

Installation Manual

Installation and Appliance Setup

INSTALLER: Leave this manual with party responsible for use and operation.

OWNER: Retain this manual for future reference.

Contact your dealer with questions regarding installation, operation or service.

NOTICE: DO NOT discard this manual!

HEAT & GLO

No one builds a better fire



IAPMO-R&T



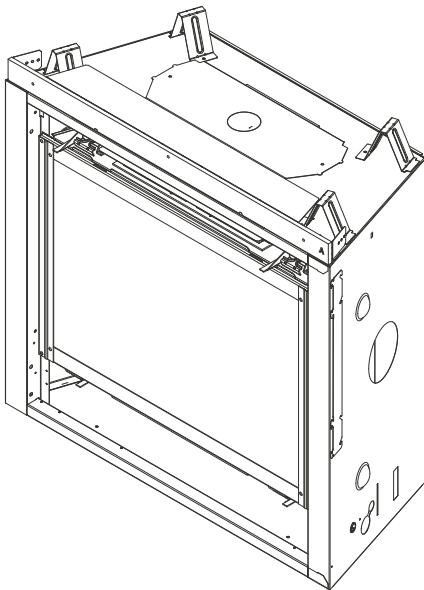
Models:

350X-AU

550X-AU

Ref No GMK10486

ASNZS 5263.1.3



**NOTE: NOT INTENDED FOR
FIREPLACE INSERT.**

⚠ WARNING:

FIRE OR EXPLOSION HAZARD

Failure to follow safety warnings exactly could result in serious injury, death, or property damage.

- **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.
 - Leave the building immediately.
 - 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.

! DANGER



**HOT GLASS WILL
CAUSE BURNS.**

**DO NOT TOUCH GLASS
UNTIL COOLED.**

**NEVER ALLOW CHILDREN
TO TOUCH GLASS.**

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

DO NOT PLACE ARTICLES ON OR AGAINST THIS APPLIANCE.

DO NOT USE OR STORE FLAMMABLE MATERIALS NEAR THIS APPLIANCE.

DO NOT SPRAY AEROSOLS IN THE VICINITY OF THIS APPLIANCE WHILE IT IS IN OPERATION.

DO NOT MODIFY THIS APPLIANCE.

▲ Safety Alert Key:

- **DANGER!** Indicates a hazardous situation which, if not avoided will result in death or serious injury.
- **WARNING!** Indicates a hazardous situation which, if not avoided could result in death or serious injury.
- **CAUTION!** Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- **NOTICE:** Used to address practices not related to personal injury.

Table of Contents

Installation Standard Work Checklist	3
--	---

1 Product Specific and Important Safety Information

A. Appliance Certification	4
B. Glass Specifications	4
C. Gas Pressure Requirements	4
D. High Altitude Installations	5
E. Non-Combustible Materials Specification	5
F. Combustible Materials Specification	5
G. Electrical Codes	5

2 Getting Started

A. Design and Installation Considerations	6
B. Good Faith Wall Surface/TV Guidelines	6
C. Tools and Supplies Needed	6
D. Inspect Appliance and Components	7

3 Framing and Clearances

A. Appliance/Decorative Front Dimension Diagrams	8
B. Clearances to Combustibles	10
C. Constructing the Appliance Chase	12
D. Floor Protection	12

4 Termination Location and Vent Information

A. Vent Termination Minimum Clearances	13
B. Chimney Diagram	14
C. Approved Pipe	15
D. Use of Elbows	15
E. Measuring Standards	16
F. Vent Diagrams	17

5 Vent Clearances and Framing

A. Pipe Clearances to Combustibles	30
B. Wall Penetration Framing/Firestops	31
C. Ceiling Firestop/Floor Penetration Framing	32
D. Install Attic Insulation Shield	32

6 Appliance Preparation

A. Vent Collar Preparation	33
B. Installing the Optional Heat-Zone®-240V Kit	35
C. Securing and Leveling the Appliance	35
D. Non-Combustible Material	35

7 Venting and Chimneys

A. Assemble Vent Sections	36
B. Assemble Slip Sections	37
C. Secure the Vent Sections	38
D. Disassemble Vent Sections	38
E. Vertical Termination Requirements	39
F. Horizontal Termination Requirements	40

8 Electrical Information

A. General Information	42
B. Wiring Requirements	43
C. Fan	44
D. Control Module Operation	44

9 Gas Information

A. Fuel Conversion	45
B. Gas Pressure	45
C. Gas Service Access	45
D. Gas Connection	45
E. High Altitude Installations	45
F. Air Shutter Setting	46
G. Burner Identification/Verification	47

10 Finishing

A. Facing Material	48
B. Mantel and Wall Projections	49
C. Decorative Front Finishing	51

11 Appliance Setup

A. Remove Fixed Glass Assembly	52
B. Remove the Shipping Materials	52
C. Clean the Appliance	52
D. Setup Overview	52
E. Install Hearth Components, Teco-Sil, Glowing Embers® , Refractory and Logs	52
F. Install and Paint Teco-Sil	53
G. Install Logs	54
H. LED's	57
I. Install Fixed Glass Assembly	57
J. Install Decorative Front	57
K. Appliance Operation	57

12 Reference Materials

A. Vent Components Diagrams	58
B. Accessories	64


→ = Contains updated information.

Installation Standard Work Checklist

ATTENTION INSTALLER: Follow this Standard Work Checklist

This standard work checklist is to be used by the installer in conjunction with, not instead of, the instructions contained in this installation manual.

Customer: _____ **Date Installed:** _____
Lot/Address: _____ **Location of Fireplace:** _____
Model (circle one): 350X-AU, 550X-AU **Installer:** _____
Dealer/Distributor Phone # _____
Serial #: _____

 **WARNING! Risk of Fire or Explosion!** Failure to install appliance according to these instructions could lead to a fire or explosion.

<u>Appliance Install</u>	YES	IF NO, WHY?
Verified that the chase is insulated and sealed. (Pg. 12)	<input type="checkbox"/>	_____
Required non-combustible board is installed. (Pg. 35)	<input type="checkbox"/>	_____
Verified clearances to combustibles. (Pg. 10-11)	<input type="checkbox"/>	_____
Fireplace is plum, level, square and secured. (Pg. 35)	<input type="checkbox"/>	_____
 <u>Venting/Chimney Section 7 (Pg 36-41)</u>		
Venting configuration complies to vent diagrams.	<input type="checkbox"/>	_____
Venting installed, locked and secured in place with proper clearance.	<input type="checkbox"/>	_____
Firestops installed.	<input type="checkbox"/>	_____
Attic insulation shield installed.	<input type="checkbox"/>	_____
Exterior wall/Roof flashing installed and sealed.	<input type="checkbox"/>	_____
Terminations installed and sealed.	<input type="checkbox"/>	_____
 <u>Electrical Section 8 (Pg 42-44)</u>		
Unswitched power (220-240 VAC) provided to the appliance.	<input type="checkbox"/>	_____
Switch wires properly installed.	<input type="checkbox"/>	_____
 <u>Gas Section 9 (Pg 45-47)</u>		
Proper appliance for fuel type.	<input type="checkbox"/>	_____
Was a conversion performed?	<input type="checkbox"/>	_____
Leak check performed and inlet pressure verified.	<input type="checkbox"/>	_____
Verified proper air shutter setting for installation type.	<input type="checkbox"/>	_____
 <u>Finishing Section 10 (Pg 48-51)</u>		
Combustible materials not installed in non-combustible areas.	<input type="checkbox"/>	_____
Verified all clearances meet installation manual requirements.	<input type="checkbox"/>	_____
Mantels and wall projections comply with installation manual requirements.	<input type="checkbox"/>	_____
 <u>Appliance Setup Section 11 (Pg 52-57)</u>		
All packaging and protective materials removed (inside & outside of appliance).	<input type="checkbox"/>	_____
Refractories, logs, media and embers installed correctly.	<input type="checkbox"/>	_____
Glass assembly installed and secured.	<input type="checkbox"/>	_____
Accessories installed properly.	<input type="checkbox"/>	_____
Mesh, doors, or decorative front properly installed.	<input type="checkbox"/>	_____
Manual bag and all of its contents are removed from inside/under the appliance and given to party responsible for use and operation.	<input type="checkbox"/>	_____
Started appliance and verified no gas leaks exist.	<input type="checkbox"/>	_____

Hearth & Home Technologies recommends the following:

- Photographing the installation and copying this checklist for your file.
- That this checklist remain visible at all times on the appliance until the installation is complete.

Comments: Further description of the issues, who is responsible (Installer/ Builder/ Other Trades, etc) and corrective action needed _____

Comments Communicated to party responsible _____ by _____ on _____
 (Builder / Gen. Contractor/) (Installer) (Date)

➔ = Contains updated information.

1 Product Specific and Important Safety Information

A. Appliance Certification

MODELS: 350X-AU, 550X-AU,
LABORATORY: IAPMO OCEANA
TYPE: Direct Vent Heater
STANDARD: AS/NZS 5263.1.3

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.

This appliance must be installed in accordance with the AS/NZS 5601.1 rules in force.

B. Glass Specifications

This appliance is equipped with 5 mm ceramic glass. Replace glass only with 5 mm ceramic glass. Please contact your dealer for replacement glass.

C. Gas Pressure Requirements

Pressure requirements for 350X-AU, 550X-AU appliances are shown in table below.

Two taps are provided on the gas control for a test gauge connection to measure the inlet and outlet pressures.

The appliance and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 3.4 kPa.

If the appliance must be isolated from the gas supply piping system by closing an individual shut-off valve, it must be of the handle-less type.

NOTE: An inline fuel pressure regulator is recommended to limit NG inlet pressure to 2.49 kPa, and LP/ULPG inlet pressure to 3.25 kPa, to ensure optimum product performance. The inline fuel pressure regulator may be needed if any of the following symptoms exist: pilot jetting, a highly visible pilot flame, flame variation, etc. The inline pressure regulator should be installed in the gas line upstream of the appliance gas valve either at the appliance or in the utility room. Final main and manifold gas pressure must be tested with inline pressure regulator installed.

	350X-AU			550X-AU		
	NATURAL GAS	PROPANE	ULPG	NATURAL GAS	PROPANE	ULPG
Inlet Gas Pressure	1.13 - 3.40 kPa	2.75 - 3.40 kPa	2.75 - 3.40 kPa	1.13 - 3.40 kPa	2.75 - 3.40 kPa	2.75 - 3.40 kPa
* Outlet (Manifold) Gas Pressure	.87 kPa	2.49 kPa	2.49 kPa	.87 kPa	2.49 kPa	2.49 kPa
Max. Gas Consumption	21	19	17	28	26	21
Min. Gas Consumption	14.7	13.3	11.9	19.6	18.2	14.7
Burner Injector DMS (mm)	#44 (2.18 mm)	#55 (1.32 mm)	#56 (1.18 mm)	#40 (2.49 mm)	#53 (1.51 mm)	#55 (1.32 mm)
Pilot Injector	.023 in. (.584 mm)	.014 in. (.356 mm)	.014 in. (.356 mm)	.023 in. (.584 mm)	.014 in. (.356 mm)	.014 in. (.356 mm)

→ * The allowable Outlet (Manifold) Gas Pressure ranges are: Natural Gas .80 - .95 kPa (.87 kPa nominal) and Propane, ULPG 2.37 - 2.61 kPa (2.40 kPa nominal). Certification testing setpoint values are shown.

NOTE: The gas control valve supplied with this product is approved for a maximum inlet pressure of **3.40 kPa**. For pressures over **3.40 kPa**, an in line pressure regulator must be installed upstream from the gas control valve.

D. High Altitude Installations

NOTICE: *If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.*

When installing above 2000 ft. (610 m) elevation:

Reduce input rate 4% for each 1000 ft. (305 m) above 2000 ft. (610 m).

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 (1382 °F)** 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 plastered or unplastered shall be considered combustible materials.

G. Electrical Codes

All electrical safety testing has been done following the EN 60335-2-102 standard. Local codes apply.

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.

This appliance must be installed in accordance with the AS/NZS 5601.1 rules in force. Consult insurance carrier, local building inspector, fire officials or authorities having jurisdiction over restrictions, installation inspection and permits.

Before installing, determine the following:

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

Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends HHT Factory Trained or certified professionals.



Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. For assistance or additional information, consult a qualified service technician, service agency or your dealer.

B. Good Faith Wall Surface/TV Guidelines

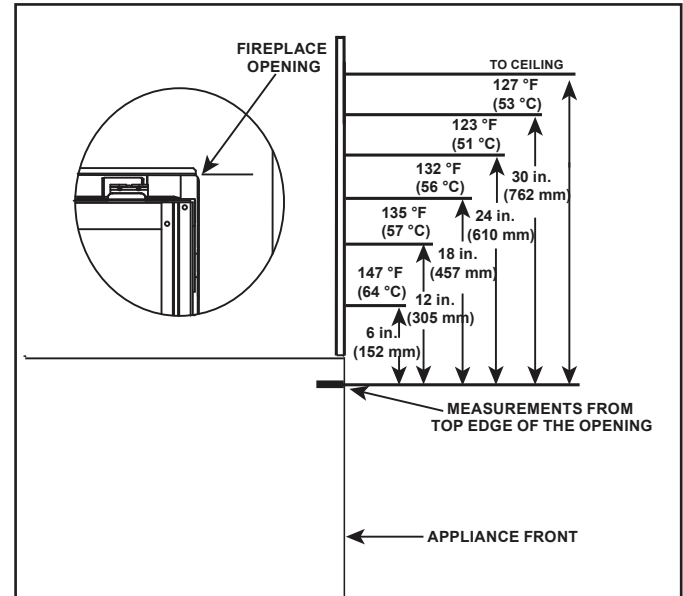


Figure 2.1 Good Faith Wall Surface Temperatures Above Appliance

NOTICE: Temperatures listed above are taken with a temperature measuring probe as prescribed by the test standard used for appliance certification. Temperatures on walls or mantels taken with an infrared thermometer may yield increased temperatures of up to 30 °F (17 °C) or more depending on the thermometer settings and material characteristics being measured. Use appropriate finishing materials that are able to withstand these conditions. For additional finishing guidelines, see Section 10.

C. Tools and Supplies Needed

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

- | | |
|--|---|
| Tape measure | Framing material |
| Pliers | Hammer |
| Phillips screwdriver | Manometer |
| Gloves | Framing square |
| Voltmeter | Electric drill and bits -1/4 in. (6 mm) |
| Plumb line | Safety glasses |
| Level | Reciprocating saw |
| Flat blade screwdriver | |
| Non-corrosive leak check solution | |
| 1/2 - 3/4 in. (13 - 19 mm) length, #6 or #8 Self-drilling screws | |
| Caulking material (300 °F (149 °C) minimum continuous exposure rating) | |

D. Inspect Appliance and Components

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

WARNING! Risk of Fire or Explosion! Damaged parts could impair safe operation. **DO NOT** install damaged, incomplete or substitute components. Keep appliance dry.

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

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

Any such action may cause a fire hazard.

WARNING! Risk of Fire, Explosion or Electric Shock! **DO NOT** use this appliance if any part has been under water. Call a qualified service technician to inspect the appliance and to replace any part of the control system and/or gas control which has been under water.

3 Framing and Clearances

A. Appliance/Decorative Front Dimension Diagrams

Dimensions are actual appliance dimensions. Use for reference only. For framing dimensions and clearances refer to Section 5.

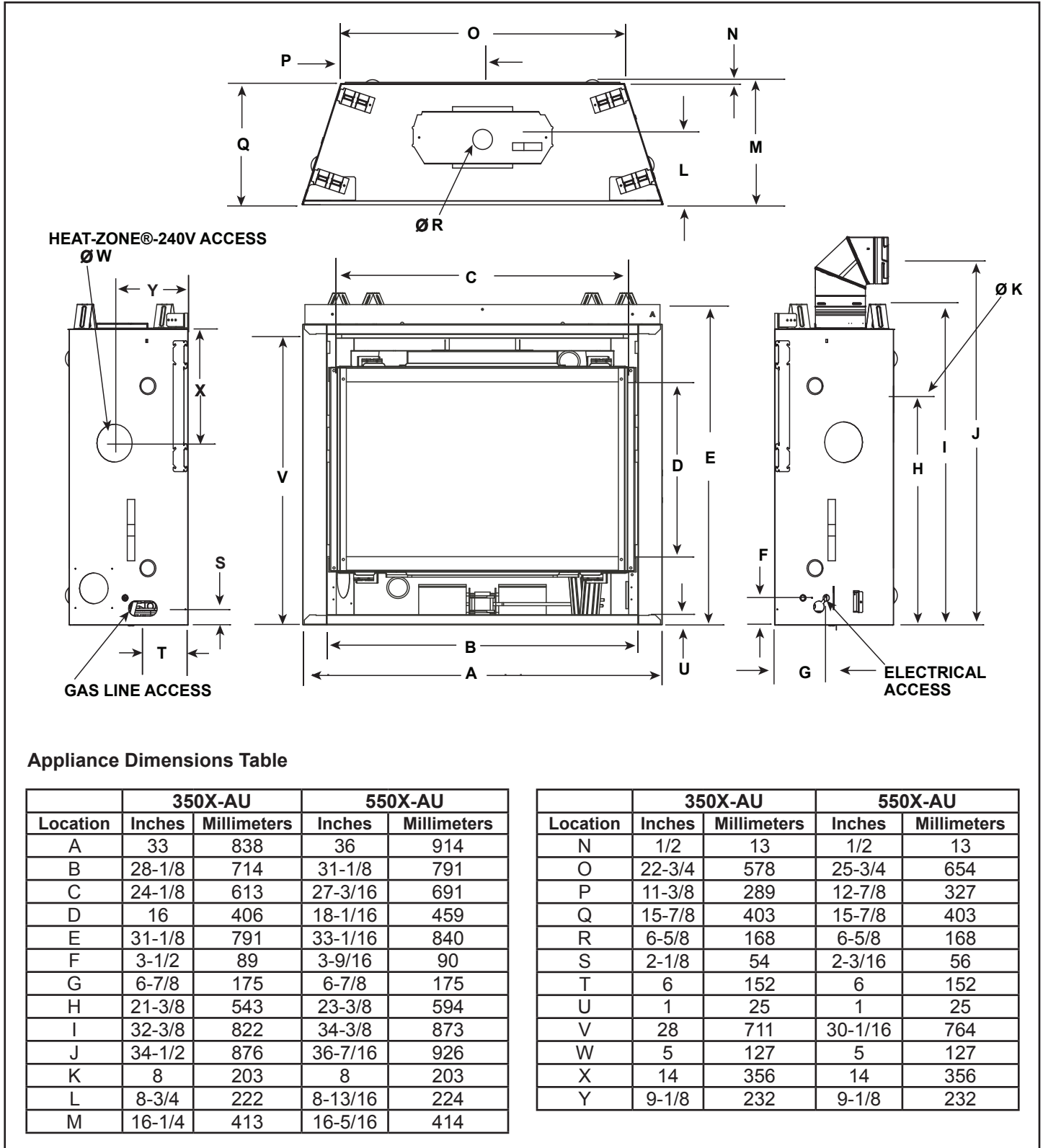
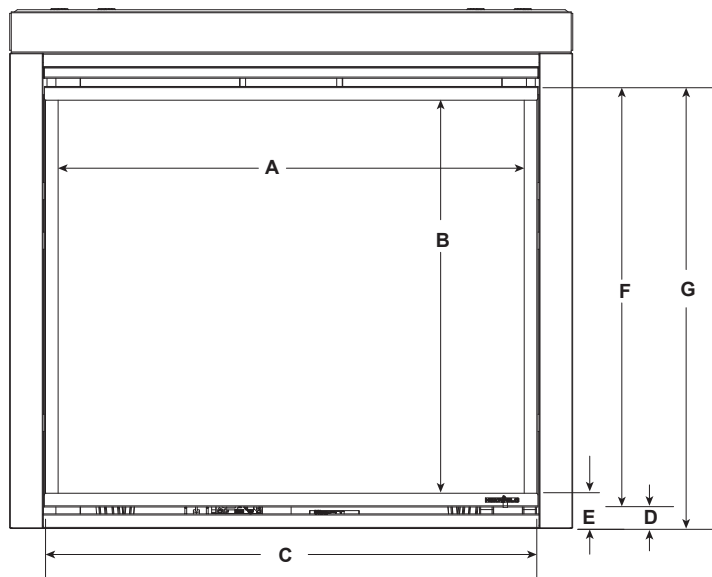


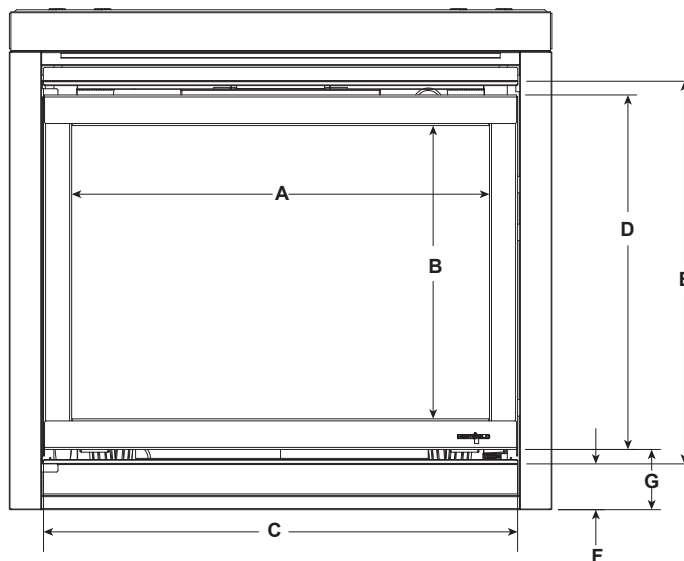
Figure 3.1 Appliance Dimensions

FIRESCREEN DECORATIVE FRONT



			A	B	C	D	E	F	G
350X-AU	FS-3	in.	26	23	28	1-5/8	2-5/8	25-1/16	26-3/4
		mm	660	584	711	41	67	637	680
550X-AU	FS-5	in.	28-7/8	25-1/8	31	1-5/8	2-5/8	27-1/8	28-3/4
		mm	733	638	787	41	67	689	730

CLEAN FACE DECORATIVE FRONT



			A	B	C	D	E	F	G
550X-AU	CF-32	in.	26-9/16	18-11/16	30-13/16	23-5/16	25-7/16	3-1/2	4-9/16
		mm	675	475	783	592	646	89	116

Figure 3.2 Decorative Front Dimensions - Firescreen and Clean Face

B. Clearances to Combustibles

When selecting a location for the appliance it is important to consider the required clearances to walls. See Figure 3.3.

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

WARNING! Risk of Fire or Burns! Provide adequate clearance around air openings and for service access. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

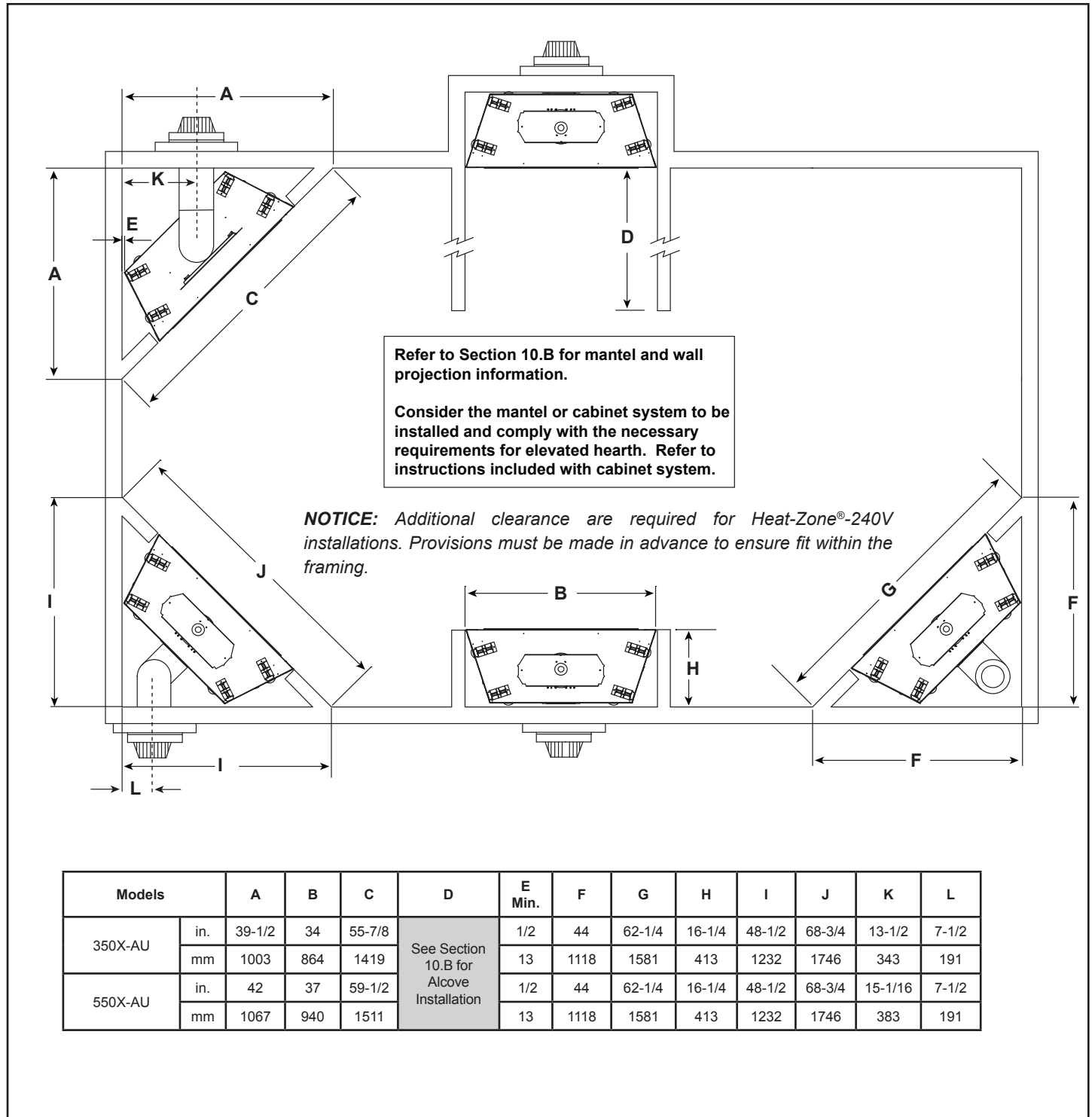
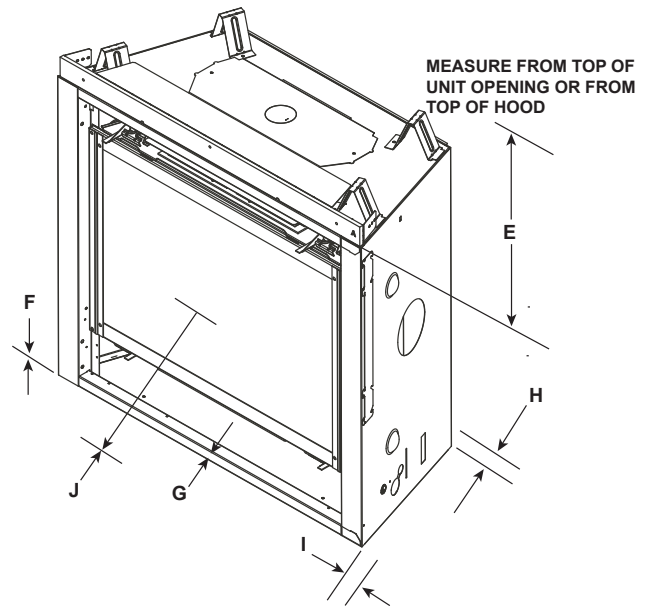
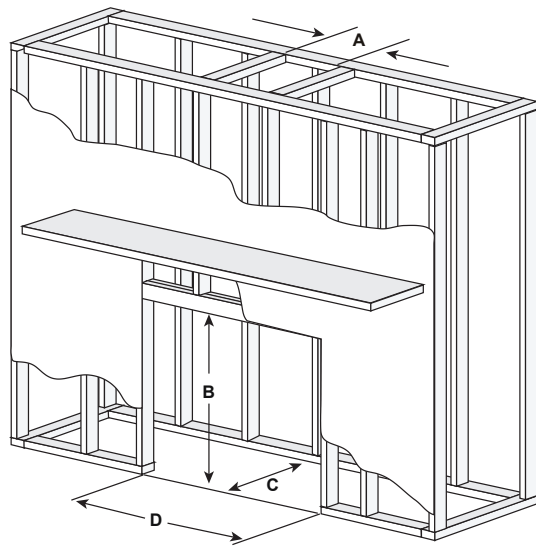


Figure 3.3 Appliance Locations



*** MINIMUM FRAMING DIMENSIONS**

Models	A		B	C		D	E	F	G	H	I	J	
	DVP Pipe	SLP Pipe	Rough Opening (Height)	**DVP Pipe	SLP Pipe	Rough Opening (Width)	Clearance to Ceiling	Combustible Floor	Combustible Flooring	Behind Appliance	Sides of Appliance	Front of Appliance	
	Rough Opening (Width)	Rough Opening (Width)		Rough Opening (Depth)	Rough Opening (Depth)								
350X-AU	in.	10	8-5/8	32-3/4	16-1/4	16-1/4	34	32	0	0	1/2	1/2	36
	mm	254	219	832	413	413	864	813	0	0	13	13	914
550X-AU	in.	10	8-5/8	34-3/4	16-1/4	16-1/4	37	32	0	0	1/2	1/2	36
	mm	254	219	882	413	413	940	813	0	0	13	13	914

* Adjust framing dimensions for interior sheathing (such as sheetrock)

C** Add 12 in. (305 mm) when rear venting with one 90° elbow.

