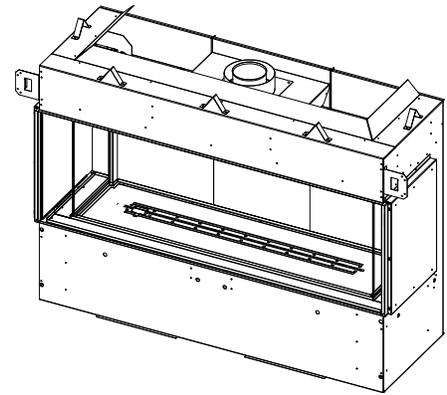


Generation 6020

Model # GEN-6020

Direct Vent Gas Fireplace



English and French installation manuals are available through your local dealer or website. Visit our website www.kozyheat.com.

Les manuels d'installation en français et en anglais sont disponibles chez votre détaillant local. Visitez www.kozyheat.com.



This appliance may be installed in an aftermarket, permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. A conversion kit is supplied with the appliance.

⚠ WARNING:
FIRE OR EXPLOSION HAZARD

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

- **Do not** store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Installation and service must be performed by a qualified installer, service agency or the gas supplier

WHAT TO DO IF YOU SMELL GAS

- **Do not** try to light any appliance.
- **Do not** touch any electrical switch; **Do not** use any phone in your building.
- Leave the building immediately.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's Instructions.
- If you cannot reach your gas supplier, call the fire department.

DANGER

HOT GLASS WILL CAUSE BURNS

DO NOT TOUCH GLASS UNTIL COOLED

NEVER ALLOW CHILDREN TO TOUCH GLASS

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

INSTALLER: Leave this manual with the appliance.

CONSUMER: Retain this manual for future reference.

CONGRATULATIONS

Hussong Manufacturing welcomes you as a new owner of a Kozy Heat gas fireplace. Kozy Heat products are designed with superior components and materials, assembled with care by trained craftsmen who take pride in their work. To ensure you receive a quality product, the burner and valve assembly are 100 percent test-fired, and the complete fireplace is thoroughly inspected before packaging. Our commitment to quality and customer satisfaction has remained the same for over 40 years. We offer a complete line of gas, and electric fireplaces, along with stylish accessories to complement any decor. Adding a fireplace is one of the best ways to increase the value of your home, and we are proud to offer a network of dealers throughout the country to help make your experience everything you imagine. We pride ourselves in being dedicated not only to functionality and reliability, but also customer safety. We offer our continual support and guidance to help you achieve the maximum benefit and enjoyment from your Kozy Heat gas fireplace.

Jim Hussong
President



Dudley Hussong
Board Chairman



Read this manual before installing or operating this appliance
Please retain this owner's manual for future reference

Homeowner Reference Information

Model name: _____
Serial Number: _____
Date Purchase / Installed: _____
Location of fireplace: _____
Dealership purchased from: _____

Dealership Phone Number: _____

Notes:

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1.0 Introduction

1.1 Appliance Certification

Laboratory: PFS in Cottage Grove, Wisconsin

Standards:

- ANSI Z21.88-2024/CSA 2.33-2019 (R2024), Vented Gas Fireplace Heaters
- CSA 2.17 2017 (R2022), Gas-Fired Appliances for Use at High Altitudes

This installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

1.2 California Proposition 65 Warning

⚠ WARNING: This product can expose you to chemicals including Carbon Monoxide, that is an externally vented by-product of fuel combustion, which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

1.3 Requirements for the Commonwealth of Massachusetts

The following requirements reference various Massachusetts and national codes not contained in this manual.

For all sidewall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1.3.1 Installation of Carbon Monoxide Detectors

At time of installation of side wall horizontally vented gas fueled equipment, the installing plumber or gas-fitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gas-fitter shall observe that a battery operated or hard wired carbon monoxide detector is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

1.3.2 Approved Carbon Monoxide Detectors

Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

1.3.3 Signage

A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print no less than the one-half inch (½) in size, "GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS".

1.3.4 Inspection

The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08 (2) (a) 1 through 4.

1.3.5 Exemptions

The following equipment is exempt from 248 CMR 5.08 (2) (a) 1 through 4: The equipment listed in Chapter 10 entitled "Equipment Not Required To Be Vented" in the most current edition of NFPA 54 as adopted by the Board; and Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

1.3.6 Manufacturer Requirements

Gas Equipment Venting System Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

- Detailed instructions for the installation of the venting system design or the venting system components; and
- A complete parts list for the venting system design or venting system.

Gas Equipment Venting System NOT Provided

When the manufacturer of Product Approved side wall horizontally vented gas equipment does not provide the parts for venting the flue gases, but identifies “special venting systems”, the following requirements shall be satisfied by the manufacturer:

- The referenced “special venting systems” instructions shall be included with the appliance or equipment installation instructions and;
- The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instructions.

A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.

1.4 Unboxing the Fireplace and Fireplace Installation Overview

You must review the entire manual for all applicable appliance information.

1. The following items will be packaged on the pallet but outside of the fireplace: tempered safety glass, black glass panel set, and parts packet with the manual. Be very careful with the boxes containing safety glass. Place these items off to the side.
2. The fireplace will arrive on a wooden pallet with a wooden crate around it. Remove the screws securing the wooden crate and lift it up and off the pallet. Take consideration of the items outlined in step 1. Remove the fireplace from the pallet. See Section 1.5 for additional information.
3. If you are converting the fireplace to be installed as a corner fireplace or three-sided (bay) fireplace then you will want to refer to the manual included with Corner Conversion Kit (Part# G6020-CCK) before proceeding. Purchase (1) Corner Conversion Kit for a left or right corner installation. Purchase (2) Corner Conversion Kits for a Bay Installation. Please read all requirements about the installation option you are choosing. The following steps refer to Section numbers in this manual but your process would be similar for a corner or bay installation.
4. Place fireplace in the framed opening. See Section 4.0 for framing information.
5. Install the fireplace vent system. See Section 6.0.
6. Finish setting up the fireplace. Remove the perimeter media tray. See Section 7.2.
7. Remove the firebox glass. See Section 7.3.
8. If you need to convert the fireplace to propane follow the conversion kit instructions. Removing the front access panel will provide greater access to the valve, control module, and other fireplace components. See Section 3.10.
9. Install the interior black glass panels. See Section 7.5.
10. If installing an optional log set or geometric spheres, follow the instructions provided in the kit.
11. Install the required crushed media. See Section 7.6.
12. Reinstall the firebox glass. See Section 7.3. It is now a good time to test burn the appliance if electrical and gas connections have been made. If the electrical connection has been made to the fireplace it would be a good time to sync the LED Wi-Fi module to your Wi-Fi network. Test the fireplace remote, fireplace operations, and LED remote. See the Supplemental LED Manual for additional information.
13. Reinstall perimeter media tray and place crushed glass over the media tray.
14. Reinstall front access panel if previously removed.
15. Install the facing and finishing material. See Section 4.0.
16. Install the fireplace safety glass panels. See Section 7.1.

1.5 Removing the Fireplace from the Pallet

The fireplace is shipped with a set of shipping brackets secured to the firebox legs. The shipping brackets are secured down to the pallet with anchor plates on each side.

1. Remove the anchor plates from the pallet. The plates are secured with 3/8" screws. See Figure 1.1. There are two screws that hold the plates to the shipping brackets. Remove the plates from both sides and discard.
2. Remove the shipping brackets from the firebox legs by removing the (4) 7/16" flange nuts that secure the brackets to the firebox legs. Discard after removal. See Figure 1.2. You may have to tip the fireplace on its back or remove the front access panel. See Section 3.10.



Figure 1.1 - Anchor Plate Removal

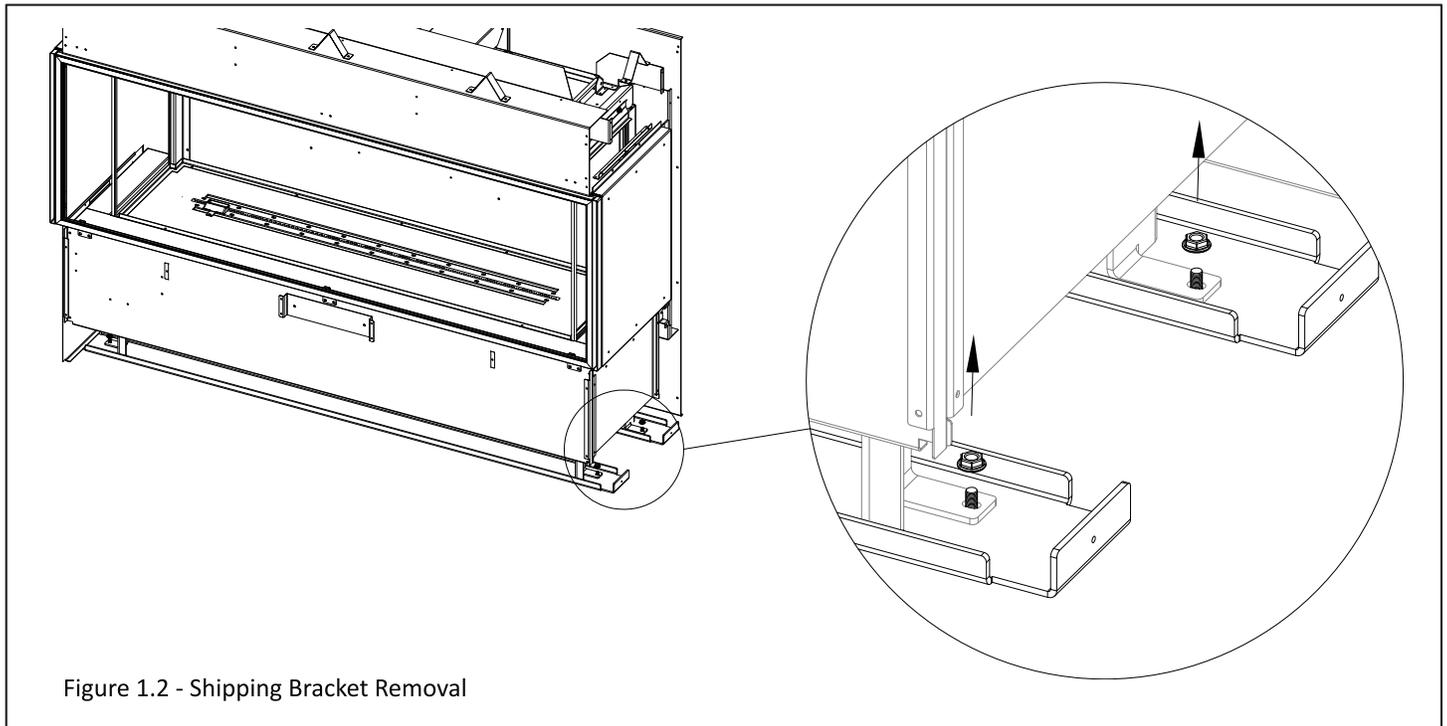


Figure 1.2 - Shipping Bracket Removal

2.0 Specifications

2.1 Heating Specifications

	Natural Gas	Propane
Maximum Input Rating	50,000 Btu/h (14.65 kW)	50,000 Btu/h (14.65 kW)
Orifice Size (DMS)	#30	#5/64"
Minimum Input Rating	27,000 Btu/h (7.91 kW)	26,000 Btu/h (7.62 kW)
Minimum Inlet Pressure	5" WC (1.25 kPa) 7" WC (1.74 kPa)** **Recommended	12" WC (2.99 kPa)
Maximum Inlet Pressure	10" WC (2.49 kPa)	13" WC (3.24 kPa)
Manifold Pressure (High)	3.8" WC (0.95 kPa)	11" WC (2.74 kPa)
Manifold Pressure (Low)	1.1" WC (0.27 kPa)	2.9" WC (0.72 kPa)
Venturi Opening Settings	1/8" (3mm) Open	1/2" (13mm) Open

2.1.1 Altitude Adjustment

This appliance may be installed at higher altitudes. Please refer to National Fuel Gas Code ANSI Z223.1/NFPA 54, CSA-B149.1 Natural Gas and Propane Installation Code, local authorities, or codes having jurisdiction in your area regarding derate guidelines.

US Installations

Refer to the American Gas Association guidelines for the gas designed appliances derating method. For elevations above 2,000' (610m), input ratings are to be reduced by 4% for each 1,000' (305m) above sea level.

Canadian Installations

When the appliance is installed at elevations above 4,500' (1,372m), the certified high-altitude rating shall be reduced at the rate of 4% for each additional 1,000' (305m).

2.2 Electrical Specifications

- The junction box in this appliance requires 120VAC, 60Hz, and 12 Amps.
- Verify the household breaker is shut off prior to working on any electrical lines.
- The AC power supply to this appliance must be hot at all times and shall not have a switch installed in it.

2.3 Appliance Dimensions

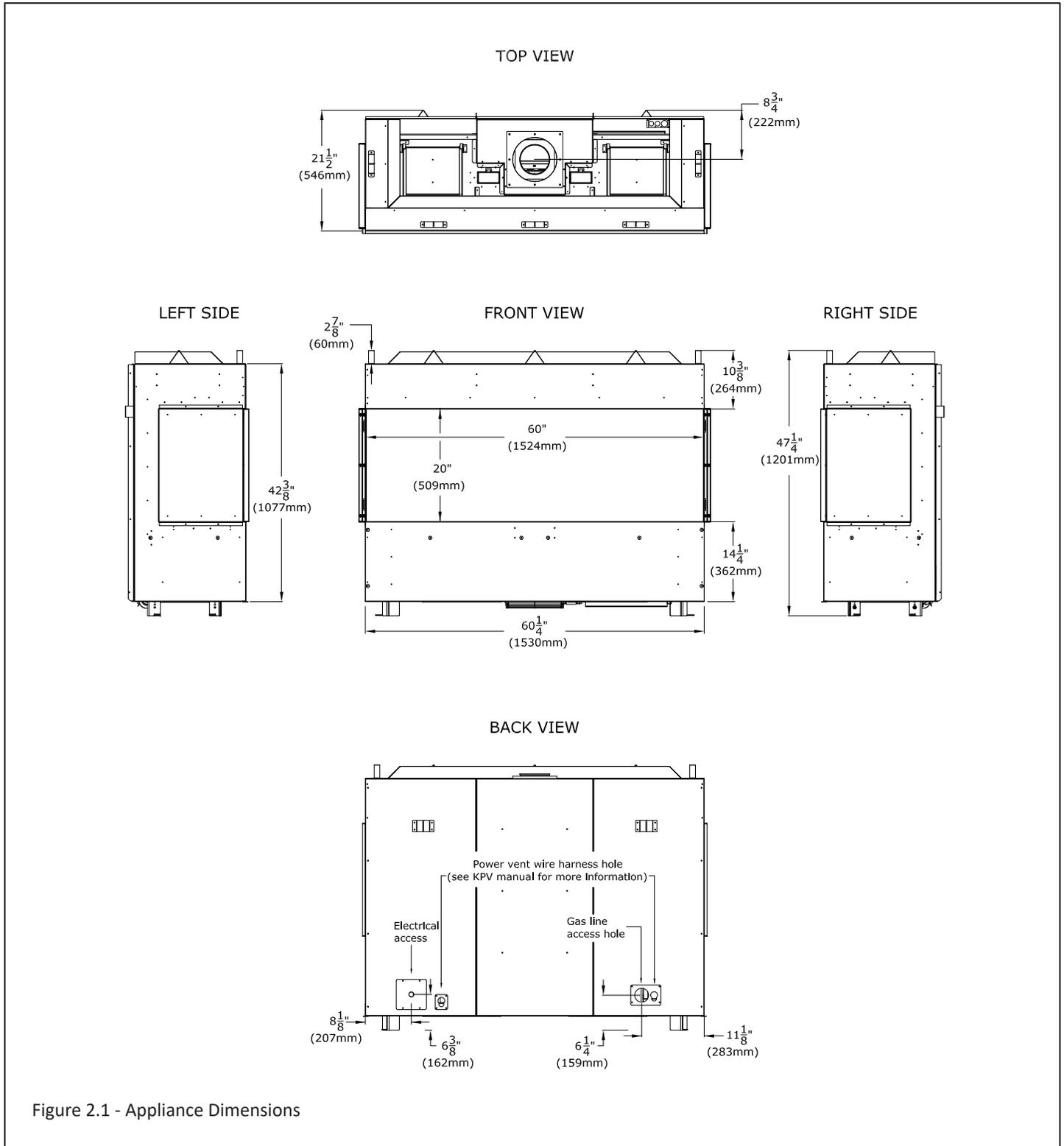


Figure 2.1 - Appliance Dimensions

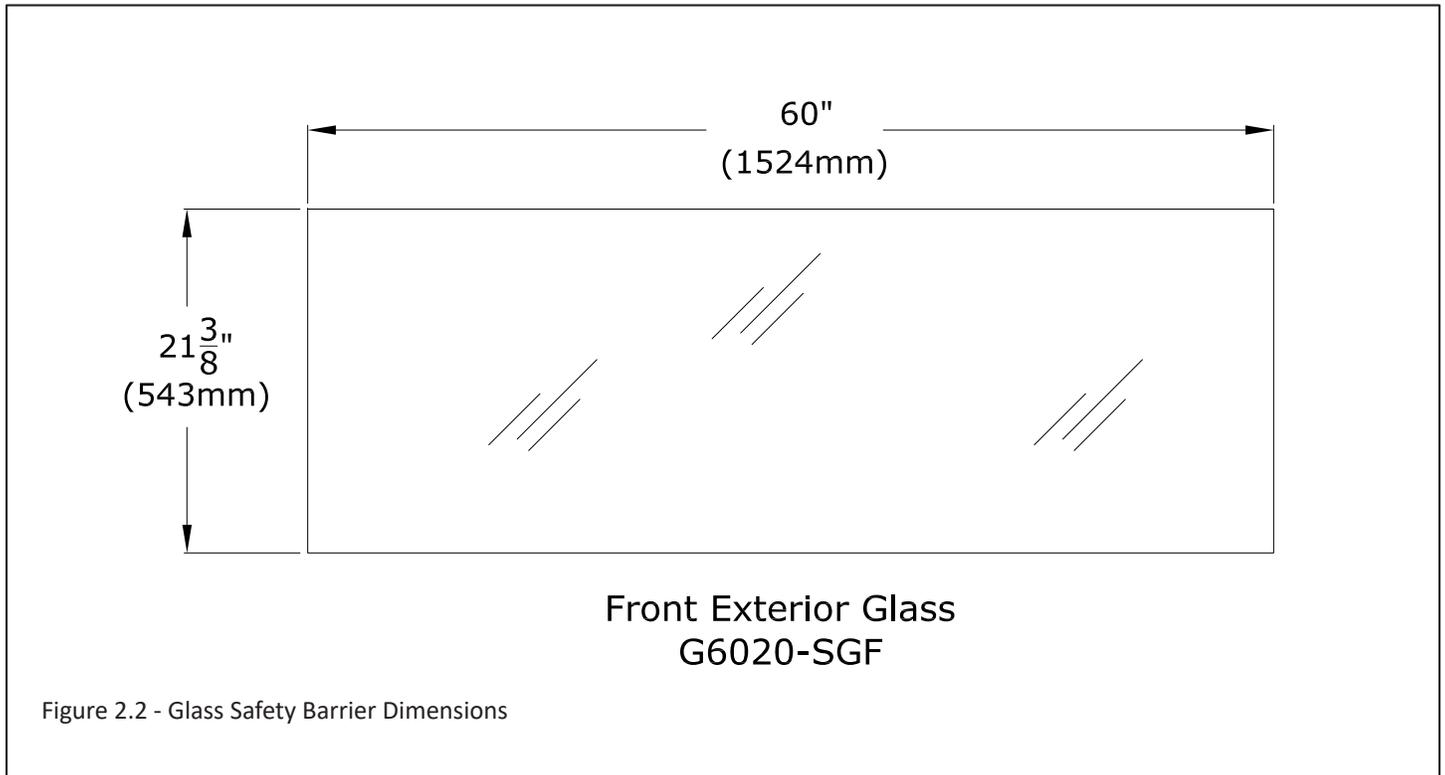
2.3 Appliance Dimensions (continued)

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

If the barrier becomes damaged, the barrier shall be replaced with Hussong Mfg.'s barriers for this appliance.

Please refer to Section 7.0 for fireplace setup.

Any glass, guard, or barrier removed for servicing an appliance must be replaced prior to operating the appliance



2.4 Safety Control System

Safety Control System Overview

During operation, room air is drawn through the air intake opening at the bottom of the fireplace chamber. Fans inside the fireplace then direct this air between the firebox glass and the exterior safety glass, effectively cooling both the safety glass and the fireplace chamber.

Fan Activation

- The fans will turn on when a thermal switch reaches a designated temperature. Conversely, the fans will turn off when the thermal switch drops below a designated temperature.

Fan Current Sensing Coil

- The power supply will be energized when power is provided to the electrical box inside the fireplace. When power is provided to the fireplace's electrical box the safety system is always energized. The Fan Current Sensing Coil monitors for the acceptable amount of current for the fan system.

Overheat Sensor

- The Safety Control System has an overheat sensor. This sensor monitors that the fireplace is operating in a safe condition.

Lockout Mode Activation

- The Safety Control System monitors the electrical current drawn by the fans. If a fan malfunctions, the current in the fan system will drop. This triggers the controller to enter lockout mode.
- If the overheat sensor hits a designated temperature the controller will enter lockout mode.
- If there is a fault with the overheat sensor the controller will enter lockout mode.

Lockout Mode Indicators and Functionality

- A flashing blue LED indicates that the safety system has been placed in lockout mode.
- During lockout mode, the controller automatically shuts off the gas burner. Please note that the top light kit and bottom LED kit remain functional.

Service Requirement

- If the fireplace enters safety lockout mode, contact a qualified service technician to diagnose and replace any defective components.

3.0 Installation Information

3.1 Appliance Placement Considerations

Read all documentation for your specific installation and design options prior to appliance installation.

WARNING: Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.

FIRE HAZARD: Do NOT install this appliance directly on carpeting, vinyl, or any other combustible material other than wood.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition

Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces

Clothing or other flammable material should not be placed on or near the appliance.

Note: Unless otherwise noted all clearances / images in this manual are based off of nominal 2" x 4" framing being used.

- This appliance must be installed on a level surface capable of supporting the fireplace and venting. If possible, place the fireplace in a position where the vent terminates between two studs, eliminating the need for any additional framing.
- This fireplace may be installed in a bedroom.
- Please be aware of the large amount of heat this fireplace will produce when determining a location.
- If planning to convert to Propane, it is easier to complete the gas conversion before installing the fireplace in the framed opening.
- All framing, facing material, and finishing material must be self-supported. The fireplace is not load-bearing.

3.2 Floor Support and Protection

- Floor protection in front of the fireplace is not required. Combustible material may be used if installing a hearth extension. Consider the thickness of the hearth extension finishing material if building a fireplace platform.
- If this appliance is to be installed directly on carpeting, tile, or other combustible material other than wood flooring, this appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.
- If the appliance is to be installed above floor level, a solid, continuous platform must be constructed below the appliance.

3.3 Appliance Installation Options

This appliance offers several design options for managing the heat produced by this fireplace.

Note: When deciding on which design option suits your application please review all sections throughout this manual as different design options have different framing, facing, and finishing options and requirements.

The appliance is shipped as a single sided fireplace.

Fireplace Installation Options

See Figure 3.1 on the following page for installation examples.

- **Single Sided Installation** is where both sides of the firebox are blocked off. The fireplace is shipped in this standard single-sided configuration.
- **Corner Installation** is where one side of the firebox has clear glass installed so you can have an opening viewing area. You can install the fireplace in a left or right corner application. You will remove the block off plate and install (1) Corner Conversion Kit (Part # G6020-CCK) on the side you want visible. You will need to reference "Generation 6020 - Corner and Bay Fireplace Conversion Addendum" for more information.
- **3-Sided Bay Installation** option is where you have both the front and side glass viewing visible. You will remove the block off plate on each side of the fireplace and install (2) Corner Conversion Kits (Part # G6020-CCK) on each side of the fireplace. You will need to reference "Generation 6020 - Corner and Bay Fireplace Conversion Addendum" for more information.

Vent System Options

- **Natural Draft** is where you connect co-axial vent pipe to the fireplace and use the fireplace's combustion process to vent the fireplace. See the allowed venting configurations in Section 6.0.
- **Kozy Power Vent** is a fan-powered mechanical draft vent system (horizontal terminations only) for use when your venting requirements go beyond what natural draft vent system allows. See the allowed natural draft venting configurations in Section 6.0. Reference the #KPV manual for all system requirements. Utilizing the Kozy Power Vent system will not change facing and finishing requirements or safety glass barrier requirements.

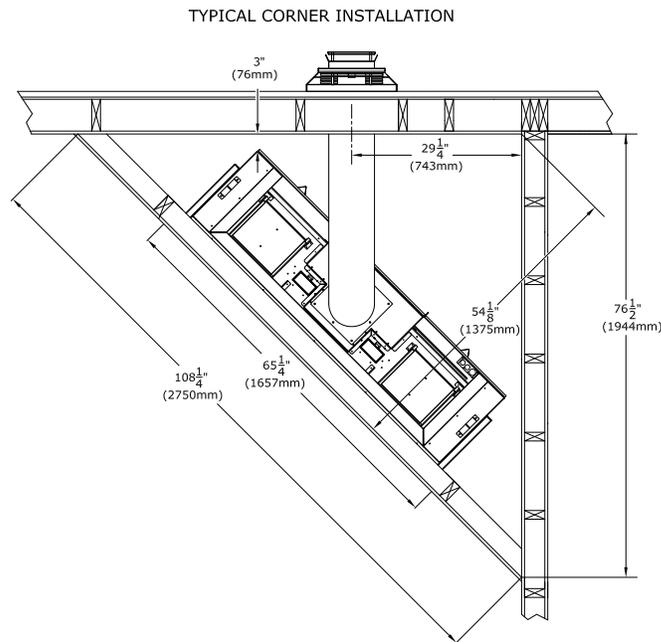
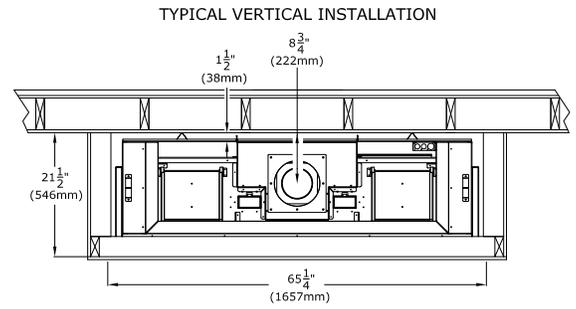
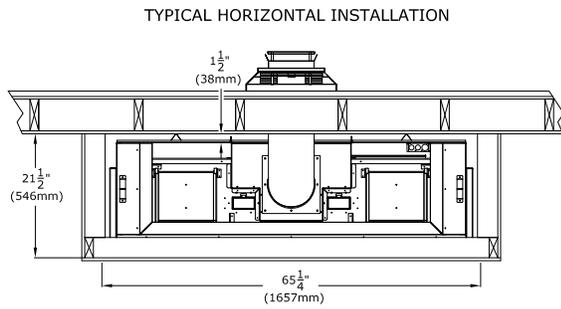


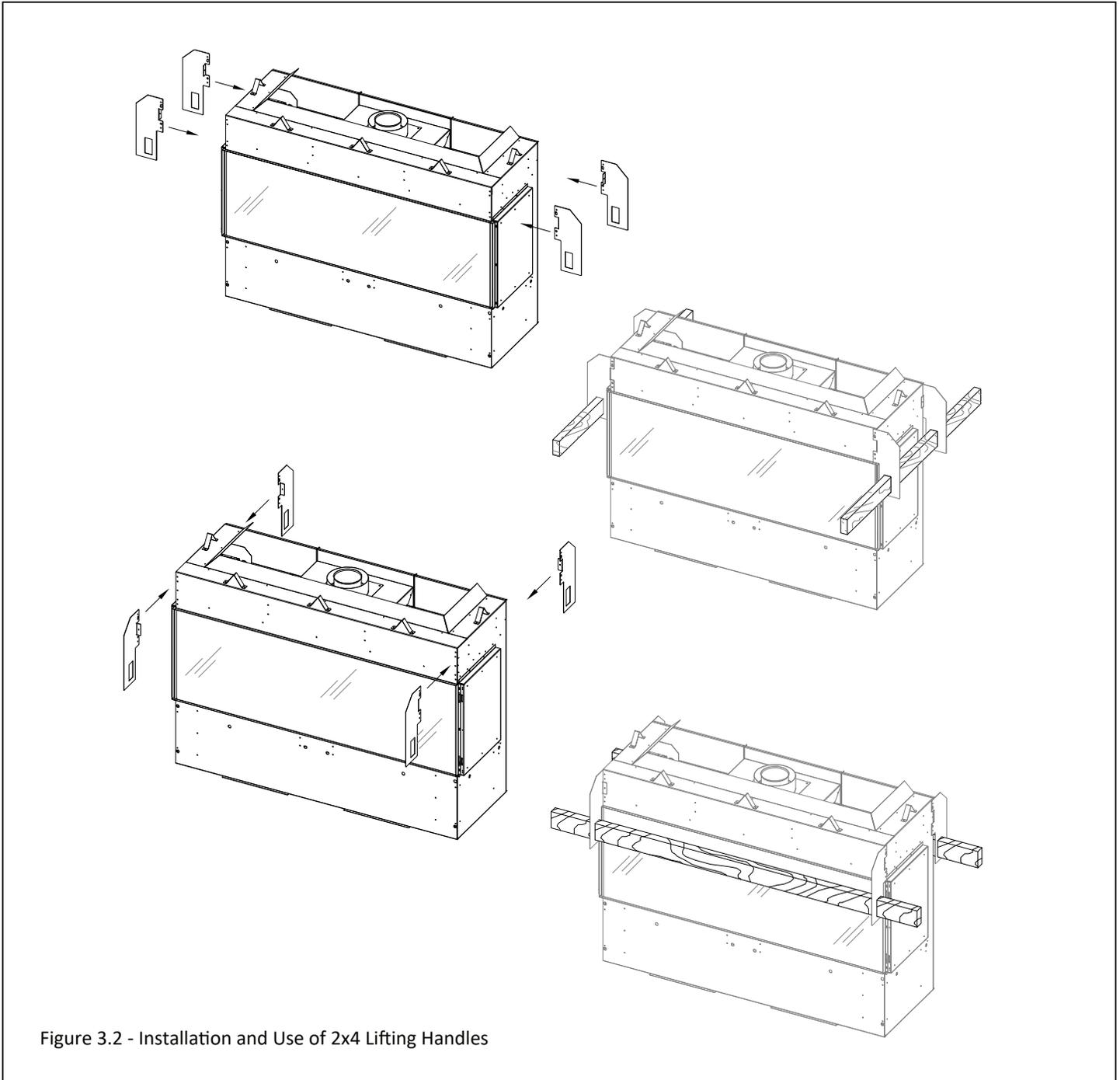
Figure 3.1 - Typical Installation

3.4 Moving the Appliance

This appliance is heavy. We recommend a team lift when moving, placing, and positioning the appliance.

We offer two options for lifting handles. The first option utilizes a 2x4 running through brackets as shown in Figure 3.2. The 2x4 lifting brackets are secured to the back of the fireplace during shipping. Attach the brackets as shown below. Place a 2"x 4" through the openings to create a lifting handle. The handles can be inserted in two orientations.

The second option is a set of handles preinstalled at the bottom of the fireplace. See Figure 3.3. These handles may be useful in lifting the fireplace into the framed opening.



3.4 Moving the Appliance (continued)

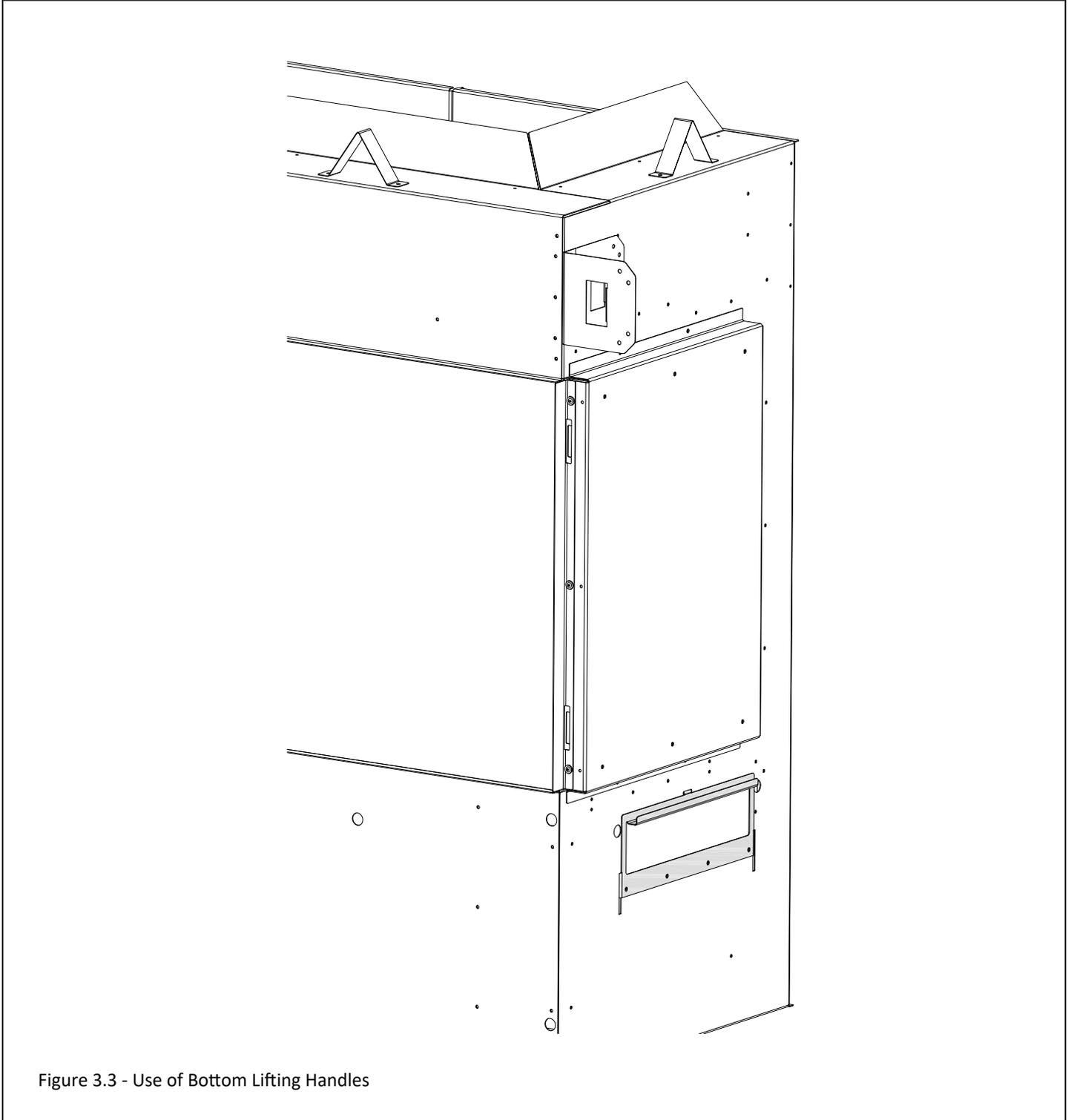


Figure 3.3 - Use of Bottom Lifting Handles

3.5 Clearances to Combustibles

- See Table 3.1 below for minimum clearances.
- Unless otherwise noted all clearances / images in this manual are based off of nominal 2" x 4" framing being used.

Table 3.1 - Minimum Fireplace Clearances to Combustible Material		
Minimum height of fireplace enclosure	90"	2286mm
Base of fireplace to ceiling	90"	2286mm
From fireplace top stand-off brackets	0"	0mm
From fireplace back stand-off brackets	0"	0mm
From fireplace corners	3"	76mm
From fireplace left and right stand-off brackets (nailing flanges)	0"	0mm
From fireplace front	36"	914mm
Fireplace side finishing edge to adjacent sidewall	18"	457mm
Front overhang or mantel 16" (406mm) deep projection from the top finishing edge of the fireplace	0"	0mm
Unlimited Hearth Extension from the bottom finishing edge of the fireplace	0"	0mm
Minimum Vent System Clearances Inside Fireplace Enclosure		
Horizontal venting within fireplace enclosure - Top surface of vent pipe	3"	76mm
Horizontal venting within fireplace enclosure - Left, right, and bottom surfaces of vent pipe	1"	25mm
Vertical venting within fireplace enclosure - All surfaces	1"	25mm

3.6 Nailing Flange Assembly and Installation

Single Sided Fireplace Installations - Caution: Never permanently remove these assemblies from the fireplace. They must be secured regardless of finish material used.

Note: If Installing the fireplace in a corner installation see nailing flange information in the “Corner and Bay Fireplace Conversion Addendum”

When installed, the nailing flanges provide the minimum 2-1/2” (64mm) clearance from the sides of the fireplace to framing.

Instructions:

1. Remove (2) nailing flanges from the right and left side of the fireplace.
2. Align nailing flange with holes on outside corners of fireplace, with the stand-off flanges on the nailing flanges facing away from the fireplace
3. Secure the nailing flanges to the fireplace with screws (provided) through the slots in nailing flanges. There are through holes in the side heat shields to allow installation.
4. Bend perforation on nailing flange until parallel with fireplace face. Do not bend toward fireplace face.
5. Position framing stud against the small stand-off (located on backside of nailing flange). Secure with nails or screws.

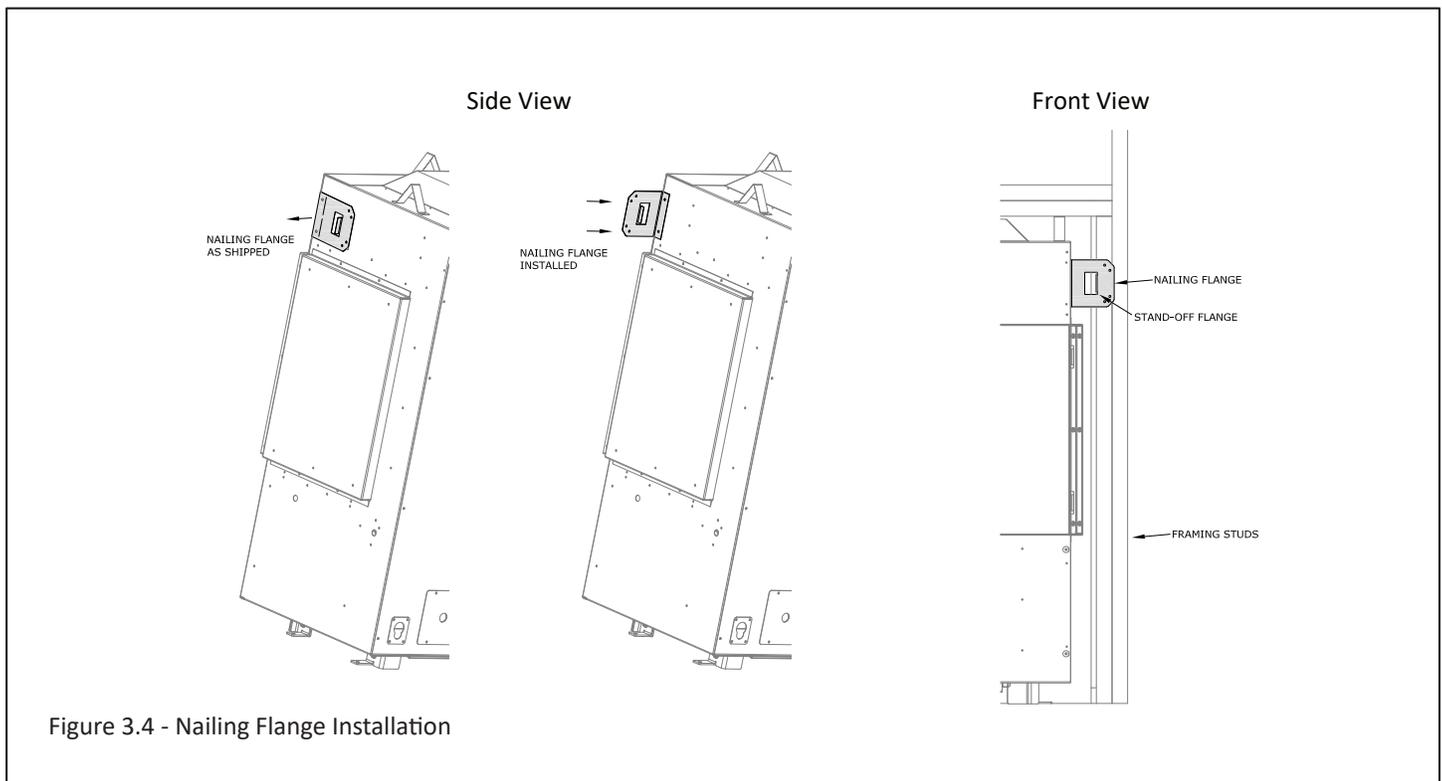
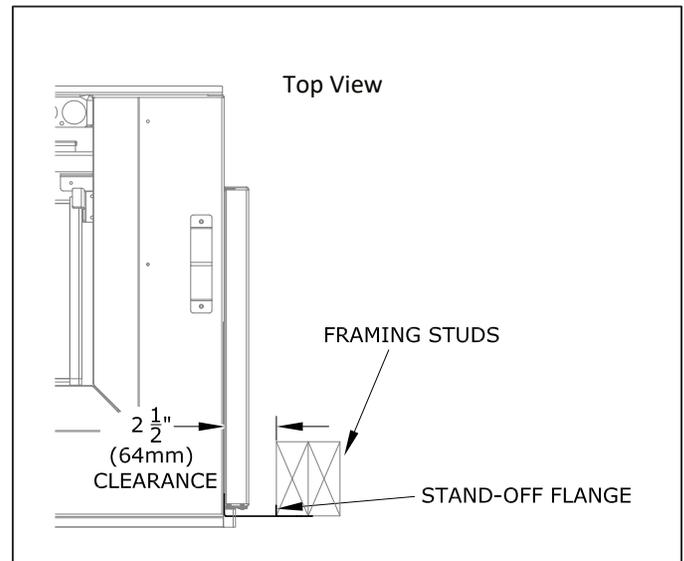


Figure 3.4 - Nailing Flange Installation

3.7 Non-Combustible Zone

- See Section 4.6, Facing Requirements for the minimum requirement of non-combustible finishing material.
- Paper faced gypsum board, commonly known as drywall; including Type X Fire Rated board is not a non-combustible material. This material is not approved for use as a non-combustible material around the fireplace.
- WonderBoard brand boards are commonly used as a backerboard for tile. WonderBoard backerboard is not a non-combustible material and is not approved for use in the non-combustible material is required around the fireplace.
- Non-combustible facing and finishing materials must meet ASTM E 136.

