

Cool Wall Vent Kit Installation Instructions

Cool Wall vent kits AA-11-03781, AA-11-03782 and AA-11-04062 Each vent kit must be used with AA-11-04060.

Approved for use with all Mendota ZC Fireplace models, except M27.

NOTE: This kit must be installed by a qualified installer. These instructions are to be used in conjunction with the fireplace installation manual to insure proper installation.

These kits are designed to use natural convection to transfer warm air from the front of the fireplace to a different location. The kits allow the warm air from the fireplace to enter the room farther up on the fireplace chase front wall or side wall. This results in much lower breastplate, mantel and wall temperatures above the top convection chamber of the fireplace.

fire-parts.com

REQUIRED TOOLS FOR INSTLALLATION

- Phillips Screw Driver
- Flat Screw Driver
- 1/4" Hex Head Driver
- 5/16" Hex Head Driver
- Drill or Impact Driver



Table of Contents

REQUIRED TOOLS FOR INSTEALLATION	1
GENERAL INFORMATION	3
APPLICATION	3
USE OF FIREPLACE FANS WITH THE COOL WALL KIT	3
KIT CONTENTS	4
AA-11-03781 – 48" X 2" VENT BOX AND TRIM KIT	
AA-11-03782 – 36" X 2" VENT BOX AND TRIM KIT	5
AA-11-04062 – DUAL 12" X 4" VENT BOX KIT	
PLANNING FOR VENT LOCATION	
AESTHETIC CONSIDERATIONS	7
AA-11-03781 – 48" X 2" VENT BOX AND TRIM KIT	
AA-11-03782 – 36" X 2" VENT BOX AND TRIM KIT	8
AA-11-04062 – DUAL 12" X 4" VENT BOX KIT	
MINIMUM FRAMING DIMENSIONS	9
12" X 4" DUAL VENT BOX AND TRIM KIT	9
VENT HEIGHT ABOVE FIREPLACE	10
HORIZONTAL OFFSET	10
CLEARANCE TO FIREPLACE DIRECT VENT	
INSTALLATION INSTRUCTIONS	12
PREPARING FIREPLACE FOR INSTALLATION OF KIT	12
PREPARING VENT COMPONENTS FOR INSTALLATION	13
INSTALLING THE VENT	14
FINISHING AROUND VENT BOX AND INSTALLING VENT TRIM/GRILL	18



GENERAL INFORMATION

APPLICATION

These kits are designed to use natural convection to transfer warm air from the front of the fireplace to a different location. The kits allow the warm air from the fireplace to enter the room farther up on the fireplace chase front wall or side wall. This results in much lower breastplate, mantel and wall temperatures above the top convection chamber of the fireplace.

Three different Cool Wall vent kits are available. A 48" x 2" vent, a 36" x 2" vent kit and a dual 12" x 4" vent kit.

The 48" and 36" wide vent kits are intended to be used on the chase front facing wall above the fireplace. It is recommended to use the 48" vent when installing a Cool Wall kit with a fireplace that has a glass frame that is close to or wider than 48". The dual 12" x 4" vent kit is intended for installation on side walls. However, it can also be installed with the vents located side by side on the front facing wall.

WARNING: The Cool Wall vent must be located in the same room as the fireplace. The Cool Wall kit cannot be used to move warm air to another room. The Cool Wall vents are approved for horizontal discharge only. They cannot be located in a ceiling or any other unapproved application.

WARNING: The Cool Wall vent can be located at a minimum of 6 inches below a ceiling. When the Cool Wall vent is located this close to the ceiling, staining or streaking may occur on light colored ceilings due to dust in the air flow. To reduce the possibility of staining or streaking locate the Cool Wall vent farther down from the ceiling.

WARNING: Do not place any objects in front of or on top of the Cool Wall vent openings. The air discharged from the Cool Wall vent is hot. Never block the Cool Wall vent opening.

USE OF FIREPLACE FANS WITH THE COOL WALL KIT

Mendota fireplaces come with warm air fans included. When a Cool Wall kit is installed on the fireplace and the fans are turned on the wall temperatures above the fireplace will increase. The fans will force some of the heated air out the front of the top convection opening on the fireplace. Thus, increasing the temperatures on the breastplate, mantel and wall directly above the convection opening on the fireplace. Increased temperatures on the breastplate, mantel and wall above the fireplace when the warm air fans are running is normal and safe.

