

PRIMO Passive Heat PowerFlow™ Heat Management System

Passive Heat - Front Discharge: PHFR-PRIMO-48, PHFR-PRIMO-60

Passive Heat - Side Discharge or Open Top Discharge: PHSI-PRIMO

Models: PRIMO48, PRIMO48ST, PRIMO60, PRIMO60ST

Installation Instructions



Leave this manual with party responsible for use and operation.

This appliance comes standard with patented SafeSurface™ Glass which keeps the surface temperature of the barrier glass at a safe level and will still be hot to the touch when operated for long periods of time.

If the barrier glass is removed, the inner glass temperature will be very hot and cause burns.

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

CAUTION! Do not install damaged components.
If any parts are missing or damaged, contact your dealer before starting installation. **DO NOT** install a damaged kit.

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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 must be installed for the protection of children and other at-risk individuals.

WARNING! Risk of Fire!

- Combustible materials **MUST NOT** overlap or be placed behind a decorative front.
- **DO NOT** apply combustible materials beyond the minimum clearances. Comply with all minimum clearances to combustibles as specified. Overlapping materials could ignite and will interfere with proper operation of decorative fronts.

1. Introduction

The PRIMO Passive Heat PowerFlow™ Heat Management System conveys warm air from the fireplace into the same room in one of three ways:

- A front discharge slot (PHFR-PRIMO).
- Two discharge heat registers positioned on the side of the appliance (PHSI-PRIMO).
- As an open top chase (PHSI-PRIMO).

Installation of the PRIMO Passive Heat kit must be done in conjunction with the appliance installation.

Installation of this kit **MUST** be performed by a qualified service technician.

PRIMO Passive Heat PowerFlow™ Heat Management System is approved for use with these models only:

PRIMO48

PRIMO48ST

PRIMO60

PRIMO60ST

NOTICE: *The PRIMO must be installed using the Clean Face Finishing option. PRIMO Passive Heat PowerFlow™ Heat Management System is not compatible with Primo Granite Surround Finish.*

WARNING! Risk of Fire! DO NOT install the PRIMO Passive Heat with models that are not approved. Overheating will occur.

The PRIMO Passive Heat Trim Kit (PHFR-PRIMO-48, PHFR-PRIMO-60) is also required with the Front Discharge Passive Heat PowerFlow™ Heat Management System (PHFR-PRIMO-48 or PHFR-PRIMO-60) and must be purchased separately. Follow instructions included with the trim kit to finish the PRIMO Passive Heat PowerFlow™ Heat Management System.

The PRIMO Passive Heat kit is tested and safe when installed in accordance with this installation manual. It is your responsibility to read all instructions before starting installation and to follow these instructions carefully during installation.

The PRIMO Passive Heat kit is carefully engineered and must be installed only as specified. If you modify it or any of its components you will void the warranty, and you may possibly cause a fire hazard. Installation must be done according to applicable local, state, provincial, and/or national codes.

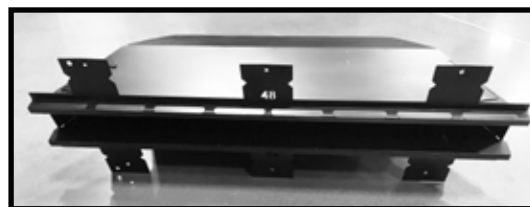
2. Kit Contents

Verify and remove contents from packaging before beginning installation. See Figure 2.1 (Front Discharge) or Figure 2.2 (Side Discharge).

Note: The flexible duct used with the PRIMO passive heat is manufactured and marked to the requirements of UL-181, Class I air duct.

Contents of Front Discharge Passive Heat Kit PHFR-PRIMO-48, PHFR-PRIMO-60

FRONT DISCHARGE KIT (PHFR-PRIMO-48/PHFR-PRIMO-60)		
DESCRIPTION	SERVICE PART NO.	QTY
Plenum- PHFR-PRIMO-48	2560-107	2
Plenum- PHFR-PRIMO-60	2560-108*	2
Collar	SRV659-125	4
Flex Air Duct (6" Diameter x 25 ft.)	659-200	1
Gear Clamp: Large	SRV662-803	4
Hurricane Screw	2005-861	14
	Replacement part: 2005-861/25	1
Glass Mounting Bracket	2560-134	2
Rubber Bumper	2310-140	4
2 Inch Jumper Wire	2012-206	1
Finishing Trim	2560-114	1
Self-Tapping #8 Screw	Service part not available	4



2560-107 (PRIMO48 / PRIMO48ST)

*NOTE: 2560-108 (PRIMO60 / PRIMO60ST) is visually similar to 2560-107 and slightly larger.



**2005-861
Hurricane Screw**



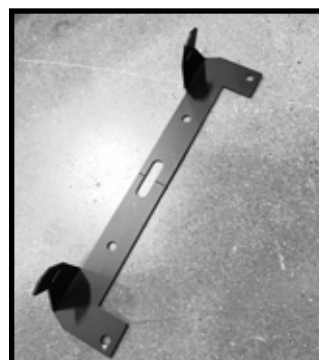
**SRV662-803
Gear Clamp: Large**



659-200 6 Inch Round Duct



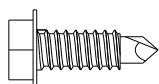
SRV659-125 Collar



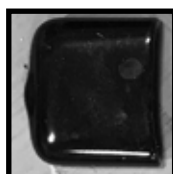
2560-134 Glass Mounting Bracket



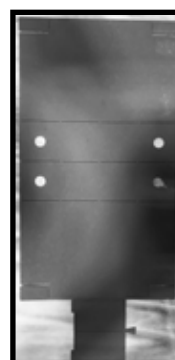
2012-206 2 Inch Jumper Wire



Self-Tapping #8 Screw



2310-140 Rubber Bumper



2560-114 Finishing Trim

Figure 2.1 Front Discharge Passive Heat Kit Components

Contents of Side Discharge/Open Top Discharge Passive Heat Kit PHSI-PRIMO

SIDE DISCHARGE / OPEN TOP DISCHARGE KITS (PHSI-PRIMO)		
DESCRIPTION	SERVICE PART NO.	QTY
12 in. X 8 in. Register Cover	2560-120	2
Side Discharge Assembly	2560-015	2
Collar	SRV659-125	2
Flex Air Duct (6" Diameter x 25 ft.)	659-200	1
Gear Clamp: Large	SRV662-803	4
Hurricane Screw	2005-861	8
	Replacement part: 2005-861/25	1
Glass Mounting Bracket	2560-134	2
Rubber Bumper	2310-140	4
2 Inch Jumper Wire	2012-206	1
Self-Tapping #8 Screw	Service part not available	4



**2005-861
Hurricane Screw**



**2310-140
Rubber Bumper**



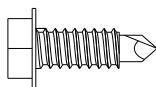
**2560-120
12 in. x 8 in. Register Cover
(Screws Included)**



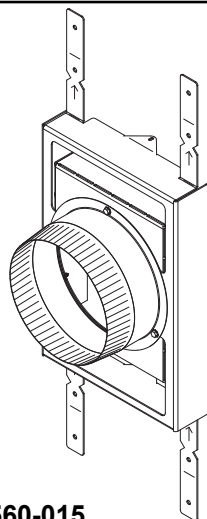
659-200 6 Inch Round Duct



2012-206 2 Inch Jumper Wire



Self-Tapping #8 Screw



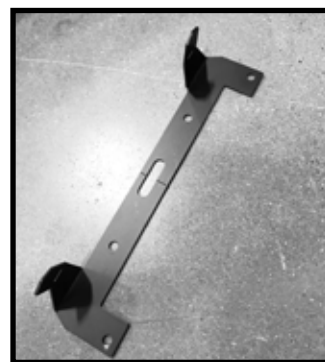
**2560-015
Side Discharge Assembly**



**SRV659-125
Collar**

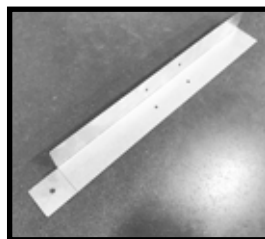


**SRV662-803
Gear Clamp: Large**

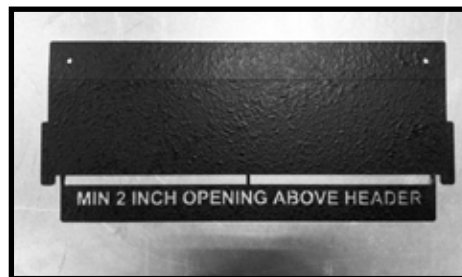


**2560-134
Glass Mounting Bracket**

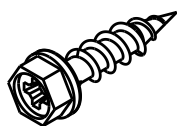
OPEN TOP DISCHARGE SPECIFIC ITEMS		
DESCRIPTION	SERVICE PART NO.	QTY
Heat Shield	2560-116	4
Mounting Bracket	2560-115	8
Wood Screw	Service part not available	12
Self-Tapping #8 Screw	Service part not available	12



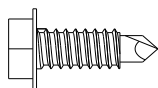
**2560-115
Mounting Bracket**



**2560-116
Heat Shield**



Wood Screw



Self-Tapping #8 Screw

Figure 2.2 Side Discharge Passive Heat Kit Components

3. Preparation

Plan the location of the appliance and the warm air duct runs. See Table 3.1.

WARNING! Risk of Fire! DO NOT fold/kink/pinch/obstruct 6 inch flexible ducts. Appliance could overheat.

Passive Heat- Side Discharge (PHSI) Only:

If installing a passive heat kit with side discharge, the flex duct must maintain a minimum 12/12 pitch with no more than 2 feet of horizontal run. See Figure 3.1.

AIR DUCT LENGTH Measurements in Inches				
	FRONT		SIDE	
SIZE	MIN.	MAX.*	MIN.	MAX.*
48	45	150	48	150
60	51	150	54	150
*This is the maximum vent run length possible with the included flex duct. Additional flex duct required for longer vent runs. Contact dealer to order.				
CLEARANCE TO FLEXIBLE DUCT Measurements in Inches				
SIZE	FRONT		SIDE	
48	1		1	
60	1		1	

Table 3.1 Air Duct Length & Clearances

Determine whether front, side, or open top discharge is to be installed and follow instructions for the appropriate application.

Things to consider:

Electrical Wiring:

It is recommended to maintain wire routing inside the stud pockets to reduce temperatures and visibility of wires.

Construction Materials:

It is recommended to plan ahead to reduce the amount of exposed finishing materials visible through the openings.

Power Vent Recommendation

Hearth & Home Technologies recommends either the PVLP-SLP or PVV-SLP power vent options for use with the Passive Heat Kit. If the application does not allow for the PVLP-SLP or PVV-SLP to be used, the PVI-SLP-B may be used. The PVI-SLP-B must be mounted outside the chase due to the higher noise level created.

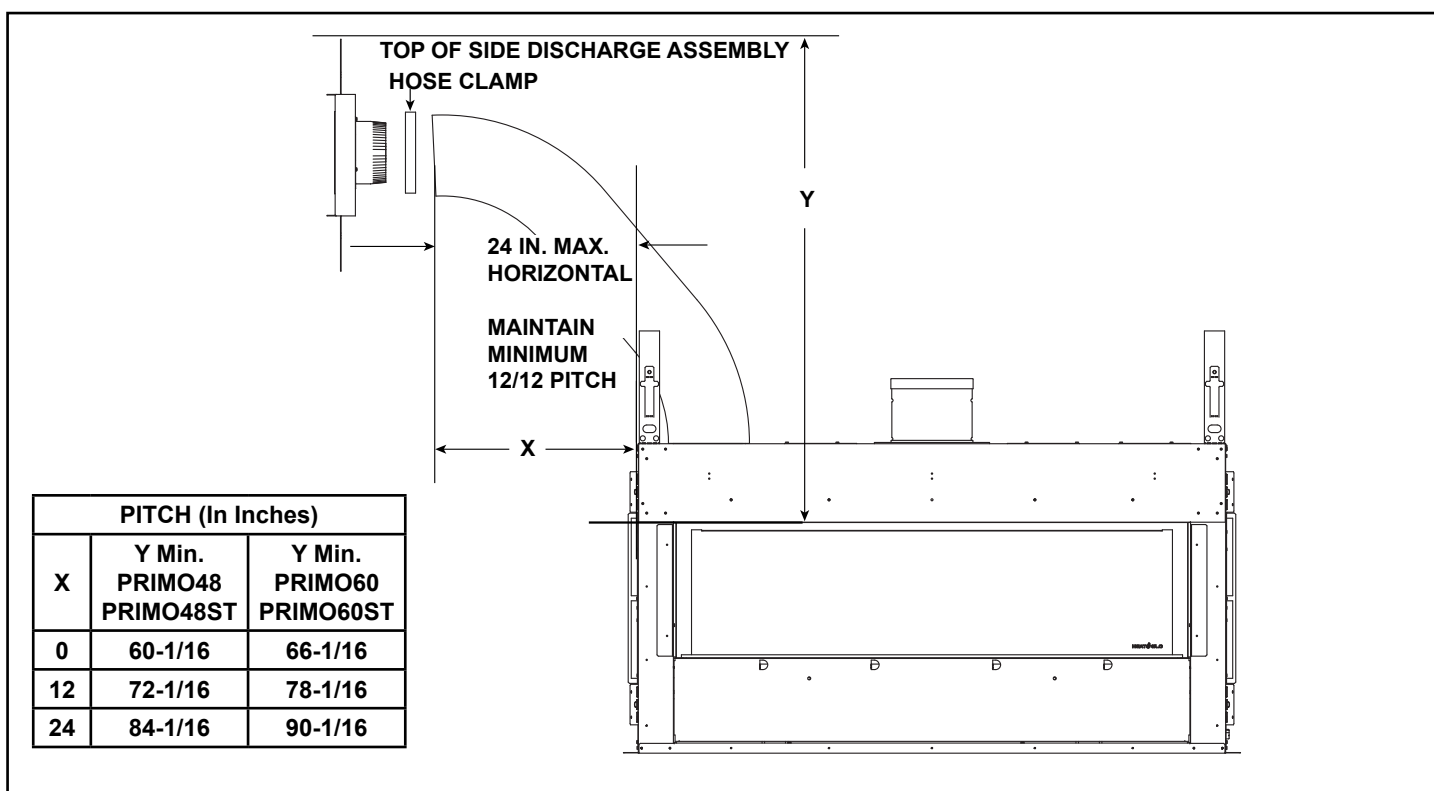


Figure 3.1 Side Discharge - Maintain Pitch

Clearance - Sprinkler to Passive Heat

Figure 3.2 references the clearances that must be adhered to when installing a sprinkler head near a passive heat discharge opening.

* If the distance from the top of the passive heat front discharge opening to the ceiling is 36 inches or greater, then there is no 36 inch clearance requirement. This is for a ceiling sprinkler head installation only.

Note: When installing a sprinkler head near a heat discharge opening, it is recommended to use a sprinkler head with an Extra High sprinkler activation temperature rating.

- When installing a sprinkler head exterior of the chase, maintain the following clearances to discharge openings (convection slots, passive heat registers, heat zone registers, etc.): 36 inches top, 18 inches sides and 6 inches bottom.

- DO NOT** install a sprinkler head inside a chase that is set up for passive heat.

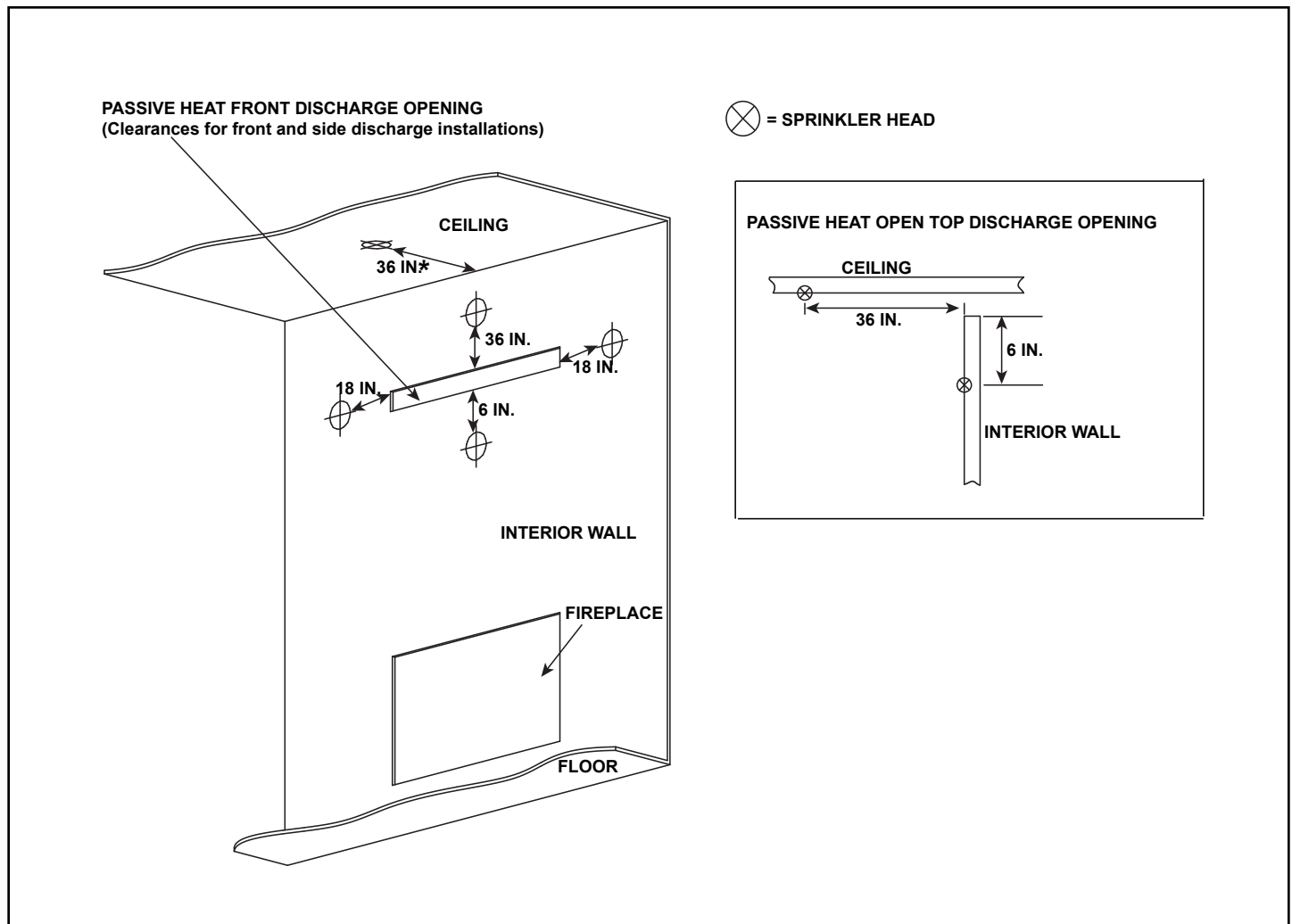


Figure 3.2 Sprinkler Head Clearance

**Good Faith Guidelines for TV Installations
Above a PRIMO Fireplace with Passive Heat Option
(Single-Sided Appliance Shown)**