3.8 Finishing Recommendations

NOTE: The surface area above the appliance may be affected by high temperatures emitted from this appliance. To help avoid or reduce the possibility of the sheetrock to crack, Hussong Mfg. recommends the following methods:

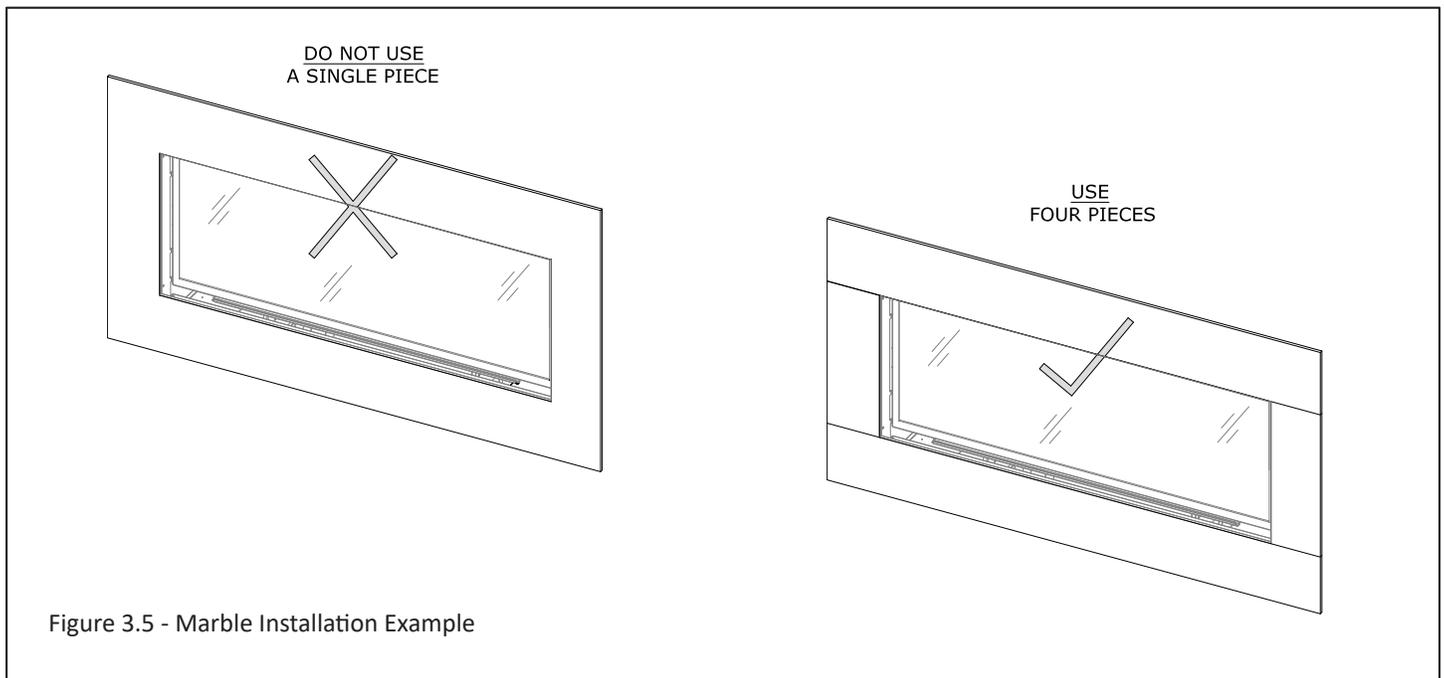
- Ensure the non-combustible material and sheetrock is dry and dust free.
- For taping and mudding seams, we recommend heat resilient tape, mesh and joint compounds, such as Durabond. Mud must be cured as per manufacturers recommendations.
- For a painted surface, use a high quality acrylic latex primer and finish coat. Avoid flat or light-colored paints to prevent discoloring.

Disclaimer: Kozy Heat does not guarantee any materials used around the fireplace. Kozy Heat disclaims any and all liability for any damage to finishing materials including warping, discoloring, cracking, peeling or flaking. This also includes any off-gassing or unpleasant smells from materials when they are heated.

3.9 Recommended Installation of Marble and other stone materials

Kozy Heat recommends the following statements when using marble, granite, or other stone finishing materials

- Never use a one-piece marble, granite or natural stone that is cut in a U-shape for finishing material to cover the sides and top areas around the fireplace opening.
- If you use a one piece U-shaped piece of marble, or stone finishing material the material is susceptible to cracking due to thermal expansion
- Refer to the manufacturer and supplier of your finishing material for use in high heat applications like around a fireplace. Ensure the material can be exposed to temperatures greater than 160°F. Kozy Heat does not assume any liability for discoloring, cracking, or other heat related damage.



3.10 Component Access During Initial Installation

You are able to remove the front panel of the fireplace to easily access the components during installation. This is recommended when changing the fireplace to propane, converting the fireplace to power vent, connecting flexible gas line to gas supply, and wiring up the electrical box.

All the tasks mentioned above can be performed from inside the fireplace by removing the control board.

The front panel can be removed by removing the (8) sheet metal screws shown below. You must reinstall the front panel before installing facing material and continuing with installation.

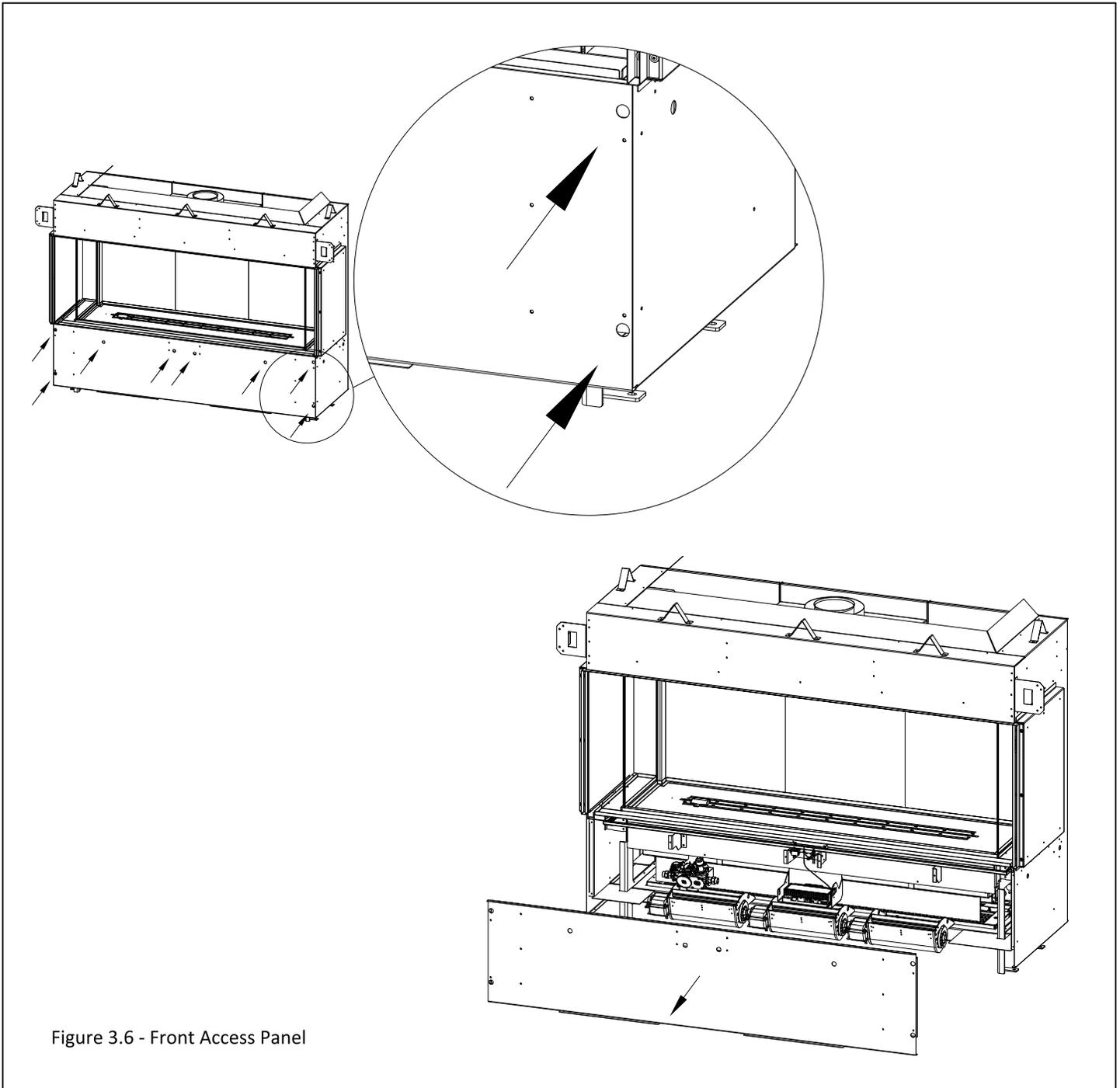


Figure 3.6 - Front Access Panel

4.0 Single-Sided Installation

The information provided in this section will cover topics related to installing this fireplace in its single-sided configuration. The topics include: framing, facing material, finishing material, cooling the fireplace chamber, and chamber clearances.

4.1 Framing

Note: Unless otherwise noted all clearances / images in this manual are based off of nominal 2" x 4" framing being used.

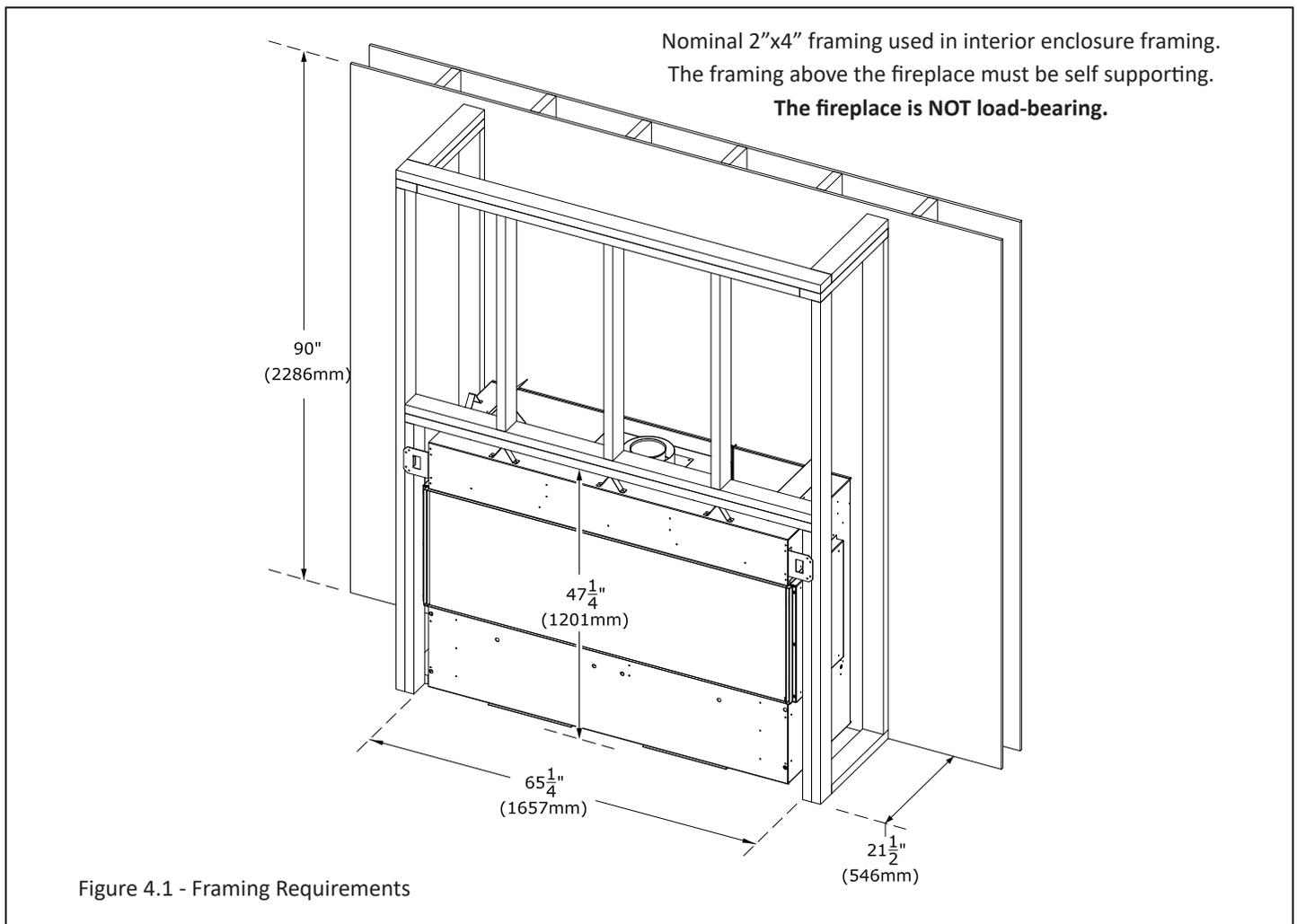
IMPORTANT: The framing above the fireplace must be self supporting in all installation scenarios. The fireplace is not load-bearing.

WARNING: Provide adequate clearances around air openings into the combustion chamber. Provide adequate clearance in front of the fireplace for safety glass barrier removal, component access, gas line installation, service access, etc.

CAUTION: Cold air transfer area. The surround fireplace chase must comply with all clearances as outlined in this manual, and be constructed in compliance with local building codes. Outside walls should be insulated to prevent cold air from entering room.

- Floor protection in front of the fireplace is not required. Combustible material may be used if installing a hearth extension. Consider the thickness of the hearth extension finishing material if building a fireplace platform. The hearth may be flush with the bottom finishing edge of the fireplace.
- The bottom of the fireplace must be placed directly on a wood or non-combustible surface (not linoleum or carpet). If this appliance is to be installed directly on carpeting, tile, or other combustible material other than wood flooring, this appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

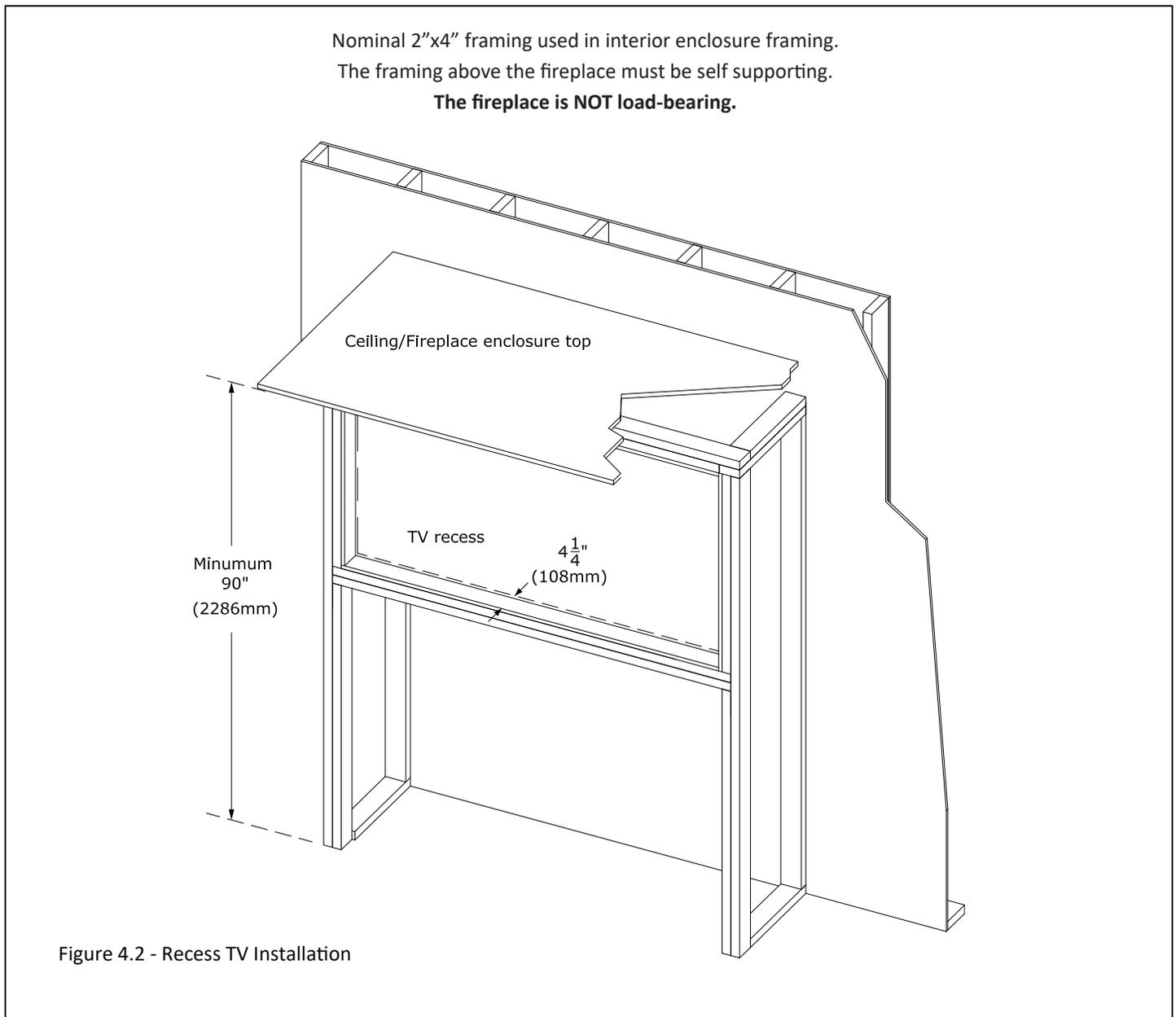
IMPORTANT: To cool the fireplace chamber correctly take important consideration when planning out the framing for this fireplace. Look at the different options on how to cool the chamber that are outlined in Section 4.5. You must choose one of the Komfort Zone Kit (KZK) or Vented Cavity options. The framing will have to accommodate one of these chamber cooling options.



4.2 Mounting a Television Above a Fireplace and Television Recess Construction

WARNING: All clearances to venting must be maintained.

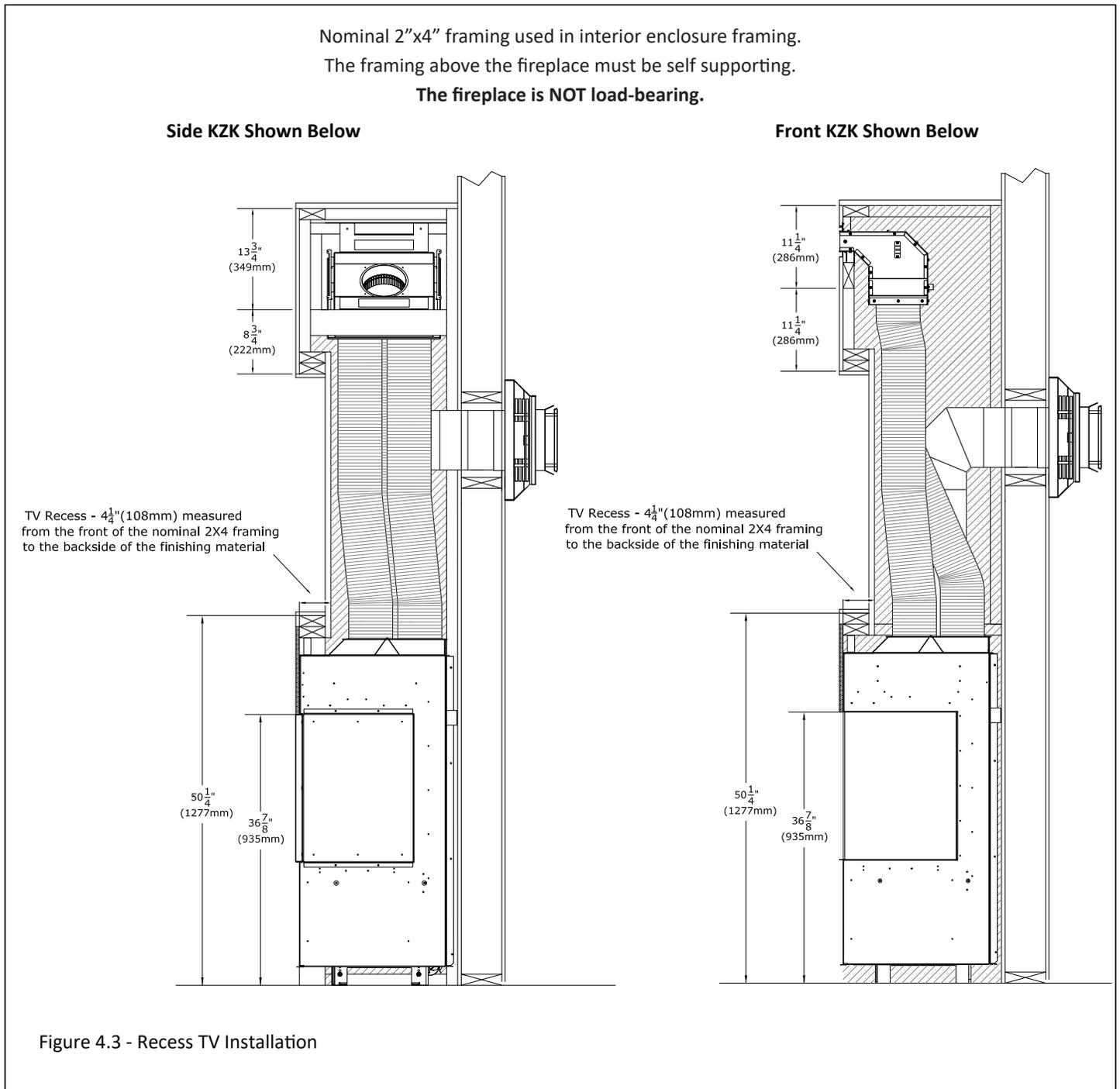
- Mounting a television above a fireplace is a common practice. Mantel depth, ceiling heights, and wall and mantel construction material all affect television surface temperatures. Most television manufacturers specify in their instructions that a television should not be installed on, near, or above a heat source.
- We recommend the use of a mantel to deflect heat away from the television.
- Television location rests solely on the homeowner. It is the home owner's responsibility that the preferred TV mounting and mantel design will not exceed the listed maximum operation temperature of their electronic goods.
- The allowed TV recess of 4-1/4" (108mm) measures from the front of the nominal 2x4 framing to the backside of the finishing material of the pocket.



4.2.1 TV Recess with a KZK

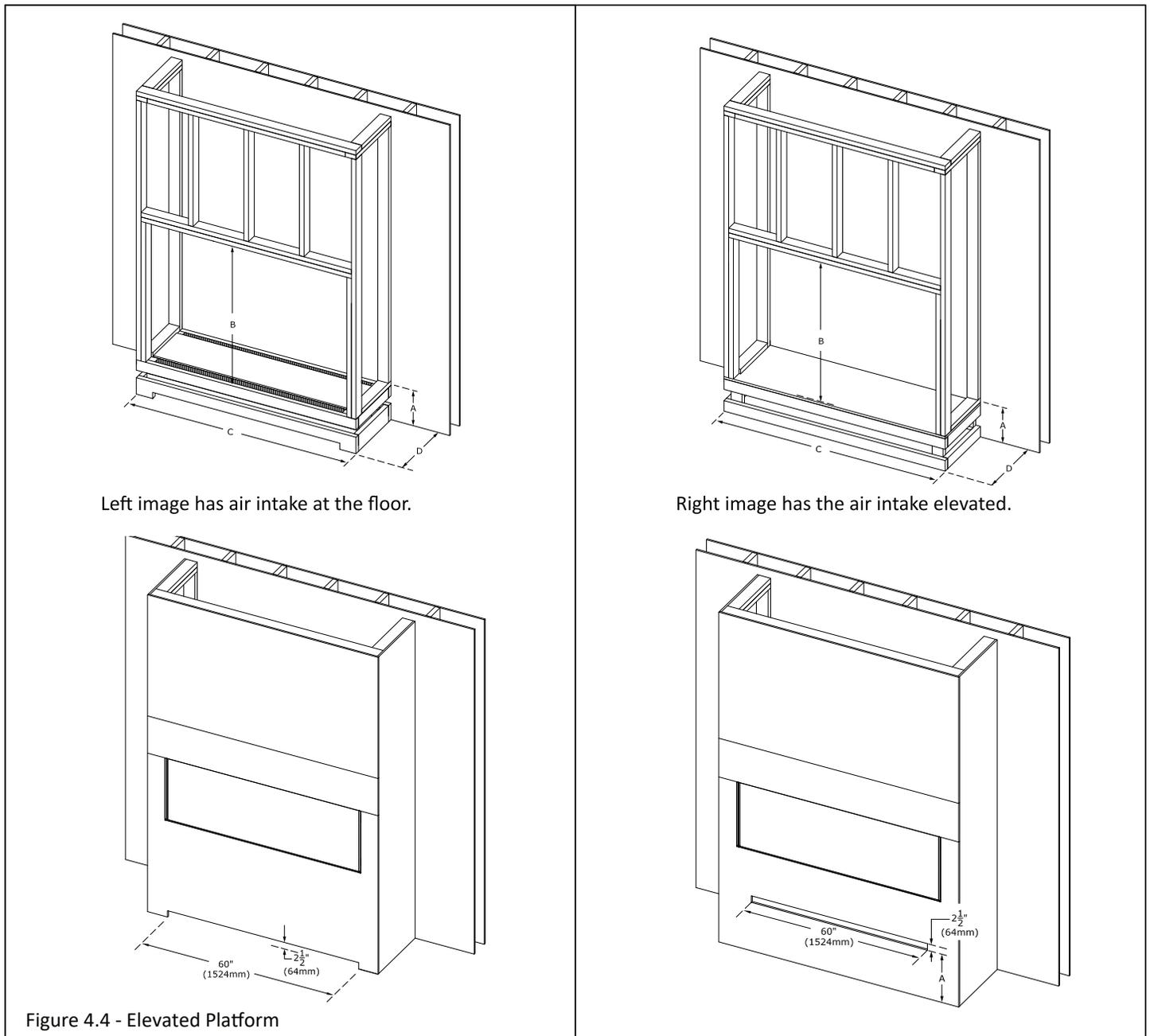
WARNING: All clearances to venting must be maintained.

- Review all information in Section 4.2 regarding best practices and considerations involving recessing a TV.
- There is specific information about minimum clearances when performing a recessed TV and utilizing a side KZK (left image) or front KZK (right image). The drawing below highlights the minimum framed distance between the KZK framed opening and the framed opening of the TV recess cavity.



4.3 Elevated Platform Installation

- When planning your installation you may want to elevate the fireplace by building a platform. When you elevate the fireplace you can have the air intake come into the chamber at the floor or be elevated. Having the air intake opening raise off the floor would help prevent debris (e.g. animal hair, kids toys, etc.) from entering the air intake opening.
- If you want to elevate the fireplace and have the air intake opening elevated off the floor as well you can follow the illustrations in Figure 4.4. The air intake opening moves with the fireplace where air intake opening starts with the base of the fireplace. Determine the height of the air intake opening you want and build the platform height according to that. The platform should be constructed with a solid plywood base.
- Dimension A is the height from the floor you want your air intake opening to start. The finished platform will be this height. Dimension B is the framed height based on your KZK or Vented Cavity selection. Dimension C is the width of the framed opening. Dimension D is the depth of the framed opening. The last image below shows a 2-1/2" air intake opening elevated off the floor.



4.3 Elevated Platform Installation (continued)

- If you want to elevate your fireplace but want the air intake opening at the floor or at a lower location than the bottom of the fireplace, there are two items that need to be completed.

Requirement #1 -The fireplace comes with two finishing edge brackets preinstalled at the bottom of the fireplace for the air intake opening. Since you are moving the air intake opening to a position lower than the fireplace you will have to remove the two bottom finishing edge brackets. Each bracket is held on with (2) sheet metal screws. Once removed you can discard. See Figure 4.5.

Requirement #2 - When you construct the fireplace platform follow Figure 4.6. You will leave two 2"x60" openings (one in front and one in back) in the platform base for air supply to the fireplace. These openings feed the front and back fans that cool the safety glass and fireplace chamber. See Figure 4.6.

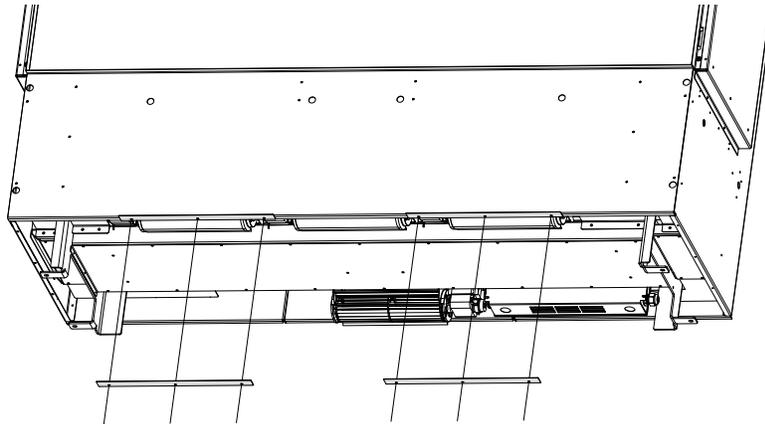


Figure 4.5 - Finishing Bracket Removal

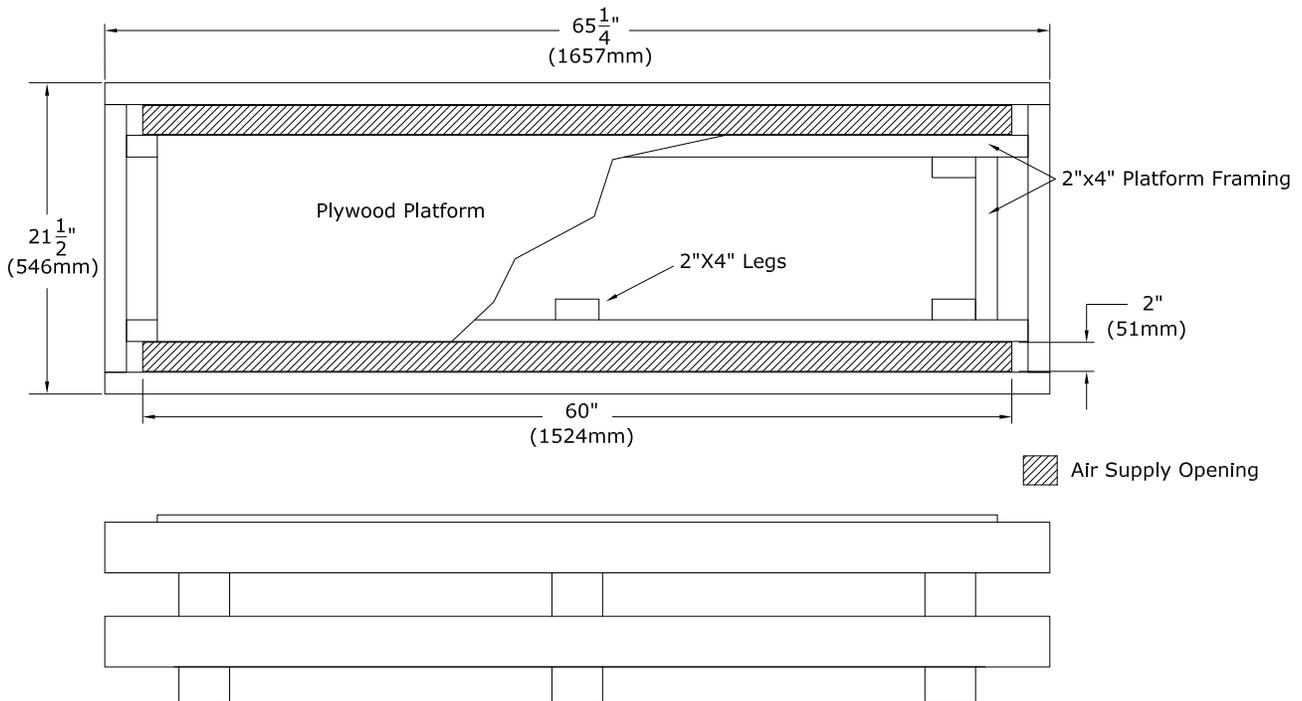


Figure 4.6 - Elevated Platform Air Openings

4.4 Clearance to Sprinkler

- In a situation where a sprinkler head is installed within the proximity to a #KZK discharge opening or the vented cavity opening for the fireplace chamber, the diagram below MUST be followed.
- The distance between a sprinkler head and discharge opening cannot be less than 60" (1524mm) in length at every point from the origin of the discharge opening. You must also verify the sprinkler head sensor is set to the proper heat setting so it does not activate when the room heats up from the fireplace being operated normally.
- Please follow local building codes to determine what temperature setting is relevant for your installation.
- Figure 4.7 shows a side KZK whereas your installation may look different.

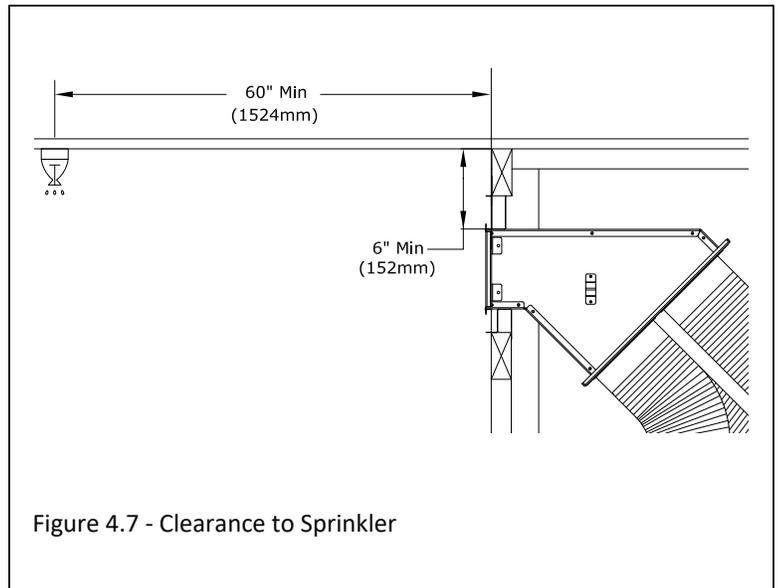


Figure 4.7 - Clearance to Sprinkler

4.5 Wall Thimble Framing Instructions - Minimum Horizontal

- Follow Figure 4.8 below for minimum rough-in dimensions.
1. Measure from floor level of the fireplace to the center of where the vent pipe will penetrate the wall. The dimension in Figure 4.8 is used with a Simpson DuraVent pipe.
 2. Cut and frame an opening in the wall to allow the vent system to run level through the wall thimble.
 3. Follow the vent pipe manufacturer's installation instructions for natural draft vent installation.

Note: Vent pipe framing dimensions are tested with listed Simpson DuraVent pipe. Other manufacturers product dimensions may vary.

Minimum Wall Thimble clearance for 5" x 8" vent pipe is 1/2" (13mm).

Minimum Wall Thimble clearance for 4" x 6-5/8" vent pipe is 1" (25mm). The Kozy Power Vent is the only approved 4" x 6-5/8" horizontal termination.

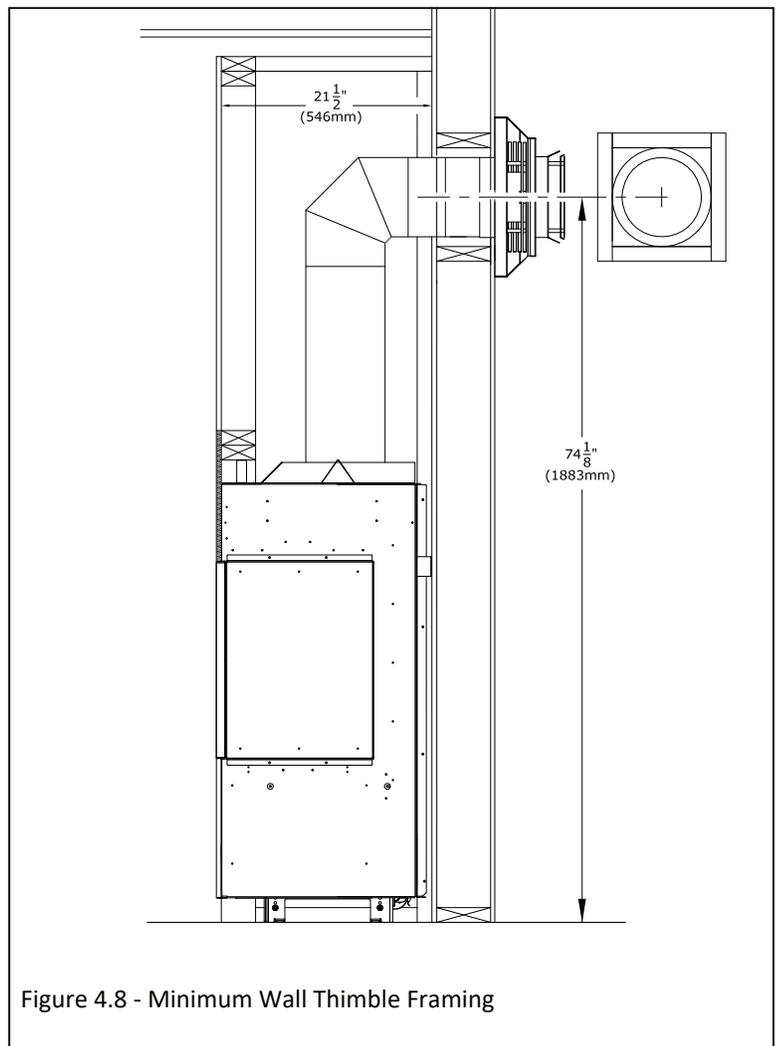


Figure 4.8 - Minimum Wall Thimble Framing

4.6 Facing Requirements

The information in this section shows the minimum non-combustible facing requirements. These requirements apply for vented cavity or KZK installations. Figure 4.9 shows the minimum 12" non-combustible facing material.

Take special consideration where you attach the facing material to the fireplace as there are no-screw zones on this fireplace.

Make sure the screws only penetrate up to 1" (25mm) into the allowed areas of the fireplace. Take consideration of this when choosing screw length based on your facing material thickness.

The image below shows two no screw zones for the facing and finishing material. There is a 1" zone below the bottom finishing edge and a 2-3/8" zone above the top finishing edge.

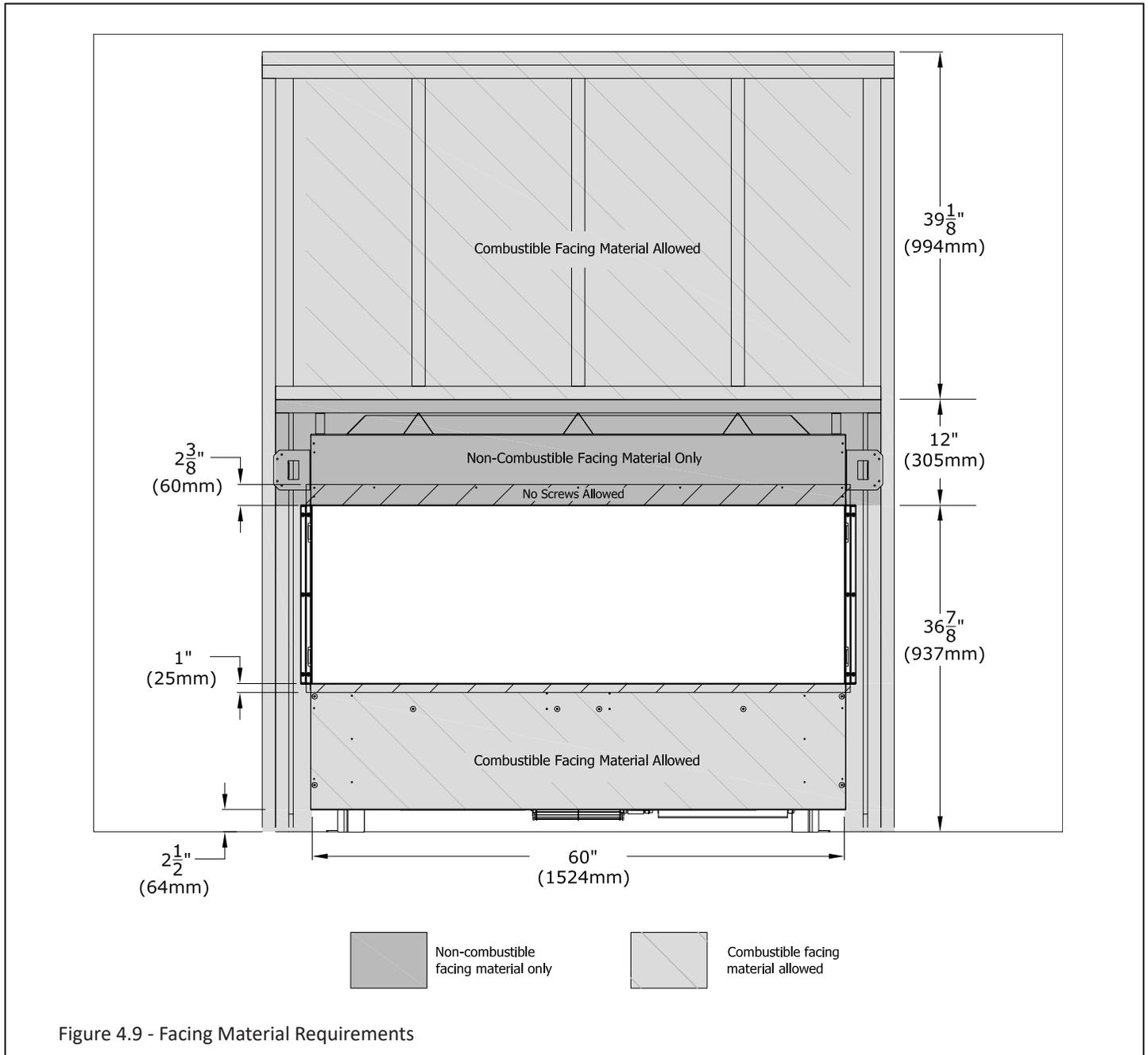


Figure 4.9 - Facing Material Requirements

4.6.1 Facing Requirements - Side Finishing Edge Extension

This fireplace comes with a side finishing edge extension included with the fireplace. This finishing edge extension creates a small gap along the side finishing edge which allows the use of the optional rectangle surround (Part # G6020-RS). Install both sides of the extension bracket with the provided (6) screws if you want to use the rectangle surround.

