shield and ceiling 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 surface, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

C. Clearances

⚠ WARNING



Fire Risk.
Odor Risk.

- Install appliance on hard metal or wood surfaces extending full width and depth of appliance.
- Do NOT install appliance directly on carpeting, vinyl, tile or any combustible material other than wood.

⚠ WARNING



Fire Risk.

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

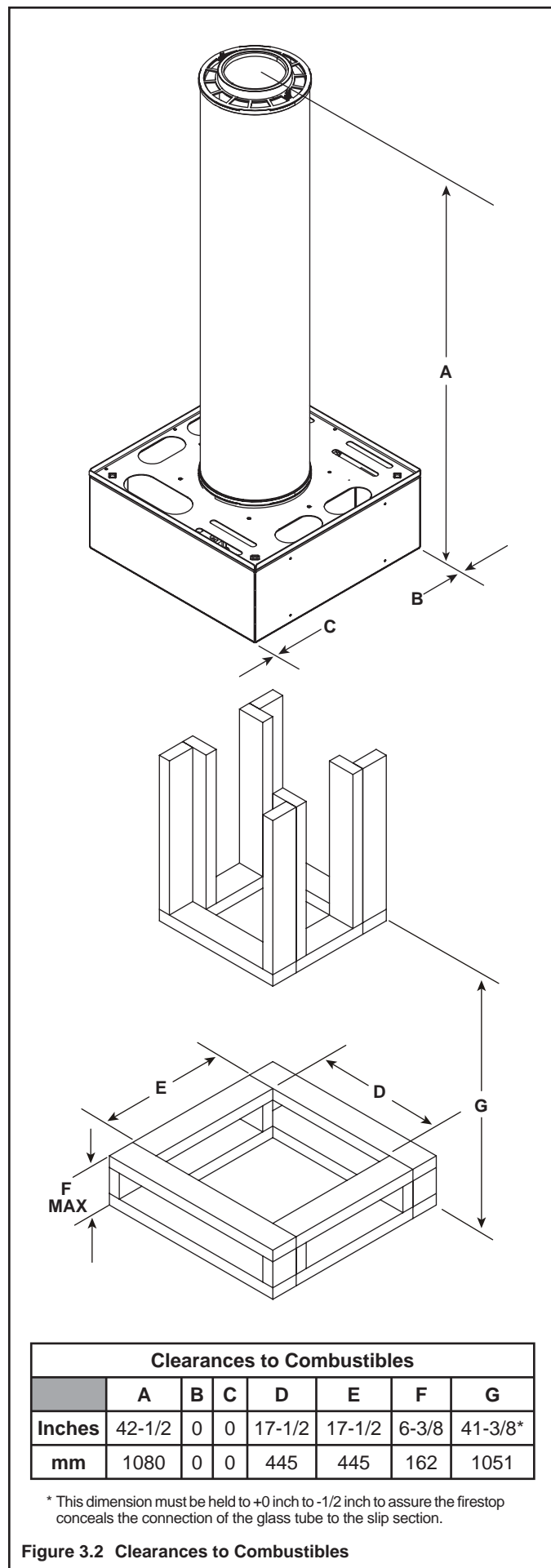


Figure 3.2 Clearances to Combustibles

D. Mantel Projections

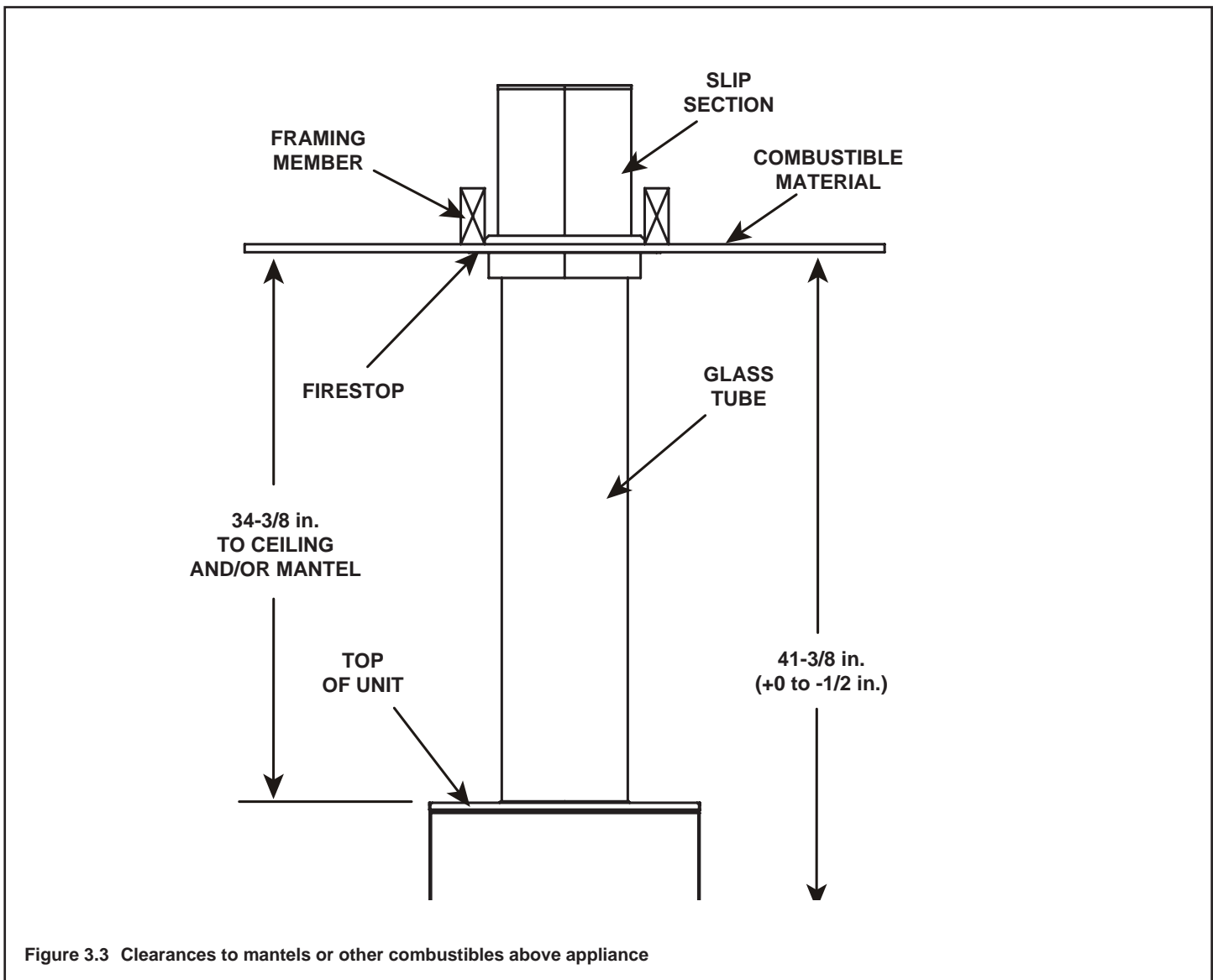


Figure 3.3 Clearances to mantels or other combustibles above appliance

4 Termination Locations

A. Vent Termination Minimum Clearances

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.

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

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

* 3 foot minimum in snow regions

Figure 4.2 Minimum height from roof to lowest discharge opening

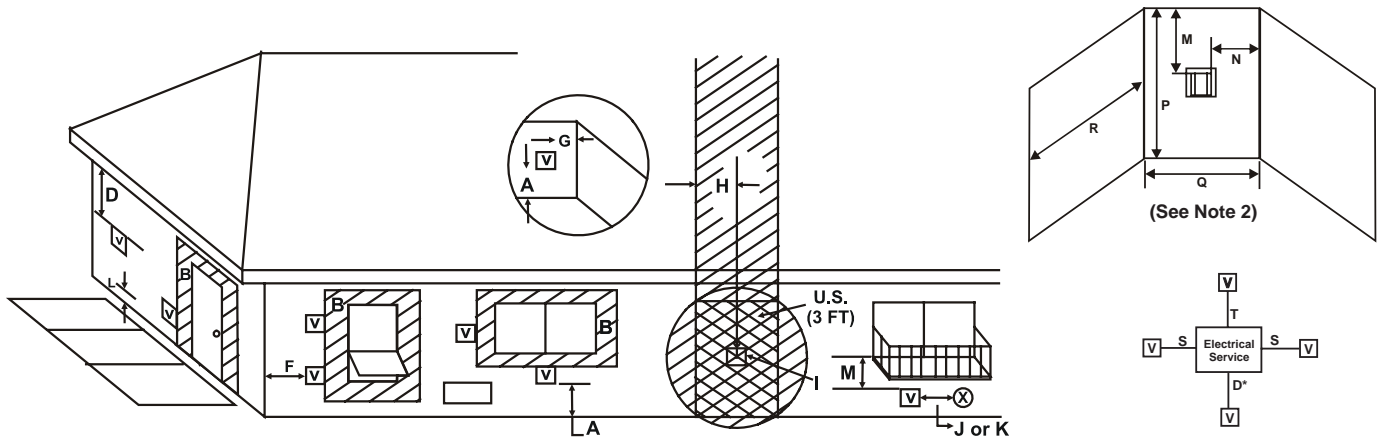
Figure 4.2 specifies minimum vent heights for various pitched roofs.

A	B
6 in. (minimum) up to 20 in. 152 mm/508 mm	18 in. minimum 457 mm
20 in. and over	0 in. minimum

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

** In a staggered installation with both gas and wood terminations, the wood termination cap must be higher than the gas termination cap.

Figure 4.3 Multiple Vertical Termination



V = VENT TERMINAL **X** = AIR SUPPLY INLET [Hatched] = AREA WHERE TERMINAL IS NOT PERMITTED

- | | |
|--|--|
| <p>A = 12 inches.....clearances above grade, veranda, porch, deck or balcony
(See Note 1)</p> <p>B = 12 inches.....clearances to window or door that may be opened, or to permanently closed window. (Glass)</p> <p>D* = 18 inches.....vertical clearance to unventilated soffit or to ventilated soffit located above the terminal
*30 inches.....for vinyl clad soffits and below electrical service</p> <p>F = 9 inches.....clearance to outside corner</p> <p>G = 6 inches.....clearance to inside corner</p> <p>H = 3 ft. (Canada).....not to be installed above a gas meter/regulator assembly within 3 feet (90 cm) horizontally from the center-line of the regulator</p> <p>I = 3 ft.....clearance to gas service regulator vent outlet</p> <p>J = 9 inches (U.S.A.)
12 inches (Canada) clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance</p> <p>K = 3 ft. (U.S.A.)
6 ft. (Canada).....clearance to a mechanical (powered) air supply inlet</p> | <p>L** = 7 ft..... clearance above paved sidewalk or a paved driveway located on public property
(See Note 1)</p> <p>M*** = 18 inches..... clearance under veranda, porch, deck, balcony or overhang
42 inches vinyl</p> <p>S = 6 inches.....clearance from sides of electrical service
(See Note 5)</p> <p>T = 12 inches.....clearance above electrical service
(See Note 5)</p> |
|--|--|

Alcove Applications

N = 6 inchesnon-vinyl sidewalls
12 inchesvinyl sidewalls

P = 8 ft.

	Q_{MIN}	R_{MAX}
1 cap	3 feet	$2 \times Q_{ACTUAL}$
2 caps	6 feet	$1 \times Q_{ACTUAL}$
3 caps	9 feet	$2/3 \times Q_{ACTUAL}$
4 caps	12 feet	$1/2 \times Q_{ACTUAL}$
$Q_{MIN} = \# \text{ termination caps} \times 3$ $R_{MAX} = (2 / \# \text{ termination caps}) \times Q_{ACTUAL}$		

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

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

Note 1: On private property where termination is less than 7 feet above a sidewalk, driveway, deck, porch, veranda or balcony, use of a listed cap shield is suggested. (See vents components page)

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

Figure 4.4 Minimum Clearances for Termination

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

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

Note 5: 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 walls, overhang and ground clearances as stated in the instructions.

Heat & Glo assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.

CAUTION: IF EXTERIOR WALLS ARE FINISHED WITH VINYL SIDING, IT IS SUGGESTED THAT A VINYL PROTECTOR KIT BE INSTALLED.

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 Hazard.

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, one foot of diagonal is equal to 8.5 inches horizontal run and 8.5 inches vertical run. A length of straight pipe is allowed between two 45° elbows (see Figure 5.1).

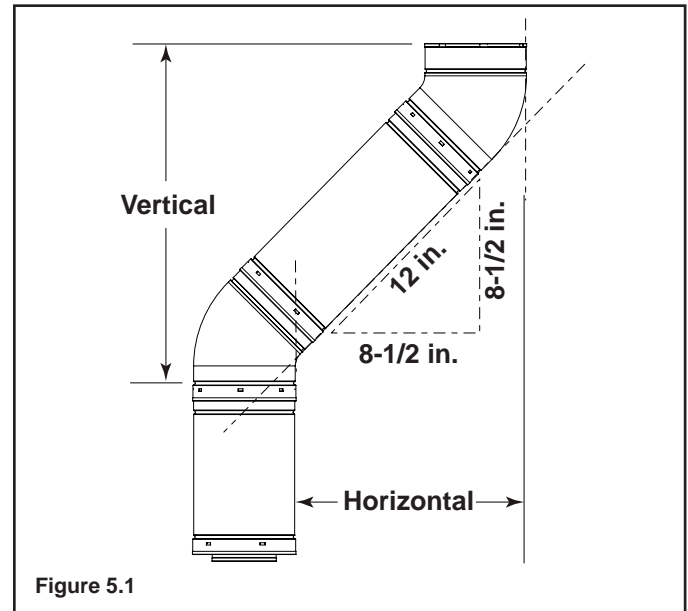


Figure 5.1

C. Measuring Standards

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

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

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

Figure 5.2 DVP Pipe Effective Length

D. Vent Diagrams

⚠ WARNING



Fire Risk. Explosion Risk.

Do NOT pack insulation or other combustibles between ceiling firestops.

- ALWAYS maintain specified clearances around venting and firestop systems.
- Install wall shield and ceiling firestops as specified.

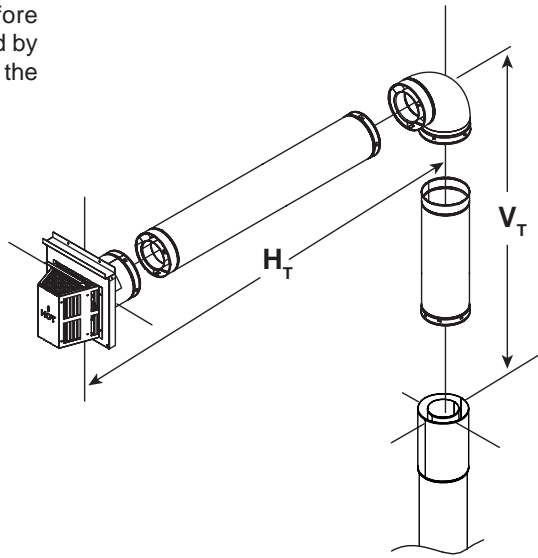
Failure to keep insulation or other material away from vent pipe may cause fire.