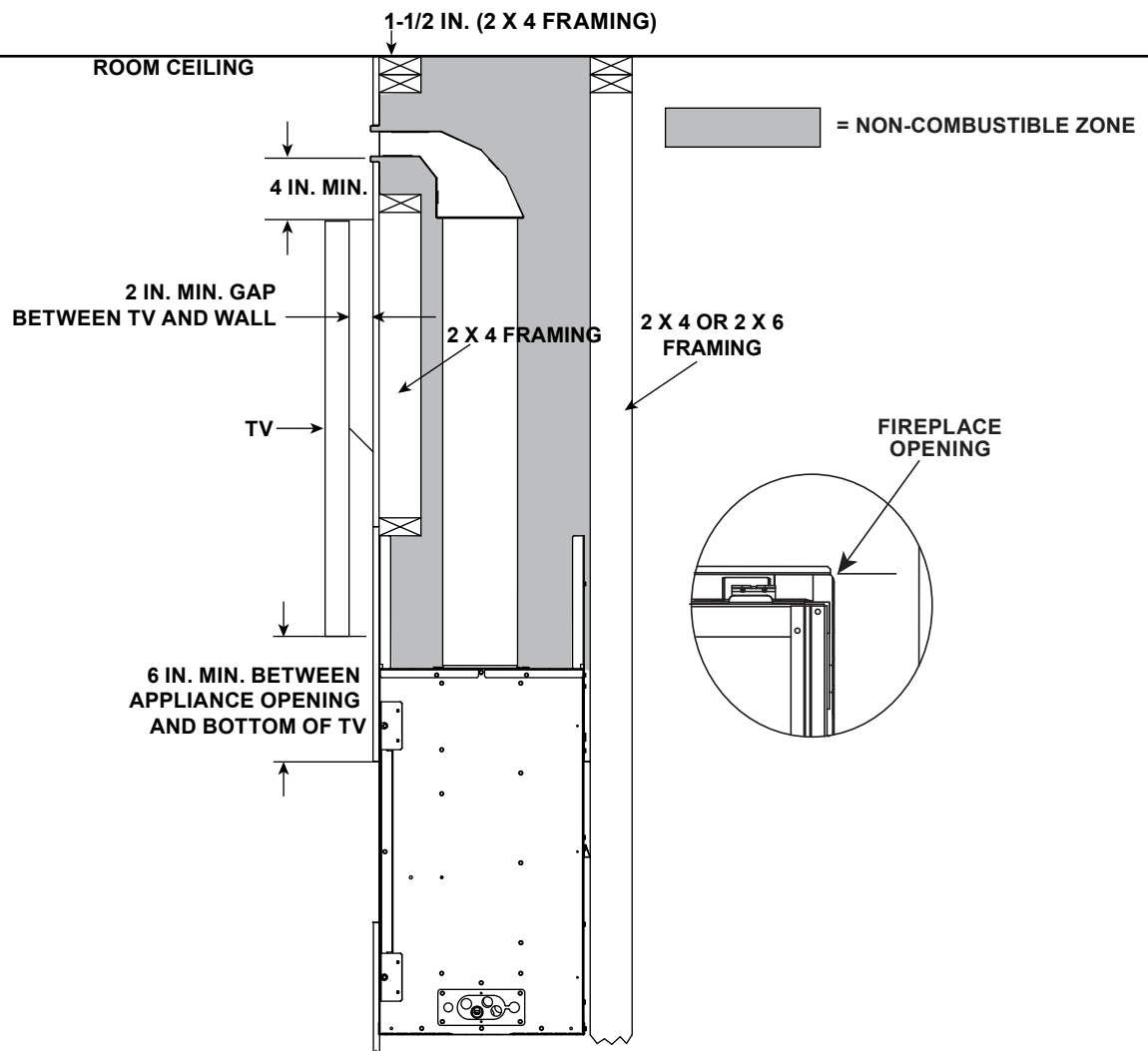


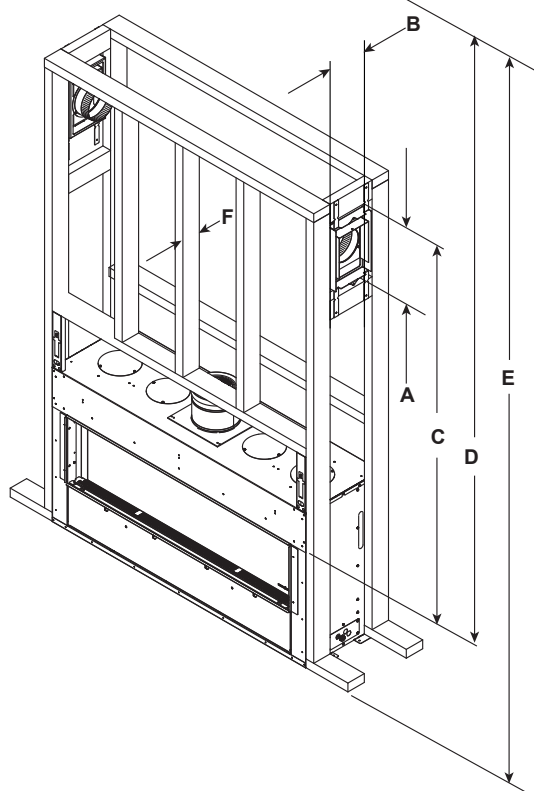
Figure 3.3 Good Faith Guidelines for TV Installations Above a PRIMO Fireplace with Passive Heat Option

4. Framing (2 X 4 Studs)

Clearances to Combustibles

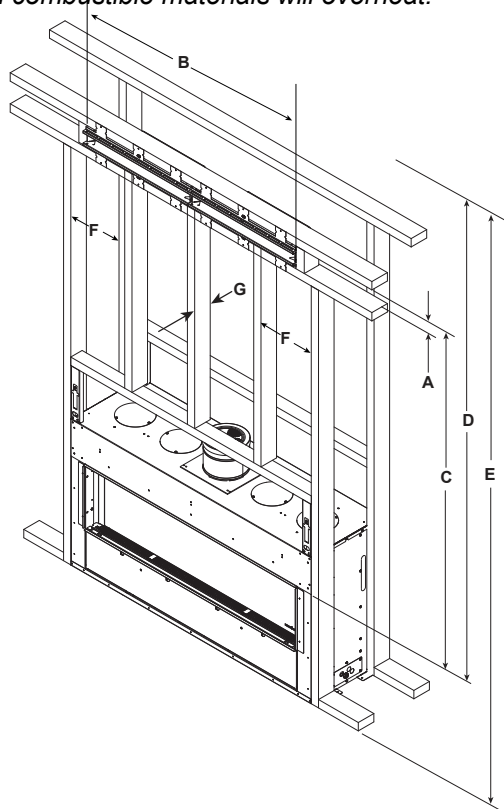
Passive Heat Side Discharge (PHSI-PRIMO)
Single-Sided or See-Through

WARNING! Risk of Fire! DO NOT allow any combustible or non-combustible objects or materials to be placed where the disruption of airflow in discharge zone could occur. Appliance and combustible materials will overheat.



Clearances to Combustibles

Passive Heat Front Discharge
(PHFR-PRIMO-48 / PHFR-PRIMO-60)
Single-Sided or See-Through



MINIMUM FRAMING DIMENSIONS

		SIDE DISCHARGE					
		A	B	C	D	E	F
		Height of Discharge Opening	Width of Discharge Opening	Clearance Opening to Framing	Clearance Opening to Ceiling	Clearance Bottom of Appliance to Ceiling	2 X 4 Studs
PRIMO48 PRIMO48ST	Inches	16	10-3/16	56-9/16	60-1/16	83-7/8	3-1/2
	millimeters	406	259	1437	1526	2130	89
PRIMO60 PRIMO60ST	Inches	16	10-3/16	62-9/16	66-1/16	89-7/8	3-1/2
	millimeters	406	259	1589	1678	2283	89

MINIMUM FRAMING DIMENSIONS

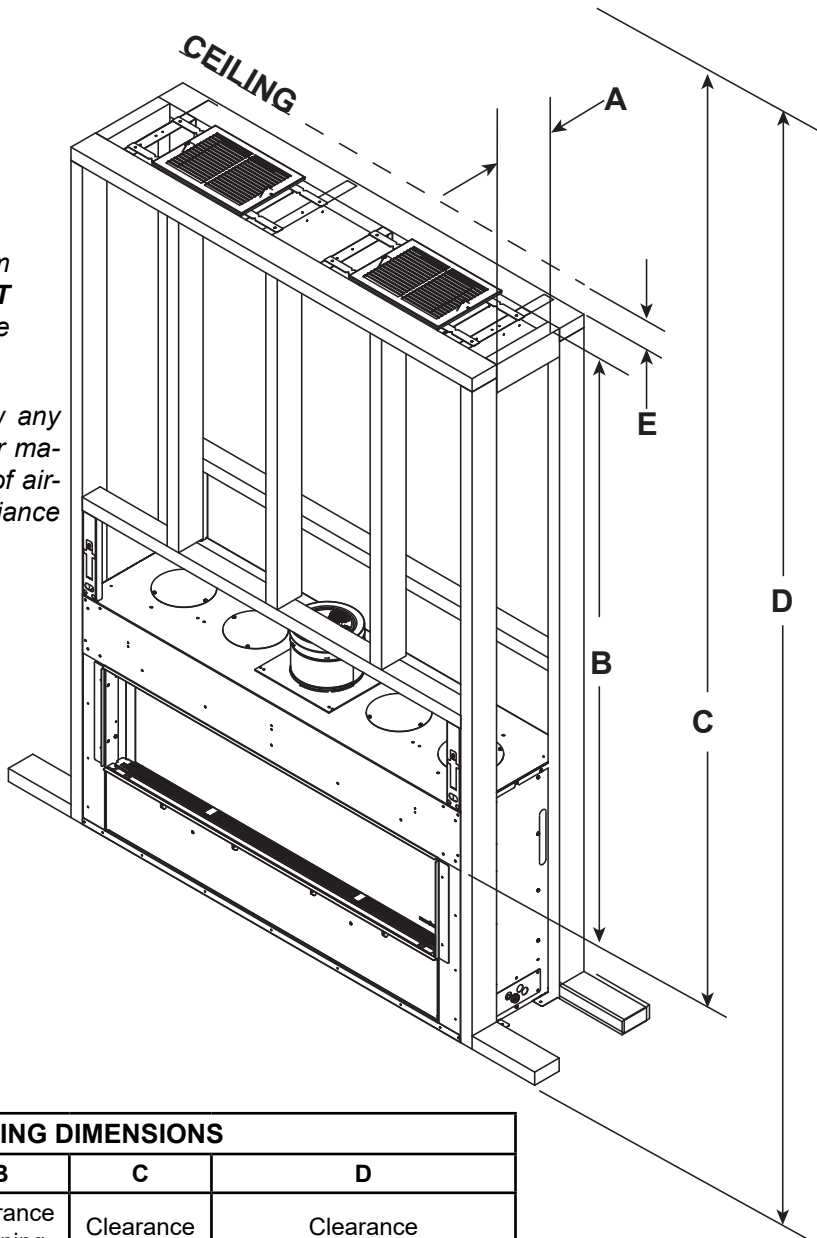
		FRONT DISCHARGE						
		A	B	C	D	E	F	G
		Height of Discharge Opening	Width of Discharge Opening	Clearance Opening to Framing	Clearance Opening to Ceiling	Clearance Bottom of Appliance to Ceiling	Framing	2 X 4 Studs
PRIMO48 PRIMO48ST	Inches	6	50-7/8	58-9/16	60-1/16	83-7/8	16 inches on center	3-1/2
	millimeters	152	1292	1488	1526	2130		89
PRIMO60 PRIMO60ST	Inches	6	62-3/4	64-9/16	66-1/16	89-7/8		3-1/2
	millimeters	152	1594	1640	1678	2283		89

Figure 4.1 Clearances to Combustibles-PRIMO48, PRIMO60 with Passive Heat Side Discharge or Front Discharge

Clearances to Combustibles - Passive Heat Open Top Discharge (PHSI-PRIMO) Single-Sided or See-Through

WARNING! Risk of Fire! Minimum dimension of discharge opening **MUST** be 2 inches! Appliance and combustible materials will overheat.

WARNING! Risk of Fire! DO NOT allow any combustible or non-combustible objects or materials to be placed where the disruption of air-flow in discharge zone could occur. Appliance and combustible materials will overheat.



MINIMUM FRAMING DIMENSIONS

		A	B	C	D
		Width of Opening	Clearance Opening to Top of Chase	Clearance Opening to Ceiling	Clearance Bottom of Appliance to Ceiling
PRIMO48 PRIMO48ST	Inches	10-3/16	58-1/16	60-1/16	83-7/8
	millimeters	259	1475	1526	2130
PRIMO60 PRIMO60ST	Inches	10-3/16	64-1/16	66-1/16	89-7/8
	millimeters	259	1627	1678	2283

REQUIRED FRAMING DIMENSION

WARNING! Risk of Fire! Maintain framing dimension as required.

- Opening greater than 2 inches: Debris or other material could enter the chase and cause fire. Mesh screen required on top of framing.
- Opening less than 2 inches: Appliance and combustible materials will overheat.

E		
Required Top of Header to Ceiling (Discharge Opening)		
PRIMO48 / PRIMO48ST PRIMO60 / PRIMO60ST		MIN
	Inches	2
	millimeters	51

Figure 4.2 Clearances to Combustibles-PRIMO48, PRIMO60 with Passive Heat Open Top Discharge

Open Top Discharge - Clearances to Combustibles

1. Dimensions for framing using the Open Top Discharge method of installation are shown in Figure 4.2.
2. If Dimension E in Figure 4.2 is greater than two inches, a piece of mesh screen with 1/2 inch x 1/2 inch opening **MUST** be installed on the top of the framing above the appliance.

The screen will prevent objects from falling through the opening and onto the top of the appliance, causing a fire. The mesh screen may be available at a hardware or home improvement retailer.

WARNING! Risk of Fire! Mesh screen required on top of framing when discharge opening is greater than two inches.

Open Top Discharge Configuration

WARNING! Risk of Fire! Comply with Open Top Discharge configurations as specified. Reduced discharge area will interfere with proper operation of the heat management system. Overheating of appliance and combustible materials will occur.

Figure 4.3 shows the acceptable configurations for Open Top Discharge.

For a **Single-Sided** appliance, the front and both sides of the chase **MUST** be open and unobstructed. A rear support stud may be installed along the back wall to ensure secure mounting of the discharge assembly.

For a **See-Through** appliance, two options are available:

Option 1: Both "Front" sides are open top configuration.

Option 2: One "Front" side is open top configuration.

For See-Through models, sides are not required to be open, but at least one front side of the chase **MUST** be open and unobstructed.

Chase Configurations Passive Heat Open Top Discharge (Single-Sided or See-Through)

WARNING! Risk of Fire! Minimum dimension of opening **MUST** be 2 inches! Appliance and combustible materials will overheat.

WARNING! Risk of Fire! **DO NOT** block discharge opening! **DO NOT** install finishing material on top plate framing!

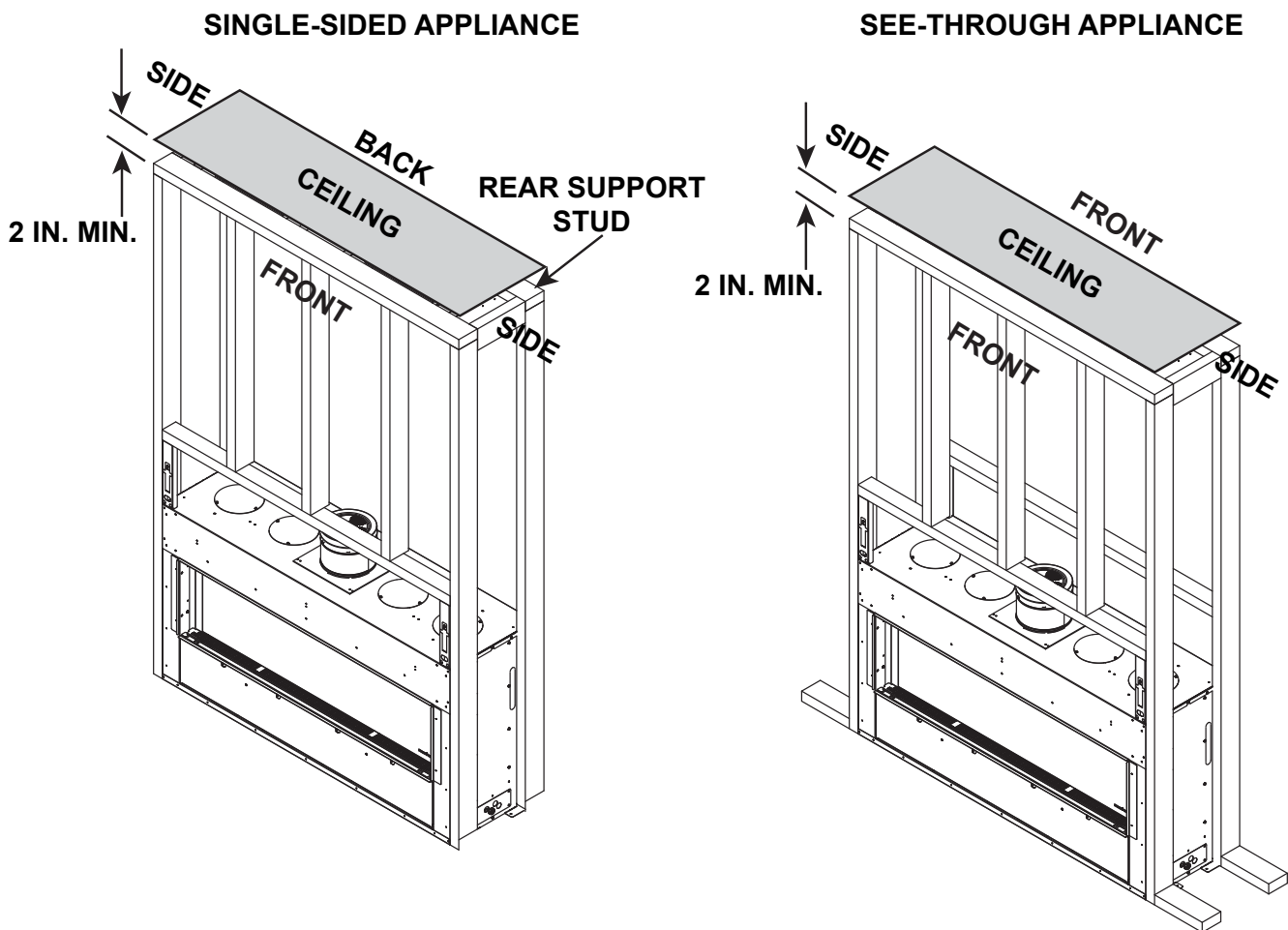


Figure 4.3 Passive Heat Open Top Discharge Configuration Options

5. Remove Barrier Glass/Bypass Limit Switch and Glass Mounting Brackets

Note: For See-Through appliances remove only the glass on the control cavity side of the appliance.