Note: Only install the (2) finishing edge extensions if you are using the option rectangle surround.

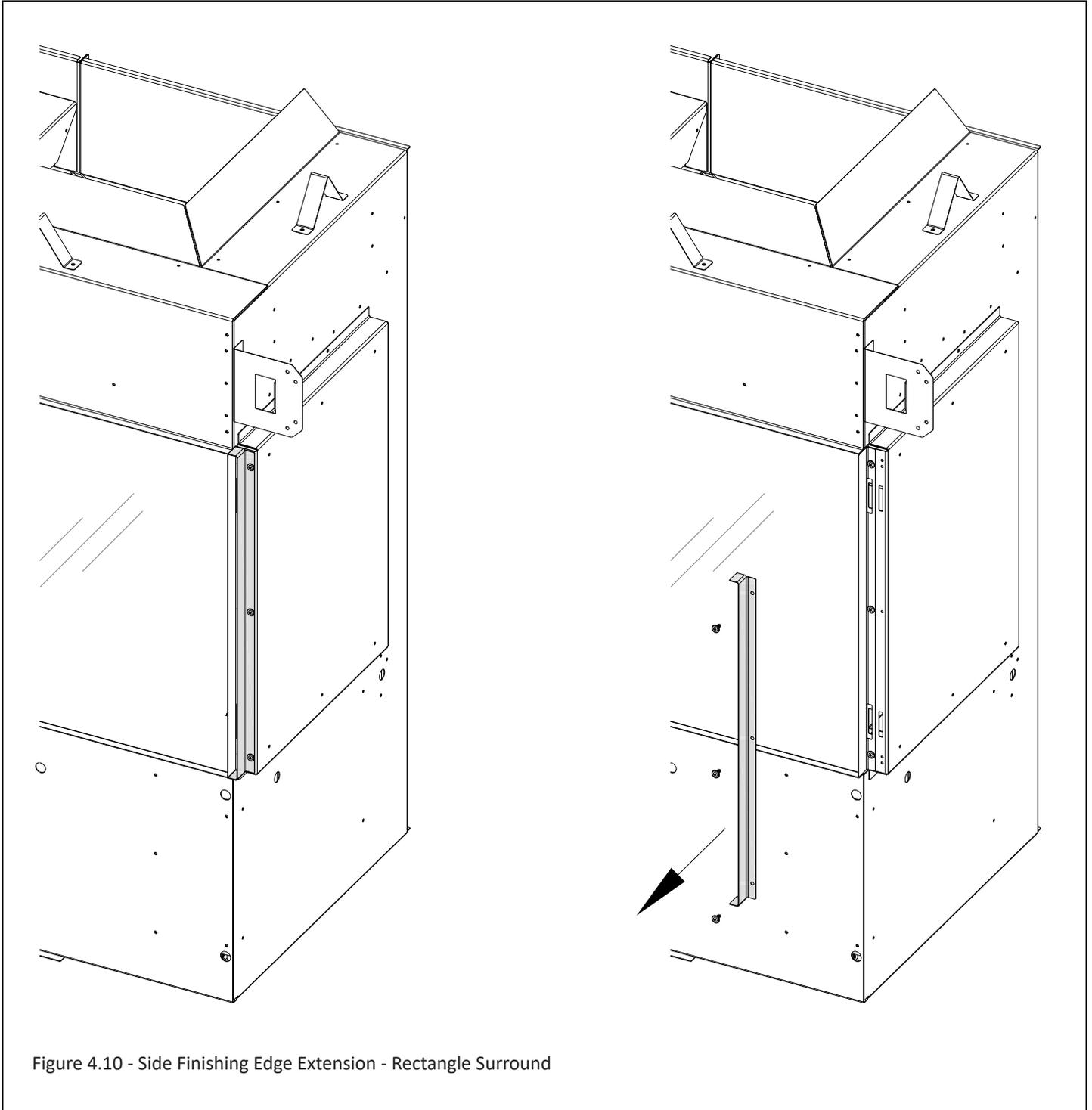


Figure 4.10 - Side Finishing Edge Extension - Rectangle Surround

4.7 Requirements to Cool the Fireplace Chamber and Safety Glass

IMPORTANT: This fireplace requires airflow to cool the fireplace chamber and the safety glass. Airflow comes into the fireplace from an air intake opening at the bottom of the fireplace. The hot air is discharged at an opening above the fireplace. You must select one of the vented cavity or KZK options to achieve this. This airflow is separate from the air that is used in the vent system and combustion process. Shown below is a visualization of the airflow.

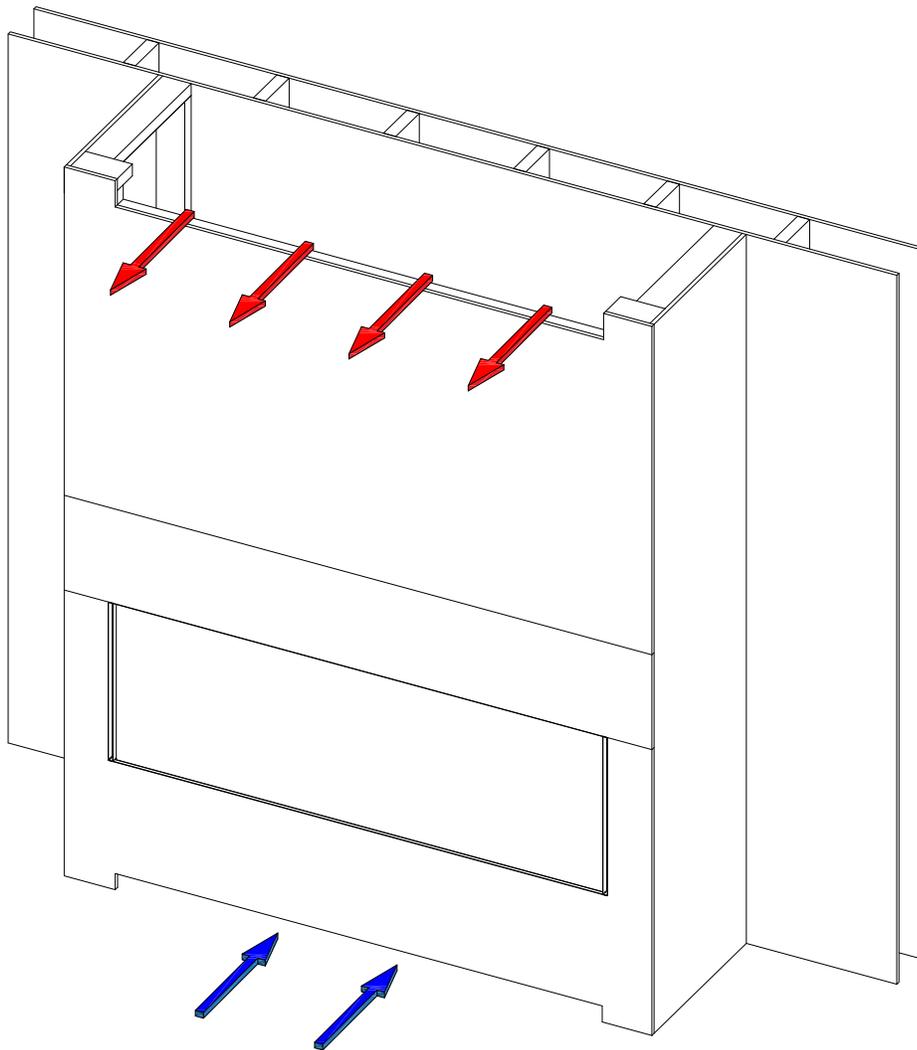


Figure 4.11 - Fireplace Chamber Airflow

4.7.1 Front KZK - Part # KZK-056

This section outlines the requirements for using the front KZK option to cool the fireplace chamber. This option requires the use of an air intake opening in the fireplace chamber and the installation of the front KZK.

Kit Contents

ALL kit contents must be installed.

- (1) 56" plenum kit: KZK-056
- (1) plenum discharge trim: KZK-056DT
- (2) plenum support brackets
- (12) 6" collars - (6) attach to the bottom of the plenums; (6) attach to the G6020-ACH.

Additional Required Items

- (1) KZK-610 (sold separately) is used for a 10' vent run. If you are mounting the plenum above the fire-place 10' (3m) or less, use (1) KZK-610 kit.
- (1) G6020-ACH - Air Chute: This air chute connects to the top of the fireplace. The KZK tubes and collars connect the air chute to the KZK plenum.

Optional Items

If you are mounting the plenum above the fireplace between 10' to 20', you will need (2) KZK-610 kit and (1) #KZK-CPL6 coupler kit. KZK-CPL6 (sold separately) is (6) 6" couplers that connect (2) KZK-610.

Plenum Placement

- **IMPORTANT:** The air duct pipe cannot run horizontally without a vertical rise.
- **IMPORTANT:** The 1/2" clearance around the air duct pipes must be maintained.
- Use #KZK-610 UL181 Class 0 Air Duct piping to connect the plenum to the unit.
- Hussong Mfg. Co., Inc. requires pipes to be listed as UL181 Class 0 Air Duct to connect the plenum to the unit.
- Maximum Vent Run: 20' (6.10m)

(6) - 10' x 6" (aluminum flex) listed to UL-181 Class 0 Air Duct (sold separately)

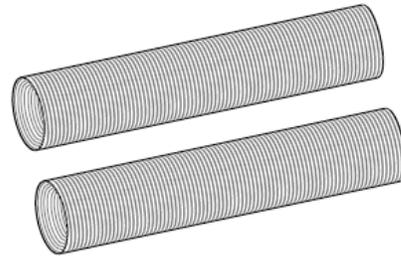


Figure 4.12 - #KZK-610

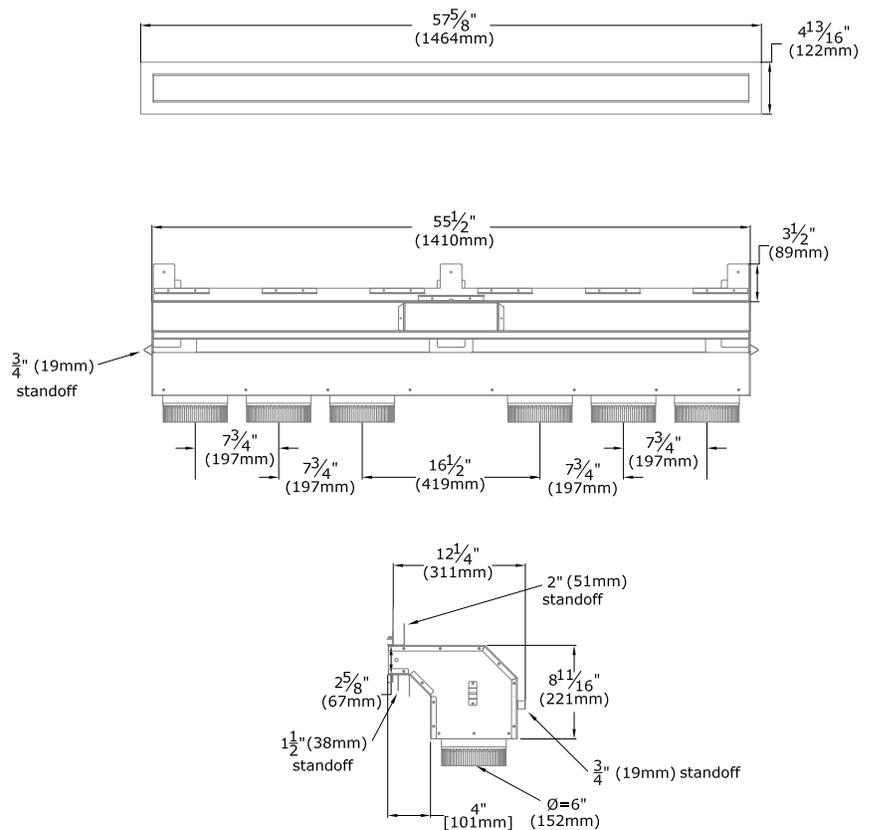


Figure 4.13 - KZK-056 Overview

4.7.1 Front KZK (continued)

Below is the framing information for the front KZK. Figure 4.14 shows the framed opening for the KZK plenum. Figure 4.15 shows the framing information.

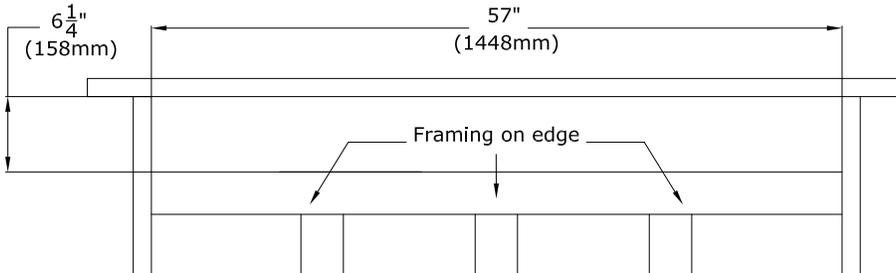


Figure 4.14 - Front KZK - Plenum Framed Opening

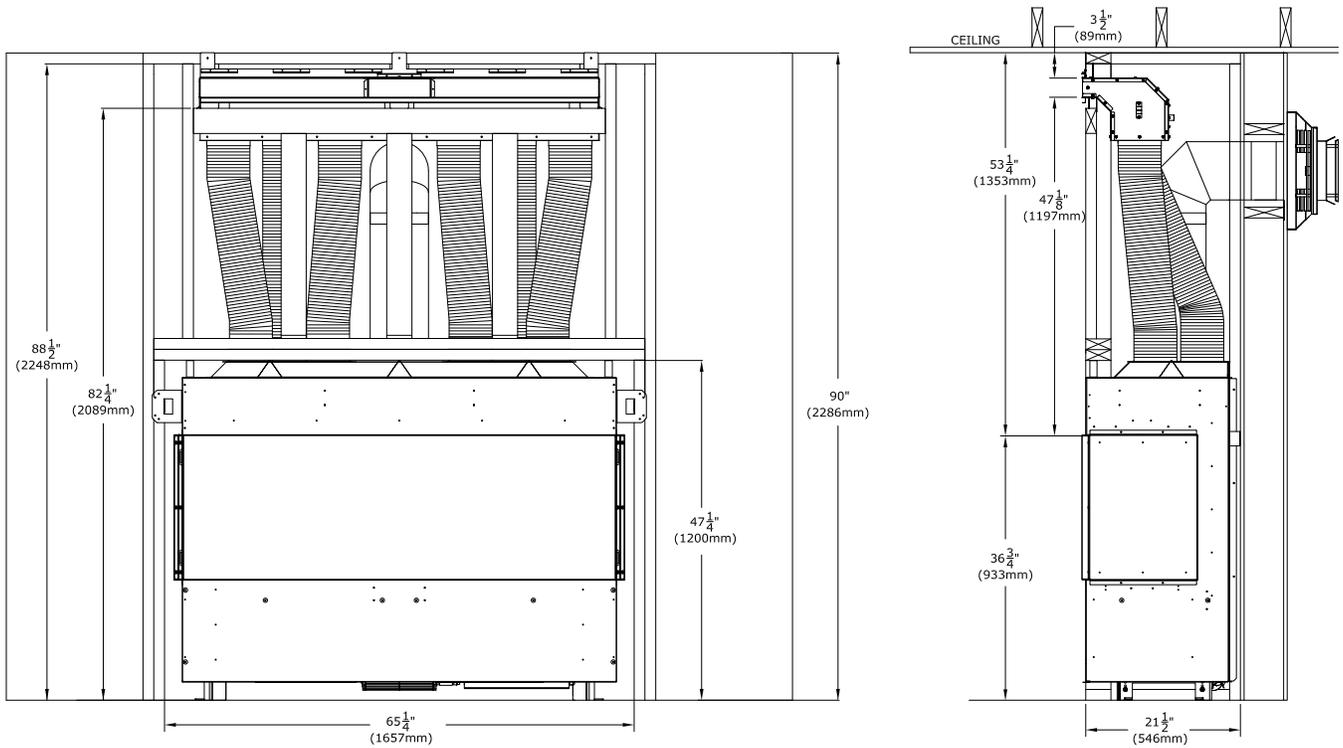


Figure 4.15 - Minimum Chamber Height Plenum Framing

4.7.1 Front KZK (continued)

Figure 4.16 shows the minimum air intake opening that is required for the front KZK installation.

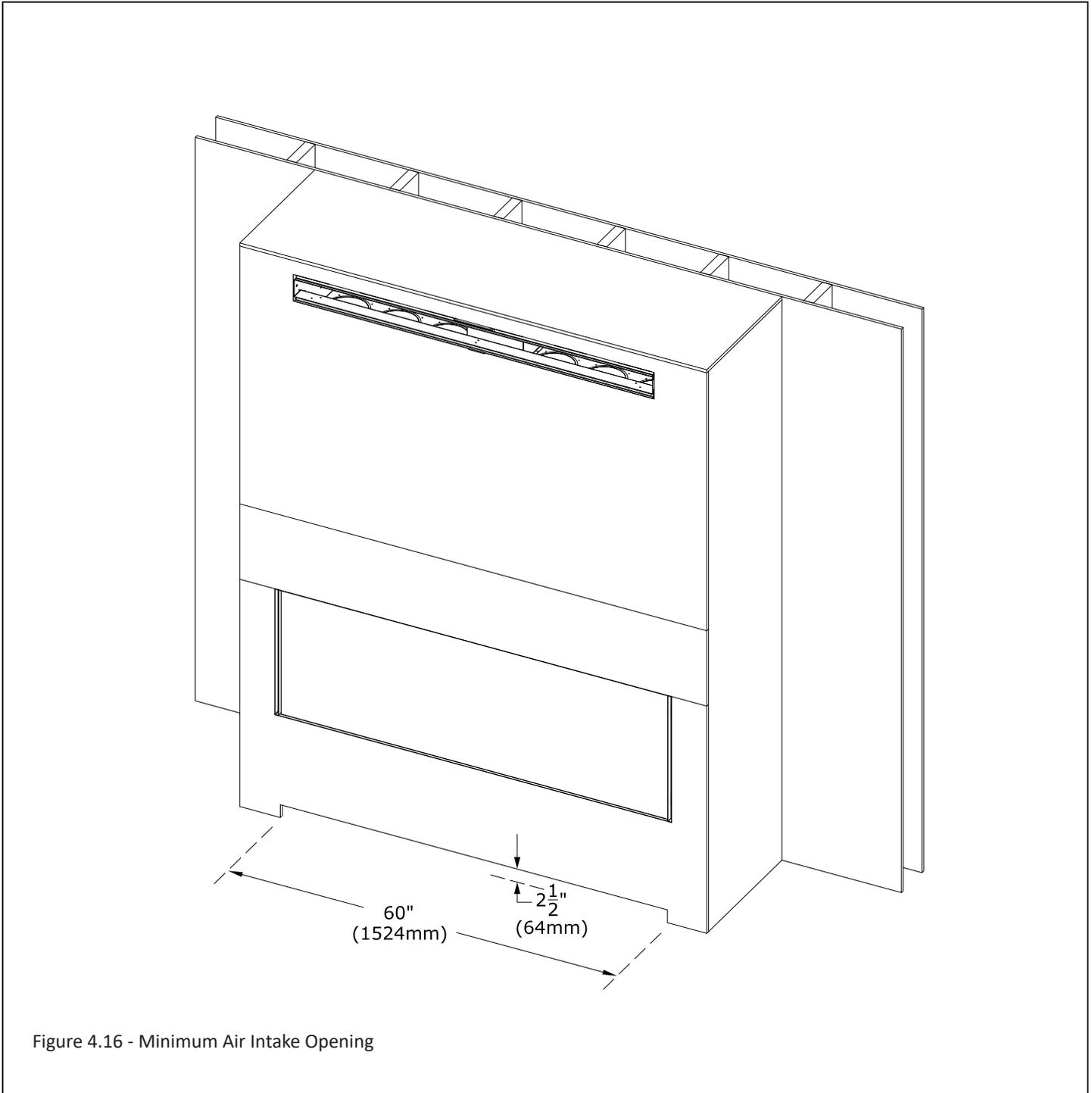


Figure 4.16 - Minimum Air Intake Opening

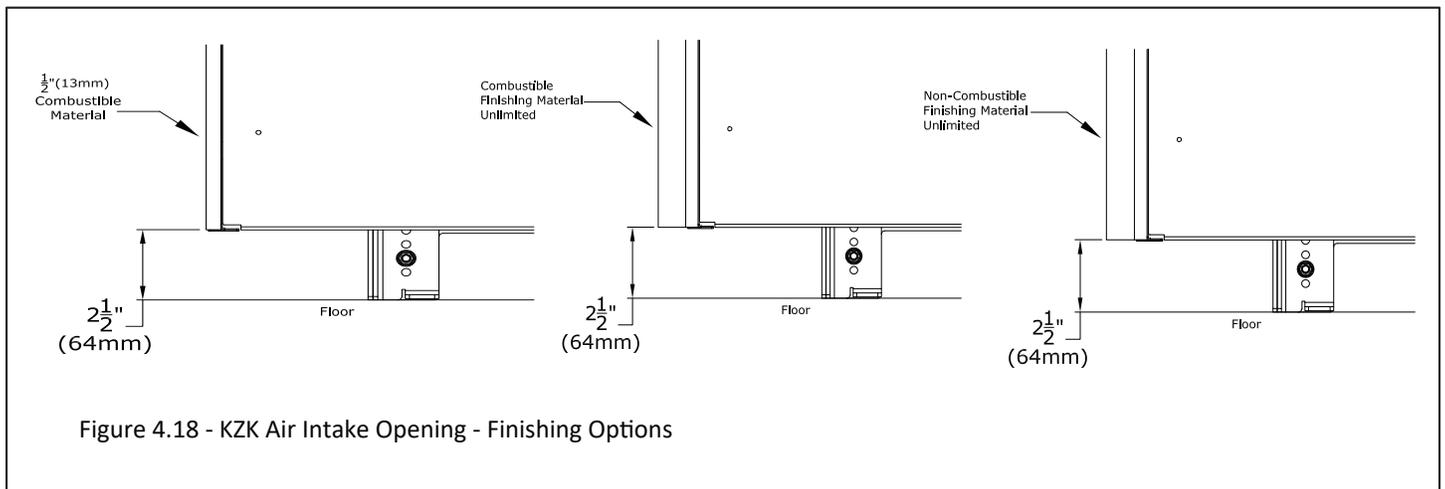
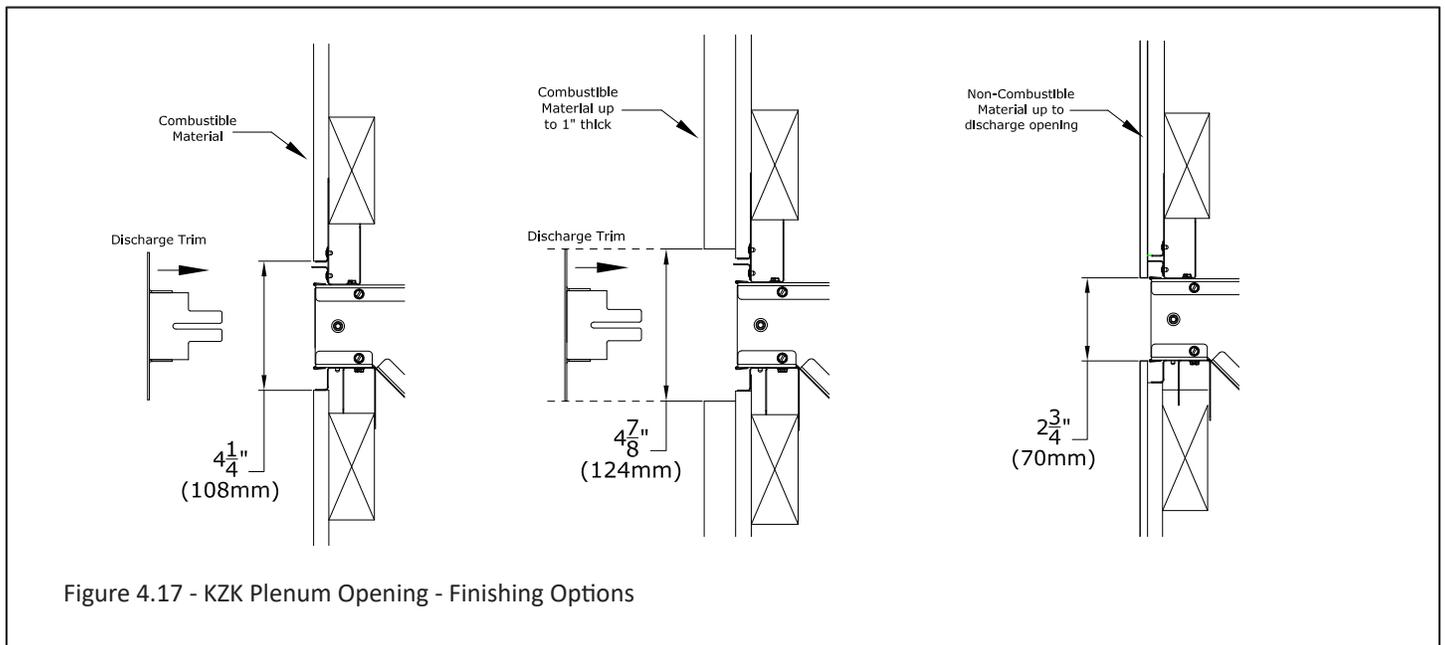
4.7.1 Front KZK (continued)

Shown below in Figure 4.17 are options on how you can finish around the front KZK plenum opening.

- The left image shows combustible facing material such as drywall finished up to the standoffs around the opening of the plenum. Install the KZK discharge trim to cover the edge of the finishing material.
- The middle image shows the allowed 1" thick additional combustible finishing material such as shiplap. This material must stop at the edge of the discharge trim.
- The right image shows non-combustible finishing material such as tile that is finished up to the opening of the plenum.

Shown below in Figure 4.18 are options on how you can finish up to finishing edge of the air intake opening. Ensure the 2-1/2" (64mm) air intake opening is always maintained throughout all the facing and finishing material.

- The left image shows the 1/2" combustible facing material butting up against the finishing edge at the fireplace bottom.
- The middle image shows the allowed 1" thick additional combustible finishing material such as shiplap.
- The right image shows non-combustible finishing material such as tile or stone.



4.7.2 Side KZK - Part # KZK-1510

This section outlines the requirements for using the side KZK option to cool the fireplace chamber. This option requires the use of an air intake opening in the fireplace chamber and the installation of the side KZK.

Kit Contents

ALL kit contents must be installed.

- (2) 15" plenums
- (2) plenum air grilles
- (12) 6" collars - (6) attach to the bottom of the plenums; (6) attach to the G6020-ACH.

Additional Required Items

- (1) KZK-610 (sold separately) is used for a 10' vent run. If you are mounting the plenum above the fireplace 10' (3m) or less, use (1) KZK-610 kit.
- (1) G6020-ACH - Air Chute: This air chute connects to the top of the fireplace. The KZK tubes and collars connect the air chute to the KZK plenum.

Optional Items

If you are mounting the plenum above the fireplace between 10' to 20', you will need (2) KZK-610 kit and (1) #KZK-CPL6 coupler kit. KZK-CPL6 (sold separately) is (6) 6" couplers that connect (2) KZK-610.

Plenum Placement

- **IMPORTANT:** The air duct pipe cannot run horizontally without a vertical rise.
- **IMPORTANT:** The 1/2" clearance around the air duct pipes must be maintained.
- Use #KZK-610 UL181 Class 0 Air Duct piping to connect the plenums to the unit.
- Hussong Mfg. Co., Inc. requires pipes to be listed as UL181 Class 0 Air Duct to connect the plenums to the unit.
- Maximum Vent Run: 20' (6.10m)

(6) - 10' x 6" (aluminum flex) listed to UL-181 Class 0 Air Duct (sold separately)

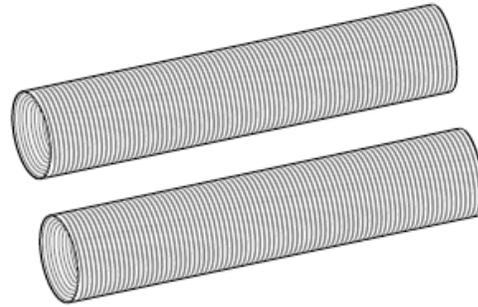


Figure 4.19 - #KZK-610

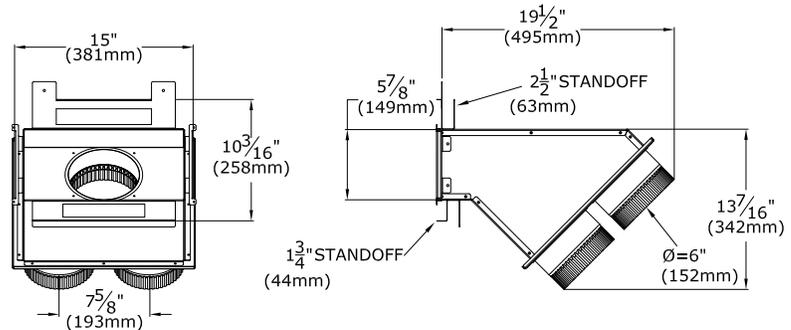
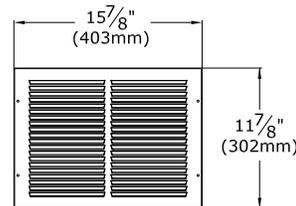


Figure 4.20 - KZK-1510 Overview

4.7.2 Side KZK Opening (continued)

Below is the framing information for the side KZK. Figure 4.21 shows the framed opening for each of the plenums in the side KZK.

IMPORTANT: In the drawing shown there is an arrow pointing to the dashed line along the back framing stud. You will have to notch 1/2" (13mm) out of the stud for the side KZK to fit.

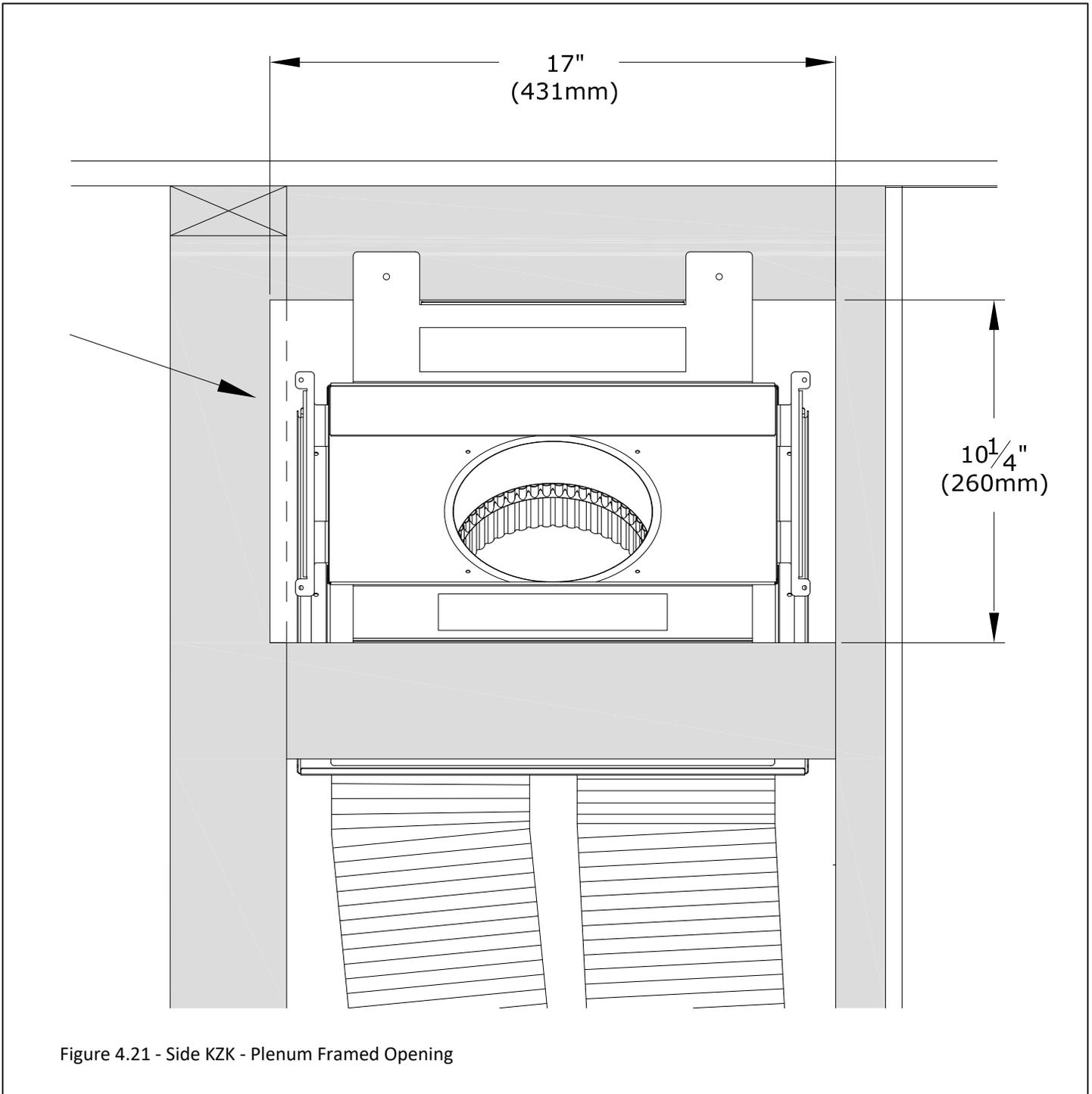
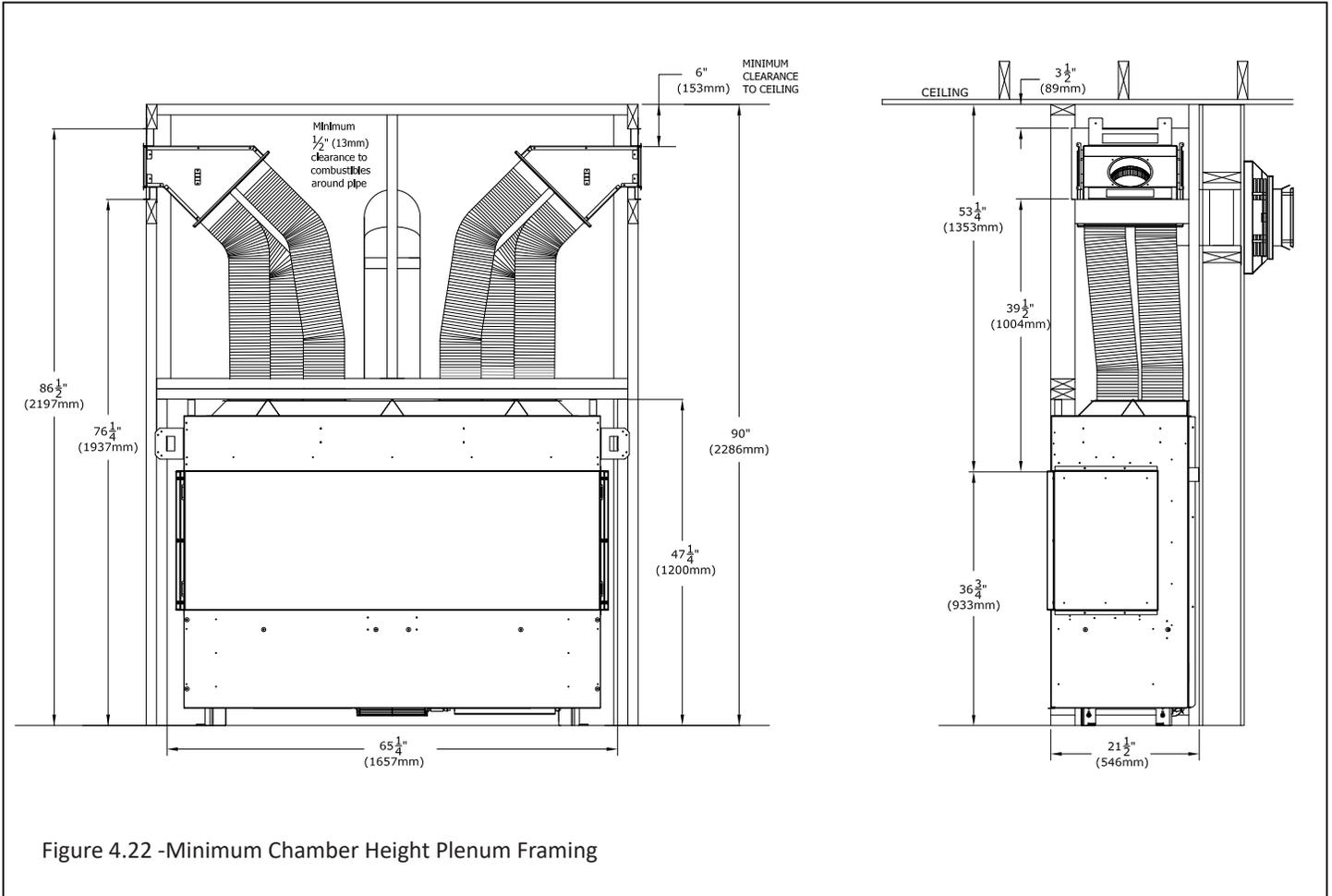


Figure 4.21 - Side KZK - Plenum Framed Opening

4.7.2 Side KZK Opening (continued)



4.7.2 Side KZK Opening (continued)

Figure 4.23 shows the minimum air intake opening that is required for the side KZK installation.

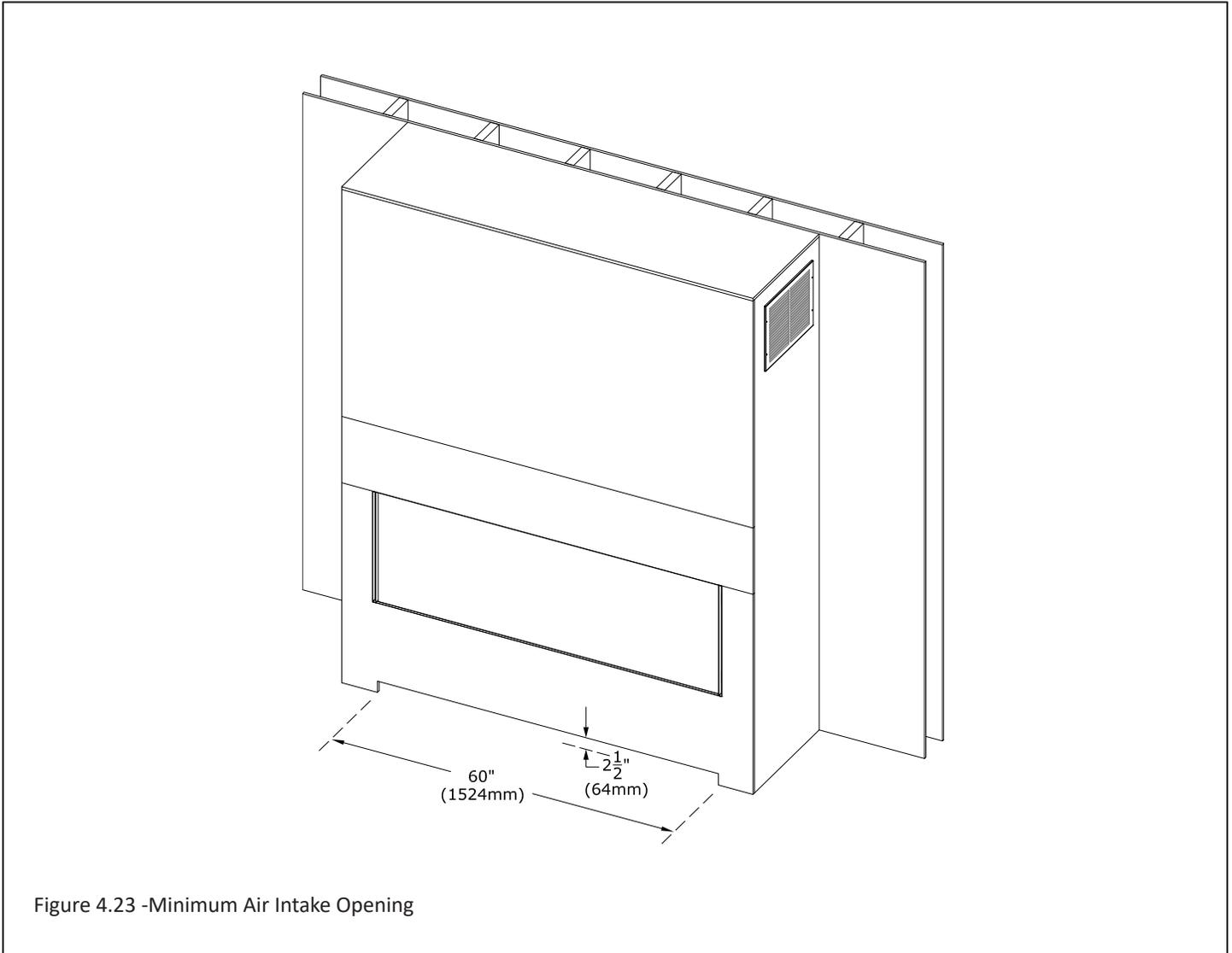


Figure 4.23 -Minimum Air Intake Opening

4.7.2 Side KZK (continued)

Shown below in Figure 4.24 are options on how you can finish around the side KZK plenum grille.

- The left image shows combustible facing material such as drywall finished up to the standoffs around the opening of the plenum. Install the KZK grille to cover the edge of the finishing material.
- The right image shows the allowed 1" thick additional finishing material such as shiplap. This material must stop at the edge of the grille.

Shown below in Figure 4.25 are options on how you can finish up to finishing edge of the air intake opening. Ensure the 2-1/2" (64mm) air intake opening is always maintained throughout all the facing and finishing material.

- The left image shows the 1/2" facing material butting up against the finishing edge.
- The middle image shows the allowed 1" thick additional finishing material such as shiplap.
- The right image shows non-combustible finishing material such as tile or stone.