1. Top Vent - Horizontal Termination

One Elbow

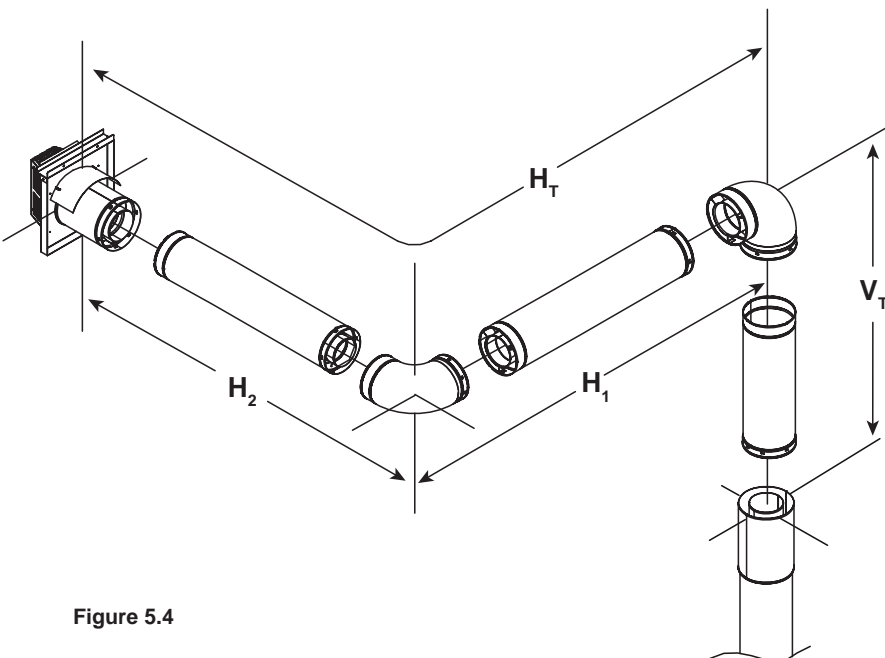
NOTE: A minimum of 2 feet before the first 90° elbow can be achieved by using a 12 inch section of DVP and the (cyclone-12slip) slip section.



V_T Min.	H_T Max.
2 ft.	2 ft.
3 ft.	6 ft.
4 ft.	10 ft.
5 ft.	15 ft.
$V_T + H_T = 40$ ft. Max	

Figure 5.3

Two Elbows



H_1	H_2	V_T Min.	H_T Max.
*	*	2 ft.	2 ft.
*	*	3 ft.	6 ft.
*	*	4 ft.	10 ft.
*	*	5 ft.	15 ft.
$V_T + H_T = 40$ ft. Max.			
*No specific restrictions on this value EXCEPT $V_T + H_T$ cannot exceed 40 ft. Max.			

Figure 5.4

1. Top Vent - Horizontal Termination - (continued)

Three Elbows

V_1	H_1	V_2	H_2	V_T Min.	H_T Max.
*	*	*	*	2 ft.	2 ft.
*	*	*	*	3 ft.	6 ft.
*	*	*	*	4 ft.	10 ft.
*	*	*	*	5 ft.	15 ft.

$V_T + H_T = 40$ ft. Max.
 *No specific restrictions on this value EXCEPT
 $V_T + H_T$ cannot exceed 40 ft. Max.

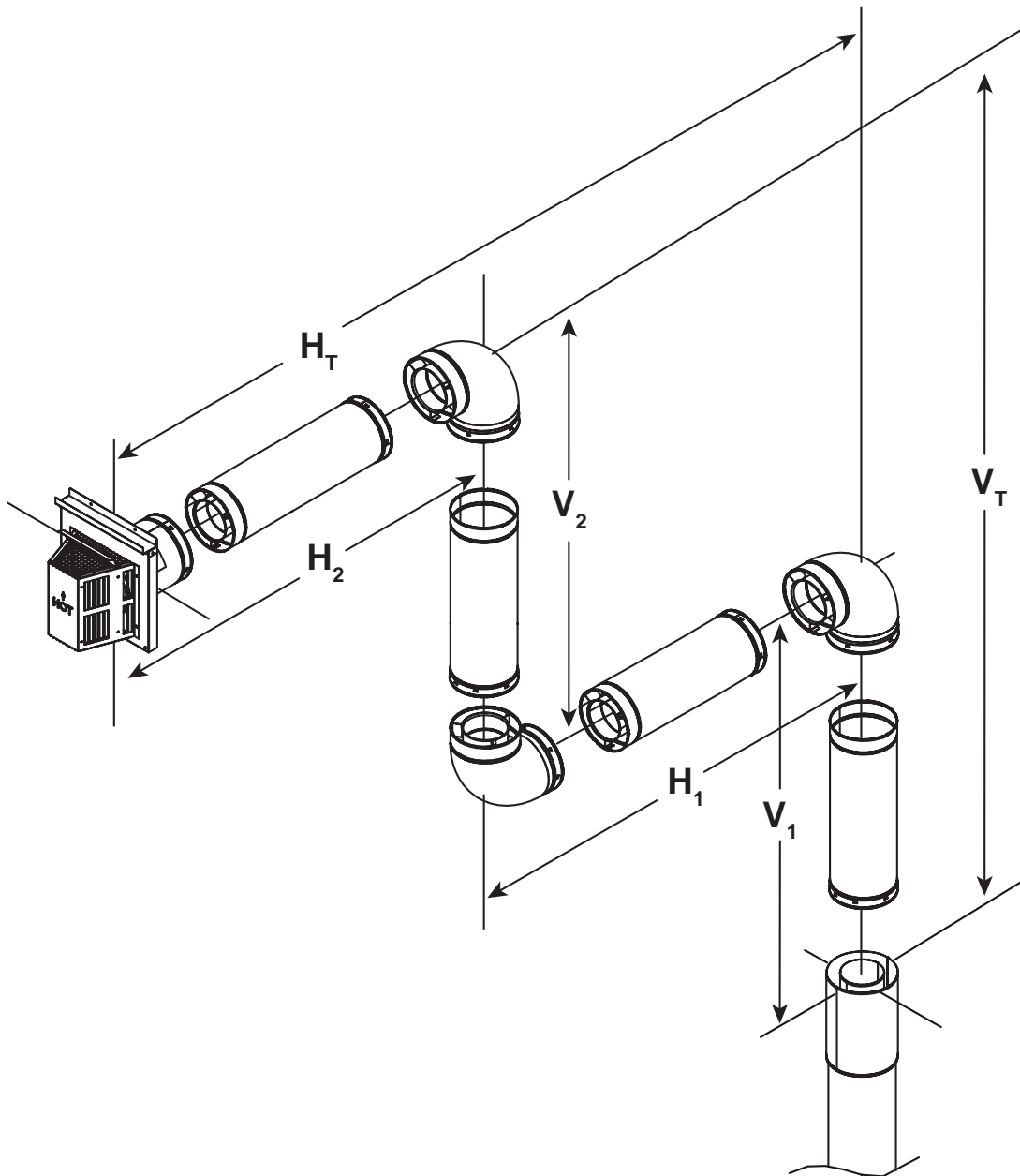
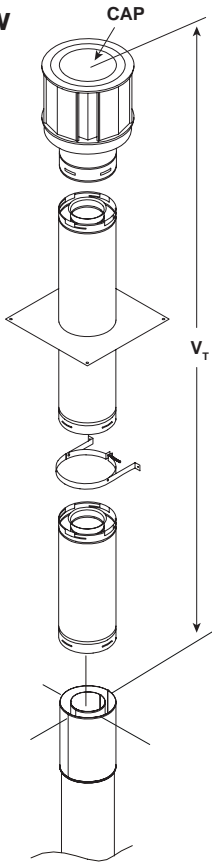


Figure 5.5

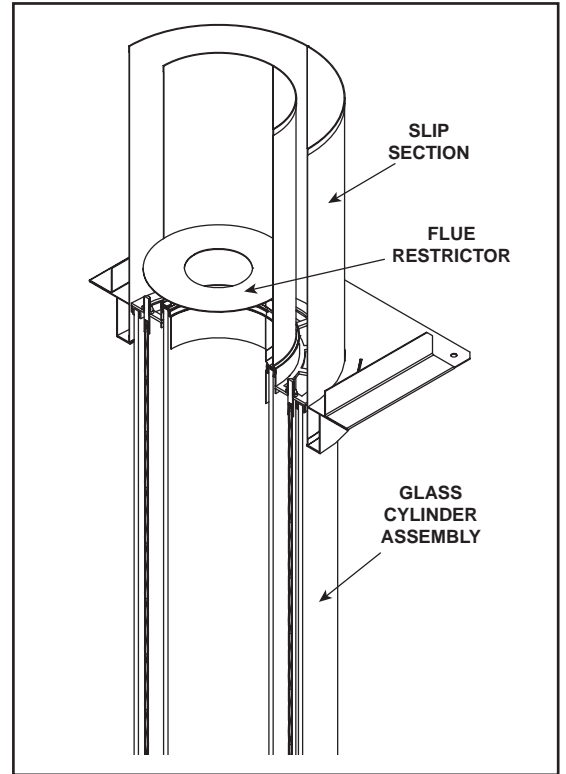
2. Top Vent - Vertical Termination

No Elbow



V_T MAX.
40 ft.

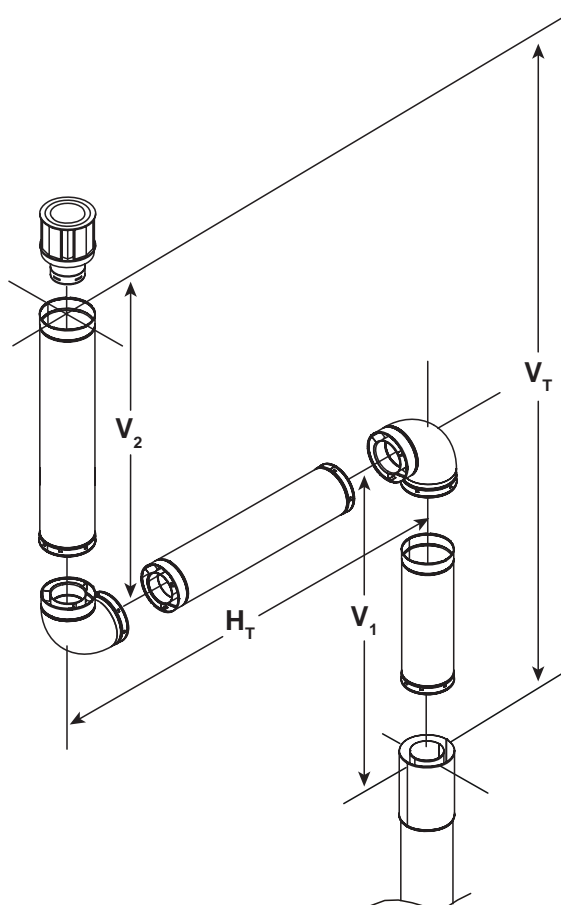
Flue Restrictor		
Part No.	Inside Diameter	Max. Vertical (V_T)
2061-204	2-3/4 in.	15-30 ft.
2061-203	2-1/2 in.	30 ft. or more



Drop the flue restrictor into the slip section as shown.

Figure 5.6

Two Elbows



V_1	V_2	V_T Min.	H_T Max.
*	*	2 ft.	2 ft.
*	*	3 ft.	6 ft.
*	*	4 ft.	10 ft.
*	*	5 ft.	15 ft.

$V_T + H_T = 40$ ft. Max.

*No specific restrictions on this value EXCEPT
 $V_T + H_T$ cannot exceed 40 ft. Max.

Figure 5.7

2. Top Vent - Vertical Termination - (continued)

Three Elbows

V_1	H_1	H_2	V_2	V_T Min.	H_T Max.
*	*	*	*	2 ft.	2 ft.
*	*	*	*	3 ft.	6 ft.
*	*	*	*	4 ft.	10 ft.
*	*	*	*	5 ft.	15 ft.

$V_T + H_T = 40$ ft. Max.
 *No specific restrictions on this value EXCEPT
 $V_T + H_T$ cannot exceed 40 ft. Max.