Figure 3.4 Clearances to Combustibles

C. Constructing the Appliance Chase

A chase is a vertical box-like structure built to enclose the gas appliance and/or its vent system. In cooler climates the vent should be enclosed inside the chase.

NOTICE: *Treatment of ceiling firestops and wall shield firestops and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, you MUST check local building codes to determine the requirements to these steps.*

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 (or an equivalent method may be used) to achieve maximum air tightness.

To further prevent drafts, the wall shield and ceiling firestops should be caulked with caulk with a minimum of 300 °F (149 °C) continuous exposure rating to seal gaps. Gas line holes and other openings should be caulked with caulk with a minimum of 300 °F (149 °C) continuous exposure rating 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.

D. Floor Protection

NOTICE: *Install appliance on hard metal or wood surfaces extending full width and depth. DO NOT install directly on carpeting, vinyl, tile or any combustible material other than wood.*

WARNING! Risk of Fire! *Maintain specified air space clearances to appliance and vent pipe:*

- Insulation and other materials must be secured to prevent accidental contact.
- The chase must be properly blocked to prevent blown insulation or other combustibles from entering and making contact with appliance or chimney.
- Failure to maintain airspace may cause overheating and a fire.

4 Termination Location and Vent Information

A. Vent Termination Minimum Clearances

WARNING

Fire 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 could cause overheating and fire.

Angle	H (Min.) mm
0°-26.6°	500*
26.6°-30.3°	500*
30.3°-33.7°	500*
33.7°-36.9°	610*
36.9°-39.8°	760*
39.8°-42.5°	990
42.5°-45.0°	1220
45.0°-49.4°	1520
49.4°-53.1°	1830
53.1°-56.3°	2130
56.3°-59.0°	2290
59.0°-60.3°	2440

* H minimum may vary depending on regional snowfall. Refer to local codes.

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

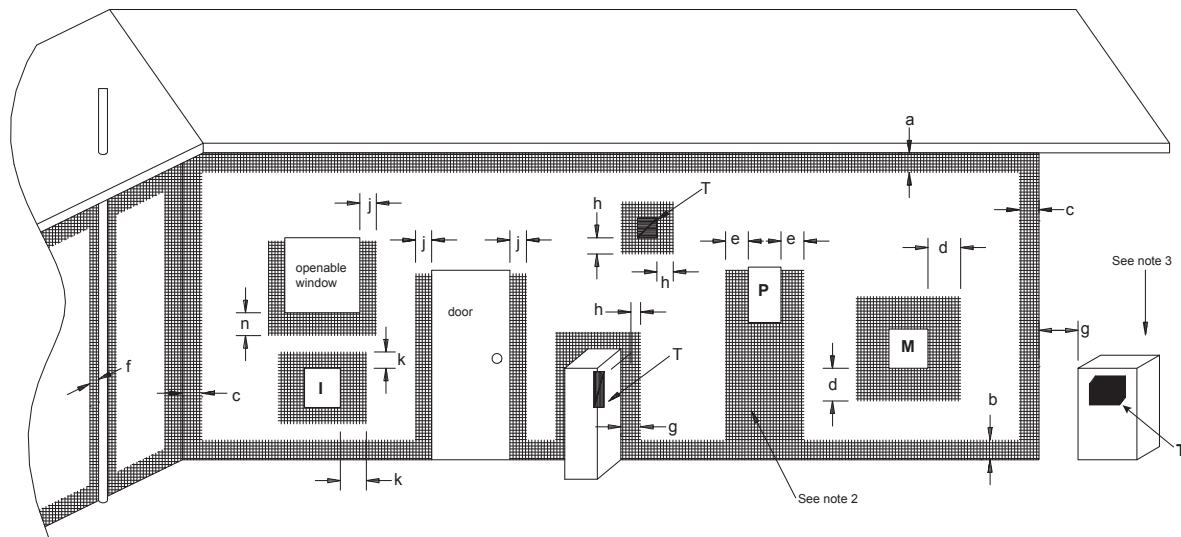
* If using decorative cap cover(s), this distance may need to be increased. Refer to the installation instructions supplied with the decorative cap cover.

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

Figure 4.2 Staggered Termination Caps

Figure 4.1 Minimum Height From Roof To Lowest Discharge Opening

B. Chimney Diagram



T = Flue terminal
I = Mechanical air inlet

M = Gas meter
P = Electricity meter or fuse box

Shading indicates prohibited areas for flue terminals

- | | | |
|--|---|--|
| <p>a - Below eaves, balconies or other projections:</p> <p>b - From the ground or above a balcony</p> <p>c - From a return wall or external corner</p> <p>d - From a gas meter (M)</p> <p>e - From an electricity meter or fuse box (P)</p> <p>f - From a drain or soil pipe</p> <p>g - Horizontally from any building structure (unless appliance approved for closer installation) or obstruction facing a terminal</p> <p>h - From any other flue terminal, cowl, or combustion air intake</p> <p>j - Horizontally from an openable window, door, non-mechanical air inlet, or any other opening into a building, with the exception of sub-floor ventilation:</p> <p>k - From a mechanical air inlet, including a spa fan</p> <p>n - Vertically below an openable window, non-mechanical air inlet or any other opening into a building, with the exception of sub-floor ventilation</p> | <p>Appliances up to 50 MJ/h input</p> <p>Appliances over 50 MJ/h input</p> <p>Appliances up to 150 MJ/h input</p> <p>Appliances over 150 MJ/h input</p> <p>Appliances up to 150 MJ/h input</p> <p>Appliances over 150 MJ/h input</p> <p>See table</p> | <p>MIN. CLEARANCE - in. (mm)</p> <p>12 (305)</p> <p>20-1/2 (521)</p> <p>39 (991)</p> <p>20-1/2 (521)</p> <p>6 (152)</p> <p>20-1/2 (521)</p> <p>20-1/2 (521)</p> <p>60 (1524)</p> <p>60 (1524)</p> <p>below</p> |
|--|---|--|

CLEARANCE			
Space Heaters	All other appliances		
Up to 50 MJ/h input	Up to 50 MJ/h input	Over 50 MJ/h input and Up to 150 MJ/h input	Over 50 MJ/h input
6 in. (152 mm)	20 in. (508 mm)	39 in. (991 mm)	59 in. (1500 mm)

- NOTES:**
- All distances are measured vertically or horizontally along the wall to a point in line with the nearest part of the terminal.
 - Prohibited area below electricity meter or fuse box extends to ground level.
 - Flue terminal under covered area:
 - The covered area or recess shall be open on at least two sides.
 - Fan assisted flue appliance shall have at least one side open and the terminal shall be within 500 mm of the opening and discharging in the direction of the opening.
 - Clearance from a flue terminal to a LP cylinder shall be a minimum of 1 meter.

MINIMUM CLEARANCES REQUIRED FOR BALANCED FLUE TERMINALS OR THE FLUE TERMINALS OF OUTDOOR APPLIANCES

Figure 4.3 Minimum Clearances for Termination

C. Approved Pipe

This appliance is approved for use with Hearth & Home Technologies DVP or SLP venting systems. Refer to Section 12.A for vent component information and dimensions.

DO NOT mix pipe, fittings or joining methods from different manufacturers.

The pipe is tested to be run inside an enclosed wall. There is no requirement for inspection openings at each joint within the wall.

WARNING! Risk of Fire or Asphyxiation. This appliance requires a separate vent. **DO NOT** vent to a pipe serving a separate solid fuel burning appliance.

D. Use of Elbows

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 4.4.

Two 45° elbows may be used in place of one 90° elbow. On 45° runs, one foot of diagonal is equal to 8-1/2 in. (216 mm) horizontal run and 8-1/2 in. (216 mm) vertical run. A length of straight pipe is allowed between two 45° elbows. See Figure 4.4.

Figure 4.5 shows the vertical and horizontal offsets for DVP or SLP elbows.

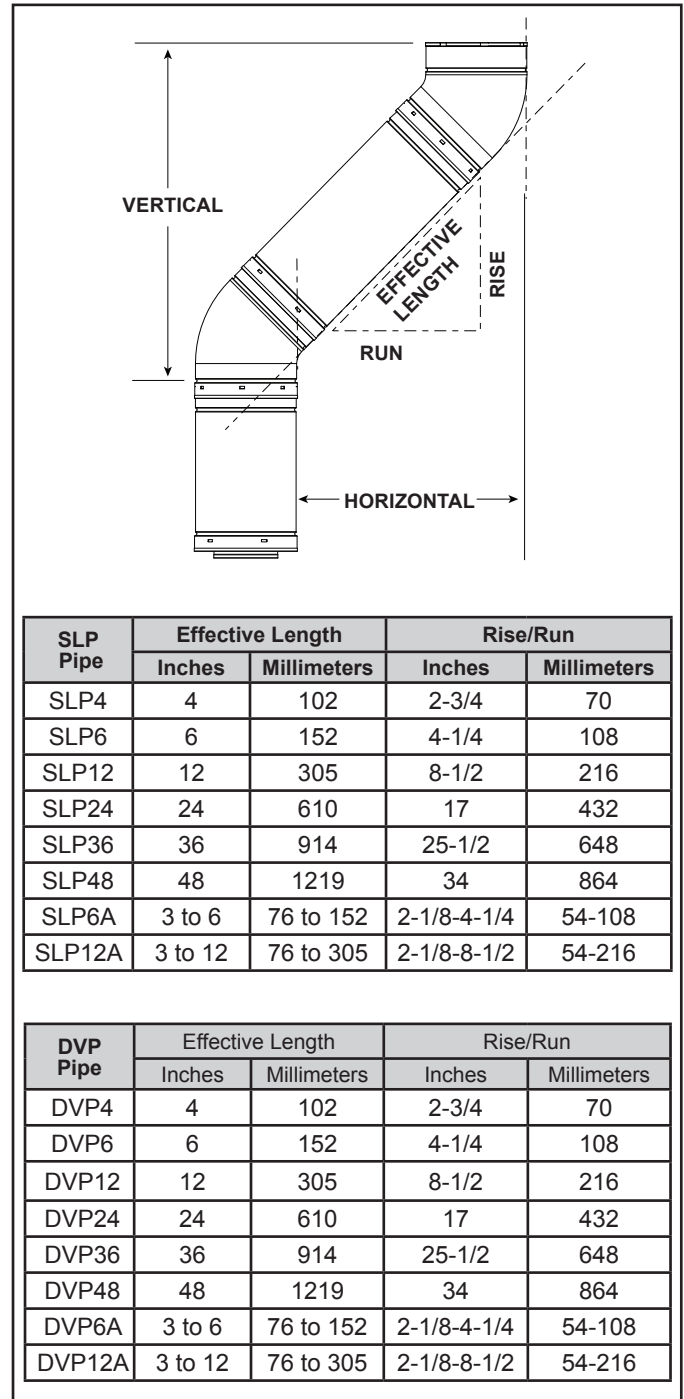


Figure 4.4

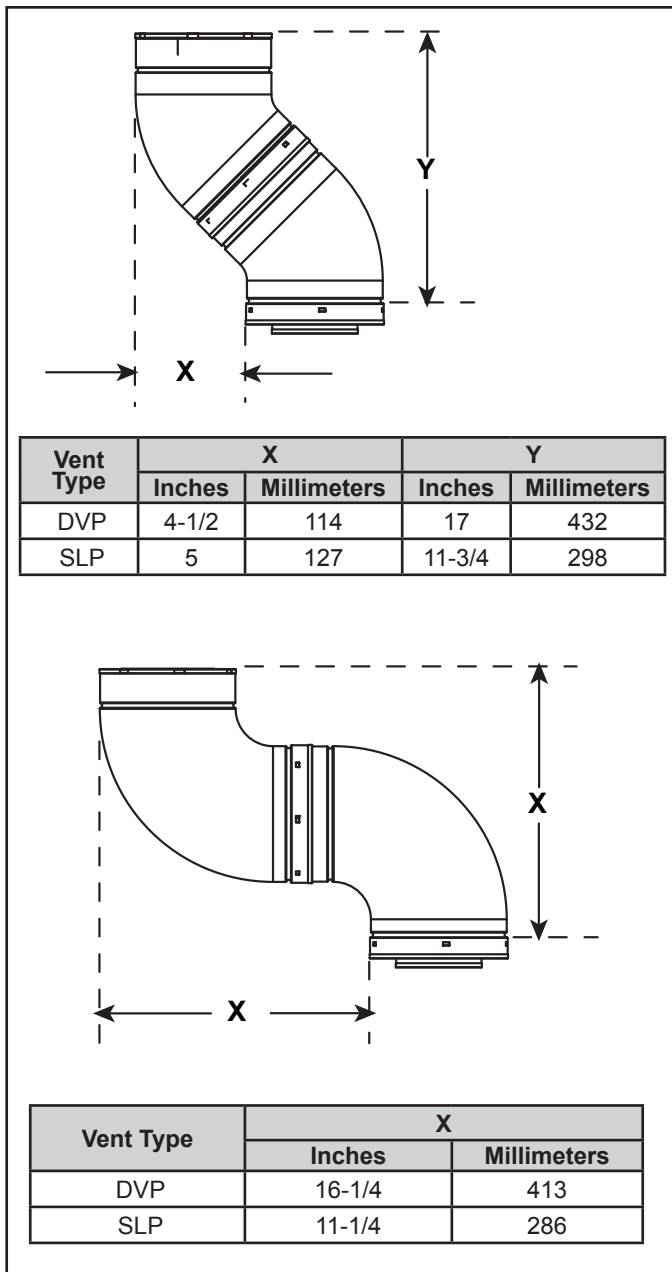


Figure 4.5 Vertical and Horizontal Offset for DVP and SLP Elbows

E. Measuring Standards

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

- Pipe measurements are shown using the effective length of pipe. See Section 12.A for information on effective length of pipe components.
- Horizontal terminations are measured to the outside mounting surface (flange of termination cap) (see Figure 4.6).
- Vertical terminations are measured to top of last section of pipe. See Figure 4.7.
- Horizontal pipe installed level with no rise.

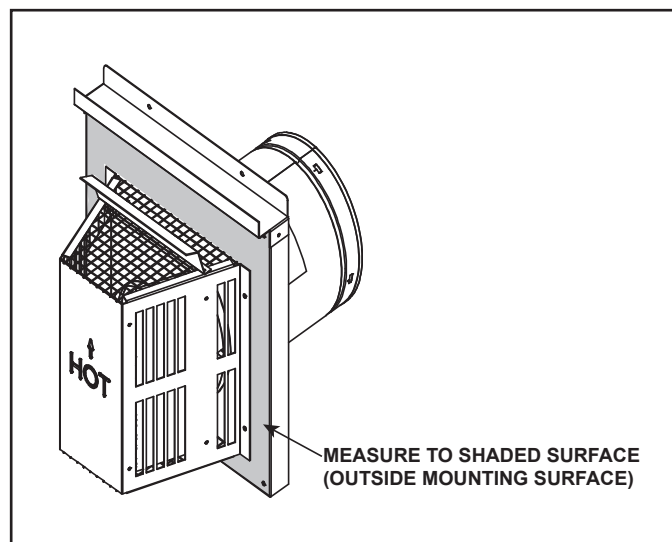


Figure 4.6 Measure to Outside Mounting Surface

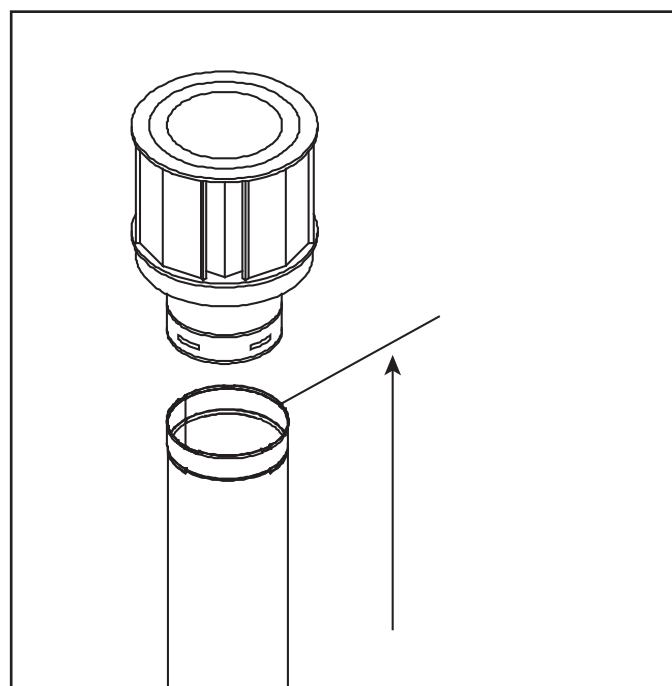


Figure 4.7. Measure to Top of Last Section of Pipe

F. Vent Diagrams

General Rules:

- SUBTRACT 3 ft. (914 mm) from the total H measurement for each 90° elbow installed horizontally.
- SUBTRACT 1-1/2 ft. (457 mm) from the total H measurement for each 45° elbow installed horizontally.
- A maximum of three 90° elbows (or six 45° elbows) may be used in any vent configuration. Some elbows may be installed horizontally. See Figure 4.15.
- Elbows may be placed back to back anywhere in the system.
- Any 90° elbow may be replaced with two back to back 45° elbows.
- When penetrating a combustable wall, a wall shield firestop must be installed.
- When penetrating a combustable ceiling, a ceiling firestop must be installed.
- Horizontal runs of vent do not require vertical rise; horizontal runs may be level.
- Horizontal termination cap should have a 1/4 in. (6 mm) downward slant to allow any moisture in cap to be released. See Figure 4.8.

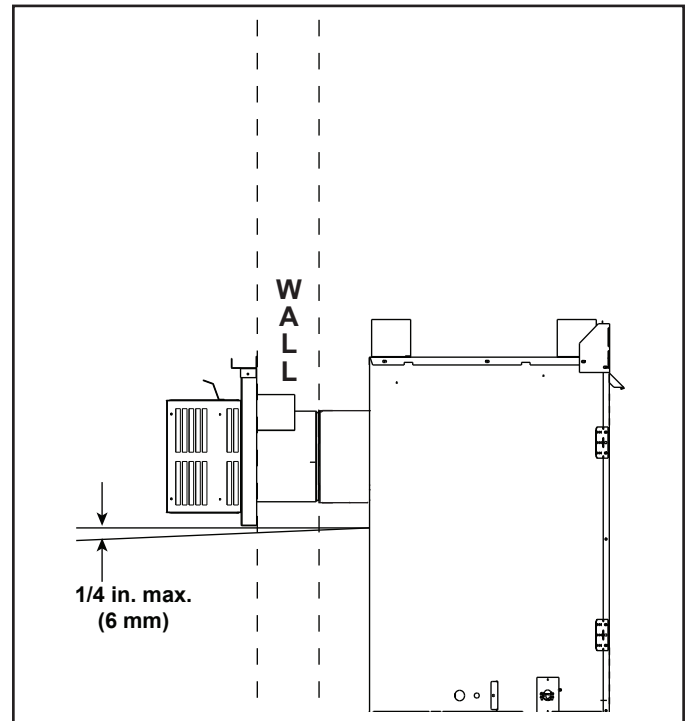


Figure 4.8 Vent Cap - Generic Appliance Shown

Top Vent - Horizontal Termination

One Elbow

Note: Use SLP Series components only.

V ₁ Minimum		H ₁ Maximum	
Elbow only		NOT ALLOWED	
1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	4 ft.	1.22 m
3 ft.	914 mm	8 ft.	2.44 m
4 ft.	1.22 m	10 ft.	3.05 m
5 ft.	1.52 m	16 ft.	4.88 m
V ₁ + H ₁ = 30 ft. (9.14 m) Maximum			

Note: A 1 ft. (305 mm) section of straight flue must be attached to the heater before a 90° elbow.

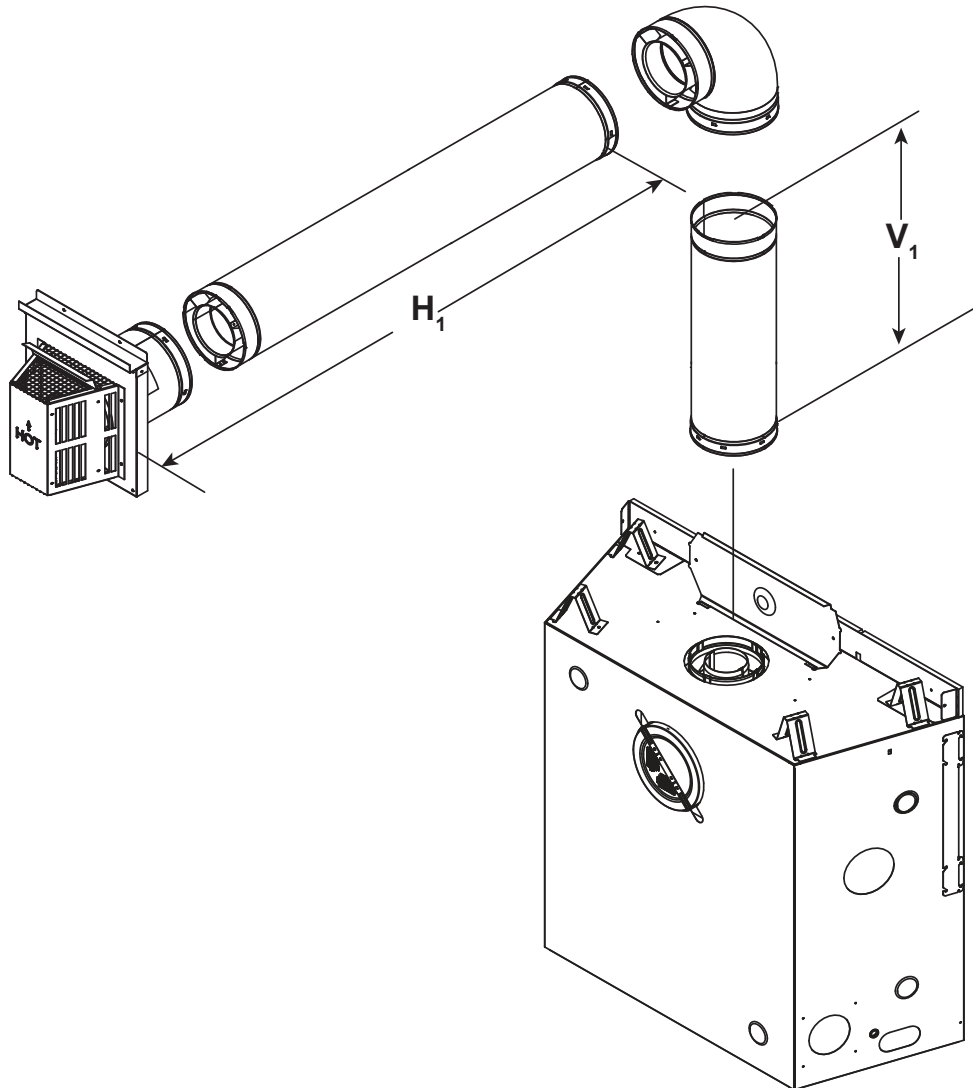


Figure 4.9

Top Vent - Horizontal Termination - (continued) Two Elbows

Note: Use SLP Series components only.