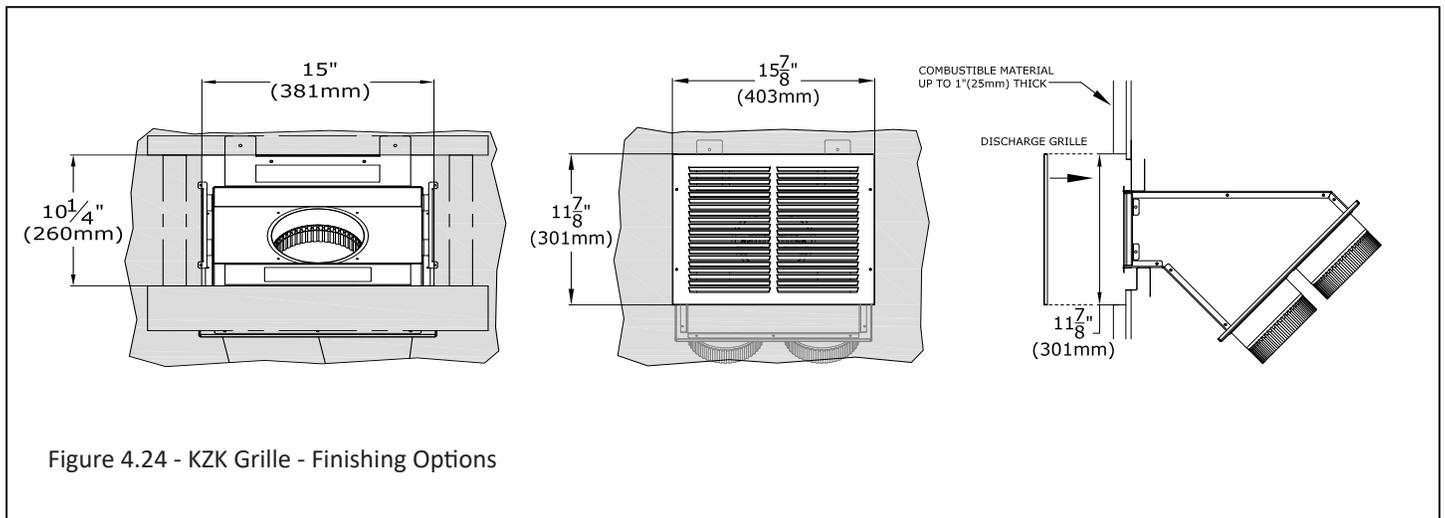


Figure 4.24 - KZK Grille - Finishing Options

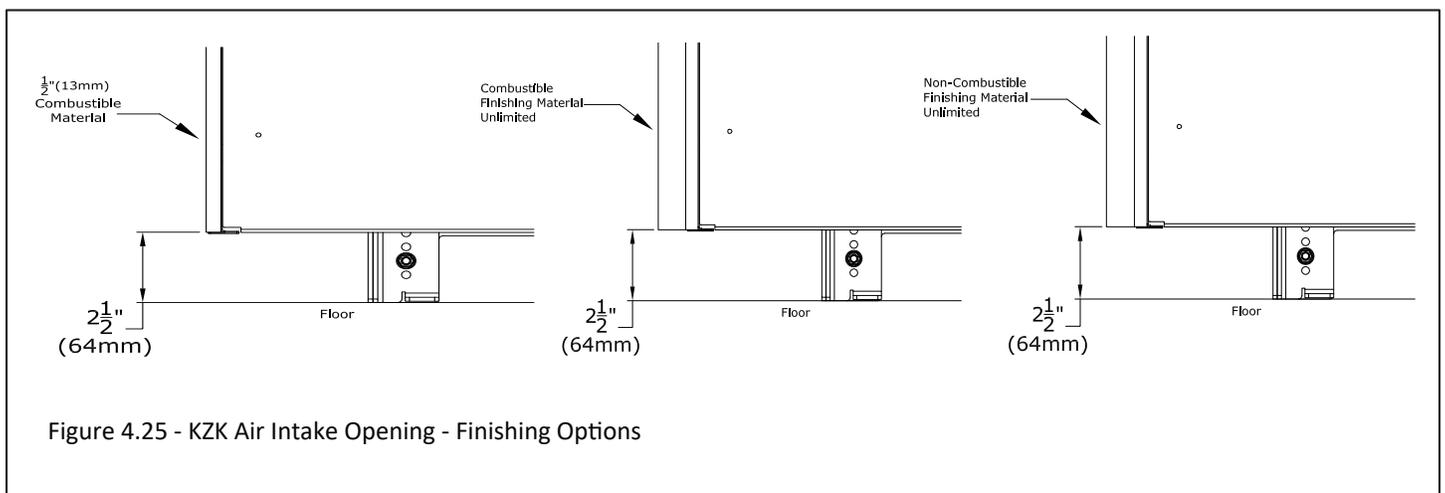


Figure 4.25 - KZK Air Intake Opening - Finishing Options

4.7.3 KZK Installation Overview

Important: You must order a (1) G6020-ACH air chute with your KZK-056 or KZK-1510 and KZK-610. The G6020-ACH air chute attaches to the fireplace. See Figure 4.26.

Note: the KZK collars cannot be installed on the fireplace when sliding the fireplace into the framed opening. Install after installing into the framed opening.

1. Use the provided (11) sheet metal screws with the kit to install the air chute. Slide the fireplace into the framed opening.
2. Next you will install the first section of vent pipe. There are (3) tabs to fold up and then you can insert the vent pipe into the center hole. Ensure the vent pipe is fully seated on the vent pipe connection. Use the (3) fold up tabs to secure the vent pipe.
3. Use the (24) provided sheet metal screws to install the KZK collars on the air chute.
4. Frame the rough opening of the KZK plenum(s). Refer to all pages of this manual to ensure all framing and finishing materials are considered.
5. Install the plenum(s) into the rough framed opening to maintain minimum clearances to combustibles. If you are installing the front KZK we recommend using the supplied mounting brackets to help support the weight of the plenum and pipes. Ensure the plenum is level (All KZK Options) and its outlet are not distorted. Additional metal strapping may be needed to support the weight of the tubes depending on the height of installation.
6. Attach the piping from all (6) plenum vent collars to all (6) fireplace vent collars. An upward slope must be maintained in horizontal section of pipe for proper convection.
7. Install the plenum discharge trim / grille provided with this kit using the (2) provided screws. If desired, the discharge trim or grille may be painted using high temperature paint (250F). Continue with fireplace installation.

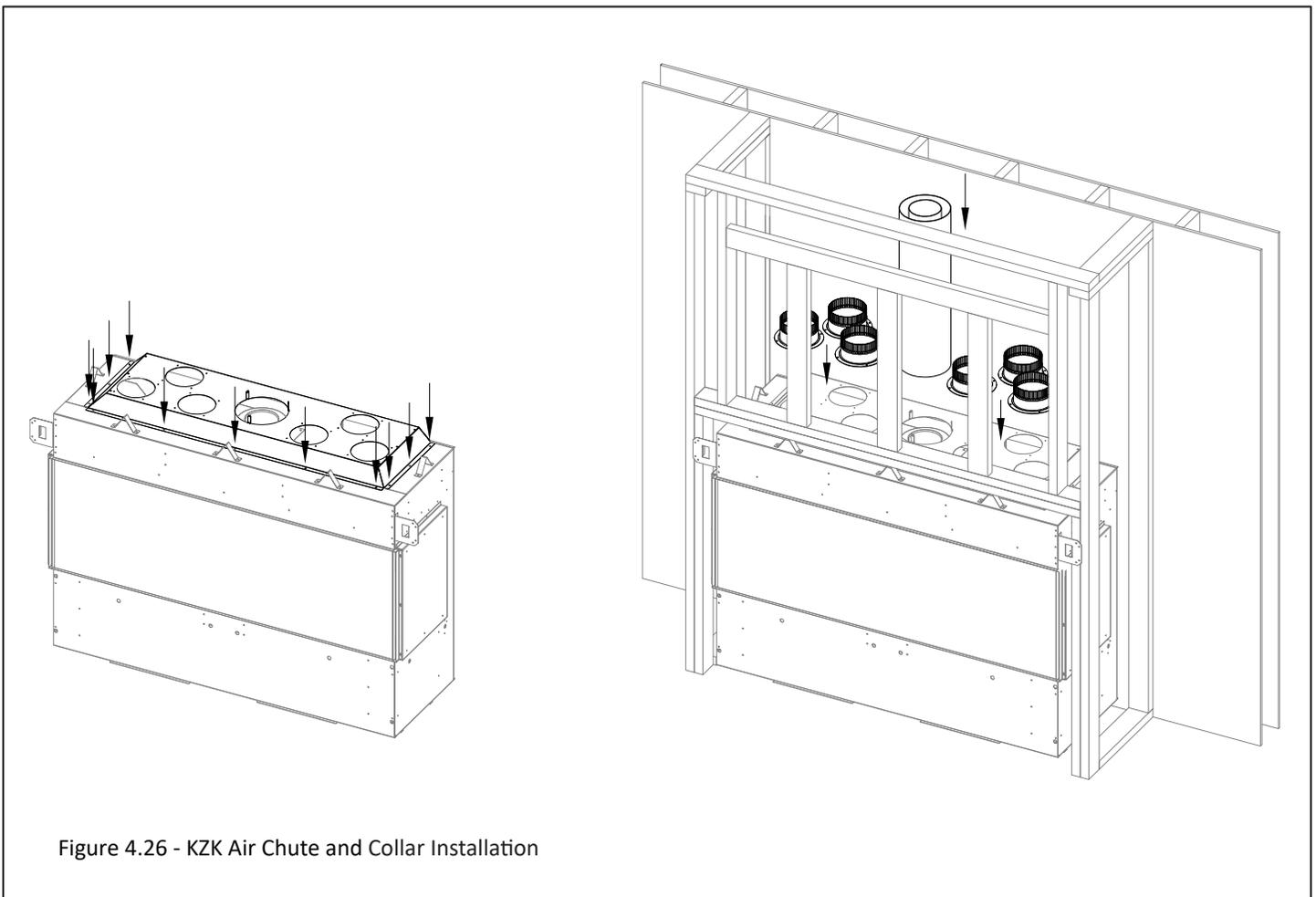


Figure 4.26 - KZK Air Chute and Collar Installation

4.7.4 Vented Cavity Openings - All Three Sides Of Chamber

See this section for the chamber air intake and heat release opening minimum requirements.

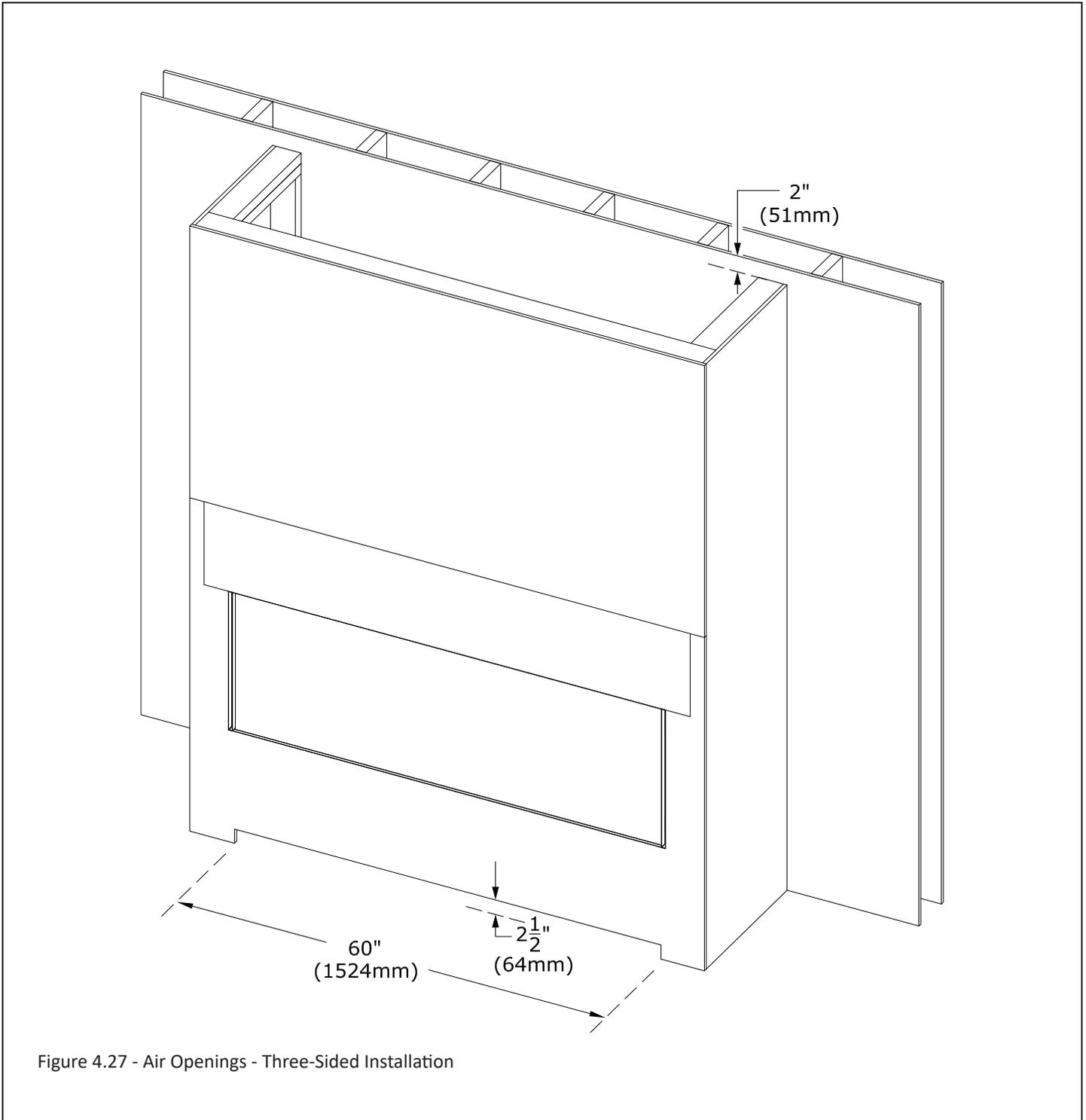
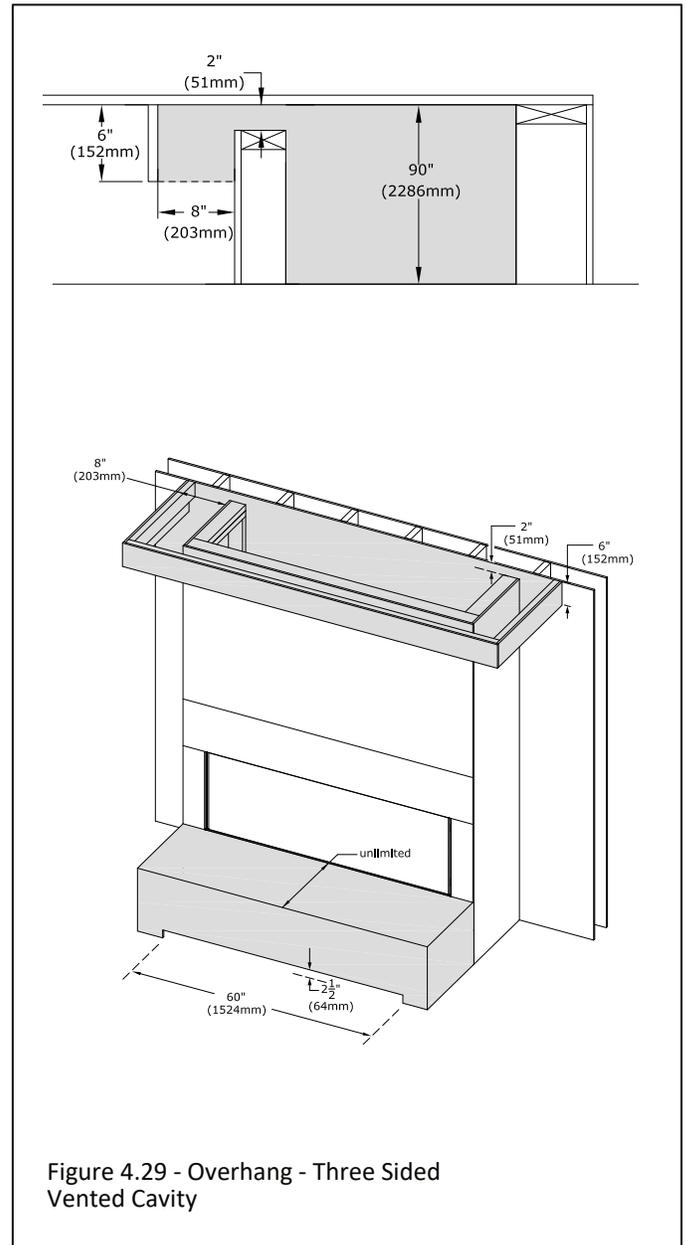
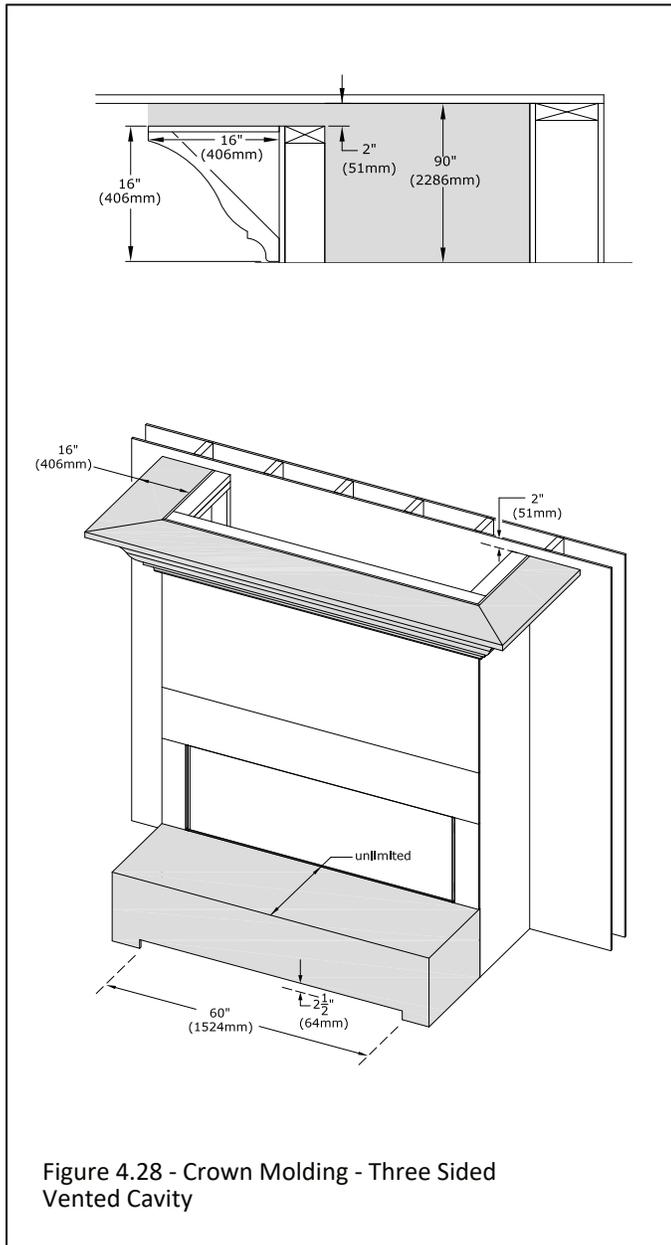


Figure 4.27 - Air Openings - Three-Sided Installation

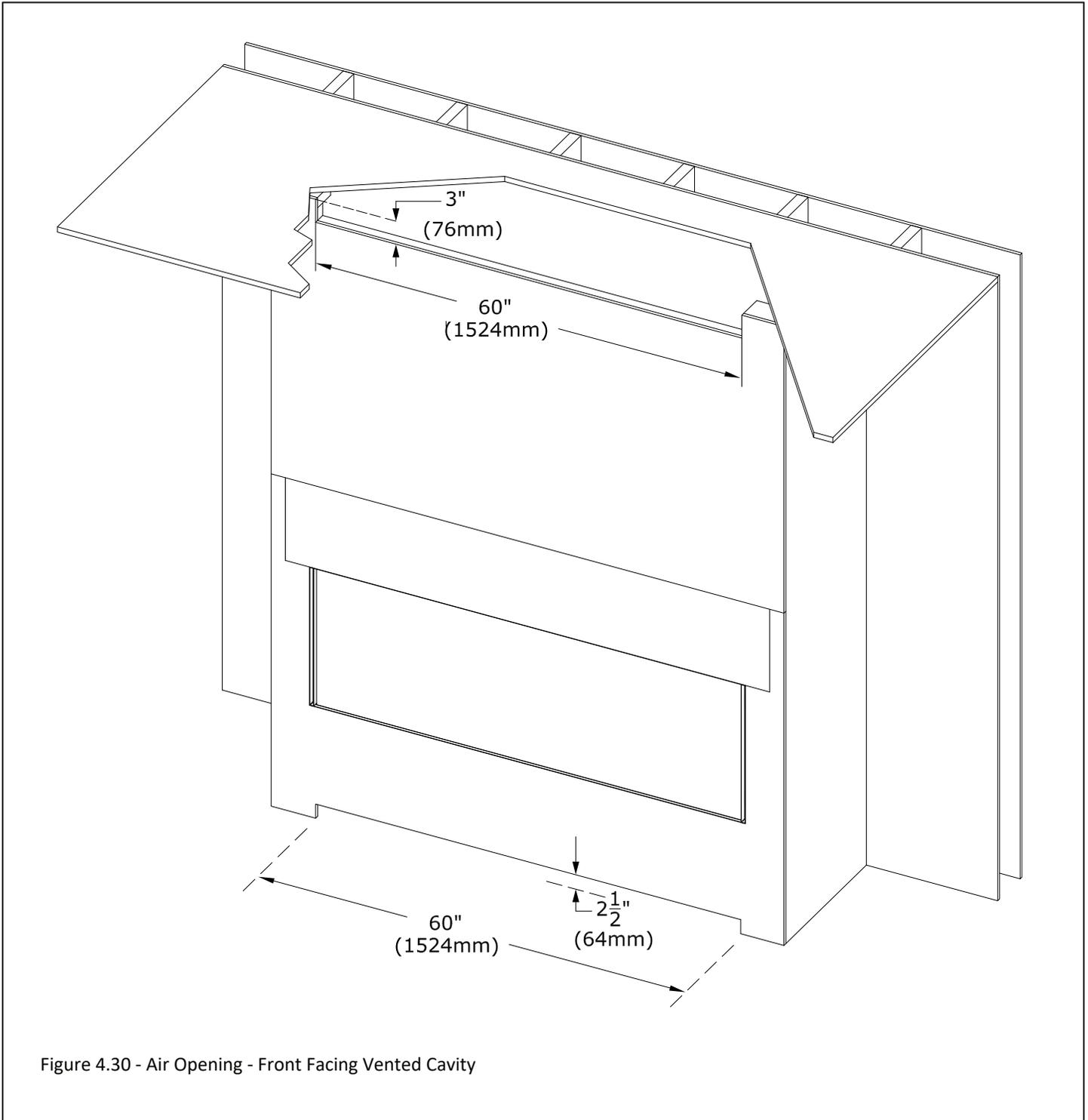
4.7.4 Vented Cavity Openings - All Three Sides Of Chamber (continued)

The figures on this page show how you can visually conceal the heat release opening. This may provide a more desirable appearance. Figure 4.28 shows the use of crown molding. Figure 4.29 shows an overhang.



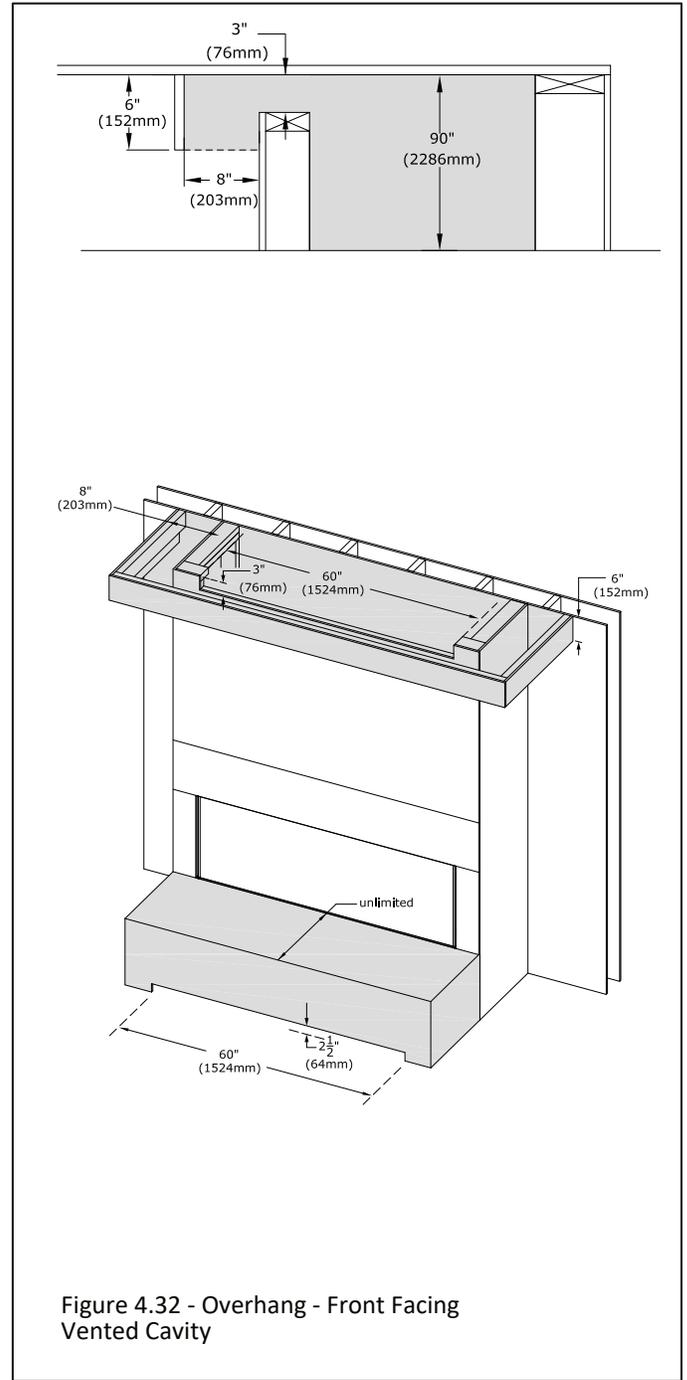
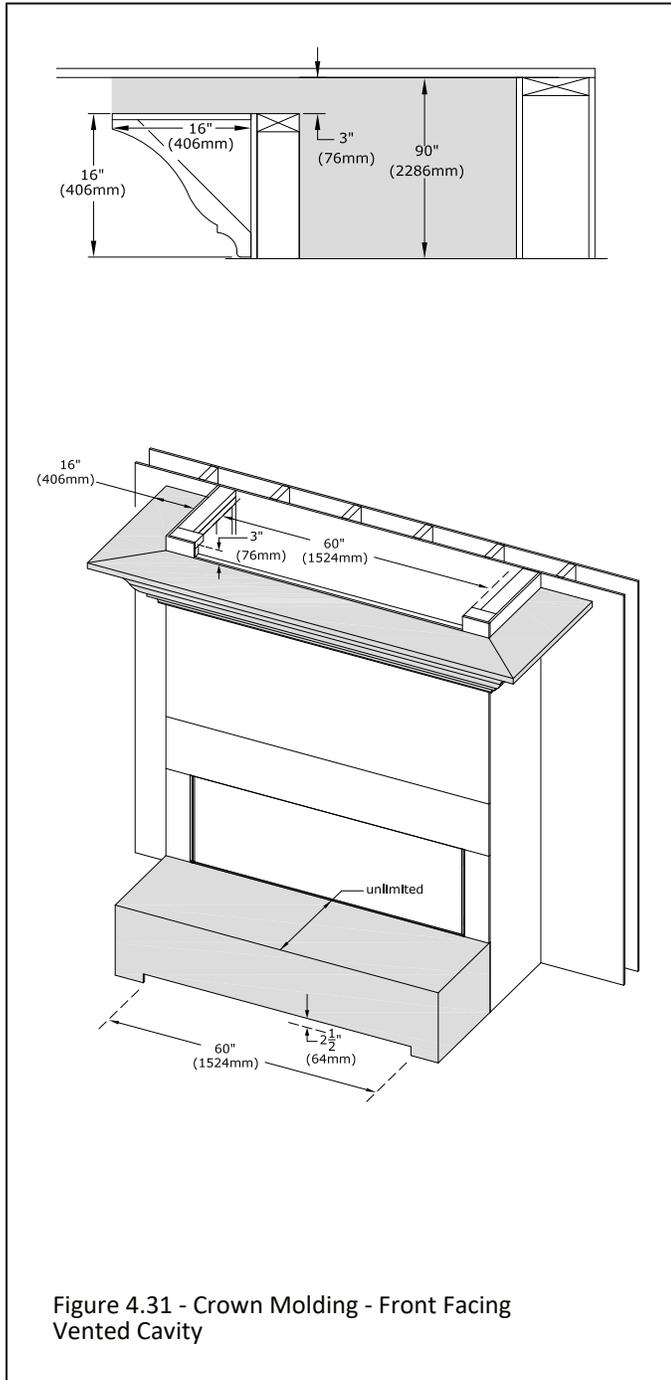
4.7.5 Vented Cavity Openings - Front Of The Chamber

See this section for the chamber air intake and heat release opening minimum requirements when you are placing the openings on the front of the chamber only.



4.7.5 Vented Cavity Openings - Front Of The Chamber (continued)

The figures on this page show how you can visually conceal the heat release opening. This may provide a more desirable appearance. Figure 4.31 shows the use of crown molding. Figure 4.32 shows an overhang.



4.7.6 Vented Cavity Openings - Combination of Front and Side Openings

See this section for the option of a front chamber air intake and side chamber heat release opening. The minimum requirements are shown in this section. The figure below shows the side heat release opening. You would order part# KZK-SPG2 for the approved side grilles. The louvers of the grille must face down.

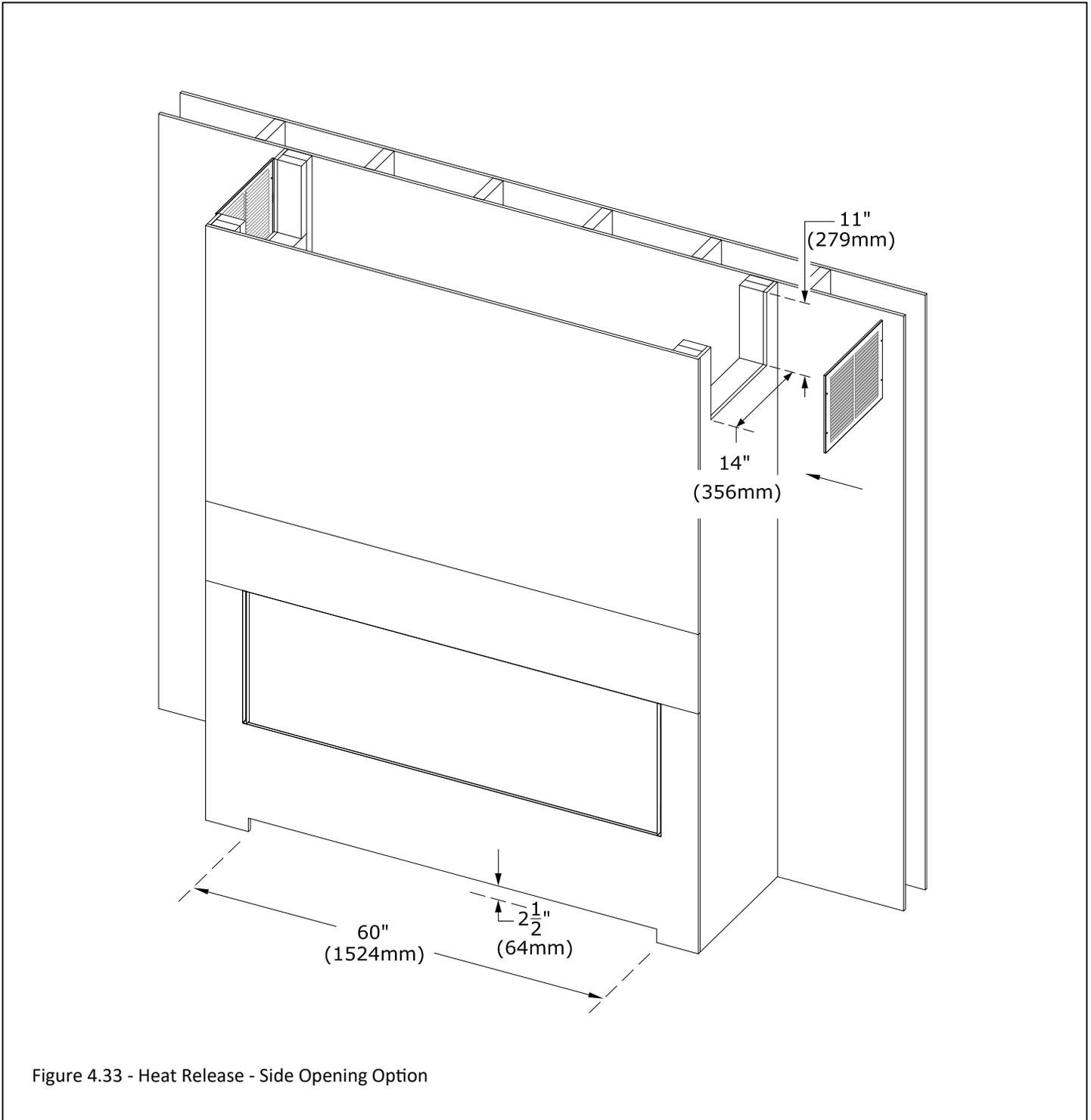


Figure 4.33 - Heat Release - Side Opening Option

4.8 Hearth, Mantel, and Front Chamber Projection for KZK (KZK) Options

NOTE: A maximum of 16" (406mm) total projection is allowed between the mantel and chamber projection (regardless if it is combustible, non-combustible, or a combination). An example would be if you installed a 10" (254mm) front chamber projection then you would be allowed up to a 6" (152mm) mantel until you hit the limit of 16" (406mm).

4.8.1 Combustible Hearth and Mantel Requirements

WARNING: All minimum clearances to combustible material **MUST** be maintained.

- **Combustible Mantel Projections:** A maximum of a 16" (406mm) mantel can be installed flush at the top finishing edge. See Figure 4.34.
- **Combustible Chamber Projections:** A maximum of a 16" (406mm) chamber projection can be installed flush at the side and top finishing edge of the fireplace. See Figure 4.35.
- **Combustible Hearth:** Combustible hearth can have an unlimited projection. Hearth can be raised flush to the bottom finishing edge. See Figure 4.34.

4.8.2 Non-combustible Mantel and Chamber Projection Requirements

- **Non-combustible Mantel Projections:** A maximum of a 16" (406mm) non-combustible mantel projection is allowed to start at 0" (0mm) from the fireplace top finishing edge of the fireplace.
- **Non-combustible Chamber Projection:** A maximum of a 16" (406mm) non-combustible projection can be installed flush at the front top finishing edge of the fireplace

IMPORTANT: You are required to have the minimum non-combustible facing material along the front and sides of the fireplace before constructing the framing of the of chamber projection. The non-combustible facing material prevents the combustible framing of the chamber projection from directly contacting the fireplace. See Section 4.8.2 for more information.

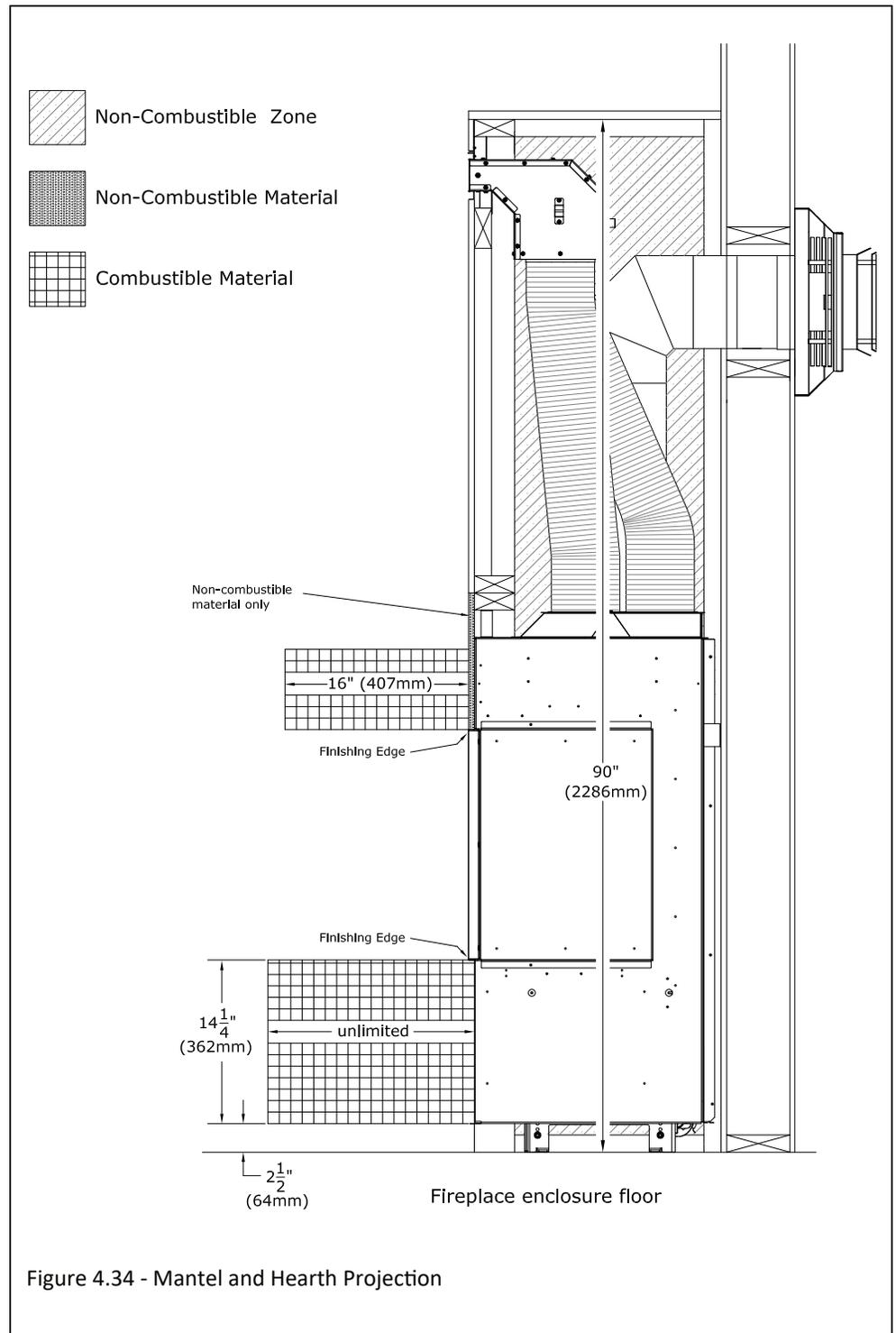


Figure 4.34 - Mantel and Hearth Projection

4.8 Hearth, Mantel, and Front Chamber Projection for KZK Options (continued)

Figure 4.35 shows the KZK installed in a 16" front chamber projection.

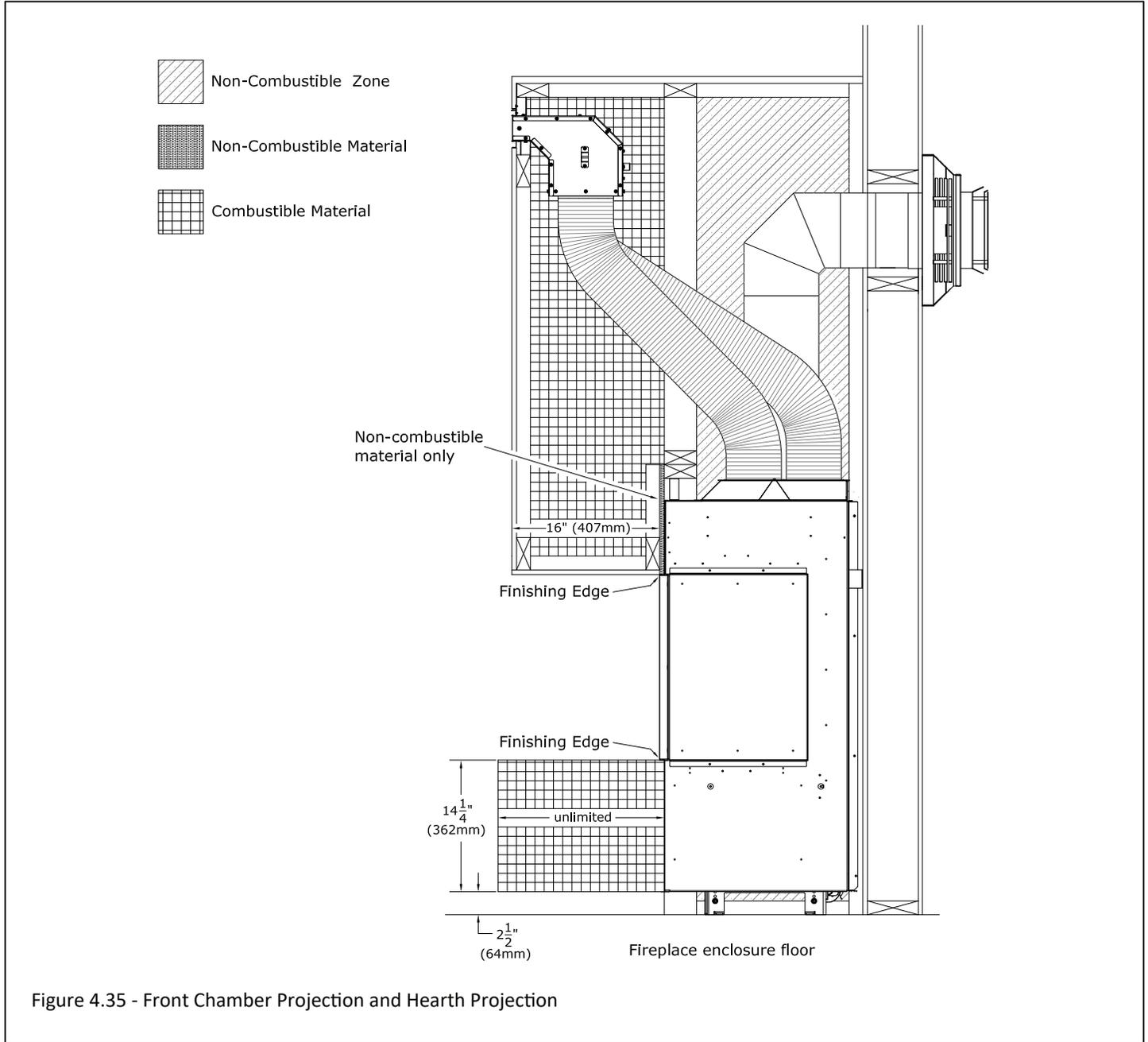


Figure 4.35 - Front Chamber Projection and Hearth Projection

4.8.3 How to Construct a Chamber Projection with a KZK

This section is an overview of the steps in constructing a chamber projection when using a KZK. Figures 4.36 and 4.37 show a front KZK (KZK-056) application but would apply to side KZK (KZK-1510) as well. The fireplace chamber does NOT need to be sealed separately from the front projection. This is because the air will heat up and rise through the KZK tubes and exit through the KZK plenum(s).