WARNING! Risk of Injury! Glass is heavy.

- Glass assembly installation and removal must be performed by a qualified service technician. See Table 5.1 below for glass assembly weights.
- Use suction cups to handle glass.
- PRIMO60 Models: It is recommended that Glass installation and removal be performed by two qualified service technicians.
- Wear protective gloves and safety glasses during removal and installation.

Barrier Glass Weights	
PRIMO48	PRIMO60
12 lbs	14 lbs

Table 5.1

1. Press glass suction cups firmly against glass to create a solid hold.
2. Slide glass straight up behind finishing material. See Figure 5.1, Detail A.
3. Tilt bottom out as shown in Figure 5.1, Detail B. Slide glass down to remove it from the appliance.
4. Set glass on prepared work surface.

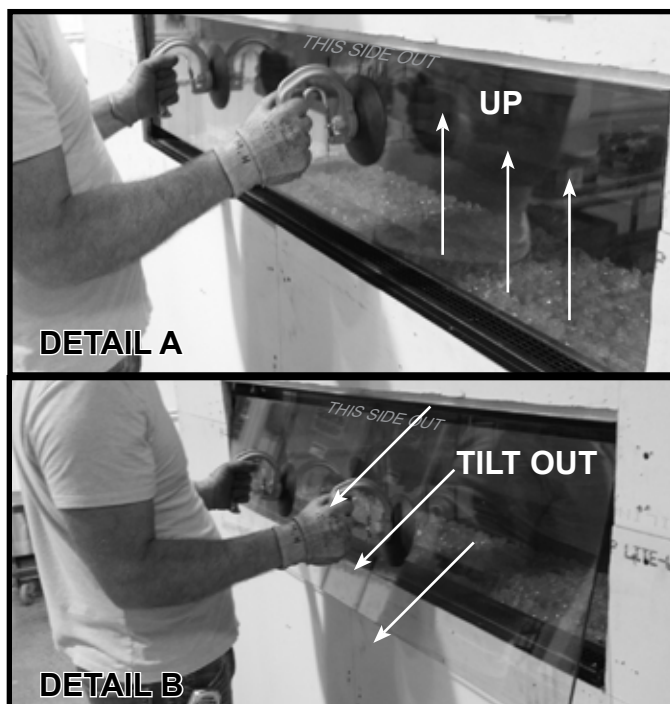


Figure 5.1 Barrier Glass - Clean Face Finish

5. Remove media from the front media tray. Remove refractory pieces, if installed.

WARNING! Choking Hazard! Keep media and stones out of reach of children.

6. Remove transition media tray.
7. Remove LED Tray assembly
8. Remove glass mounting brackets, if installed. See Figure 5.2.
9. Remove bottom panel to access component tray as shown in Figure 5.3.
10. Disconnect the two wires attached to the limit switch. See Figure 5.4.



Figure 5.2 Remove Existing Glass Mounting Brackets (If Installed)



Figure 5.3 Remove Bottom Panel

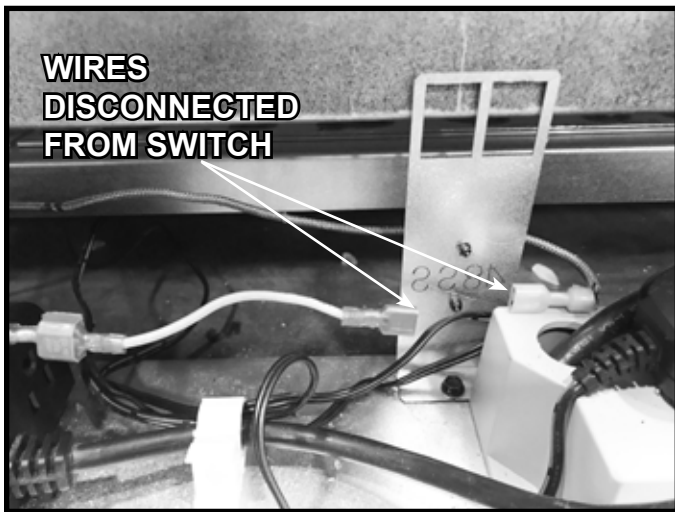


Figure 5.4 Disconnect Limit Switch Wires and Remove Bracket

Note: Because Passive Heat does not require a heat management fan to operate, the limit switch is not required during operation.

WARNING! Risk of Fire! DO NOT block discharge openings. Follow framing dimensions as instructed. Overheating of appliance and combustible materials will occur!

11. Install jumper wire between the disconnected wires from Step 10. See Figure 5.5.

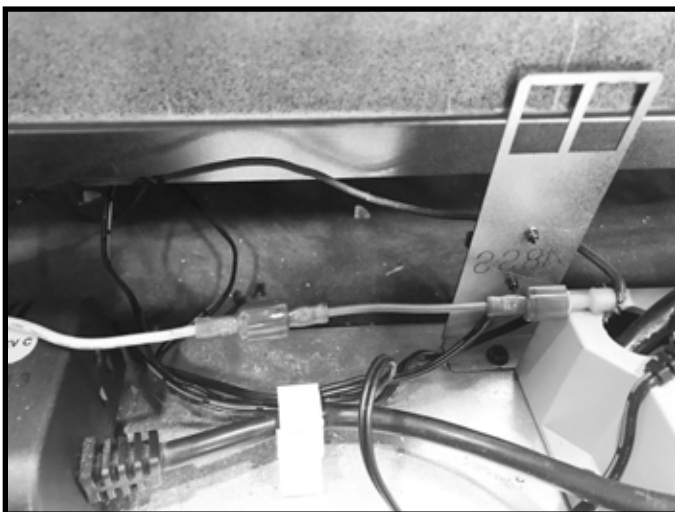


Figure 5.5 Jumper Wire Installed

12. Install the supplied glass mounting brackets. If the appliance is a See-Through model, glass mounting brackets will need to be installed on both sides of the appliance. The glass mounting brackets included in this kit replace those shipped with the Clean Face Finishing Kit. Discard glass mounting brackets shipped with Clean Face Finishing Kit.

13. Break the glass mounting bracket into two pieces as shown in Figures 5.6, 5.7 and 5.8. Make the hand bends as shown in Figure 5.8 to form the glass mounting brackets.

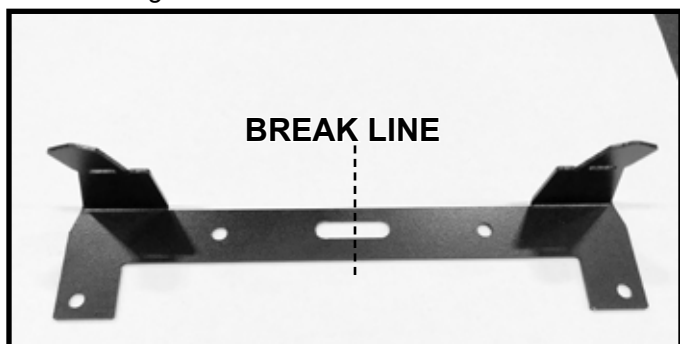


Figure 5.6 Glass Mounting Bracket

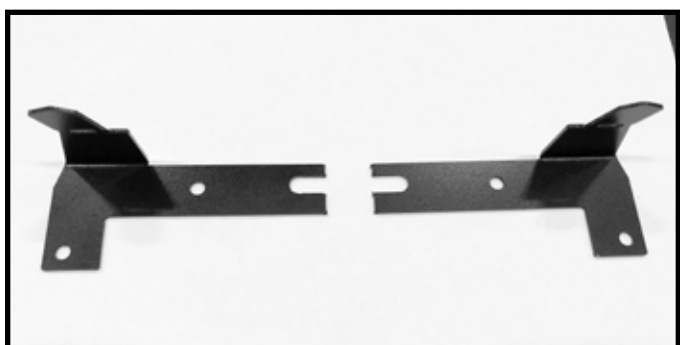


Figure 5.7 Break Glass Mounting Bracket

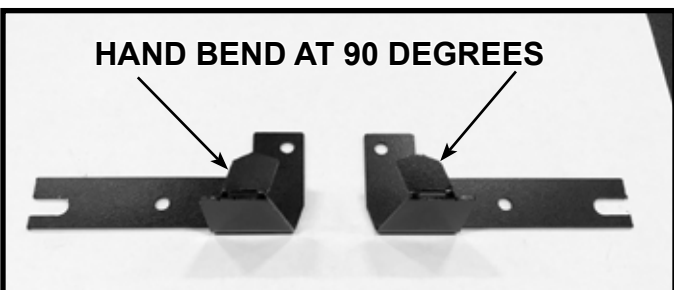


Figure 5.8 Form Glass Mounting Bracket

14. Install glass mounting brackets on bottom left and right sides using an existing screw, a self-tapping screw, and shoulder bolt. See Figure 5.9. Install rubber bumpers as shown to protect the barrier glass.



Figure 5.9 Install Glass Mounting Brackets

15. Reinstall the LED tray as shown in Figure 5.10.
16. Set transition media tray into position as shown in Figure 5.11. The return bends are at the bottom of the tray. The rear return bend should be positioned in between the glass frame and the glass frame bracket. Ensure tray is positioned flush with appliance opening.
17. Reinstall transition glass panels and transition glass tab.
18. Reinstall media on transition media tray. See Figure 5.12.

WARNING! Choking Hazard! Keep media out of reach of children.



Figure 5.10 Reinstall the LED Tray

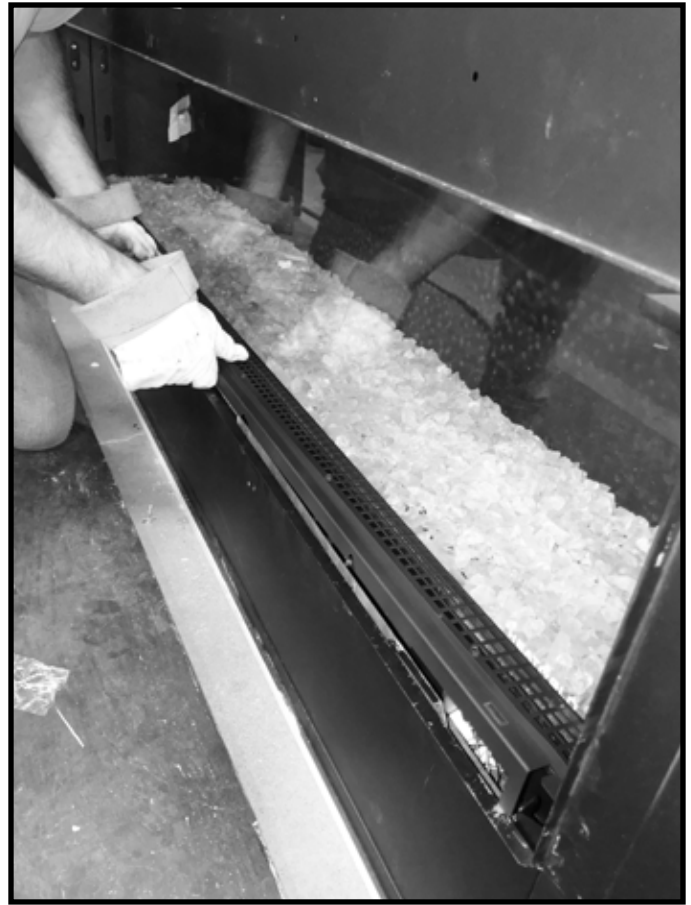


Figure 5.11 Reinstall the Transition Media Tray



Figure 5.12 Reinstall Media

19. Reinstall barrier glass as instructed below.

Replace Barrier Glass

1. Press glass suction cups firmly against glass to create a solid hold.
2. Tilt glass and slide glass between finishing material and barrier glass tabs. See Figure 5.13.
3. Center the barrier glass left to right.
4. Tilt bottom in toward appliance. Set glass down into position on rubber bumpers.

WARNING! Risk of Fire!

- Vertical gap $\frac{5}{8}$ inch required for proper airflow.
- Install barrier glass as instructed. Overheating will occur.

When barrier glass is installed, a vertical gap of approximately $\frac{5}{8}$ inch is formed between the bottom of the glass and the transition media tray. This gap allows adequate air flow through the appliance. See Figure 5.13.

Barrier glass must be installed between the finishing material and the barrier glass tabs. If not installed correctly, appliance will not operate as intended. See Figure 5.13.

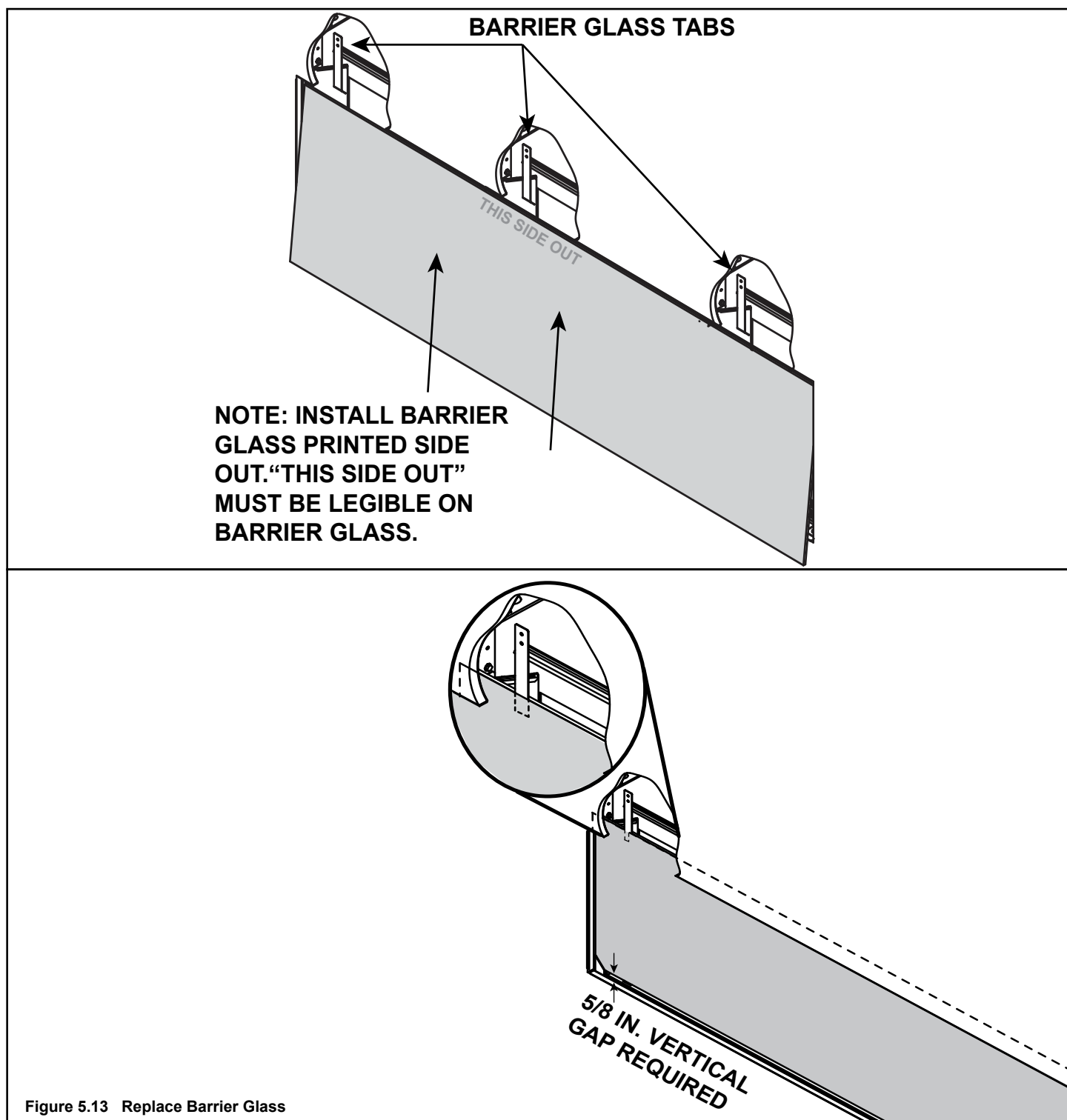


Figure 5.13 Replace Barrier Glass

6. Installation and Finishing - Front Discharge

Install Plenums and Flexible Duct

WARNING! Risk of Fire! DO NOT remove HEAT-OUT-PRIMO seal plates unless HEAT-OUT-PRIMO is installed. Appliance will overheat. See HEAT-OUT-PRIMO installation instructions.

1. Remove the two outer passive heat seal plates. See Figure 6.1 and 6.2. Install collars over the openings using hurricane screws provided in the kit.