Page 3 of 18 85-03-01096



KIT CONTENTS

AA-11-03781 - 48" X 2" VENT BOX AND TRIM KIT

This kit contains the following parts.

his kit contains the following PART NUMBER	DESCRIPTION	QTY	
HA-118-00001	48" X 2" VENT BOX	1	
HA-117-00005	VENT GUIDE BOTTOM	1	
HA-117-00004	VENT GUIDE TOP	1	
HA-117-00006	SUPPORT BRACKET	2	
HA-118-00002	48" X 2" VENT TRIM	1	
50-01-00102	#8 X ½" SELF-DRILLING SCREW	30	•
THE	FOLLOWING ARE INCLUDED IN THE AA-11	-04060	KIT.
45-01-00422	8" STARTER COLLAR	2	
45-01-00421	8" X 24" VENT PIPE	2	
45-01-00426	8" FLEX ALUMINUM VENT	25 FEET	
HA-119-00268	COLLAR CLIPS	4	
50-06-00162	8" HOSE CLAMP	4	

Page 4 of 18 85-03-01096



AA-11-03782 – 36" X 2" VENT BOX AND TRIM KIT

This kit contains the following parts.

PART NUMBER	DESCRIPTION	QTY	
HA-118-00003	36" X 2" VENT BOX	1	
HA-117-00015	VENT GUIDE BOTTOM	1	
HA-117-00014	VENT GUIDE TOP	1	
HA-117-00006	SUPPORT BRACKET	2	
HA-118-00004	36" X 2" VENT TRIM	1	
50-01-00102	#8 X ½" SELF-DRILLING SCREW	30	*
THE	FOLLOWING ARE INCLUDED IN THE A	A-11-0	4060 KIT.
45-01-00422	8" STARTER COLLAR	2	
45-01-00421	8" X 24" VENT PIPE	2	
45-01-00426	8" FLEX ALUMINUM VENT	25 FEET	
HA-119-00268	COLLAR CLIPS	4	
50-06-00162	8" HOSE CLAMP	4	

Page 5 of 18 85-03-01096



AA-11-04062 – DUAL 12" X 4" VENT BOX KIT

This kit contains the following parts.

PART NUMBER	DESCRIPTION	QTY	
HA-118-00005	12 X 4 VENT BOX	2	
HA-117-00020	VENT GUIDE BOTTOM	2	
HA-117-00019	VENT GUIDE TOP	2	
HA-117-00006	SUPPORT BRACKET	4	
65-06-01453	12" X 4" SIDEWALL GRILL	2	
50-01-00102	#8 X 1/2" SELF-DRILLING SCREW	50	
THE FO	OLLOWING ARE INCLUDED IN THE AA-11-04	060 KIT	
45-01-00422	8" STARTER COLLAR	2	0
45-01-00421	8" X 24" VENT PIPE	2	
45-01-00426	8" FLEX ALUMINUM VENT	25 FEET	
HA-119-00268	COLLAR CLIPS	4	
50-06-00162	8" HOSE CLAMP	4	

Page 6 of 18 85-03-01096



PLANNING FOR VENT LOCATION

AESTHETIC CONSIDERATIONS

You can choose form three different vent box outlet shape designs. Chose the vent box and trim kit that will look best when installed with your fireplace and room décor.

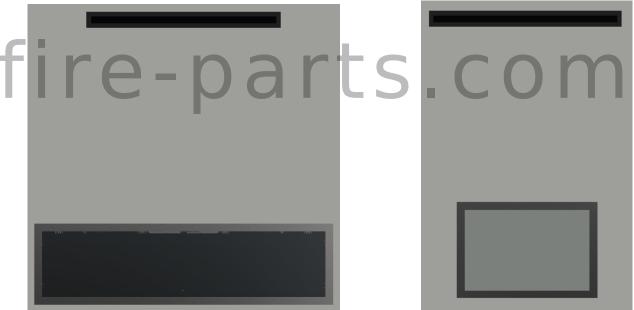
AA-11-03781 – 48" X 2" VENT BOX AND TRIM KIT

This vent box and trim are designed to be installed above the fireplace. The vent box has a simple slot opening that is 48" wide and 2" tall. The vent box and trim come painted black but can be repainted to match room décor if desired. It is recommended that this 48" vent box be used with fireplaces that have a glass width of close to 48" or more. However, it can also be used on smaller fireplace if desired. For comparison the drawings below show the 48" vent box and trim installed over a ML72 fireplace and a FV34 fireplace.