V_1 Minimum		$H_1 + H_2$ Maximum	
Elbow only		Not allowed	
6 in.	152 mm	1 ft.	305 mm
1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	4 ft.	1.22 m
3 ft.	914 mm	6 ft.	1.83 m
4 ft.	1.22 m	8 ft.	2.44 m
5 ft.	1.52 m	10 ft.	3.05 m
20 ft.	6.10 m	10 ft.	3.05 m
$V_1 + H_1 + H_2 = 40$ ft. (12.19 m) Maximum $H_1 + H_2 = 10$ ft. (3.05 m) Maximum			

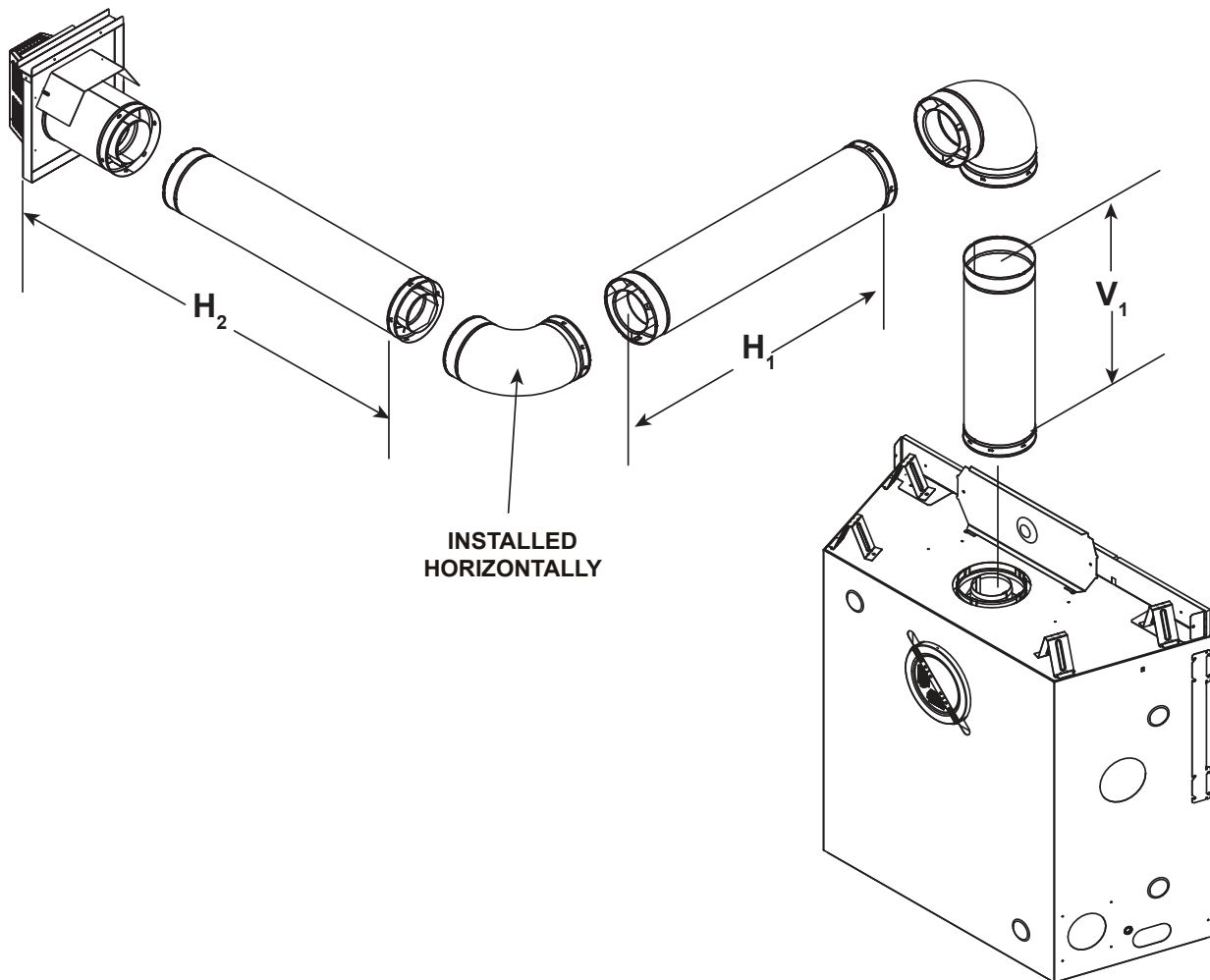


Figure 4.10

Top Vent - Horizontal Termination - (continued)

Three Elbows

V ₁ Min.		H ₁ Max.		V ₂ Min.		H ₂ Max.	
6 in.	152 mm	1 ft.	305 mm	1 ft.	305 mm	1 ft.	305 mm
1 ft.	305 mm	2 ft.	610 mm	2 ft.	610 mm	2 ft.	610 mm
2 ft.	610 mm	2 ft.	610 mm	3 ft.	914 mm	4 ft.	1.22 m
3 ft.	914 mm	3 ft.	914 mm	4 ft.	1.22 m	6 ft.	1.83 m
4 ft.	1.22 m	4 ft.	1.22 m	5 ft.	1.52 m	8 ft.	2.44 m*
5 ft.	1.52 m	6 ft.*	1.83 m	6 ft.	1.83 m	6 ft.	1.83 m

*H₁ = 6 ft. (1.83 m) Maximum *H₁ + H₂ = 12 ft. (3.66 m) Maximum
V₁ + V₂ = 32 ft. (9.75 m) Maximum V₁ + V₂ + H₁ + H₂ = 36 ft. (10.97 m) Maximum

Note: Use SLP Series components only.

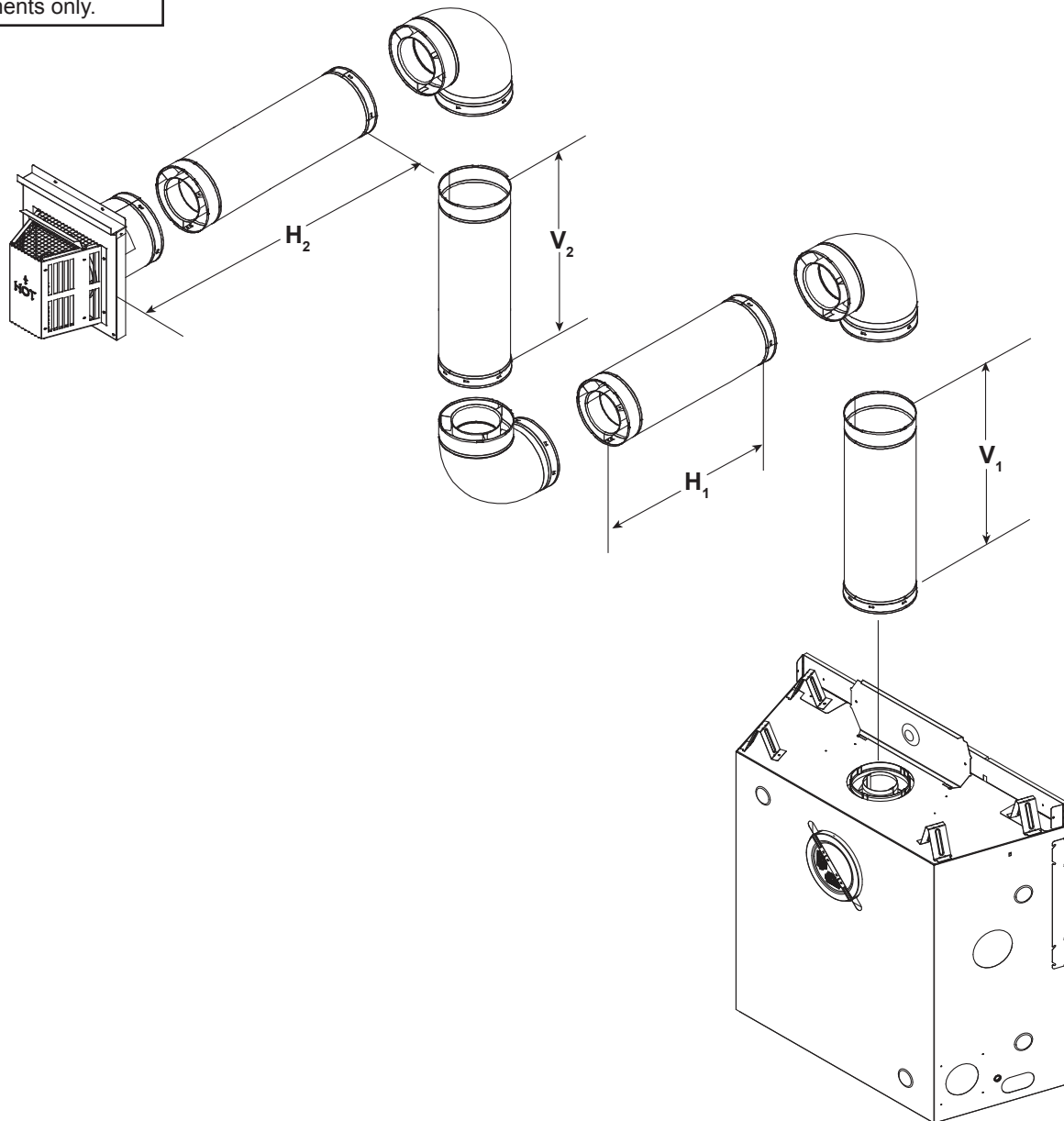


Figure 4.11

Top Vent - Vertical Termination

No Elbow

Note: Use SLP Series components only.

Note: If installing a vertical vent/termination off the top of the appliance, the optional exhaust restrictor may be needed.

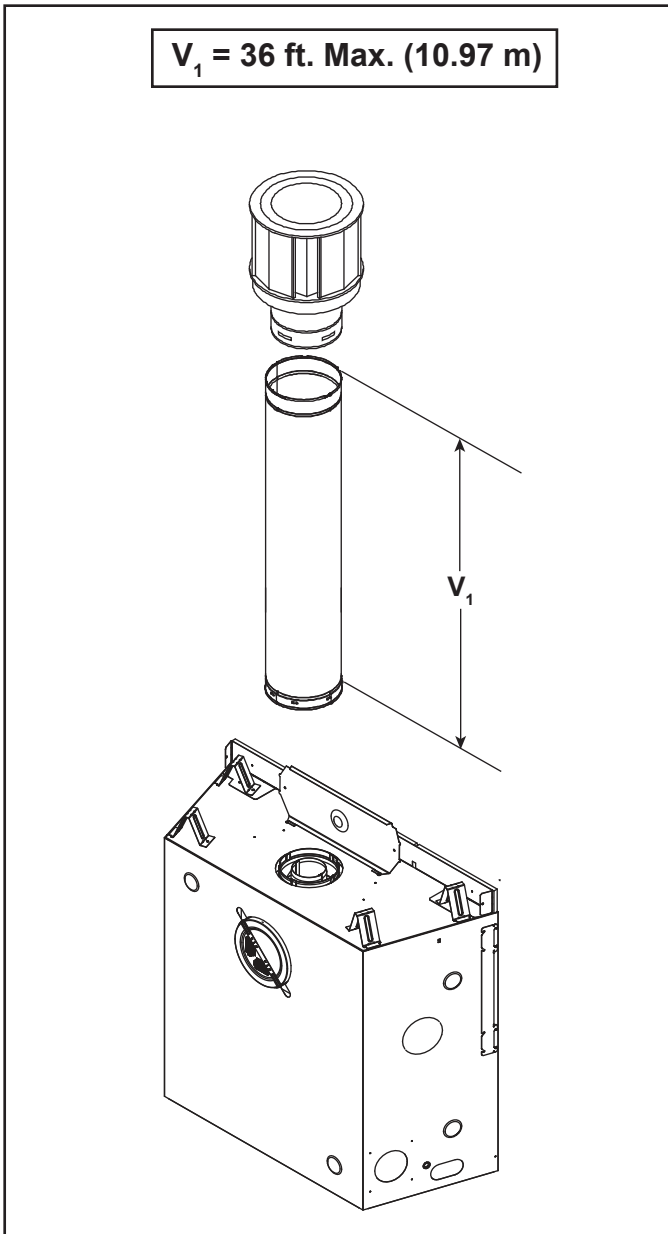


Figure 4.12

Exhaust Restrictor Instructions

Exhaust restrictors are recommended for these vertically terminated products which have excessive draft. Exhaust restrictors will compensate for high draft, and restore visual flame height. If the vent configuration has a total vertical of 12 ft. (3.7 m), an exhaust restrictor may be needed. The exhaust restrictor is located in the appliance manual bag.

Note: Remove center tab in exhaust restrictor for vent configuration with over 20 ft. (6.0 m) of vertical. See Figure 4.13.

Note: Remove inner heat shield, if installed.

1. Install the exhaust restrictor over the center of the exhaust outlet in the firebox. See Figure 4.13.
2. Center the exhaust restrictor in the open end of the exhaust outlet and secure through the slots on the exhaust restrictor with the two 1/4 in. (6 mm) self tapping screws provided in the appliance manual bag.
3. Reinstall inner heat shield.

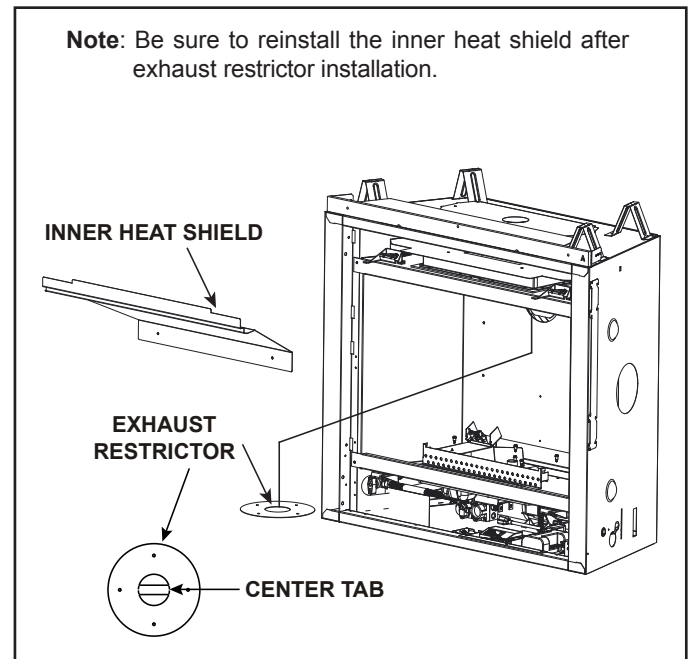


Figure 4.13 Exhaust Restrictor Installation

Top Vent - Vertical Termination - (continued)

Two 90° Elbows

Note: Use SLP Series components only.

V_1		H_1 Maximum		V_2	$V_1 + V_2$ Min.	
Elbow only		Not allowed		*	*	*
6 in.	152 mm	2 ft.	610 mm	*	*	*
1 ft.	305 mm	4 ft.	1.22 m	*	*	*
2 ft.	610 mm	6 ft.	1.83 m	*	*	*
3 ft.	914 mm	8 ft.	2.44 m	*	*	*
4 ft.	1.22 m	12 ft.	3.66 m	*	*	*
5 ft.	1.52 m	16 ft.	4.88 m	*	*	*
$V_1 + V_2 + H_1 = 36 \text{ ft. (10.97 m)}$ Maximum *No specific restrictions on this value EXCEPT $V_1 + V_2$ cannot exceed 32 ft. (9.75 m)						

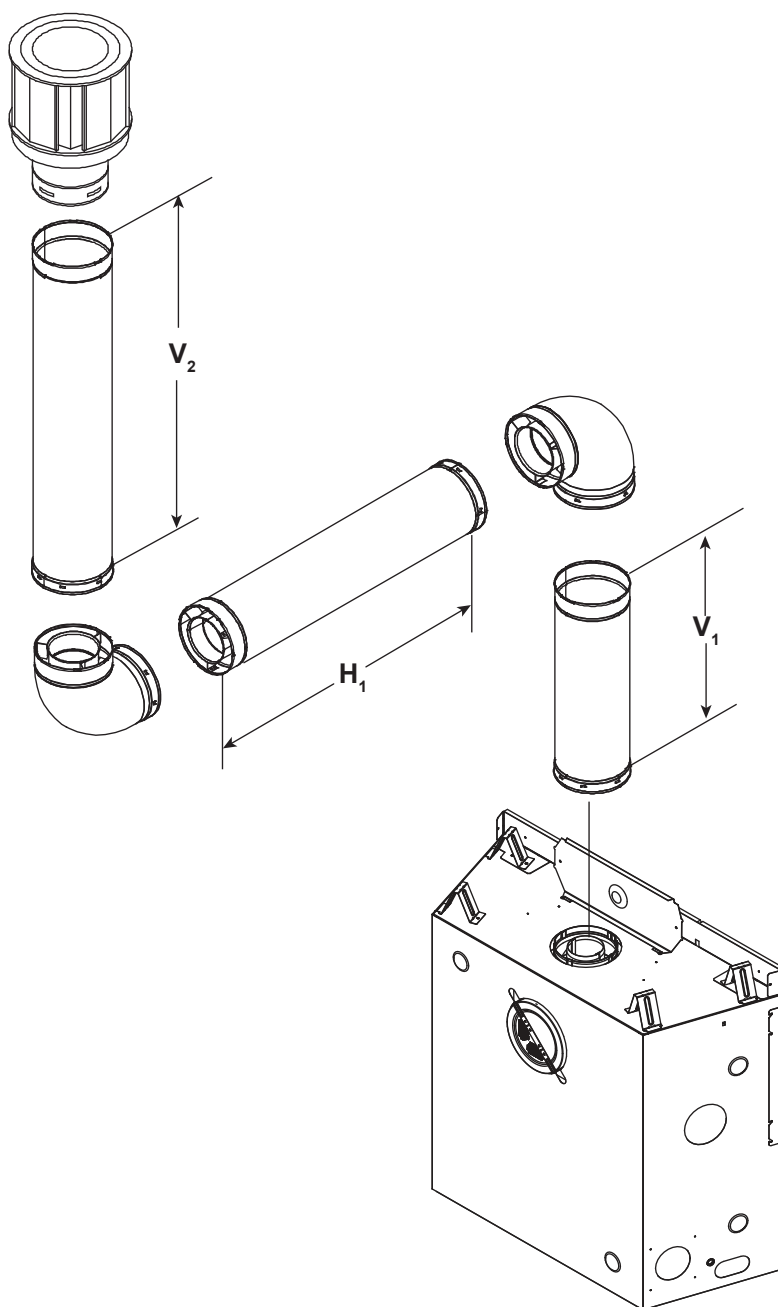


Figure 4.14

Top Vent - Vertical Termination - (continued)

Three Elbows

Note: Use SLP Series components only.

ALL MODELS							
V_1		$H_1 + H_2$ Maximum		V_2		$V_1 + V_2$ Minimum	
90° Elbow		0	0	1-1/2 ft.	457 mm	1-1/2 ft.	457 mm
1/2 ft.	152 mm	1 ft.	305 mm	*	*	*	*
1-1/2 ft.	457 mm	2 ft.	610 mm	*	*	*	*
2-1/2 ft.	762 mm	4 ft.	1.2 m	*	*	*	*
3-1/2 ft.	1.1 m	6 ft.	1.8 m	*	*	*	*
4-1/2 ft.	1.4 m	14 ft.	4.3 m	*	*	*	*
H_1 Maximum = 14 ft. (4.3 m) *No specific restrictions on this value EXCEPT $V_1 + V_2 + H_1 + H_2$ CANNOT exceed 40 ft. (12.2 m).							

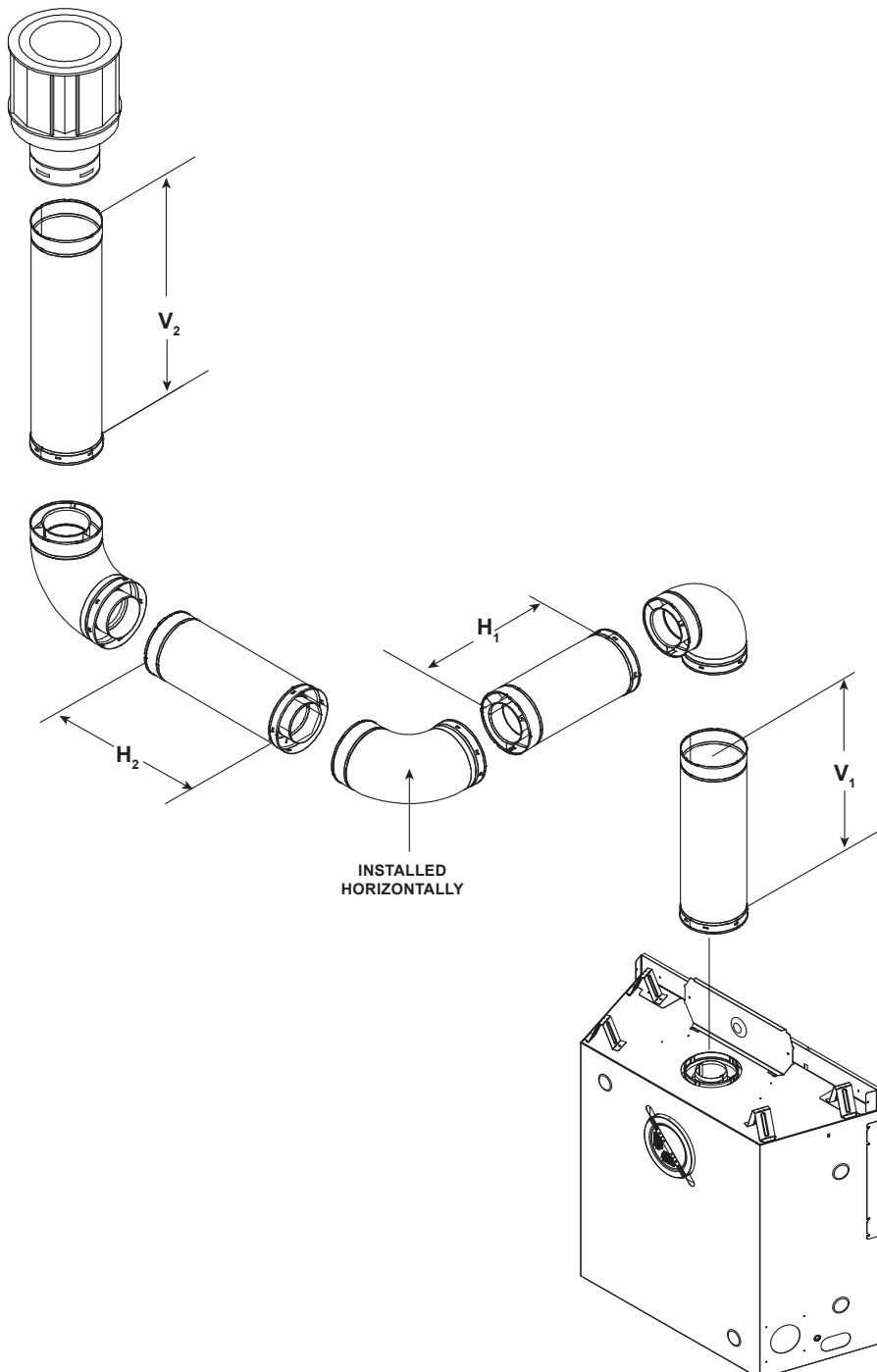


Figure 4.15

Rear Vent - Horizontal Termination

No Elbow

Note: Use DVP Series components only.

ALL MODELS
 $H_1 = 18 \text{ in. (457 mm)}$ Maximum

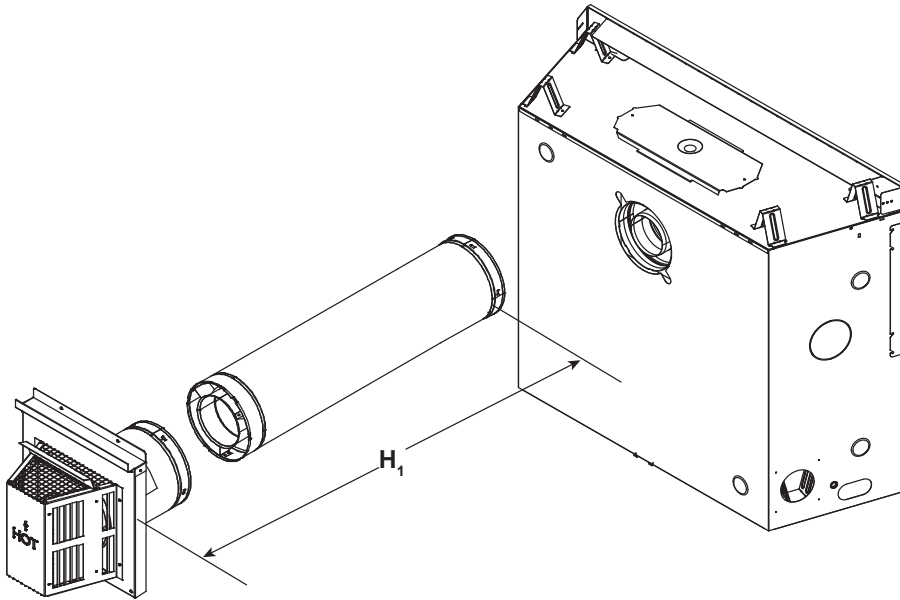


Figure 4.16

Two 90° Elbows

Note: Use DVP Series components only.

Must use two 90° elbows for corner installations. The use of two 90° elbows in a corner installation will affect space requirements. See Section 3.B. Use of 45° elbow not allowed.

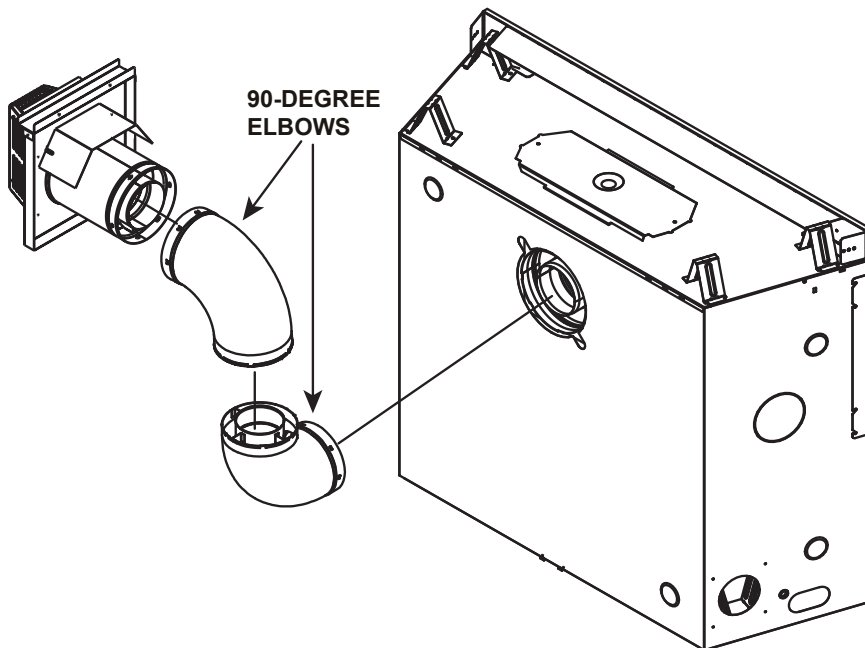


Figure 4.17

Rear Vent - Horizontal Termination - (continued)

Two Elbows

Note: Use DVP Series components only.

H ₁ Maximum		V ₁ Minimum		H ₂		H ₁ + H ₂ Maximum	
6 in.	152 mm	Back to Back 90° Elbows		6 in.	152 mm	1 ft.	305 mm
6 in.	152 mm	6 in.	152 mm	1 ft.	305 mm	1-1/2 ft.	457 mm
1 ft.	305 mm	1 ft.	305 mm	1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	2 ft.	610 mm	2 ft.	610 mm	4 ft.	1.22 m
3 ft.	914 mm	3 ft.	914 mm	4 ft.	1.22 m	8 ft.	2.44 m
4 ft.	1.22 m	4 ft.	1.22 m	6 ft.	1.83 m	10 ft.	3.05 m
V ₁ + H ₁ + H ₂ = 30 ft. (9.14 m) Maximum H ₁ = 4 ft. (1.22 m) Maximum H ₁ + H ₂ = 10 ft. (3.05 m) Maximum							

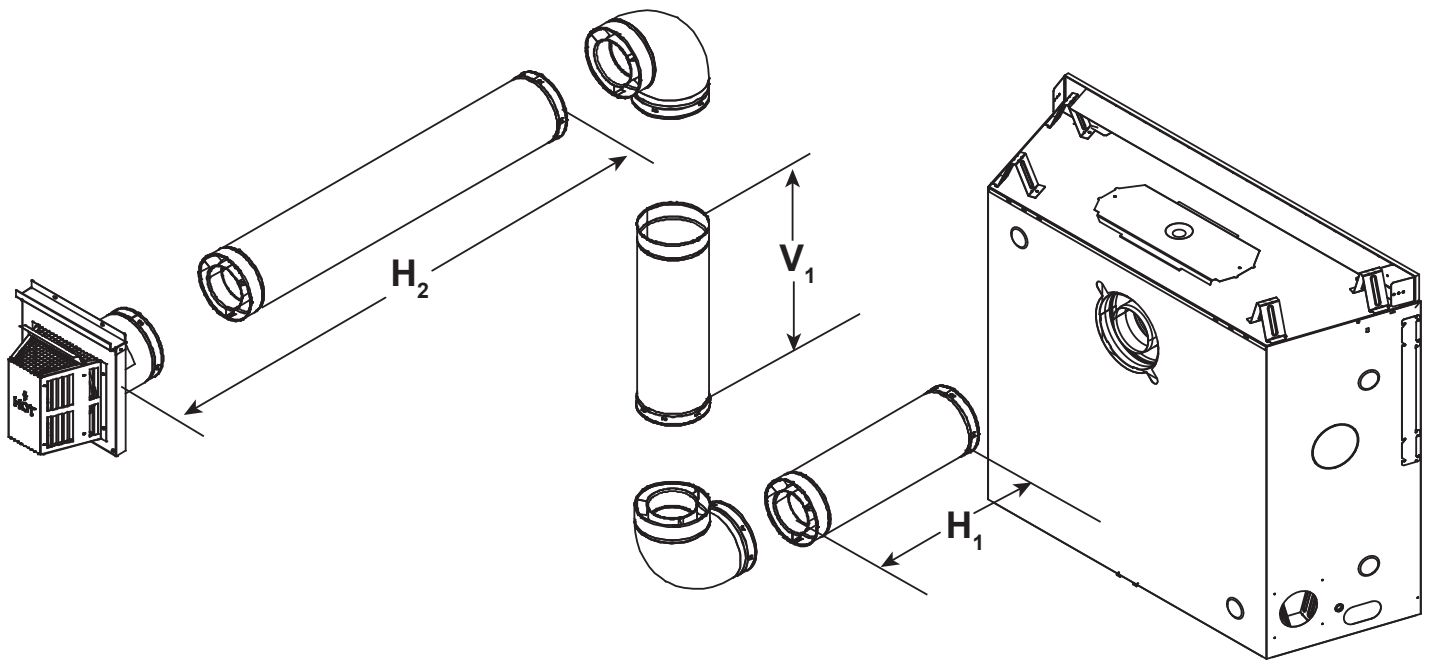


Figure 4.18

Rear Vent - Horizontal Termination - (continued)

Three Elbows

Note: Use DVP Series components only.