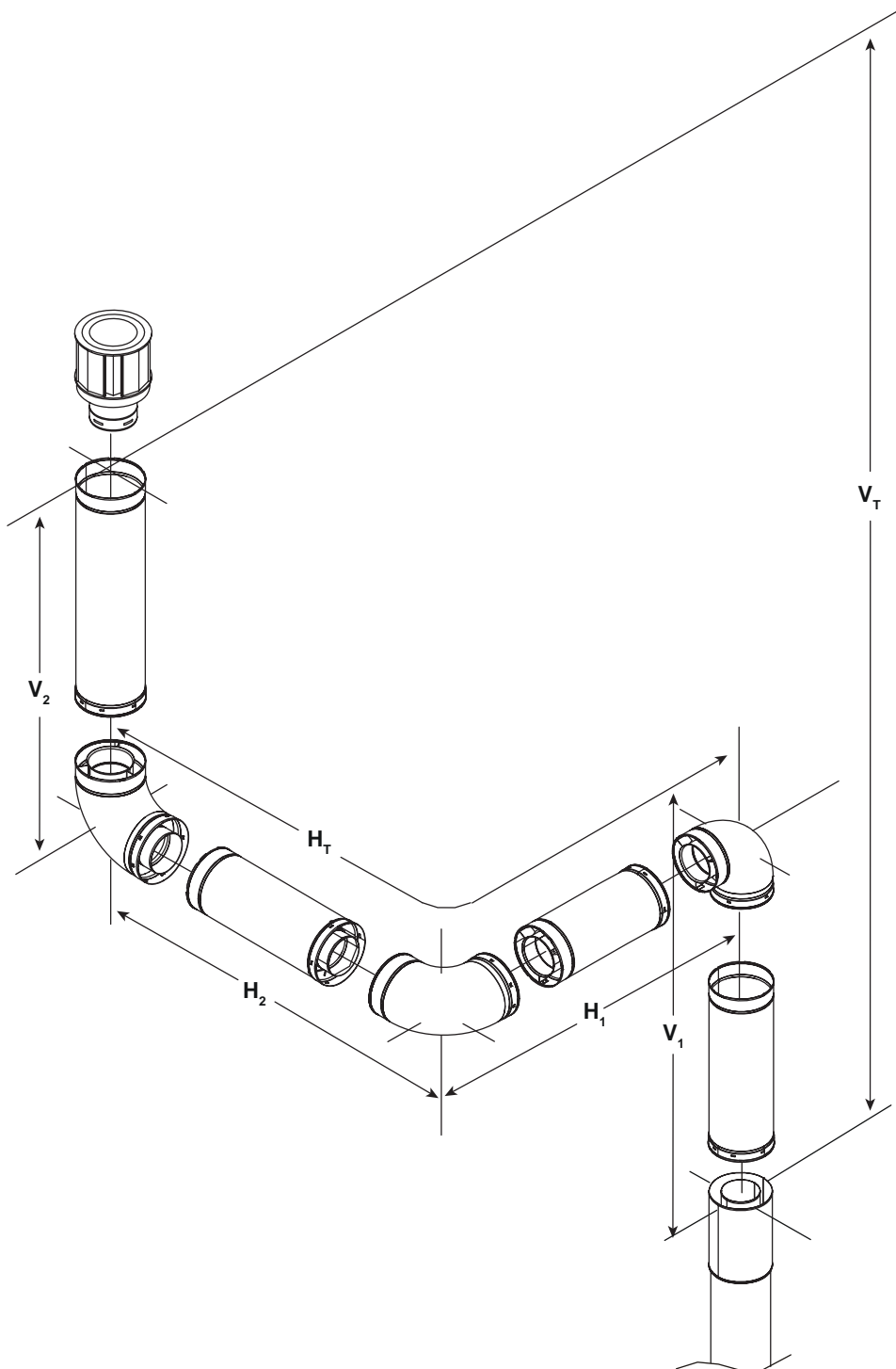



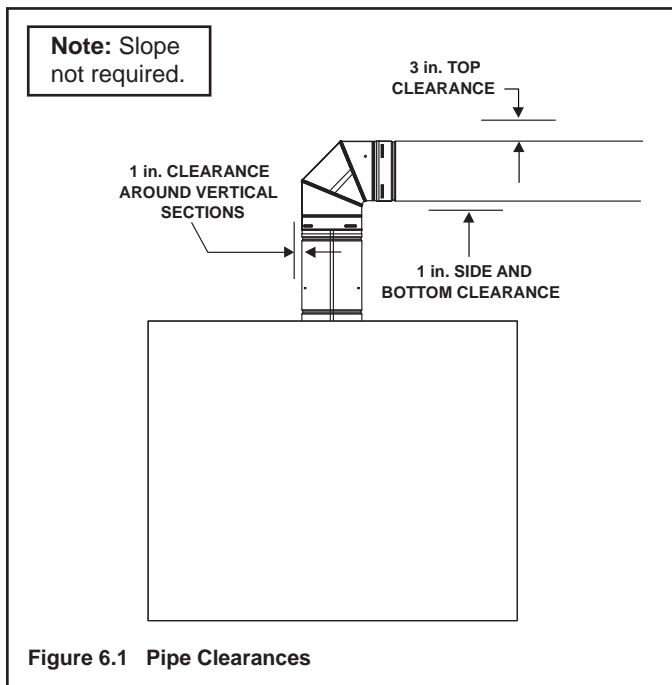


Figure 5.8

6 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

	WARNING
	Fire Risk. Explosion Risk. Maintain vent clearance to combustibles as specified.
	<ul style="list-style-type: none">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

Combustible Wall Penetration

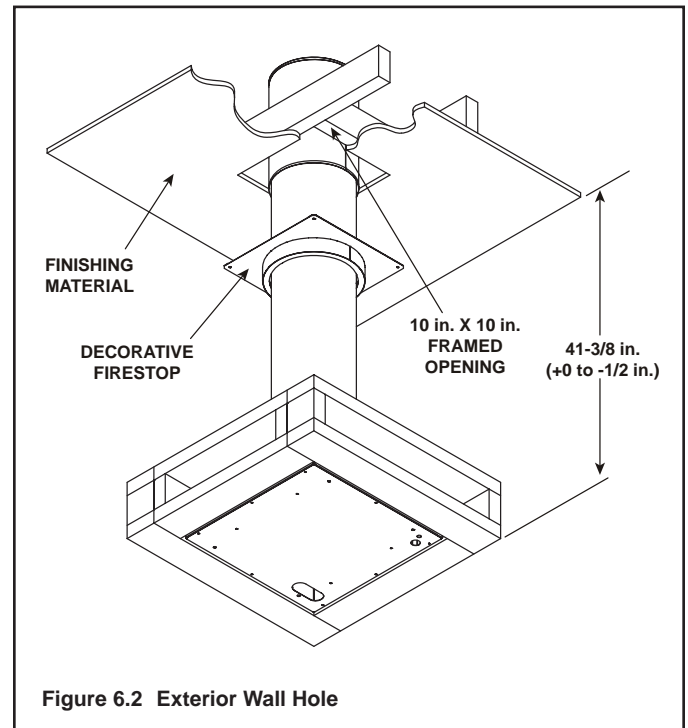
Frame a hole in a combustible wall for an interior wall shield firestop, (Figure 6.2) whenever a wall is penetrated. Use same size framing materials as those used in the wall construction. The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

Non-Combustible Wall Penetration

If the hole being penetrated is surrounded by noncombustible materials such as concrete, a hole with diameter one inch greater than the pipe is acceptable.

Whenever a non-combustible wall is penetrated, the wall shield firestop is only required on one side and no heat shield is necessary.

If your local inspector requires the wall shield firestop on both sides, then both wall shield firestops must have a heat shield attached to them.



C. Vertical Penetration Framing

⚠ WARNING



Fire Hazard

Keep loose materials or blown insulation from touching the vent pipe.

- 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.

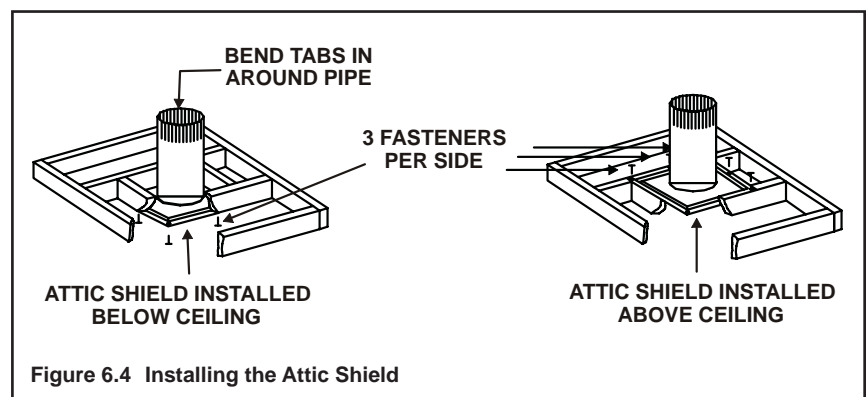
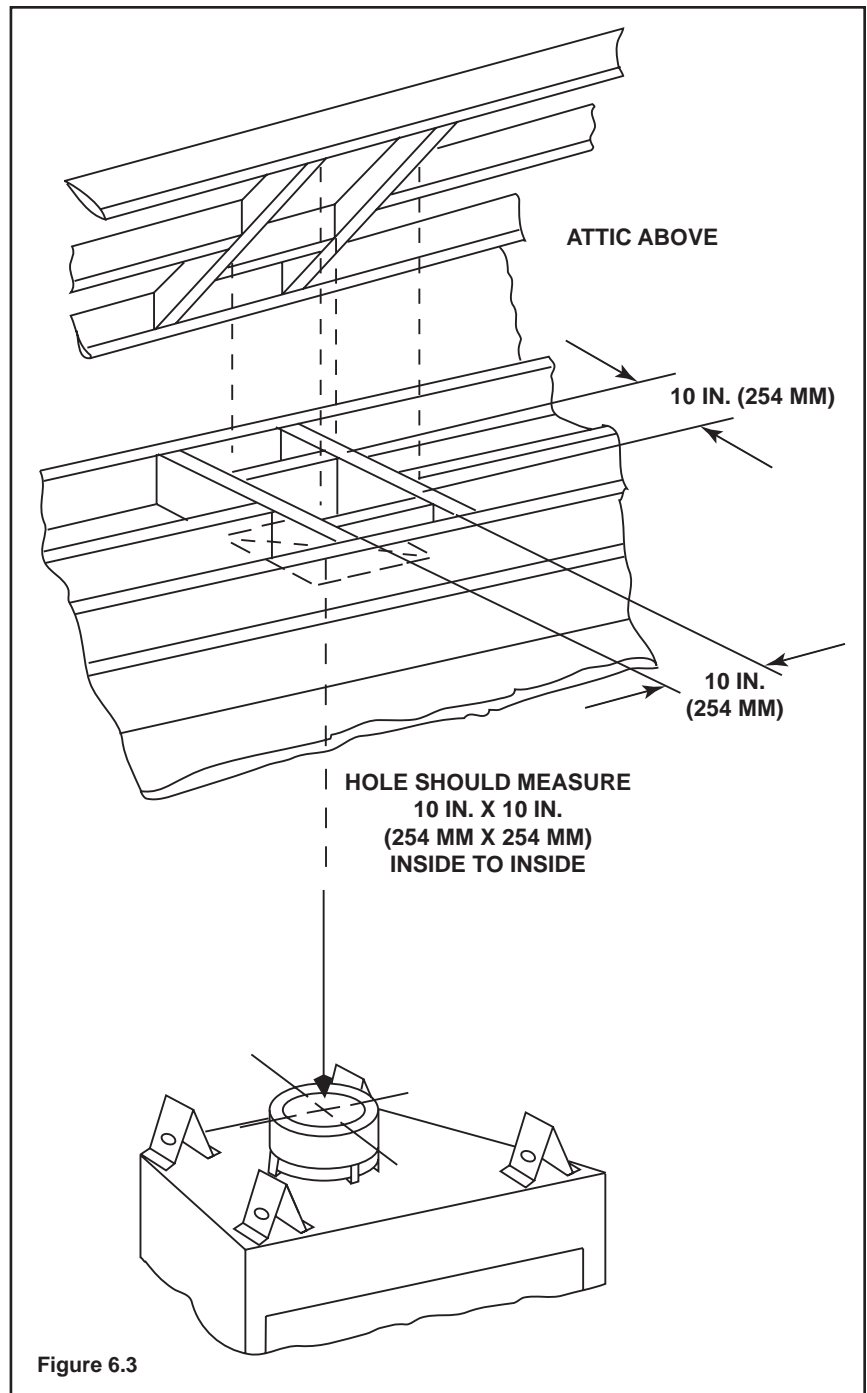
Installing the Ceiling Firestop

- Frame an opening 10 inches by 10 inches whenever the vent system penetrates a ceiling/floor (see Figure 6.3).
- 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.
- Do not pack insulation around the vent. Insulation must be kept away from the pipe.

Installing Attic Shield

Note: An additional ceiling firestop is not required if attic shield is used.

- Frame opening for attic shield.
- Attic shield may be installed above or below ceiling (see Figure 6.4).
- Secure with three fasteners on each side.
- Fold tabs at top of attic shield in toward vent pipe. Tabs must keep vent pipe centered within shield.
- Field construct additional shield height if insulation is deeper than height of attic shield.



7 Appliance Preparation

A. Securing and Leveling 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 7.1). Holes are provided to secure the appliance to the framing members with screws.

- Horizontal 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.
- Secure the appliance to the framing by using nails or screws through the holes in the base plate of the appliance.

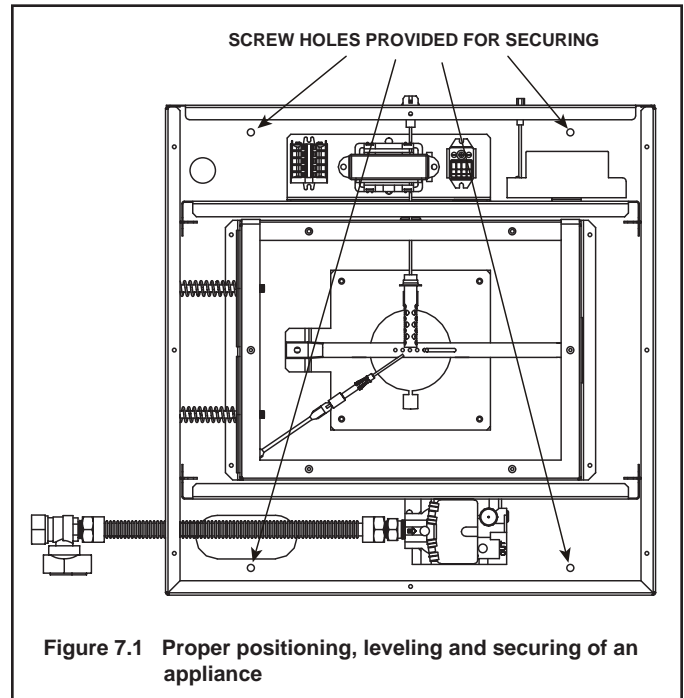


Figure 7.1 Proper positioning, leveling and securing of an appliance

WARNING

Fire Risk.

- ALWAYS maintain specified clearances around the appliance.
 - Do NOT notch into the framing around the appliance spacers.
- Failure to keep insulation, framing or other material away from the appliance may cause fire.



8 Installing Vent Pipe

A. Assembly of Vent Sections

WARNING

Do not mix pipe, fittings or joining methods from different manufacturers.

WARNING

Fire Risk
Exhaust Fumes Risk
Impaired Performance of Appliance

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

DVP Series Venting Only

Attach the first vent components to the starting collar. Attach the slip section (cyclone-12 slip) onto the glass cylinder (see Figure 8.1).

The next section of pipe slips into the slip section and must have an overlap of 1-1/2 inch but no more than 6 inches, to allow the slip section room to slide up for glass removal.

The first section of pipe must be secured to the framing to make it rigid and allow it to support the remaining pipe sections.