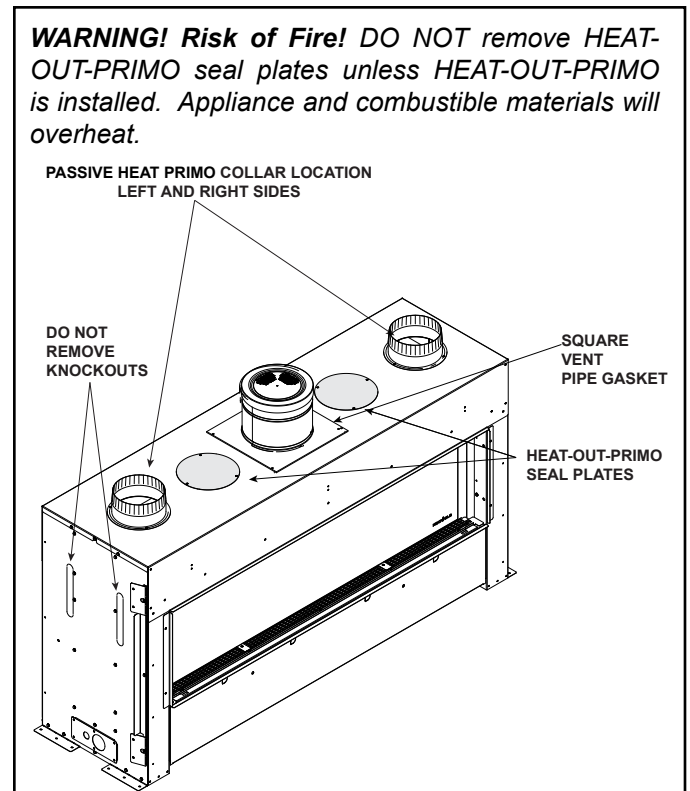


Figure 6.2 Remove PRIMO Passive Heat Seal Plates

***The Front Discharge option, Side Discharge option or Open Top Chase option may be installed. Installing more than one option is not allowed.**

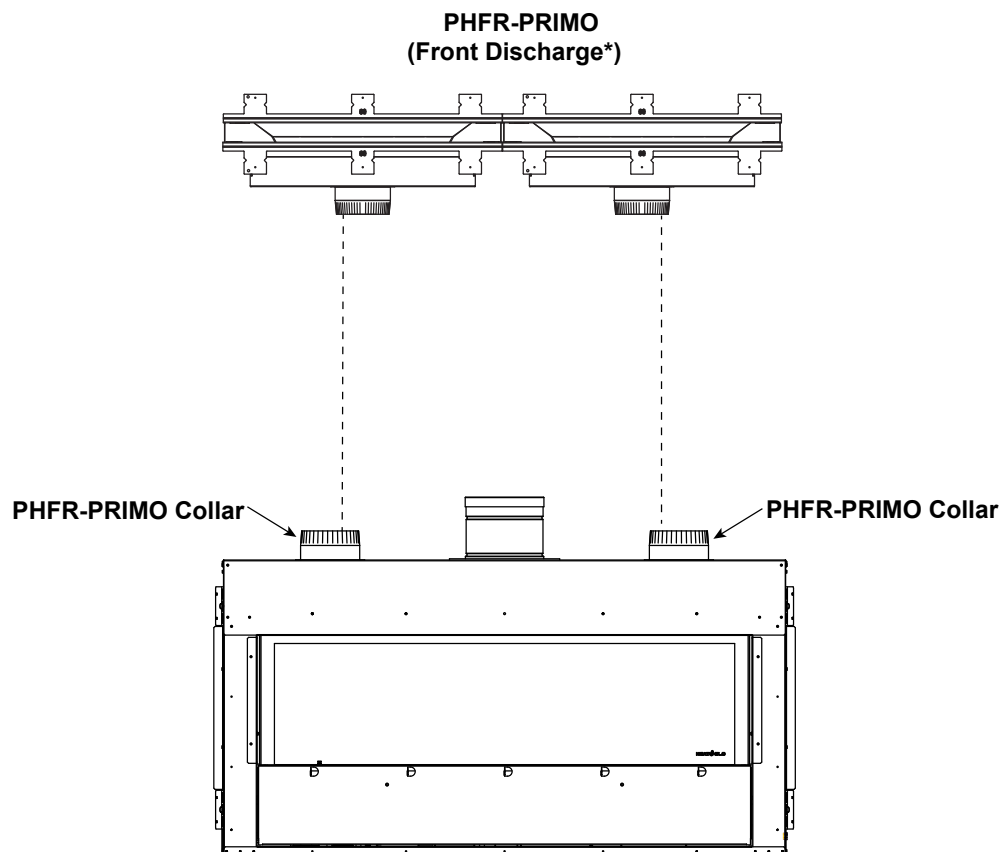


Figure 6.1 PHFR-PRIMO Passive Heat Front Discharge Configuration / Remove PRIMO Passive Heat Seal Plates

2. Locate the finishing trim piece and break at the two places noted in Figure 6.3. Bend as indicated in Figure 6.4, Detail A, B, and C.

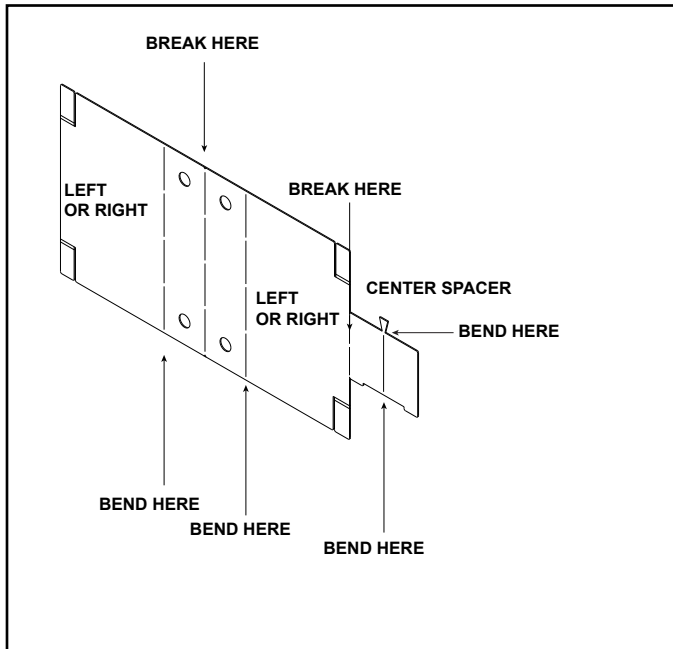


Figure 6.3 Finishing Trim

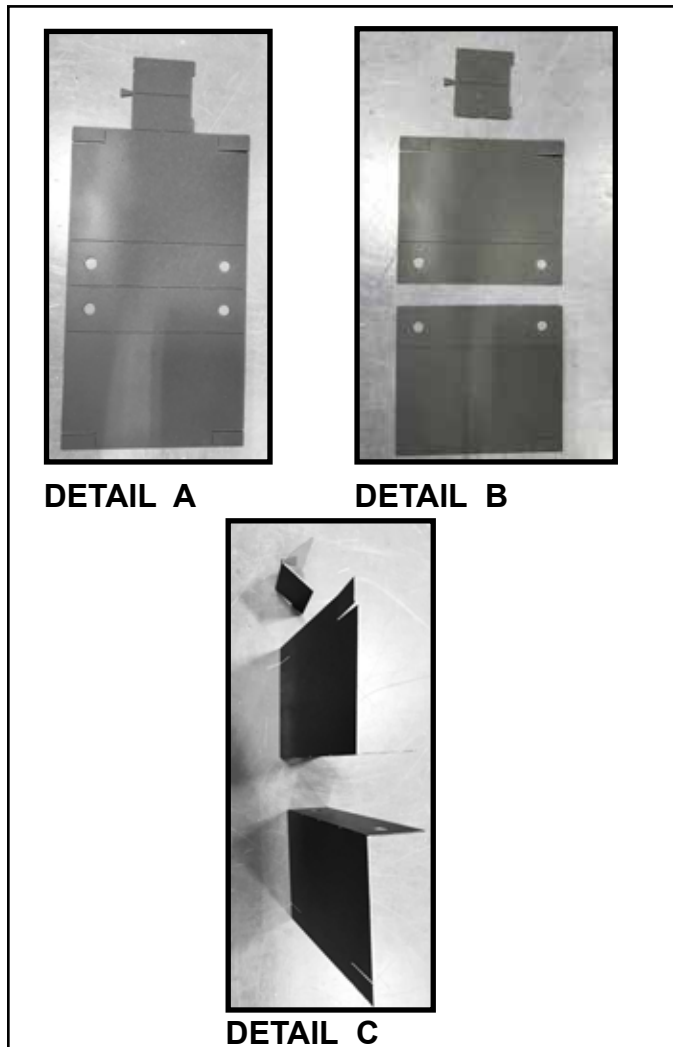


Figure 6.4 Break and Bend Finishing Trim

3. Install the left and right finishing trim pieces on the framing on the sides of the discharge opening using construction screws or nails as shown in Figure 6.5, Detail A and B. Notice that the screws are installed on the back side of the framing. See Figure 6.15 and Figure 6.20.

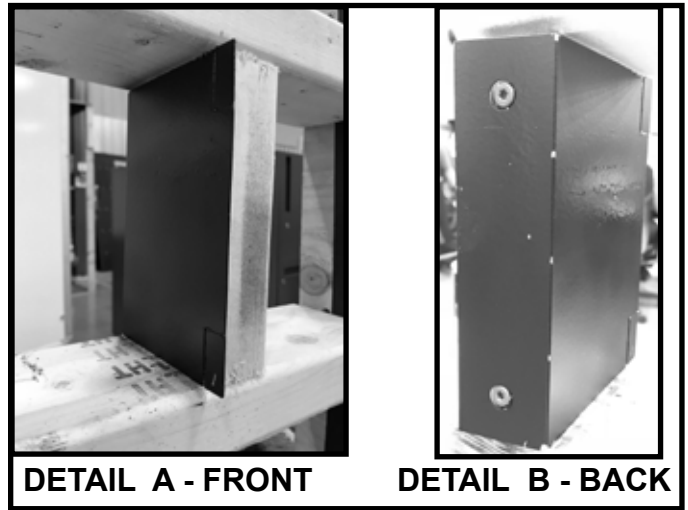


Figure 6.5 Finishing Trim Installed

4. Two passive heat plenums are included with the kit and both must be installed with the PRIMO appliance or the appliance will overheat. The plenums are placed into the framed opening from inside the chase.

WARNING! Risk of Fire! Two plenums **MUST** be installed for passive heat to function correctly. Overheating of appliance and combustible materials will occur.

5. Position the first plenum into the wall by turning vertically to clear the studs. See Figure 6.6.



Figure 6.6 Turn Plenum Vertically to Clear Framing Studs

6. Turn plenum back to horizontal orientation and tilt to bring bottom nailing tabs through the opening first. Rotate the plenum forward to get the top nailing tabs through. See Figures 6.7, 6.8, and 6.9.



Figure 6.7 Rotate Plenum to Horizontal Orientation

7. Position the plenum adjacent to the finishing trim piece on the framing as shown in Figure 6.8 and Figure 6.9. The notches in the nailing tabs denote the height of the plenum and are to be lined up with the edge of the header as shown in Figure 6.10. Mount the plenum into the wall using drywall framing screws or nails. See Figure 6.11.

Note: Finishing trim pieces not installed on all photos.

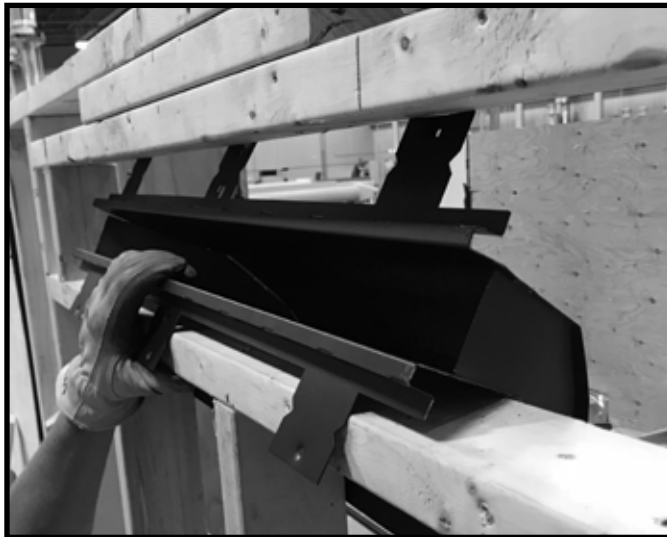


Figure 6.8 Place Plenum From Inside of the Chase



Figure 6.9 Position Plenum

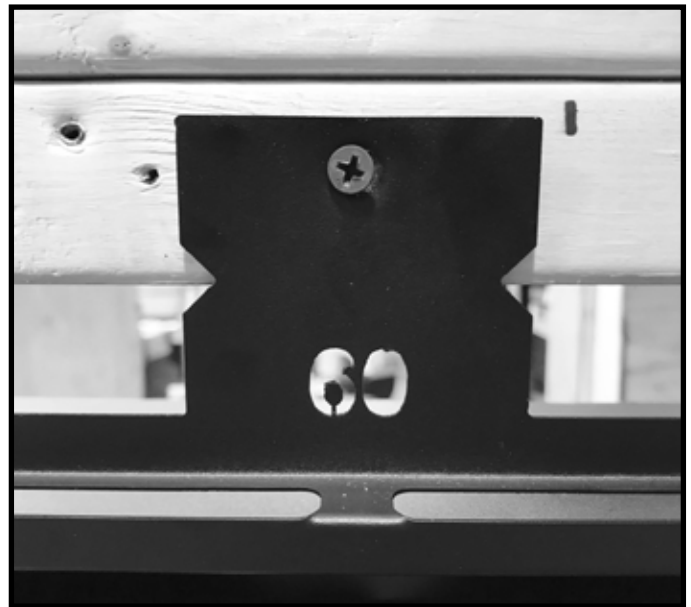


Figure 6.10 Secure Nailing Tabs

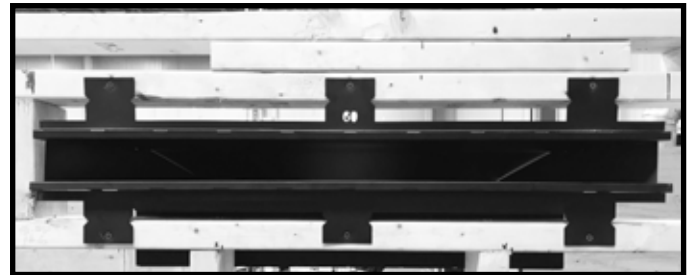


Figure 6.11 Plenum Secured in Place

8. Place the second plenum into position so that it sits side by side with the other plenum. The two plenums must be centered left to right in the framed opening.

Note: The two plenums must be touching each other in the center of the opening in order for the trim to fit properly. See Figure 6.12.



Figure 6.12 Plenums Contact Each Other

9. Insert the center finishing trim piece between the two plenums. See Figure 6.13 and 6.14.

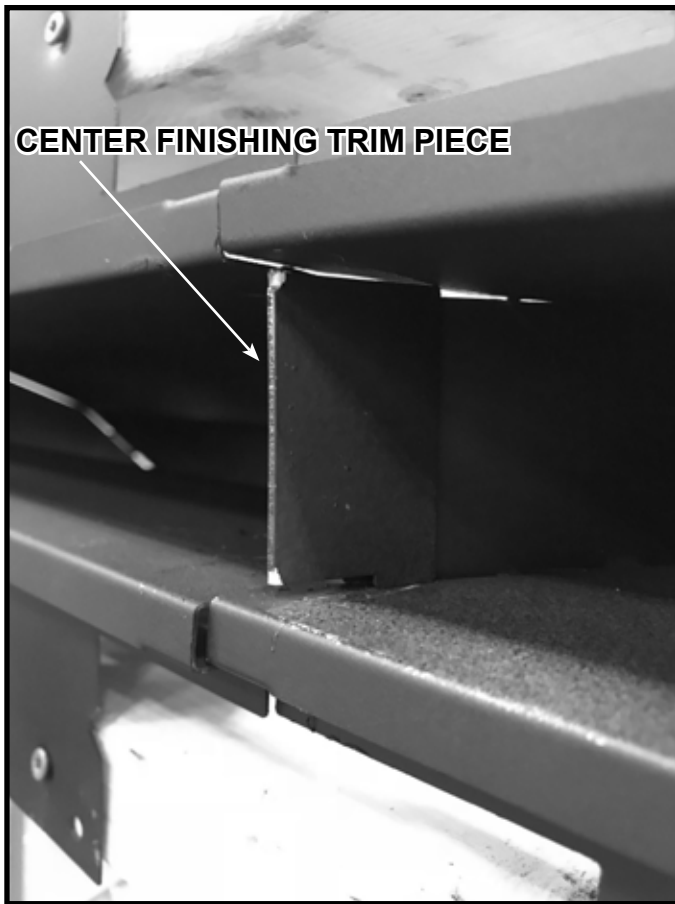


Figure 6.13 Insert Center Finishing Trim Piece

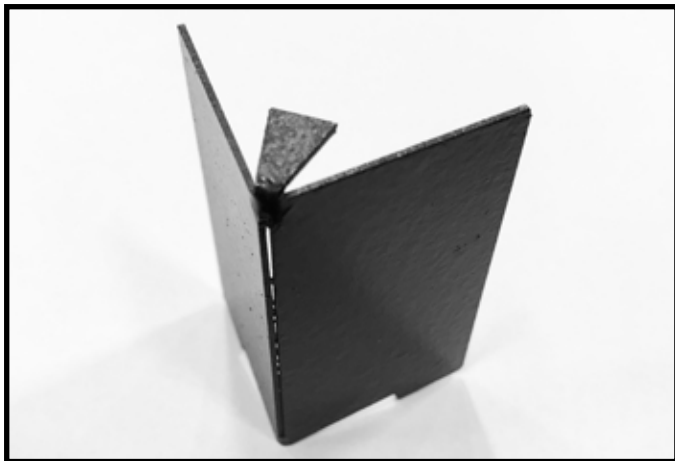


Figure 6.14 Insert Center Finishing Trim Piece

10. Bend the edge of the left and right side trim pieces over for a reference on where to cut the drywall. See Figure 6.15.
11. Install one collar to bottom side of each plenum using hurricane screws provided in the kit. See Figure 6.16.
12. Cut flex venting to appropriate length to run from top of appliance to the bottom of the plenum. Ensure there are no kinks. See Figure 6.17 and Figure 6.18.

WARNING! Risk of Fire! DO NOT fold/kink/pinch/obstruct 6 inch flexible ducts. Overheating of appliance and combustible materials will occur.



Figure 6.15 Bend Side Trim Piece

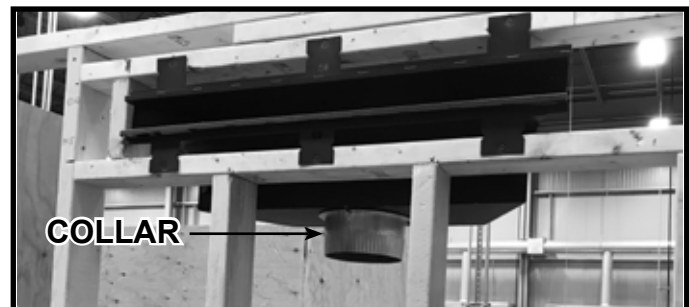


Figure 6.16 Install Collar to Bottom of Plenum



Figure 6.17 Install Flex Venting to Collar on Bottom of Plenums

13. Secure flex venting to collars on both the appliance and the bottom of the plenum using the provided gear clamps. See Figure 6.18 and Figure 6.20.

