

## PH-LINEAR

### Models: COSMO-IFT-B Series, RAVE-IFT-B Series, JADE-B, DVLINEAR36, B41IL-AU Series Passive Heat Kit Installation Instructions



Leave this manual with party responsible for use and operation.

**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.


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.

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## Introduction

The Passive Heat (PH-LINEAR) Heat Management System conveys warm air from the fireplace into the same room through either one front discharge slot, two side discharge heat registers or an open top discharge.

Installation of the Passive Heat kit must be done in conjunction with the appliance installation. Installation of this kit **MUST** be performed by a qualified service technician.

**WARNING! Risk of Fire! DO NOT install the Passive Heat (PH-LINEAR) Heat Management System with models that are not approved. Overheating will occur.**

The Passive Heat Trim Kit is also available for installation with the Front Discharge Passive Heat systems and must be purchased separately. Contact your dealer to order the appropriate kit: PH-FRTTRIM-32, PH-FRTTRIM-36 or PH-FRTTRIM-48.

The Passive Heat Trim kit is required with the side discharge Passive Heat system and must be purchased separately. Contact your dealer to order the PH-SIDETRIM kit.

Follow instructions included with the trim kit to complete installation of the Passive Heat system.

The 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 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.

## Preparation

Plan the location of the appliance.

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

### **CAUTION! Risk of Burns!**

- The fireplace should be turned off and cooled before kit is installed.
- Shut off gas supply.

**Power Vent Option**

If an optional power vent will be installed in conjunction with the Passive Heat Kit (PH-LINEAR), Hearth & Home Technologies recommends the PVLP-SLP power vent option. If the application does not allow for the PVLP-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.

The Passive Heat Kit is not compatible with a Smart-Wall™ TV Kit , GFK-160A, GFK-240 or other fan.

For AU models, PVLP-SLP-AU is approved to be used in conjunction with the Passive Heat Kit.

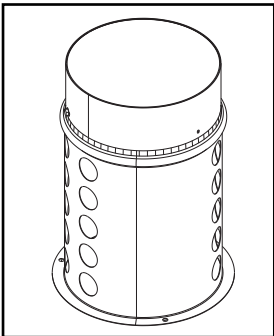
**Kit Contents**

Verify and remove contents from packaging before beginning installation. See Figure 1.

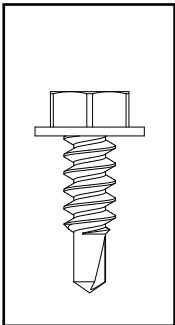
**Contents of PH-LINEAR Kit**

**PH-LINEAR**

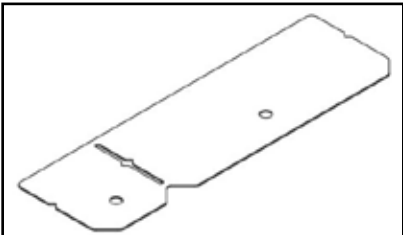
FRONT/OPEN TOP DISCHARGE KIT		
DESCRIPTION	SERVICE PART NO.	QTY
Passive Heat Adapter	2617-302	2
Screw	030-860/8	1
Passive Heat Template	2617-137	4



**2617-302**  
**Passive Heat Adapter**



**030-860/8**  
**Screw**



**2617-137**  
**Passive Heat Template**

Figure 1 Passive Heat Kit Components

## Clearances

**WARNING! Risk of Fire! Maintain clearances to combustibles as specified.**

Ensure all clearances are maintained.

- Maintain minimum distance from top of appliance opening to the room ceiling. Refer to the figures in the Framing section of this instruction.
- An open space, or “cavity,” is allowed up to three inches above the top of the passive heat discharge opening. A chase ceiling is required when the open space “cavity” exceeds three inches above the discharge opening. Construct the false ceiling from material such as metal, drywall or plywood.

## Clearance - Sprinkler to Passive Heat

Figure 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 in. (914 mm) or greater, then there is no 36 in. (914 mm) 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 in. (914 mm) top, 18 in. (457 mm) sides and 6 in. (152 mm) bottom.
- **DO NOT** install a sprinkler head inside a chase that is set up for passive heat.