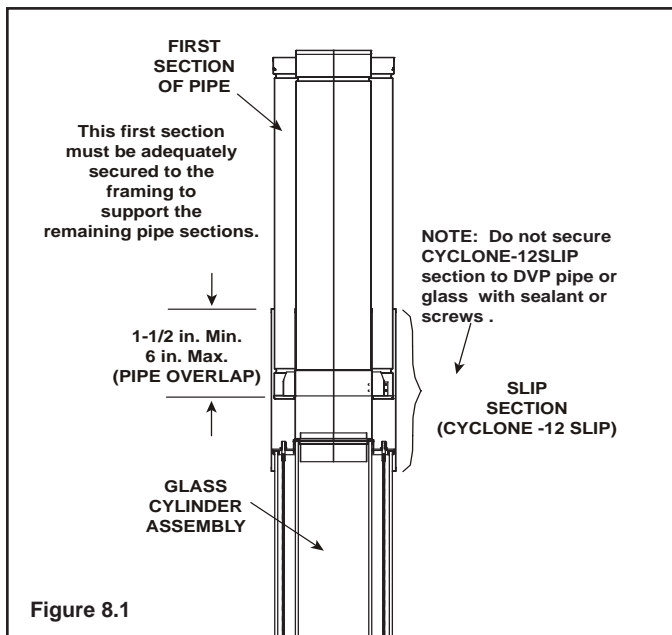


Figure 8.1

Note: It is critical that the relationship of the DVP pipe, Cyclone-12SLIP and glass assembly is installed per specification shown in Figure 8.1. The Cyclone-12SLIP section **MUST** be able to be manipulated up and down to ensure routine maintenance to the fireplace can be performed.

Sealing of Pipe Sections

All pipe joints must be sealed with high temperature silicone, including the slip section that connects directly to the horizontal termination cap, but not including the CYCLONE-12SLIP.

- Apply a bead of silicone sealant inside the female outer pipe joint prior to joining sections. See Figure 8.2
- Only outer pipes are 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 toward 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.

Assembling 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 8.3). **Note:** The end of the pipe sections with the lances/tabs on it will face towards the appliance.

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 8.4) and the seams are not aligned (see Figure 8.5). Tug slightly on section A to confirm it has completely locked into place.

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.



Figure 8.2 Lances

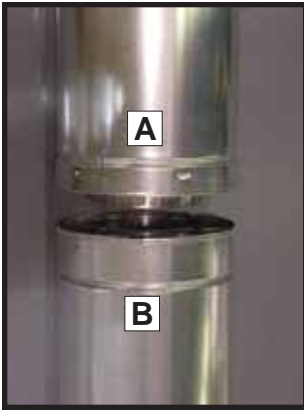
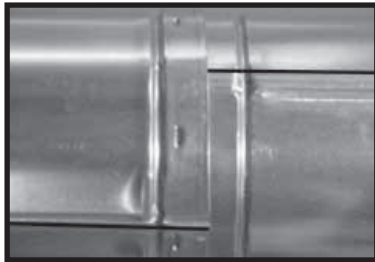


Figure 8.3

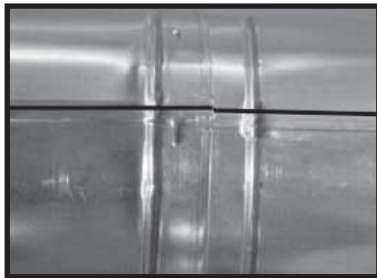


Figure 8.4

Note: Make sure that the seams are not aligned to prevent unintentional disconnection.



CORRECT



INCORRECT

Figure 8.5 Seams

Assembling Minimum Installations (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 8.6). For installations into commercial, multi-family (multilevel exceeding two stories) or high-rise applications, it is required to seal MI (non-unitized) pipe with a bead of silicone sealant. Apply to the overlap of outer pipe sections only.

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.

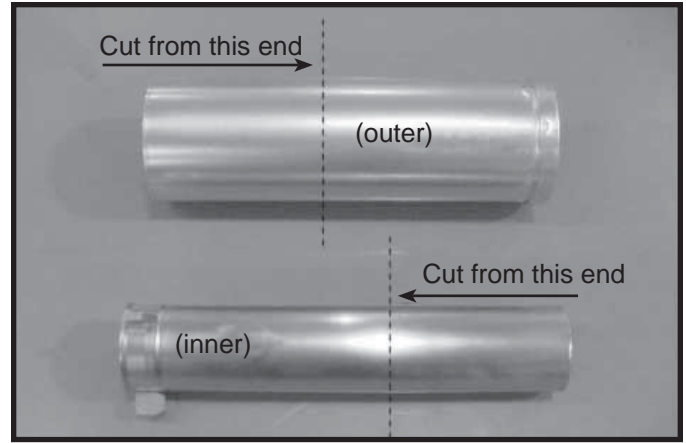


Figure 8.6

Assembling DVP-12A 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 8.7).

Slide together to the desired length, making sure that a 1-1/2 inch 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 8.8).

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.

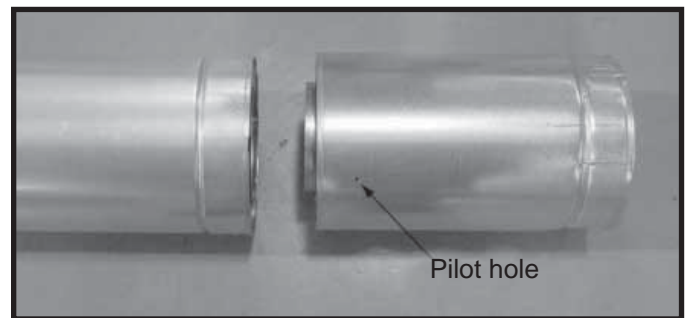


Figure 8.7 Slip Section Pilot Holes

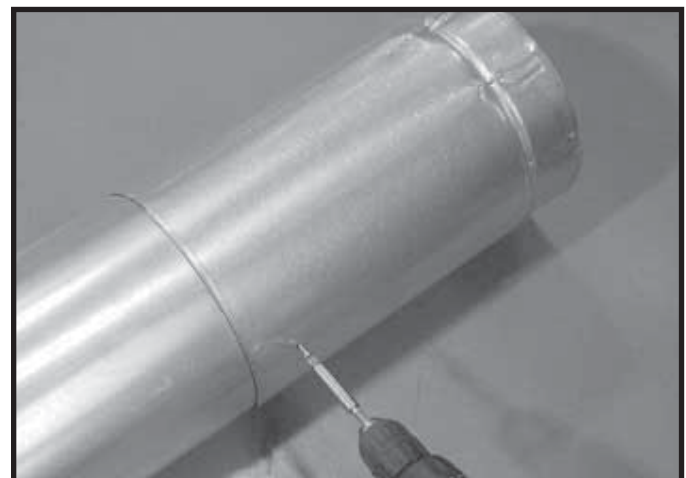


Figure 8.8 Screws into Slip Section

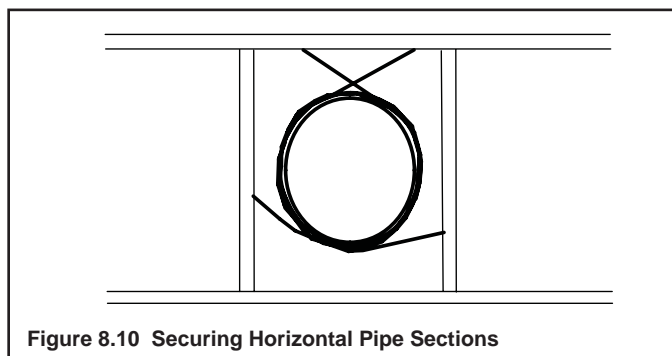
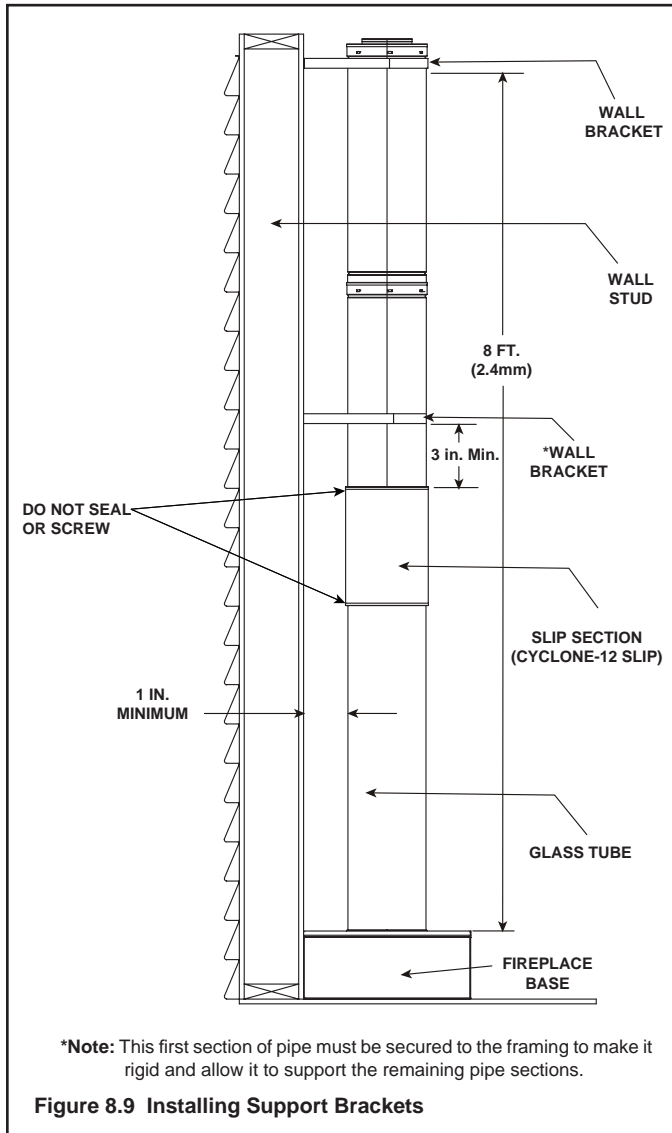
Securing the Vent Sections

Vertical Sections

Vertical sections of pipe must be supported every 8 feet above the fireplace base. For the Cyclone, there must be an additional vent support (wall bracket) placed around the first section of pipe (see Figure 8.9). The vent support or plumber's strap (spaced 120° apart) may be used.

Horizontal Sections

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



B. Disassembly of Vent Sections

To disassemble any two pieces of pipe, rotate either section (see Figure 8.11), so that the seams on both pipe sections are aligned (see Figure 8.12). They can then be carefully pulled apart.

⚠ WARNING

Fire Risk.
Explosion Risk.
Combustion Fume Risk.

Use vent run supports per installation instructions.
Connect vent sections per installation instructions.

- 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.

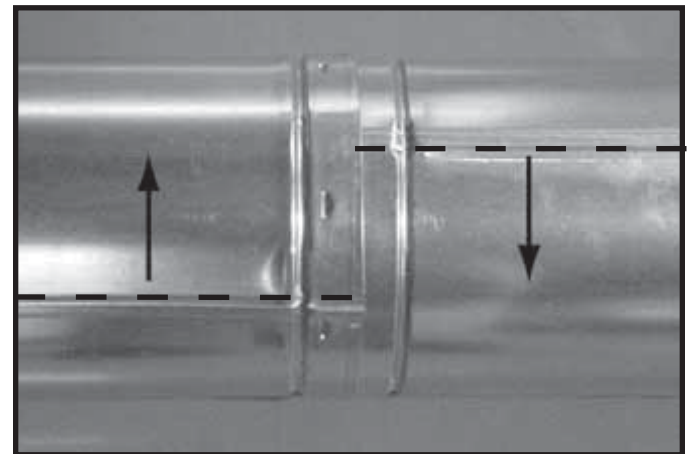


Figure 8.11 Rotate Seams for Disassembly

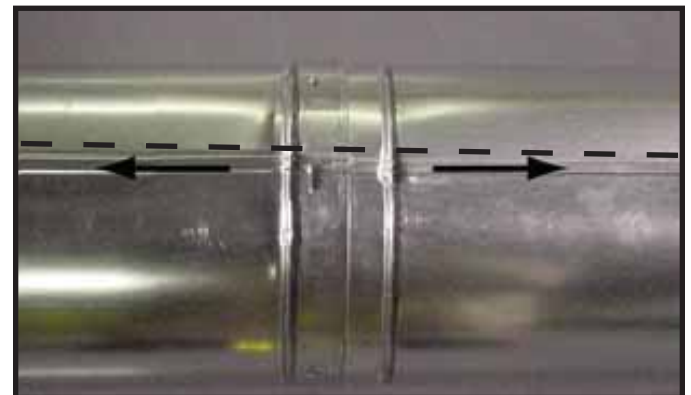


Figure 8.12 Align and Disassemble Vent Sections

C. Installing Heat Shield and Horizontal Termination Cap

⚠ WARNING



Fire Hazard

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 inch 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 inches.
- Use pilot holes for screws.
- Screws must not exceed 1 inch 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 one inch above the top of the vent between the wall shield firestop and the base of the termination cap.

There are two sections of the heat shield. One section is factory-attached to the wall shield firestop. The other section is factory-attached to the cap. See Figure 8.12.

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

Important Notice: Heat shields may not be field constructed.

The extended heat shield (DVP-HSM-B) 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 8.12) 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.

Installing the 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.