WARNING! Risk of Fire! DO NOT fold/kink/pinch/obstruct 6 inch flexible ducts. Appliance and combustible materials could overheat.



Figure 6.18 Install Flex Venting to Appliance

14. Install self-tapping screw through gear clamp into collar. Repeat for all collars. See Figure 6.19

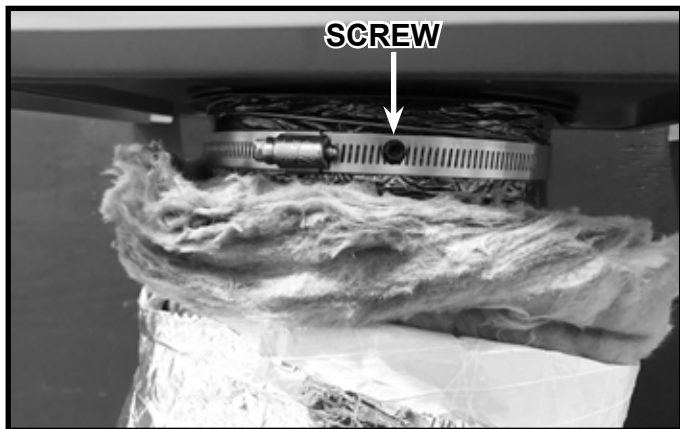


Figure 6.19 Install Screw into Collar



Figure 6.20 Flex Vent Installed with No Kinks

Finishing

1. Apply wall sheathing material, such as drywall up to 1/2 in. (13mm) thick up to the edge of the plenum. See Figure 6.21.

WARNING! Risk of Overheating! DO NOT apply wall sheathing past the edge of the plenum. Overheating of appliance and combustible materials will occur.

2. **Facing Material with Front Trim Kit ((PHTRIM-PRIMO-48 or PHTRIMPRIMO-60)**

The passive heat kit trim kit is designed to be mounted directly to the drywall surface. Additional facing materials must not be placed behind the trim kit. It is acceptable to place Non-Combustible facing materials up to the edge of the trim kit. See Figure 6.22 and Figure 6.23. Consult the appliance Installation Manual to determine maximum facing material thickness.

3. Install the required trim kit (PHTRIM-PRIMO-48 or PHTRIM-PRIMO-60) as instructed to complete the installation.
4. Continue to Wiring section.

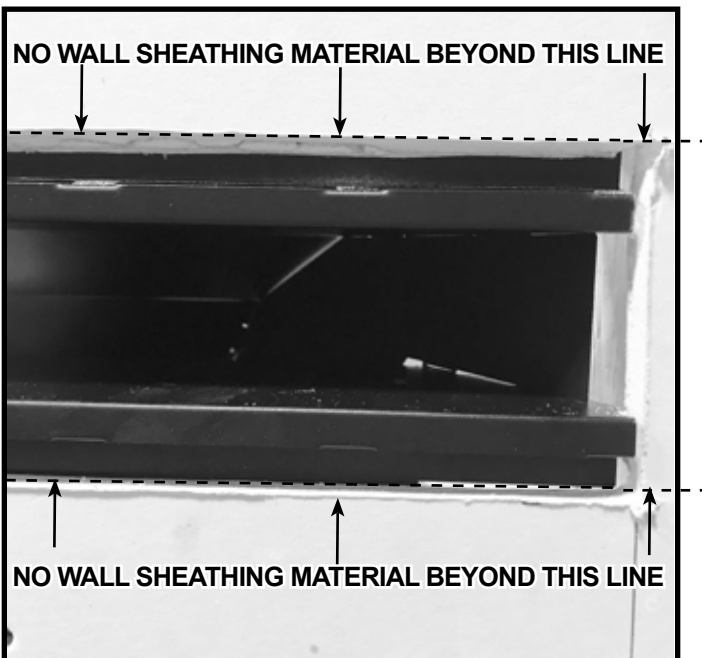


Figure 6.21 Wall Sheathing Installed

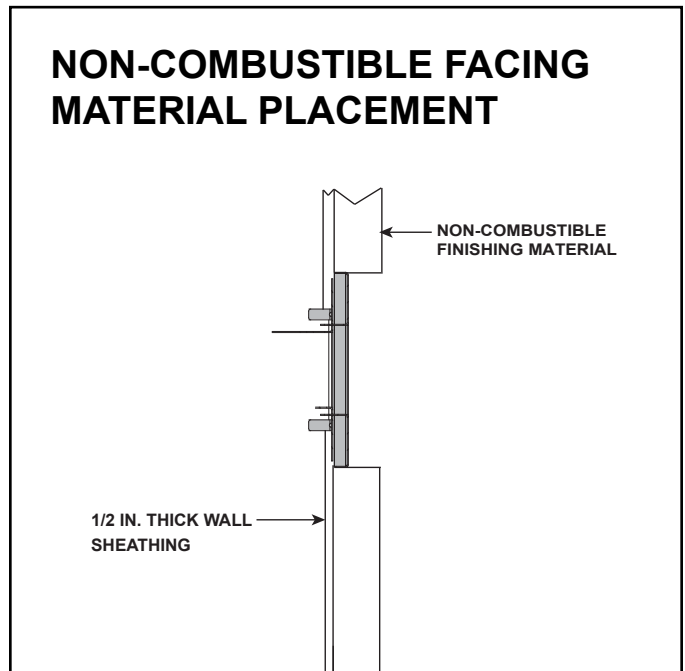


Figure 6.22 Finishing Material Installed

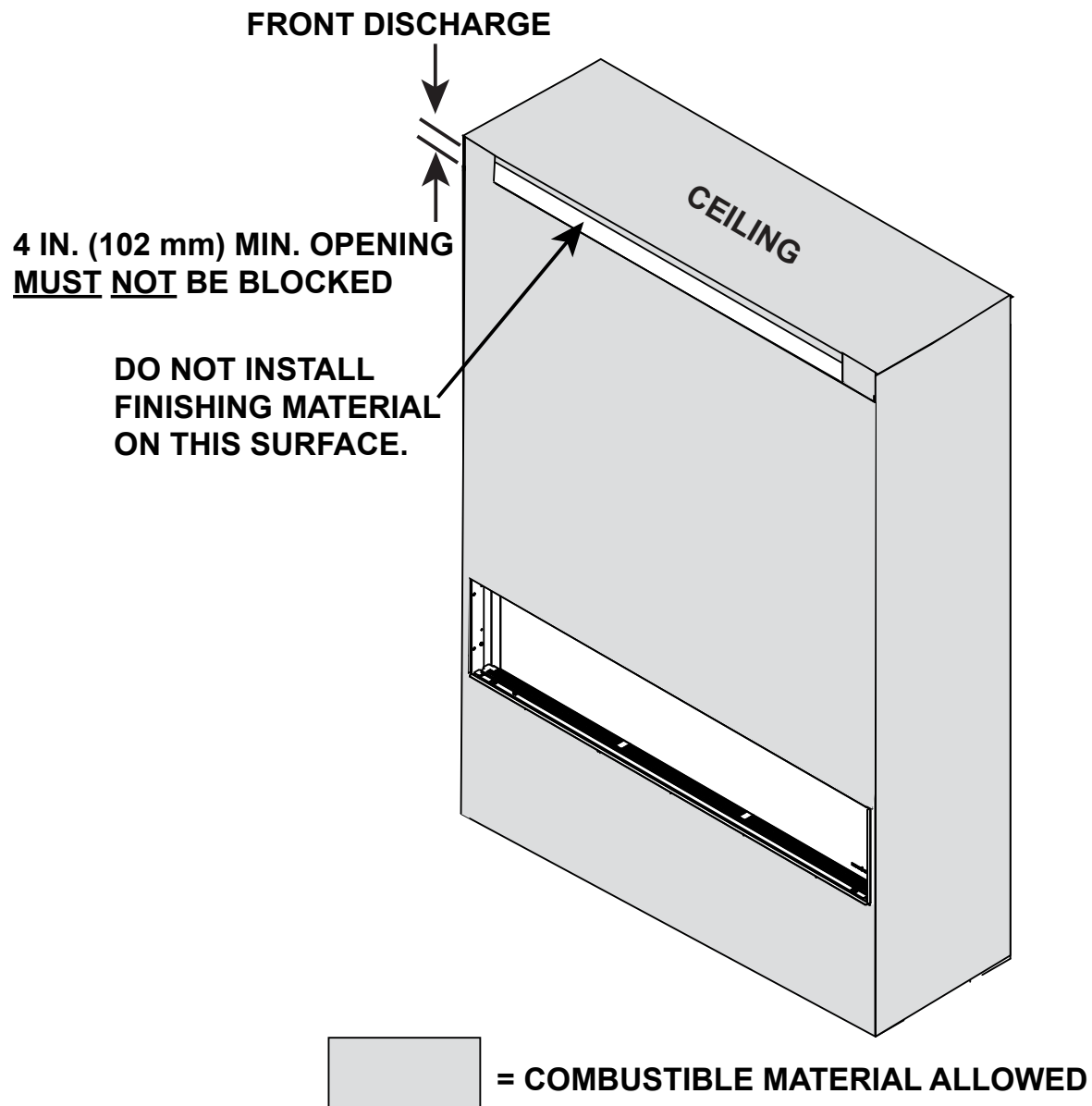


Figure 6.23 Finishing Material Installed

7. Installation and Finishing - Side Discharge

Install Assemblies and Flexible Duct - Side Discharge

1. Remove the two outer passive heat seal plates. See Figure 7.1 and Figure 7.2. Install collars over the openings using hurricane screws provided in the kit.

WARNING! Risk of Overheating! Both passive heat side discharge assemblies included with kit **MUST** be installed and operational. Overheating of appliance and combustible materials will occur.

2. Place the side discharge assembly into the wall with the **arrows on the nailing tabs facing upward**. See Figure 7.3. The height of the side discharge assembly is denoted by the notches in the nailing tabs that are to be lined up with the edge of the header closest to the side discharge assembly. Ensure the side discharge assembly is centered in the wall. Mount side discharge assemblies into wall using drywall framing screws or nails.
3. Repeat Step 2 to install the second side discharge assembly on the other side of the appliance.

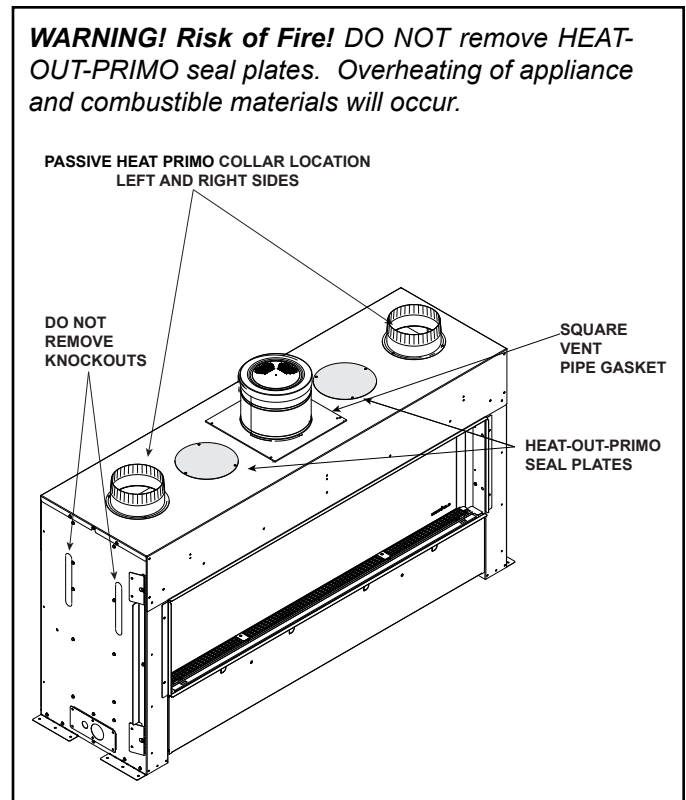


Figure 7.2 Remove PRIMO Passive Heat Seal Plates

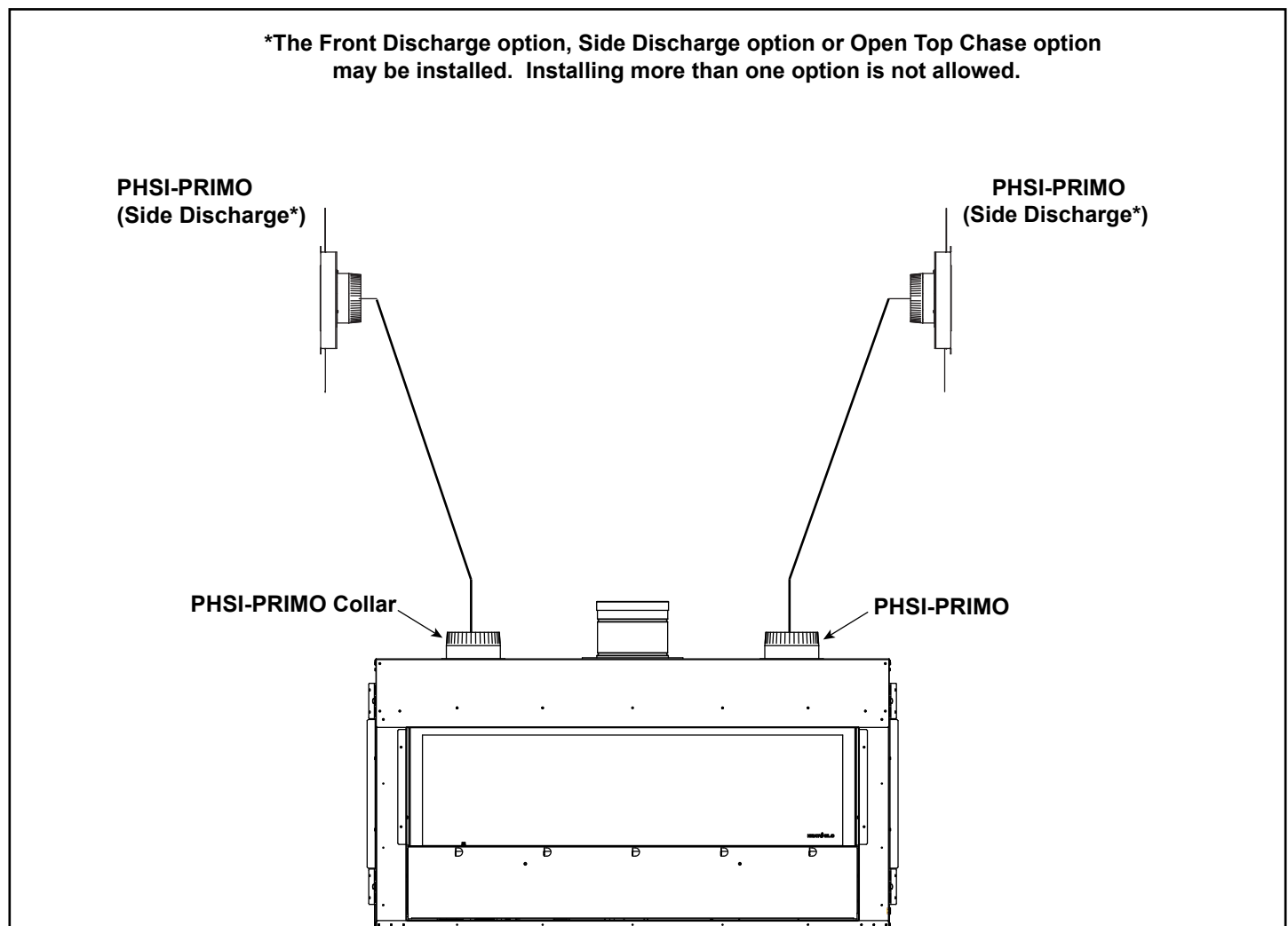


Figure 7.1 PRIMO Passive Heat Side Discharge Configuration / Remove PRIMO Passive Heat Seal Plates



Figure 7.3 Side Discharge Assembly Nailing Tab Orientation

4. Cut flex venting to appropriate length to run from top of the appliance to the back side of the side discharge assembly ensuring there are not any kinks. Be sure that the flex venting is not so tight as to collapse where attached to the side discharge assembly and restrict airflow. Refer to Section 3 and Figure 3.1 regarding length and pitch requirements.

WARNING! Risk of Fire! DO NOT fold/kink/pinch/obstruct 6 inch flexible ducts. Overheating of appliance and combustible materials will occur.

5. Secure the flex venting to the collars on both the appliance and the bottom of the side discharge assembly using the provided gear clamps. See Figure 7.4-7.7.



Figure 7.4 Install Flex Venting to Appliance

6. Install self-tapping screw through gear clamp into collar. Repeat for all collars. See Figure 7.5.

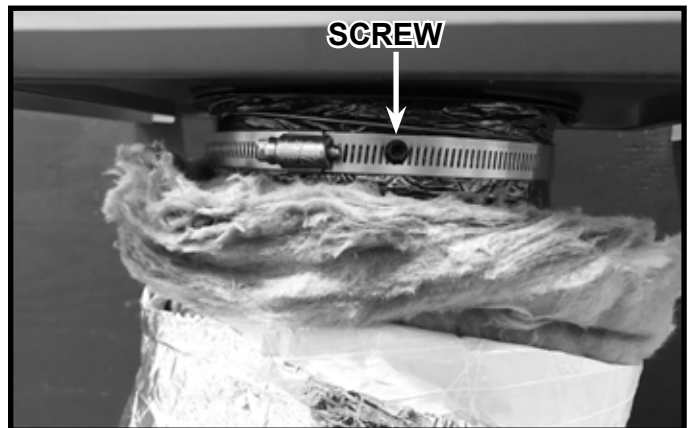


Figure 7.5 Install Screw into Collar



Figure 7.6 Install Flex Venting to Side Discharge Assembly



Figure 7.7 Flex Venting Installed

Finishing Instructions - Side Discharge

1. Apply wall sheathing material, such as drywall, up to 1/2 inch thick up to the edge of the installed side discharge assembly. See Figure 7.8 and Figure 7.9.

WARNING! Risk of Overheating! DO NOT apply wall sheathing past outside edge of plenum. Overheating of appliance and combustible materials will occur.