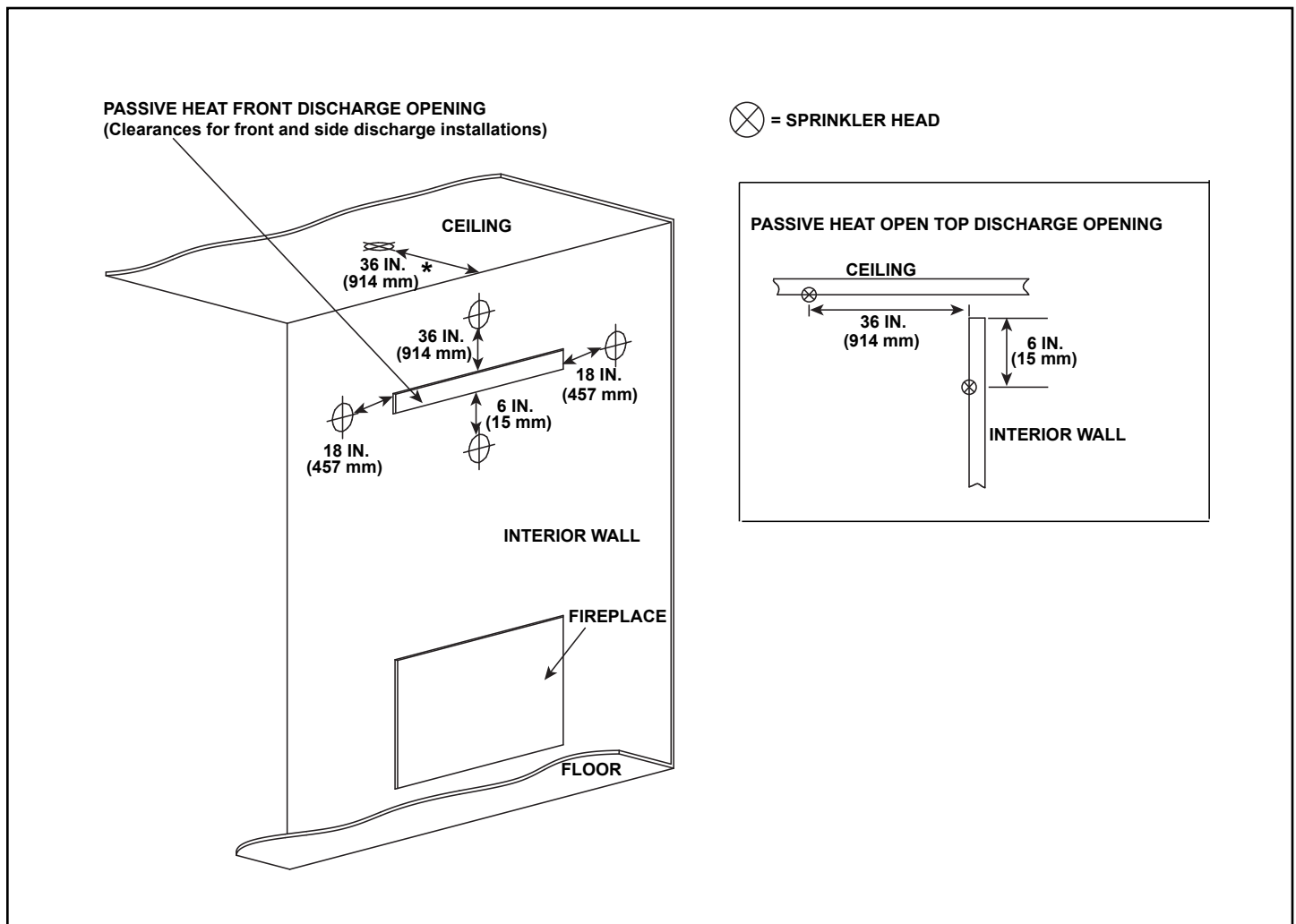


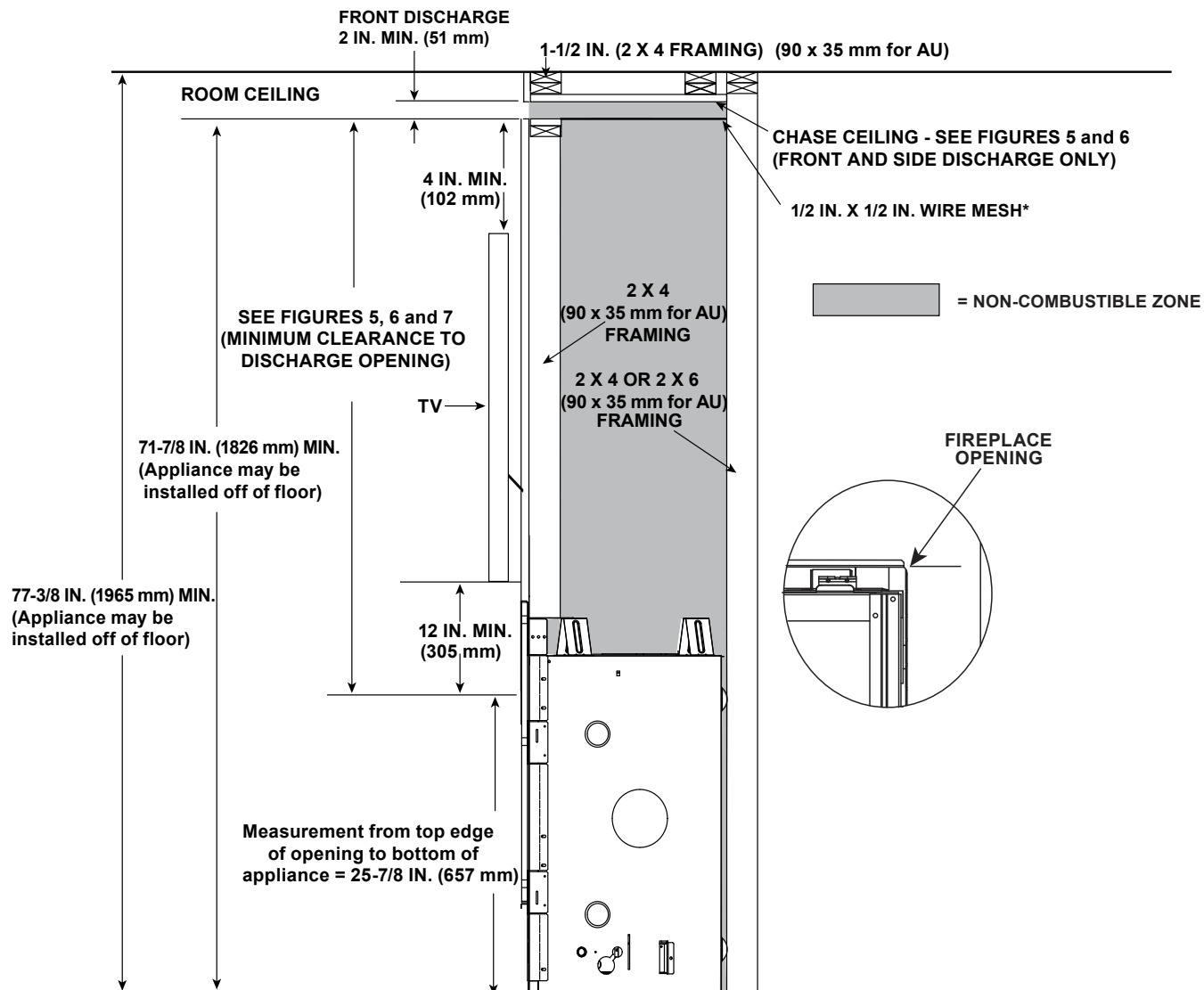
Figure 2

## Good Faith Guidelines for TV Installations Above a Fireplace with Passive Heat Option

This diagram specific to these models:

COSMO32-IFT-B	RAVE32-IFT-B	JADE32IN-B
COSMO36-IFT-B	RAVE36-IFT-B	JADE42IN-B
COSMO42-IFT-B	RAVE42-IFT-B	JADE42IL-B
DVLINEAR36	B41L-AU	

**WARNING! Risk of Fire!** Mesh screen required on bottom of discharge opening when discharge opening is greater than 3 in. (76 mm). Secure mesh to top of framing.