H ₁ Maximum		V ₁ Minimum		H ₂ + H ₃		H ₁ + H ₂ + H ₃ Max.	
0 ft.	0 mm	Back to Back 90° Elbows		1 ft.	305 mm	1 ft.	305 mm
6 in.	152 mm	6 in.	152 mm	1 ft.	305 mm	1-1/2 ft.	457 mm
1 ft.	305 mm	1 ft.	305 mm	1 ft.	305 mm	2 ft.	610 mm
2 ft.	610 mm	2 ft.	610 mm	2 ft.	610 mm	4 ft.	1.22 m
3 ft.	914 mm	3 ft.	914 mm	5 ft.	1.52 m	8 ft.	2.44 m
4 ft.	1.22 m	4 ft.	1.22 m	6 ft.	1.83 m	10 ft.	3.05 m
V ₁ + H ₁ + H ₂ + H ₃ = 30 ft. (9.14 m) Maximum H ₁ = 4 ft. (1.22 m) Maximum H ₁ + H ₂ + H ₃ = 10 ft. (3.05 m) Maximum							

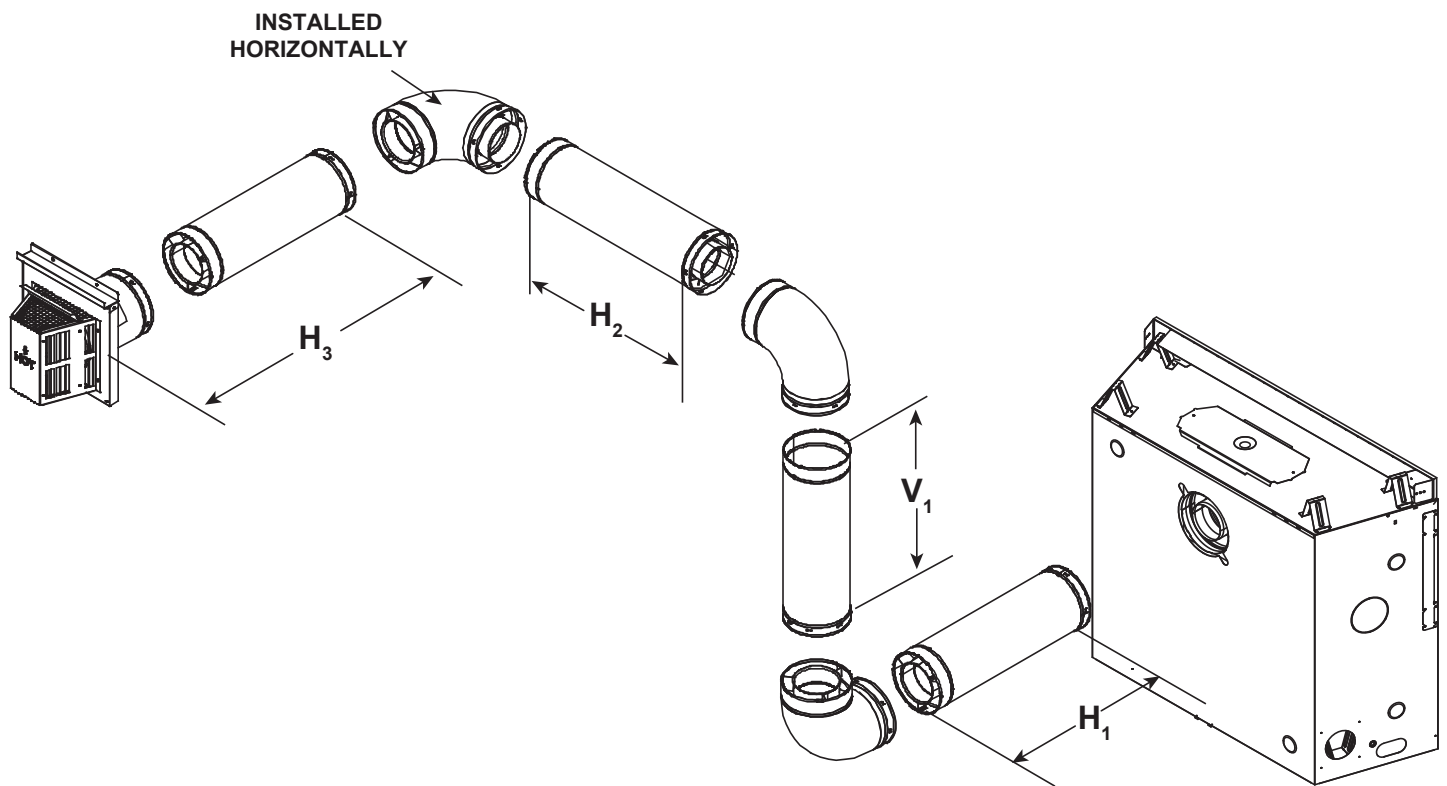
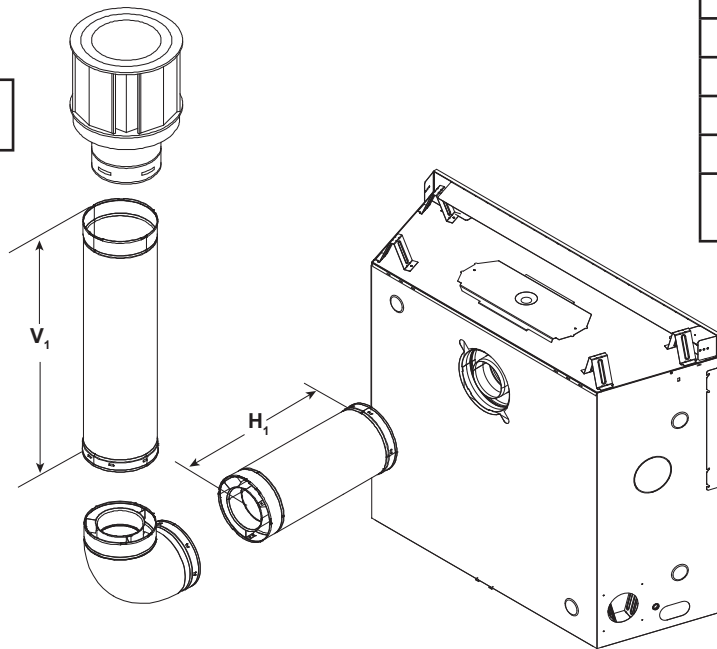


Figure 4.19

Rear Vent - Vertical Termination

One Elbow

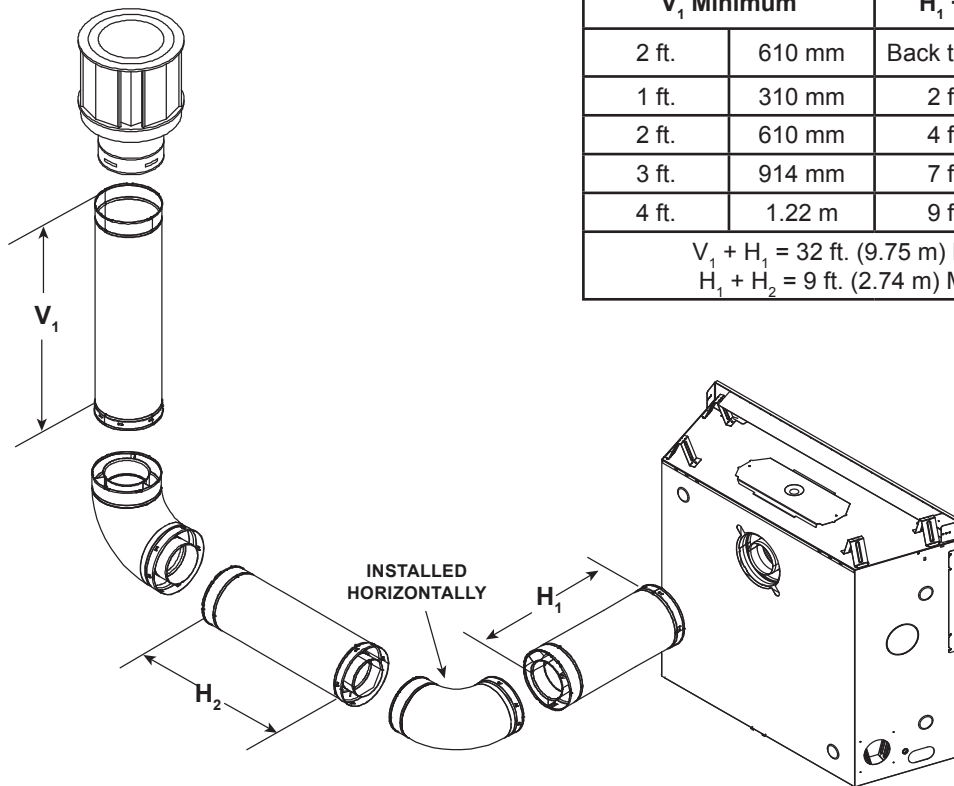
Note: Use DVP Series components only.



V ₁ Minimum		H ₁ Maximum	
1 ft.	305 mm	3 ft.	914 mm
2 ft.	610 mm	6 ft.	1.83 m
3 ft.	914 mm	8 ft.	2.44 m
4 ft.	1.22 m	11 ft.	3.35 m
5 ft.	1.52 m	12 ft.	3.66 m
V ₁ + H ₁ = 36 ft. (10.97 m) Maximum			
H ₁ = 12 ft. (3.66 m) Maximum			

Figure 4.20

Two Elbows



V ₁ Minimum		H ₁ + H ₂ Maximum	
2 ft.	610 mm	Back to Back 90° Elbows	
1 ft.	310 mm	2 ft.	610 mm
2 ft.	610 mm	4 ft.	1.22 m
3 ft.	914 mm	7 ft.	2.13 m
4 ft.	1.22 m	9 ft.	2.74 m
V ₁ + H ₁ = 32 ft. (9.75 m) Maximum			
H ₁ + H ₂ = 9 ft. (2.74 m) Maximum			

Figure 4.21

Rear Vent - Vertical Termination - (continued)

Three Elbows

Note: Use DVP Series components only.

ALL MODELS							
H ₁ Maximum		V ₁ Minimum		H ₂		H ₁ + H ₂ Maximum	
1-1/2 ft.	457 mm	Back to Back Elbows		1 ft.	305 mm	2-1/2 ft.	762 mm
3-1/2 ft.	1.1 m	1 ft.	305 mm	3 ft.	914 mm	6-1/2 ft.	2.0 m
5-1/2 ft.	1.2 m	2 ft.	610 mm	5 ft.	1.5 m	10-1/2 ft.	3.2 m
7-1/2 ft.	2.3 m	3 ft.	914 mm	7 ft.	2.1 m	14-1/2 ft.	4.4 m
H ₁ Maximum = 7-1/2 ft. (2.3 m) V ₁ + V ₂ + H ₁ + H ₂ Maximum = 40 ft. (12.2 m)							

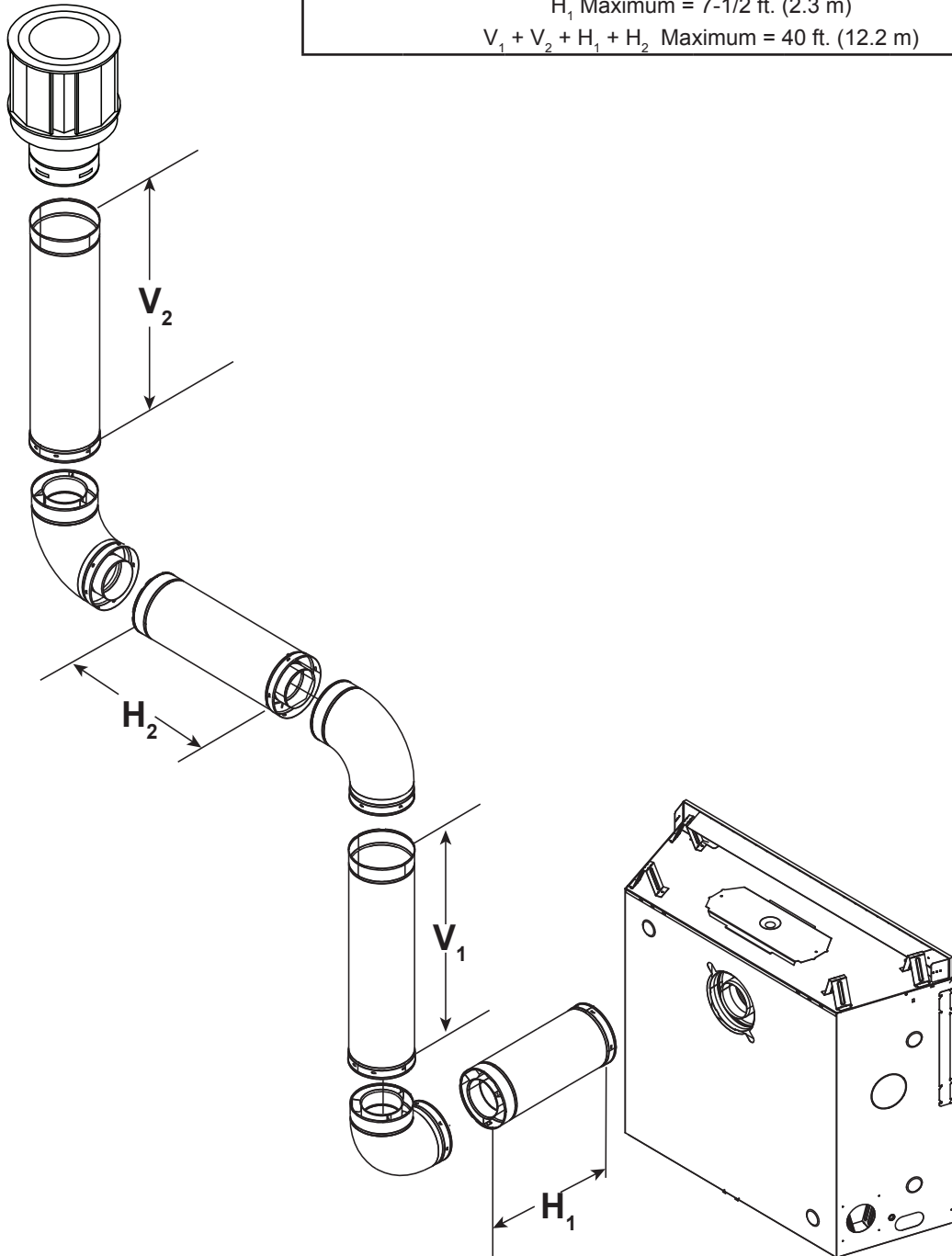


Figure 4.22

Three Elbows

Note: Use DVP Series components only.

H ₁	H ₂	H ₃	V ₁ Minimum		H ₁ + H ₂ + H ₃ Maximum	
*	*	*	8 ft.	2.44 m	6 ft.	1.83 m
*	*	*	9 ft.	2.74 m	7 ft.	2.13 m
*	*	*	10 ft.	3.05 m	8 ft.	2.44 m
*	*	*	10 ft.	3.05 m	8 ft.	2.44 m

$V_1 + H_1 + H_2 + H_3 = 32 \text{ ft. (9.75 m) Maximum}$
 *No specific restrictions on this value EXCEPT
 $V_1 + H_1 + H_2 + H_3 \text{ cannot exceed } 32 \text{ ft. (9.75 m) Maximum}$
 $H_1 + H_2 + H_3 = 8 \text{ ft. (2.44 m) Maximum}$

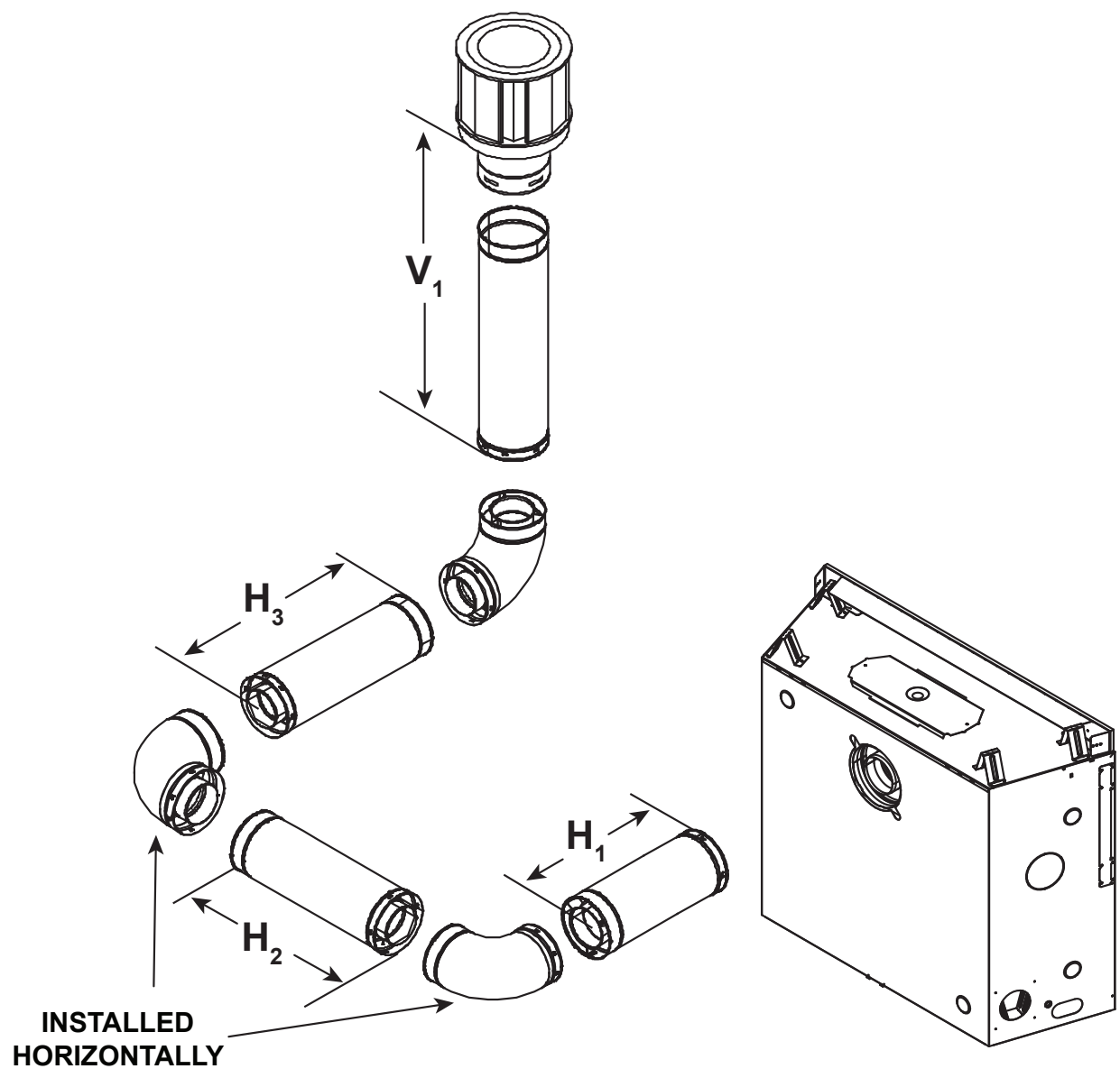


Figure 4.23

5 Vent Clearances and Framing

A. Pipe Clearances to Combustibles

WARNING! Risk of Fire! Maintain air space clearance to vent. DO NOT pack insulation or other combustibles:

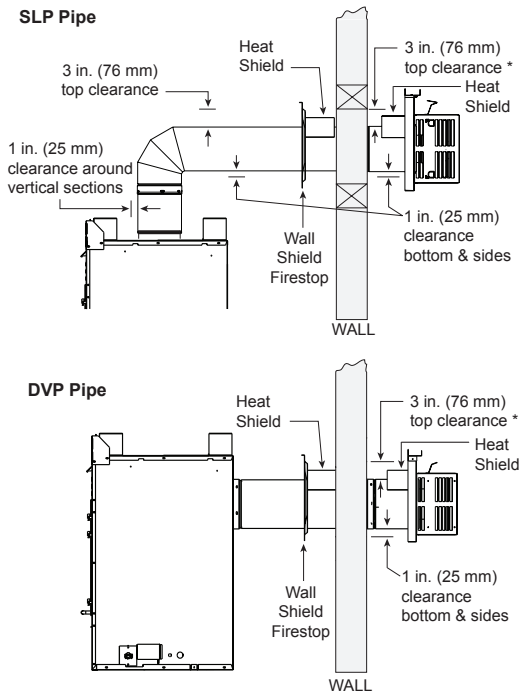
- Between ceiling firestops
- Between wall shield firestops
- Around vent system

Failure to keep insulation or other material away from vent pipe could cause overheating and fire.

Note: Heat shields MUST overlap by a minimum of 1-1/2 in. (38 mm).

- **DVP heat shield** - 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.
- **SLP heat shield** - designed to be used on a wall 4-3/8 in. to 7-5/8 in. (111 mm to 194 mm) thick.
- If wall thickness is less than 4-3/8 (111 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-5/8 in. (194 mm) a DVP-HSM-B will be required.

(DVP-SLP Pipe Shown)



* When using SLP pipe, minimum clearances from the vent pipe to combustible materials at inside wall firestops are:

Top:	2-1/2 in. (64 mm)
Bottom:	1/2 in. (13 mm)
Sides:	1 in. (25 mm)

Figure 5.1 Horizontal Venting Clearances To Combustible Materials - Generic Appliance Shown

B. Wall Penetration Framing/Firestops

Combustible Wall Penetration

Whenever a combustible wall is penetrated, you must frame a hole for the wall shield firestop(s). The wall shield firestop maintains minimum clearances and prevents cold air infiltration.

These clearances are maintained by using an SLP-WS (SLP pipe) or DVP-WS (DVP pipe). See Figure 5.2 for framing instructions.

- For external walls: The wall shield firestop is included with the termination cap assembly.
- For internal walls: A wall shield firestop must be purchased and installed.
- The opening must be framed on all four sides using the same size framing materials as those used in the wall construction.
- SLP pipe - A wall shield firestop must be placed on each side of an interior wall. A minimum 1-1/2 in. (38 mm) overlap of attached heat shields must be maintained.
- DVP pipe - A wall shield firestop is required on one side only on interior walls. If your local inspector requires a wall shield firestop on both sides, then both wall shield firestops must have a heat shield (refer to Section 12.A) attached to them.
- See Section 7.F for information for regarding the installation of a horizontal termination cap.

Non-Combustible Wall Penetration

If the hole being penetrated is surrounded by non-combustible 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.

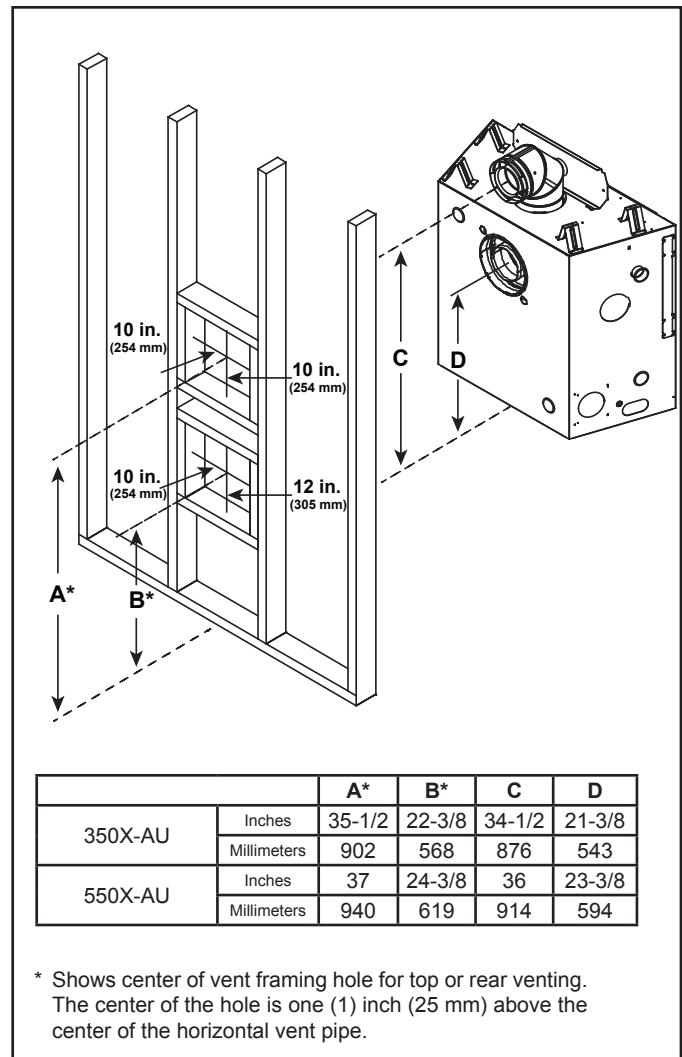


Figure 5.2 Wall Penetration

C. Ceiling Firestop/Floor Penetration Framing

A ceiling firestop **MUST** be used between floors and attics.

- **DVP pipe only** - Frame an opening 10 in. by 10 in. (254 mm by 254 mm) whenever the vent penetrates a ceiling/floor (see Figure 5.3).
- **SLP pipe only** - Frame opening 9 in. x 9 in. (229 mm x 229 mm) whenever the vent penetrates a ceiling/floor. See Figure 5.3.
- Frame the area with the same sized lumber as used in ceiling/floor joist.
- The ceiling firestop may be installed above or below the ceiling joists when installed with an attic insulation shield. It must be under joists between floors that are not insulated. See Figure 5.4.
- Secure in place with nails or screws.

WARNING! Risk of Fire! DO NOT pack insulation around the vent. Insulation must be kept back from the pipe to prevent overheating.

D. Install Attic Insulation Shield

WARNING! Fire Risk. DO NOT allow loose materials or insulation to touch vent. Hearth & Home Technologies requires the use of an attic shield.

The International Fuel Gas Code requires an attic shield constructed of 26 gauge minimum steel that extends at least 2 in. (51 mm) above insulation.

- Attic insulation shields must meet specified clearances to combustibles and be secured in place.
- An attic insulation shield kit is available from Hearth & Home Technologies. Contact your dealer to order. Install attic insulation shield according to instructions included with kit.