Figure 7.8 Wall Sheathing Installed

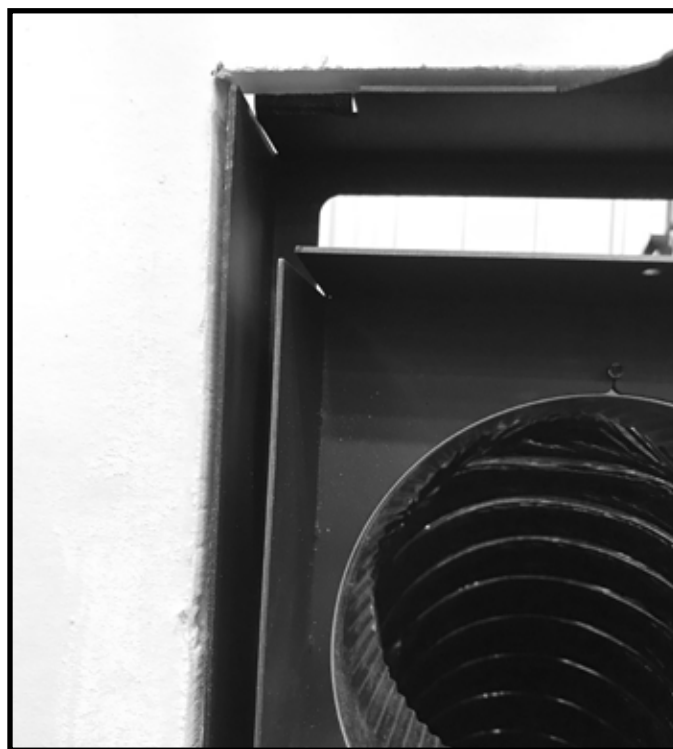


Figure 7.9 Finishing Edge

2. Bend over both register cover tabs. See Figure 7.10.

Note: It is permissible to paint the outer wrapping of the flex vent with black paint, if desired. See Figure 7.11.

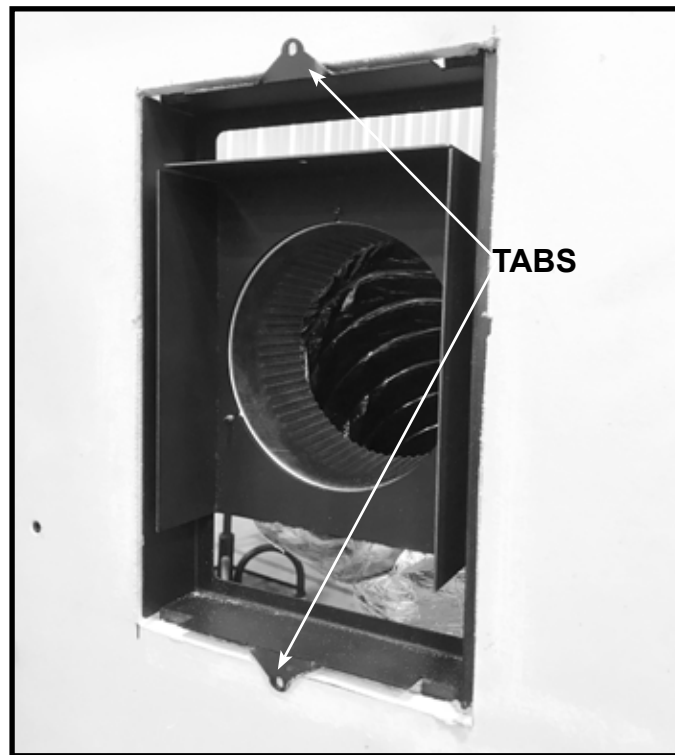


Figure 7.10 Bend Register Cover Tabs



Figure 7.11 Paint Outer Wrapping of Flex Vent (Optional)

3. Install register cover with louvers facing the front of the fireplace (control side) using provided screws. See Figure 7.12.

WARNING! Risk of Fire! DO NOT block passive heat registers! Overheating of appliance and combustible materials will occur.

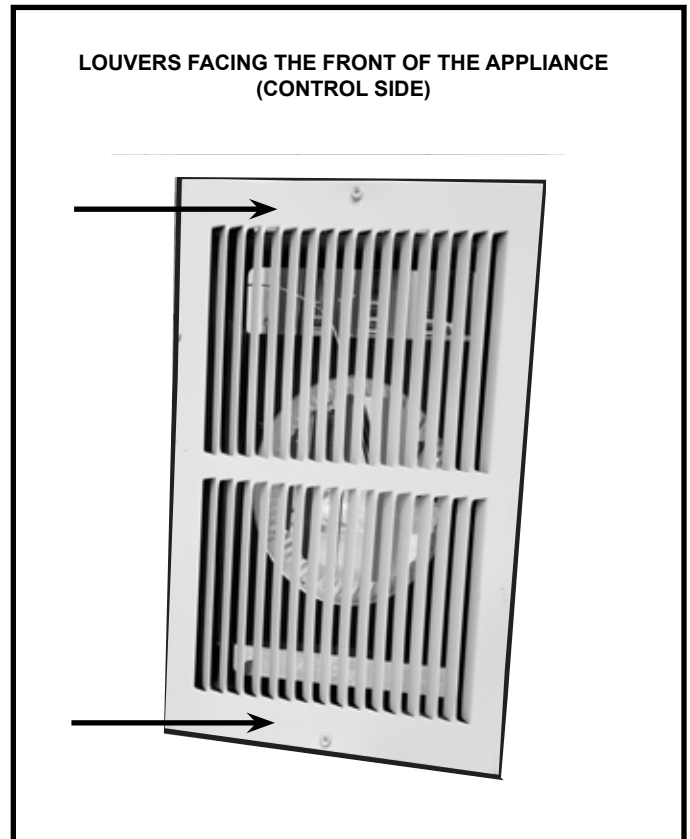


Figure 7.12 Correct Register Orientation

4. Facing Material with Side Discharge Register Covers

The passive heat kit register covers are designed to be mounted directly to the drywall surface. Additional facing materials must not be placed behind the register covers. It is acceptable to place Non-Combustible facing materials up to the edge of the register covers. See Figure 7.13 and Figure 7.14. Consult the appliance Installation Manual to determine maximum facing material thickness.

5. Install the required register covers as instructed to complete the installation.

Painting

Side Discharge:

If desired finishing includes a painted register cover, Hearth & Home Technologies recommends using high temperature paint with a minimum of 300 °F (149 °C) continuous exposure rating.

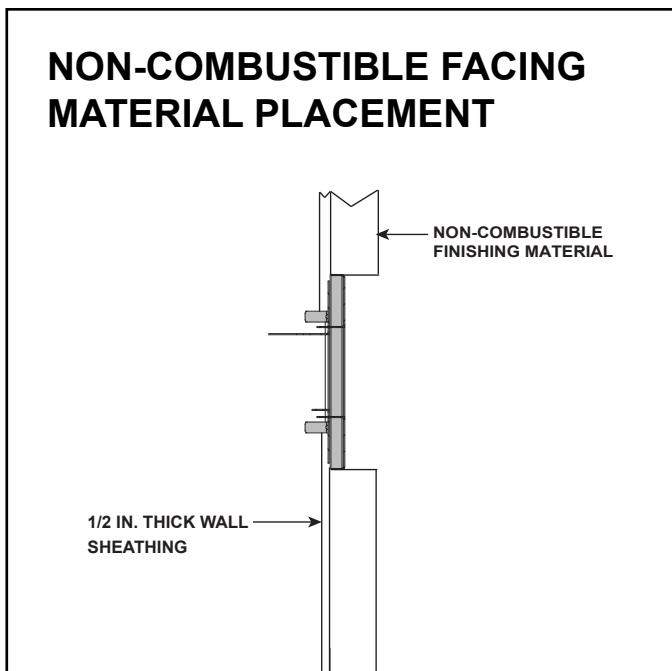


Figure 7.13 Finishing Material Installed

**SIDE DISCHARGE
(DISCHARGE SLOTS ON BOTH SIDES OF APPLIANCE)**

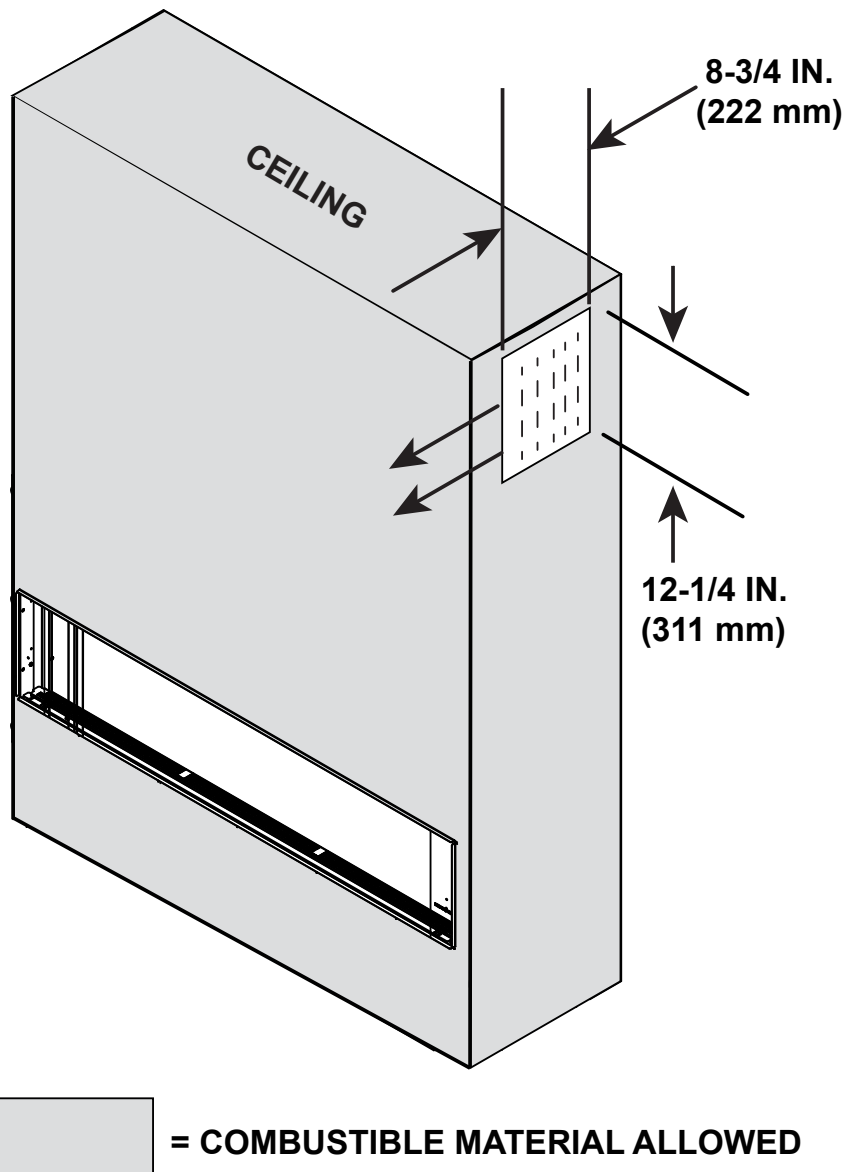


Figure 7.14 Finishing Material Installed

8. Installation and Finishing - Open Top Discharge

(Installation Option for PHSI-PRIMO Kit)

Install Assemblies and Flexible Duct - Open Top Discharge

1. Remove the two outer passive heat seal plates. See Figure 8.1 and Figure 8.2. Install collars over the openings using hurricane screws provided in the kit.

WARNING! Risk of Overheating! Both passive heat side discharge assemblies included with kit **MUST** be installed and operational. Overheating of appliance and combustible materials will occur.

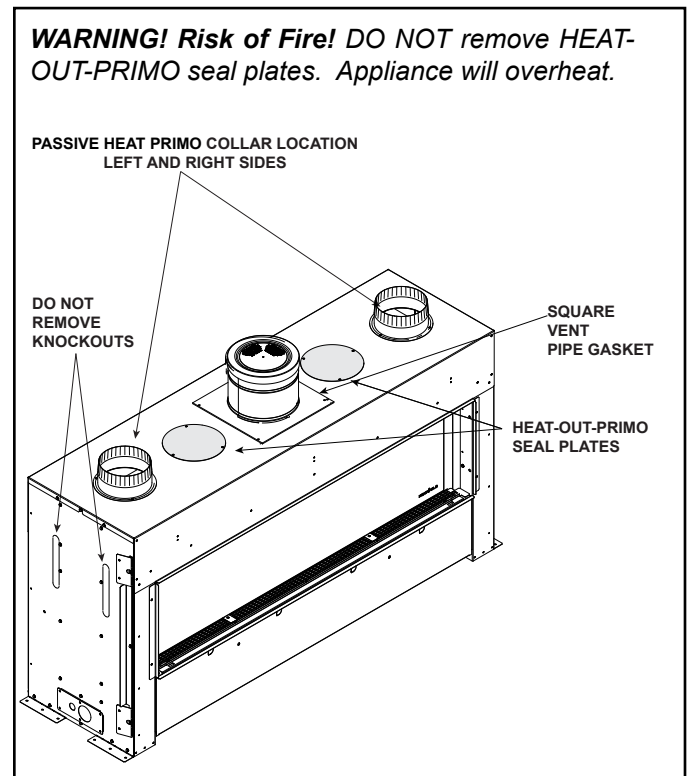


Figure 8.2 Remove PRIMO Passive Heat Seal Plates

***The Front Discharge option, Side Discharge option or Open Top Chase Discharge may be installed. Installing more than one option is not allowed.**

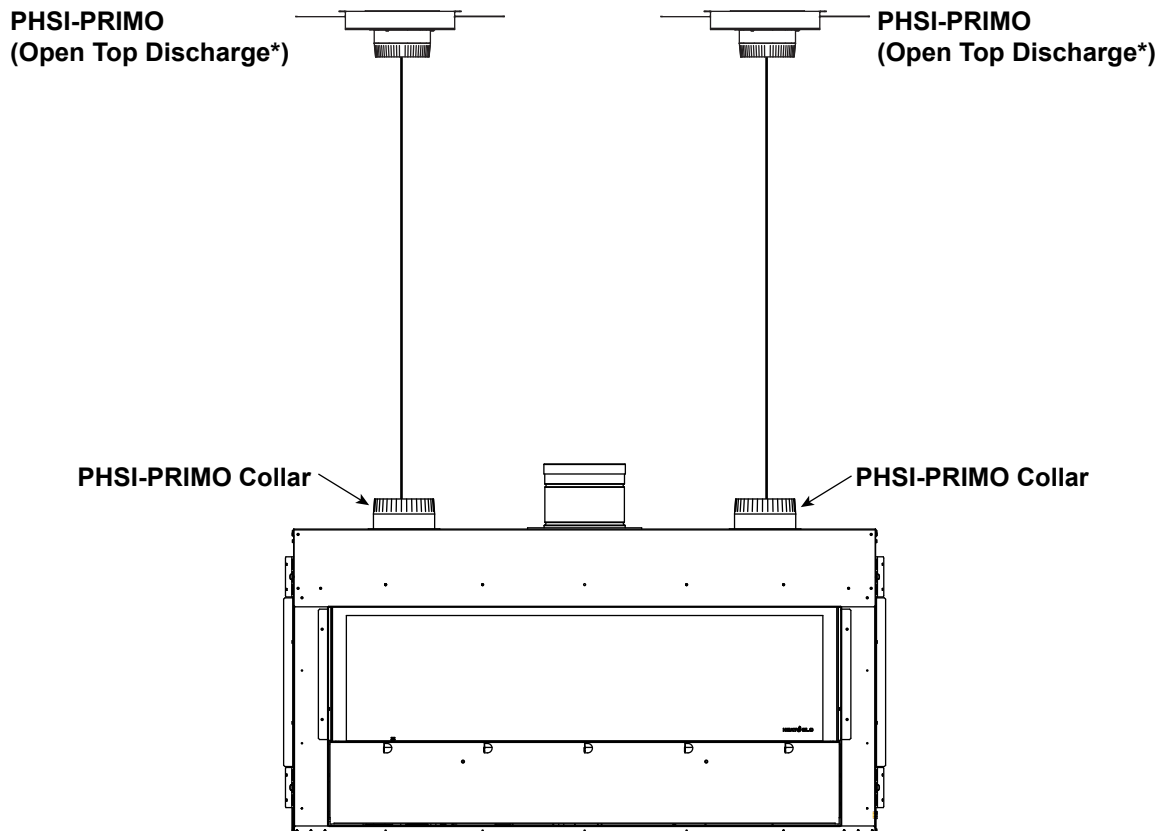


Figure 8.1 PRIMO Passive Heat Open Top Discharge Configuration / Remove PRIMO Passive Heat Seal Plates

2. Measure the chase depth between the top framing and the back wall where the discharge assemblies are to be mounted. See Figure 8.3.



Figure 8.3 Measure Chase Depth

3. Make the hand bend shown in Figure 8.4 on all of the mounting brackets."

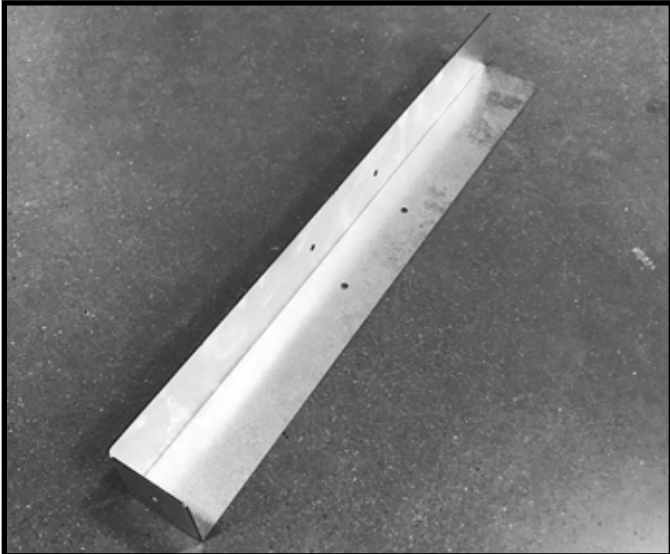
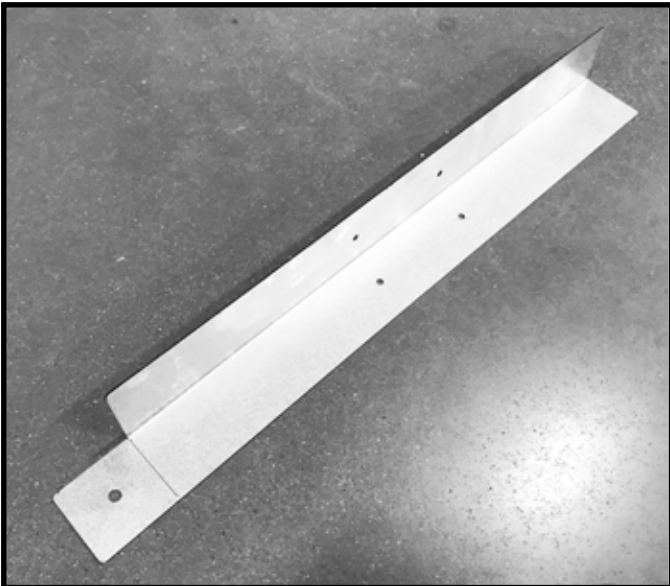


Figure 8.4 Make Hand Bends

4. Assemble two mounting brackets measuring the same distance measured in Step 2 using a self-tapping screw. Repeat this process to have a total of four assemblies. See Figure 8.5 and Figure 8.6.