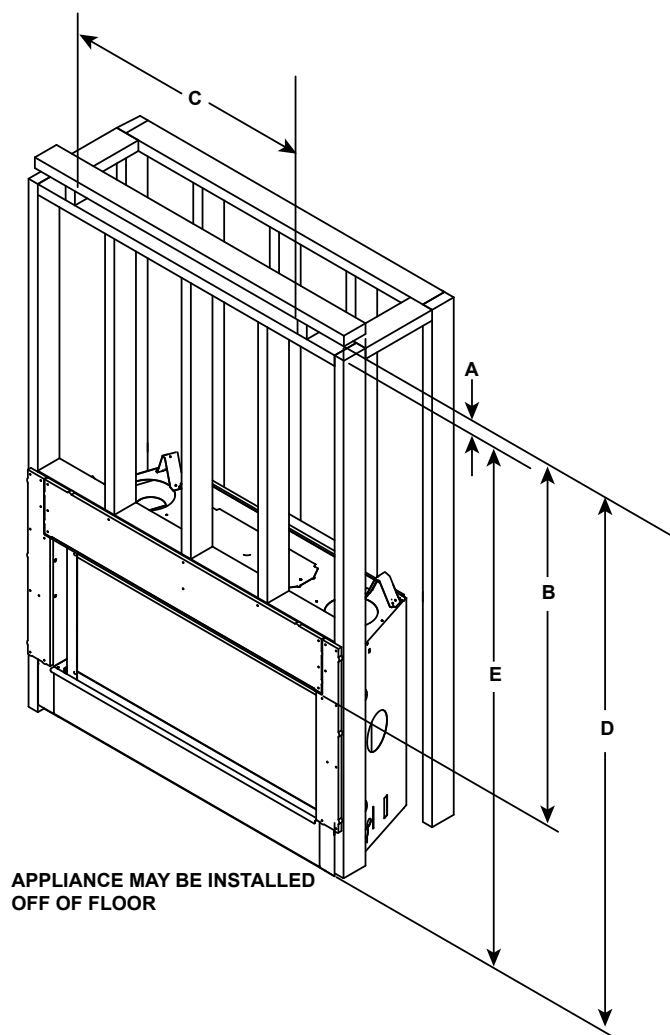
\* Wire mesh required for front discharge or open top discharge passive heat installations with discharge opening of 3 in. (76 mm) or greater.

**NOTE:** The TV installation requirements are the same regardless of whether the Passive Heat kit is installed with a top discharge, side discharge or open top discharge.

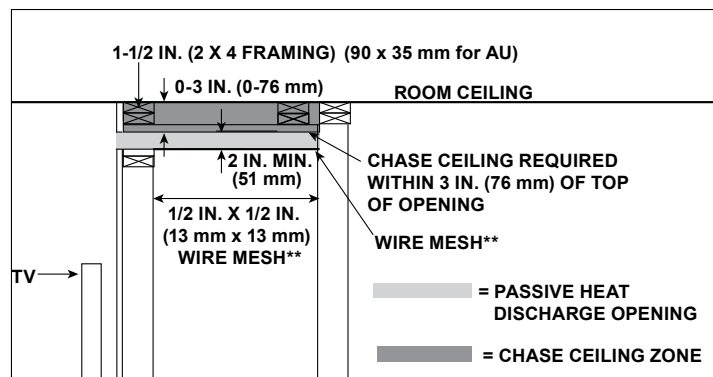
Figure 3

## Framing Dimensions- Passive Heat Front Discharge (PH-LINEAR)

**Front Discharge:** Air conveyed into the room through one front discharge slot.



### CHASE DETAIL



**WARNING! Risk of Fire!** Wire mesh required on bottom of discharge opening (Dimension A) when finished discharge opening is greater than 3 in. (76 mm). Secure mesh to top of framing.

### FRONT DISCHARGE MINIMUM FRAMING DIMENSIONS

		A		B	C	D	E
		TRIM KIT* INSTALLED (PH-FRTTRIM-XX)	NO TRIM KIT**				
		Required Height of Discharge Opening	Height of Discharge Opening				
COSMO32-IFT-B RAVE32-IFT-B JADE32IN-B	Inches	3-1/2	2	48	31-1/8	73-7/8	71-7/8
	millimeters	89	51	1219	791	1876	1826
COSMO36-IFT-B RAVE36-IFT-B DVLINER36 B41L-AU	Inches	3-1/2	2	48	36-1/2	73-7/8	71-7/8
	millimeters	89	51	1219	927	1876	1826
COSMO42-IFT-B RAVE42-IFT-B JADE42IN-B JADE42IL-B	Inches	3-1/2	2	48	42-1/2	73-7/8	71-7/8
	millimeters	89	51	1219	1080	1876	1826

\* Measurement for Trim Kit = 3-1/2 in. (89 mm) + Additional Finishing Material Thickness

\*\* Measurement without Trim Kit = 2 in. (51 mm) + Additional Finishing Material Thickness. If finished discharge opening height is greater than 3 in. (76 mm), wire mesh is required.