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

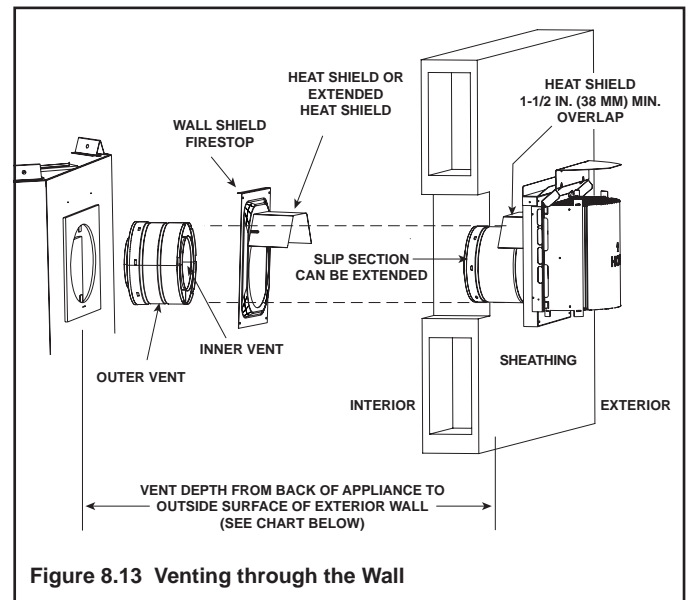


Figure 8.13 Venting through the Wall

Cap Specification Chart (depth without using additional pipe sections)

Cyclone-Cust	DVP-TRAPK1 Top Vent Depth	DVP-TRAP1 Rear Vent Depth	DVP-TRAPK2 Top Vent Depth	DVP-TRAP2 Rear Vent Depth
		3-1/2 in. to 5-3/8 in.	N/A	6 in. to 10 in.
Cyclone-Cust	DVP-HPC1 Top Vent Depth	DVP-HPC1 Rear Vent Depth	DVP-HPC2 Top Vent Depth	DVP-HPC2 Rear Vent Depth
	6-1/4 in. to 8-3/8 in.	N/A	8-3/8 in. to 12-1/2 in.	N/A

DVP-TRAP1 can adjust 1-1/2 in. (3-1/8 to 4-5/8)

DVP-TRAP2 can adjust 4 in. (6-9/16 to 10-9/16)

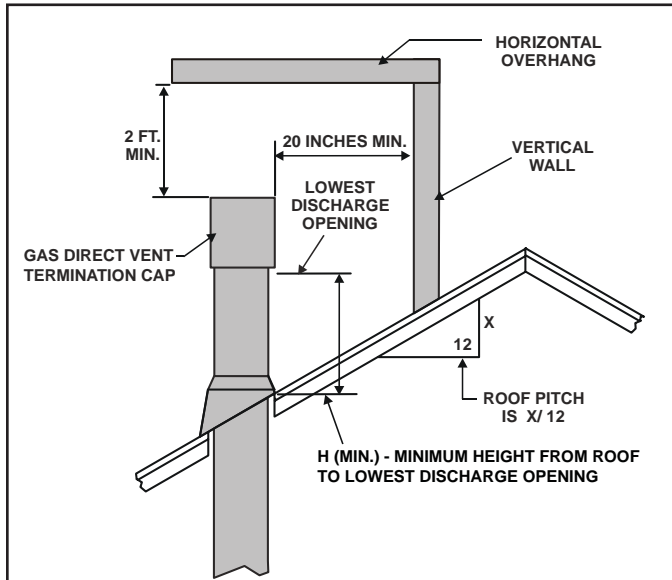
DVP-HPC1 can adjust 2-1/8 in. (4-1/4 to 6-3/8)

DVP-HPC2 can adjust 4-1/8 in. (6-3/8 to 10-1/2)

D. Installing Roof Flashing and Vertical Termination Cap

To install roof flashing see Figure 8.14.

For installation of vertical termination cap see minimum vent heights for various pitched roofs (see Figure 8.14).



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

* 3 foot minimum in snow regions

Figure 8.14 Minimum height from roof to lowest discharge opening

Caulk the gap between the roof flashing and the outside diameter of the pipe. Also caulk the perimeter of flashing that contacts roof surface as shown in Figure 8.16.

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 8.15).



Figure 8.14



Figure 8.15

⚠ 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.

Assembling and Installing 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 8.17).

Wrap the storm collar around the exposed pipe section and align brackets. Insert a bolt (provided) through the brackets and tighten nut to complete storm collar assembly (see Figure 8.18).

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 8.18 Assembling the Storm Collar Around the Pipe

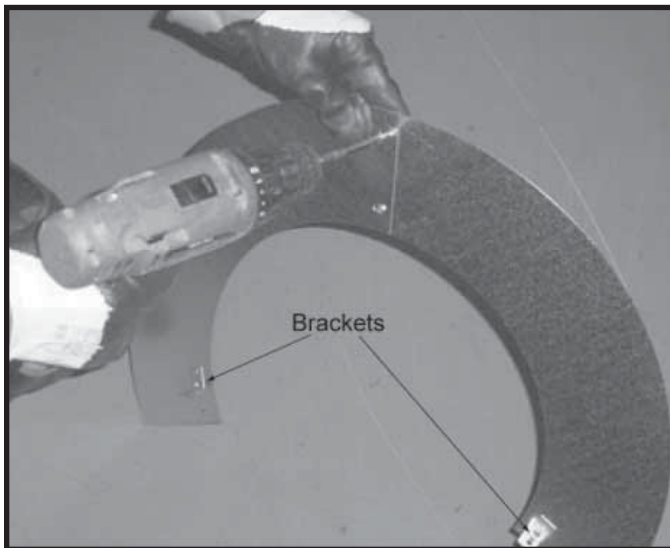


Figure 8.17 Assembling the Storm Collar

9 Gas Information


A. Fuel Conversions

No fuel conversions allowed.

B. Gas Pressures

Proper input pressures are required for optimum appliance performance. Gas line sizing requirements need to be made following NFPA54.


⚠ WARNING



Fire Risk.
Explosion Hazard.
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



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 the table below. Minimum pressures must be met when other household gas appliances are operating.

Pressure	Natural Gas
Minimum inlet pressure	5.0 inches w.c.
Maximum inlet gas pressure	14.0 inches w.c.
Manifold pressure	3.5 inches 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 inch (13 mm) T-handle manual shut-off valve and flexible gas connector are connected to the 1/2 inch (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 the appliance provided the hole in the outer wrap does **NOT** exceed 2-1/2 inches 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 inch connection on the manual shutoff valve.

⚠ WARNING	
	<p>Fire or Explosion Hazard</p> <ul style="list-style-type: none"> • Gas buildup 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</p> <p>Explosion Risk Fire 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 hazard.</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.


<p>HIGH ALTITUDE INSTALLATIONS</p> <p>U.L. Listed gas appliances are tested and approved without requiring changes for elevations from 0 to 2000 feet in the U.S.A. and Canada.</p> <p>When installing this appliance at an elevation above 2000 feet, 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 feet above a 2000 foot elevation in the U.S.A., or 10% for elevations between 2000 and 4500 feet 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.</p> <p>If installing this appliance at an elevation above 4500 feet (in Canada), check with local authorities.</p>
--

10 Electrical Information

A. Recommendation for Wire

This appliance requires 110-120 VAC be wired directly to the transformer. See Figure 10.1.

1. Ensure that the electrical service being installed to the appliance is turned "OFF" by verifying with a volt meter.

	⚠ WARNING
	Shock hazard. Wire 110V to transformer. Do NOT wire 110V to valve. Do NOT wire 110V to wall switch. <ul style="list-style-type: none">• Incorrect wiring will damage 24V valve.• Incorrect wiring will override HSI safety lockout and may cause explosion.

2. Bring the electrical service wire through the wire restraint located on the right side of the appliance. Leave about 10 inches of electric service wire inside the appliance to permit for future service maintenance.
3. Locate the (2) female insulated connectors installed on the transformer and the (1) ground connector screwed to the right side of the transformer bracket.

Note: The factory installed yellow female insulated connectors (2) and yellow ground connector (1) are designed for use with 10/12 AWG wire. If another gauge wire is being used, these connectors should be replaced with the appropriate gauge insulated connectors to ensure a proper connection. See Figure 10.2.

4. Route electrical service wires through plastic grommet as show in Figure 10.1. This plastic grommet is located on the right side of the Transformer bracket.
5. Connect the L1 (Black) service wire to the supplied yellow female insulated connector located on transformer terminal (23) using a wire crimping tool. See Figure 10.2.

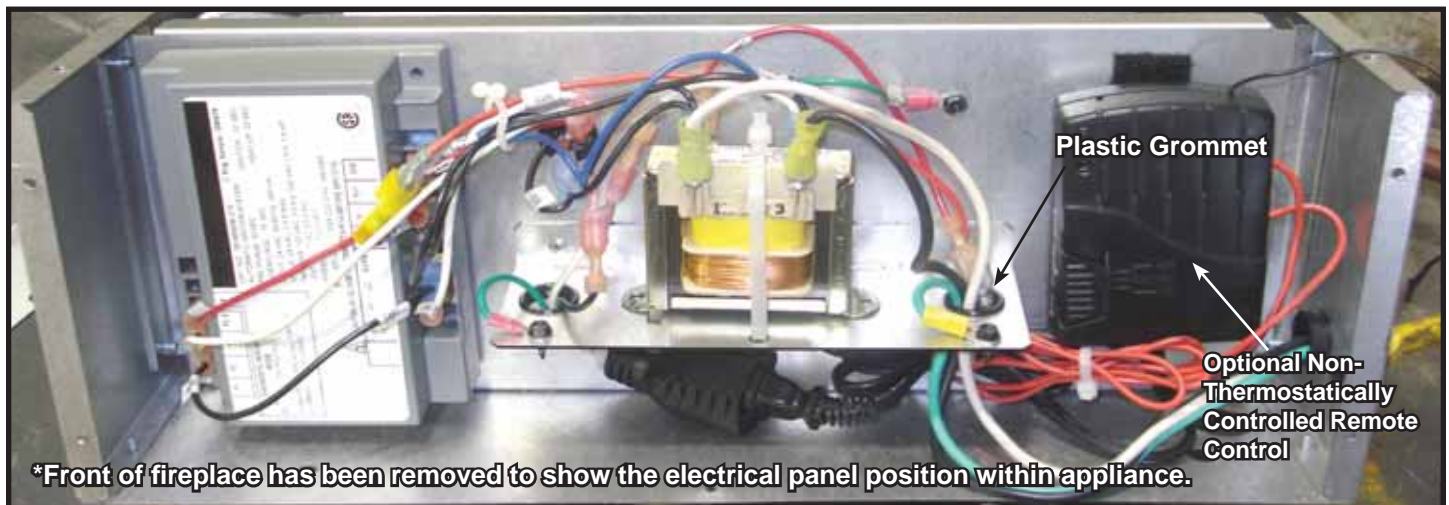


Figure 10.1 Electrical Panel position inside Appliance with Front removed.

6. Connect the neutral (White) service wire to the yellow female insulated connector located on transformer terminal (1) using a wire crimping tool. See Figure 10.2.
7. Connect the ground (Green) wire to the 1/4 in. ground screw located on the front right of the transformer bracket. See Figure 10.2.

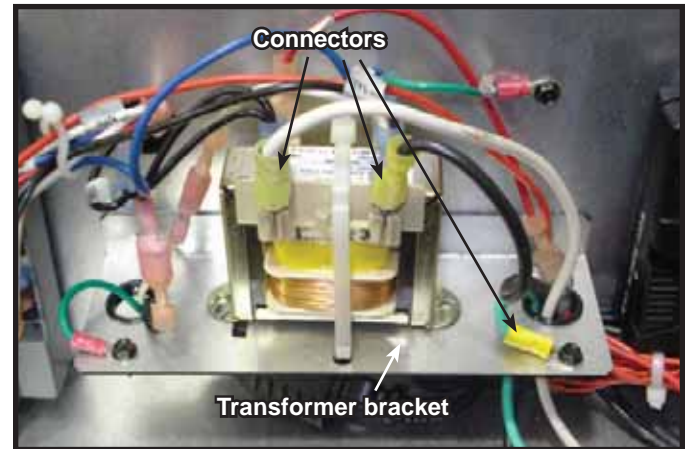


Figure 10.2

Note: The system is polarity sensitive. Polarity must be correct for this fireplace to operate correctly.

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 C221.1**.

- A 110-120 VAC circuit for this product must be protected with ground-fault circuit-interrupter protection, in compliance with the applicable electrical codes, when it is installed in locations such as in bathrooms or near sinks.

B. Connecting to the Appliance

⚠ WARNING

Wire 110V to the transformer.
Do NOT wire 110V to valve.
Do NOT wire 110V to wall switch.

- Incorrect wiring will damage 24V valve.
- Incorrect wiring will override HSI safety lockout and may cause explosion.

- This appliance ships with a standard WSK-21-W ON/OFF wall switch. An optional, non-thermostat remote may be installed in addition to the standard WSK-21-W wall switch. Refer to the wire diagram for more information.
- 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.

C. Hot Surface Ignition Wiring

This appliance requires a 110 VAC supply to the appliance transformer for operation. A wiring diagram is shown in Figure 10.9. This appliance is equipped with a 24V valve.

Optional Accessories Requirements

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

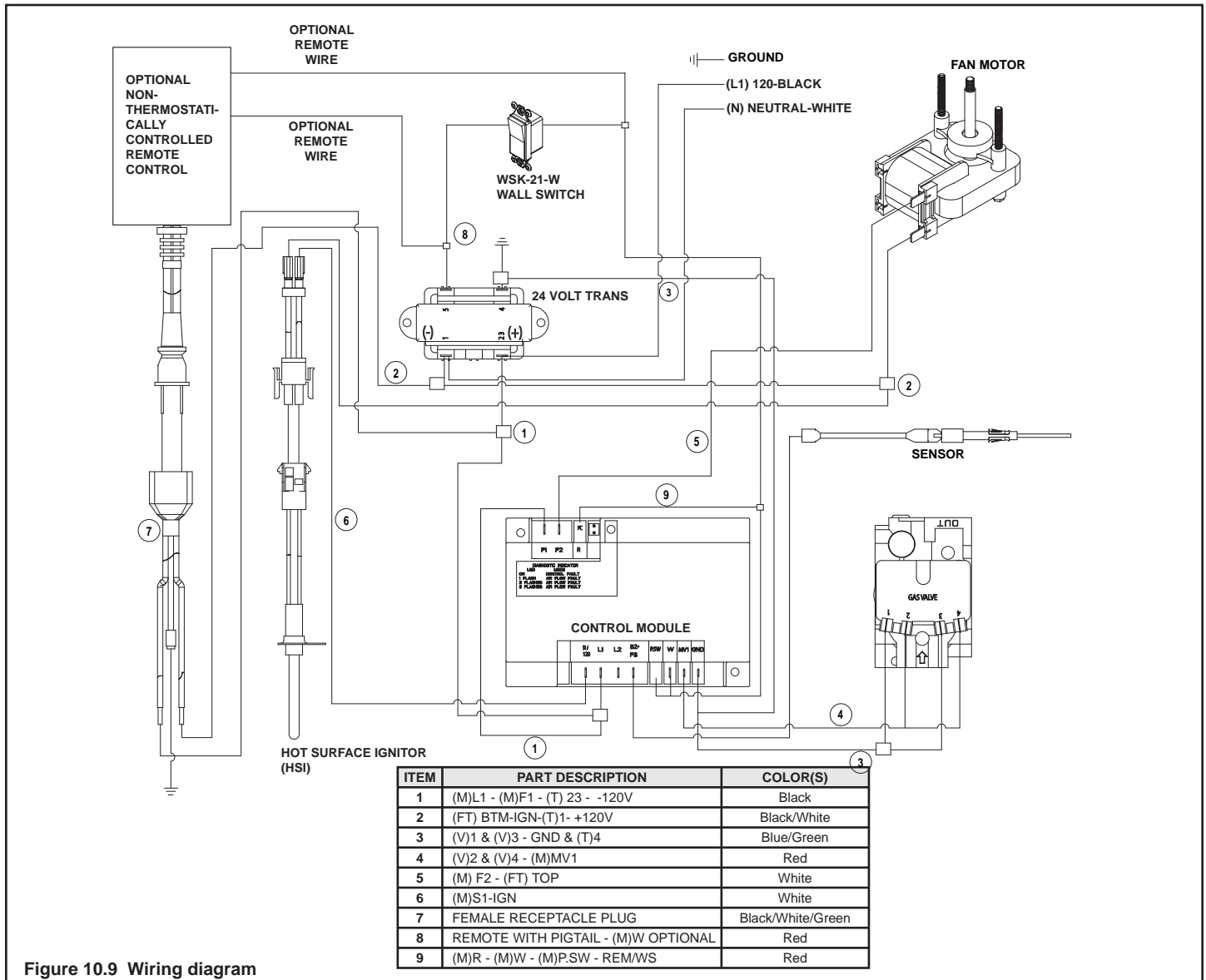
CAUTION

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

⚠ WARNING

Shock hazard.