ATTENTION: When installing this vent box kit over smaller fireplaces the minimum chase framing dimensions will need to be increased to accommodate the vent. Be sure to understand all framing requirements of both the fireplace and vent box and trim kit before installation.

INSTALLED WITH ML72 FIREPLACE

INSTALLED WITH FV34 FIREPLACE



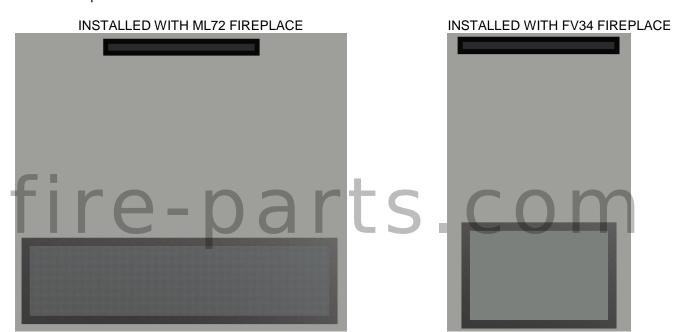
Page 7 of 18 85-03-01096



<u>AA-11-03782 – 36" X 2" VENT BOX AND TRIM KIT</u>

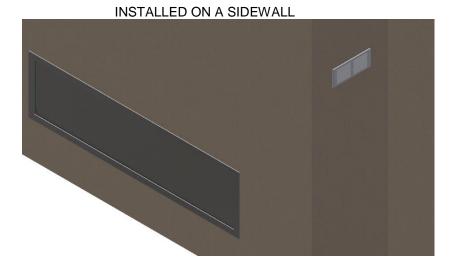
This vent box and trim kit is designed to be installed above the fireplace. The vent box has a simple slot opening that is 36" wide and 2" tall. The vent box and trim come painted black but can be repainted to match room décor if desired. It is recommended that this 36" vent box is used with fireplaces that have a glass width less than 48". However, it can also be used on any fireplace if desired. For comparison the drawings below show the 36" vent box and trim installed over a ML72 fireplace and a FV34 fireplace.

ATTENTION: When installing this vent box and trim kit over smaller fireplaces the minimum chase framing dimensions will need to be increased to accommodate the vent. Be sure to understand all framing requirements of both the fireplace and vent box and trim kit before installation.



<u>AA-11-04062 – DUAL 12" X 4" VENT BOX KIT</u>

This dual vent box and trim kit is designed to be installed on a chase side wall. The dual vent box and trim kit can also be installed above the fireplace on the front wall. The vent box and trim kit can be used with any fireplace. This vent box and trim kit comes with two vent boxes that are each 12" wide and 4" tall. When installed the vent boxes are finished with a louvered vent cover. The louvered cover comes painted white but can be repainted to match the room's décor if desired. The drawings below show how this kit would look like installed on a chase side or front wall.





Page 8 of 18 85-03-01096

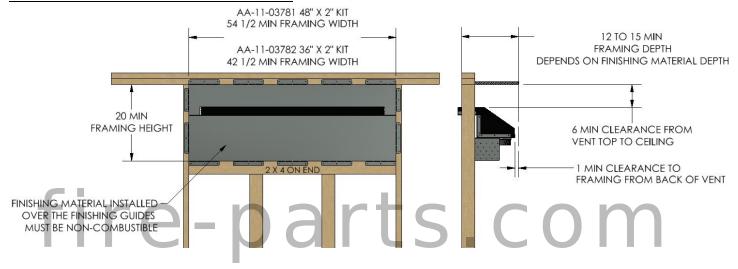


MINIMUM FRAMING DIMENSIONS

In addition to these dimensions, consult the installation manual for the fireplace that the vent will be installed with. The minimum framing dimensions may need to be increased to accommodate the fireplace or vent kit. Be sure to understand all factors that will affect the placement of the fireplace and these vent kits before beginning construction.