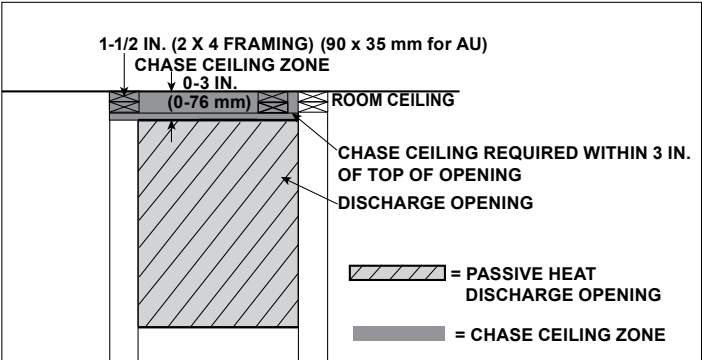
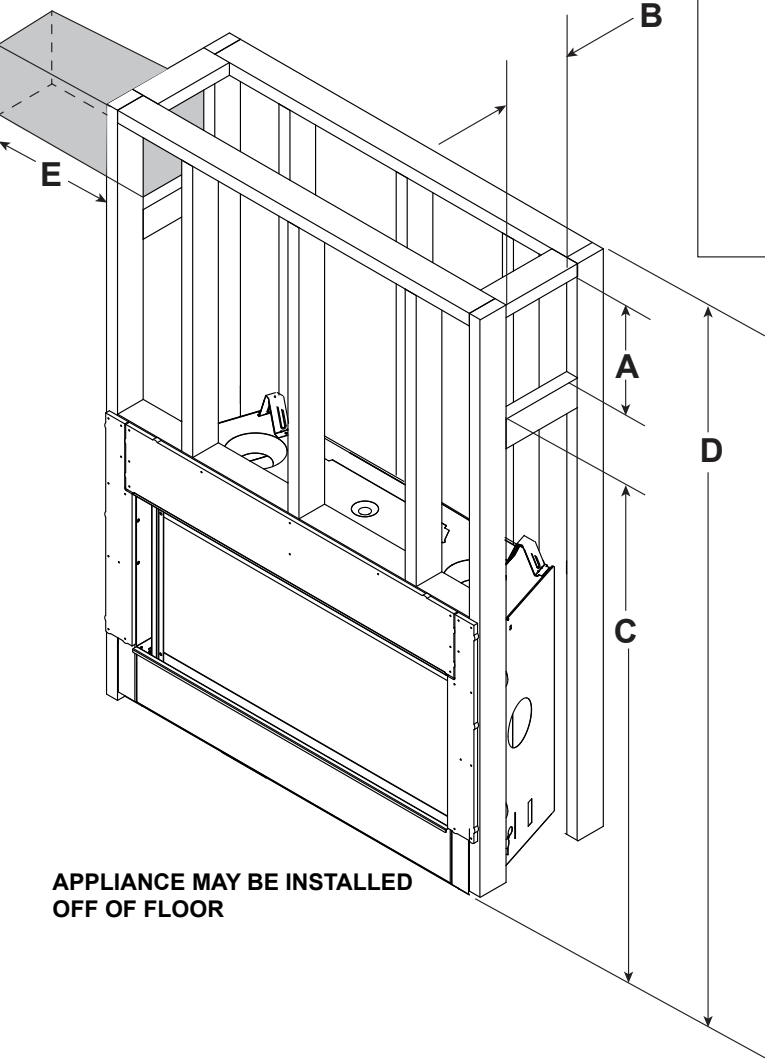
Figure 4 Passive Heat Front Discharge Framing Dimensions With and Without a Trim Kit

Framing Dimensions - Passive Heat Side Discharge (PH-LINEAR)

Side Discharge: Air conveyed into the room through two discharge registers, one on each side of appliance.

CHASE DETAIL

**WARNING! Risk of Fire! DO NOT** place combustible objects or combustible materials in non-combustible zone. Appliance and combustible materials will overheat.



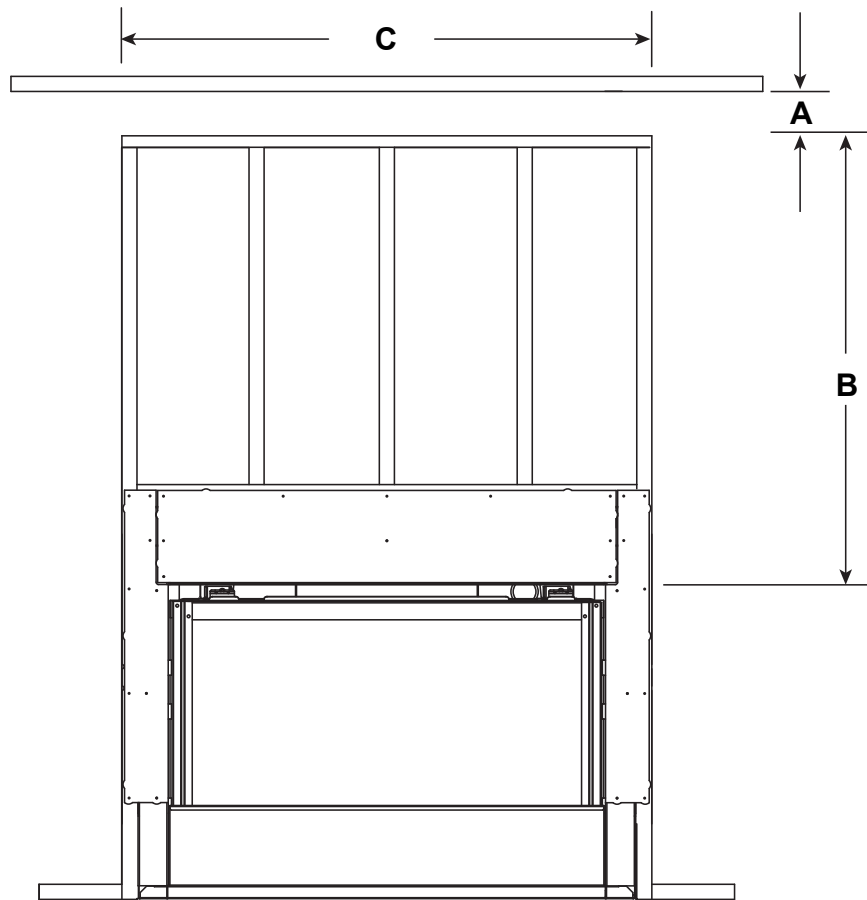
SIDE DISCHARGE FRAMING DIMENSIONS						
		A	B	C	D	E
		Height of Discharge Opening	Width of Discharge Opening	Minimum Clearance to Discharge Opening From Bottom of Appliance	Minimum Clearance Bottom of Appliance to Ceiling	Minimum Clearance to Combustible Materials
COSMO32-IFT-B RAVE32-IFT-B JADE32IN-B	Inches	12-1/4	8-3/4	63-5/8	77-3/8	18
COSMO36-IFT-B RAVE36-IFT-B DVLINEAR36 B41L-AU COSMO42-IFT-B RAVE42-IFT-B JADE42IN-B/ JADE42IL-B	millimeters	311	222	1616	1965	457

Figure 5 Passive Heat Side Discharge Framing Dimensions

## Framing Dimensions - Passive Heat Open Top Discharge (PH-LINEAR)

**Open Top Discharge:** A minimum of three sides must be open allowing air to be conveyed into the room.

**WARNING! Risk of Fire!** Mesh screen required on bottom of discharge opening when discharge opening is greater than 3 in. (76 mm). Secure mesh to top of framing.