- Frame out the chamber above the fireplace. Install the required non-combustible facing material as required in Section 4.6.

NOTE: This non-combustible facing material is only required if you intend on using combustible framing for the projection. If you use non-combustible framing then it can come into direct contact with the fireplace (non-combustible facing material is not required).

- Next frame out the projection and install the KZK. Lastly install the facing material and finishing material.

IMPORTANT: Maintain ½" (13mm) clearance around the KZK tubes to anything combustible.

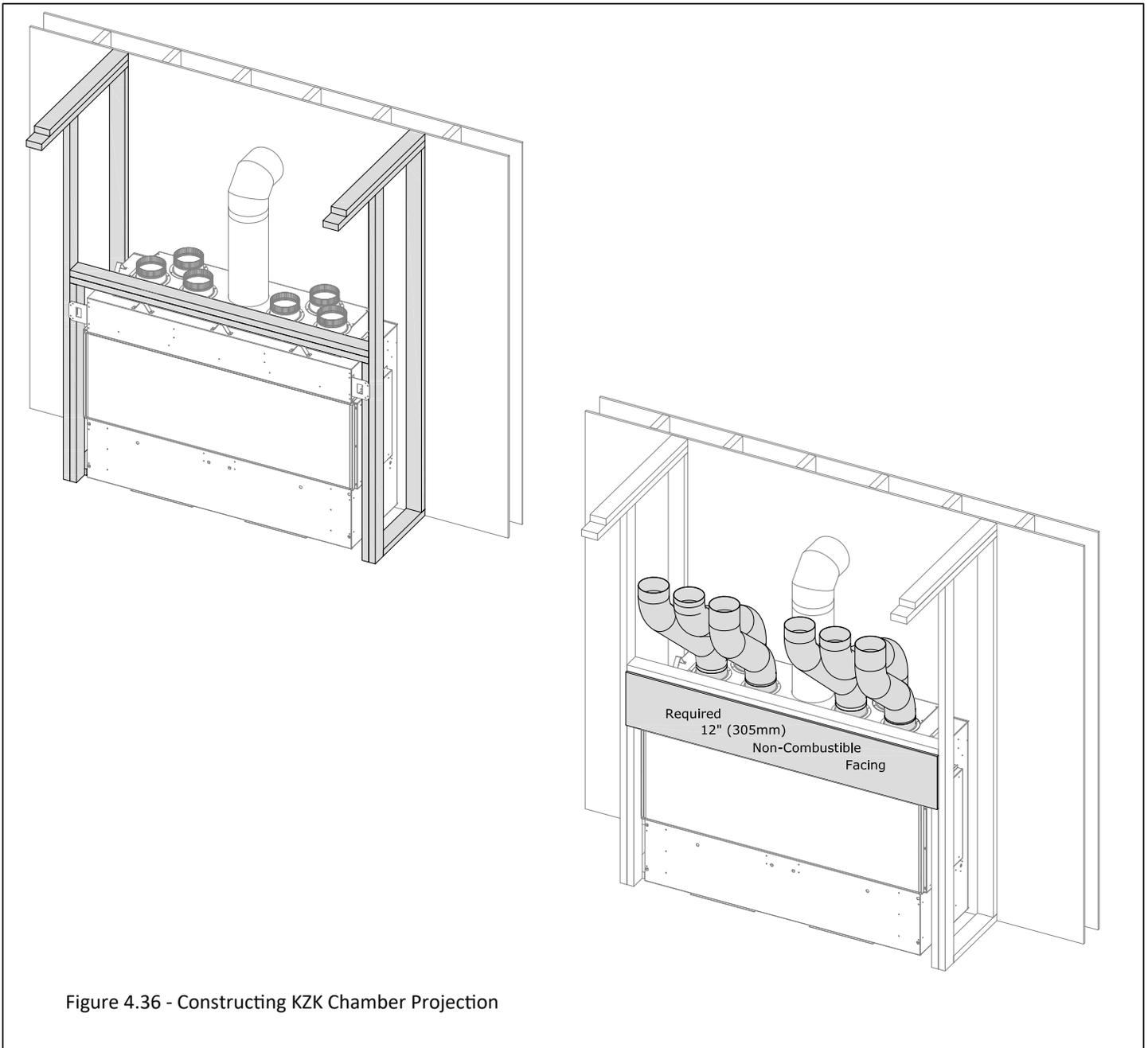


Figure 4.36 - Constructing KZK Chamber Projection

4.8.3 How to Construct a Chamber Projection with a KZK (continued)

IMPORTANT: Maintain $\frac{1}{2}$ " (13mm) clearance around the KZK tubes to anything combustible.

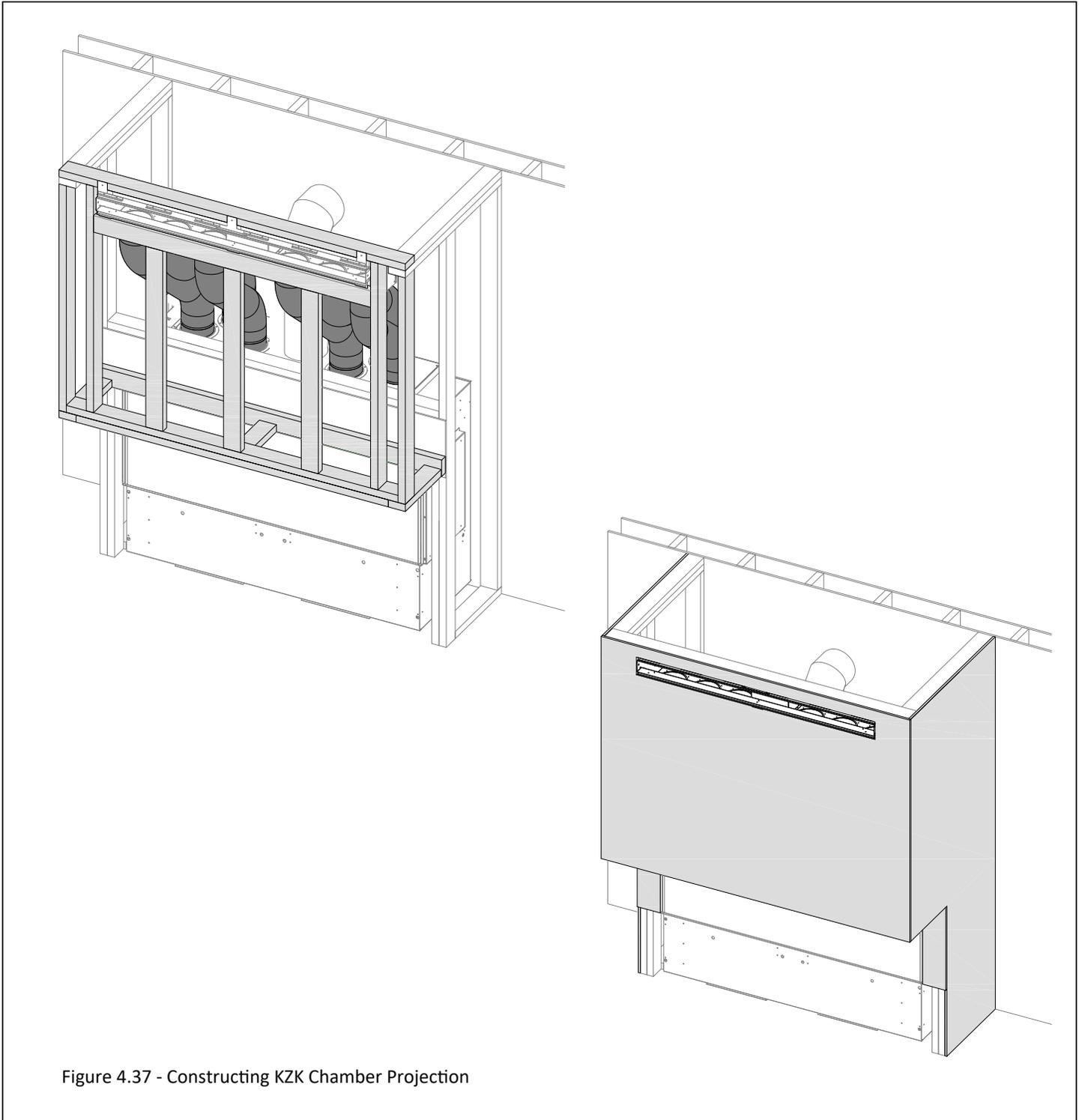


Figure 4.37 - Constructing KZK Chamber Projection

4.9 Hearth, Mantel, and Front Chamber Projection for Vented Cavity Options

NOTE: A maximum of 16" (406mm) total projection is allowed between the mantel and chamber projection (regardless if it is combustible, non-combustible, or a combination). An example would be if you installed a 10" (254mm) front chamber projection then you would be allowed up to a 6" (152mm) mantel until you hit the limit of 16" (406mm).

4.9.1 Combustible Hearth and Mantel Requirements

WARNING: All minimum clearances to combustible material **MUST** be maintained.

- **Combustible Mantel Projections:** A maximum of a 16" (406mm) mantel can be installed flush at the top finishing edge. See Figure 4.38.
- **Combustible Chamber Projections:** A maximum of a 16" (406mm) chamber projection can be installed flush at the side and top finishing edge of the fireplace. See Figure 4.39.
- **Combustible Hearth:** Combustible hearth can have an unlimited projection. Hearth can be raised flush to the bottom finishing edge. See Figure 4.38.

4.9.2 Non-combustible Mantel and Chamber Projection Requirements

- **Non-combustible Mantel Projections:** A maximum of a 16" (406mm) non-combustible mantel projection is allowed to start at 0" (0mm) from the top fireplace finishing edge.
- **Non-combustible Chamber Projection:** A maximum of a 16" (406mm) non-combustible projection can be installed flush at the side and top finishing edge of the fireplace.

IMPORTANT: You are required to have the minimum non-combustible facing material along the front and sides of the fireplace before constructing the framing of the of chamber projection. The non-combustible facing material prevents the combustible framing of the chamber projection from directly contacting the fireplace. See Section 4.9.4 for more information.

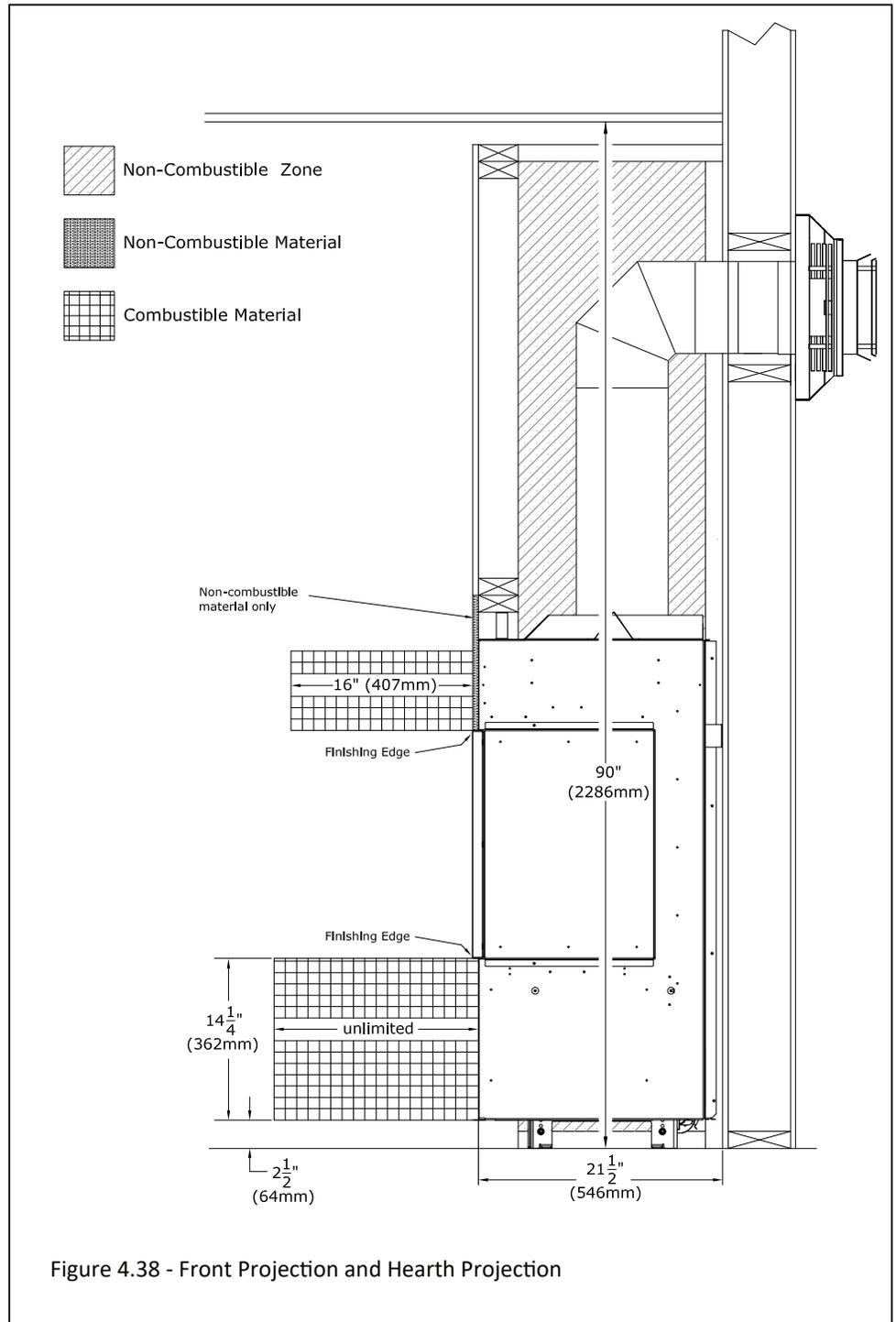


Figure 4.38 - Front Projection and Hearth Projection

4.9 Hearth, Mantel, and Front Chamber Projection for Vented Cavity Options (continued)

Figure 4.39 shows a 16" front chamber projection with a vented cavity. The air intake and heat release openings of the fireplace chamber must maintain their clearances for the option you have chosen throughout the entire fireplace chamber and projection. The hearth projection is unlimited.

IMPORTANT: It is required to install facing material on the fireplace chamber before constructing the chamber projection. This is required to ensure the convective cooling process of the fireplace functions correctly. See Section 4.9.4 on how to construct the chamber projection.

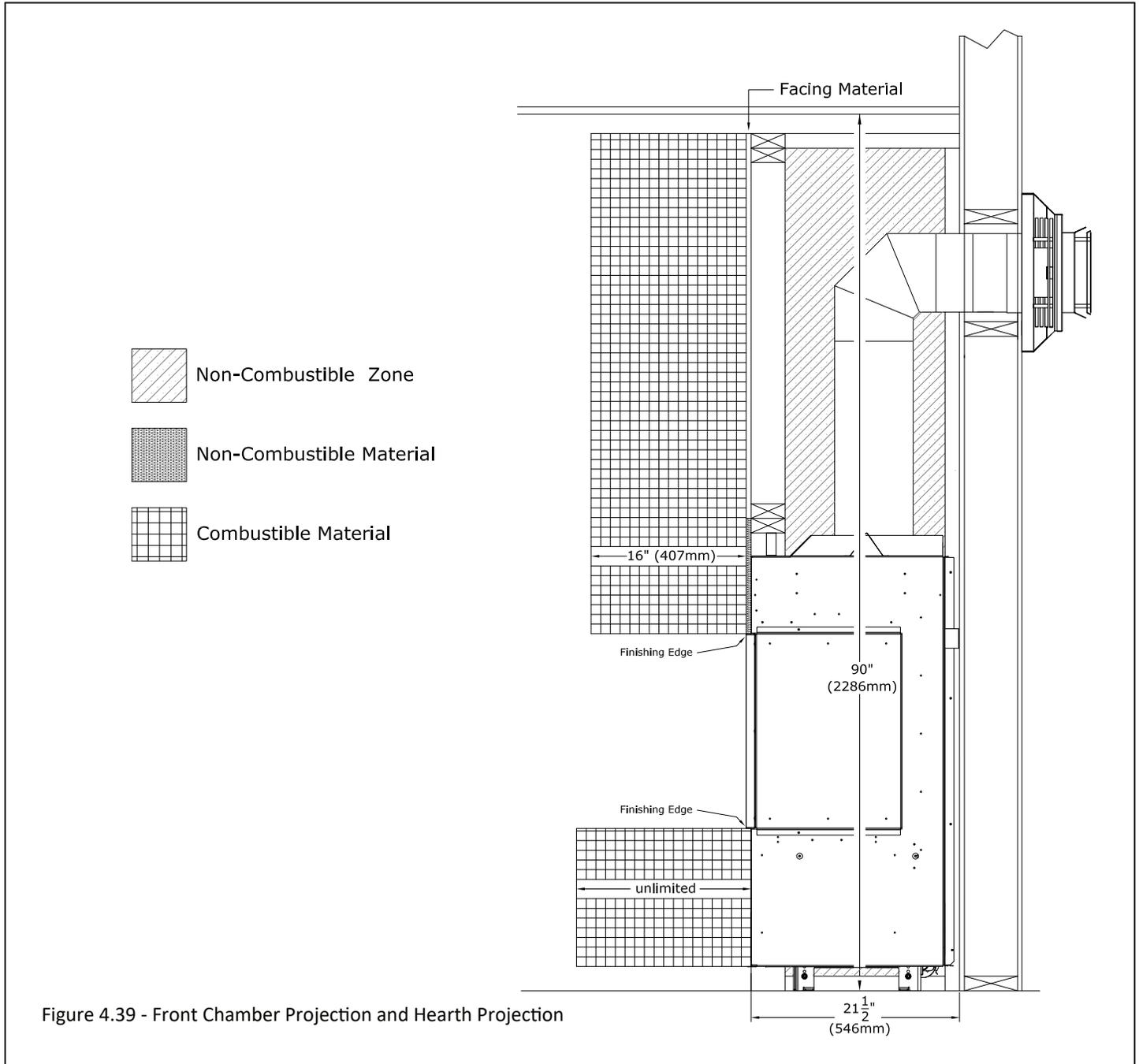
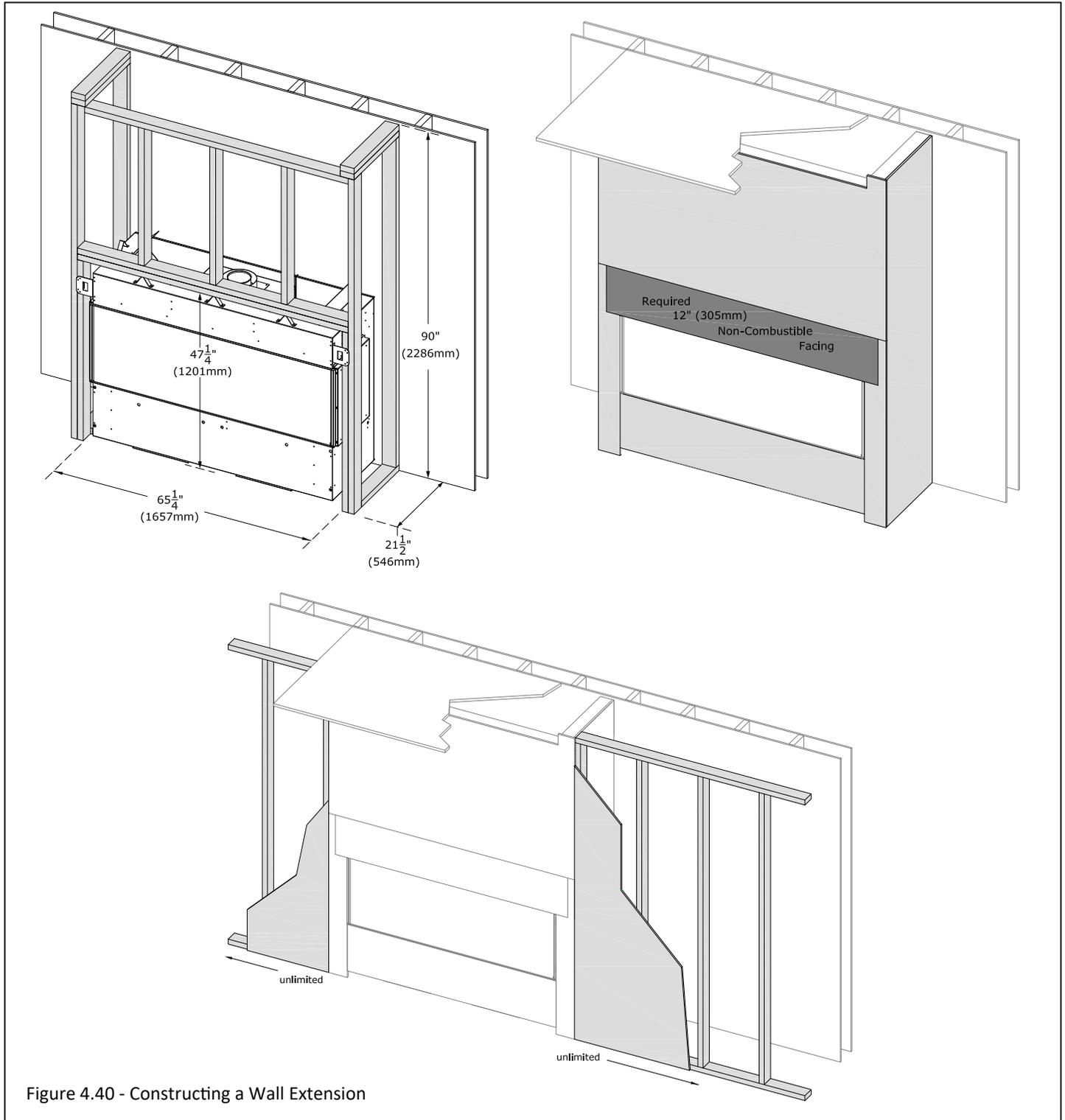


Figure 4.39 - Front Chamber Projection and Hearth Projection

4.9.3 Wall Extensions with a Vented Cavity

When the fireplace is operated with one of the vented cavity options you need to ensure the convective cooling process is maintained by keeping the fireplace chamber at the minimum width. You are required to frame and face the fireplace chamber at the minimum width. You can then frame and face wall extensions off either side of the fireplace chamber. See Figure 4.40.



4.9.4 How to Construct a Chamber Projection with a Vented Cavity

This section is an overview of the steps in constructing a chamber projection when using a Vented Cavity. Figures 4.41 and 4.42 show a vented cavity that is open on all three sides of the chamber. You are required to construct the fireplace chamber and then install facing material first to ensure the convective cooling process of air entering the fireplace chamber at the bottom and discharging at the top of the chamber via the opening option you have chosen. The convective cooling process of the fireplace chamber is essential for proper function of the safety glass barrier and clearance to combustibles of the fireplace chamber.

- Frame out the chamber above the fireplace. Install all the facing material across the entire fireplace chamber which will seal the fireplace chamber from the projection. Pay attention to the required non-combustible facing material as required in Section 4.6.
- Next frame out the projection and ensure the vented cavity air opening maintains the required clearances. Lastly install the facing material and finishing material on the projection. The minimum dimensions of the air intake openings and heat release openings that you choose are required to be maintained in the initial fireplace chamber and throughout the projection.

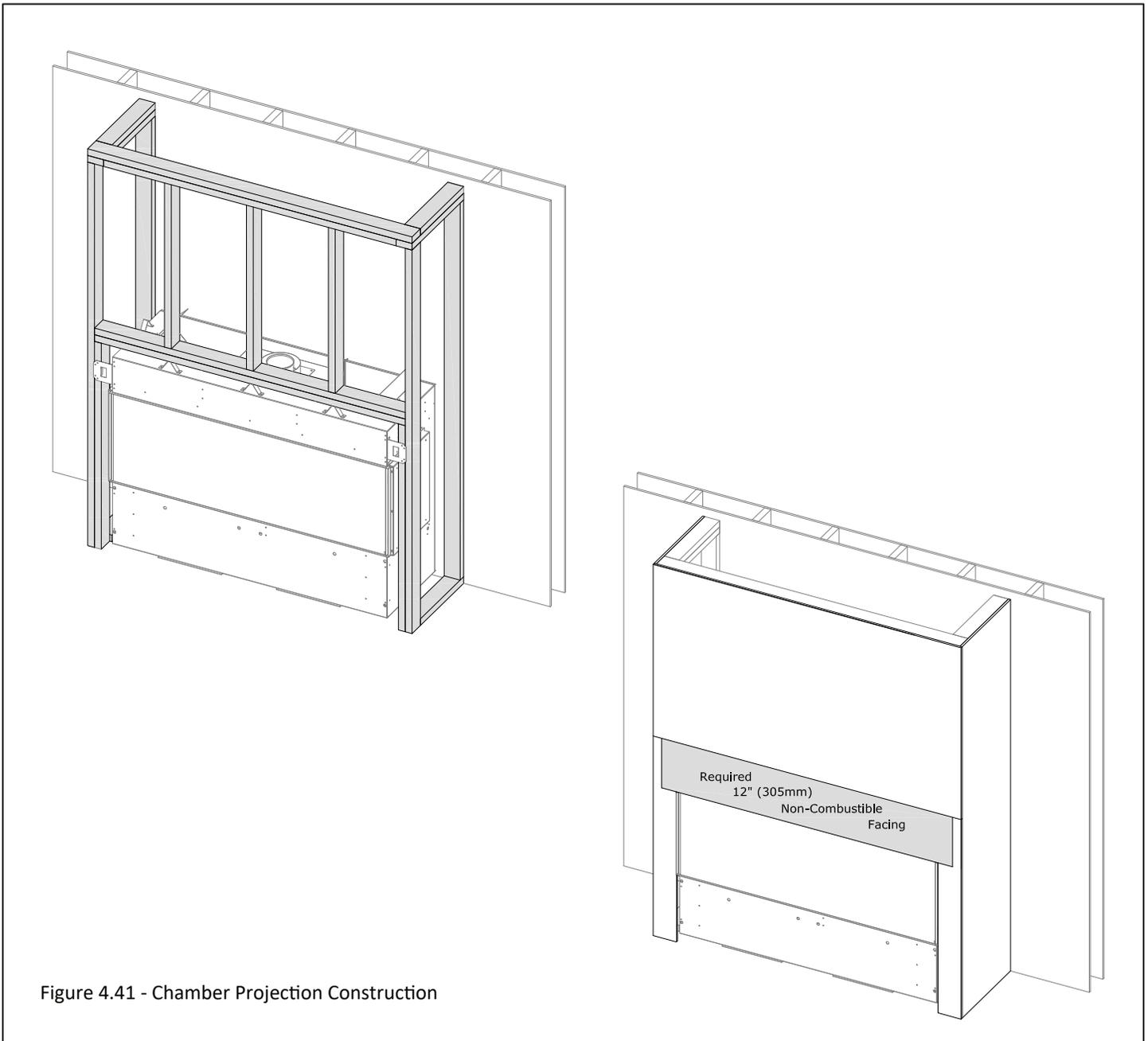


Figure 4.41 - Chamber Projection Construction

4.9.4 How to Construct a Chamber Projection with a Vented Cavity (continued)

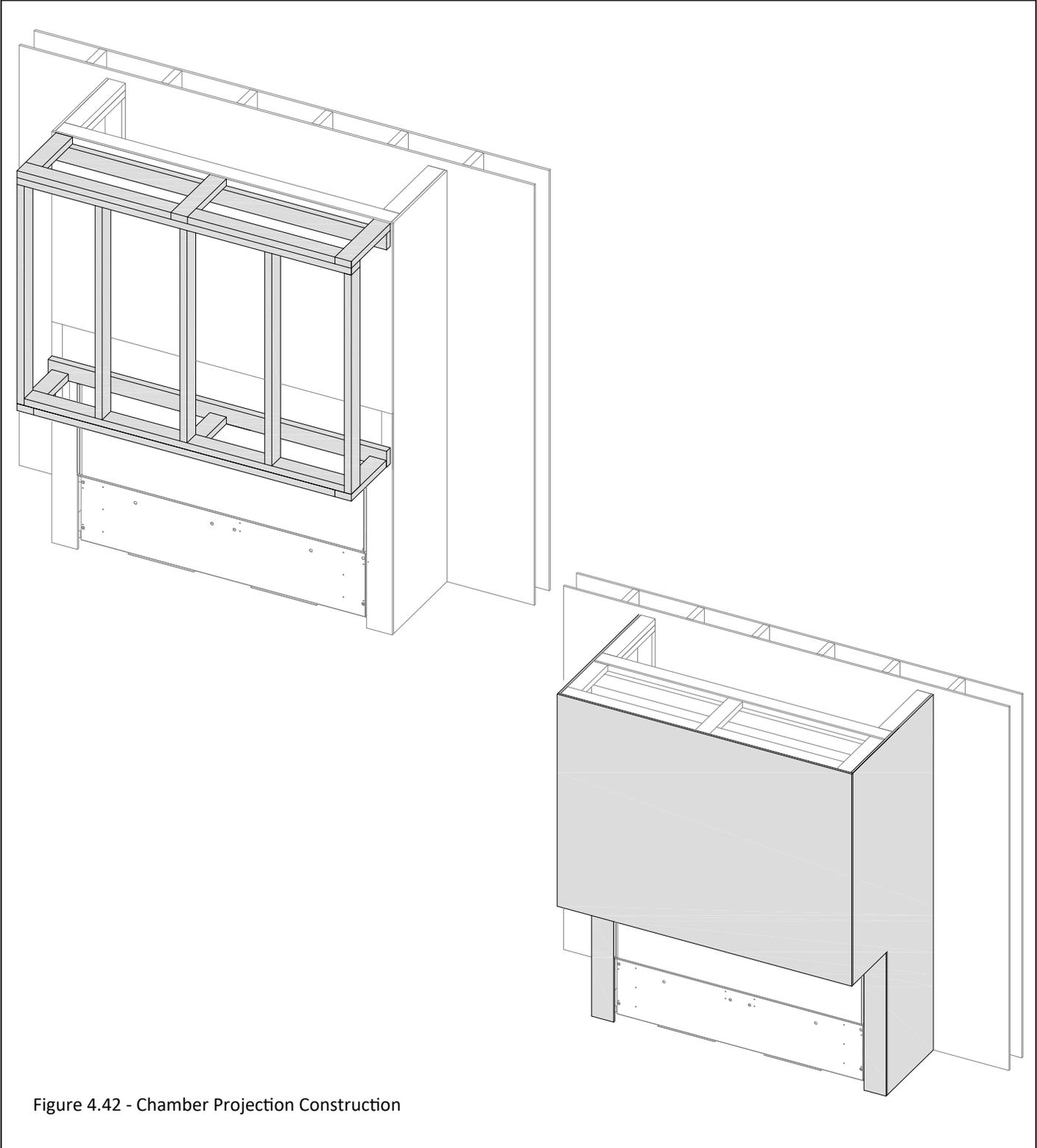


Figure 4.42 - Chamber Projection Construction

4.10 Clearance to a Sidewall

The sidewall clearance is taken from the fireplace side finishing edge. The minimum clearance of 18" (457mm) applies to all Vented Cavity and KZK options.

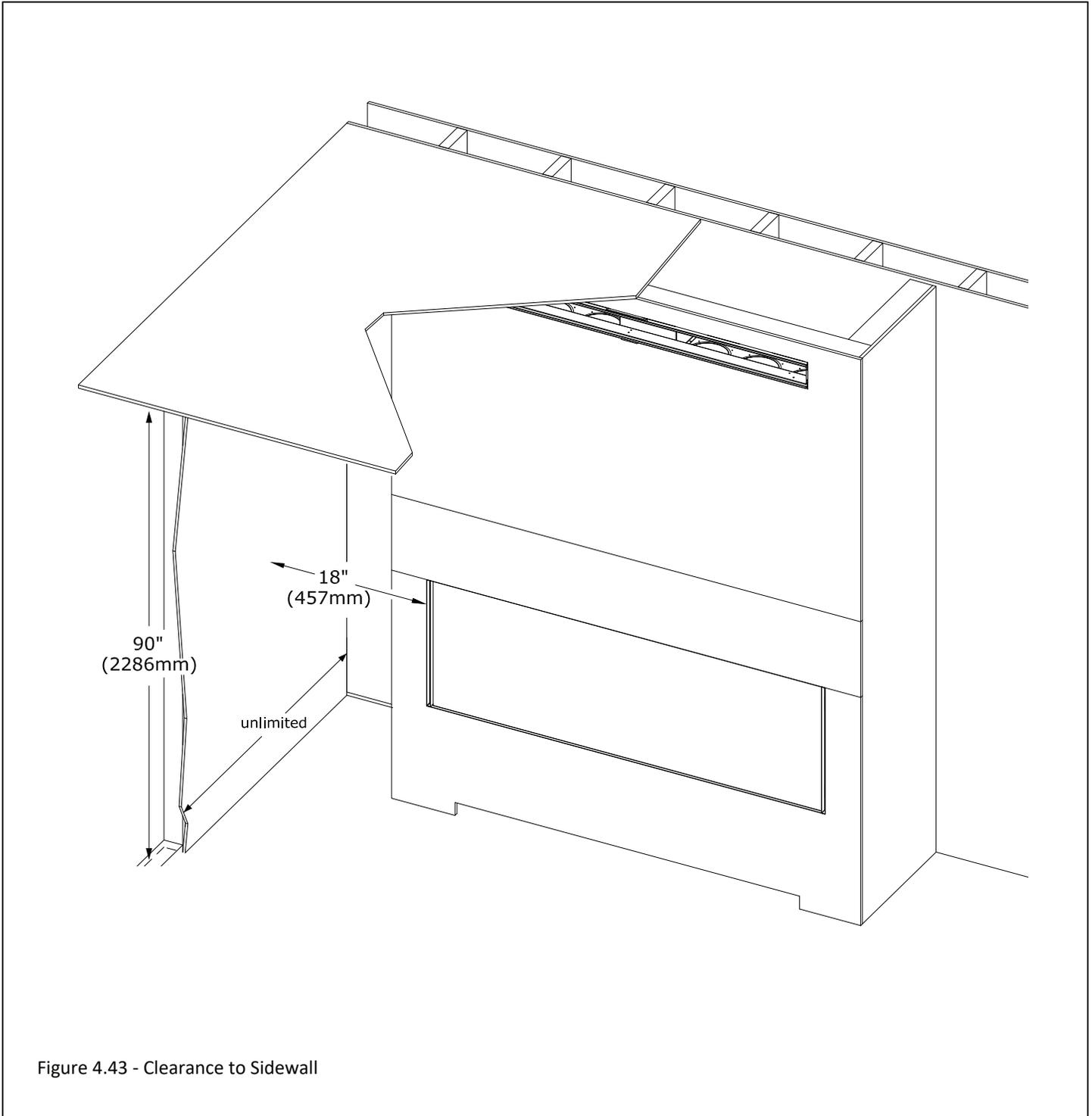


Figure 4.43 - Clearance to Sidewall

4.10 Clearance to a Sidewall (continued)

The image below shows the minimum dimensions for a side vented cavity or side KZK installation where you want a pocket. An example would be if you have shelving / built-ins on the sides.

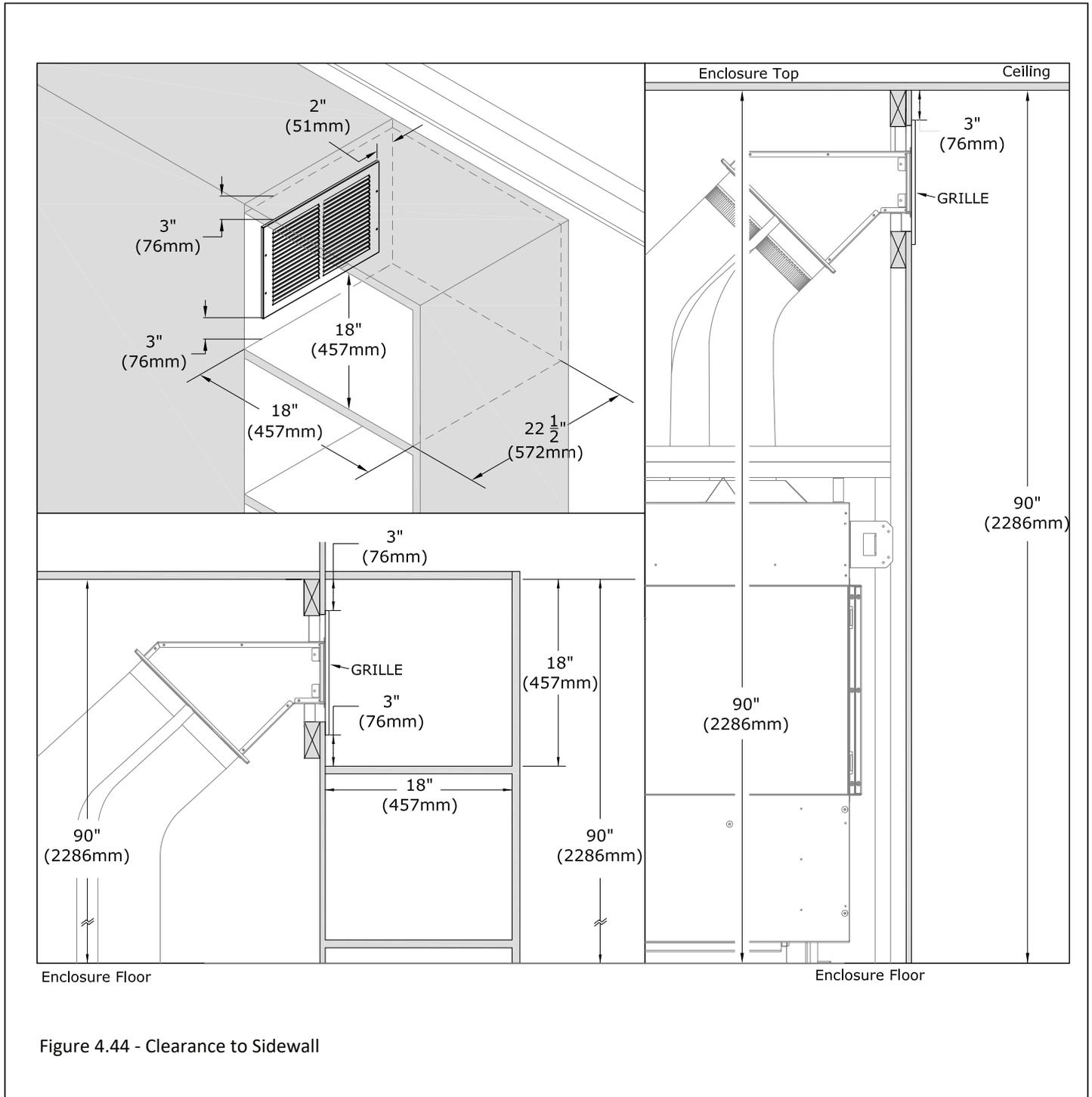


Figure 4.44 - Clearance to Sidewall

5.0 Gas Line Connection

5.1 Gas Conversion

Note: Stepper Motor sold separately to complete gas conversion

ATTENTION: The conversion shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the ANSI Z223.1 installation code.

This fireplace is manufactured for use with natural gas. Follow the instructions included with the conversion kit if converting to propane.

5.2 Gas Line Installation

CAUTION: Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI Z223.1. Commonwealth of Massachusetts installations must be done by a licensed plumber or gas fitter.

NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi (3.5 kPa). For test pressures equal to or less than ½ psi (3.5 kPa), the appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve.

- A listed (and Commonwealth of Massachusetts approved) ½” (13mm) tee handle manual shut-off valve and flexible gas connector are to be connected to the ½”(13mm) control valve inlet. If substituting for these components, please consult local codes for compliance.
- This fireplace is equipped with a 3/8” (10mm) x 35” (914mm) long flexible gas connector and manual shut-off valve.
- Do not run gas line in a manner that would obstruct fan operation.
- For high altitude installations, consult the local gas distributor or the authority having jurisdiction for proper rating methods.
- Figure 5.1 shows where to route the flexible gas line from the gas valve to the gas supply line. This path ensures the flexible gas line does not block the LED light kit. The shaded area in the back left corner is where we recommend the gas shut off valve to be connected to the gas supply line. This will ensure you have access to the shut off valve when removing the control board. Run gas line into fireplace through gas line hole provided. See Figure 2.1, Appliance Dimensions for gas line access.