NOTE: The vent guides for each vent box are designed to insure clearance to combustible material is meet. The framing guides will locate the vent opening the required 6 inches from the ceiling.

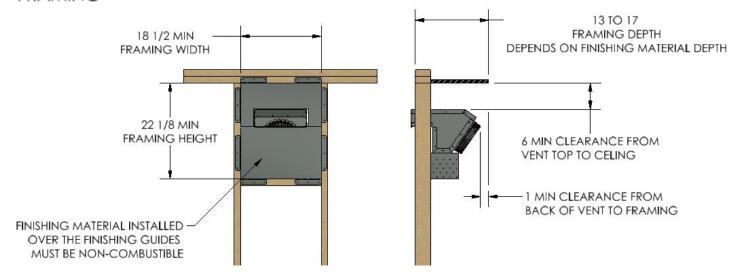
48" X 2" & 36" X 2" VENT BOX AND TRIM KITS



12" X 4" DUAL VENT BOX AND TRIM KIT

This kit includes two vent boxes as shown below. The vent boxes can be installed one on each sidewall or both vent boxes can be installed on the front wall.

FRAMING

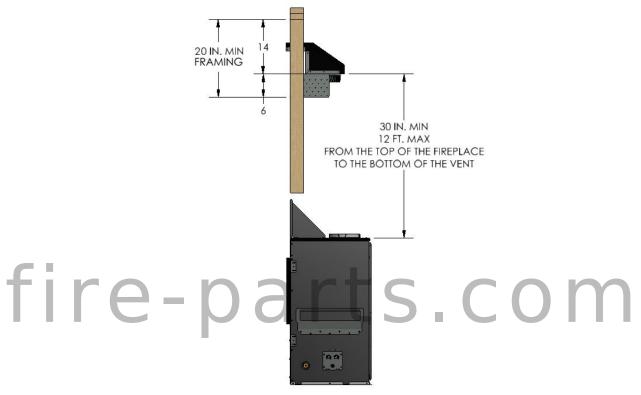


Page 9 of 18 85-03-01096



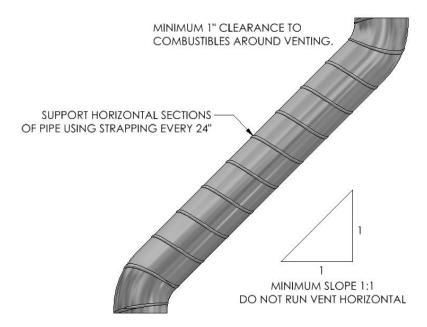
VENT HEIGHT ABOVE FIREPLACE

The vent box must be located at least 30 inches and up to 12 feet above the top of the fireplace. To meet the minimum height requirement when framing for the vent guides the bottom framing 2x4 must be at least 24" above the top of the fireplace.



HORIZONTAL OFFSET

When the vent box is placed in a location that requires the flex vent to be offset horizontally, a maximum 45° or 1:1 rise to run ratio must be maintained. This is to insure adequate air flow through the vent system. Support diagonal sections of the flex duct with strapping every 24" to keep the flex duct from drooping.



Page 10 of 18 85-03-01096



CLEARANCE TO FIREPLACE DIRECT VENT

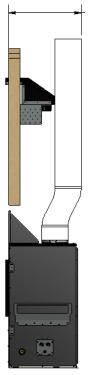
When planning the location of the Cool Wall vent box and trim kit be sure to consider how the fireplace exhaust vent system is to be installed. For example, if the fireplace must be vented vertically, make sure there will be room for the direct vent duct from the fireplace to pass by the Cool Wall Vent. The minimum framing depth may need to be increased to allow clearance for the direct vent ducts around the Cool Wall vent.

The fireplace venting can also dictate which Cool Wall vent box and trim kit is used. In this example, instead of increasing the framing depth the dual 12" x 4" cool wall vent box and trim kit could be used and installed so that the fireplace direct vent duct passes between the cool wall kit vent ducts.