OPEN TOP DISCHARGE MINIMUM FRAMING DIMENSIONS				
		A*	B	C
		Height of Discharge Opening	Clearance to Discharge Opening	Width of Discharge Opening
COSMO32-IFT-B RAVE32-IFT-B JADE32IN-B	Inches	2	48	40
	millimeters	51	1219	1016
COSMO36-IFT-B RAVE36-IFT-B DVLINEAR36 B41L-AU	Inches	2	48	45
	millimeters	51	1219	1143
COSMO42-IFT-B RAVE42-IFT-B JADE42IN-B JADE42IL-B	Inches	2	48	52
	millimeters	51	1219	1321

\* Mesh screen required for front discharge or open top discharge passive heat installations with discharge opening of 3 in. (76 mm) or greater.

**Figure 6** Passive Heat Minimum Framing Dimensions Open Top Discharge

## Adapter Installation - Front, Side and Open Top Discharge

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

1. Remove rear standoffs and discard. See Figure 7.
2. Remove both top knockouts from outer wrap as shown in Figure 7. Discard knockout piece and ensure no other material or debris is blocking the hole created by removing the knockout.
3. Center adapter over opening with the solid portion facing the front of the appliance. Attach both adapters to appliance by installing three screws per adapter. See Figure 8.

**Note:** If installing an additional Heat Management System, refer to the instructions included with the kit for further installation instructions.

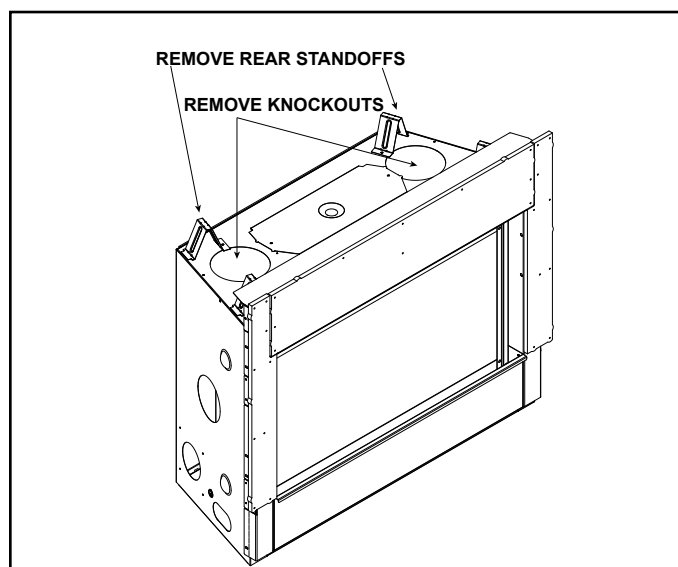


Figure 7 Remove Knockouts

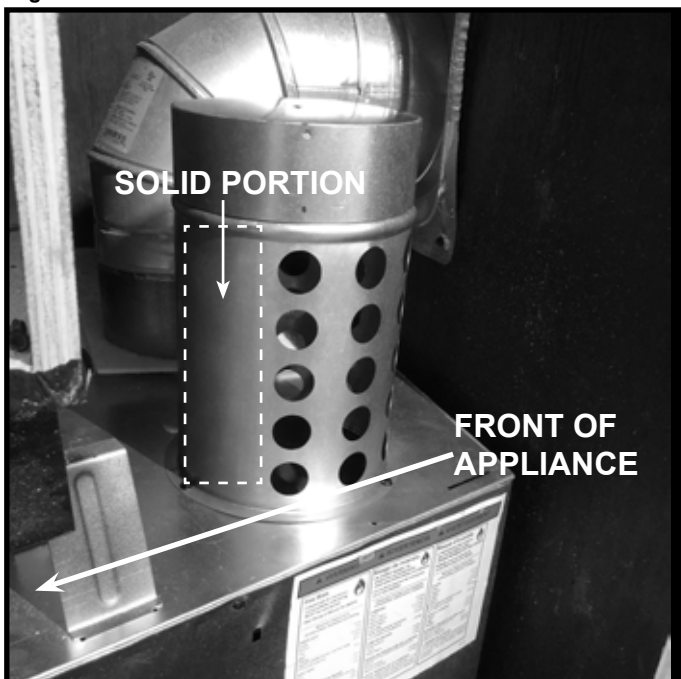


Figure 8 Attach Adapters

## Passive Heat Template - Front and Side Discharge

Install the passive heat templates to prevent finishing material from being installed over passive heat discharge openings. Use two templates for front discharge and four templates for side discharge.

1. Hand bend templates as shown in Figure 9.
2. Place one template into the top left corner of the discharge opening as shown in Figure 10. Align the outside edge of the framing with the notch in the template as shown in Figure 11. Attach to framing using wood screws.
3. Place the second template into the bottom right corner and attach using the same method as in Step 2. If installing templates on framing for a side discharge kit, repeat the process for the additional two templates on the other side discharge opening.
4. Once the wall finishing material has been installed, remove the templates and discard. After the templates have been removed, the trim kit, register, or other finishing options may be installed.