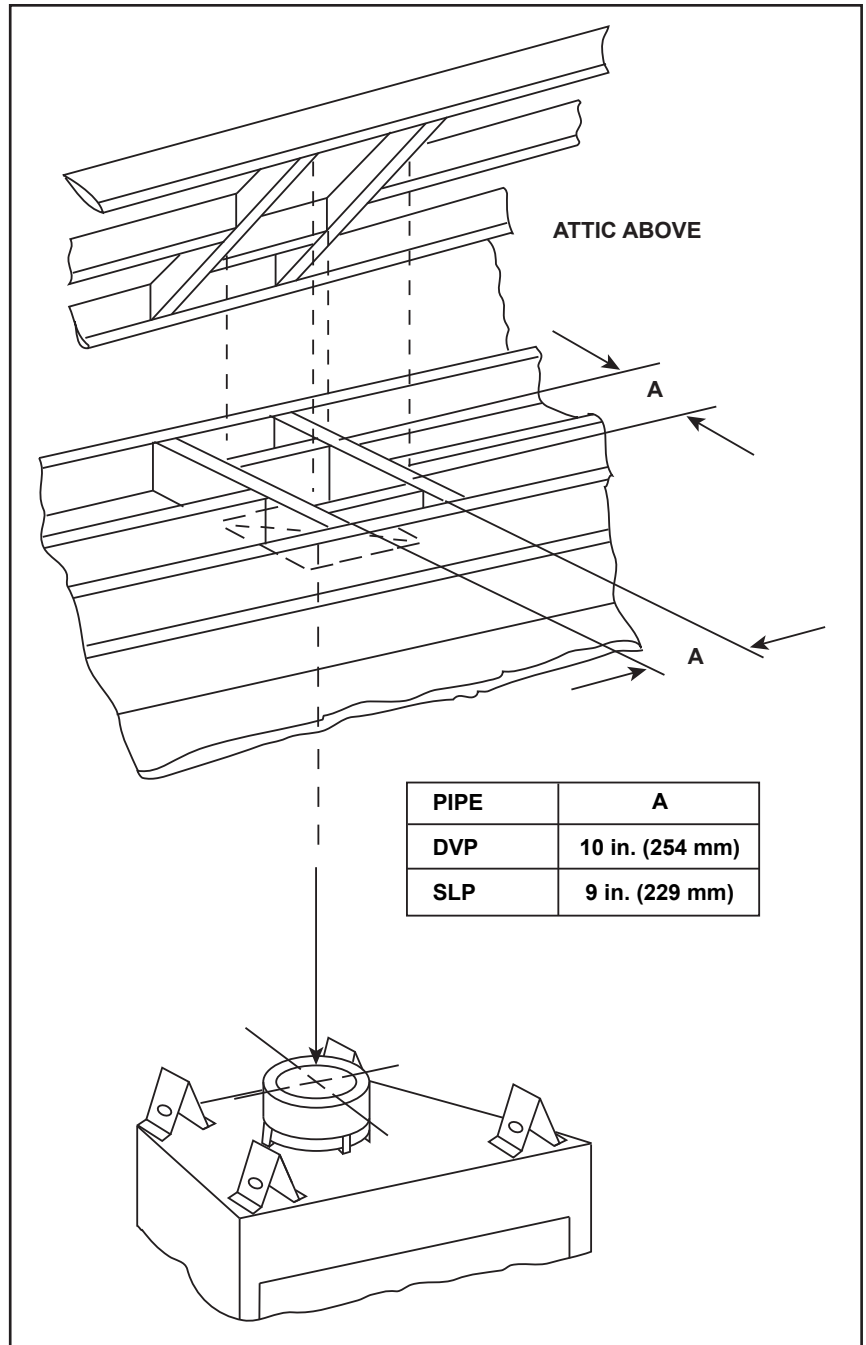


Figure 5.3 Installing Ceiling Firestop - Generic Appliance Shown

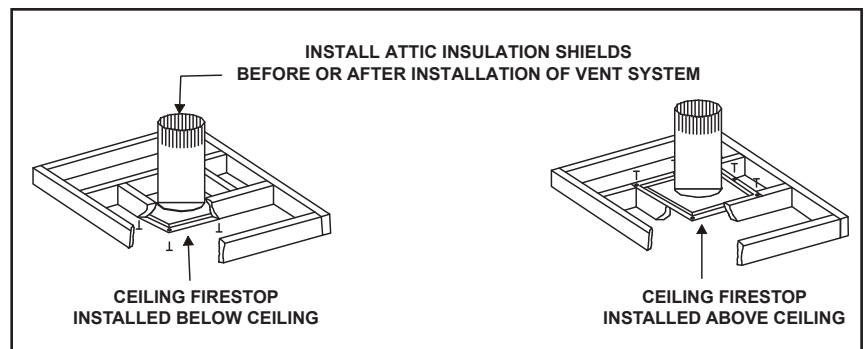


Figure 5.4 Installing the Attic Shield

6 Appliance Preparation

A. Vent Collar Preparation

CAUTION! Risk of Cuts, Abrasions or Flying Debris. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

NOTICE: Once appliance is set up for top or rear venting, it CANNOT be changed at a later time.

Top Vent

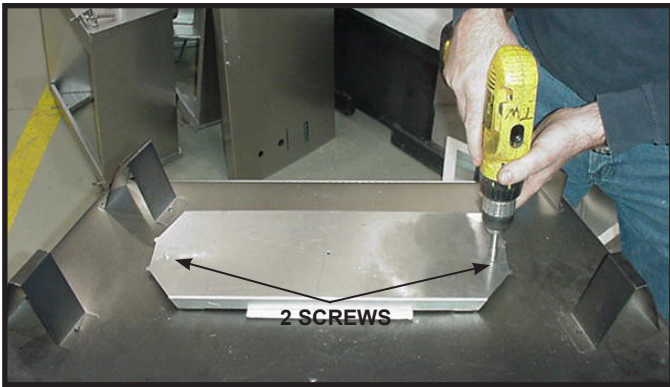


Figure 6.1 For top vent, remove the two screws holding the top heat shield in place. For rear vent, see next page.

WARNING! Risk of Fire! Do not remove heat shield. Elevated header temperatures may cause a fire.



Figure 6.2 Rotate the top heat shield to the vertical position as shown above. The heat shield must remain in the vertical position.

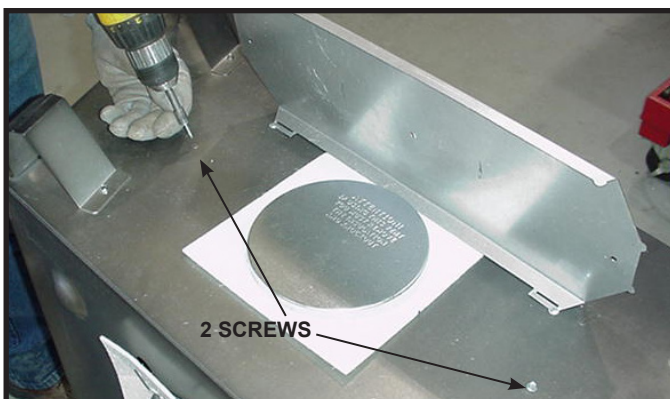


Figure 6.3 Replace the two screws as shown.

Note: Actual appliance may look different than the appliance shown in this section.



Figure 6.4 Remove the seal cap.



Figure 6.5 Remove the insulation basket and white insulation from the center vent pipe.



Figure 6.6 Remove the insulation from the outer vent pipe.



Figure 6.7 To attach the first section of vent pipe, make sure to use the fiberglass gasket to seal between the first vent component and the outer appliance wrap. Use two self tapping screws to secure the gasket to the outer wrap.

Note: Once the seal cap has been removed, it cannot be reattached.

Rear Vent

NOTICE: Once appliance is set up for top or rear venting, it CANNOT be changed at a later time.

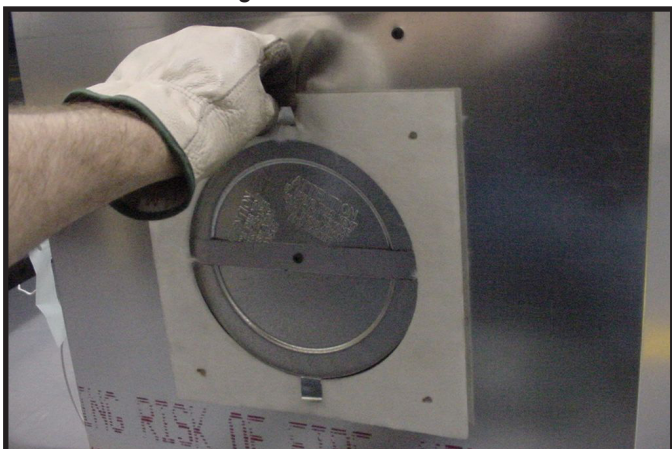


Figure 6.8 (Generic Appliance Shown) Fold the tabs toward the center of the fire plug (90°) and remove the insulation gasket.



Figure 6.9 (Generic Appliance Shown) Cut the metal retaining band and fold the sides out.

NOTICE: Once the seal cap has been removed it CANNOT be reattached.



Figure 6.10 (Generic Appliance Shown) Fold the center parts of the retaining band out and use to remove the seal cap.



Figure 6.11 (Generic Appliance Shown) Discard the seal cap, remove and discard the insulation basket. Note: Once the seal cap has been removed it CANNOT be reattached.



Figure 6.12 (Generic Appliance Shown) Attach the first vent section (it will snap into place). Slide the insulation gasket onto the vent section, up against the appliance and over the tabs. Use two self-tapping screws to secure gasket to outer wrap.

B. Installing the Optional Heat-Zone®-240V Kit

NOTICE: Additional clearances are required for Heat-Zone®-240V installations. Provisions must be made in advance to ensure fit within the framing.

- Locate the Heat-Zone®-240V ports on the left and right sides of the appliance. Either one or two Heat-Zones®-240V may be installed. See Figure 6.13. Remove the knockout(s) from the appliance with a tin snips.
- Center the duct collar around the exposed hole and attach it to the appliance with three screws. Note: Do this BEFORE final positioning of the appliance.
- Determine the location for the air register/fan housing assembly.

Reference the Heat-Zone®-240V Kit instructions for the remaining installation steps.

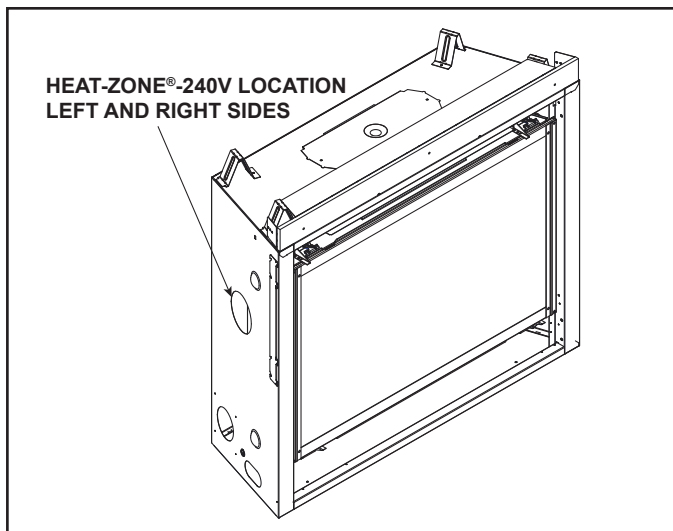


Figure 6.13 Heat-Zone®-240V Locations

C. Securing and Leveling the Appliance

WARNING! Risk of Fire! Prevent contact with:

- Sagging or loose insulation
- Insulation backing or plastic
- Framing and other combustible materials

Block openings into the chase to prevent entry of blown-in insulation. Make sure insulation and other materials are secured.

DO NOT notch the framing around the appliance standoffs.

Failure to maintain air space clearance could cause overheating and fire.

The diagram shows how to properly position and secure the appliance. See Figure 6.14. Nailing tabs are provided to secure the appliance to the framing members.

- Bend out nailing tabs on each side.
- Place the appliance into position.
- Keep nailing tabs flush with the framing.
- Plum, square and level the appliance from side to side and front to back.

- Shim the appliance as necessary, keeping the bottom supported, level and straight. It is acceptable to use wood shims underneath the appliance.
- Place a level on top, sides and bottom as shown in Figure 6.14.
- Secure the appliance to the framing by using nails or screws through the nailing tabs.
- Optional: Secure the appliance to the floor by inserting two screws through the pilot holes at the bottom of the appliance.

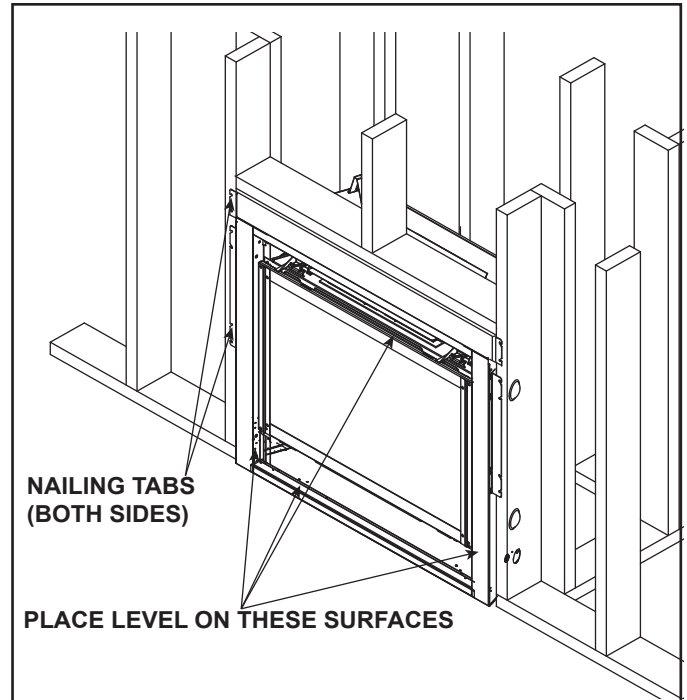


Figure 6.14 Proper Positioning and Securing of an Appliance

D. Non-Combustible Material

WARNING! Risk of Fire! DO NOT remove factory-installed non-combustible material.

A non-combustible board is factory-installed above the appliance opening. Do not remove.

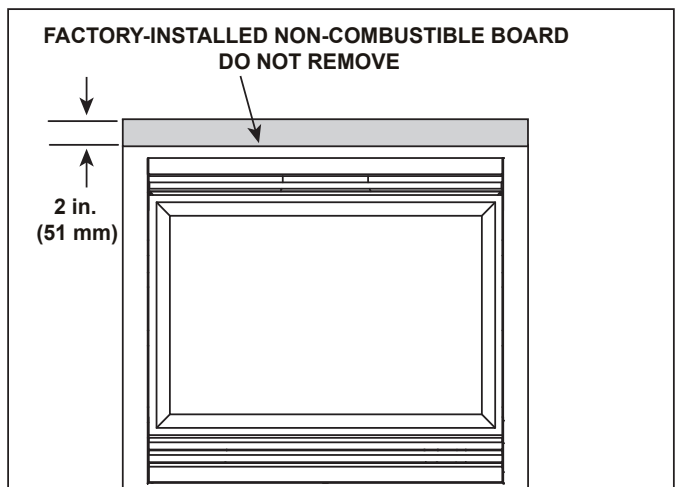


Figure 6.15 Facing Materials

7 Venting and Chimneys

A. Assemble Vent Sections

(DVP Pipe Only)

Attach Vent to the Firebox Assembly

Note: The end of the pipe sections with the lanced tabs will face toward the appliance.

Attach the first pipe section to the starting collar:

- Lanced pipe end of the starting collar.
- Inner pipe over inner collar.
- Push the pipe section until all lanced tabs snap in place.
- Lightly tug on pipe to confirm it has locked.

Required Commercial, Multi-family (Multi-level exceeding two stories), or High-Rise Applications

All outer pipe joints must be sealed with 100% silicone (300° F minimum continuous exposure rating), including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant (300 °F (149 °C) minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections. See Figure 7.1. **OR**

Apply a bead of silicone sealant (300 °F (149 °C) minimum continuous exposure rating) to the outside of connecting joint after joining sections **OR**

Apply aluminum foil tape (300 °F minimum continuous exposure rating) to the outside of connecting joint after joining sections. On horizontal pipe runs, it is recommended that the tape seam is positioned on the bottom side of the vent pipe.

- Only outer pipes need to be sealed. All appliance collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

WARNING! Risk of Fire or Explosion! DO NOT break silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent could leak.

Assemble Pipe Sections

Per Figure 7.2:

- Start the inner pipe on the lanced end of section A into the flared end of section B.
 - Start the outer pipe of section A over the outer pipe of section B.
 - Once both vents sections are started, push firmly until all lanced tabs lock into place.
 - Lightly tug on the pipe to confirm the tabs have locked.
- It is acceptable to use screws no longer than 1/2 in. (13 mm) to hold outer pipe sections together. If predrilling holes, **DO NOT** penetrate inner pipe.

For 90° and 45° elbows that are changing the vent direction from horizontal to vertical, one screw minimum should be put in the outer flue at the horizontal elbow joint to prevent the elbow from rotating. Use screws no longer than 1/2 in. (13 mm). If predrilling screw holes, **DO NOT** penetrate inner pipe.



Figure 7.1 High Temperature Silicone Sealant

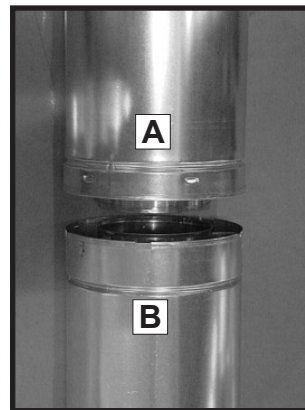


Figure 7.2

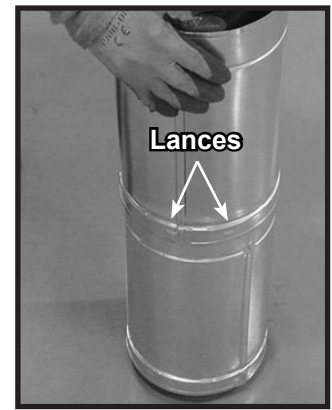
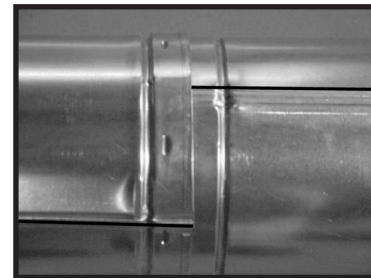
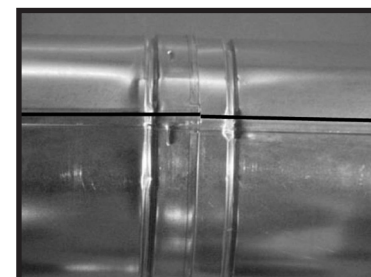


Figure 7.3

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



CORRECT



INCORRECT

Figure 7.4 Seams

Assemble Vent Sections (SLP Only)

To attach the first vent component to the starting collars of the appliance:

- Lock the vent components into place by sliding the pipe section onto the collar.
- Align the seam of the pipe and seam of collar to allow engagement. Rotate the vent component to lock into place. Use this procedure for all vent components. See Figure 7.5.
- Slide the gasket over the first vent section and place it flush to the appliance. This will prevent cold air infiltration. Caulk with a minimum of 300 °F (149 °C) continuous exposure rating may be used to hold the part in place.
- Continue adding vent components, locking each succeeding component into place.
- Ensure that each succeeding vent component is securely fitted and locked into the preceding component.

Required Commercial, Multi-family (Multi-level exceeding two stories), or High-Rise Applications

All outer pipe joints must be sealed with 100% silicone (300 °F (149 °C) minimum continuous exposure rating), including the slip section that connects directly to the horizontal termination cap.

- Apply a bead of silicone sealant (300 °F (149 °C) minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections. See Figure 7.1. **OR**

Apply a bead of silicone sealant (300 °F (149 °C) minimum continuous exposure rating) to the outside of connecting joint after joining sections **OR**

Apply aluminum foil tape (300 °F (149 °C) minimum continuous exposure rating) to the outside of connecting joint after joining sections. On horizontal pipe runs, it is recommended that the tape seam is positioned on the bottom side of the vent pipe.

- Only outer pipes need to be sealed. All appliance collar, pipe, slip section, elbow and cap outer flues shall be sealed in this manner, unless otherwise stated.

WARNING! Risk of Fire or Explosion! DO NOT break silicone seals on slip sections. Use care when removing termination cap from slip pipe. If slip section seals are broken during removal of the termination cap, vent could leak.

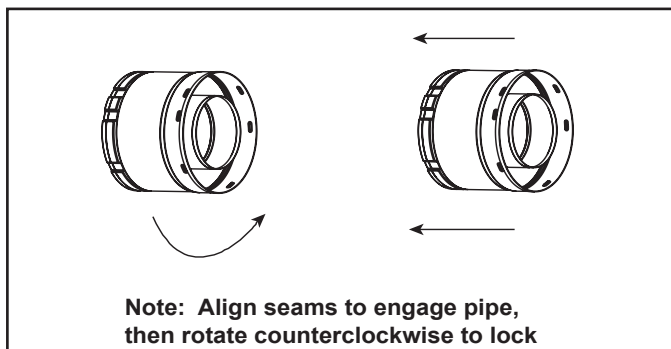


Figure 7.5 Adding Venting Components

B. Assemble Slip Sections

- Slide the inner flue of the slip section into the inner flue of the pipe section and the outer flue of the slip section over the outer flue of the pipe section. See Figure 7.6.
- Slide together to the desired length.

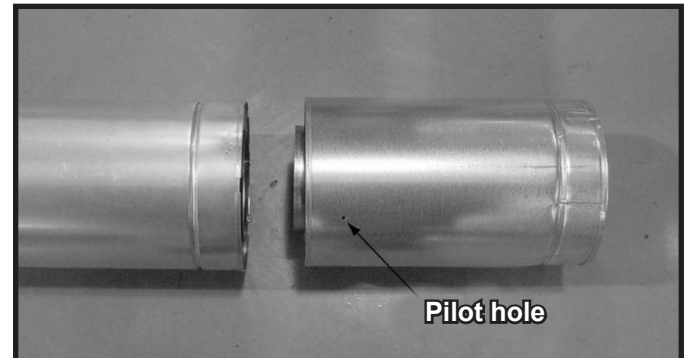


Figure 7.6 Slip Section Pilot Holes

- Maintain a 1-1/2 in. (38 mm) overlap between the slip section and the pipe section.
- Secure the pipe and slip section with two screws no longer than 1/2 in. (13 mm), using the pilot holes in the slip section. See Figure 7.7.

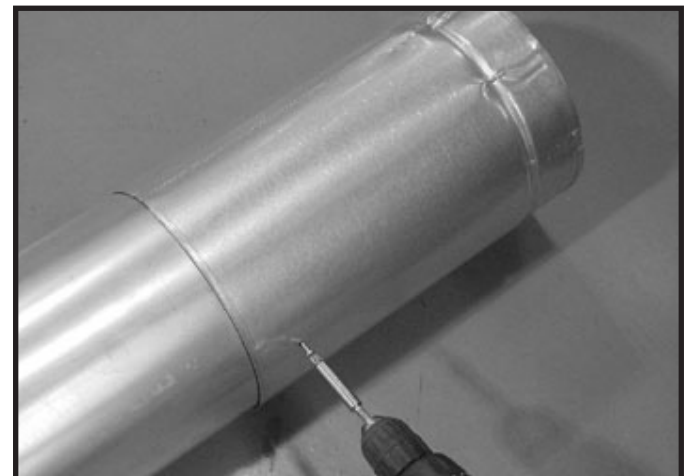


Figure 7.7 Screws into Slip Section

- Continue adding pipe as necessary following instructions in "Assembling Pipe Sections."

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

NOTICE: When installing a vent system with an HRC termination cap, all pipe system joints shall be sealed using a high temperature silicone sealant (300 °F (149 °C) minimum continuous exposure rating).

- Apply a bead of silicone sealant (300 °F (149 °C) minimum continuous exposure rating) inside the female outer pipe joint prior to joining sections.
- Only outer pipes are sealed, sealing the inner flue is not required.
- All appliance collar, pipe, slip section, elbow and cap outer flues shall be sealed.

C. Secure the Vent Sections

- Vertical runs originating off the top of the appliance, with no offsets, must be supported every 8 ft. (2.44 m) after the maximum allowed 25 ft. (7.62 m) of unsupported rise.
- Vertical runs originating off the rear of the appliance, or after any elbow, must be supported every 8 ft. (2.44 m).
- Horizontal runs must be supported every 5 feet (1.52 m).
- Vent supports or plumbers strap (spaced 120° apart) may be used to support vent sections. See Figures 7.8 and 7.9.
- Wall shield firestops may be used to provide horizontal support to vent sections.
- SLP ceiling firestops have tabs that may be used to provide vertical support.

WARNING! Risk of Fire, Explosion or Asphyxiation! Improper support could allow vent to sag and separate. Use vent run supports and connect vent sections per installation instructions. **DO NOT** allow vent to sag below connection point to appliance.

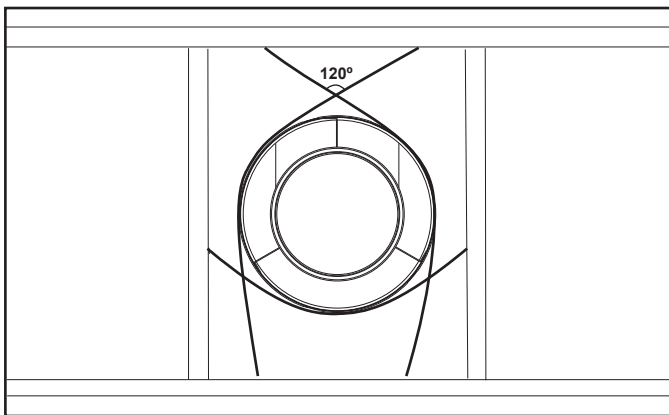


Figure 7.8 Securing Vertical Pipe Sections

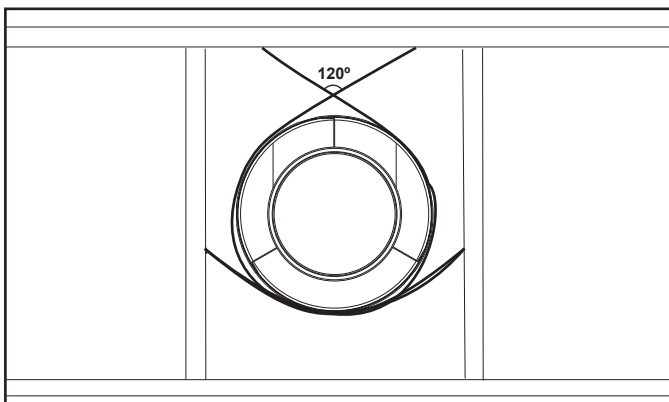


Figure 7.9 Securing Horizontal Pipe Sections

D. Disassemble Vent Sections

- Rotate either section (see Figure 7.10) so the seams on both pipe sections are aligned as shown in Figure 7.11.
- Pull carefully to separate the pieces of pipe.