NOTE: The fireplace direct vent duct may require two 45 deg. offsets to shift the direct vent duct to pass by the vent box. This is shown in the diagram below. The chart gives what the new framing depth would need to be for each fireplace model. The finishing depth is dependent on how thick the finishing material is on the front wall.

FIREPLACE	FINISHING MATERIAL THICKNESS		
MODEL	MIN 1" THICK	MAX 4" THICK	
FV34, FV34-DÉCOR, FV34-ARCH	22"	19"	
FV36, FV41, FV41-DÉCOR, FV41-ARCH, FV42	23"	20"	
FV46	23"	22 1/2"	
ML39, ML47, ML54, ML60, ML72	23"	22"	
DXV35	22"	19"	
DXV42, DXV45	23"	20"	
DXV60	23"	22.5"	
M50 GREENBRIAR	23"	21.5"	





MIN FRAMING DEPTH INCREASES TO ALLOW FOR CLEARANCE TO FIREPLACE VENT.

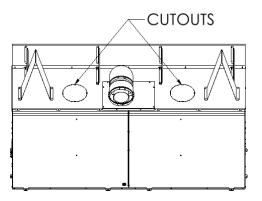
Page 11 of 18 85-03-01096



INSTALLATION INSTRUCTIONS

PREPARING FIREPLACE FOR INSTALLATION OF KIT

1. Locate the two circular cutouts on top of the fireplace. Use a side cutter or tin snips to cut the tabs around the perimeter of the circle and remove the cutout.







2. Next remove the insulation in the cutout to expose the fireplace's top inner shield. This part also has a circular cutout. Use a side cutter or tin snips to cut the tabs around the perimeter of the circle and remove the cut out.







3. Remove any loose pieces of insulation and push the insulation away from the inner cutout so that when the 8" rigid venting is inserted into the fireplace all of the insulation fits around the vent pipe. Insert the 8" by 2' rigid vent pipe into the cutout on the fireplace. The vent pipe will sit on top of the inner shield. The cutout on the inner shield is smaller than the vent pipe. Therefore, the vent will not pass through the inner shield cutout.





Page 12 of 18 85-03-01096



4. Use the collar clips and self-drilling screws to secure the vent pipe to the top of the fireplace. Make sure the vent pipe is pushed down against the inner shield while attaching the collar clips.





PREPARING VENT COMPONENTS FOR INSTALLATION

1. Each kit comes with two 8" crimped starter collars. To install the starter collars, slide the end with the tabs through the 8" holes on the bottom of the vent. Then, bend over all the tabs to hold the starter collar in place.



2. Each vent box kit comes with a front framing guide. The guide comes in two parts that need to be screwed together. Line up the screw holes on the two halves and screw them together using 4 of the hex head sheet metal screws. When screwed together, the parts will have a hole in the center which matches the size of the vent box outlet opening.









Page 13 of 18 85-03-01096



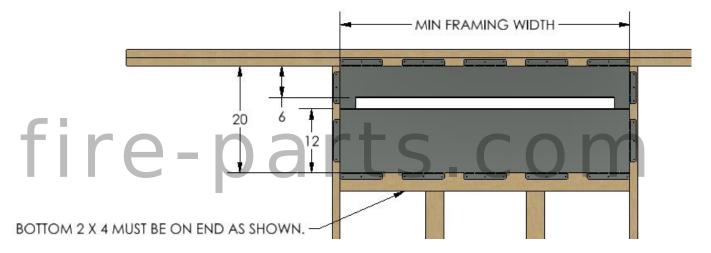
INSTALLING THE VENT

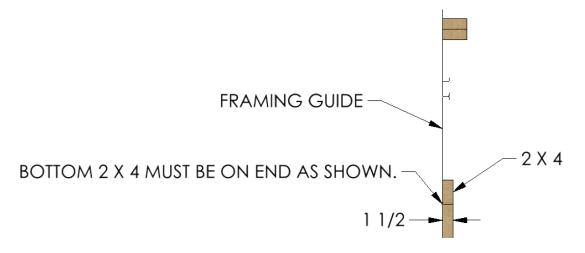
See the sections in these instructions PLANNING FOR VENT LOCATION and FRAMING DIMENSIONS. Follow the information in these sections to plan out the installation before proceeding.