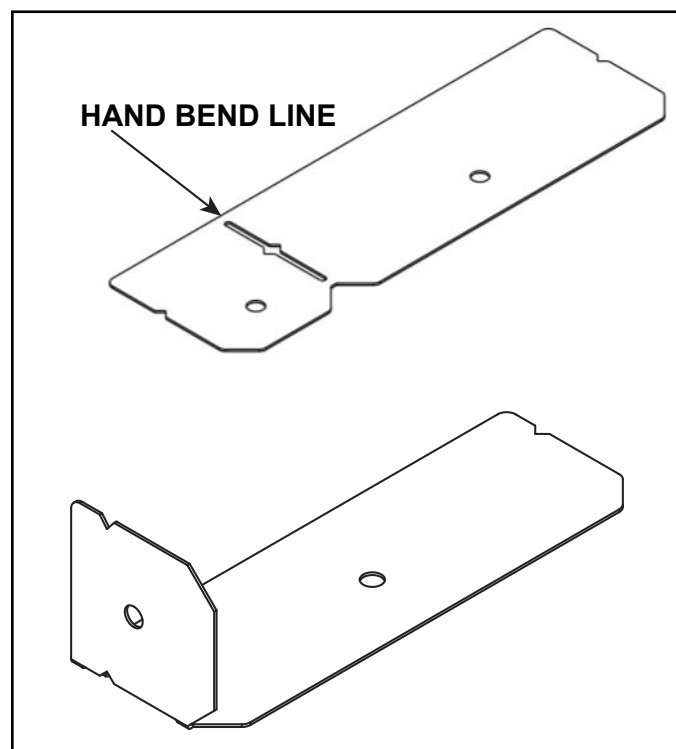
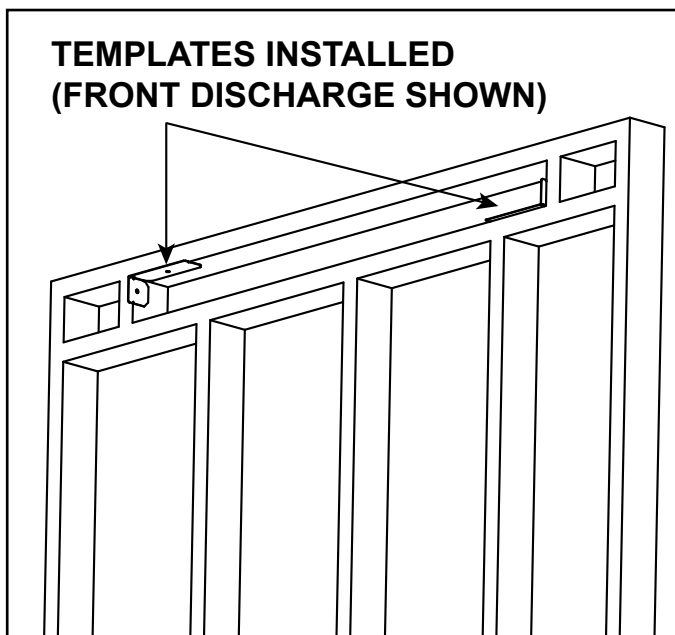
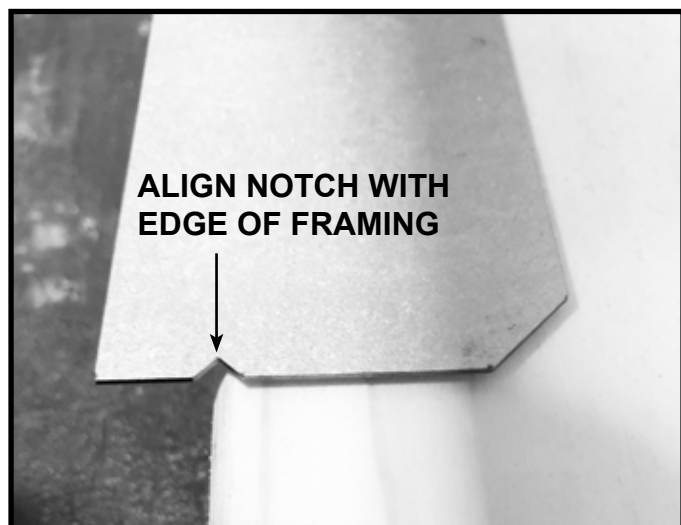


Figure 9 Hand Bending the Template





**Figure 10 Template Installation**



**Figure 11 Template Notch Alignment**

## Finishing

1. Apply wall sheathing material, such as drywall up to 1/2 in. (13mm) thick up to the edge of the discharge opening.

**WARNING! Risk of Overheating! DO NOT** apply wall sheathing past the edge of discharge opening or finishing templates. Remove finishing templates before appliance operation. Overheating of appliance and combustible materials will occur.

### 2. Facing Material with Front Trim Kit (PH-FRTTRIM)

1 Inch Thick or Less: When using Non-Combustible facing material in this thickness range, the Overlap Fit method may be used. Place facing materials up to the edge of the discharge opening and install trim kit as instructed. Facing must not interfere with the air flow through the trim kit.

Greater than 1 Inch: Non-Combustible facing material in this thickness range must use the Inside Fit method. Place facing materials up to 1/2 in. (13mm) away from the edge of the trim kit to allow for proper removal of the vent cover. Install trim kit as instructed. Consult the appliance Installation Manual to determine maximum facing material thickness.

### 3. Facing Material with Side Discharge (PH-SIDETRIM)

1 Inch Thick or Less: When using Non-Combustible facing material in this thickness range, the Overlap Fit method may be used. Place facing materials up to the edge of the discharge opening and install register covers as instructed. Facing must not interfere with the air flow through the trim kit.

Greater than 1 Inch: Non-Combustible facing material in this thickness range must use the Inside Fit method. Place facing materials up to the edge of the register covers. Install register covers as instructed. Consult the units Installation Manual to determine maximum facing material thickness.

4. Install trim kit (PH-FRTTRIM or PH-SIDETRIM) as instructed.

**Side Discharge:** The PH-SIDETRIM kit is required to complete installation.

**Front Discharge:** The PH-FRTTRIM kit is an optional finishing method. Other standard finishing methods may be used as well.