Table 5.1 - Inlet Gas Supply Pressures		
	Natural Gas	Propane
Minimum Pressure	5” WC (1.25 kPa) 7” WC (1.74 kPa) **Recommended	12” WC (2.99 kPa)
Maximum Pressure	10” WC (2.49 kPa)	13” WC (3.24 kPa)

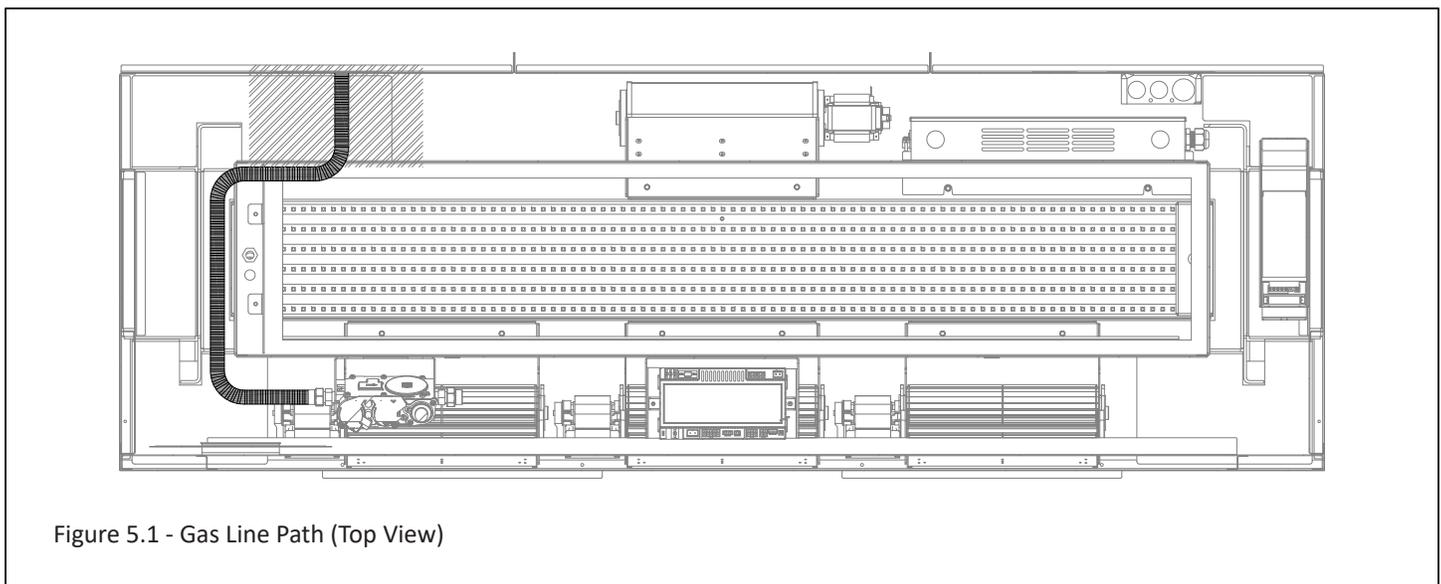


Figure 5.1 - Gas Line Path (Top View)

6.0 Vent System Requirements and Information

NOTE: Consult the local and national installation codes to assure adequate combustion and ventilation air is available. Venting requirements apply to both natural gas and propane.

Flame height and appearance will vary depending upon venting configuration and the type of fuel used.

6.1 Vertical Vent Cap Termination

WARNING: This gas appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.

Note: Natural Draft Applications only.

- Refer to Figure 6.1 below for vertical vent terminations clearances.

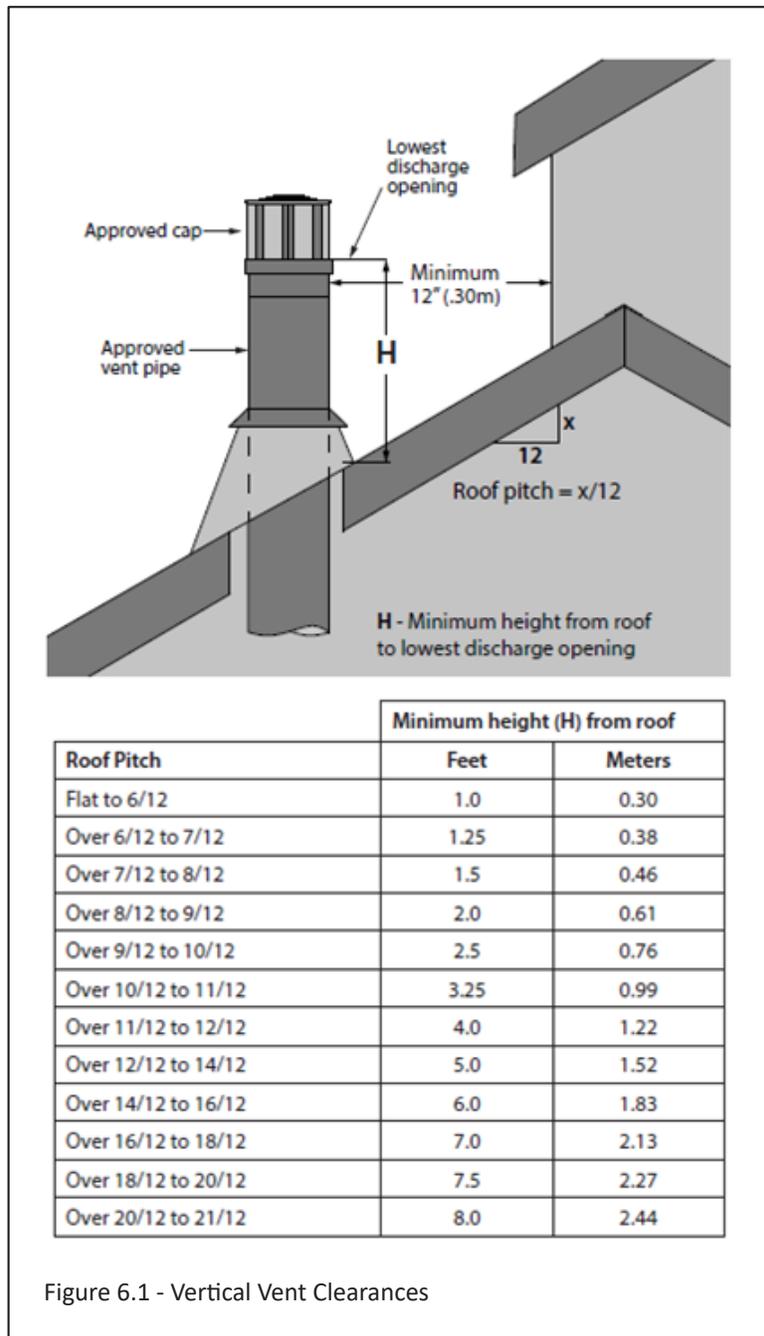
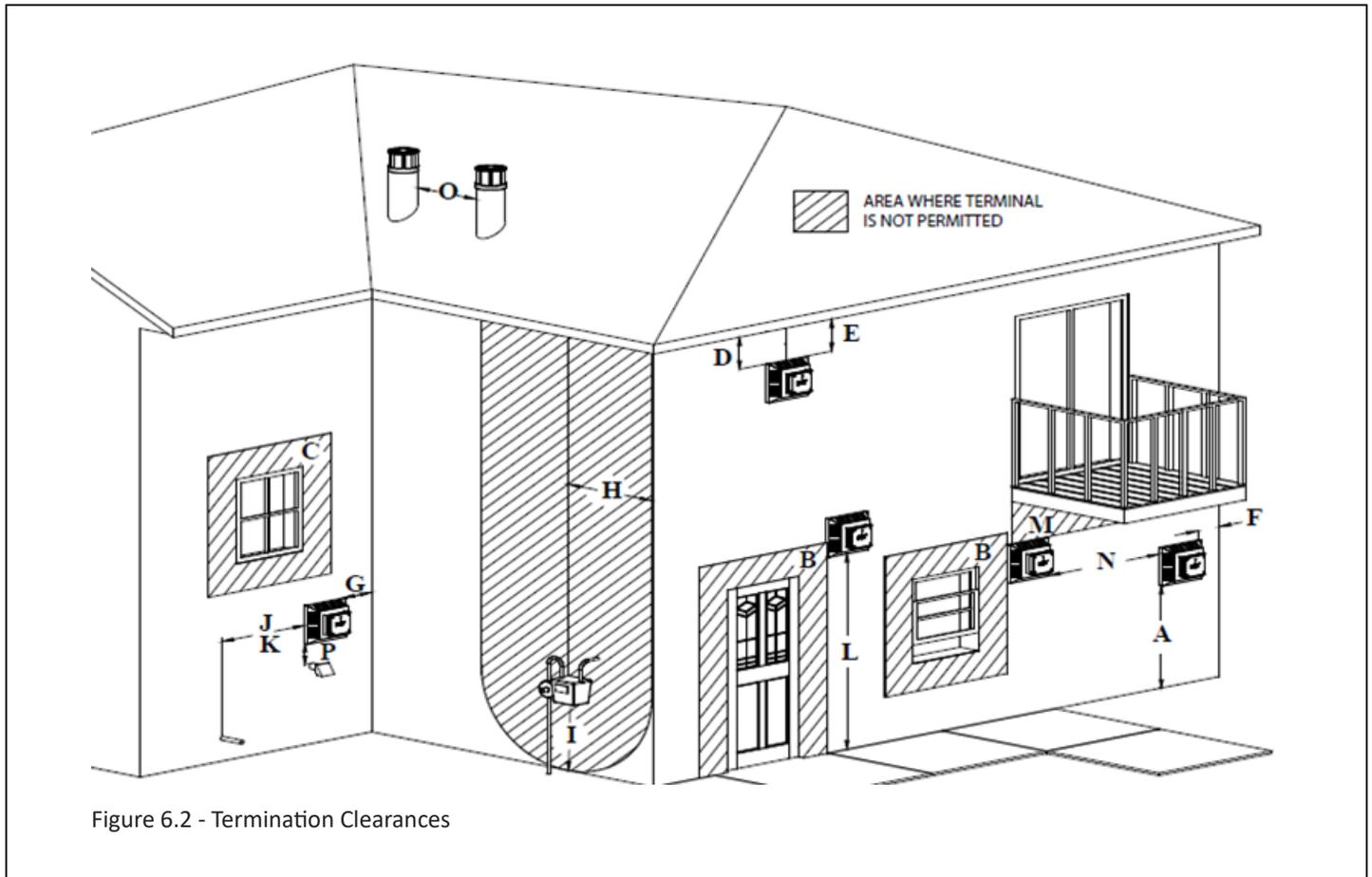


Figure 6.1 - Vertical Vent Clearances

6.2 Minimum Termination Clearances

- Refer to Figure 6.2 and the Table 6.1 below for natural draft vent termination clearance locations.
- If you are installing a power vent system on this fireplace refer to the #KPV manual for vent information.



Vinyl & PVC Siding Recommendation

- Vinyl and PVC siding is likely to bend, buckle, and deform due to heat reflecting from a fireplace horizontal termination cap.
- Please refer to vent manufacturer for information regarding vinyl siding protectors.
- Kozy Heat assumes no responsibility or liability for damages caused to vinyl or PVC siding in this type of installation.

Table 6.1		Canadian Installations	US Installations
A	Clearance above grade, veranda, porch, deck, or balcony.	12" (30cm)	12" (30cm)
B	Clearance to window or door that may be opened.	12" (30cm)	9" (23cm)
C	Clearance to permanently closed window (recommended to prevent condensation on window).	12" (30cm)*	12" (30cm)*
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61cm) from the edge of the terminal.	24" (61cm)*	24" (61cm)*
E	Clearance to unventilated soffit.	12" (30cm)*	12" (30cm)*
F	Clearance to outside corner.	0" (0cm)*	0" (0cm)*
G	Clearance to inside corner.	3" (8cm)*	3" (8cm)
H	Clearance to each side of center line extended above meter / regulator assembly.	3' (91cm) within a height 15' (4.5m) above the meter/regulator assembly	*
I	Clearance to service regulator vent outlet.	3' (91cm)	*
J	Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance.	12" (30cm)	9" (23cm)
K	Clearance to mechanical air supply inlet.	6' (1.83m)	3' (91cm) above**
L	Clearance above paved sidewalk or paved driveway located on public property	7' (2.13m)†	*
M	Clearance under veranda, porch deck, or balcony.	12" (30cm)‡	12" (30cm)
N	Clearance between two horizontal terminations.	12" (30cm)	12" (30cm)
O	Clearance between two vertical terminations (may be the same height)	12" (30cm)	12" (30cm)
P	Above furnace exhaust or inlet	12" (30cm)	12" (30cm)

*Clearance in accordance with local installation codes and the requirements of the gas supplier.

**Massachusetts: 10' (3m) above] if within 10' (3m) horizontally

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

‡Permitted only if veranda, porch, deck, or balcony if fully open on a minimum of two sides beneath the floor

VINYL SOFFIT, VINYL CEILING, AND VINYL OVERHANG DISCLAIMER: Clearances to heat resistant materials (i.e. wood, metal). This does not include vinyl. Hussong Manufacturing Co., Inc. Will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings, or vinyl ventilated / unventilated soffits.

6.3 Vent Pipe Termination Framing and Venting Clearances

- Natural Draft: Vent termination location must be in compliance with section 6.1 and 6.2
- If using Kozy Power Vent #KPV, please reference the manual included with the power vent kit.
- The gas appliance cannot be connected to a chimney flue that is serving a separate solid-fuel burning appliance.
- Horizontal vent sections require at least 1/4" (6mm) rise for every 12" (305mm) of travel.

6.3.1 Vent Pipe Clearances Inside the Fireplace Enclosure

- A minimum of 1" (25mm) clearance on all sides of the vertical vent pipe must be maintained.
- Any horizontal pipe within the fireplace chamber must have a minimum clearance of 3" (76mm) from the top of the vent pipe to the chamber top. See Figure 6.3.
- A minimum of 1" (25mm) clearance on the sides and bottom surfaces on the horizontal pipe must be maintained.

6.3.2 Wall Thimble Clearances

- Minimum Wall Thimble clearance for 5" x 8" vent pipe is 1/2" (13mm).
- Minimum Wall Thimble clearance for 4" x 6-5/8" vent pipe is 1" (25mm). The Kozy Power Vent is the only approved 4" x 6-5/8" horizontal termination.

6.3.3 Vent Pipe Clearances Outside the Fireplace Enclosure

- A minimum of 1" (25mm) clearance on all sides of the vertical vent pipe must be maintained.
- A minimum of 1" (25mm) clearance on the top, sides, and bottom of the horizontal vent pipe must be maintained.

6.3.4 Vent Pipe Termination Location

- NOTE: Elbows listed with approved vent systems for this appliance vary in vertical length. Please consult the vent manufacturer's instructions to determine the elbow dimension used for installation. Adjust the wall pass-through rough opening dimensions as necessary to maintain clearance requirements.
- Provide a means for visually checking the vent connection to the appliance after the fireplace is installed.
- Attic insulation shields may be insulated using unfaced insulation products listed as non-combustible per ASTM E 136.
- Wall thimble products that comply with the required clearances to combustibles must be installed for all horizontal vent runs that pass through interior or exterior walls. These wall thimble products may be insulated using unfaced insulation products listed as non-combustible per ASTM E 136.
- Vertical Terminations - Follow vent pipe manufacturer's installation instructions for vertical terminations.
- Horizontal Terminations - WARNING: Do not recess the vent cap into wall or siding.

6.4 Vent Pipe Restriction

- Burner flame appearance and characteristics are affected by altitude, fuel quality, venting configuration, and other factors. To achieve desirable flame appearance, the vent exhaust may be restricted by the restrictor plate (included in components packet).
- The restrictor plate is shipped with all inner rings intact, and when installed, provides the most vent restriction. There are (2) inner rings that can be knocked out. As you knock out and remove an inner ring you have less vent restriction whereas removing both inner rings you will have the least amount of vent restriction.
- Follow Figure 6.4 for restrictor plate installation before attaching venting or through the firebox ceiling if venting is already attached. For vent restriction plate recommendations and adjustments, see section 10.2.3, Vent Restriction (after installation).

6.5 Use of Flexible Venting Outside the Appliance Enclosure

- If an approved venting manufacturer offers flexible venting options that can replace rigid vent pipe follow the vent manufacturer's instructions.
- Flexible vent pipe can only be used outside of the appliance enclosure.
- Flexible vent pipe cannot be used to terminate the vent system horizontally or vertically.

Figure 6.3 shows the minimum clearance the top of the vent pipe must maintain through the entire fireplace chamber. Figure 6.4 shows how to install the vent restrictor before vent pipe installation. Refer to Section 6.4.

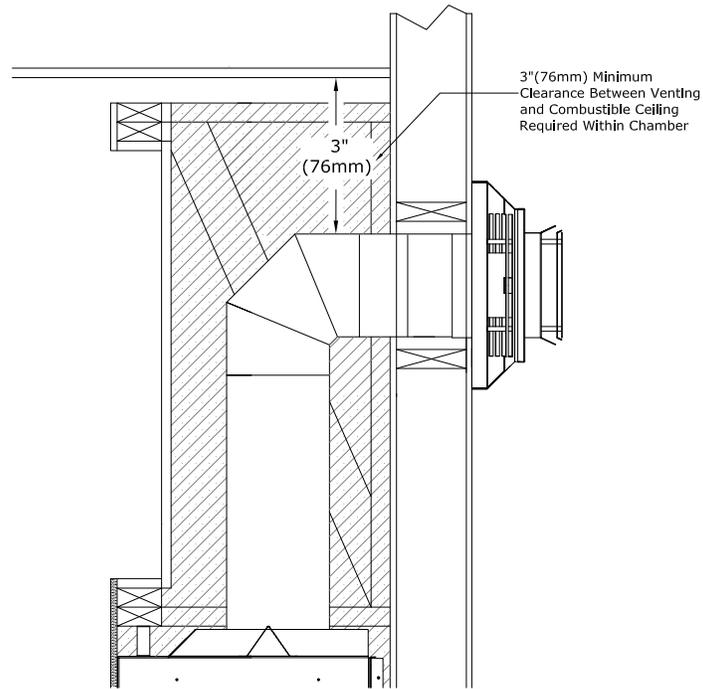


Figure 6.3 - Horizontal Vent Pipe Clearance Inside the Fireplace Enclosure

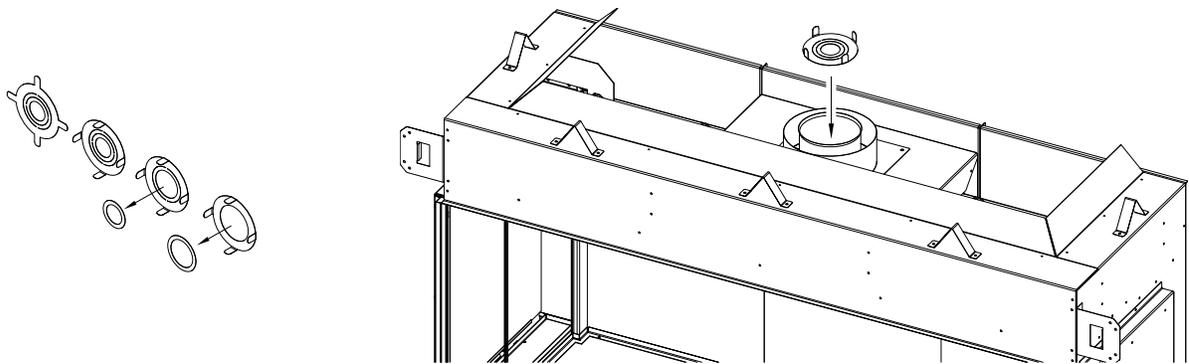


Figure 6.4 - Vent Restrictor

6.6 Approved Vent Systems

This appliance is equipped for use with a 5" (127mm) exhaust by 8" (203mm) air intake co-axial vent pipe system.

This appliance is approved for use with Kozy Heat Power Vent System #KPV (sold separately). Power Vent configurations and requirements are located in the #KPV manual.

This appliance is approved for use with manufacturers (horizontal and vertical terminations): American Metal Products (Ameri-Vent), BDM, ICC, Metal Fab., Selkirk, and Simpson DuraVent. See sections 6.6.1 and 6.6.2.

This appliance can be adapted to use 4" diameter aluminum flexible pipe by any listed vent manufacturer when used in combination with an existing minimum 7" ID Class A metal/masonry chimney. Refer to section 6.8 for more information.

Refer to the vent manufacturer's installation manual for complete installation instructions. Installation must conform with the requirements and restrictions specified in this manual.

6.6.1 Approved 5" x 8" Vent Systems

Table 6.2 - Approved 5"x8" Vent Systems	
Vent Manufacturer	Vent Cap Part Number
American Metal Products (Ameri-Vent)	5DHCS 5DHC 5D14S 5D36S
BDM	DVR8-HCP DVR8-VCLP DVR8-SNK36
Simpson Duravent	58DVA-HC 58DVA-HSCH 58DVA-VCH 58DVA-VC 58DVA-VCS
ICC	TM-5HT MT-5RHT TM-5SVT TM-5LRHT TM-5ST36
Metal Fab	5DHT 5DST14 5DST36

Table 6.2 - Approved 5"x8" Vent Systems (continued)	
Selkirk	5DT-HC 5DT-HCR 5DT-VT 5DT-VC 5DT-ST14 5DT-ST36

6.6.2 Approved 4" x 6 - 5/8" Vent Systems

This appliance may be reduced from a 5" x 8" to a 4" x 6-5/8" vent system for **vertical termination natural draft, Class A chimney conversion, or horizontal power vent only.**

Refer to the vent pipe manufacturer's installation manual for more information.

Table 6.3 - Approved 4"x6-5/8" Vent Systems	
Vent Manufacturer	Vent Cap Part Number
American Metal Products (Ameri-Vent)	4DVC
BDM	DVR6-VCLP
Kozy Heat	KPV
Simpson Duravent	46DVA-VCH 46DVA-VC 46DVA-VCE
ICC	TM-4SVT (Require the use of ICC Wind / Heat Shield Part # HTS)
Selkirk	4DT-VT 4DT-VC

6.7 Natural Draft Co-Axial Pipe Installations

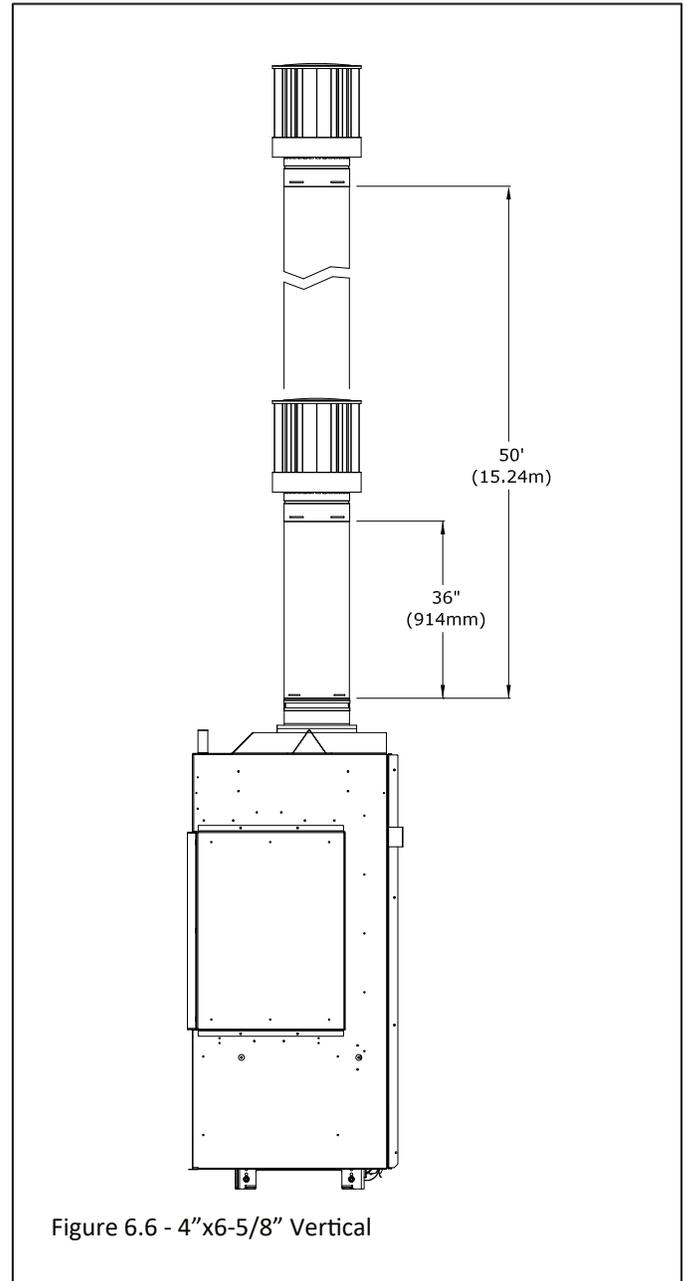
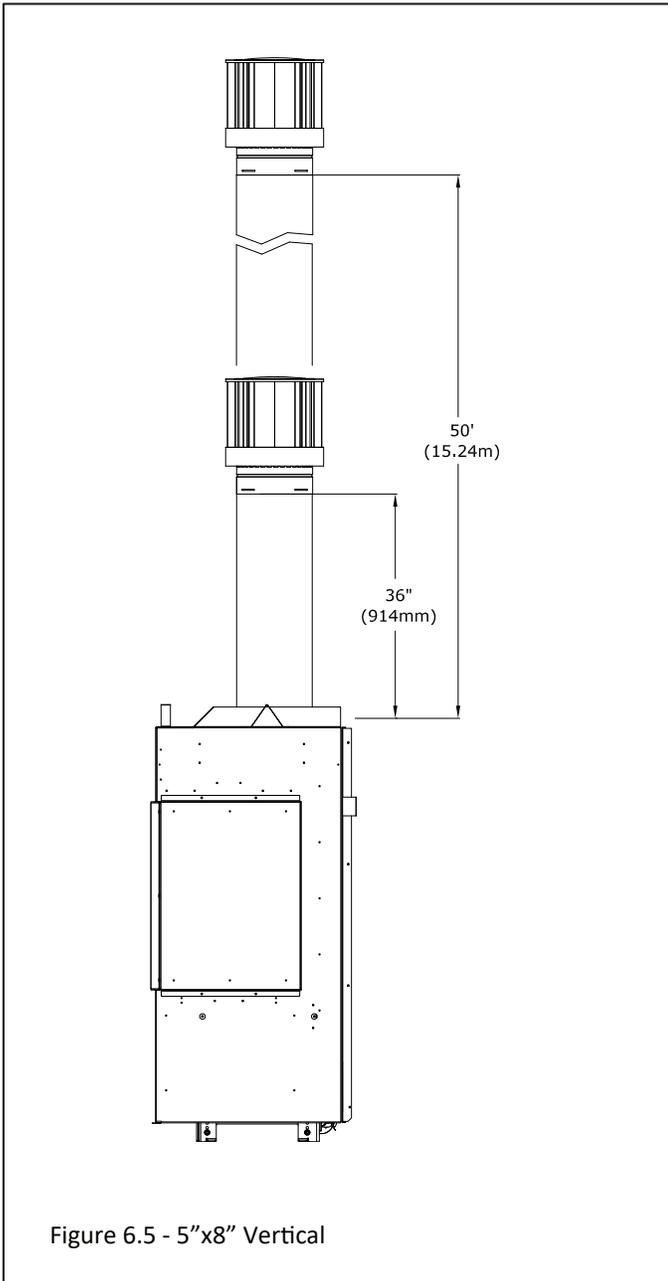
6.7.1 Vertical Terminations

Note: Natural Gas and Propane Installations

- (i) **Minimum / Maximum Vertical Terminations:**
 3' (914mm) minimum vertical length / 50' (15.24m)
 maximum vertical length + termination cap

- (ii) **Minimum / Maximum Vertical Terminations with Reducer*:**
 4" x 6-5/8" reducer + 3' (914mm) minimum vertical
 length / 50' (15.24m) maximum vertical length +
 termination cap

*To use any 45° elbow for vertical terminations with a reducer, the total minimum vertical vent run must be 10' (3.05m). A total of (4) 45° elbows may be used. No 90° elbows are allowed. For every 45° elbow used, 18" (457mm) must be subtracted from maximum venting allowed.



6.7.2 Horizontal Terminations

Note: Natural Gas and Propane Installations

IMPORTANT: Horizontal vent sections require 1/4" (6mm) of rise for every 12" (305mm) of travel.

(i) Minimum 24" Vertical Vent Pipe/ Minimum Horizontal:

24" (610mm) vertical vent pipe + 90° horizontal elbow + termination cap

(i) Minimum 24" Vertical Vent Pipe / Maximum Horizontal:

24" (610mm) vertical vent pipe + 90° horizontal elbow + 8' (2.44m) horizontal vent pipe + termination cap

(ii) Minimum 36" Vertical Vent Pipe / Minimum Horizontal:

36" (914mm) vertical vent pipe + 90° horizontal elbow + termination cap

(ii) Minimum 36" Vertical Vent Pipe / Maximum Horizontal:

36" (914mm) vertical vent pipe + 90° horizontal elbow + 14' (4.27m) horizontal vent pipe + termination cap

(iii) Minimum 48" Vertical Vent Pipe / Minimum Horizontal:

48" (1219mm) vertical vent pipe + 90° horizontal elbow + termination cap

(iii) Minimum 48" Vertical Vent Pipe / Maximum Horizontal:

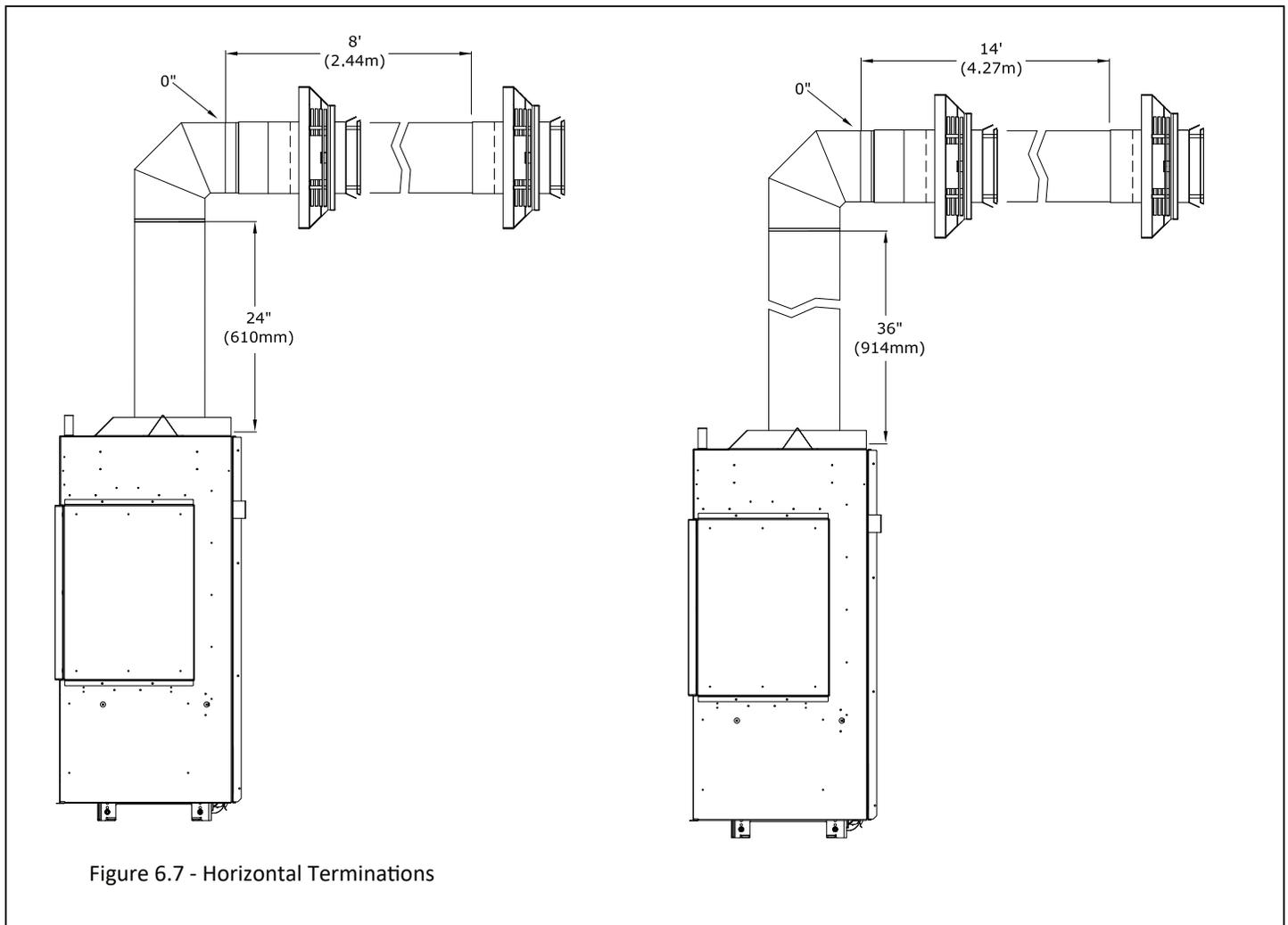
48" (1219mm) vertical vent pipe + 90° horizontal elbow + 20' (6.10m) horizontal vent pipe + termination cap

(iv) Maximum 8' Vertical / Minimum Horizontal:

8' (2.44m) vertical vent length + 90° horizontal elbow + termination cap

(iv) Maximum 8' Vertical / Maximum Horizontal:

8' (2.44m) vertical vent pipe + 90° horizontal elbow + 25' (7.62m) horizontal vent pipe + termination cap



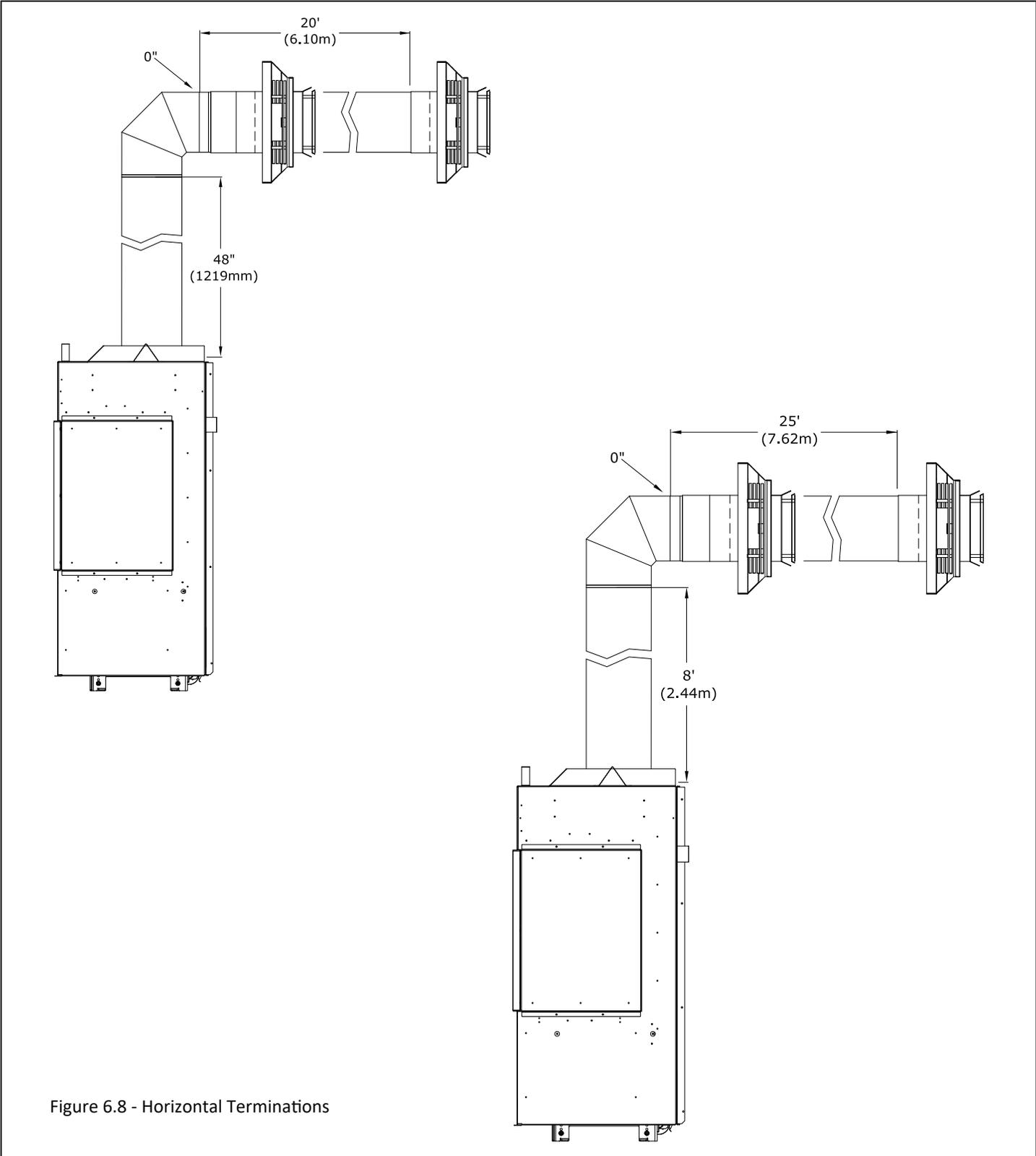


Figure 6.8 - Horizontal Terminations

6.7.3 Combination Venting

Note: Natural Gas and Propane Installations

Vent termination must be within the shaded area in FIGURE 6.9.

- 25' (7.62m) maximum vertical rise + 25' (7.62m) maximum horizontal run = 50' (15.2m) of total length

- Maximum of (5) 90° elbows. For each additional 90° elbow used after the first elbow, 3' (914mm) must be subtracted from maximum venting allowed.
- (2) 45° degree elbows may be used in place of (1) 90° elbow. For each 45° elbow used, 18" (457mm) must be subtracted from maximum venting allowed.

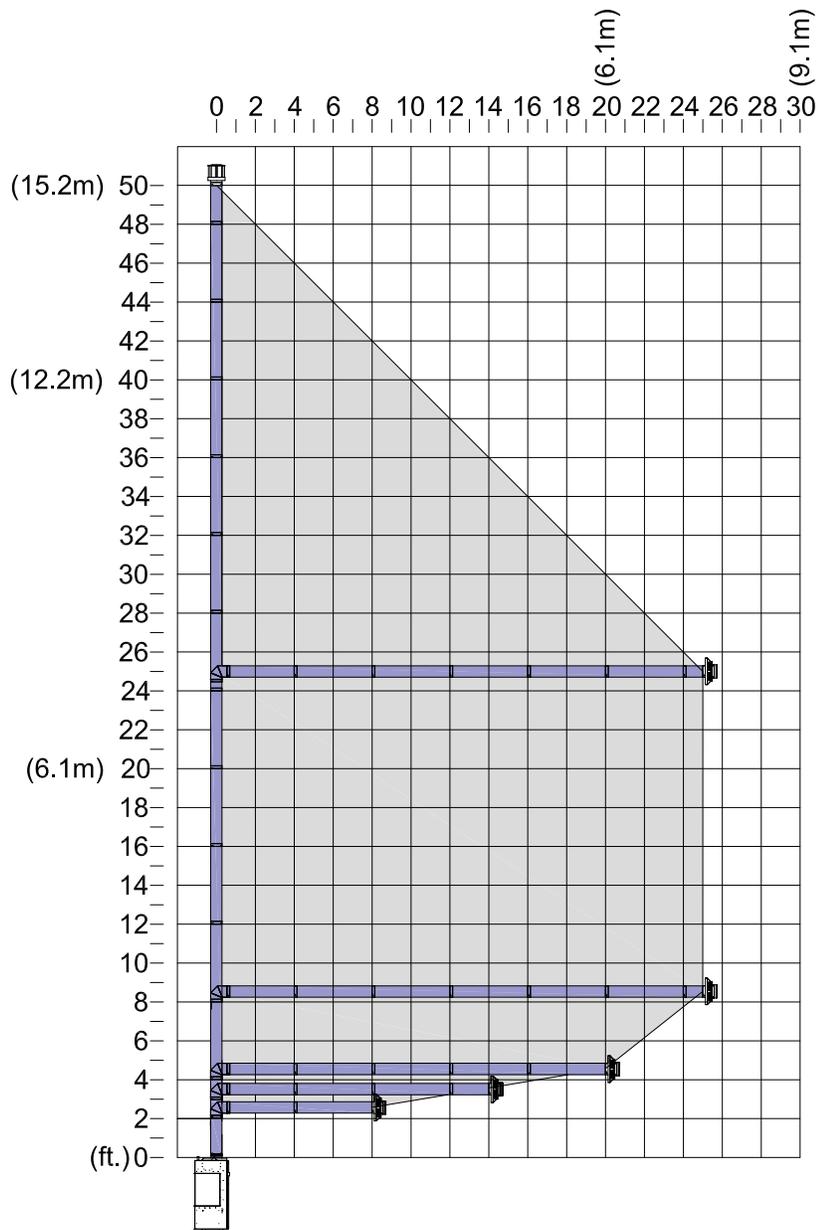


Figure 6.9 - Combination Venting

6.8 Class A Chimney / Masonry Chimney Conversion

This appliance is approved to be adapted for Class A/Masonry Chimney conversion with kits utilizing a 4" (102mm) flexible exhaust by any vent manufacturers listed in section 6.1, APPROVED VENT SYSTEMS.

Before conversion, have the existing installation inspected by a qualified chimney sweep or professional installer. The existing chimney system must be in serviceable condition, and functionally sound. Before proceeding with following installations, check with local building jurisdiction to verify this type of installation is allowed in your area.

Follow Figure 6.10 for allowable venting configurations for installation in existing through-the-ceiling, Class A/Masonry chimney. Route the exhaust gases and intake air through the existing Class A/Masonry chimney.

The gas appliance cannot be connected to a chimney flue that is serving a separate solid-fuel burning appliance.

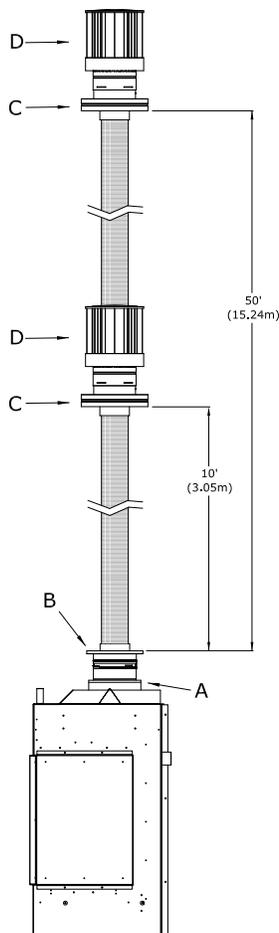
6.8.1 4" Flex Pipe Venting Configurations

IMPORTANT: Horizontal vent sections require at least 1/4" (6mm) rise for every 12" (305mm) of travel.

IMPORTANT: Care should be taken when installing flexible pipe to avoid a tight bend that may cause abrasion or damage to the flexible pipe.

1. Minimum / Maximum Vertical Terminations

4" x 6-5/8" reducer + retro connector + 10' (3.05m) minimum length of 4" aluminum flexible pipe / 50' (15.24m) maximum length of 4" aluminum flexible pipe + top adapter + termination cap



4" Flex Pipe Chimney Conversion	
A - Reducer	C - Top Adapter
B - Retro Connector	D - Termination Cap

Figure 6.10 - Class A Chimney Conversion

7.0 Fireplace Setup

7.1 Safety Glass

WARNING: Do not operate this fireplace with the glass removed, cracked, or broken. Replacement of the glass assembly, should be done by a licensed or qualified service person. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

The safety glass for this fireplace is tempered glass.

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

7.1.1 Removing The Safety Glass Assembly

WARNING: Do not remove the glass assembly when hot.