Figure 8.5 Measure Length of Mounting Brackets



Figure 8.6 Assemble Mounting Brackets

Note: For See-Through models, it is required to cut the mounting brackets using a snip to a shorter length. Leave as much overlap as possible for maximum support. See Figure 8.7.

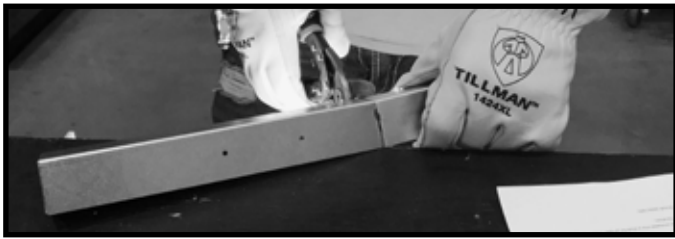


Figure 8.7 Shorten Bracket for See-Through Models

5. Locate the Open Top Discharge bend lines on the nailing tabs of the discharge assemblies. See Figure 8.8.
6. Bend or cut the nailing tabs at this location to break off excess nailing tab material not needed for Open Top Discharge. See Figure 8.9.

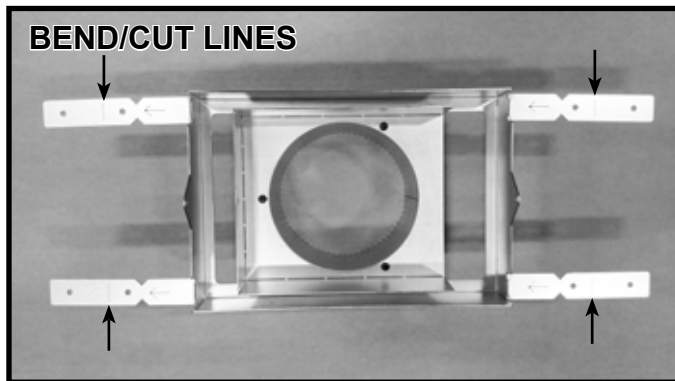


Figure 8.8 Bend/Cut Line Locations - Shown Unpainted

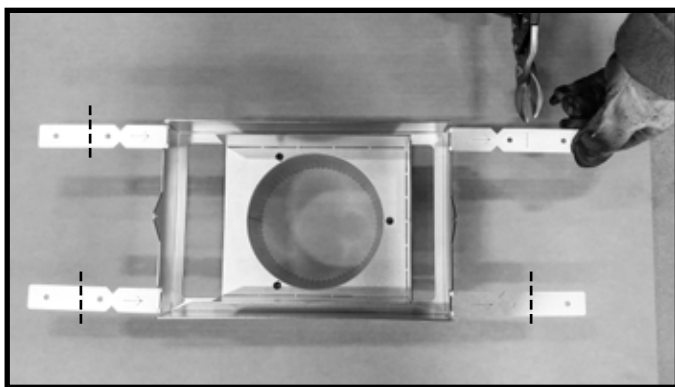


Figure 8.9 Cutting the Nailing Tabs

7. Bend over both register cover tabs as shown in Figure 8.10 and 8.11.

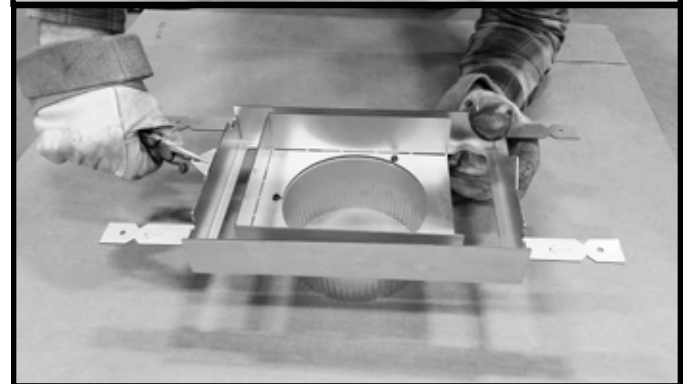
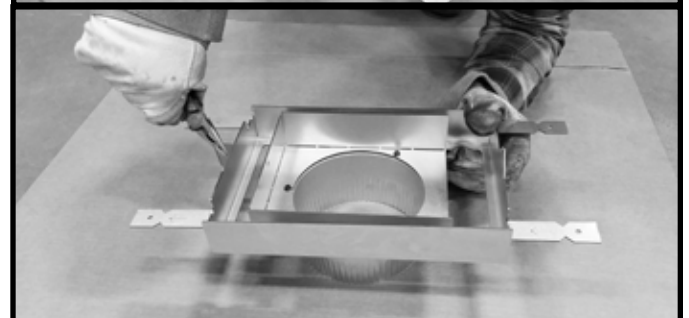
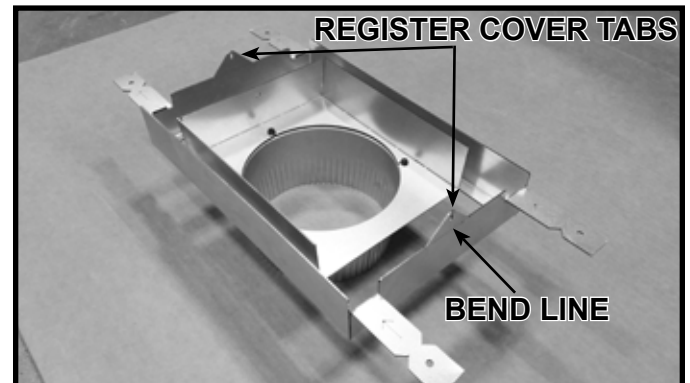


Figure 8.10 Bend Register Cover Tabs

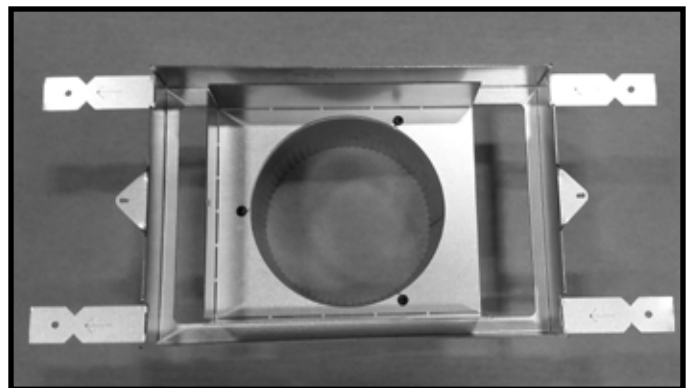


Figure 8.11 Register Cover Tabs Bent

8. On a flat surface, mount a mounting bracket assembly to the end of the nailing tabs on each side of the discharge assembly. See Figure 8.12. Make sure that the discharge assembly is centered on the mounting bracket assembly as shown in Figure 8.13. Repeat this process for both discharge assemblies.

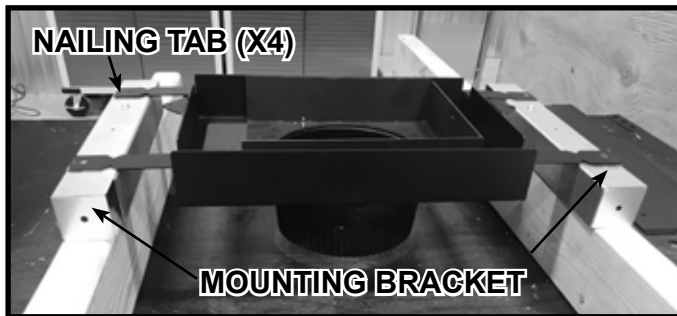


Figure 8.12 Mounting Bracket Assembly Fastened to Nailing Tabs

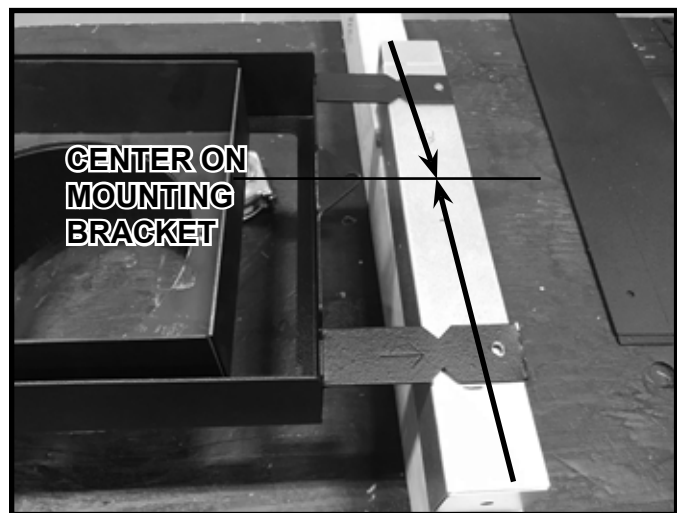


Figure 8.13 Center Discharge Assembly on Mounting Bracket

9. Mount the 12 inch x 8 inch register cover to the discharge assemblies register cover tabs using the screws provided with the cover. See Figure 8.14.

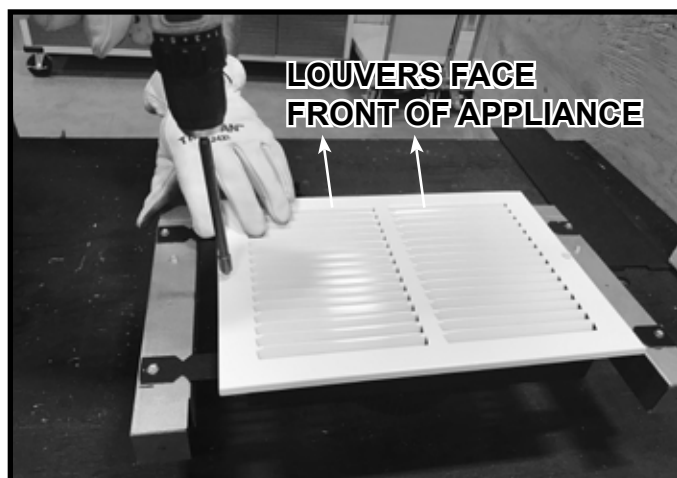


Figure 8.14 Louvers Face Front of Appliance

10. Mark out the location that each discharge assembly is to be mounted. The discharge assembly should be mounted as close to centered over the Passive Heat collar on the appliance as possible.

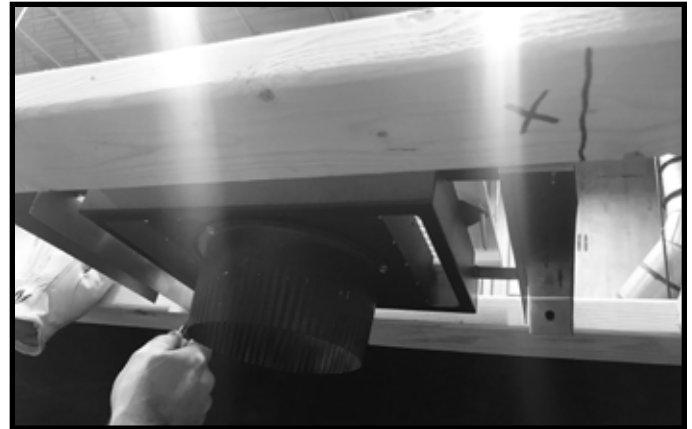


Figure 8.15 Mark Mounting Location for Discharge Assembly

Note: An unobstructed gap measuring a minimum of two inches from the room ceiling to the top of the mounting bracket is necessary for the open top discharge to properly function.

Note: If discharge assemblies are mounted too close together, possible vent runs will be limited as SLP pipe will not fit in between the mounted discharge assemblies.

11. Mount the discharge assemblies assembled with the mounting bracket assemblies to the wall using the provided wood screws. Be sure that the louvers on the register cover face the discharge opening on the front of appliance.

Note: The mounting bracket assemblies must be screwed into a stud or wall anchor for proper support.

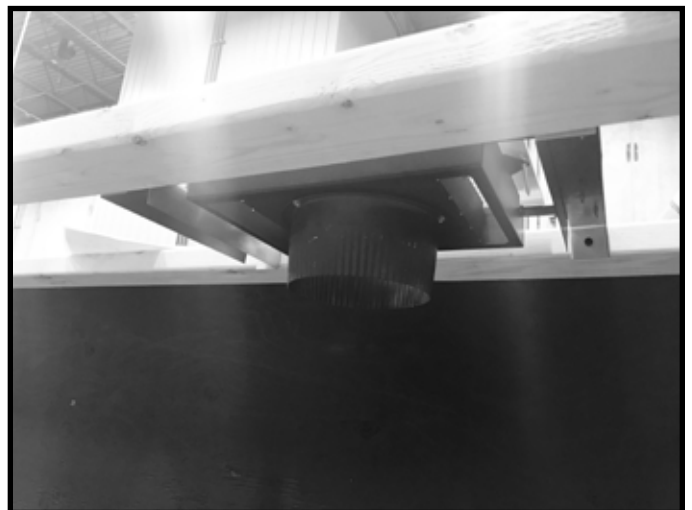


Figure 8.16 Mounted Discharge Assembly

12. Both discharge assemblies must be mounted so the louvers face the front of the appliance. For See-Through appliances, both assemblies must face the same direction. See Figure 8.17 and refer to Figure 4.3.

WARNING! Risk of Fire! DO NOT install discharge assemblies with louvers facing rear of appliance. Heated air **MUST** flow toward front of appliance. Appliance and combustible materials will overheat.

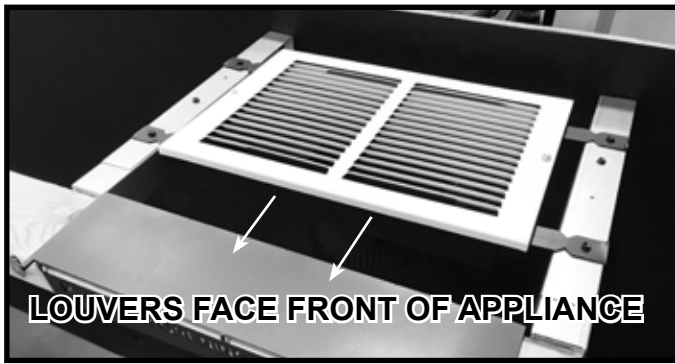


Figure 8.17 Register Louvers Facing Front of Appliance

13. Bend heat shields at the three hand bend lines as shown in Figures 8.18-8.20.

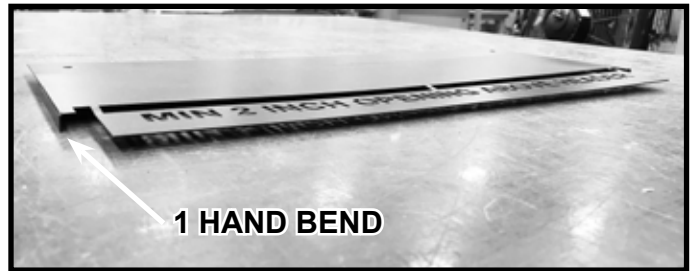


Figure 8.18 One Hand Bend Complete

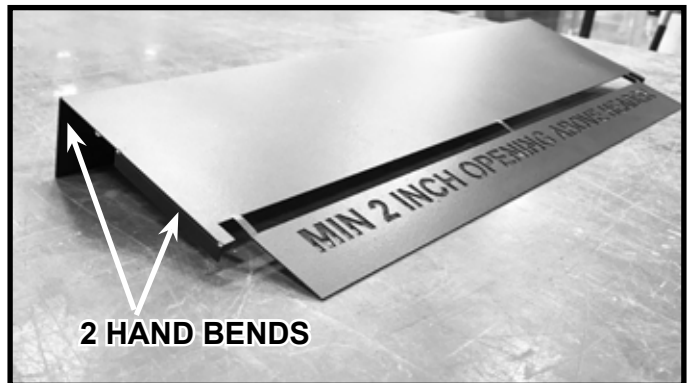


Figure 8.19 Two Hand Bends Complete

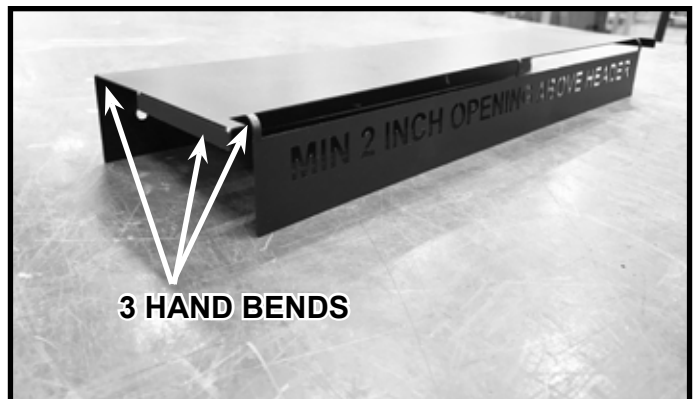


Figure 8.20 All Hand Bends Complete

14. Mount a heat shield centered between the mounting bracket assemblies using provided wood screws for each discharge assembly.
 - a. Single-Side appliances will require two heat shields.
 - b. See-Through appliances discharging out both of the front sides will require four heat shields.
 - c. See-Through appliances discharging out of one front side will require two heat shields.