## Painting

### Side Discharge:

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

### Front Discharge and Open Top Discharge:

The location of the Passive Heat discharge opening could allow for venting and other construction materials to be visible. It is recommended to paint the vent pipe, firestop, and other visible construction materials, as shown in Figure 12 using a high temperature paint with a minimum of 300 °F (149 °C) continuous exposure rating. Hearth & Home Technologies recommends using black touch up paint (part number TUP-GBK-12) available from your Hearth & Home Technologies dealer.

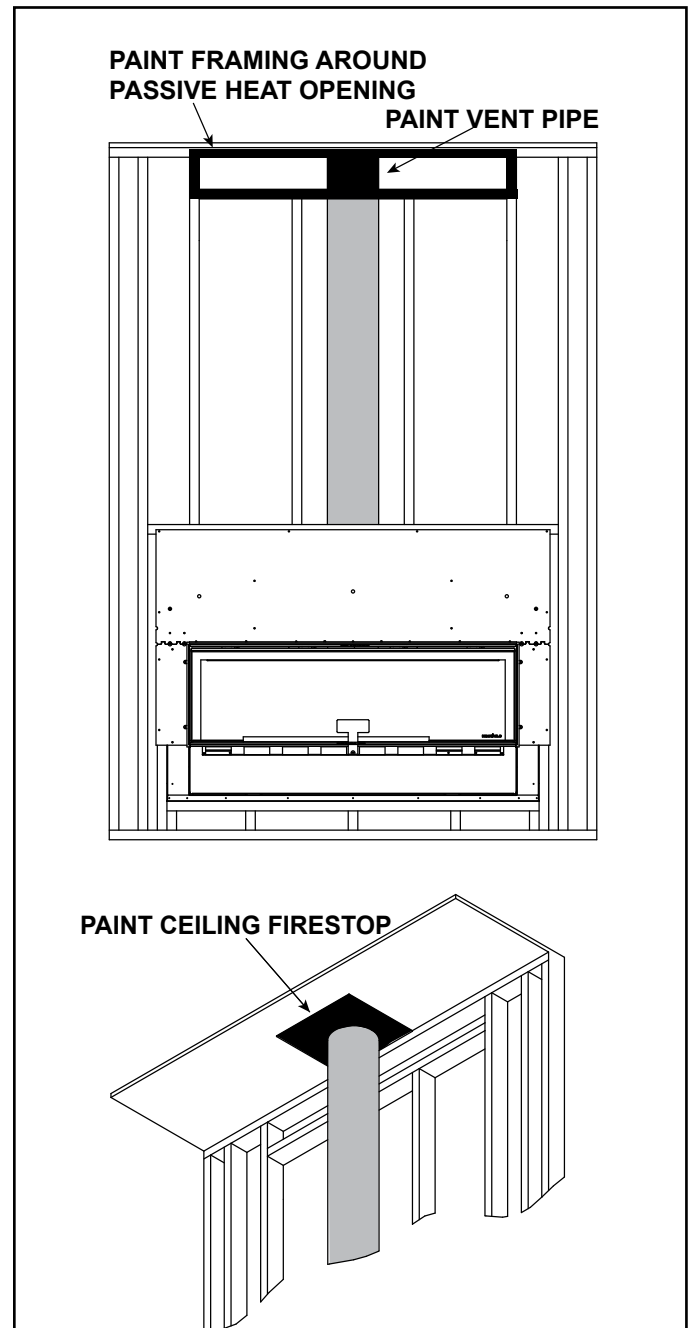


Figure 12 Painting Visible Components

## INSIDE FIT

## OVERLAP FIT

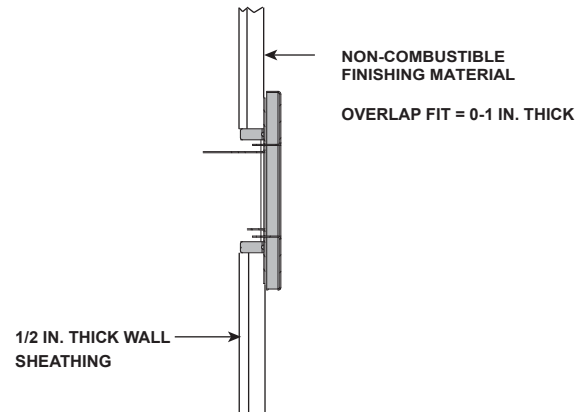
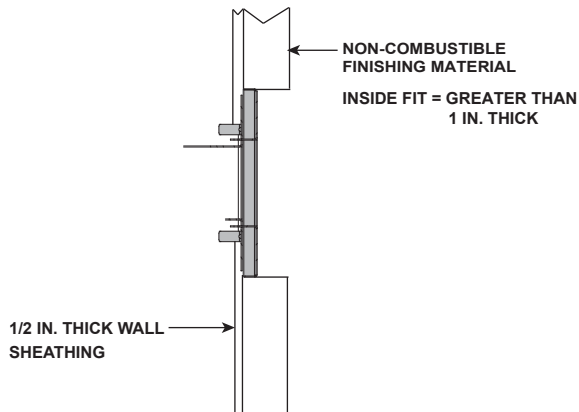
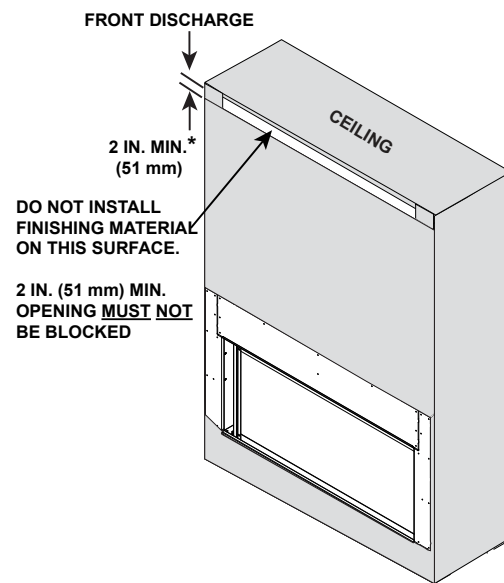
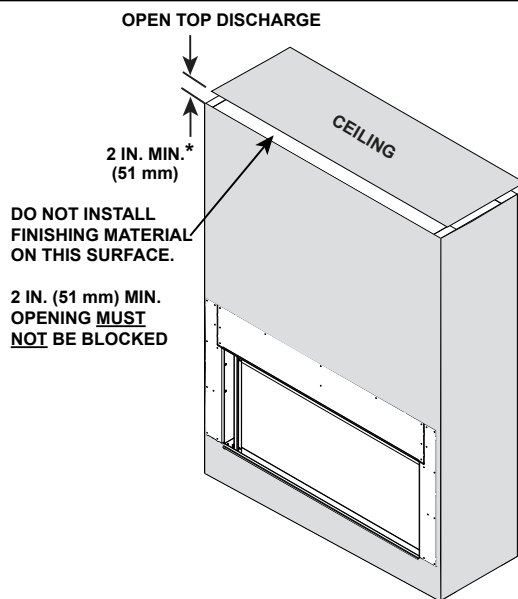
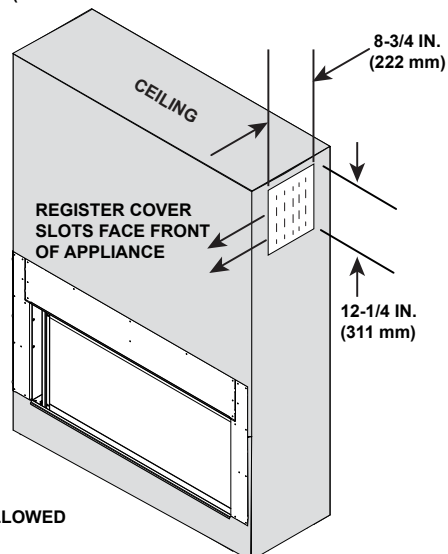