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

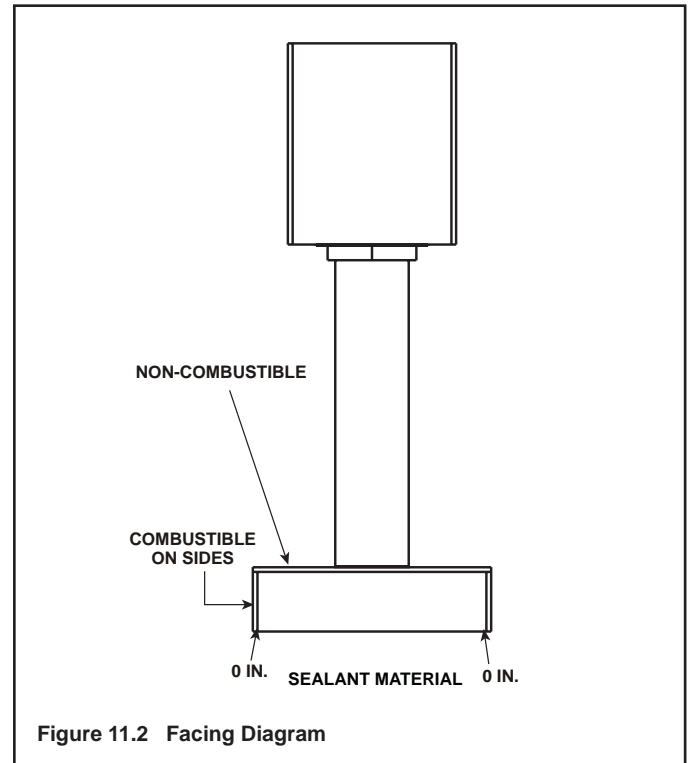
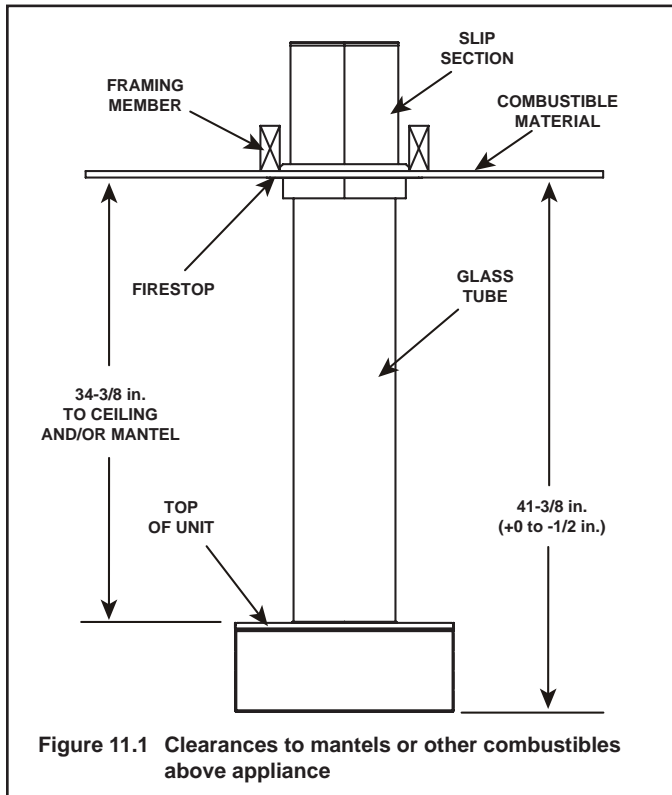


→ Figure 10.9 Wiring diagram

11 Finishing

A. Mantel Projections

This appliance is approved to be installed with a clearance to the ceiling and/or other projections of 34-3/8 inch minimum from the top of the fireplace (see Figure 11.1).



Sheetrock or other finishing materials can be brought to within 0 inches on the sides and bottom.

Finishing materials for the top of the fireplace base must be noncombustible and removable for access to controls. All clearances must be maintained (see Figure 11.3).

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.

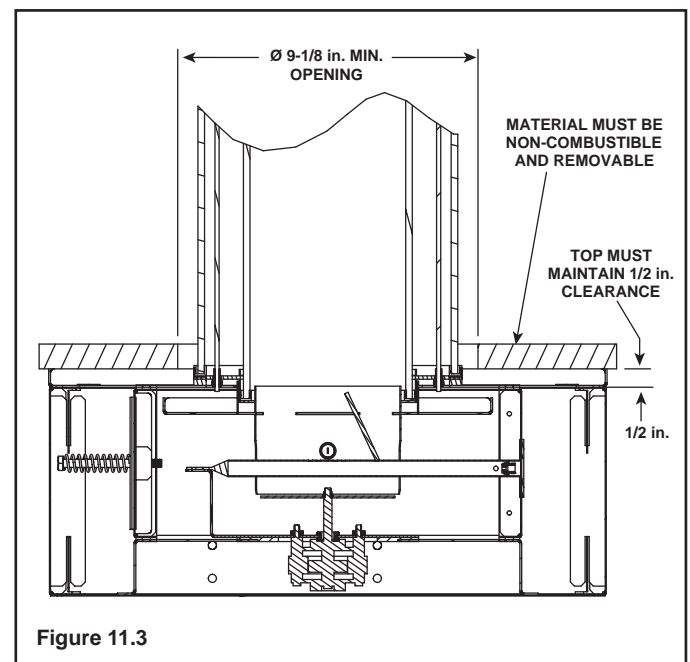
Finishing materials must not interfere with:

- 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.

- Install combustible materials only up to specified clearances on top, front and side.
- Seal joints between the finished wall and appliance top and sides using only a 300° F minimum sealant.



12 Appliance Setup

A. Remove Shipping Materials

Remove shipping materials from inside or underneath the firebox.

B. Clean the Appliance

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

C. Accessories

Install approved accessories per instructions included with accessories. See Service Parts List for appropriate accessories. Refer to **Section 15**.

	⚠ WARNING
	<p>Shock or fire risk. Use ONLY optional accessories approved for this appliance.</p> <ul style="list-style-type: none">• 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.

D. Glass Assembly Installation

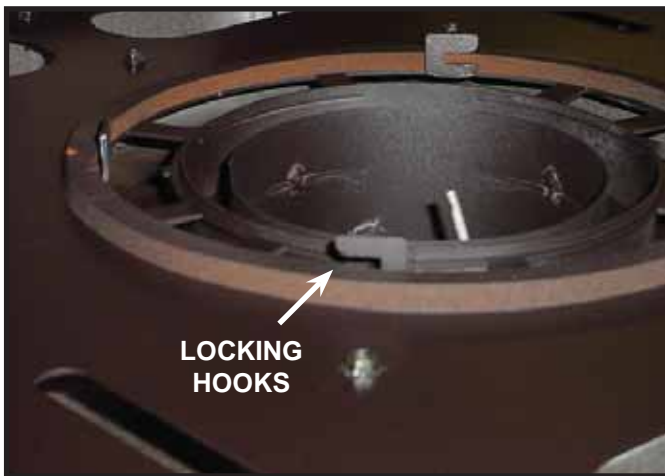


Figure 12.1



Figure 12.2 Position the bottom of the glass assembly by centering it on the platform as shown.

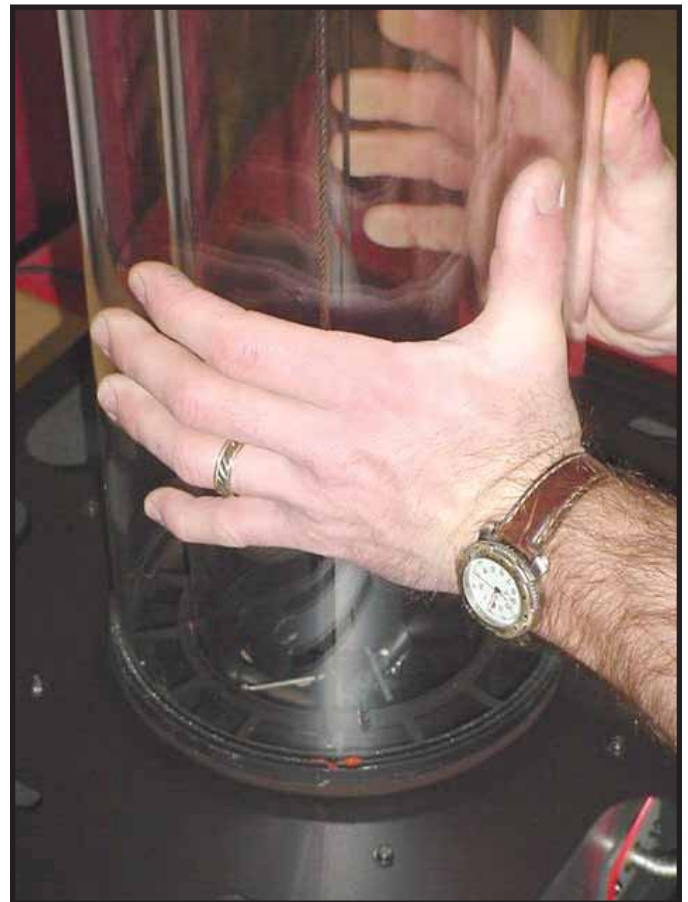



Figure 12.3 Once the glass cylinder is centered, while pushing down, twist the glass cylinder clockwise to engage the locking hooks. Turn the glass cylinder counter-clockwise while pushing down to remove.


13 Operating Instructions

A. Before Lighting Appliance

Before operating this appliance have a qualified technician:

- Remove all shipping materials from inside and/or underneath the firebox.
- Check the wiring.
- 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 Glass cylinder must be in place when appliance is operating. Risk of: <ul style="list-style-type: none">• Combustion Fumes• Fire Do NOT operate appliance with glass cylinder removed. <ul style="list-style-type: none">• Remove glass cylinder for servicing only.• Glass replacement should be done by qualified technician. qualified technician.
---	--

WARNING	
	HOT SURFACES! Glass and other surfaces are hot during operation AND cool down. Hot glass will cause burns. <ul style="list-style-type: none">• Do not touch glass until it is cooled• NEVER allow children to touch glass• Keep children away <ul style="list-style-type: none">• CAREFULLY SUPERVISE children in same room as fireplace.• Alert children and adults to hazards of high temperatures. High temperatures may ignite clothing or other flammable materials. <ul style="list-style-type: none">• Keep clothing, furniture, draperies and other flammable materials away. <hr/> <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 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 Appliance

HSI 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.

A. This appliance is equipped with an hot surface ignition device which automatically lights the burner. Do not try to light the burner by hand.

B. 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

WARNING:

DO NOT CONNECT 110 VAC TO THE CONTROL VALVE.

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance.

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

If not installed, operated, and maintained in accordance with the manufacturer's instructions, this product could expose you to substances in fuel or fuel combustion which are known to the State of California to cause cancer, birth defects, or other reproductive harm.

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

For additional information on operating your
Hearth & Home Technologies fireplace, please refer to www.fireplaces.com.

from a neighbor's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the fire department.

C. 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.

CAUTION:

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

Do not operate the appliance with panel(s) removed, cracked or broken. Replacement of the panel(s) should be done by a licensed or qualified service person.

NOT FOR USE WITH SOLID FUEL

This appliance is only for use with the type(s) of gas indicated on the rating plate. This appliance is not convertible to other gases.

Also Certified for Installation in a Bedroom or a Bedsitting Room.

For assistance or additional information, consult a qualified installer, service agency or the gas supplier.

LIGHTING INSTRUCTIONS (HSI)

1. Turn off all electric power to the appliance.
2. This appliance is equipped with an ignition device which automatically lights the burner. Do not try to light the burner by hand.
3. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the Safety Information located on the left side of this label. If you don't smell gas, go to next step.
4. Turn on all electric power to the appliance.
5. To light the burner, flip the ON/OFF switch to the "ON" position. (The ON/OFF switch may include a wall switch if so equipped).
6. It will take 15 to 30 seconds for the hot surface ignitor to warm-up before an ignition attempt is made.
7. If the appliance will not operate, follow the instructions "To Turn Off Gas to Appliance" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1. Turn off all electric power to the appliance if service is to be performed.
2. Flip ON/OFF switch to the "OFF" position.
3. Turn gas off to this unit.

Final inspection by _____

2073-913C



C. After 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: The 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 to 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	
	<p>Fire Risk. High Temperatures. Keep combustible household items away from appliance. Do NOT obstruct combustion and ventilation air.</p> <ul style="list-style-type: none"> • Do NOT place combustible items on top of or in front of appliance. • Keep furniture, draperies away from appliance.

CAUTION
<ul style="list-style-type: none"> • Prevent accidental appliance operation when not attended. • Unplug or remove batteries from optional remote control if absent or if appliance will not be used for an extended period of time. • Property damage possible from elevated temperatures.

CAUTION
<p>Smoke and odors released during initial operation.</p> <ul style="list-style-type: none"> • Open windows for air circulation. • Leave room during initial operation. • Smoke may set off smoke detectors. <p>Smoke and odors may be irritating to sensitive individuals.</p>

 WARNING	
	<p>Fire Hazard. Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.</p> <ul style="list-style-type: none"> • Do NOT store flammable materials in the appliance's vicinity. • 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
Condensation on the glass	This is a result of gas combustion and temperature variations. As the appliance warms, this condensation will disappear.
Blue flames	This is a result of normal operation and the flames will begin to yellow as the appliance is allowed to burn for 8 to 5 minutes.
Odor from appliance	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 of any oils remaining from manufacturing. Odor may also be released from finishing materials and adhesives used around the appliance.
Film on the glass	The glass cylinder can be cleaned with standard household glass cleaner. See glass assembly installation section for removal information.
Metallic noise	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 fireplace.

14 Maintaining and Servicing 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 checkup 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 optional 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 firebox.
- Burner ignition and operation.
- 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

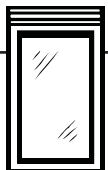
⚠ WARNING

Inspect external vent cap regularly.