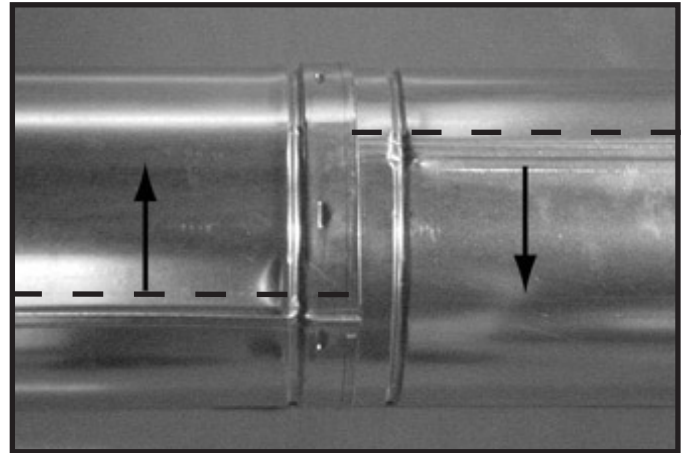


Figure 7.10 Rotate Seams for Disassembly

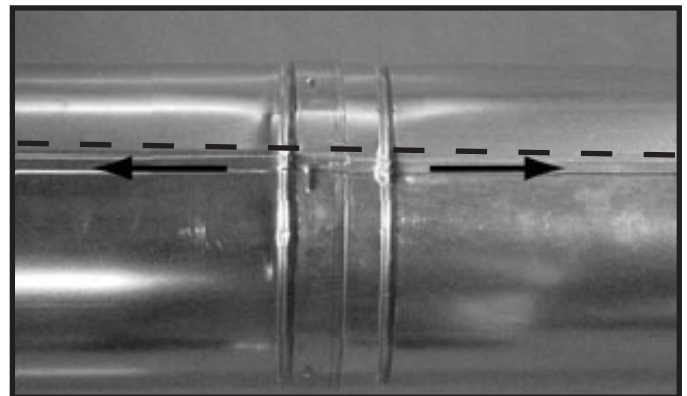


Figure 7.11 Align and Disassemble Vent Sections

E. Vertical Termination Requirements

Install Metal Roof Flashing

- See minimum vent heights for various pitched roofs (Figure 7.12) to determine the length of pipe to extend through the roof.
- Slide the roof flashing over the pipe sections extending through the roof as shown in Figure 7.13.

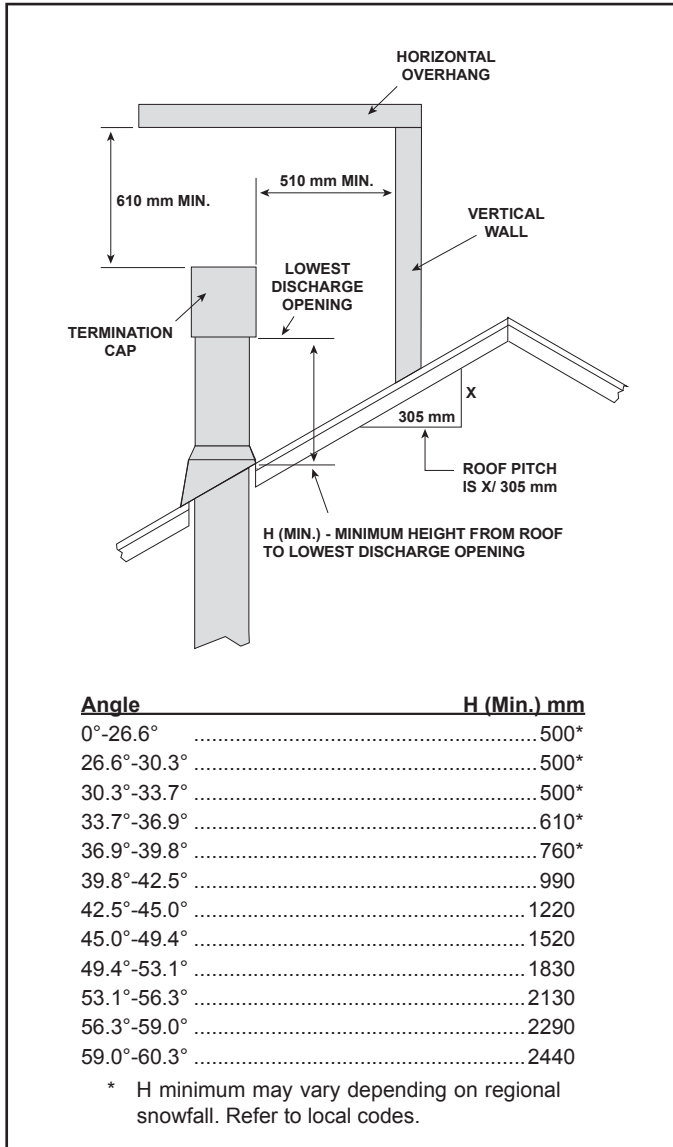


Figure 7.12 Minimum Height From Roof to Lowest Discharge Opening

NOTICE: Failure to properly caulk the roof flashing and pipe seams could permit entry of water.

- Caulk the gap between the roof flashing and the outside diameter of the pipe.
- Caulk the perimeter of the flashing where it contacts the roof surface. See Figure 7.13.
- Caulk the overlap seam of any exposed pipe sections that are located above the roof line.

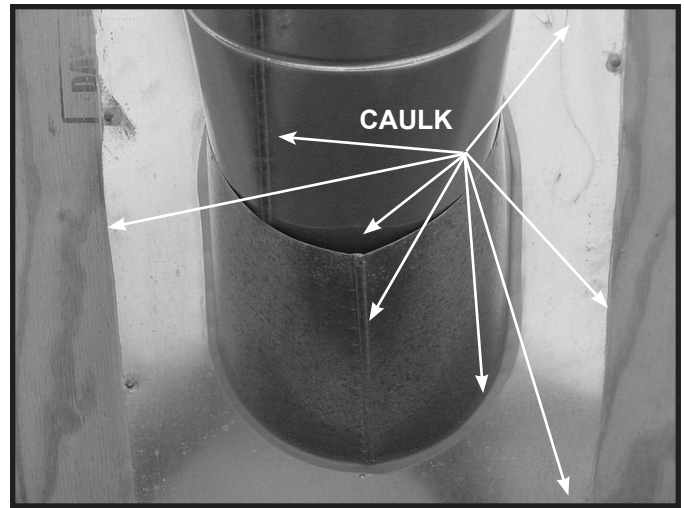


Figure 7.13

Assemble and Install Storm Collar

CAUTION! Risk of Cuts, Abrasions or Flying Debris. Wear protective gloves and safety glasses during installation. Sheet metal edges are sharp.

- Slide the storm collar onto the exposed pipe section and align brackets.
- Insert a bolt (provided) through the brackets and install nut. Do not completely tighten.



Figure 7.14 insert Bolt into Brackets

- Slide the assembled storm collar down the pipe section until it rests on the roof flashing (see Figure 7.14).
- Tighten nut and make sure the collar is tight against the pipe section.
- Caulk around the top of the storm collar. See Figure 7.15.

Install Vertical Termination Cap

- Attach the vertical termination cap by sliding the inner collar of the cap into the inner flue of the pipe section while placing the outer collar of the cap over the outer flue of the pipe section.
- Secure the cap by driving 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 7.15).

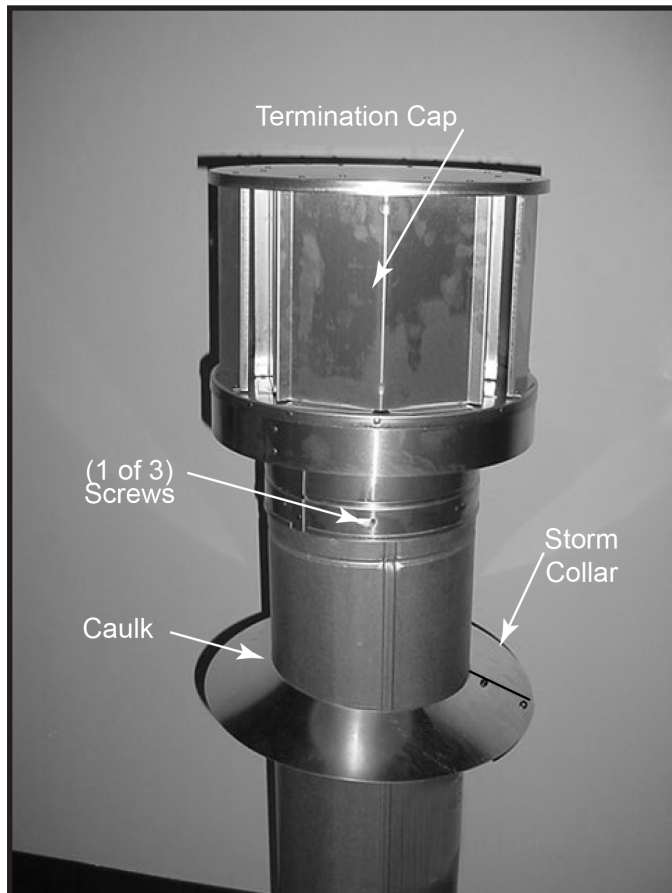


Figure 7.15

F. Horizontal Termination Requirements

Heat Shield Requirements for Horizontal Termination

WARNING! Risk of Fire! To prevent overheating and fire, heat shields must extend through the entire wall thickness.

- **DO NOT** remove the heat shields attached to the wall shield firestop and the horizontal termination cap (shown in Figure 7.16).
- Heat shields must overlap 1-1/2 in. (38 mm) minimum.

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 7.16.

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

- If the wall thickness is less than 4 in. (102 mm) (DVP) or 4-3/8 in. (111 mm) (SLP), the heat shields on the cap and wall shield firestop must be trimmed. A minimum 1-1/2 in. (38 mm) overlap **MUST** be maintained.
- Use an extended heat shield if the finished wall thickness is greater than 7-1/4 in. (184 mm).
- The extended heat shield may need to be cut to length maintaining sufficient length for a 1-1/2 in. (38 mm) overlap between heat shields.
- Attach the extended heat shield to either of the existing heat shields using the screws supplied with the extended heat shield. Refer to vent components diagrams in the back of this manual.
- Rest the small leg on the extended heat shield on top of the pipe section to properly space it from the pipe section.

Important Notice: Heat shields may not be field constructed.

Install Horizontal Termination Cap (DVP and SLP Pipe)

WARNING! Risk of Fire! The telescoping flue section of the termination cap **MUST** be used when connecting vent.

- 1-1/2 (38 mm) minimum overlap of flue telescoping section is required.

Failure to maintain overlap could cause overheating and fire.

- 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.

CAUTION! Risk of Burns! Local codes may require installation of a cap shield to prevent anything or anyone from touching the hot cap.

NOTICE: For certain exposures which require superior resistance to wind-driven rain penetration, a flashing kit and HRC caps are available. When penetrating a brick wall, a brick extension kit is available for framing the brick.

Note: When using termination caps with factory-supplied heat shield attached, no additional wall shield firestop is required on the exterior side of a combustible wall.

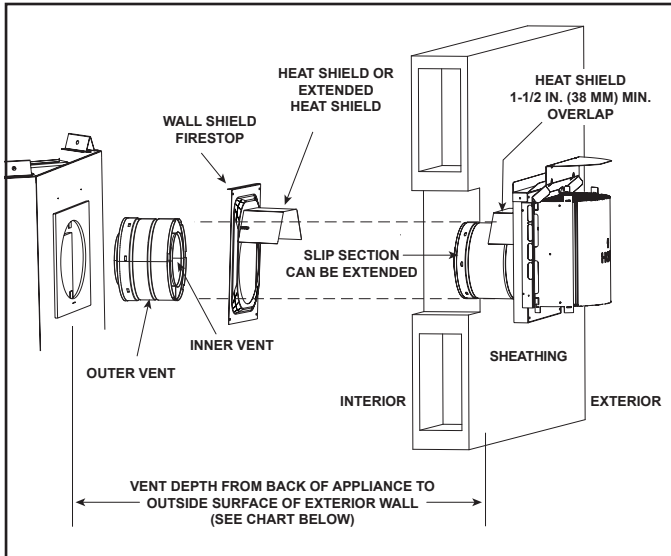


Figure 7.16 Venting Through the Wall - Generic Appliance Shown

**Termination Cap Specification Chart
(depth without using additional pipe sections)**

	DVP-TRAPK1 Top Vent Depth	DVP-TRAP1 Rear Vent Depth	DVP-TRAPK2 Top Vent Depth	DVP-TRAP2 Rear Vent Depth
350X-AU 550X-AU	N/A	3-1/8 in. to 5 in. (79 mm to 127 mm)	N/A	5-1/2 in. to 9-1/2 in. (140 mm to 241 mm)

DVP-TRAP1 can adjust 1-1/2 in. (3-1/8 to 4-5/8)
38 mm (79 mm to 117 mm)

DVP-TRAP2 can adjust 4 in. (5-3/8 to 9-3/8)
102 mm (143 mm to 244 mm)

8 Electrical Information

A. General Information

WARNING! Risk of Shock or Explosion! DO NOT wire 220/240 VAC to the valve or to the appliance wall switch. Incorrect wiring will damage controls.

- Wire the appliance junction cord to unswitched 220/240 VAC. This is required for proper operation of the appliance.
- A 220/240 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.
- Low voltage and 220/240 VAC voltage cannot be shared within the same wall box.

Electrical Service and Repair

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

WARNING! Risk of injury! The gas supply shall be shut off prior to disconnecting the electrical power and removing batteries (if installed) before proceeding with any maintenance to the appliance.

WARNING! Risk of Shock! Replace damaged wire with type 105 °C rated wire. Wire must have high temperature insulation.

Accessories Requirements

- This appliance may be used with a wall switch, wall mounted thermostat and/or a remote control.

Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

B. Wiring Requirements

IntelliFire™ Plus Ignition System Wiring

- Wire the appliance junction cord to 220/240 VAC for proper operation of the appliance.

WARNING! Risk of Shock or Explosion! DO NOT wire IPI controlled appliance junction cord to a switched circuit. Incorrect wiring will override IPI safety lockout.

- Refer to Figure 8.1, IPI Wiring Diagram.
- This appliance is equipped with an IntelliFire™ Plus control valve which operates on a 6 volt/1.5 AMP system.
- Plug the 6 volt transformer plug into the appliance junction cord to supply power to the appliance OR install 4 AA cell batteries (not included) into the battery pack before use.

NOTICE: Batteries should only be used as a power source in the event of an emergency power outage. Batteries should not be used as a primary long-term power source. Battery polarity must be correct when installing batteries. When using batteries as a power source, the 6-volt transformer must be unplugged from the receptacle.

Do not store batteries in the battery pack when the appliance is powered by the 6 volt transformer connected to permanent electrical service.

Accessories Requirements

- This appliance ships standard with a remote control.
- Wiring for optional Hearth & Home Technologies approved accessories should be done now to avoid reconstruction. Follow instructions that come with those accessories.

The junction cord, control module and LED power supply can be accessed by removing decorative front.

LED's

LED's are factory installed. No additional set up or maintenance is required.

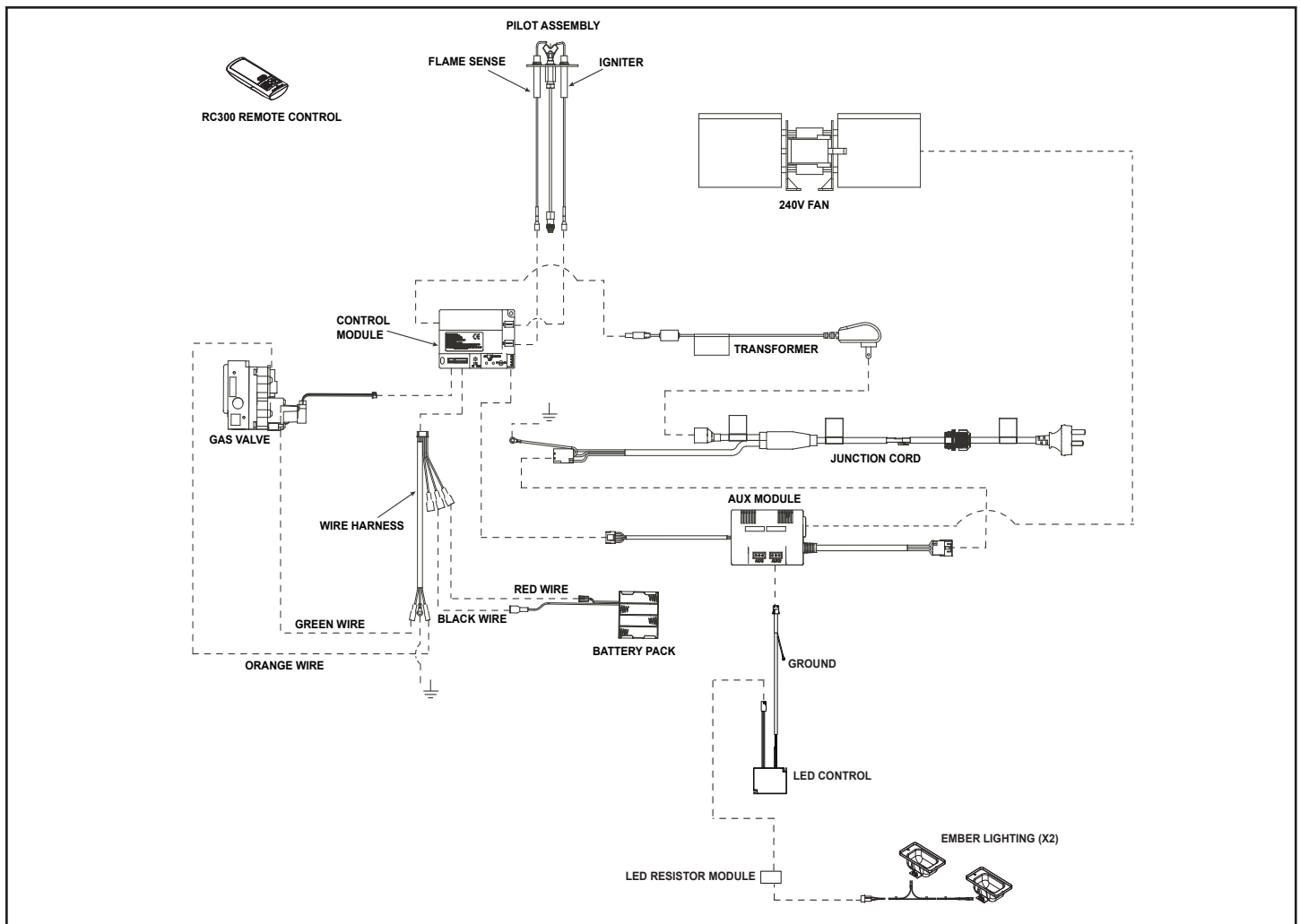


Figure 8.1 IntelliFire™ Plus Wiring Diagram with Remote

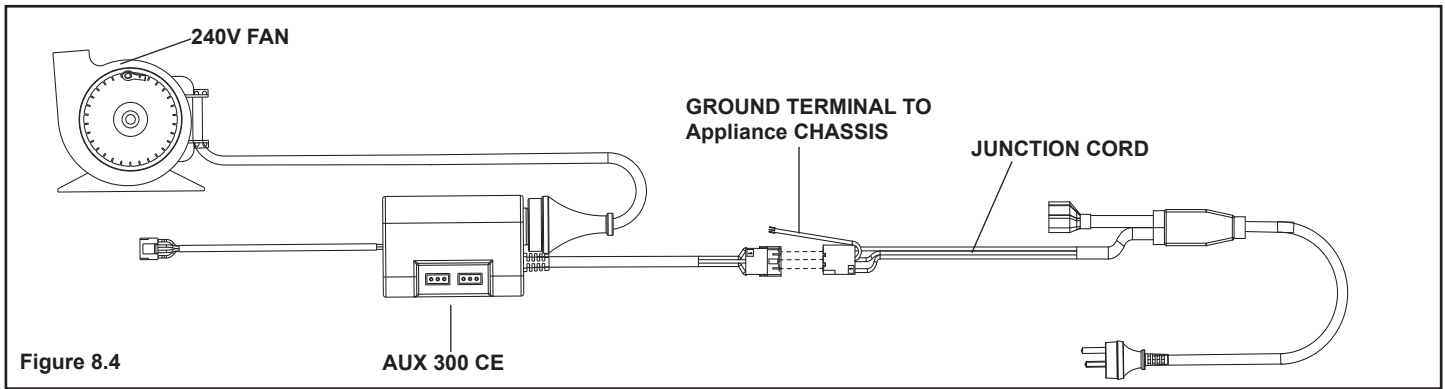


Figure 8.4

C. Fan

These heaters have a factory installed fan and electrical junction cord. These components are located behind the decorative front.

Use of the fan requires that the Junction cord (factory installed) be connected to 220/240 VAC service before permanently enclosing the heater. The service cord is found on the right exterior side of the appliance. See Figure 8.4 for wire connection detail.

D. Control Module Operation

See Section 3.J of the Owner's Manual for Control Module Operation.

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

- Installation and use of any damaged system component.
- Modification of the system component.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.

Any such action may cause a fire hazard.

- Read, understand and follow these instructions for safe installation and operation.

Introduction

The RC300AU multifunctional remote control is designed to control pilot light, flame height, fan speed, and up to two 220/240 VAC auxiliary functions on your gas appliance. The RC300AU is equipped with thermostat functions which can automatically control the temperature in the room in which it is installed. The control is only for use with the Hearth & Home Technologies IntelliFire™ Plus system (IPI). The AUX300CE module is rated for 220/240 VAC, 50-60 Hz, and is required for operation of this remote control device.

Installation Precautions

The installation of this remote control must be performed by a qualified service technician. This remote control is tested and safe when installed in accordance with this installation manual. Do not install any components that may be damaged.

Do not modify, disassemble, or substitute any of the components included with this kit. Installation of this unit must be done by a qualified service technician.

Placement of this remote control may affect performance. An assessment of the space should be done prior to installation for optimum performance.

Determine Location

Determine the location for the remote control. The selected location should be in the same space as the appliance. Never place this unit in a separate room. The remote control must be placed within 30 ft. (9.14 m) of the appliance but should not be exposed to extreme heat.

The RC300AU is approved for interior installation and should not be used in exterior applications.

- Keep remote control out of reach of children.

Appliance Specific Information

Standard appliance features vary. Consult the installation manual for available options.

The included **AUX300CE** receiver provides additional features: Fan control and two Aux functions.

The **REM300-HNG-AU** remote control system functions include: On/Off, Thermostat Mode, Timer Countdown, Flame Adjustment (for appliances with variable flame), Fan Adjustment and Auxiliary Functions.

Kit Contents

REM300-HNG-AU

- REM300-HNG-AU Transmitter
- AAA Batteries (3)
- Wall Holder
- Drywall Anchor (2)
- Screws (2)

9 Gas Information

A. Fuel Conversion

- Make sure the appliance is compatible with available gas types.
- Conversions must be made by a qualified service technician using Hearth & Home Technologies specified and approved parts.

B. Gas Pressure

→ **WARNING! Risk of Explosion!** An in-line regulator **MUST** be installed if the gas pressure exceeds 3.4 kPa. Failure to install a regulator could damage valve.

Pressure requirements for 350X-AU and 550X-AU fireplaces are shown in the table below.

Two taps are provided on the right hand side of the gas control for a test gauge connection to measure the inlet and outlet pressures.

The fireplace and its individual shut-off valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 6 kPa.

If the fireplace must be isolated from the gas supply piping system by closing an individual shut-off valve, it must be of the handle-less type.


- Optimum appliance performance requires proper input pressures.
- Pressure requirements are:

Gas Pressure	Natural Gas	Propane	ULPG
Minimum inlet pressure	1.13 kPa	2.75 kPa	2.75 kPa
Maximum inlet pressure	3.4 kPa	3.4 kPa	3.4 kPa
Manifold pressure	0.87 kPa	2.49 kPa	2.49 kPa

→ **WARNING! Risk of Fire or Explosion!** High pressure will damage valve. Low pressure could cause explosion.

- Verify inlet pressures. Verify minimum pressures when other household gas appliances are operating.
- Install regulator upstream of valve if line pressure is greater than 3.4 kPa.

⚠ 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.

C. Gas Service Access

Note: This appliance does include a manual gas shutoff valve that is located in the valve compartment. This manual gas shutoff valve is accessible for service by removing the decorative front. The valve is most accessible if it is located forward in the control cavity of the appliance.

Depending upon local code, an additional manual gas shutoff, in a readily accessible area may be required and located upstream from the appliance.

D. Gas Connection

Note: Have the gas supply line installed in accordance with local building codes by a qualified installer approved and/or licensed as required by the locality.

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

Note: Consult local building regulations to properly size the gas supply line leading to the (Rp 1/2 in.) hook-up at the unit.

Incoming gas line should be piped into the valve compartment and connected to the ISO 7-Rp 1/2 (BSP Rp 1/2) threaded gas inlet connection on the manual shutoff valve.

IMPORTANT NOTICE: (Items 1, 2 and 3 applies to ALL Heat & Glo gas appliances)

1. **1/2 in. GAS LINE:** Run through cavity 70 mm above finished hearth level, **NOT RIGID, NOT CLIPPED**, with minimum 500 mm into cavity and 120 mm back from plaster face.
2. **PVC (COMPOSITE) GASLINE** must terminate minimum 500 mm short of gas heater. Copper pipe **MUST** be the final connection to the gas heater.
3. **ISOLATING SWITCH:** Location within 1 metre of fireplace, subject to mantelpiece etc. Check to ensure it remains clear of any mantelpiece installation.

Leak test all gas line points and the gas control valve prior to and after starting the gas appliance.

E. High Altitude Installations

NOTICE: If the heating value of the gas has been reduced, these rules do not apply. Check with your local gas utility or authorities having jurisdiction.

When installing above 2000 ft. (610 m) elevation:

Reduce input rate 4% for each 1000 ft. (305 m) above 2000 ft. (610 m).

F. Air Shutter Setting

Air shutter settings should be adjusted by a qualified service technician at the time of installation.

Factory Pre-Set Air Shutter Settings

350X-AU (NG)	3/8 in. (9 mm)
350X-AU (PROPANE/ULPG)	Full Open
550X-AU (NG)	7/16 in. (11 mm)
550X-AU (PROPANE/ULPG)	Full Open

The air shutter settings listed above were set based on an appliance that was vented of the top with one 90 degree elbow and the maximum horizontal vent run permitted; this vent configuration is considered to be a more restrictive vent configuration. For less restrictive venting, such as short horizontally terminating or a vertically terminating appliance, the shutter may be adjusted to a more “closed” position.

Natural Gas (NG) installations:

As a general rule, prior to the initial fire up, it is acceptable to reduce the shutter opening to adjust for short horizontally terminating or vertically terminating vent configurations.

Air Shutter Adjustment

The air shutter may be adjusted by locating and loosening the wing nut shown in Figure 9.1. Push/Slide the wing nut toward the back of the appliance to close the shutter. Pull/Slide the wing nut toward the front of the appliance to open the air shutter.

Shutter Setting Verification / Flame Appearance

- After 15 minutes, the flames will be a yellow/blue mix. The front flames may be blue at this time.
- After 30 minutes, the flames should be yellow with some blue flames near the burner ports.
- After 1 hour, the flame will be at its maximum maturity.

NOTICE: *Flames should not appear orange or stretch to the top refractory. If flames are dark orange with dark, smoky tips, provide more primary air to the burner by opening the air shutter accordingly.*

Note: Visually, a propane flame may differ from a natural gas flame. This is due to the different chemical compositions that make up both fuel types. In general, the propane (LP) flames may be a little shorter and much brighter than a natural gas (NG) flame.