Figure 13 Finishing Material Installed



\* = Mesh screen required for front discharge or open top discharge passive heat installations with discharge opening of 3 in. (76 mm) or greater.

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



 = COMBUSTIBLE MATERIAL ALLOWED

Figure 14 Finishing Material Installed

## Mantel Projections

Refer to the appliance Installation Manual.

### Installation of Passive Heat with Other Optional Heat Management Systems

There are other heat management options available for use with the COSMO-IFT-B, RAVE-IFT-B, JADE-B, DVLINEAR36 and B41L-AU models. Consult the appliance manual for compatible options.

**NOTICE:** Cap must be removed from adapter prior to attaching venting for the heat management kit. Heat-Zone®-Gas and Heat-Out-Gas system will not function properly if cap remains attached.

#### Passive Heat Kit Installed with Optional Heat-Zone-Gas (Heat-Zone®-240V for B41L-AU)

- Only one Heat-Zone-Gas kit may be installed and used in conjunction with the Passive Heat Heat Management System.

**WARNING! Risk of Overheating!** Be sure the venting does not extend past the rib on Passive Heat adapter. If venting or insulation is blocking holes in the Passive Heat adapter overheating of chase could occur.

- Remove cap from the Passive Heat adapter and discard the cap. The venting for the Heat-Zone-Gas kit will attach directly on top of the Passive heat adapter. See Figure 15.
- Refer to the instructions included with the Heat-Zone-Gas kit for more information.

#### Passive Heat Kit Installed with Optional Heat-Out-Gas (Not available with B41L-AU)

- One Heat-Out-Gas kit may be installed and used in conjunction with the Passive Heat Heat Management System.

**WARNING! Risk of Overheating!** Be sure the venting does not extend past the rib on Passive Heat adapter. If venting or insulation is blocking holes in the Passive Heat adapter overheating of chase could occur.

- Remove cap from the Passive Heat adapter and discard the cap. The venting for the Heat-Out-Gas kit will attach directly on top of the Passive heat adapter. See Figure 16.
- Refer to the instructions included with the HEAT-OUT-GAS kit for more information.

The Passive Heat Kit is not compatible with the Smart-Wall™ TV Kit, GFK-160A or any other fan.

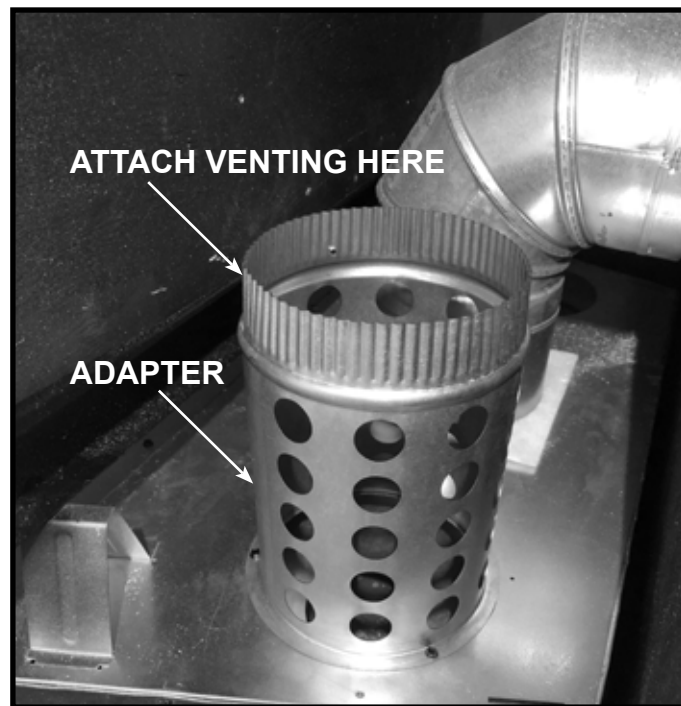


Figure 15 Adapter Prepared for Venting to be Attached

## Maintenance

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

Please contact your Hearth & Home Technologies dealer with any questions or concerns.

For the location of your nearest Hearth & Home Technologies dealer, please visit [www.hearthnhome.com](http://www.hearthnhome.com).

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