1. Attach the suction cups to the front safety glass. Remove the front safety glass piece as shown in Figure 7.1. Lift up the safety glass and tilt the bottom edge of the glass towards you. Move the glass down and swing out to remove.

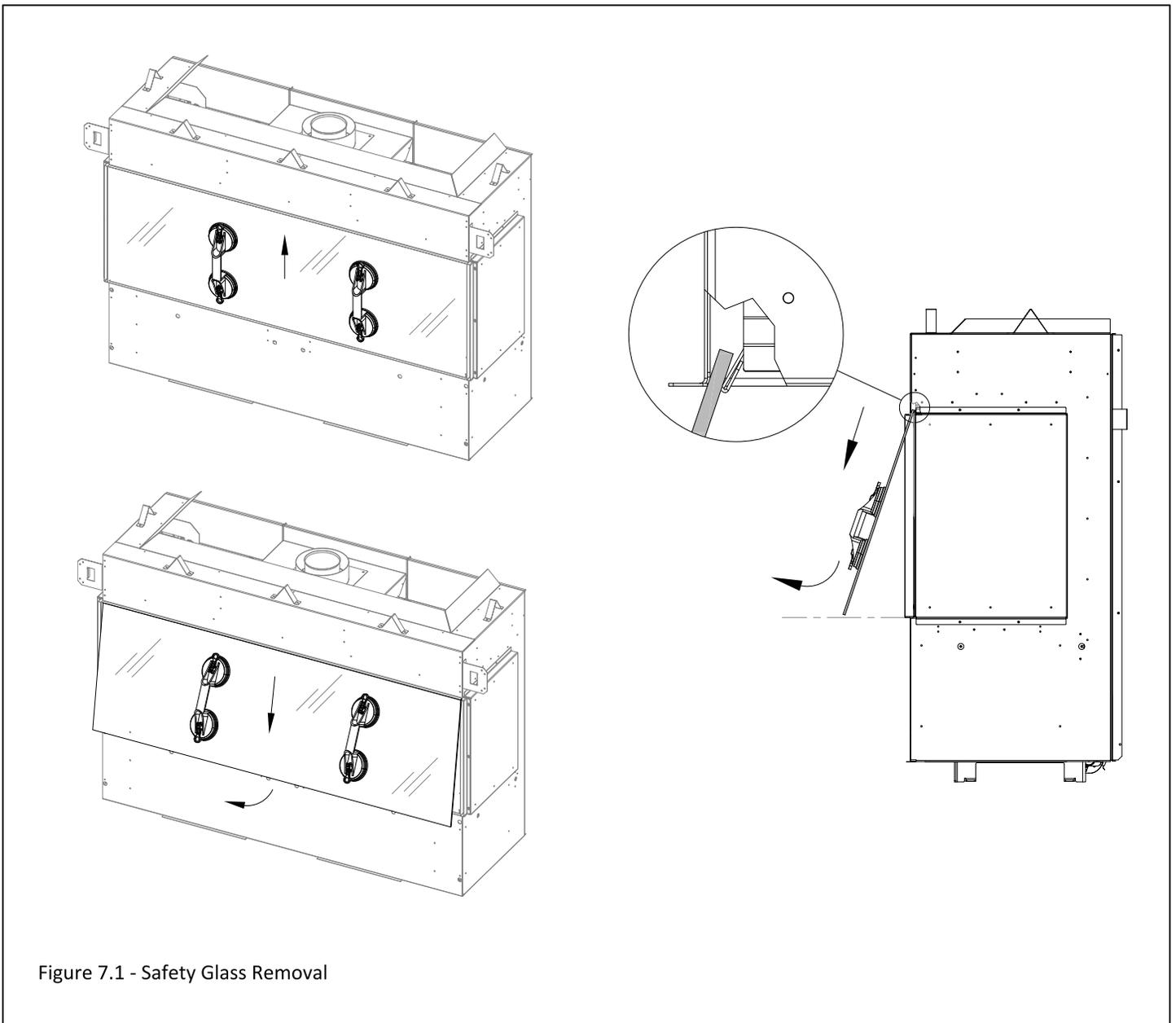


Figure 7.1 - Safety Glass Removal

7.1.2 Installing The Safety Glass Assembly

1. Start with the bottom edge of the glass tilted towards you, slide the top edge of the glass behind the top finishing edge of the fireplace. There is a glass retention bracket behind this top finishing edge (on the inside of the fireplace) that holds the glass. Ensure the glass is sliding into this bracket. See the image on the right in Figure 7.2 for a close up of this support bracket.
2. When the top edge of the glass is between the retention bracket and the fireplace outer shell you can tilt in the bottom edge of the glass and position the glass down into its resting position on brackets.

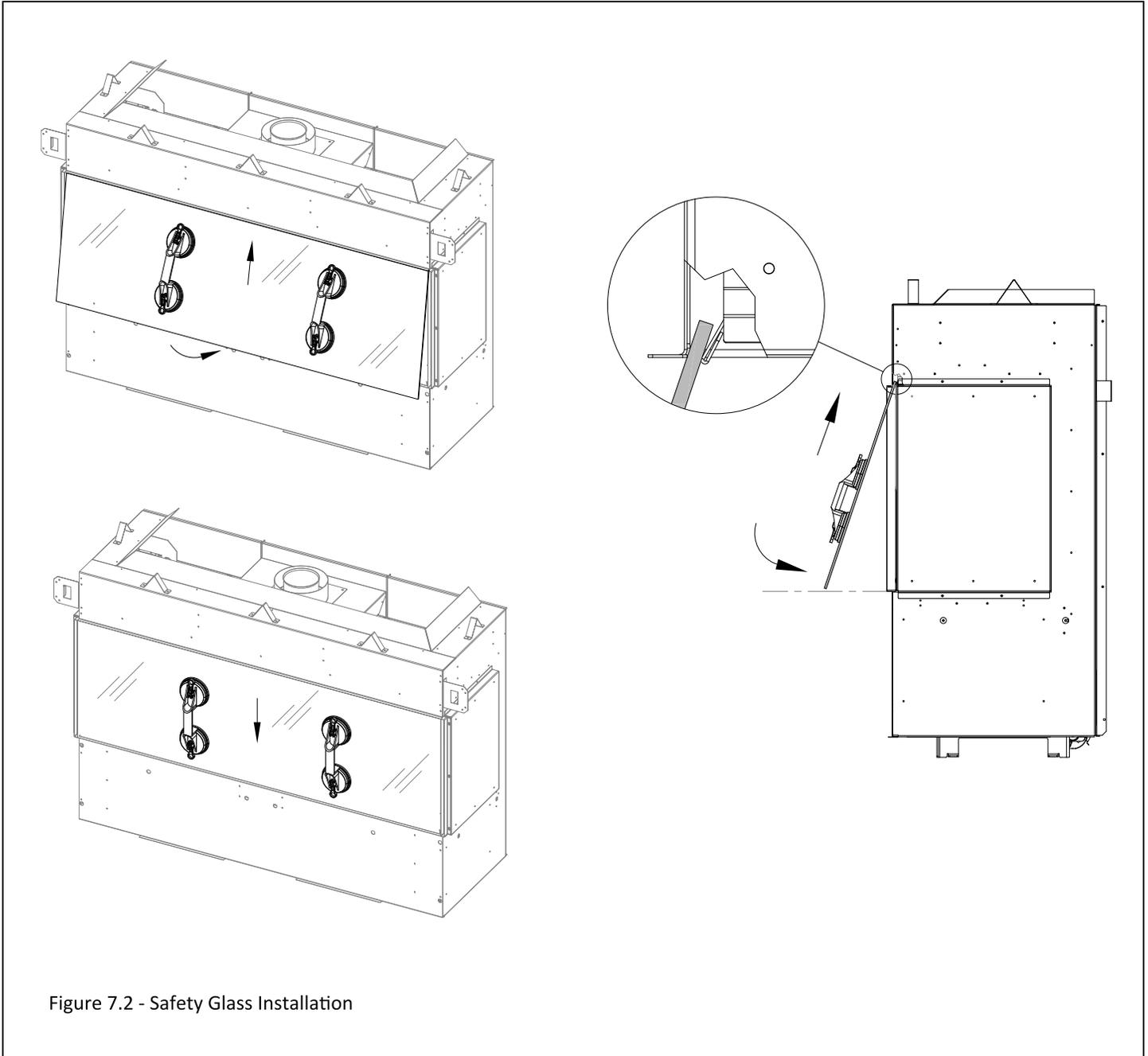


Figure 7.2 - Safety Glass Installation

7.2 Perimeter Media Tray

You will need to remove the perimeter media tray to access any of the components of the fireplace or to remove the firebox glass.

Removal Instructions:

1. After the safety glass is removed locate the (3) sheet metal screws that secure each side media tray and the front media tray. See Figure 7.3.
2. After removing the sheet metal screws you can lift up and remove the media trays. See Figure 7.3. Reinstall in reverse order.

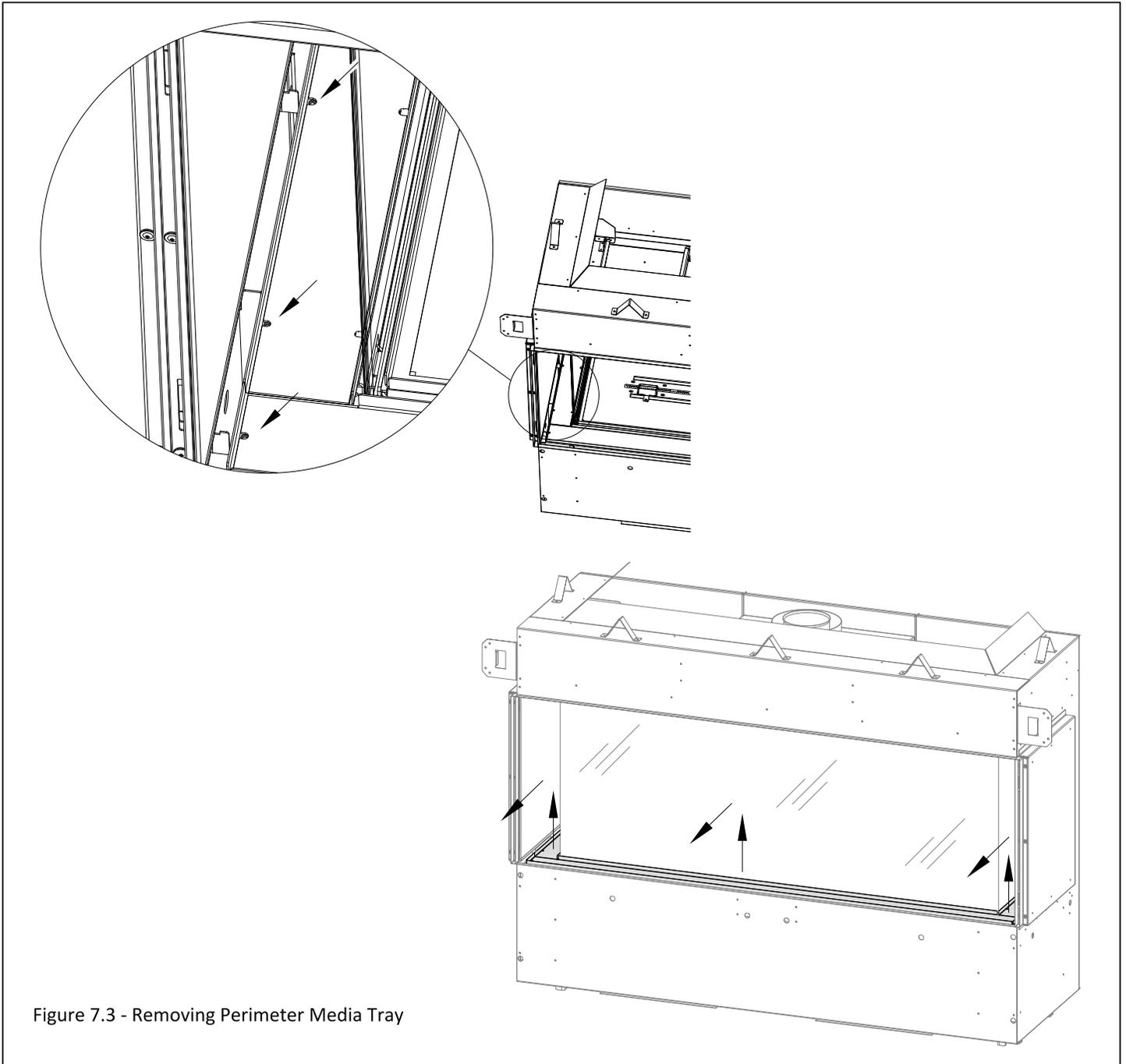


Figure 7.3 - Removing Perimeter Media Tray

7.3 Firebox Glass

WARNING: Do not operate this fireplace with the glass removed, cracked, or broken. Replacement of the glass assembly, should be done by a licensed or qualified service person.

The firebox glass for this fireplace is ceramic glass.

The firebox glass provides a sealed system for the fireplace. This consists of the firebox glass and the silicone corner gasket.

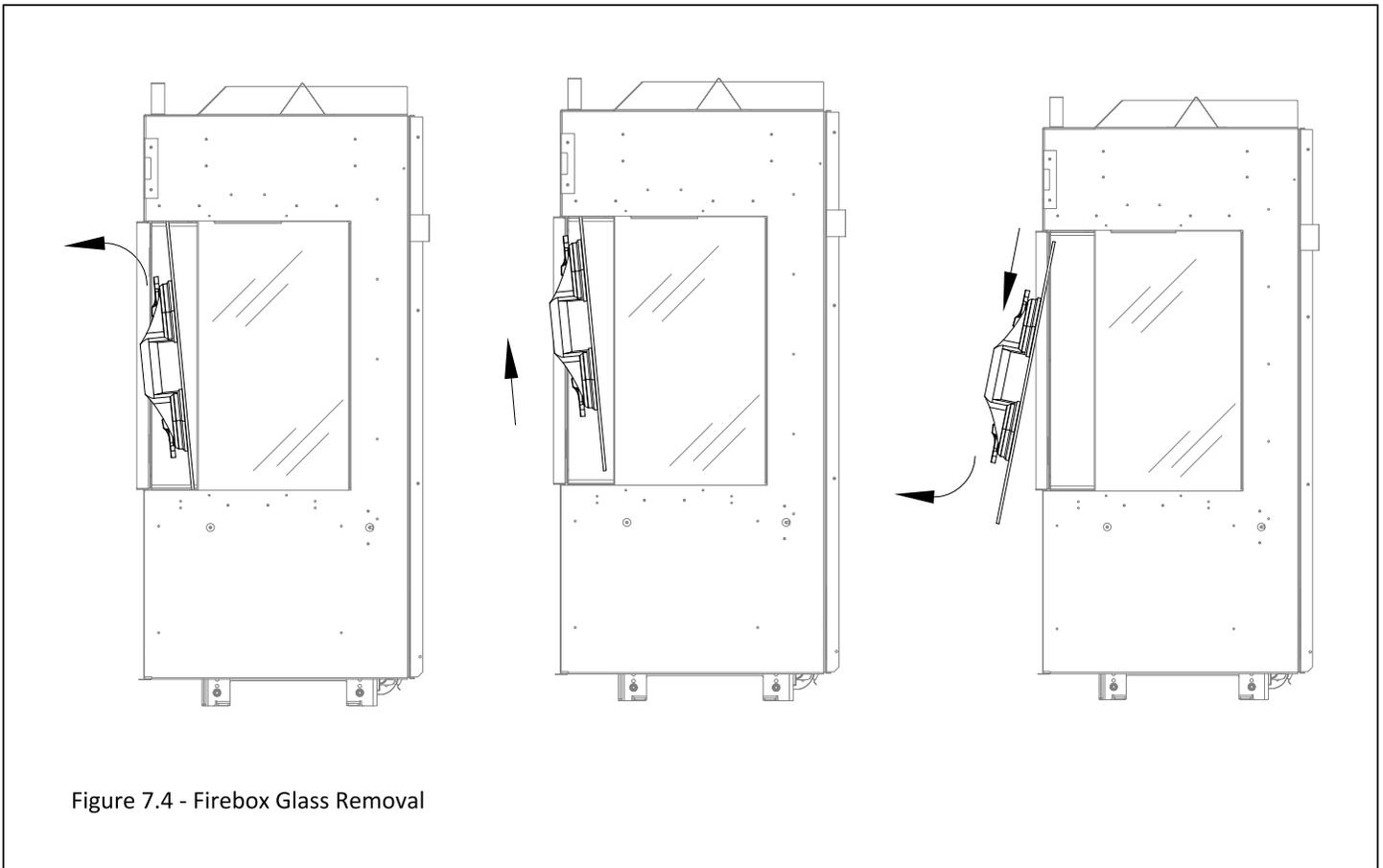
7.3.1 Removing The Firebox Glass

WARNING: Do not remove the glass assembly when hot.

1. Remove the perimeter media tray by lifting it up and out of the slot it is installed. See Figure 7.3.
2. Start with the front glass. Attach suction cups to the front firebox glass.
3. Remove the 7/16" nuts that secure the upper glass bracket and remove this bracket for the front glass as shown in Figure 7.5. Save this bracket to reinstall the glass.
4. Loosen the 7/16" nuts that secure the lower glass brackets as shown in Figure 7.5. You do not need to remove these brackets.
5. Start by lifting the front piece of glass as shown in Figure 7.4 to remove the front firebox glass.

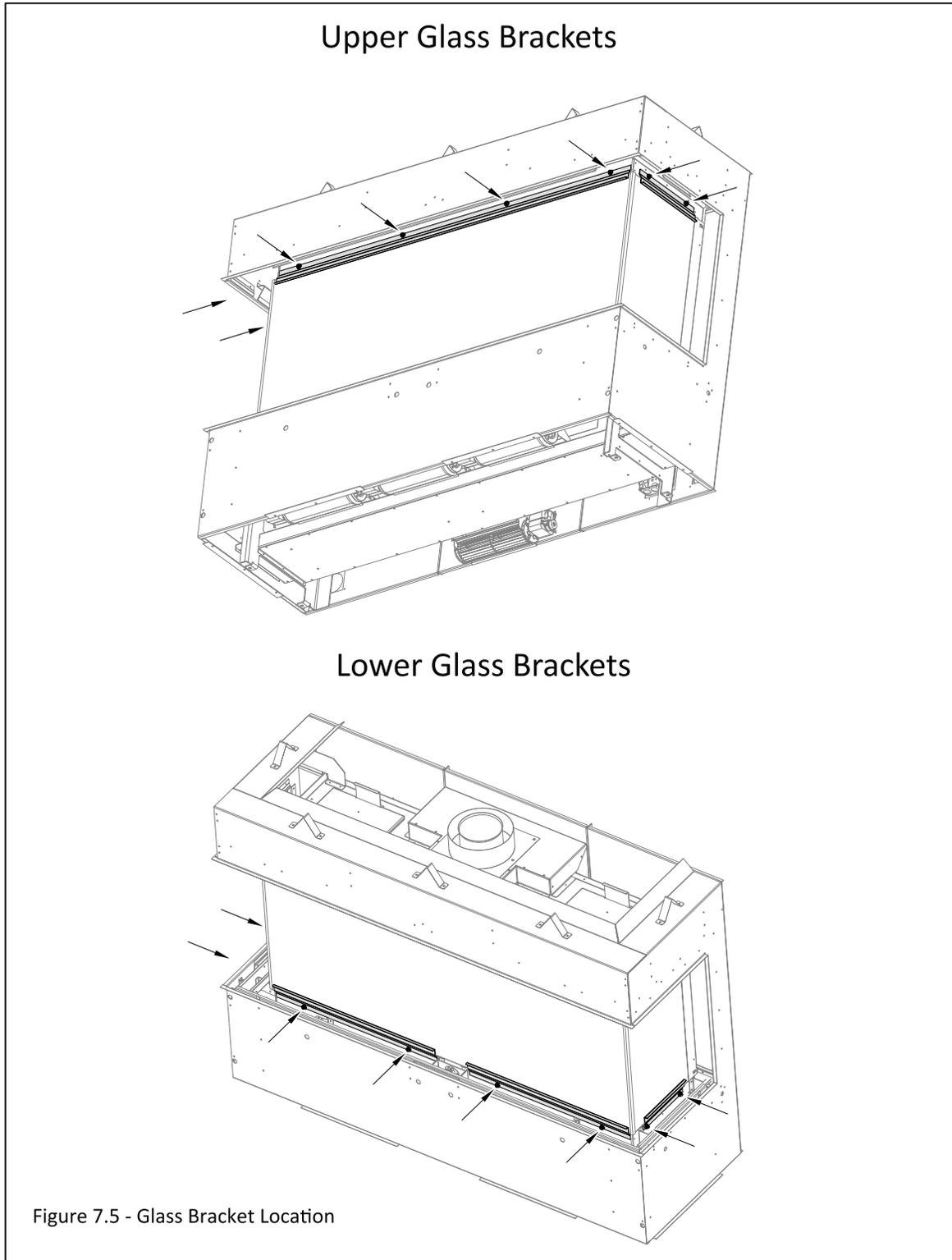
Note: You may need to peel away the small amount of silicone that is at the top and bottom corners of where the front and side pieces of glass meet. The silicone sealing strips should stay attached to the side pieces of glass when removing the front glass pane.

6. Next remove the upper glass brackets and loosen the lower glass brackets for the side firebox glass pieces. You will need to remove these glass pane by hand as a suction cup will not fit on the side. To remove the side firebox glass follow the steps outlined above for the front glass removal.



7.3.1 Removing The Firebox Glass (continued)

Note: The image below shows the side fireplace block off plates removed. This was done to show the location of the upper and lower side firebox glass brackets and nuts.



7.3.2 Installing The Firebox Glass

1. Start with installing one of the side glass pieces first. Ensure the silicone sealing strips are installed. Have the lower glass brackets already installed with the nuts loose. Install the side firebox glass into place. Install the glass to the firebox by securing the upper glass bracket with the 7/16" nuts. Tighten the lower glass brackets now.
2. Install the front piece of glass. When installing the front piece of glass you may find it helpful to start with the bottom glass brackets installed but left loose. As you lift the glass into place (See Figure 7.7) start with the glass slightly offset to the side of the firebox that does not have the side glass installed yet. You are able to slide the front glass sideways into the silicone sealing strip of previously installed side firebox glass.

Use your finger to push the silicone strip securely into the edge of the front glass. See Figure 7.6 for a top-down view of how the front glass is sealed inside the silicone channel. Secure the front glass by installing the top glass bracket and secure both the top and bottom bracket.

3. Now you can install the remaining side firebox glass. At the opposite side you can use your finger or a small tool to peel open the edge of the silicone strip as you press the side firebox glass up against the front glass. Ensure the glass is seated into the channel on both sides.
4. Secure the remaining side firebox glass bracket with the 7/16" nuts. Tighten all the 7/16" nuts that secure the upper and lower glass brackets as shown in Figure 7.5.
5. Apply high temperature silicone to the top and bottom corners of where the front and side firebox glass pieces meet. See Figure 7.8.
- 6 Reinstall the perimeter media tray.

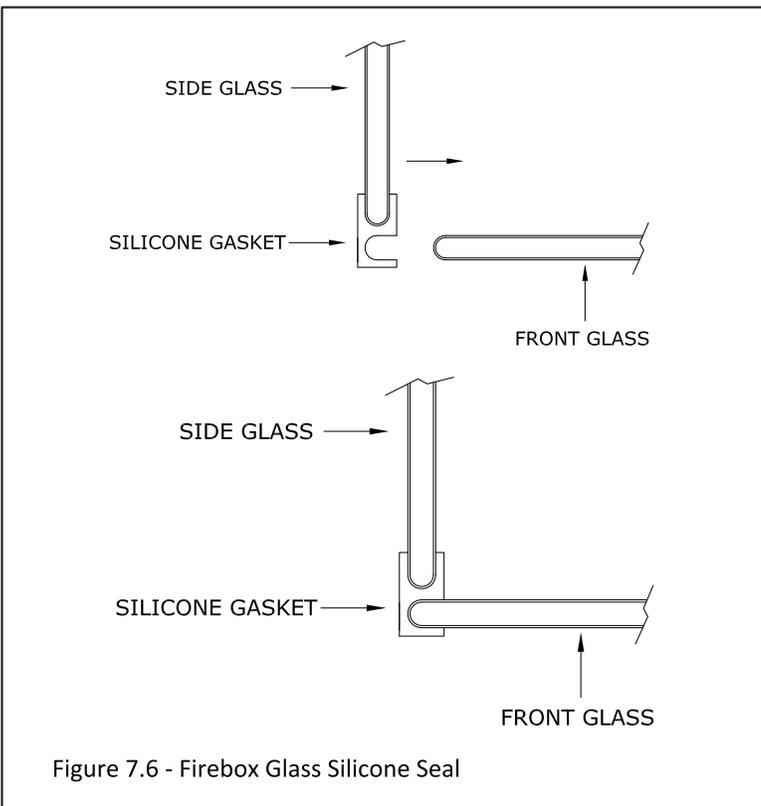


Figure 7.6 - Firebox Glass Silicone Seal

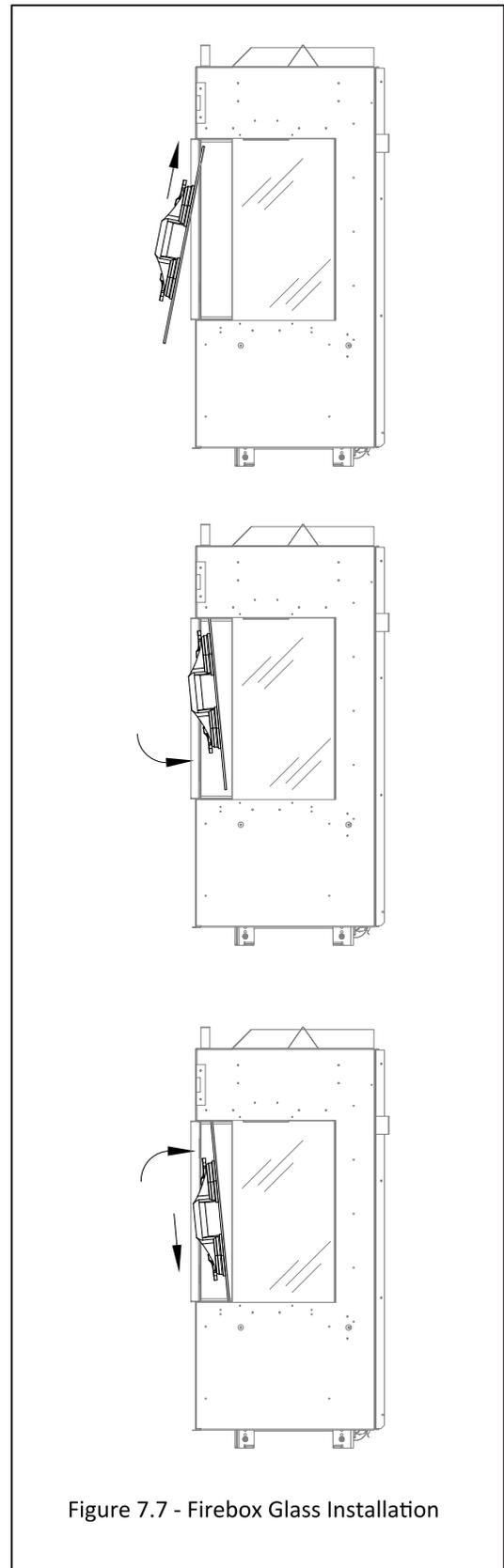


Figure 7.7 - Firebox Glass Installation

7.3.2 Installing The Firebox Glass (continued)

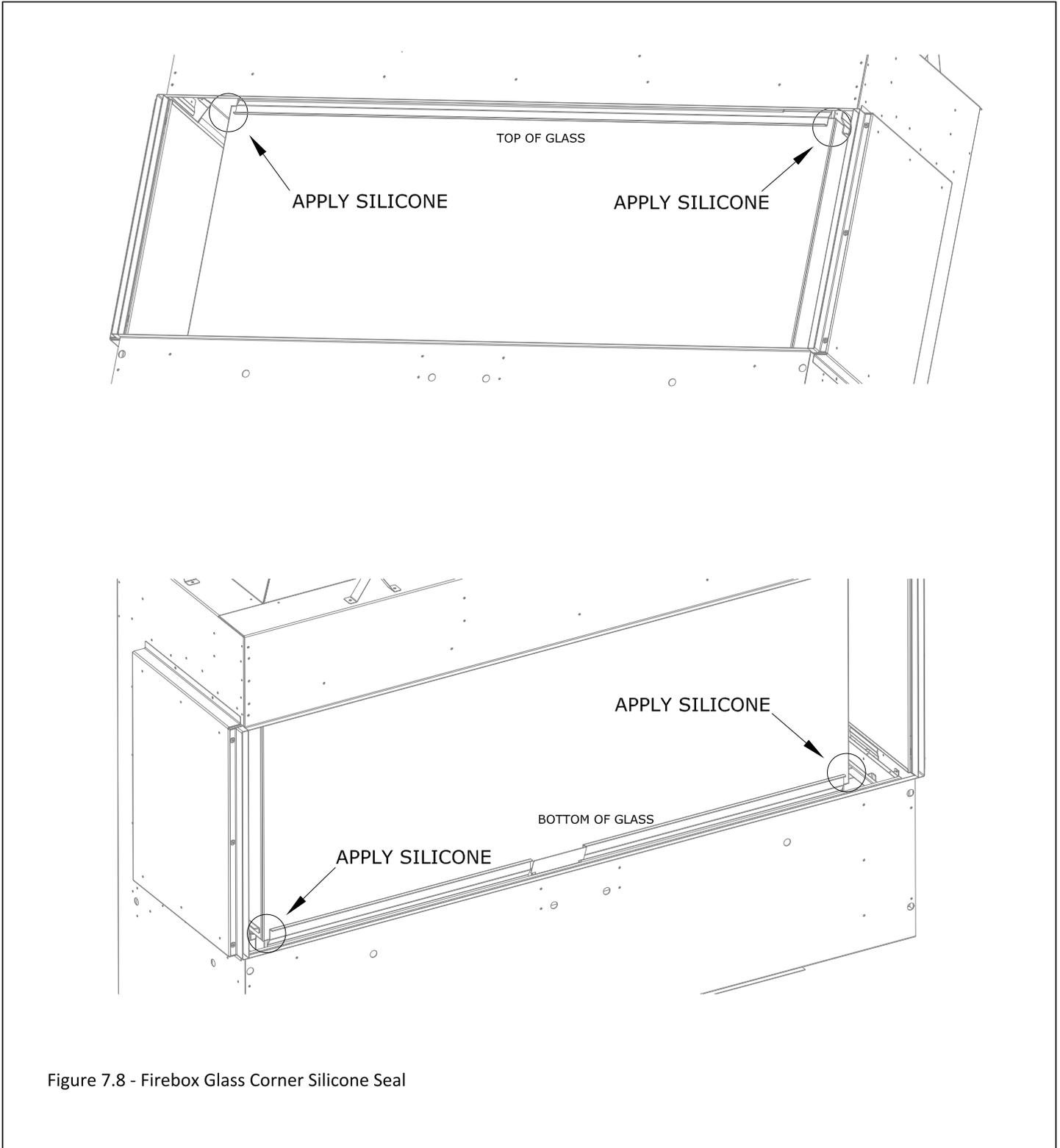


Figure 7.8 - Firebox Glass Corner Silicone Seal

7.4 Burner Tube Removal

1. Remove the fireplace safety glass, perimeter media tray, and firebox glass. See additional details in Section 7.1 to 7.3.
2. Unscrew the media tray on top of the burner tube. Remove media tray and burner tube. Media tray removal outlined in Section 7.8.
3. Reinstall in reverse steps.

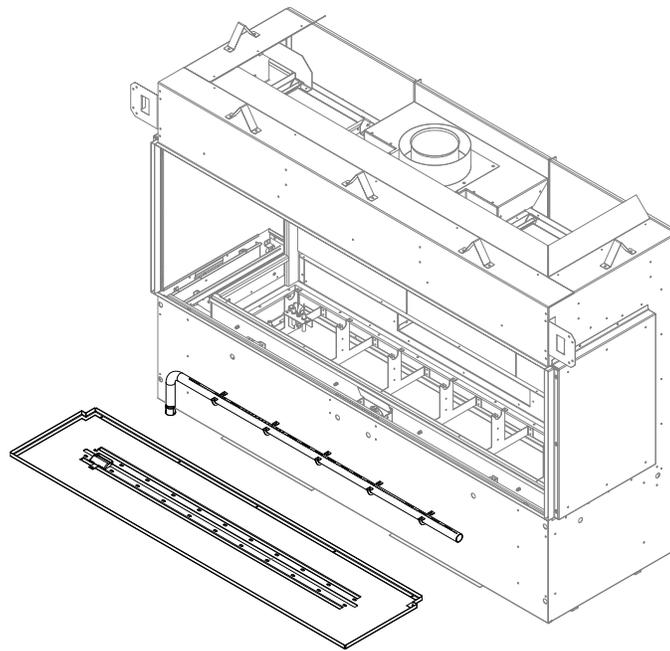


Figure 7.9 - Media Tray and Burner Removal

7.5 Log Set or Geometric Sphere Installation

Refer to the instructions that are included with the optional accessory you have chosen. The three optional accessories are a Weathered Log Set (G6020-500), Birch Log Set (G6020-B501), or Geometric Spheres (G6020-GEO)

- If converting to propane, complete the conversion before installing the log (or sphere) set. Follow the conversion instructions included with the kit.
- Install the Black Glass Panels before log (or Sphere) set installation. See Section 7.7.

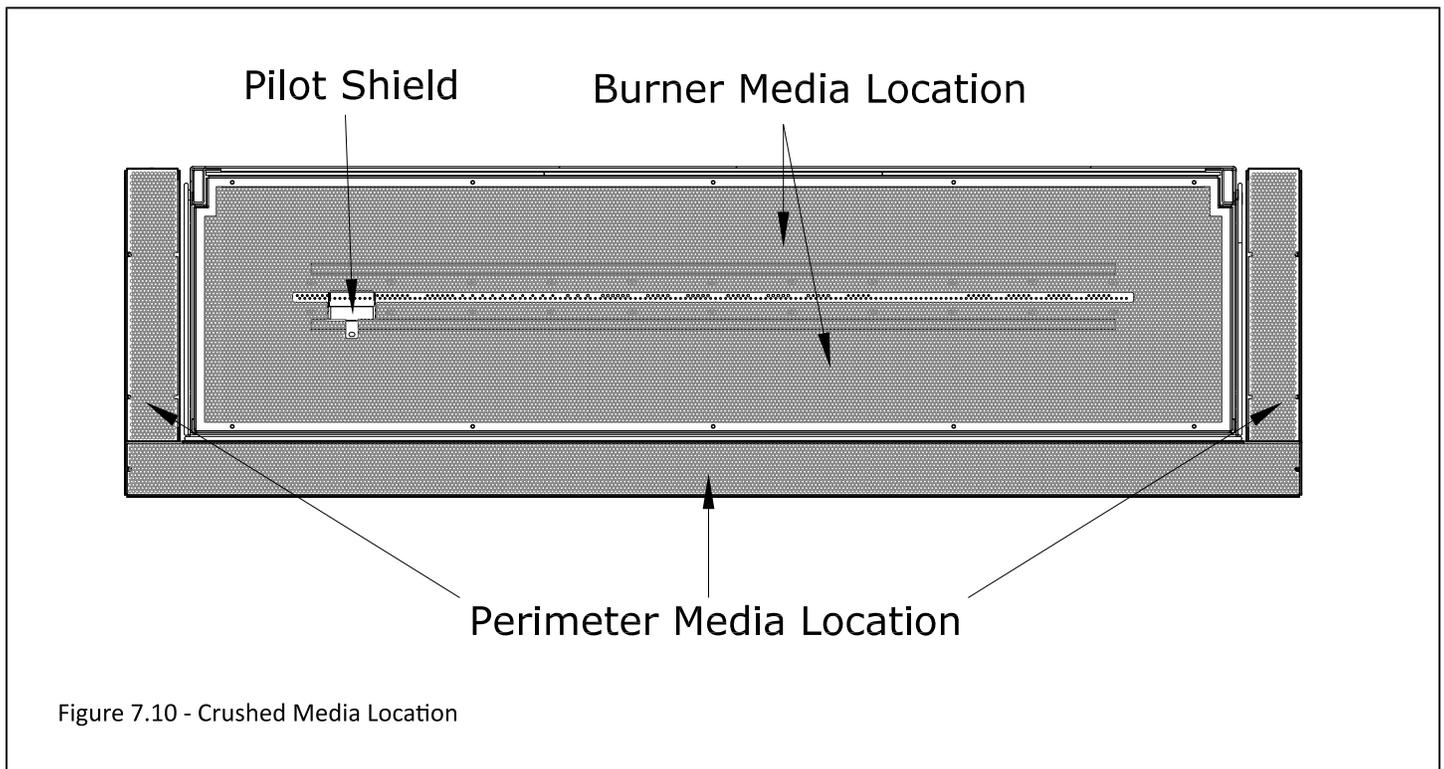
7.6 Crushed Media Installation (Part # 425-ICE)

Note: If you are installing one of the optional log sets ensure that it is placed down first on the burner media tray before installing crushed media.

IMPORTANT: It is required that no crushed media blocks the pilot flame from igniting the burner. A blocked pilot may cause a delayed ignition. Figure 7.10 shows an arrow on the left that is pointing to the pilot shield around the pilot. Do not place media inside the media guard to cover or block the pilot.

IMPORTANT: Inspect and ensure the lighting of the main burner occurs within (4) seconds of the main gas valve opening.

- Install the Black Glass Panels before crushed media installation. See Section 7.7.
- Part #425-ICE includes (5) 5lb. Bags of crushed media.
- Burner Media.
 - If you are installing just the crushed glass (no log set) then install 3-1/2 bags (17.5 lbs.) across the burner media tray.
 - If you are installing a log set then install 3 bags (15 lbs.) across the burner media tray. Ensure the crushed glass is only one layer thick across the burner.
- Perimeter Media.
 - Install 1-1/2 bags (7.5 lbs.) across the perimeter media trays.



7.7 Black Glass Panel Installation

- If converting to propane, complete the conversion before installing the black glass panel set. Follow the conversion instructions included with the fireplace.
- Follow the steps in reverse for panel removal.

Installation

1. Remove the safety glass, perimeter media tray, firebox glass, and crushed glass.
2. Install the (3) rear interior firebox black glass panels. These three panels are the same size and interchangeable. Secure with (2) rear firebox panel clips and (2) sheet metal screws as shown. See Figure 7.11.
3. Install the (2) rear perimeter black glass panels by tilting them sideways until you get them to the back of the fireplace. Place the bottom edge of the glass down into the preinstalled bottom perimeter panel clip and tilt into place. Use the supplied perimeter panel clip and secure on the top of the glass with (2) sheet metal screws. See Figure 7.12.
4. Install the side black glass panels by sliding them into position as shown in Figure 7.12.