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

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 assembly:

- Avoid striking, scratching or slamming glass.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Do NOT clean glass when 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 additional 12 hours.

Refer to maintenance instructions.

A. Fan Motor Service

To service the fan motor, remove the glass assembly (see Glass Assembly Removal Instructions) and remove all screws from the top.

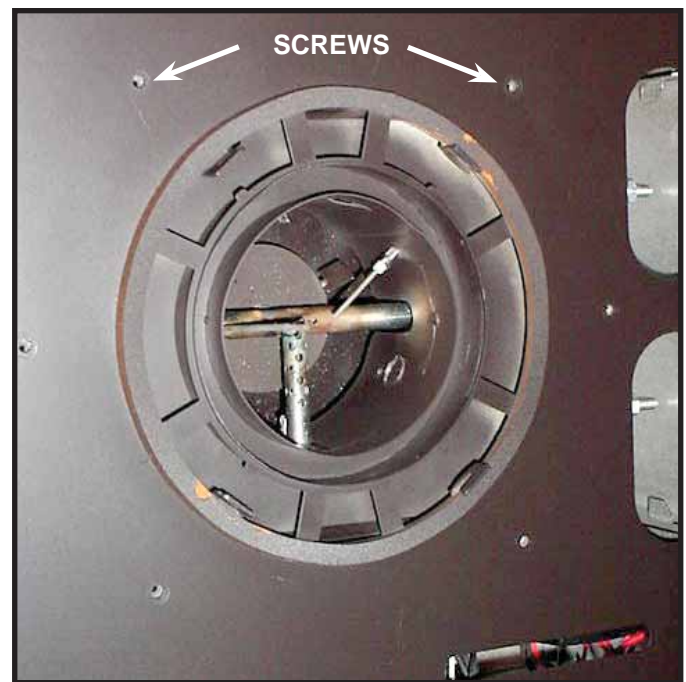


Figure 14.1

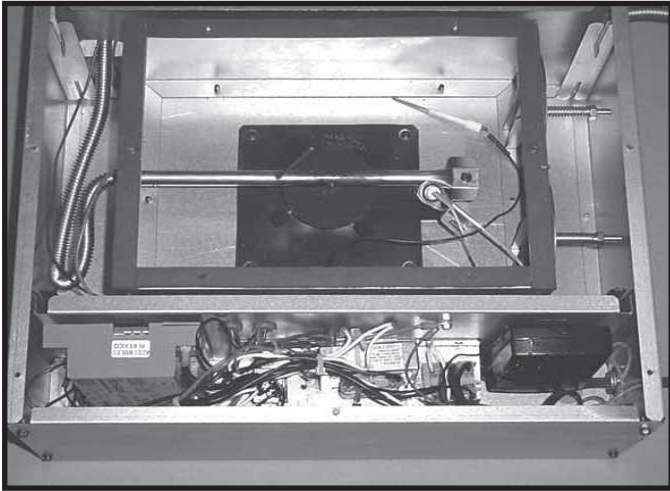


Figure 14.2 The glass platform plate can now be removed by removing the 13 screws on the outer edge of this platform. Lift the platform. The HSI (Hot Surface Ignitor) and the sensor wire can be unplugged. Set platform aside.



Figure 14.4 The fan plate can now be accessed. Remove the four screws. Lift the fan plate, being careful to not cut or scar wiring while disconnecting them from the fan motor.

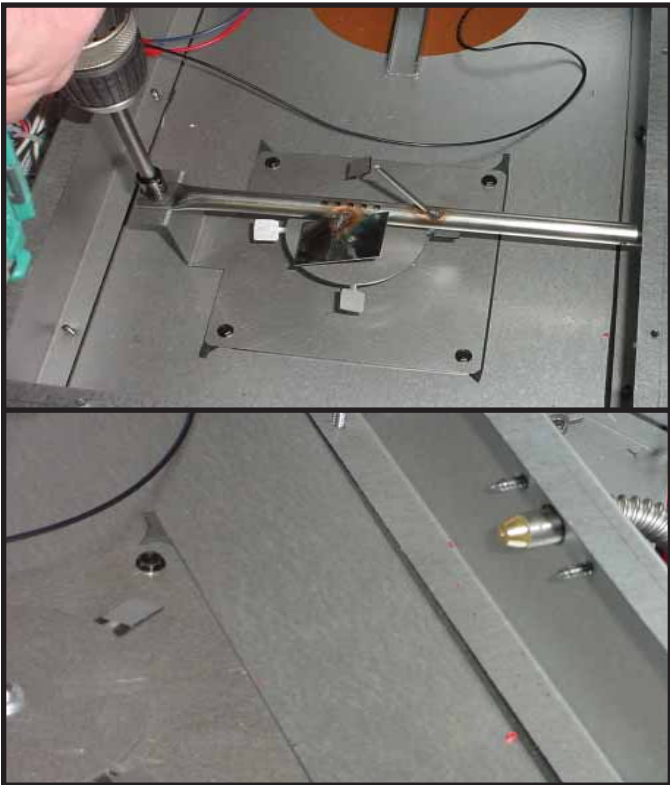


Figure 14.3 Remove the tube burner. It is held in place with one screw. Pull the burner tube away from orifice holder, rotating burner tube slightly, and remove it from the orifice.

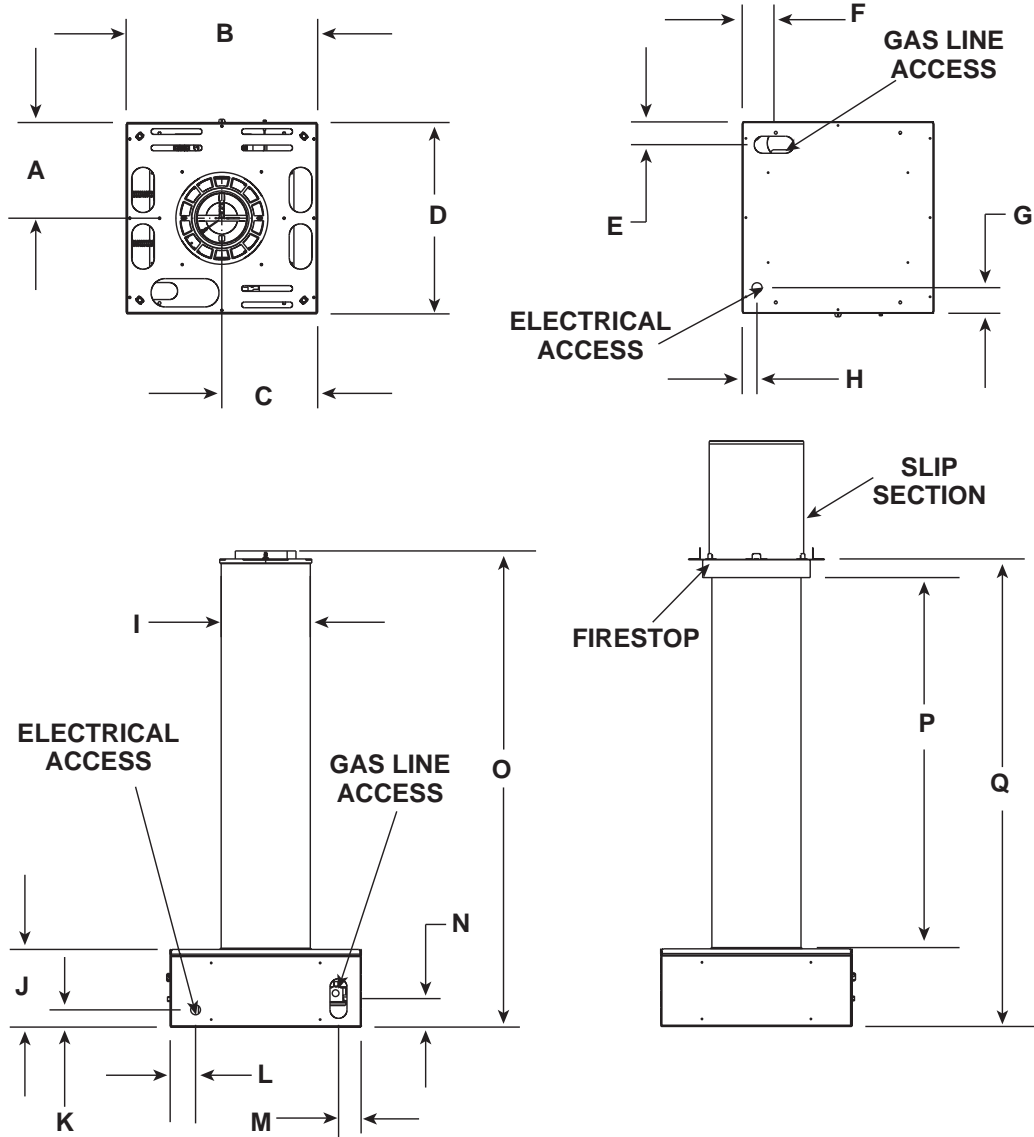
B. Maintenance Tasks

Inspect	Maintenance Tasks
Doors, Surrounds and Fronts	1. Inspect for scratches, dents or other damage and repair as necessary.
	2. Verify no obstructions to airflow through the louvers.
	3. Verify maintenance of proper clearance to combustible household objects.
Gasket Seal, Glass Assembly and Glass	1. Inspect gasket seal and its condition.
	2. Inspect glass cylinder 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. Clean glass. Replace glass assembly if severely coated with silicate deposits that cannot be removed.
Valve Compartment and Firebox Top	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.
Burner Ignition and Operation	1. Verify burner is properly secured and aligned with pilot or igniter.
	2. Clean off burner top, inspect for plugged ports, corrosion or deterioration. Replace burner if necessary.
	3. Check for smooth lighting and ignition carryover to all ports. Verify there is no ignition delay.
	4. Inspect for lifting or other flame problems.
	5. Verify air shutter is clear of dust and debris.
	6. Inspect orifice for soot, dirt or corrosion.
	7. Verify manifold and inlet pressures. Adjust regulator as required.
Venting	1. Inspect venting for blockage or obstruction such as bird 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 remains intact.
Optional Remote Controls	1. Verify operation of optional remote control.

15 Reference Materials

A. Appliance Dimension Diagram

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



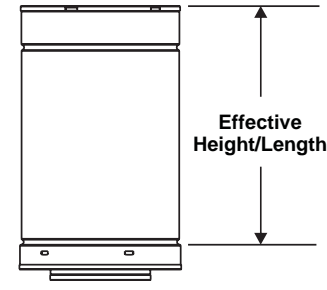
Location	Inches	Millimeter
A	8/12	215
B	17	430
C	8-1/2	215
D	17	430
E	2	51
F	2-3/4	71

Location	Inches	Millimeter
G	2-1/4	58
H	1-1/4	33
I	7-7/8	200
J	6-7/8	174
K	1-1/2	39
L	2-1/4	57

Location	Inches	Millimeter
M	2	51
N	2-1/2	64
O	42-1/8	1069
P	32-3/4	831
Q	41-3/8	1050

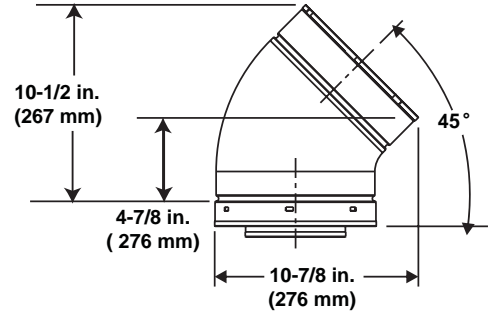
Figure 15.1 Appliance Dimensions

B. Vent Components Diagrams

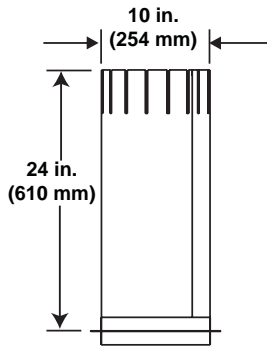


DVP Pipe (see chart)

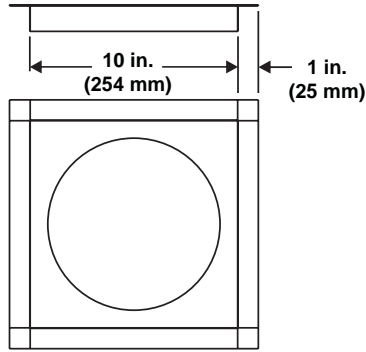
Pipe	Effective Length	
	Inches	Millimeters
DVP4	4	102
DVP6	6	152
DVP12	12	305
DVP24	24	610
DVP36	36	914
DVP48	48	1219
DVP6A	3 to 6	76 to 152
DVP12A	3 to 12	76 to 305
DVP12MI	3 to 12	76 to 305
DVP24MI	3 to 24	76 to 610



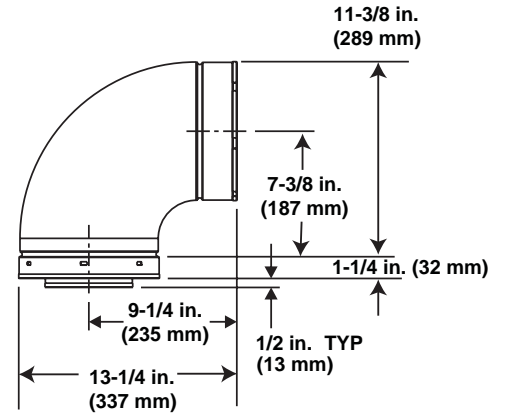
DVP45 (45° Elbow)



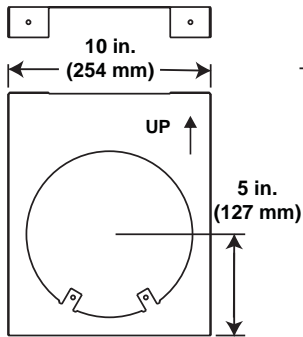
DVP-AS (Attic Shield)



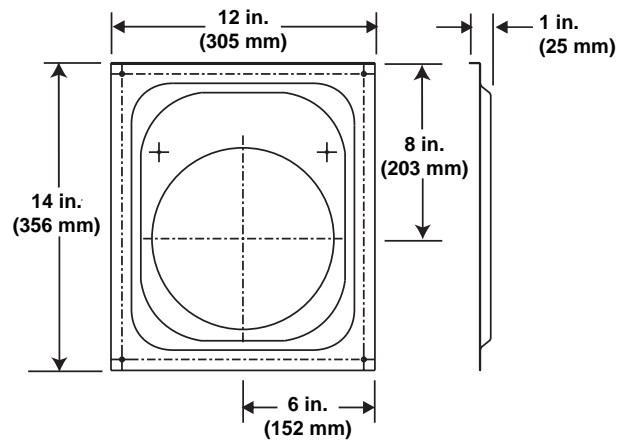
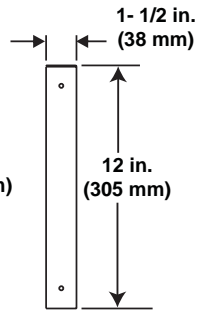
DVP-FS (Ceiling Firestop)



DVP90ST (90° Elbow)



DVP-HVS (Vent Support)

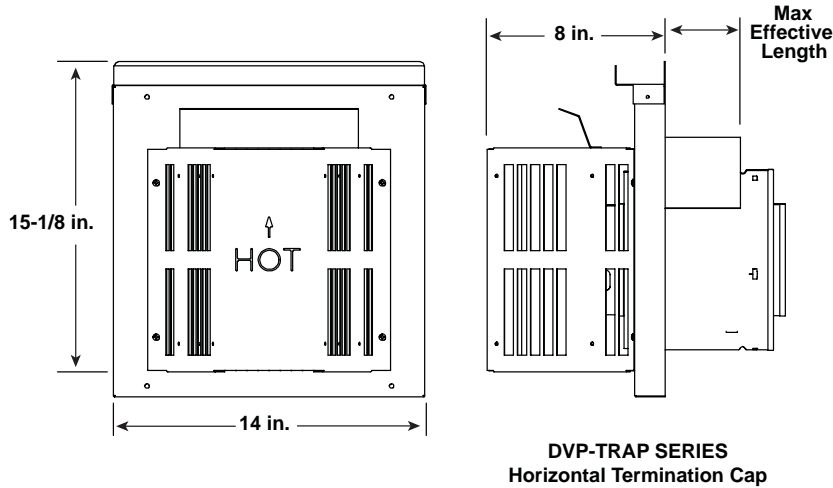


DVP-WS (Wall Shield Firestop)

Figure 15.2 DVP vent components

B. Vent Components Diagrams (continued)

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.