NOTE: These instructions show a 48" x 2" vent. The other vent sizes install in the same way.

1. The first step is to fasten the framing guide to the framing. The opening in the framing guide will determine where the vent is located. The vent slot in the framing guide is not vertically centered it must be positioned as shown with the slot towards the top.

ATTENTION: Locate the bottom 2 x 4 used for framing "on end" as shown. This will allow for clearance to the vent tubes when they are attached to the vent box.

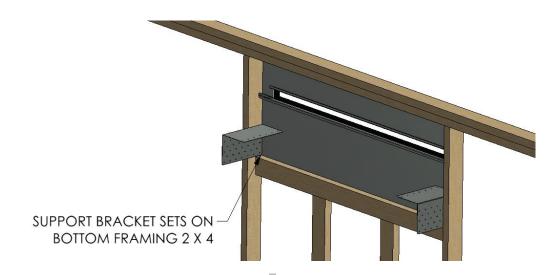




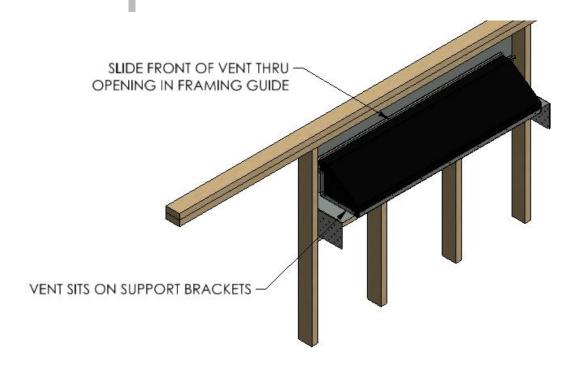
Page 14 of 18 85-03-01096



2. Place the vent box support brackets as shown and screw them in a couple of places to the framing. The bottom of the brackets rest against the bottom framing 2 x 4 and can be pushed up against the framing guide plate. The side of the bracket with one row of holes must be facing up.



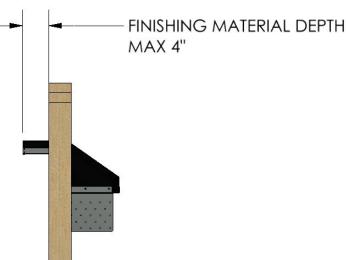
3. Slide the vent box outlet end through the opening in the framing guide. The bottom of the vent box will sit on the support brackets.



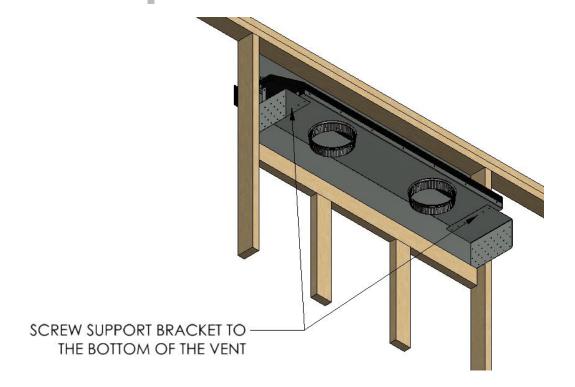
Page 15 of 18 85-03-01096



4. The distance the vent box outlet sticks out the front of the framing guides is adjustable up to 4". It is important at this time to know how deep the finishing material around the vent will be so that the vent box outlet can be set at the correct depth. Set the distance the vent box protrudes out from the framing guide to match the thickness of finishing material that will be used.



5. When the vent box is located at the correct depth, use a couple of self-drilling screws on each side to attach the vent box to the support brackets.