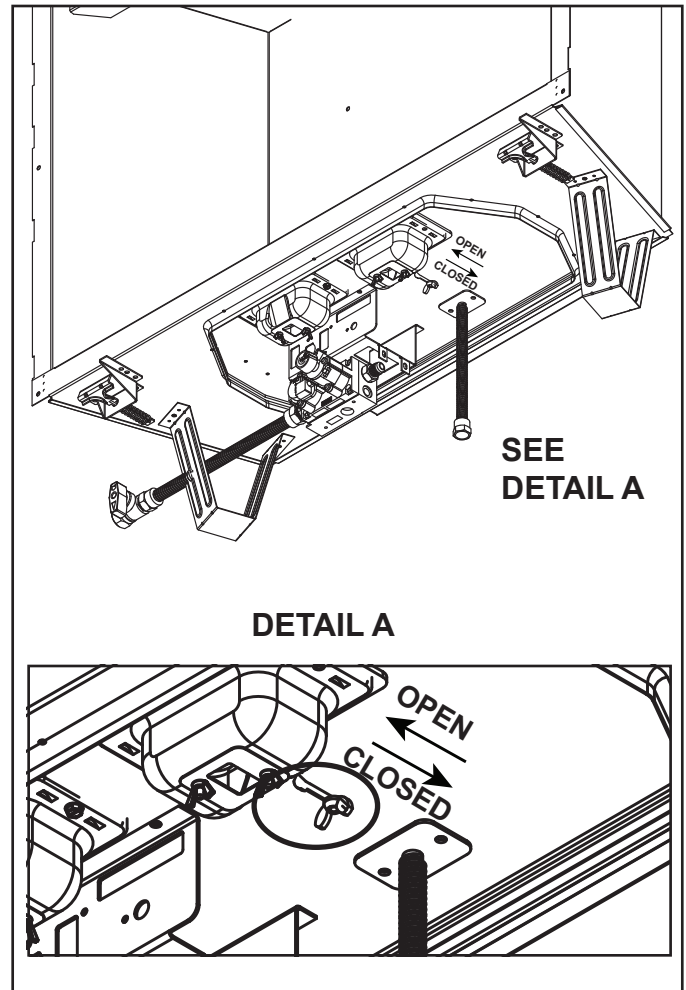


Figure 9.1 Air Shutter Adjustment

G. Burner Identification/Verification

The burner may be accessed for identification and verification purposes. This task should be performed by a qualified service technician. The logs and burner must be removed to see these identification marks. Disconnect the pilot from the burner before removal. See Figure 9.2 for burner identification chart. Notch patterns are located on bottom side of burner.

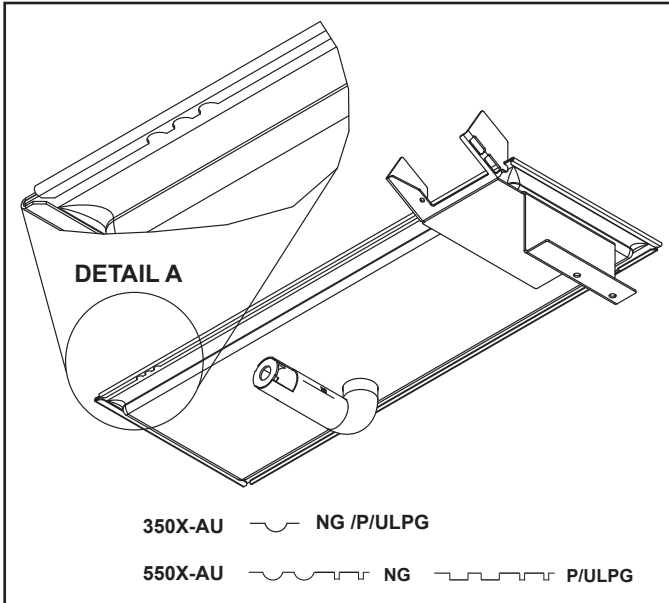


Figure 9.2 Burner Identification

10 Finishing

A. Facing Material

- Metal front faces may be covered with non-combustible materials only.
- Facing and/or finishing materials must not interfere with air flow through louvers, operation of louvers or decorative fronts, or access for service.
- Facing and/or finishing materials must never overhang into the glass opening.
- Observe all clearances when applying combustible materials.
- Confirm that appliance is plum, square and level. See Section 6.
- Seal joints between the finished wall and appliance top and sides using a 300 °F (149 °C) minimum sealant. Refer to Figure 10.1

WARNING! Risk of Fire! DO NOT apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified in this manual. Overlapping materials could ignite and will interfere with proper operation of decorative fronts and louvers.

NOTICE: Surface temperatures around the appliance will become warm while the appliance is in operation. Ensure finishing materials used for all surfaces (floor, walls, mantels, etc.) will withstand temperatures up to 190 °F (88 °C) .

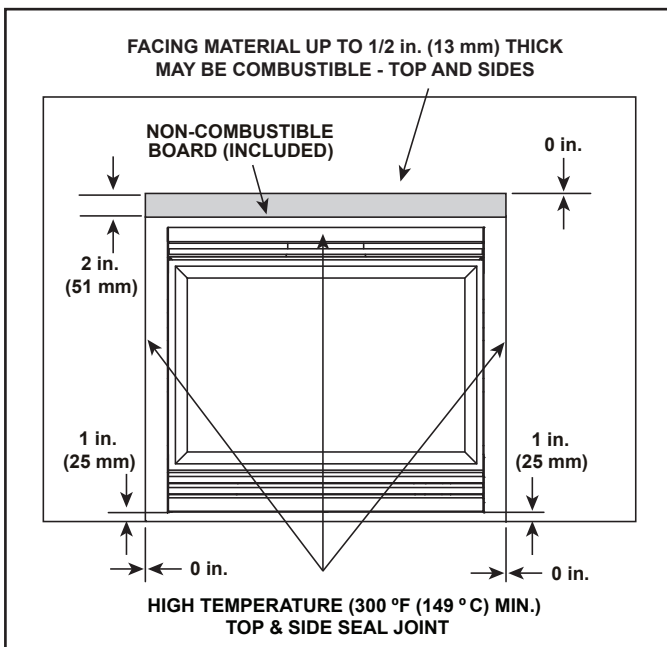


Figure 10.1 Facing Materials

B. Mantel and Wall Projections

WARNING! Risk of Fire! Comply with all minimum clearances as specified. Framing closer than the minimums listed must be constructed entirely of noncombustible materials (i.e., steel studs, concrete board, etc.)

Note: Measurement is taken from top edge of the appliance.

Combustible Mantels

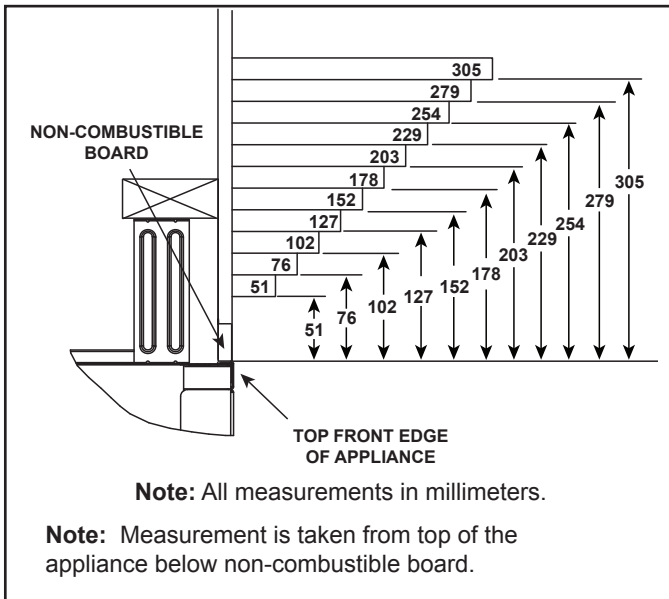


Figure 10.2 Minimum Vertical and Maximum Horizontal Dimensions of Combustibles

Non-Combustible Mantels

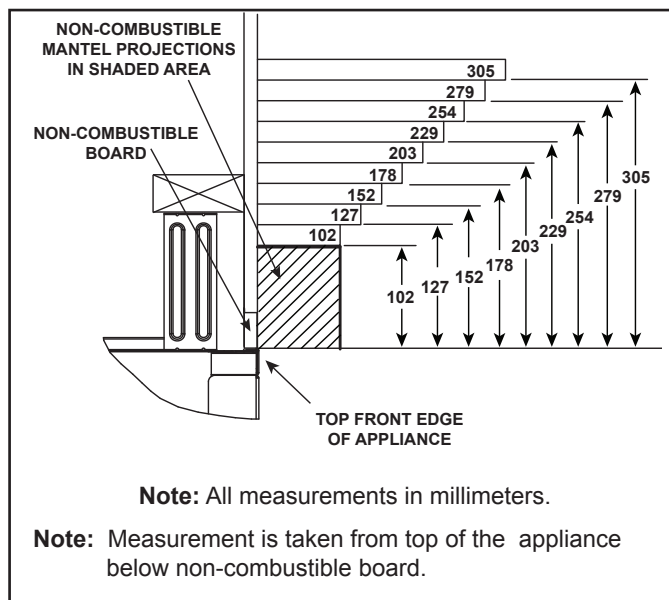


Figure 10.3 Minimum Vertical and Maximum Horizontal Dimensions of Non-Combustibles

Non-Combustible Mantel Legs or Wall Projections

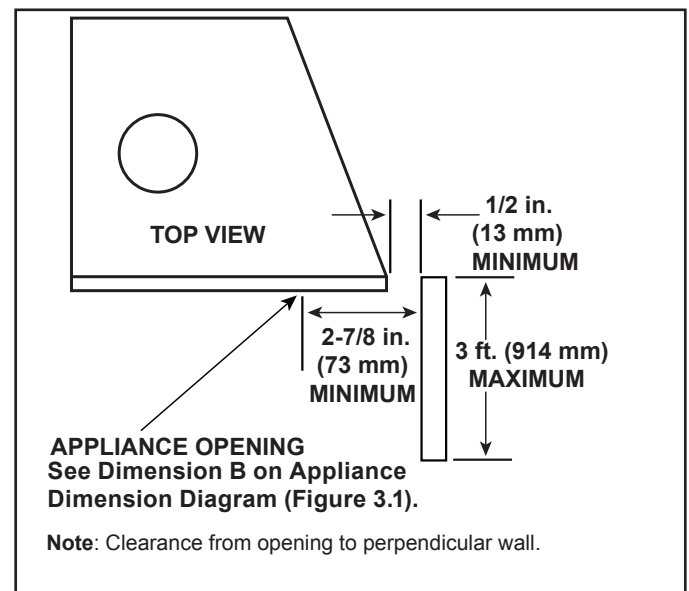


Figure 10.4 Non-Combustible Mantel Leg (Acceptable on both sides of opening)

Combustible Mantel Legs or Wall Projections

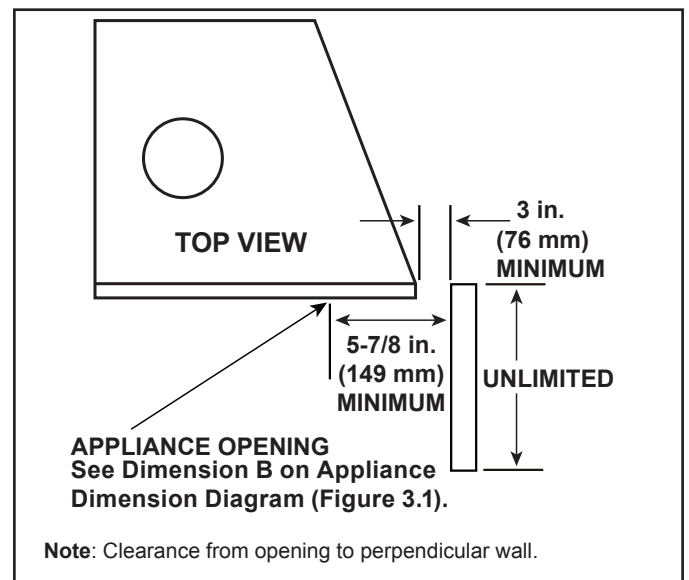


Figure 10.5 Wall Projection (acceptable on one side of opening)

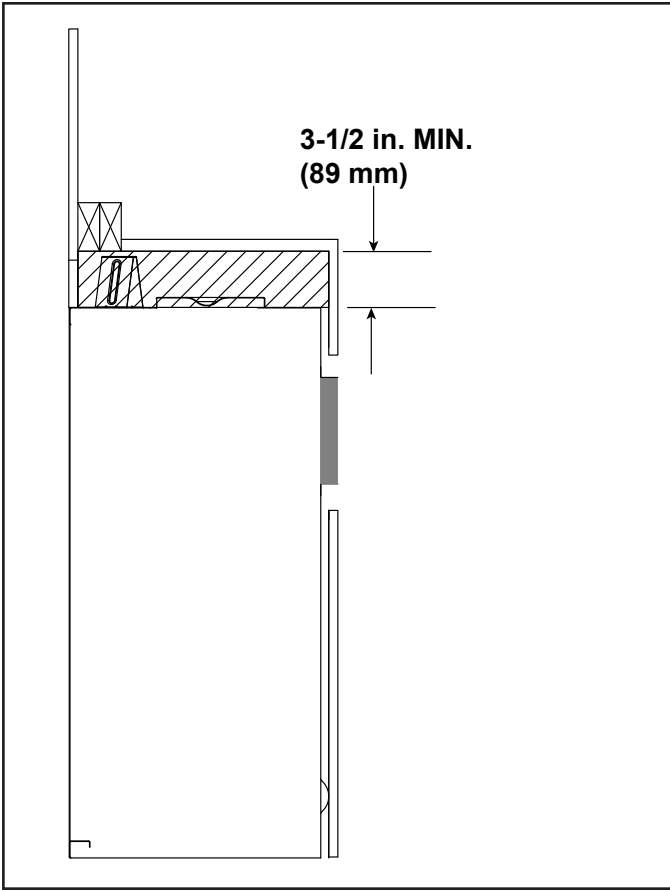
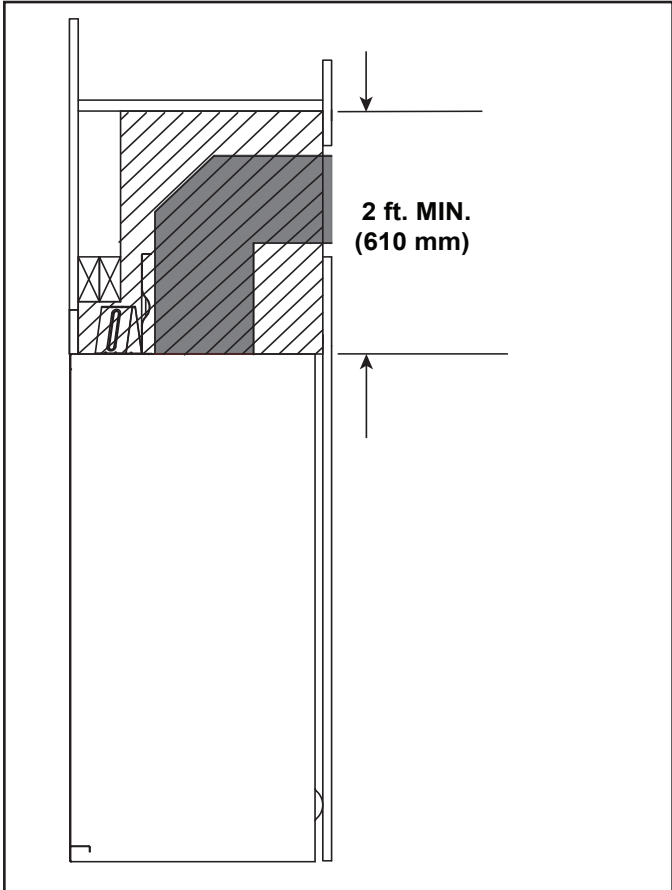


Figure 10.6 Non-Combustible Zone Above Appliance



Note: A 1 ft. (305 mm) section of straight flue must be attached to the heater before a 90° elbow.

Figure 10.7 Top Vent with Elbow Non-Combustible Zone Above Appliance

C. Decorative Front Finishing

Only decorative fronts certified for use with this appliance model may be used. Contact your dealer for a list of decorative fronts that may be used. Once you have determined what kind of decorative front and finishing material is going to be used on the appliance, use the information below which shows the decorative front models and the non-combustible finishing material thickness allowed.

THE GUARD IS FITTED TO THIS APPLIANCE TO REDUCE THE RISK OF FIRE OR INJURY FROM BURNS AND NO PART OF IT SHOULD PERMANENTLY BE REMOVED. FOR PROTECTION OF YOUNG CHILDREN OR THE INFIRM. A SECONDARY GUARD IS REQUIRED.

Note: Refer to Section 3 for individual decorative front dimensions as installed on appliance.

Inside Fit - Firescreen Front (1-4 in. (0-102 mm) Finishing)

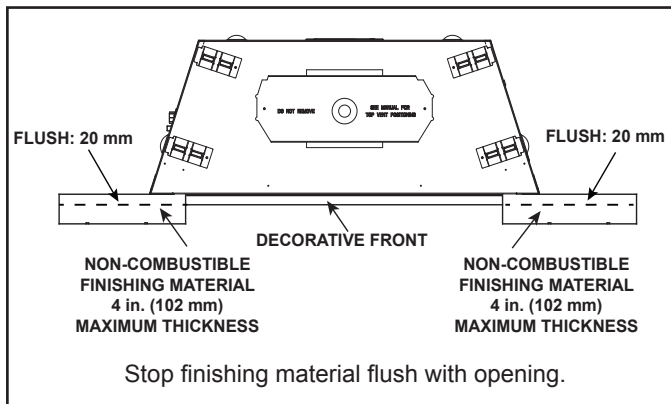


Figure 10.8 Firescreen Decorative Front

Flush Mounting Firescreen Front: 20 mm of non-combustible finishing material may be used to create a flush mounted front. See Figure 10.8.

Adjustable Overlap Fit

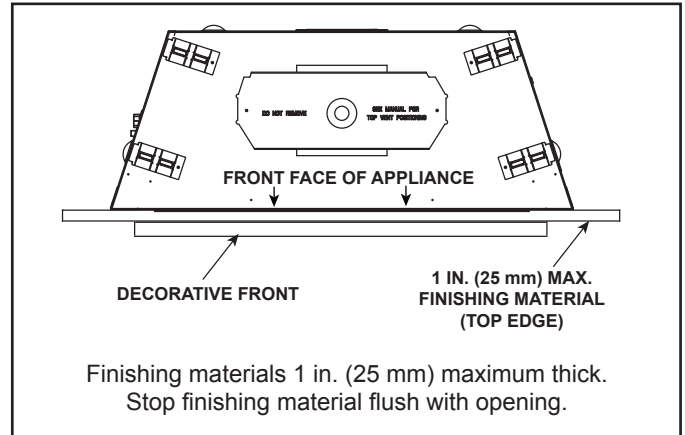


Figure 10.9 Overlap Fit Decorative Front (CFT Decorative Front)

11 Appliance Setup

A. Remove Fixed Glass Assembly

WARNING! Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

- **DO NOT** strike, slam or scratch glass.
- **DO NOT** operate appliance with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.
- Pull the four glass assembly latches out of the groove on the glass frame. Remove glass assembly from the appliance. See Figure 11.1.

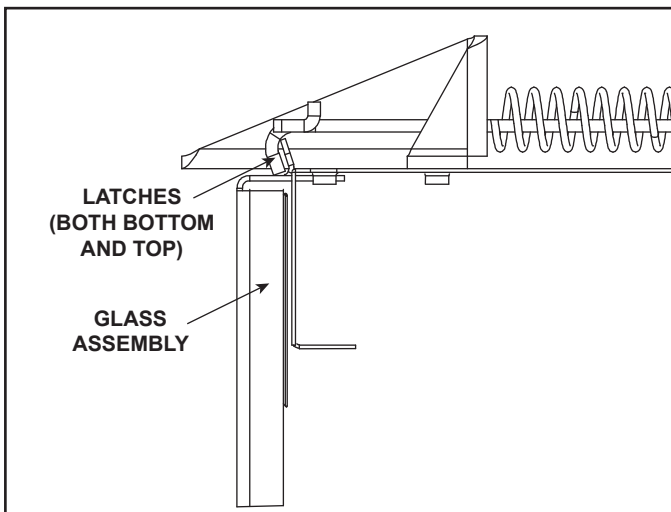


Figure 11.1 Fixed Glass Assembly

B. Remove the Shipping Materials

Remove shipping materials from inside or underneath the firebox.

- The splatter guard is a piece of corrugated material used to protect the appliance during the installation process before finishing work on the whole hearth is complete. Splatter guards may be factory installed or accompany the door of the appliance, depending on the appliance model. Splatter guards must be removed before appliance is fired.

WARNING! Risk of Fire! Close the ball valve before installing the splatter guard to prevent accidental lighting. Remove the splatter guard before lighting the appliance.

C. Clean the Appliance

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

D. Setup Overview

These are common log and refractory instructions for the 350X-AU and 550X-AU models. Both models use the same number of components, which are scaled up or down in size, depending on the model of appliance installed. All sizes consist of five logs and two hearth components.

E. Install Hearth Components, Teco-Sil, Glowing Embers[®], Refractory and Logs

Install Hearth Components

1. Remove the left and right hearth components from the packaging and install as shown in Figure 11.2. Verify that the left and right hearth components are pushed firmly "down" into position. This is important to ensure grout lines are positioned correctly.



Figure 11.2 Press Left Hearth Firmly Into Place

F. Install and Paint Teco-Sil

1. Remove Teco-Sil rock from its shipping location.
2. Install the Teco-Sil into the ember tray.
3. Fog the Teco-Sil to the desired look, using high temperature black paint (Hearth & Home Technologies part number TUP-GBK-12). See below for fogging tips. Prior to painting, take precautions to prevent any overspray from reaching the pilot assembly. Paint is not included with the appliance. See Fig 11.3.

Fogging Tips

- Apply paint with the ember lights turned on. This will help avoid over fogging or under fogging.
- Reduce the lighting in the room while applying the paint.
- Fog the Teco-Sil to create a realistic coal bed appearance.
- Allow the paint to dry/cure a minimum of 15 minutes.
- DO NOT allow paint or paint overspray on the pilot.



Figure 11.3 Paint Teco-Sil

G. Install Logs

Log Set Assembly: LOGS-350X, LOGS-SL5

Models: 350X-AU, 550X-AU

LOG PLACEMENT INSTRUCTIONS

Install Logs

CAUTION: Logs are fragile, handle with care.

NOTICE: Paint Touch Up Kit (2372-099) may be ordered from your dealer to repair chips and scratches if necessary.

Overview

These are common log instructions for the 350X-AU, 550X-AU models. Both models use the same number of components, which are scaled up or down in size, depending on the model of appliance installed. Each size log set consists of five logs.

*The photos shown in these instructions depict an 350X-AU.

Log Pins

The overall size and placement of the burner assembly within the firebox is very similar between all sizes. However, each burner top has different burner ports and log pin configurations. See Figure 1 for log pin locations.

The log pins, along with the indentations in the hearth components, will aid in correctly positioning the two rear logs and small burner log. The indentations are shown in Figure 5.

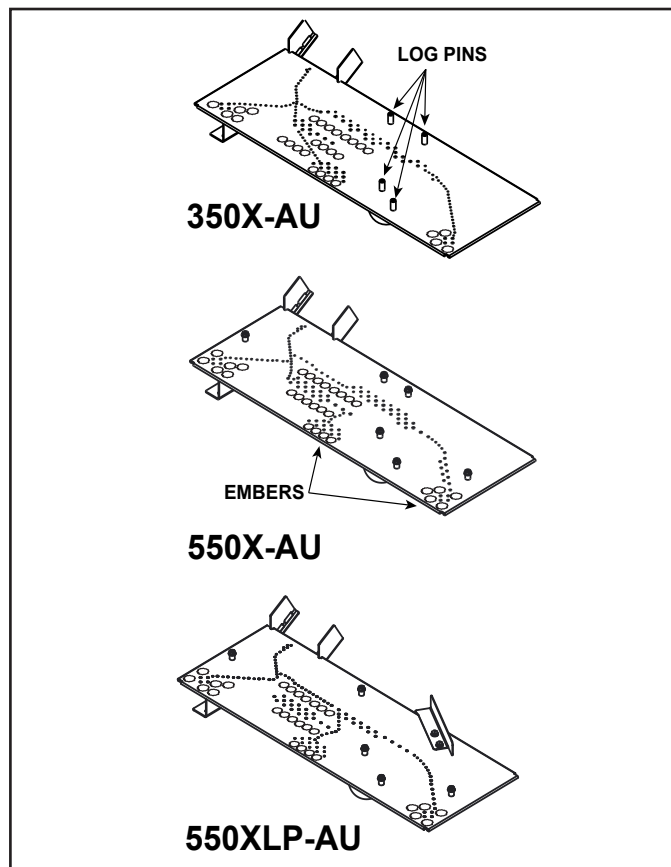


Figure 1. Log Pin and Glowing Ember Locations

Log Placement Tips

- The rear left log, rear right log and small burner log utilize holes in the bottom side of the logs that correspond to the log pins on the burner. Reference Figure 1 and Figure 2.

Additionally, the rear left log and rear right log are located by indentations in the right and left hearth components. See Figure 5.

Note: 350X-AU model does not utilize a hearth indentation in the left hearth.

- Top left and top right logs, which lay across the rear left and rear right logs, utilize the “indentations” in the rear left and rear right logs for proper placement. See Figures 7 and 8.

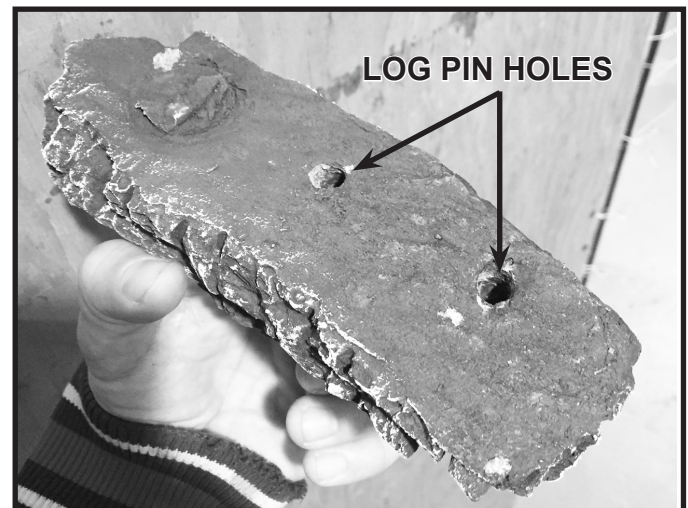


Figure 2. Example of Log Pin Holes

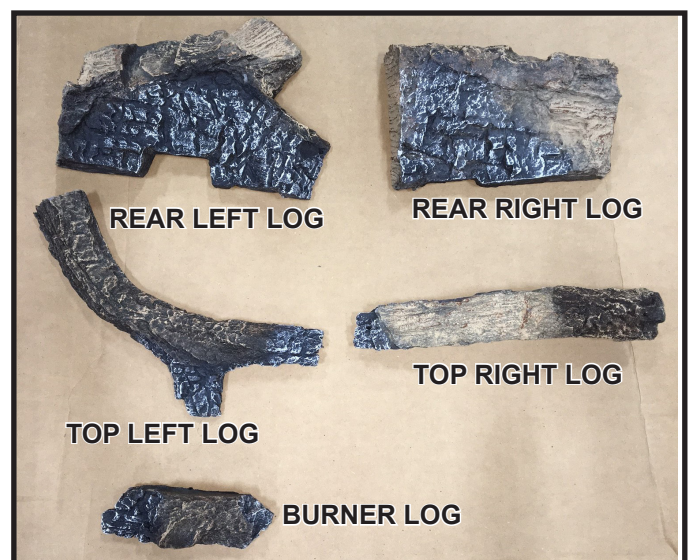


Figure 3. Log Set Components

Install Rear Logs

1. Remove large rear left log from the packaging and install the log by locating it on the back left log pin(s). The left side of the log will reside within the indentation in the left hearth component. See Figure 5.

Note: 350X-AU model does not utilize a hearth indentation on the left hearth. See Figure 4.

The rear left log will be positioned to maintain about a 1-1/4 in. (32 mm) rear gap between the rear left log and the back wall. The rear left log will maintain about a 3/4 in. (19 mm) gap from the left wall. See Figure 4.