Term Cap	Minimum Effective Length	Maximum Effective Length
Trap1	3-1/8 in.	4-5/8 in.
	79 mm	117 mm
Trap2	5-3/8 in.	9-3/8 in.
	137 mm	238 mm

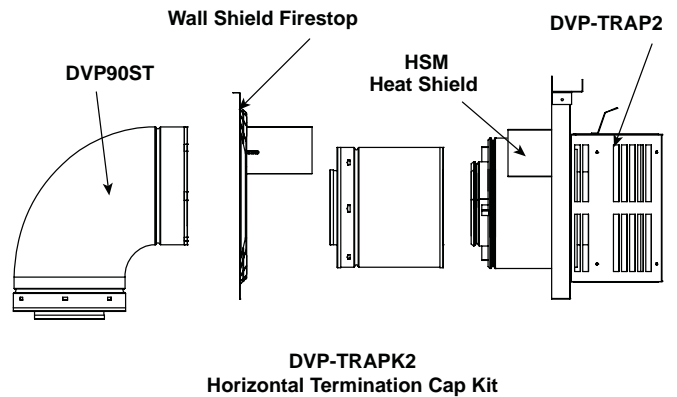
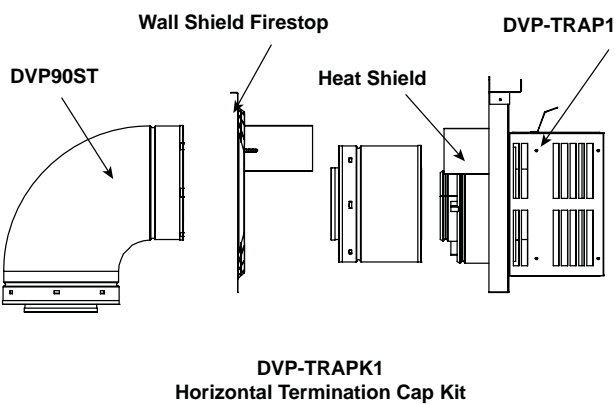
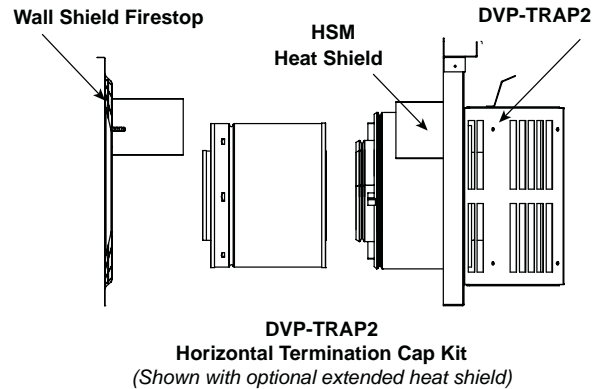
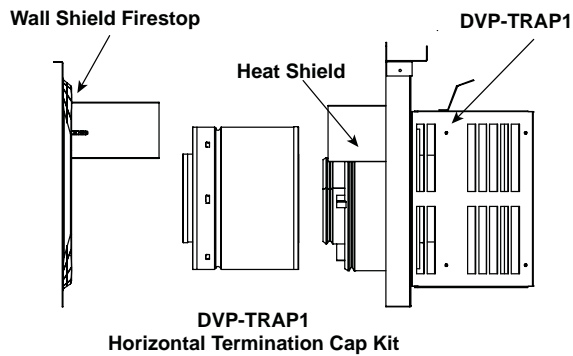
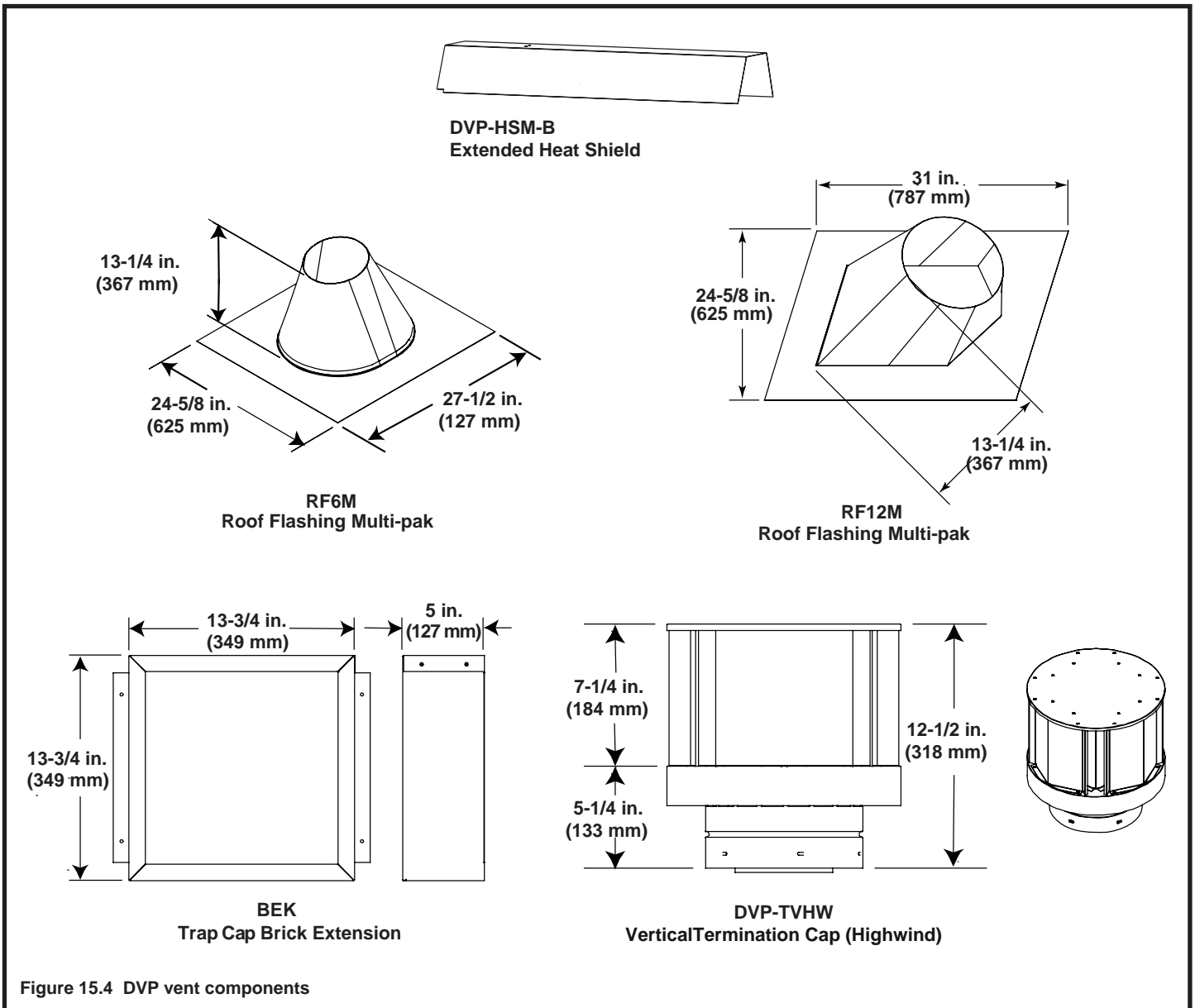


Figure 15.3 DVP vent components

B. Vent Components Diagrams (continued)



D. Limited Lifetime Warranty

Hearth & Home Technologies Inc. LIMITED LIFETIME WARRANTY

Hearth & Home Technologies Inc., on behalf of its hearth brands ("HHT"), extends the following warranty for HHT gas, wood, pellet, coal and electric hearth appliances that are purchased from an HHT authorized dealer.

WARRANTY COVERAGE:

HHT warrants to the original owner of the HHT appliance at the site of installation, and to any transferee taking ownership of the appliance at the site of installation within two years following the date of original purchase, that the HHT appliance will be free from defects in materials and workmanship at the time of manufacture. After installation, if covered components manufactured by HHT are found to be defective in materials or workmanship during the applicable warranty period, HHT will, at its option, repair or replace the covered components. HHT, at its own discretion, may fully discharge all of its obligations under such warranties by replacing the product itself or refunding the verified purchase price of the product itself. The maximum amount recoverable under this warranty is limited to the purchase price of the product. This warranty is subject to conditions, exclusions and limitations as described below.

WARRANTY PERIOD:

Warranty coverage begins on the date of installation. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the product by an independent, authorized HHT dealer/ distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from HHT, regardless of the installation or occupancy date. The warranty period for parts and labor for covered components is produced in the following table.

The term "Limited Lifetime" in the table below is defined as: 20 years from the beginning date of warranty coverage for gas appliances, and 10 years from the beginning date of warranty coverage for wood, pellet, and coal appliances. These time periods reflect the minimum expected useful lives of the designated components under normal operating conditions.

Warranty Period		HHT Manufactured Appliances and Venting							Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Coal	Electric	Venting	
1 Year		X	X	X	X	X	X	X	All parts and material except as covered by Conditions, Exclusions, and Limitations listed
2 years				X	X	X			Igniters, electronic components, and glass
		X	X	X	X	X			Factory-installed blowers
			X						Molded refractory panels
3 years				X					Firepots and burnpots
5 years	1 year			X	X				Castings and baffles
7 years	3 years		X	X	X				Manifold tubes, HHT chimney and termination
10 years	1 year	X							Burners, logs and refractory
Limited Lifetime	3 years	X	X	X	X	X			Firebox and heat exchanger
90 Days		X	X	X	X	X	X	X	All replacement parts beyond warranty period

See conditions, exclusions, and limitations on next page.

D. Limited Lifetime Warranty (*continued*)

WARRANTY CONDITIONS:

- This warranty only covers HHT appliances that are purchased through an HHT authorized dealer or distributor. A list of HHT authorized dealers is available on the HHT branded websites.
- This warranty is only valid while the HHT appliance remains at the site of original installation.
- Contact your installing dealer for warranty service. If the installing dealer is unable to provide necessary parts, contact the nearest HHT authorized dealer or supplier. Additional service fees may apply if you are seeking warranty service from a dealer other than the dealer from whom you originally purchased the product.
- Check with your dealer in advance for any costs to you when arranging a warranty call. Travel and shipping charges for parts are not covered by this warranty.

WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Changes in surface finishes as a result of normal use. As a heating appliance, some changes in color of interior and exterior surface finishes may occur. This is not a flaw and is not covered under warranty.
- Damage to printed, plated, or enameled surfaces caused by fingerprints, accidents, misuse, scratches, melted items, or other external sources and residues left on the plated surfaces from the use of abrasive cleaners or polishes.
- Repair or replacement of parts that are subject to normal wear and tear during the warranty period. These parts include: paint, wood, pellet and coal gaskets; firebricks; grates; flame guides; and the discoloration of glass.
- Minor expansion, contraction, or movement of certain parts causing noise. These conditions are normal and complaints related to this noise are not covered by this warranty.
- Damages resulting from: (1) failure to install, operate, or maintain the appliance in accordance with the installation instructions, operating instructions, and listing agent identification label furnished with the appliance; (2) failure to install the appliance in accordance with local building codes; (3) shipping or improper handling; (4) improper operation, abuse, misuse, continued operation with damaged, corroded or failed components, accident, or improperly/incorrectly performed repairs; (5) environmental conditions, inadequate ventilation, negative pressure, or drafting caused by tightly sealed constructions, insufficient make-up air supply, or handling devices such as exhaust fans or forced air furnaces or other such causes; (6) use of fuels other than those specified in the operating instructions; (7) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; (8) modification of the appliance not expressly authorized and approved by HHT in writing; and/or (9) interruptions or fluctuations of electrical power supply to the appliance.
- Non-HHT venting components, hearth components or other accessories used in conjunction with the appliance.
- Any part of a pre-existing fireplace system in which an insert or a decorative gas appliance is installed.
- HHT's obligation under this warranty does not extend to the appliance's capability to heat the desired space. Information is provided to assist the consumer and the dealer in selecting the proper appliance for the application. Consideration must be given to appliance location and configuration, environmental conditions, insulation and air tightness of the structure.

This warranty is void if:

- The appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals. Over-firing can be identified by, but not limited to, warped plates or tubes, rust colored cast iron, bubbling, cracking and discoloration of steel or enamel finishes.
- The appliance is subjected to prolonged periods of dampness or condensation.
- There is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.

LIMITATIONS OF LIABILITY:

- The owner's exclusive remedy and HHT's sole obligation under this warranty, under any other warranty, express or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified above. In no event will HHT be liable for any incidental or consequential damages caused by defects in the appliance. Some states do not allow exclusions or limitation of incidental or consequential damages, so these limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state. **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 EXPRESSED WARRANTY SPECIFIED ABOVE.**