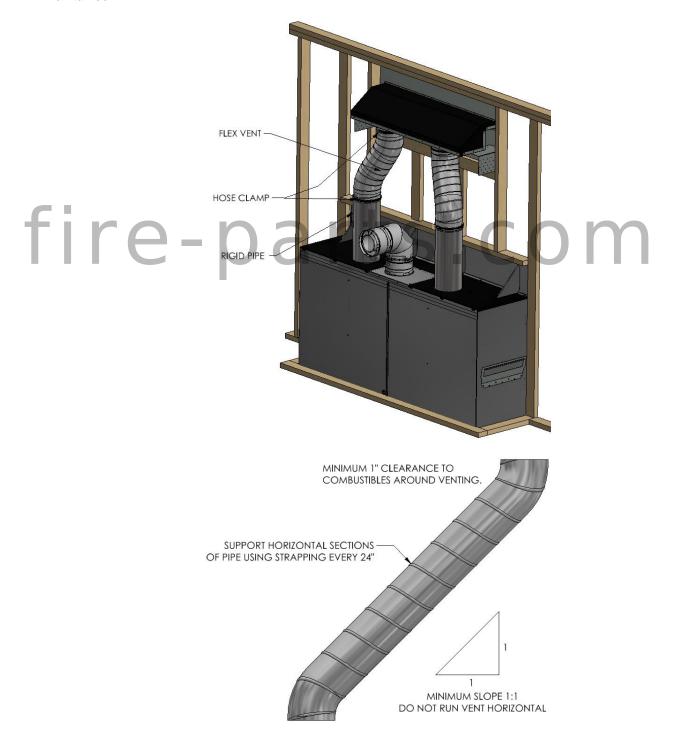


Page 16 of 18 85-03-01096



6. Next use the flex vent to connect the vent pipe that was installed on top of the fireplace to the starter collars that are located on the vent box. Cut the vent to length and pull it tight between the two connections. Use the 8" hose clamps to hold the flex vent to the starter collars on the vent box and rigid pipe on the unit. In addition to the hose clamps a couple self-drilling screws can be used below the hose clamps to screw the flex vent to the rigid pipe and starter collars.

ATTENTION: When running the flex vent with a horizontal offset a minimum 1-to-1 rise-to-run ratio must be maintained.

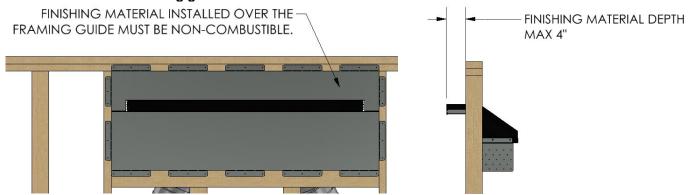


Page 17 of 18 85-03-01096

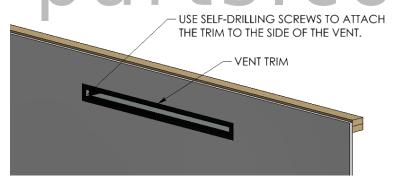


FINISHING AROUND VENT BOX AND INSTALLING VENT TRIM/GRILL

ATTENTION: Finishing material used around the vent box can be up to 4" thick. **Finishing material that is placed over** the metal framing guide must be non-combustible.

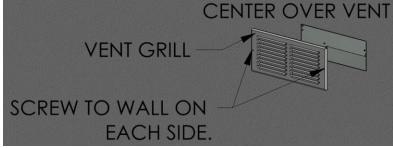


- 1. Place finishing material around the vent box outlet. The finishing material can be placed up to the edges of the vent box opening, but it cannot cover the opening of the vent box. Finishing material can be screwed to the framing guide using sheet metal or drywall screws.
- For 48 x 2 vent and 36 x 2 vent:
 Once the finishing material is installed, install the vent trim by sliding the trim into the vent box opening. Push the trim tight against the wall. Self-drilling screws can be used to secure the trim to the side of the vent box opening.



For 12 x 4 vent:

Once the finishing material is installed, the grill can be installed over the vent box opening. Center the grill over the vent box opening and use the two included screws to secure the grill to the wall. Make sure that the louvers on the grill are slanted upwards so you can't see into the vent.



NOTE: The trims for the 48 x 2 and 36 x 2 vents box come painted black. The grill for the 12 x 4 vent comes painted white. If desired, they can be repainted another color. High temperature paint (>250°F) must be used. For additional information on acceptable paint types to use around the fireplace and vent box, refer to the installation manual included with the fireplace.

Page 18 of 18 85-03-01096