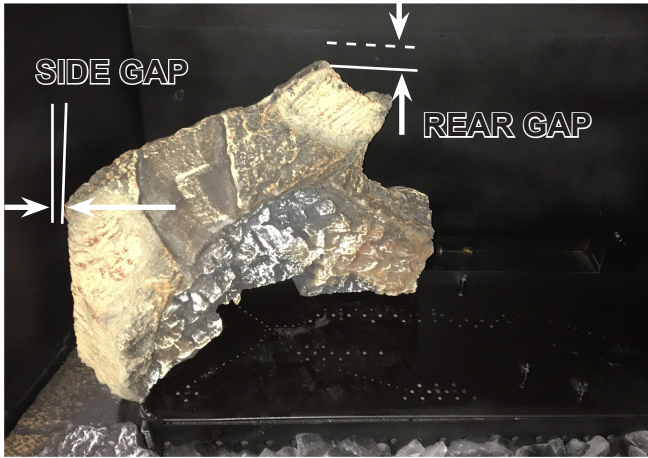


Figure 4. Rear Left Log Installed

2. Remove the large rear right log from packaging and install it by locating it on the back right log pin. On some models, it may be necessary to lift the rear left log slightly to install the rear right log. The right side of the log will reside within the indentation in the right hearth component. See Figure 5.

350X-AU Models: The rear right log will be positioned to maintain about a 2 in. (51 mm) rear gap between the rear right log and the back wall. The rear right log will maintain a 3/4 in. (19 mm) gap from the right wall.

550X-AU Models: The rear right log will be positioned to maintain about a 1 in. (25 mm) rear gap between the rear right log and the back wall refractory. The rear right log maintain a 1 in. (25 mm) gap from the right wall. See Figure 5.



Figure 5. Rear Right Log Installed

Install Glowing Embers®

3. Remove the Glowing Embers® from packaging and install the ember material as shown in Figure 1. Care should be taken to avoid placing ember material directly over ports and to avoid using excessive amounts of ember material.

WARNING! Risk of Explosion! Follow ember placement instructions. **DO NOT** place embers directly over burner ports. Replace ember material annually. Improperly placed embers interfere with proper burner operation.

- Embers CANNOT be placed directly over ports. Care should be taken not to cover the lighting trail of ports (from back to front).
- When placing Glowing Embers® onto the burner care should be taken so that the ports are not covered. Place the 18 mm ember pieces near the port holes in the burner top. Failure to follow this procedure will likely cause lighting and sooting problems.

Install Front Logs

- Remove small burner log from packaging. This log has two holes on the bottom. These holes correspond to two log pins located on the burner top. Place the small burner log on the two log pins. See Figure 6. When properly placed, this log will rest on both the burner and ember tray/Teco-Sil.



Figure 6. Burner Log Installed

- Remove top left log from packaging. Place the log into the indentation on the rear left log. The "Y" shaped end of the log will rest on the ember tray and the Teco-Sil rock. See Figure 7 and Figure 8.



Figure 7. Location of Left Log indentation



Figure 8. Location of Right Log Indentation

- Remove top right log from packaging. There are indentations located in the right rear log and small burner log to locate the log. Place log into indentations as shown in Figure 8 and Figure 9.



Figure 9. Top Right Log Installed - Log Set Complete

H. LED's

LED's are factory installed. No additional set up or activation required.

I. Install Fixed Glass Assembly

WARNING! Risk of Asphyxiation! Handle fixed glass assembly with care. Inspect the gasket to ensure it is undamaged and inspect the glass for cracks, chips or scratches.

- **DO NOT** strike, slam or scratch glass.
- **DO NOT** operate appliance with glass removed, cracked, broken or scratched.
- Replace as a complete assembly.

Replacing Fixed Glass Assembly

- Replace the glass door on the appliance. Pull out and latch the four glass assembly latches into the groove on the glass frame.

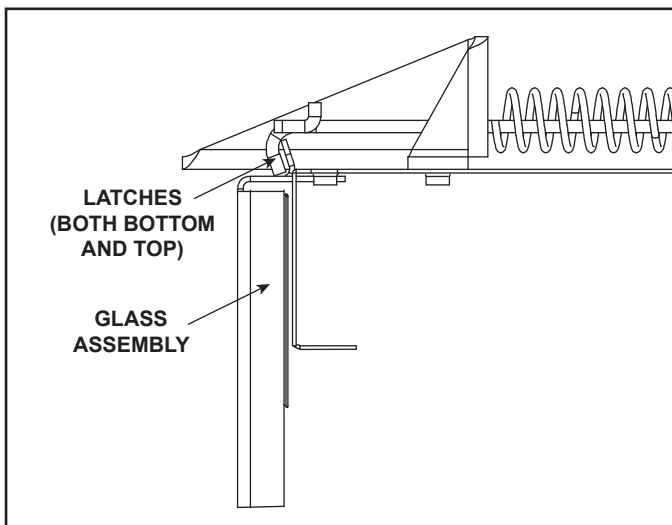


Figure 11.9 Fixed Glass Assembly

J. Install Decorative Front

WARNING! Risk of Fire! Install **ONLY** doors or fronts approved by Hearth & Home Technologies. Unapproved doors or fronts could cause appliance to overheat.

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.

For more information refer to the instructions supplied with your decorative front.

K. Appliance Operation

Start the appliance to verify proper function and installation. See the appliance Owner's Manual for IPI lighting instructions.

Appliance ON/OFF

Use the IntelliFire™ Plus Remote Control to control the ON/OFF function of the appliance. Follow instructions included with the installed control. If a wall switch is installed, refer to the instructions included with the control.

LED Lighting

The ON/OFF function for the LED lighting option is controlled by the IntelliFire™ Plus remote control. Follow instructions included with the installed control to test the LED lighting.

12 Reference Materials

A. Vent Components Diagrams

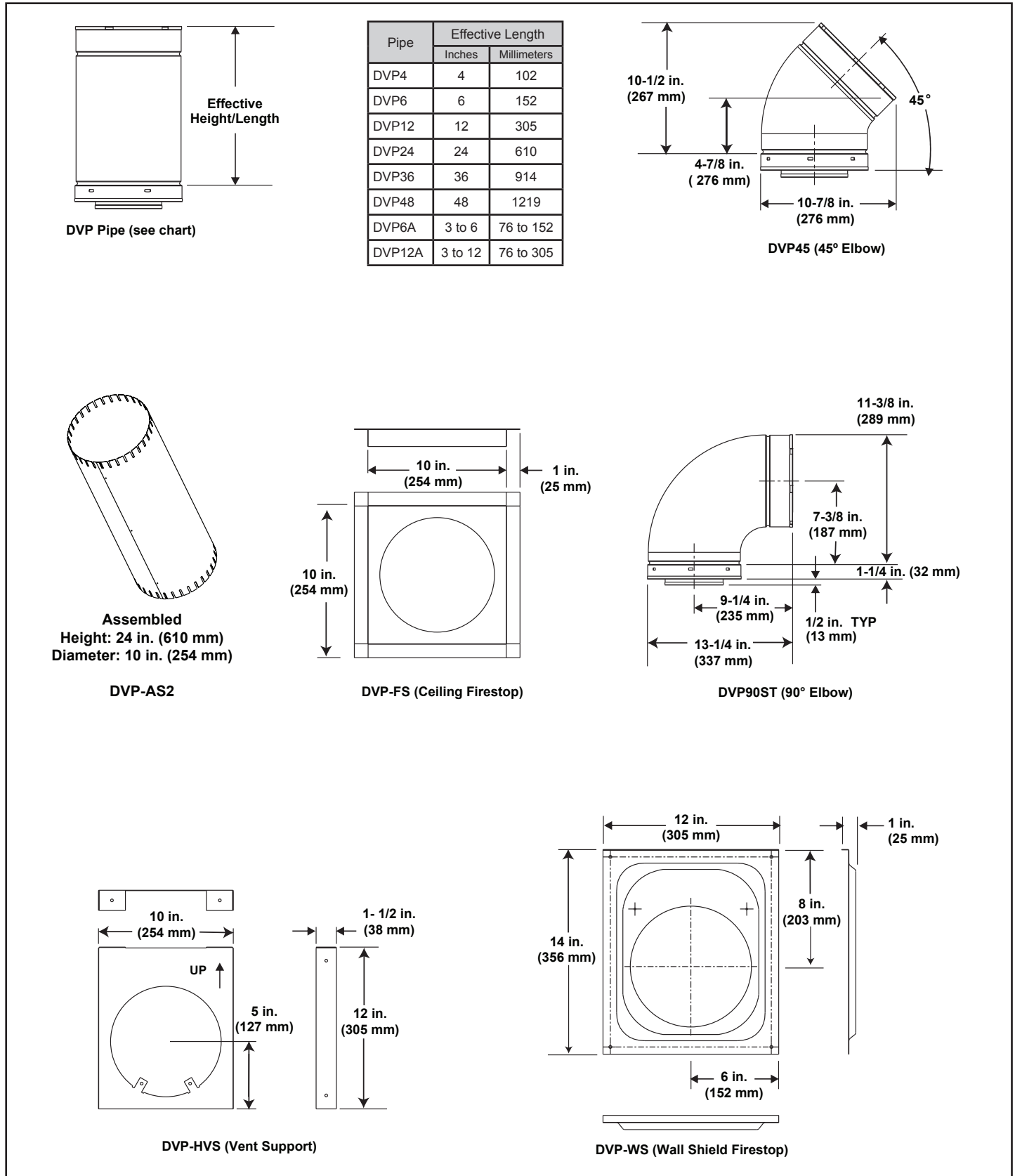
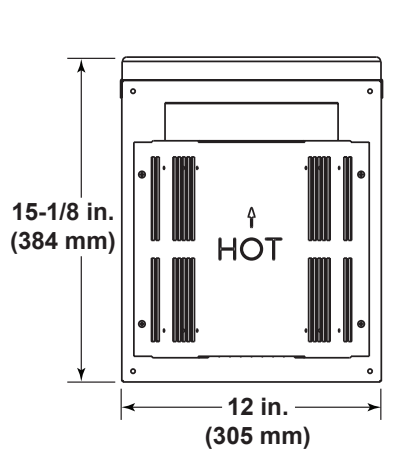


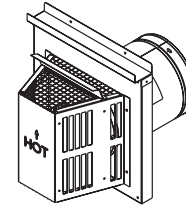
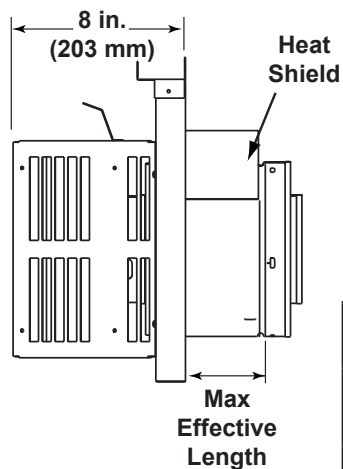
Figure 12.1 DVP Vent Components

A. Vent Components Diagrams (continued)

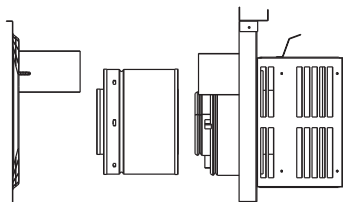
Note: Heat shields **MUST** overlap by a minimum of 1-1/2 in. (38 mm). **The heat shield is designed to be used on a wall 4 in. to 7-1/4 in. (102 mm to 184 mm) thick.** If wall thickness is less than 4 in. (102 mm) the existing heat shields must be field trimmed. If wall thickness is greater than 7-1/4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



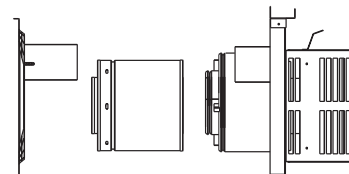
DVP-TRAP2
Horizontal Termination Cap



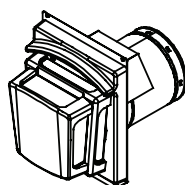
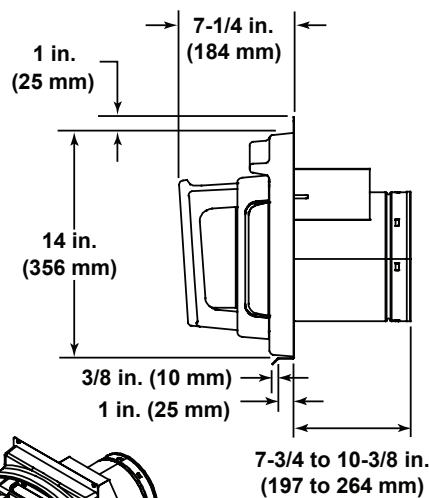
Term Cap	Minimum Effective Length	Maximum Effective Length
Trap1	3-1/8 in.	4-5/8 in.
	79 mm	117 mm
Trap2	5-3/8 in.	9-3/8 in.
	137 mm	238 mm



DVP-TRAP1



DVP-TRAP2



DVP-FBHT
FireBrick Termination Cap

Figure 12.2 DVP Vent Components

A. Vent Components Diagrams (continued)

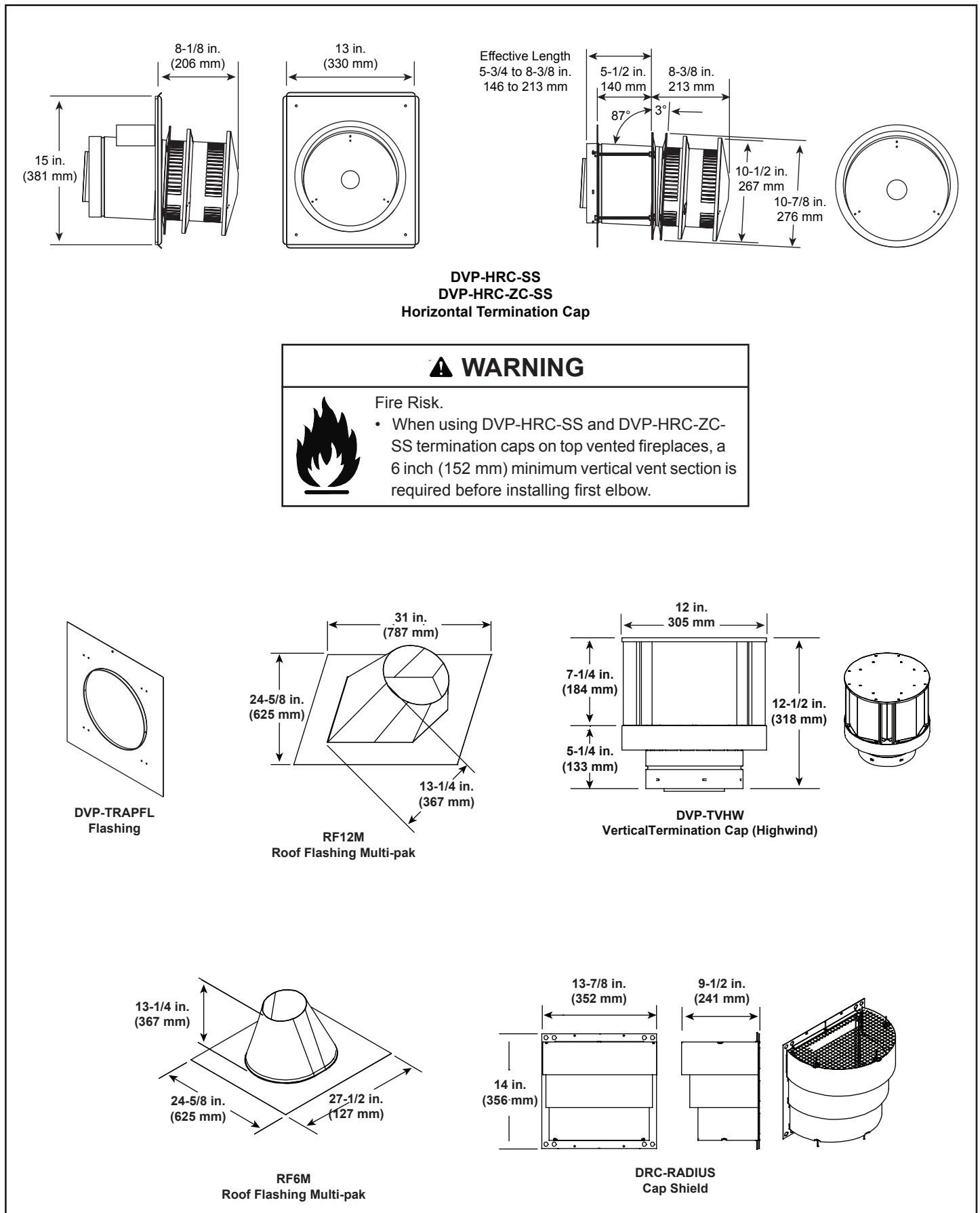


Figure 12.3 DVP Vent Components

A. Vent Components Diagrams (continued)

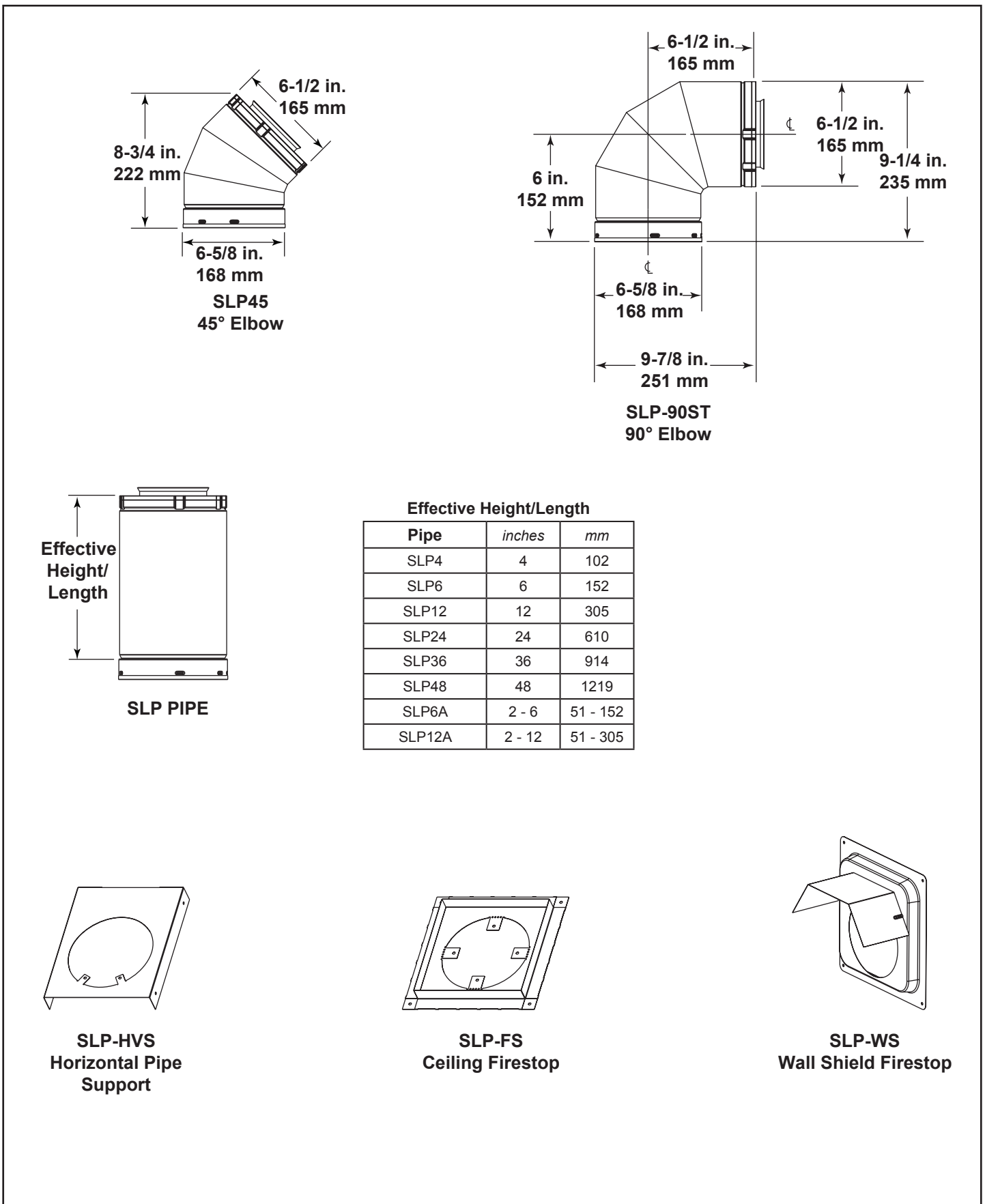


Figure 12.4 SLP Series Vent Components

A. 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.

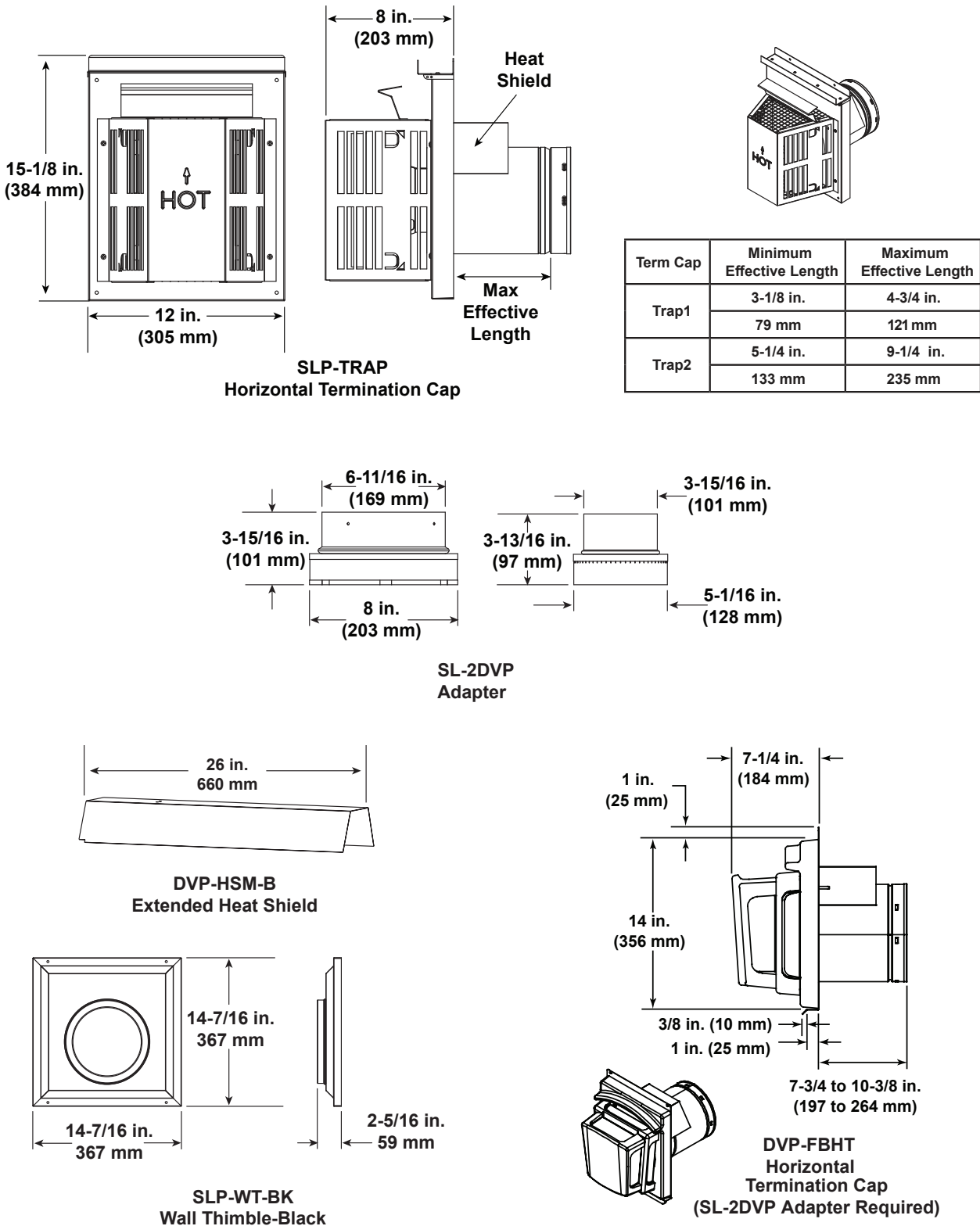
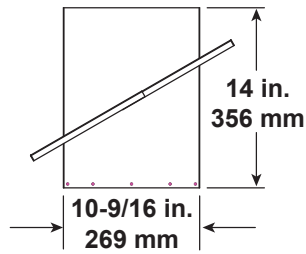
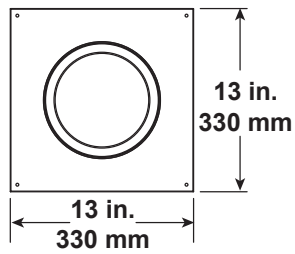


Figure 12.5 SLP Series Vent Components

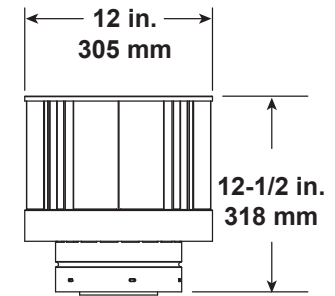
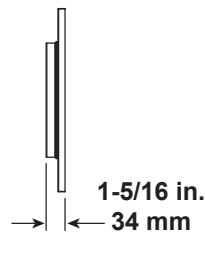
A. Vent Components Diagrams (continued)



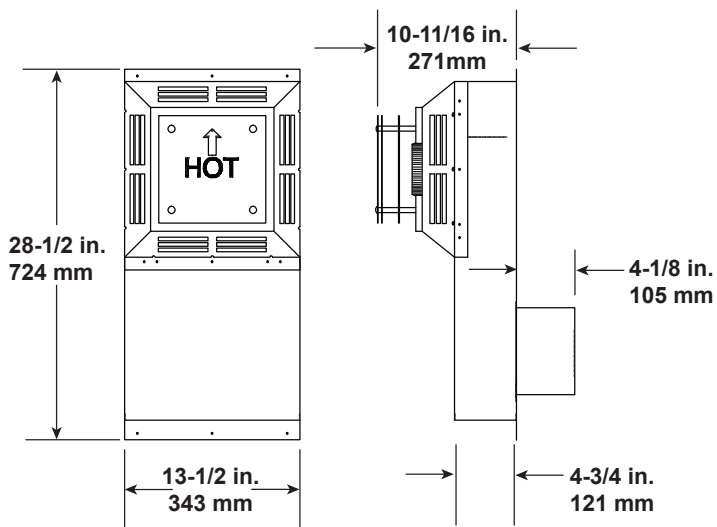
SLP-CCS-BK
Cathedral Ceiling
Support Box-Black



SLP-DCF-BK
Ceiling Firestop
Black



SLP-TVHW
Vertical
Termination Cap



SLK-SNKD
Snorkel
Termination Cap

Figure 12.6 SLP Series Vent Components

B. Accessories

Remote Controls, Wall Controls and Wall

Switches

Follow the instructions supplied with the control installed to operate your appliance:

For safety:

- Install a switch lock or a wall/remote control with child protection lockout feature.
- Keep remote controls out of reach of children.

See your dealer if you have questions.

Optional Heat-Zone®-240V Kit

Follow the instruction supplied with the kit for operation.

- Preparation of the appliance for installation of the kit is discussed in Section 6.B.

Contact your dealer if you have questions.

Optional Black Magic Glass Kit

Follow the instructions supplied to install the kit. Contact your dealer if you have questions.

Heat & Glo, a brand of Hearth & Home Technologies
7571 215th Street West, Lakeville, MN 55044
www.heatnglo.com

Please contact your Heat & Glo dealer with any questions or concerns.
For the location of your nearest Heat & Glo dealer,
please visit www.heatnglo.com.

Printed in U.S.A. - Copyright 2018