Figure 8.21 Heat Shield Centered and Mounted

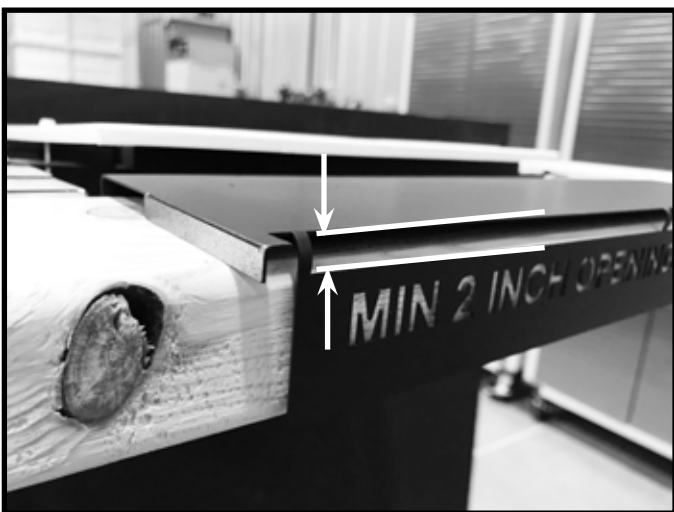


Figure 8.22 Heat Shield Gap

15. Cut flex venting to appropriate length to run from top of appliance to the bottom of the discharge assembly. Ensure there are no kinks. See Figure 8.23.
16. Secure flex venting to collars on both the appliance and the bottom of the plenum using the provided gear clamps. See Figure 8.24.

WARNING! Risk of Fire! DO NOT fold/kink/pinch/obstruct 6 inch flexible ducts. Appliance and combustible materials could overheat.

17. Install self-tapping screw through gear clamp into collar. Repeat for all collars. See Figure 8.25.



Figure 8.23 Install Flex Venting to Appliance

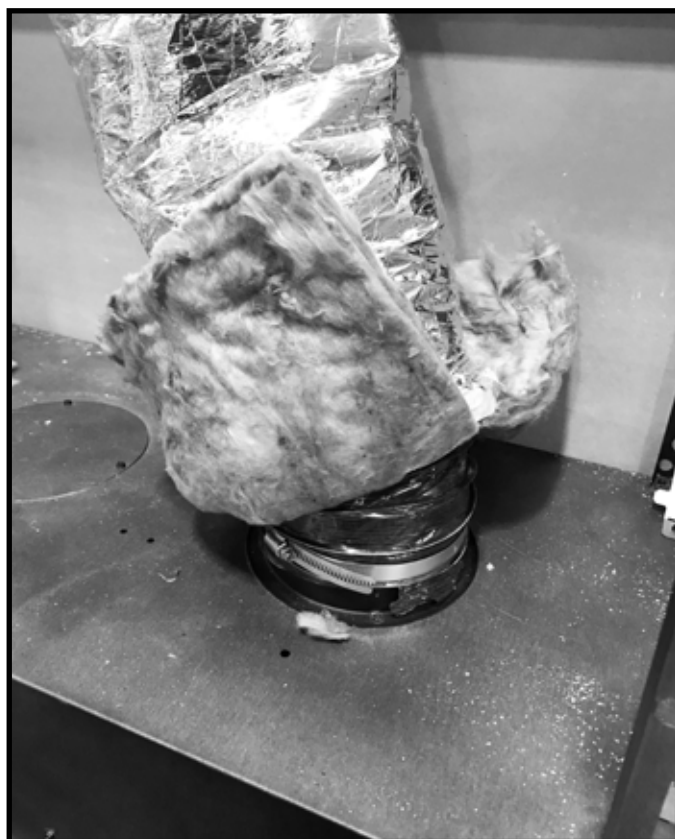


Figure 8.24 Install Flex Venting to Appliance

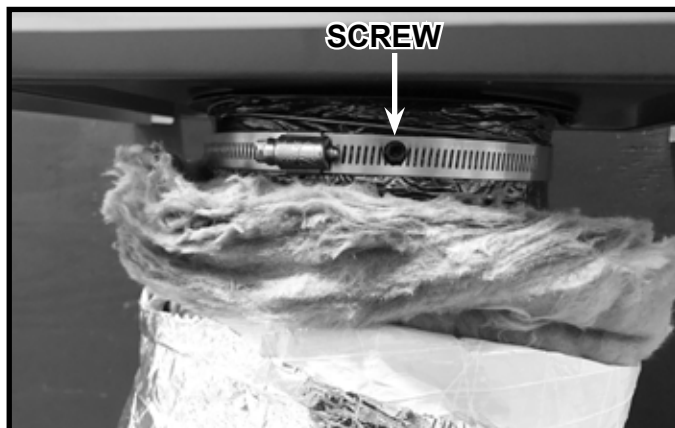


Figure 8.25 Install Screw into Collar

Finishing Procedure - Open Top Discharge

1. Apply wall sheathing material up to ½ inch thick around the chase making sure that the gap measuring a minimum of 2 inches from the top of the chase to the room ceiling remains unblocked. No drywall or other finishing material can be installed on the top plate framing. See Figure 8.26.

WARNING! Risk of Fire! DO NOT block discharge opening! **DO NOT** install finishing material on top plate framing!

If the discharge opening is greater than two inches, a piece of mesh screen with 1/2 inch x 1/2 inch opening **MUST** be installed on the top of the framing above the appliance.

Note: If venting components are visible, it is acceptable to paint the pipe using a high temperature paint with a minimum of 300 °F continuous exposure rating. Hearth & Home Technologies recommends using black touch up paint (part number TUP-GBK-12) available from your Hearth & Home Technologies dealer.

2. Finish around edge of chase using nylon drywall edge trim strips.

WARNING! Risk of Fire! Mesh screen required on top of framing when discharge opening is greater than 2 inches.

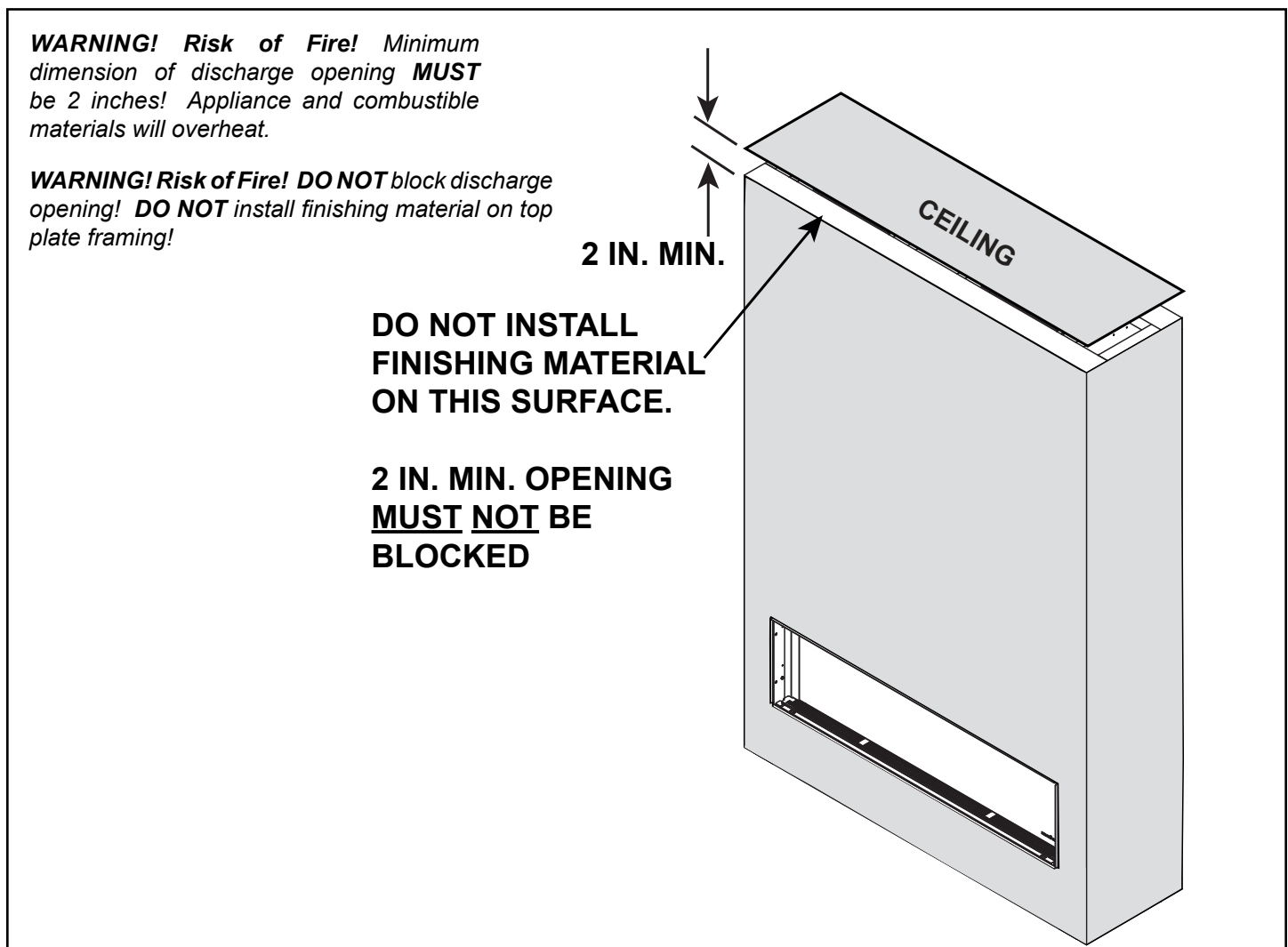


Figure 8.26 Open Top Discharge Finished Wall

The PRIMO model requires electrical power in order to operate the required power vent. If electrical power service is interrupted during operation of this model, the appliance will not operate. **Battery power is not an option on the PRIMO.**

The Passive Heat kit may be installed with HEAT-OUT-PRIMO. A wall switch is required to operate the HEAT-OUT-PRIMO. Refer to the instructions included with the HEAT-OUT-PRIMO kit for more information.

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

2155-204 LED SWITCH

2155-752

2310-211

2273-308

2310-204 THERMIDISC

JUNCTION BOX 110-120 VAC

2310-062 LED'S

RC300 4.5V DC (AAA X 3)

2300-753 JUMPER WIRE

2196-150 PVI MODULE

2166-335 AUX

2196-200 PVI-WIRE HARNESS

2179-300

107-558A MALE/FEMALE WIRE HARNESS

2012-206 JUMPER WIRE

2155-033 JUMPER WIRE

6V TRANSFORMER

2159-310

2206-299 LOCK OUT RESET SWITCH

SEE THROUGH ONLY

PVI-SLP-B OR PVLP-SLP POWER VENT REQUIRED
PVLP-SLP RECOMMENDED

PVLP-SLP RECOMMENDED

PVI-SLP-B VERTICAL TERMINATION ONLY

Heat & Glo • PHFR-PRIMO-48, PHFR-PRIMO-60, PHSI-PRIMO Instructions • 2560-970 Rev. H • 1/23

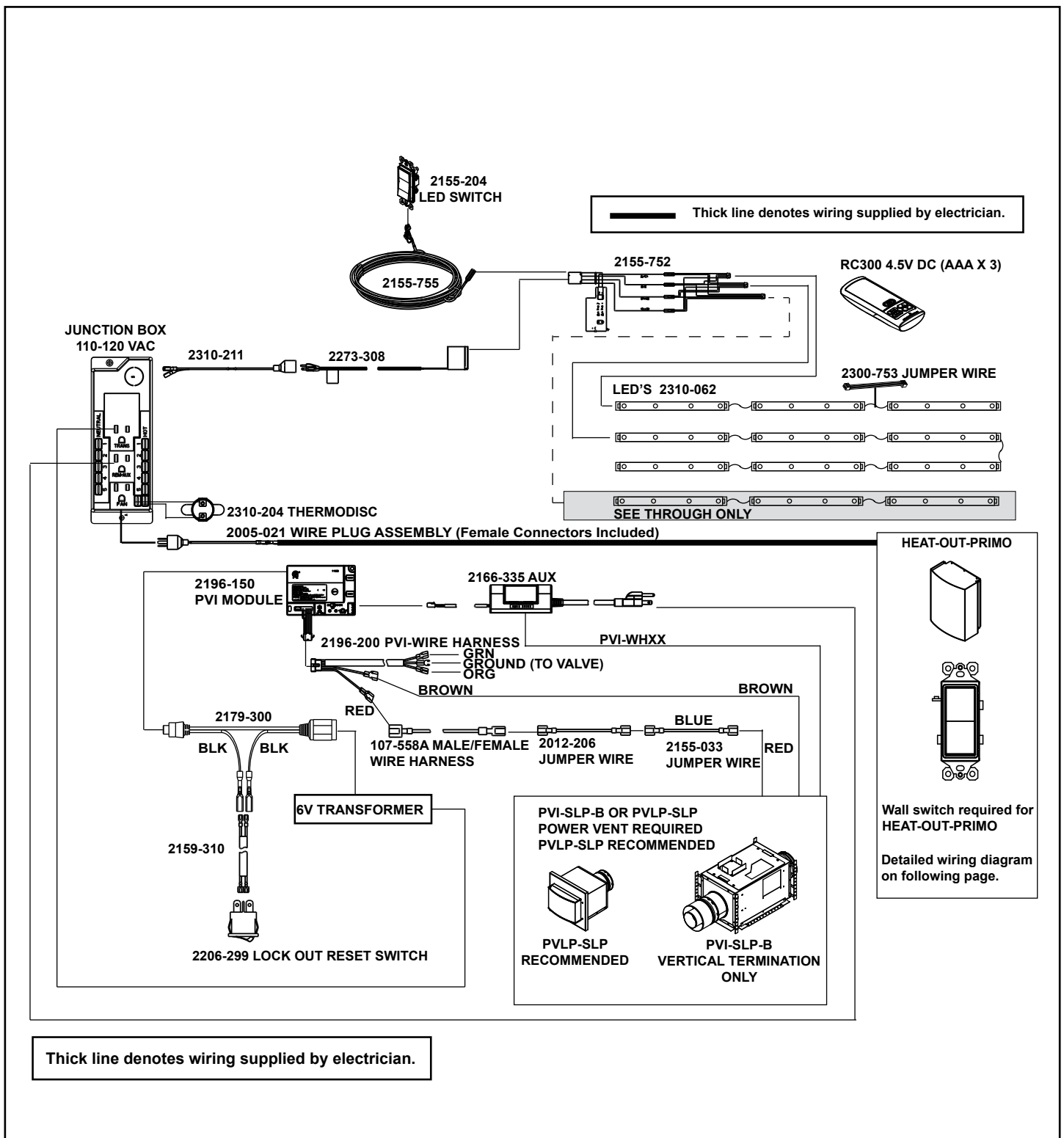


Figure 9.2 Wiring Diagram - PRIMO Passive Heat with HEAT-OUT-PRIMO

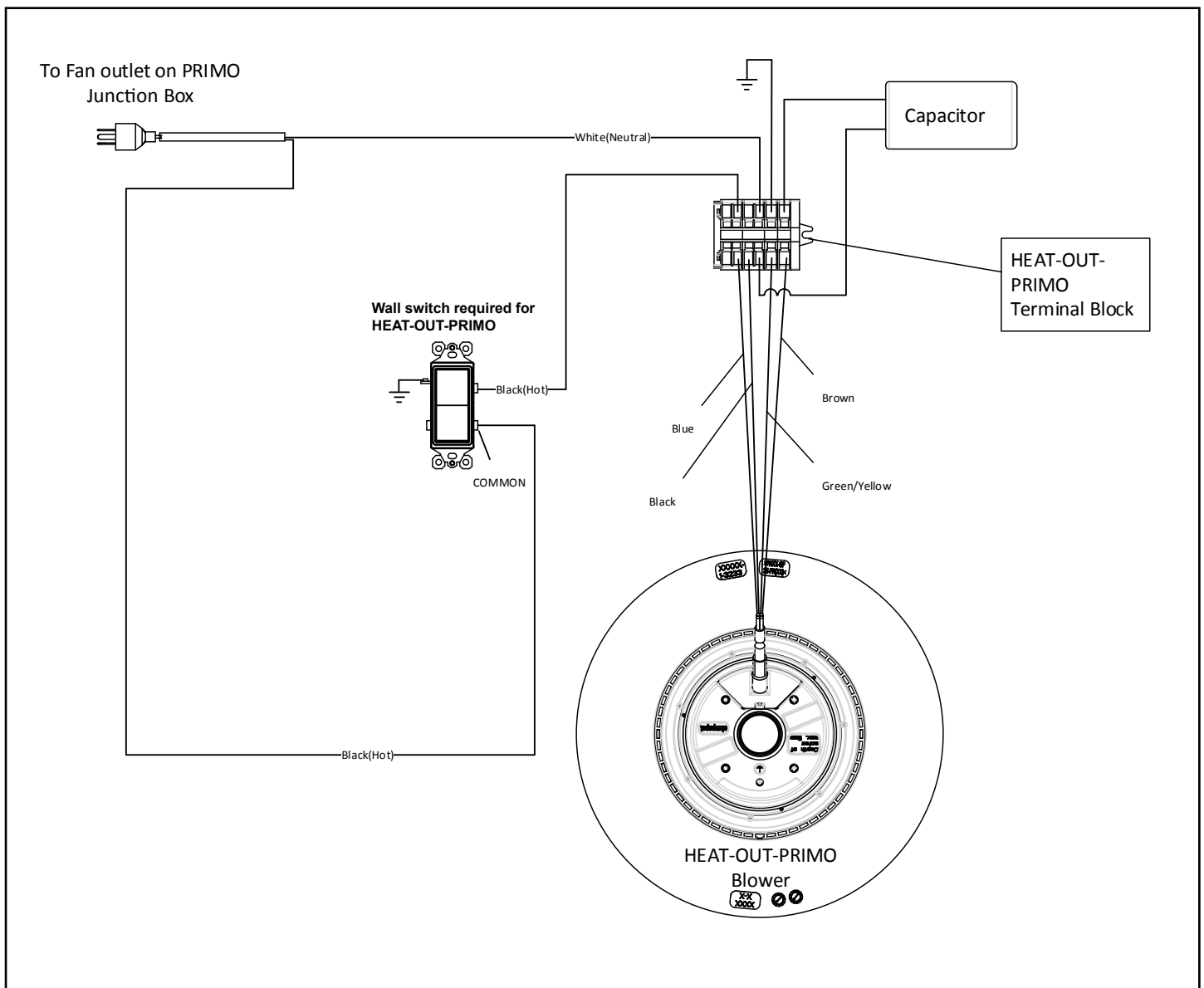


Figure 9.3 Wiring Diagram - Passive Heat with HEAT-OUT-PRIMO (Detailed)

10. Maintenance

Service and maintain the gas fireplace per instructions.
Keep the air register(s) clean and free of any blockage.

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.

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