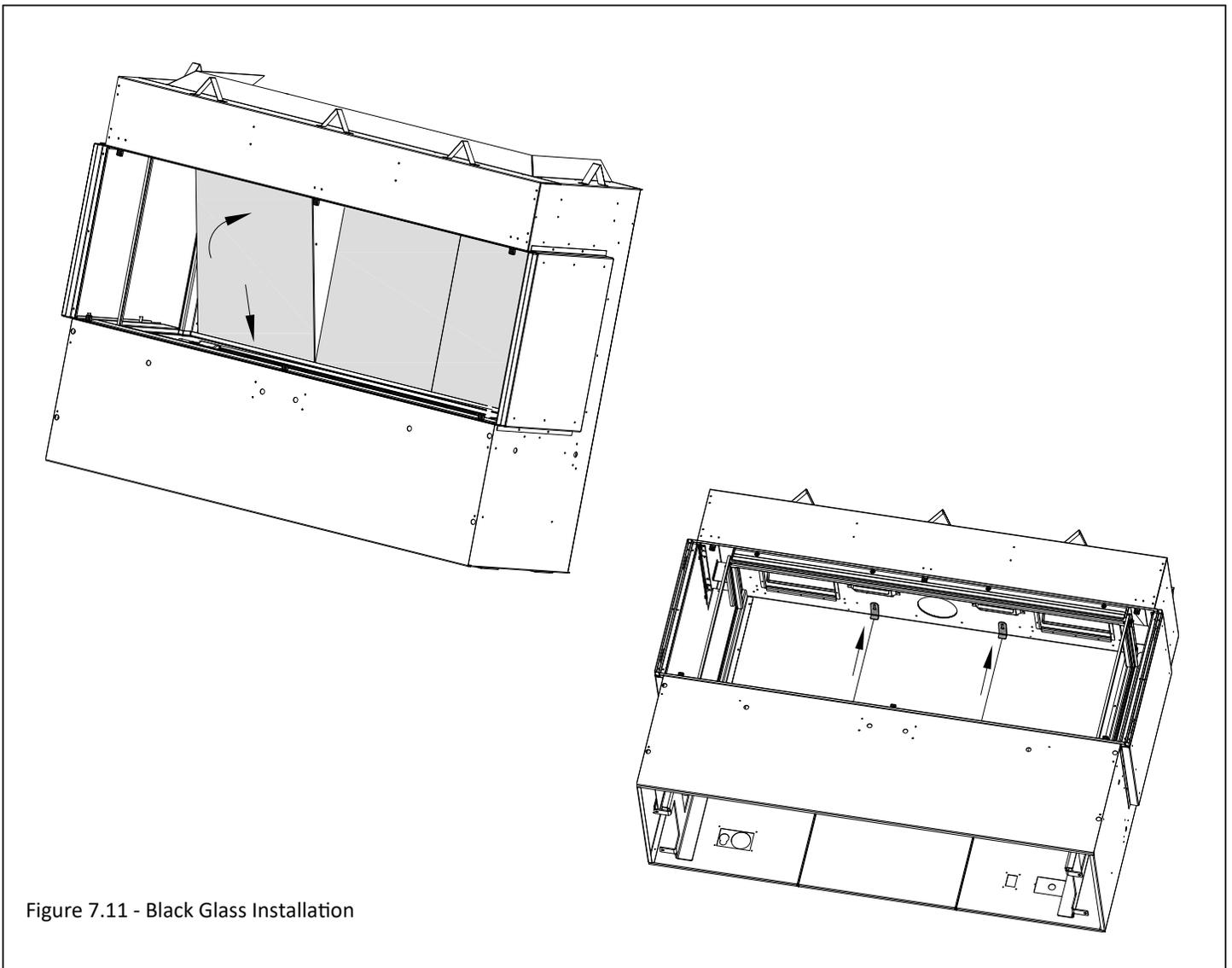


Figure 7.11 - Black Glass Installation

7.7 Black Glass Panel Installation (continued)

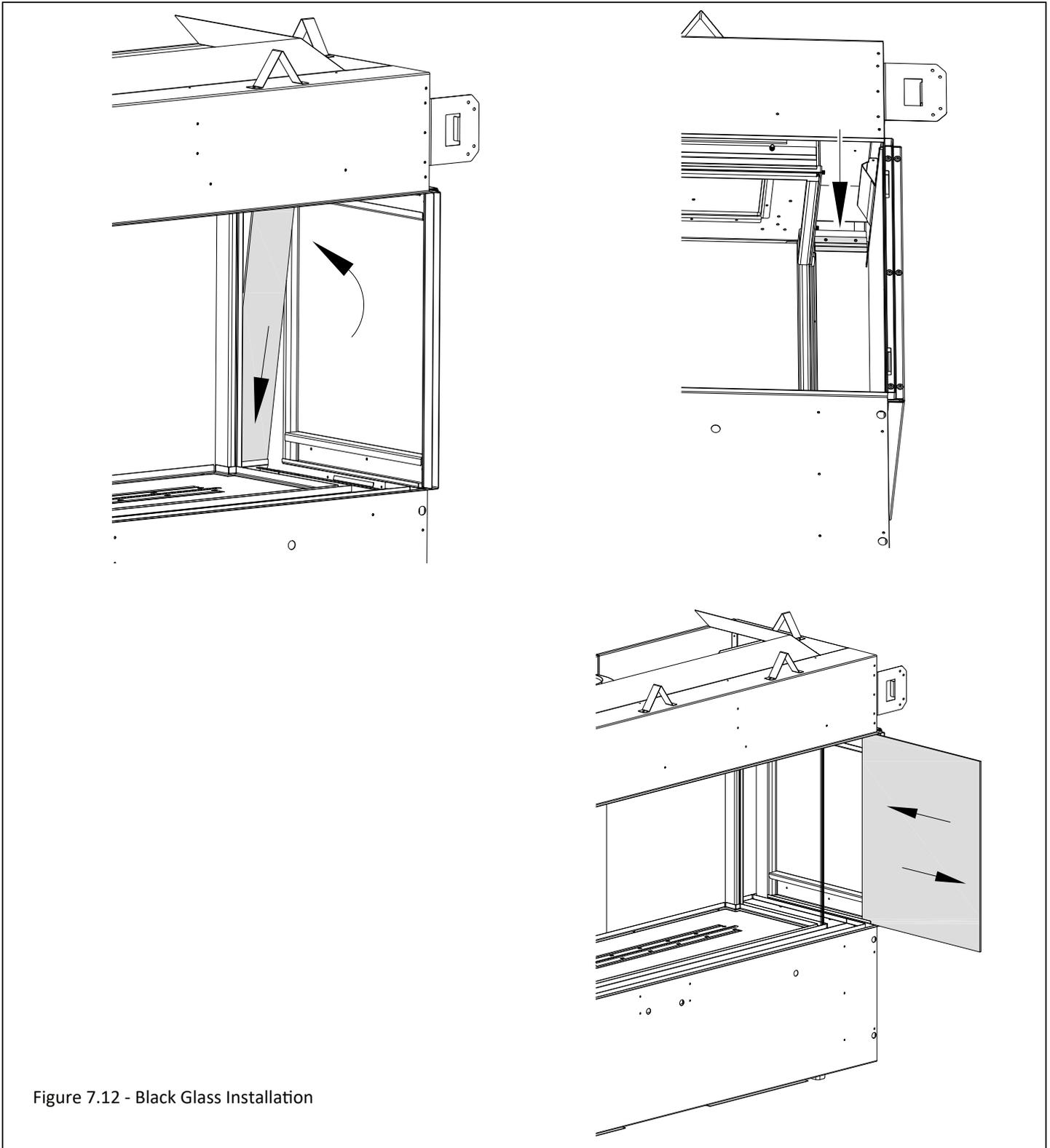


Figure 7.12 - Black Glass Installation

7.8 Control Board Removal and Installation

WARNING: If burner and/or pilot have been burning, use appropriate protection to avoid burns or damage to personal property before removing any components.

DO NOT OPERATE THIS APPLIANCE WITHOUT THE SEALING GASKET (LOCATED UNDER THE CONTROL BOARD) IN PLACE. IF GASKETING IS DAMAGED, IT MUST BE REPLACED.

CAUTION: Check all connections for leaks with soapy water, whether field or factory made.

7.8.1 Control Board Removal

1. Disconnect the electrical power of the fireplace. Locate the main shut-off valve upstream of the appliance connector and close the valve. Figure 7.13.
2. Remove the safety glass, perimeter media tray, firebox glass, and crushed media. You may find it beneficial to remove the lower glass brackets for increased accessibility. Figure 7.14, 7.15, and 7.16.
3. Disconnect the wiring lead from the safety system to the on/off switch wiring. Figure 8.2.
4. Remove the (2) sheet metal screws that secure the switch panel. Lift this panel off its support bracket and locate the slits in the control module brackets. Slide the switch panel into these openings to secure it during control board removal. Figure 7.17 and 7.18.
5. Remove all the sheet metal screws around the perimeter of the media tray and all sheet metal screws along the center of the burner. Remove the firebox media tray and burner tube. Figure 7.19.
6. Remove the (24) sheet metal screws securing the control board to the bottom of the firebox. Figure 7.20
7. Start by pulling up and out the control board. As you lift the board up you will have to tilt the control board towards you so the valve and module pivot into the opening. Lift the control board up to gain access to under the control board.
8. Make sure gas supply is turned off. Lean over the tilted control board and disconnect the gas line flex tube. This gas line flex tube goes from the fireplace gas valve to the supply gas line entering the fireplace, as shown in Figure 5.1.
9. Disconnect both top light kit leads from the wire harness on the IFC control module.
10. Remove the control board.

7.8.2 Control Board Installation

- Install the control board and all previously removed components in reverse order.
- When installing the control board make sure you are aligning the holes in the control board with the holes in the firebox bottom. **VERIFY SEALING GASKET IS IN PLACE.**

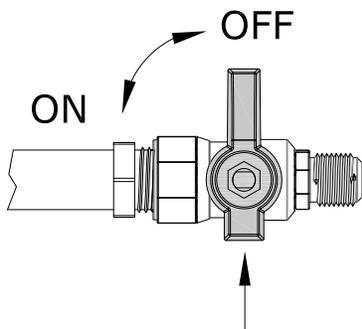


Figure 7.13 - Turn Off Gas

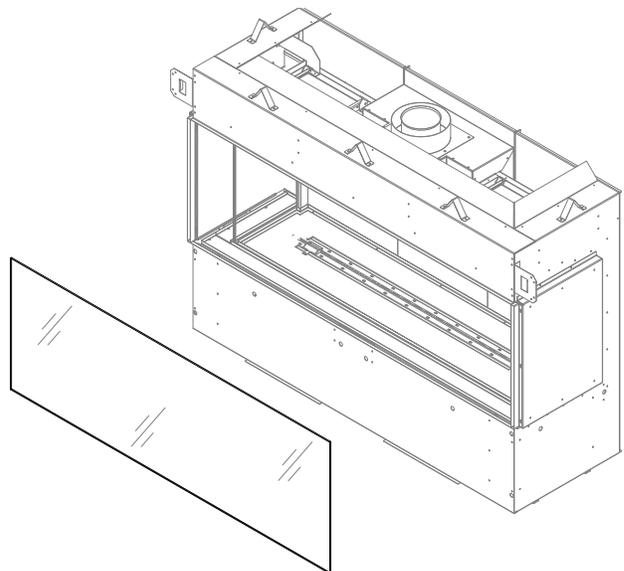
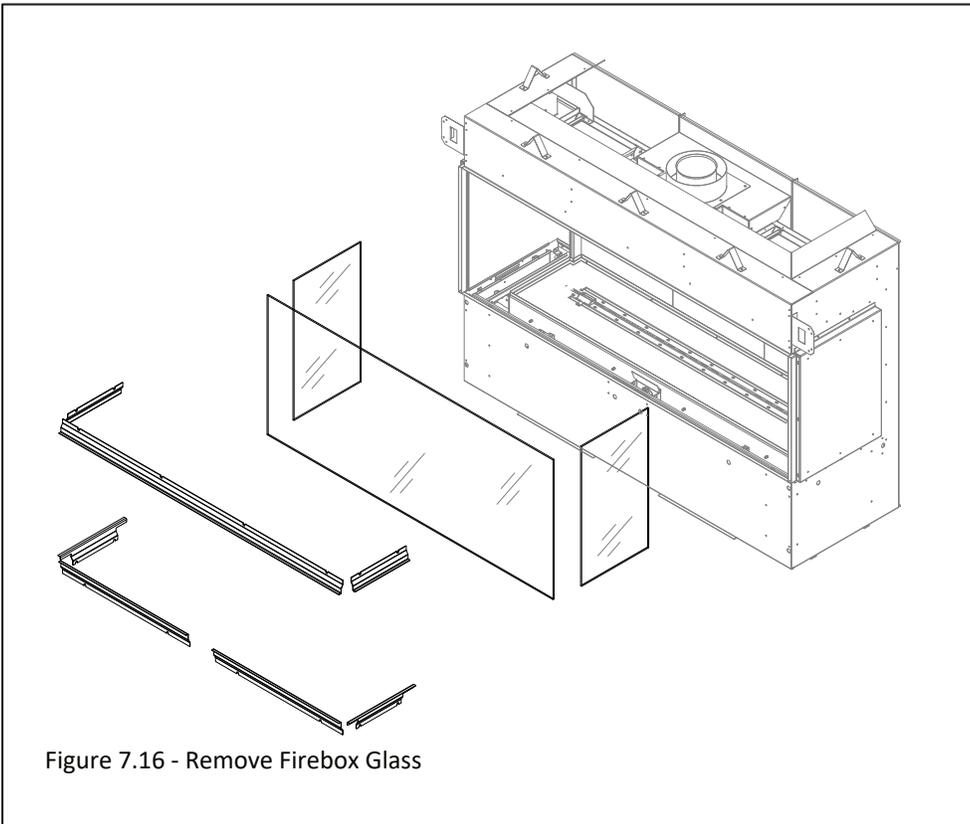
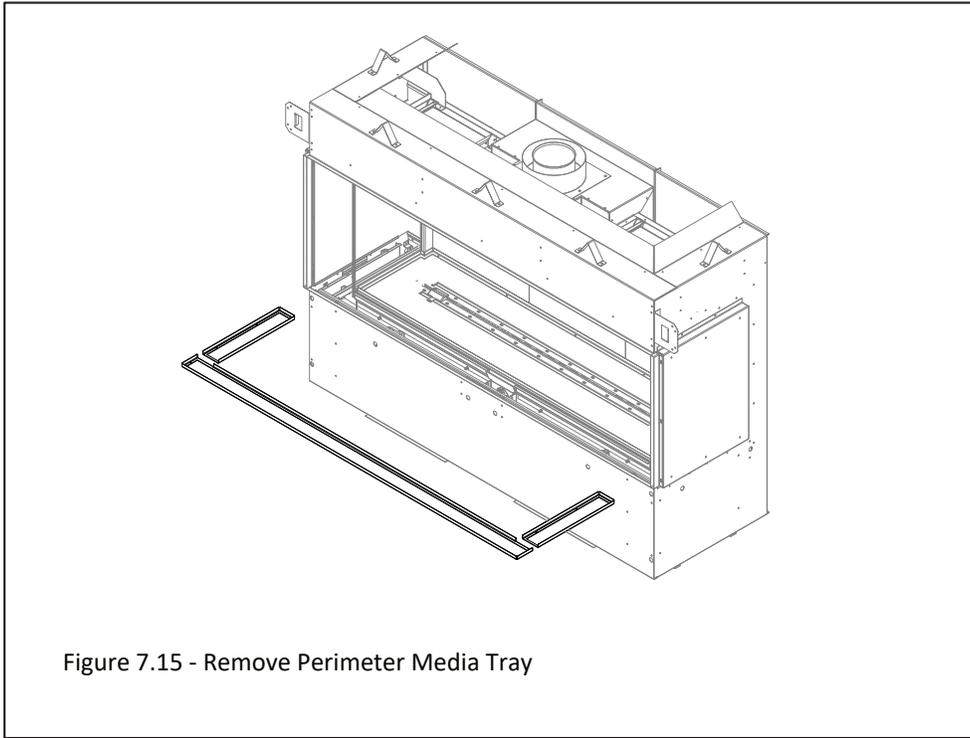


Figure 7.14 - Remove Safety Glass

7.8 Control Board Removal and Installation (continued)



7.8 Control Board Removal and Installation (continued)

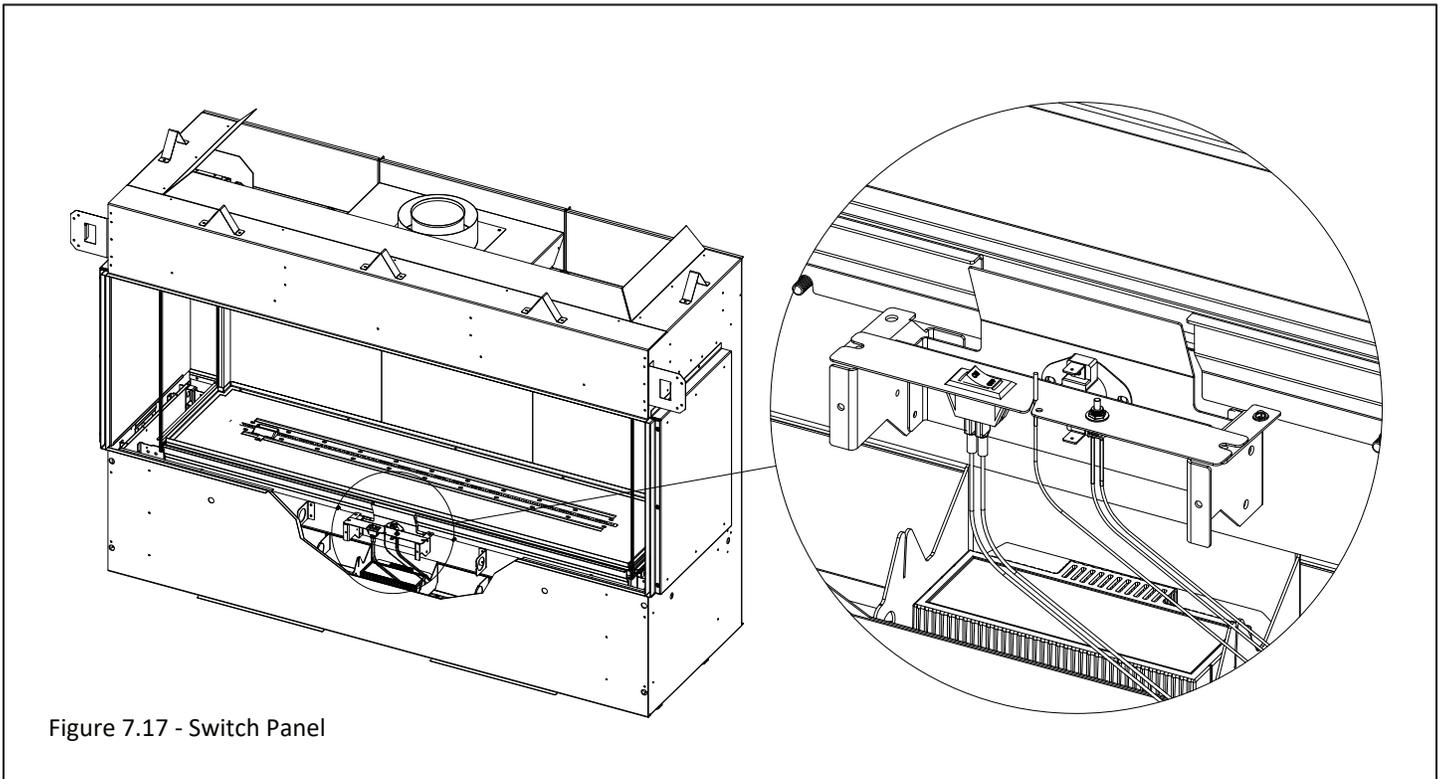


Figure 7.17 - Switch Panel

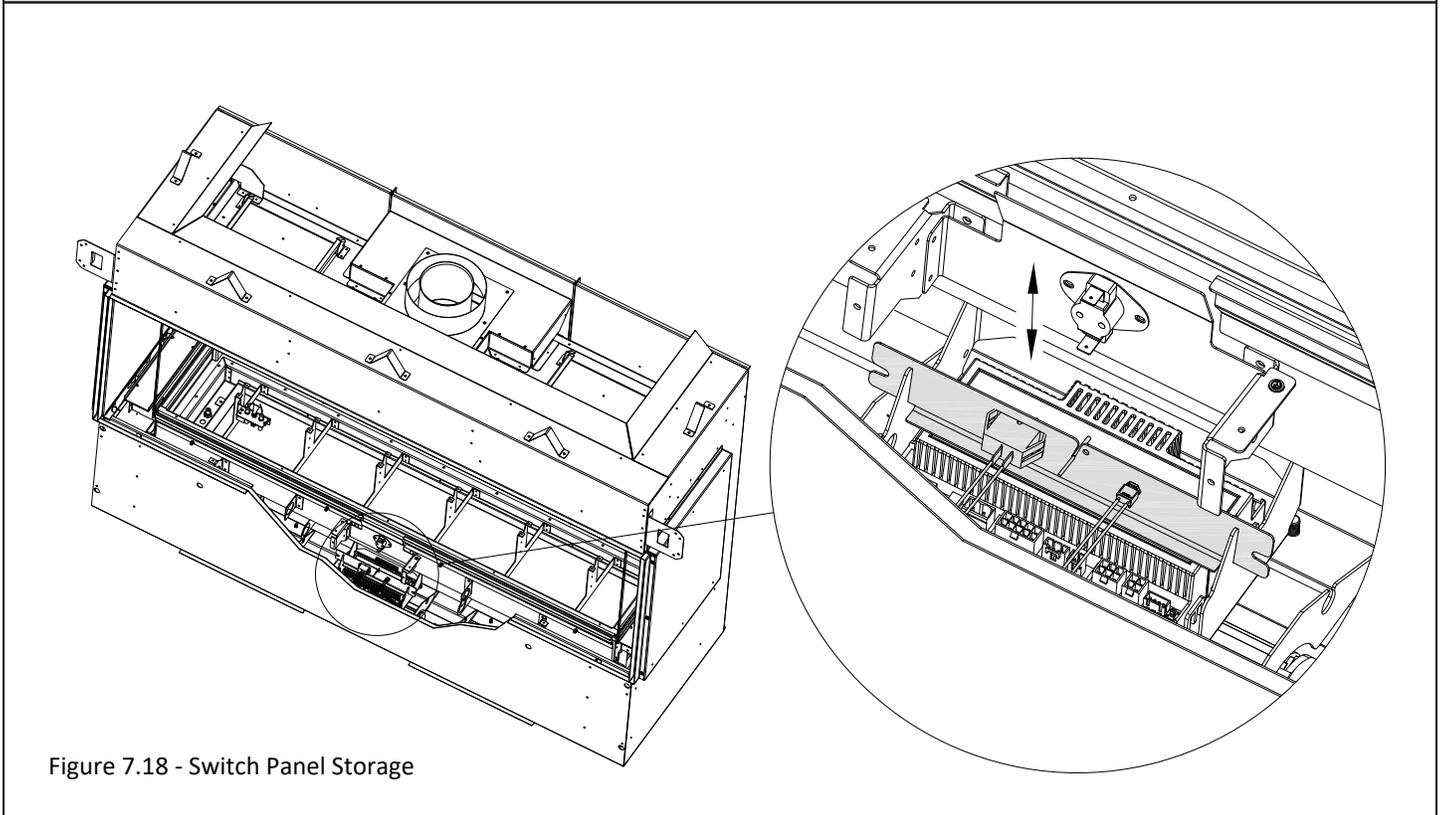


Figure 7.18 - Switch Panel Storage

7.8 Control Board Removal and Installation (continued)

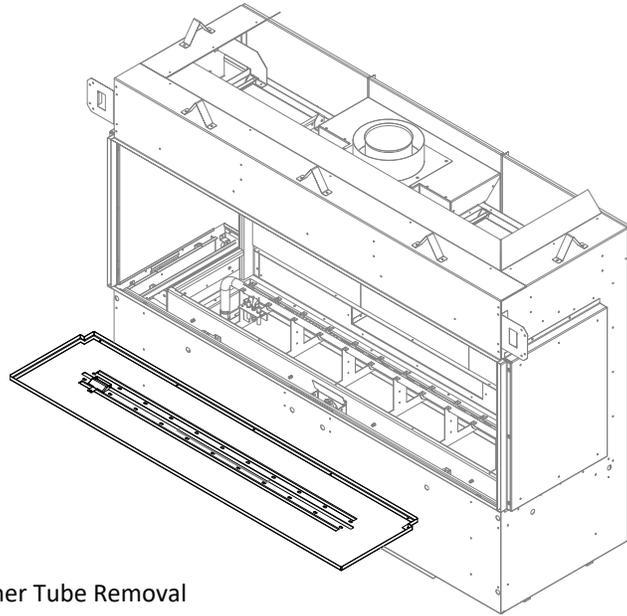


Figure 7.19 - Media Tray and Burner Tube Removal

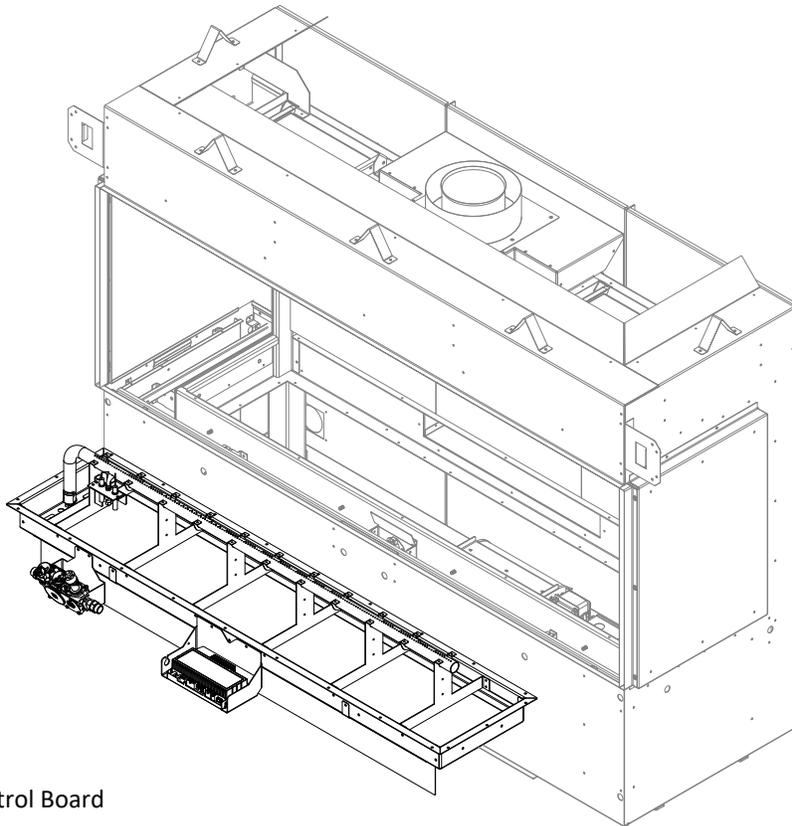


Figure 7.20 - Remove Control Board

8.0 Electrical Information

WARNING: Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect this appliance and to replace any part of the control system and any gas control which has been under water.

WARNING - Electrical Grounding Instructions: This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug

8.1 Electrical Specifications

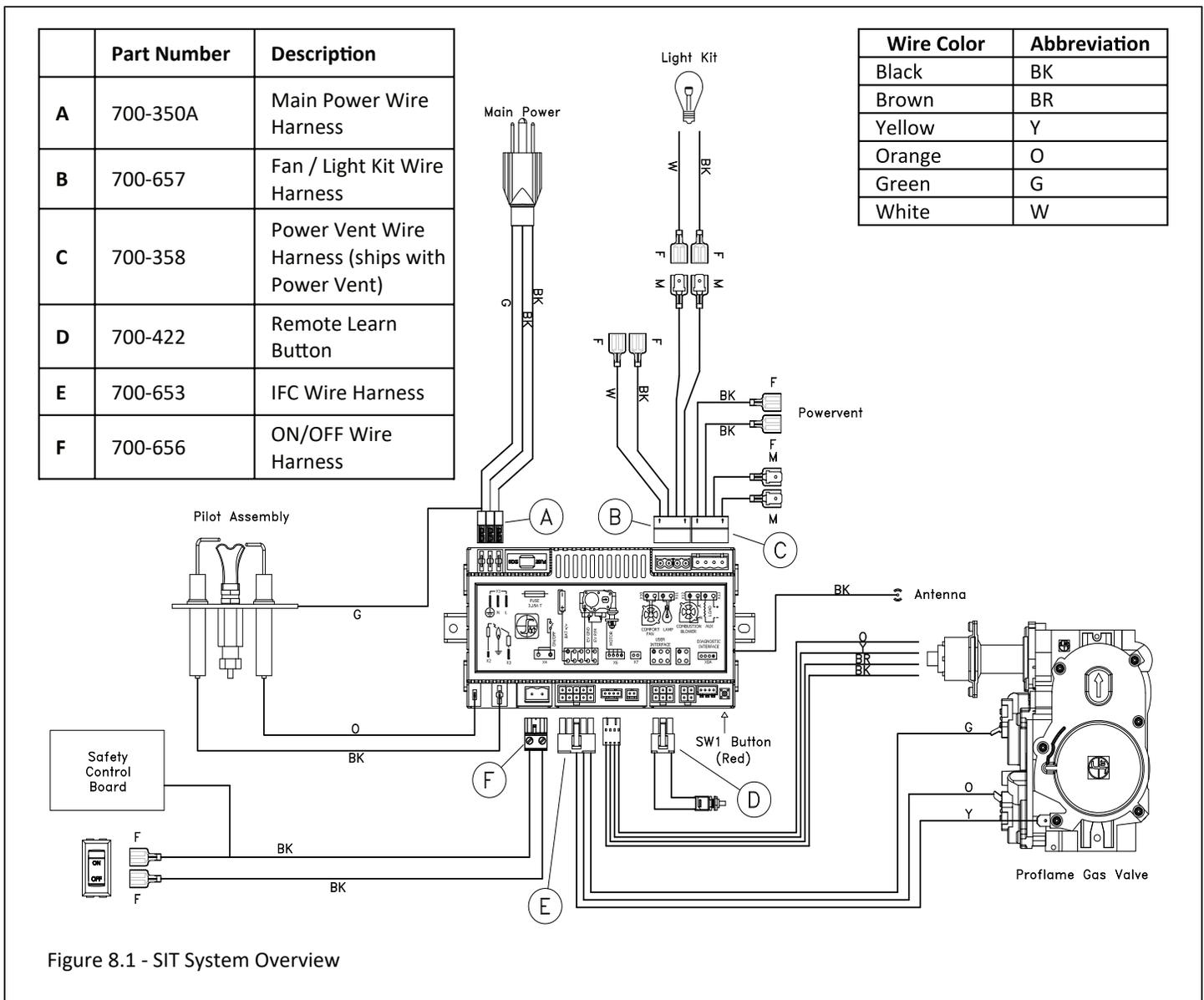
This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

8.2 Wiring Requirements

- The system requires 120 VAC of electricity to operate.

Figure 8.1 - 8.3

Note: Spade connectors are labeled "M" for male connectors and "F" for female connectors.



8.1 Electrical Information (continued)

See "Section 2.4 - Safety Control System" for more information.

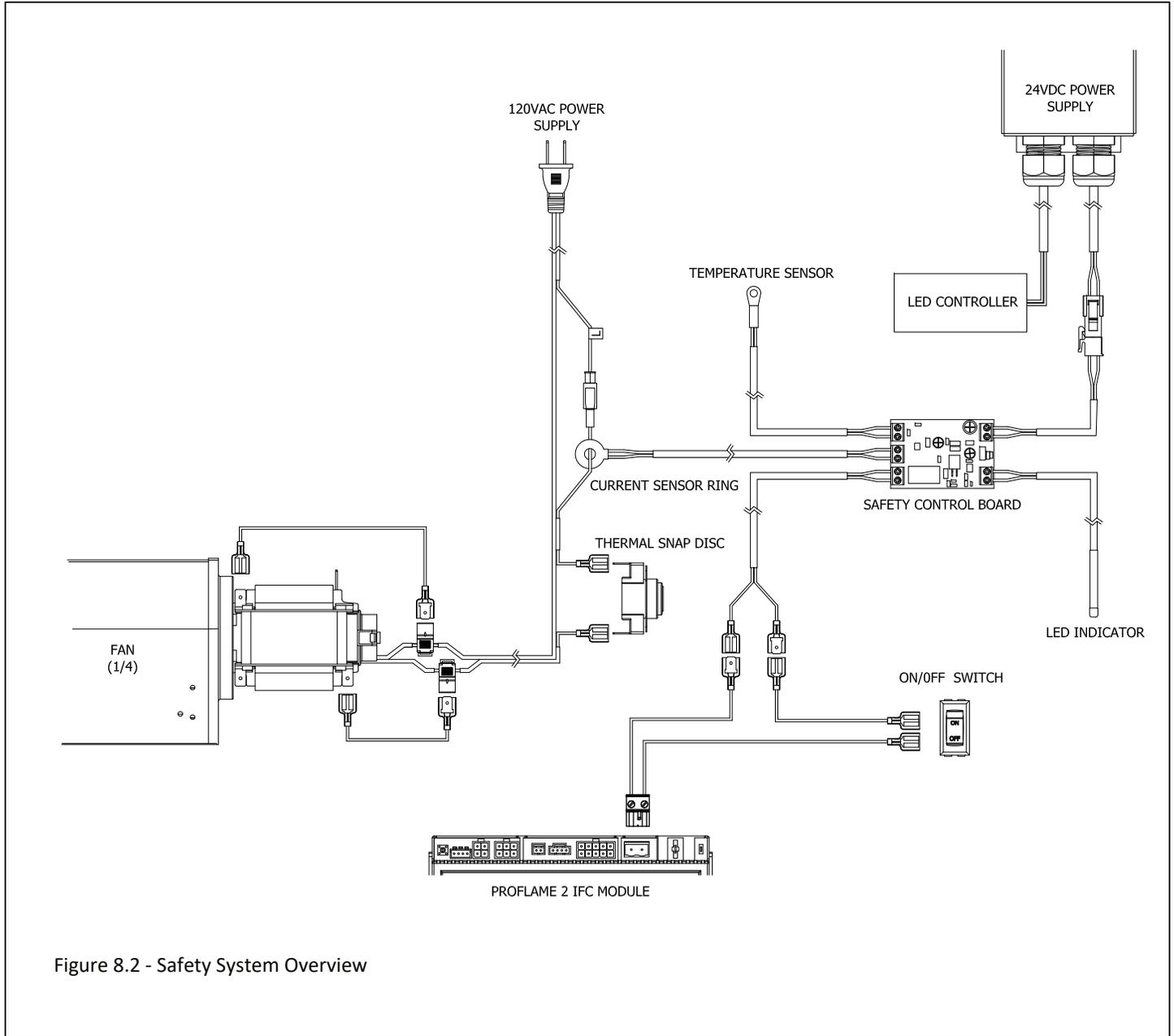


Figure 8.2 - Safety System Overview

8.1 Electrical Information (continued)

See the "LED Supplemental Manual" for more information.

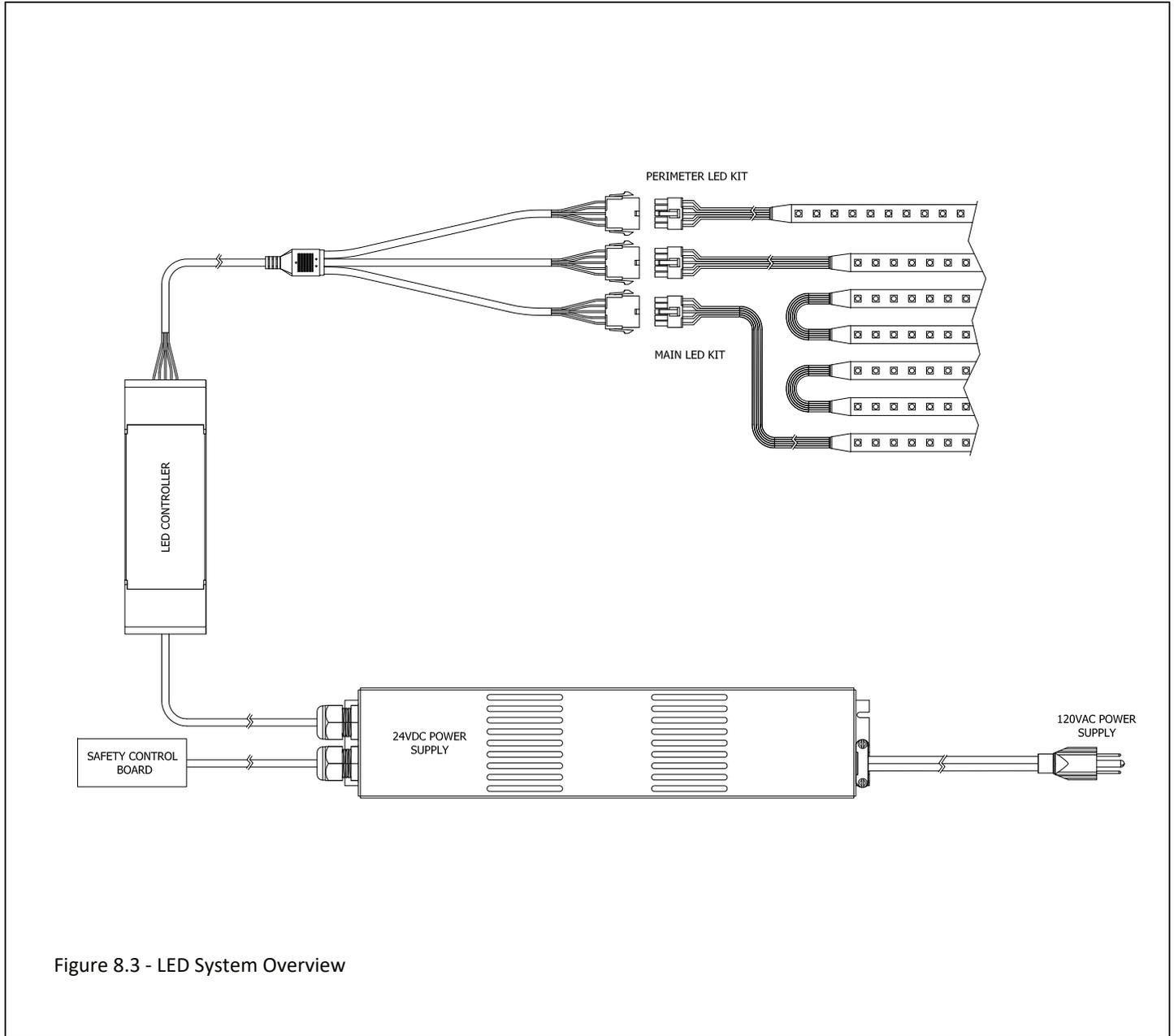


Figure 8.3 - LED System Overview

9.0 Operating Instructions

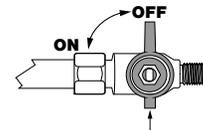
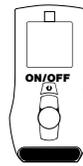
FOR YOUR SAFETY READ BEFORE OPERATING

WARNING: If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.

- A. This appliance is equipped with an ignition device that automatically lights the pilot. Do not try to light the pilot by hand.
- B. BEFORE OPERATING, smell around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- WHAT TO DO IF YOU SMELL GAS
- Do not try to light any appliance.
 - Do not touch any electric switch; do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- C. Use only your hand to turn the gas control manual valve. Never use tools. If the valve will not turn by hand, do not try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control that has been under water.

OPERATING INSTRUCTIONS

1. STOP! Read the safety information above on this label. This appliance is equipped with an on-demand pilot that shuts off after 7 days of time.
2. Press the wireless remote OFF button.
3. Turn off all electric power to the appliance.
4. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
5. Locate the manual valve installed by your qualified service technician.
6. Turn the manual valve clockwise  to the OFF position.
7. Wait five (5) minutes to clear out any gas. Then, smell for gas, including near the floor. If you smell gas, STOP! Follow 'B' in the safety information above. If you do not smell gas, go to the next step.
8. Turn the manual valve counterclockwise  to the ON position.
9. Turn on all electric power to the appliance.
10. Press the wireless remote ON button.
11. If the appliance will not operate, follow the instructions, "To Turn Off Gas To Appliance" and call your service technician or gas supplier.



TO TURN OFF GAS TO APPLIANCE

1. Press the wireless remote OFF button.
2. Turn off all electric power to the appliance if service is to be performed.
3. Locate the manual valve installed by your qualified service technician.
4. Turn the manual valve clockwise  to OFF position.



DANGER



**HOT GLASS WILL
CAUSE BURNS.
DO NOT TOUCH GLASS
UNTIL COOLED.
NEVER ALLOW CHILDREN
TO TOUCH GLASS.**

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

9.1 Setup Proflame 2 IFC Module

1. Set the main ON/OFF rocker switch in the OFF position.
2. Install (3) AAA batteries (included in the components packet) in the remote control battery bay, located at the base of the remote.
3. Connect the IFC Module to an AC power supply.

9.2 Initialize the Control System

IMPORTANT: Remove all packaging and combustible material from the firebox before initializing the control system.

NOTE: Performing the next steps will initiate pilot start-up in manual mode, where the pilot igniter will spark repeatedly. The pilot will ignite if gas is supplied to the fireplace.

1. To access the ON/OFF toggle switch and remote learn button, remove the front safety glass and front perimeter media tray (See Section 7.1 and 7.2).
2. Press the remote sync button. The IFC module will BEEP (3) times and illuminate an amber LED. This indicates the receiver is ready to synchronize with the transmitter.
3. Within (5) seconds, push the ON/OFF button on the remote control. The receiver will BEEP (4) times to indicate the transmitter's command is accepted, and is set to the transmitter's particular code. The pilot will automatically ignite.
4. Press the remote control ON/OFF button again. The pilot will extinguish, confirming the remote control command. The control system is now initialized.
5. Set the main ON/OFF rocker switch to ON position for remote control operation of the main burner and fireplace features. Reinstall the previously removed components.

9.3 Reset the System for Manual Operation

1. To access the ON/OFF toggle switch and remote learn button, remove the front safety glass and front perimeter media tray (See Section 7.1 and 7.2).
 2. Locate the remote sync button by sliding out the control module.
 3. Set the ON/OFF rocker switch to OFF position.
 4. Press and hold the remote sync button until it emits (3) beeps and an amber LED is illuminated.
 5. Within (5) seconds, press the remote sync button again. This will close synchronization with the remote control. The pilot will automatically light.
- Turn the main burner ON by setting the ON/OFF switch in ON position. The main burner will only operate on HI.
 - Turn the main burner OFF by setting the ON/OFF switch in the OFF position. The pilot will remain lit even if burner is turned off, provided CPI mode is turned on.

9.4 Automatic Safety Turn-off

- This system will execute an automatic turn OFF command for approximately (5) seconds within (24) hours of a continued pilot flame ignition to perform a safety check. This allows the system to verify correct safety functions.

- After the turn OFF sequence is completed, the IFC module will re-execute the latest command.

9.5 Control System 7 Day Timeout

- If you have your Proflame 2 system set to CPI (continuous pilot ignition) with 7 consecutive days without ignition of the main burner, the pilot will turn off. This is a standard safety feature of the SIT Proflame 2 system.
- Once you turn CPI on, the 7 day timer will start. If at any time during the following 7 days your main burner ignites, it will reset the timer back to 7 days.
- See section 9.8.3 PILOT IGNITION SELECTION for more information.

How to check if your system is set to CPI:

The LCD screen will display the snowflake icon.

To select the preferred pilot ignition feature,

1. With the system in the OFF position, press the mode key to index the CPI mode icon.
2. Press the up arrow key to activate CPI.
3. Press the down arrow key to return to IPI. A single 'beep' will confirm reception of the command.

To Turn ON the appliance

1. With the system in the OFF position, press the remote control ON/OFF key to turn ON the appliance. A single 'beep' will emit from the IFC module to confirm reception of the command.

The LCD screen will display all active icons, and the IFC module will start the ignition sequence.

9.6 IFC Module Ignition Sequence

The IFC module will try (2) times for ignition, each lasting approximately (60) seconds, with approximately (35) seconds between each attempt.

1. With the system in OFF position, press the remote control ON/OFF key. Approximately (4) seconds after this key is depressed, the IFC module will generate sparks to the pilot hood.
2. First ignition attempt will generate sparks for (60) seconds.
3. If there is no flame ignition (rectification) within the (60) second time frame, the IFC module will stop generating sparks for approximately (35) seconds.
4. After (35) seconds of wait time, the IFC module will generate sparks for another (60) seconds for the second ignition attempt.
5. If there is no positive rectification after (60) seconds, the IFC module will go into a lock out. The red LED will blink (3) times, in intervals, until the system is reset.

9.6.1 Reset IFC Module after Lockout

ON/OFF Rocker Switch

1. Set the ON/OFF rocker switch to the OFF position.
2. After approximately (2) seconds, move the switch to the ON position. The ignition sequence will start again.

Remote Control ON/OFF Key

1. Press the remote control ON/OFF key to turn the system OFF.
2. After approximately (2) seconds, press the ON/OFF key again. The ignition sequence will start again.

Cycling Flame

1. Press the remote control down arrow key during flame adjustment mode to reduce the flame to OFF (indicated by OFF displayed on the LCD screen).
2. After approximately (2) seconds, press the up arrow key. The ignition sequence will start again.

9.7 Additional Diagnostic Information

Low Battery Condition (<4V) Remote Control:

- Battery Icon will appear on LCD remote control display.
- Replace batteries.

Pilot Flame Error Condition:

- Red LED Indicator will blink (2) times in intervals. Contact your dealer if this occurs.

System Lock Out Condition:

- Red LED Indicator will blink (3) times in intervals.
- Verify gas is turned on.
- Verify sensor is not shorted.
- Follow section 9.2, INITIALIZE THE CONTROL SYSTEM .

9.8 Remote Control Operation

PROFLAME 2 TRANSMITTER

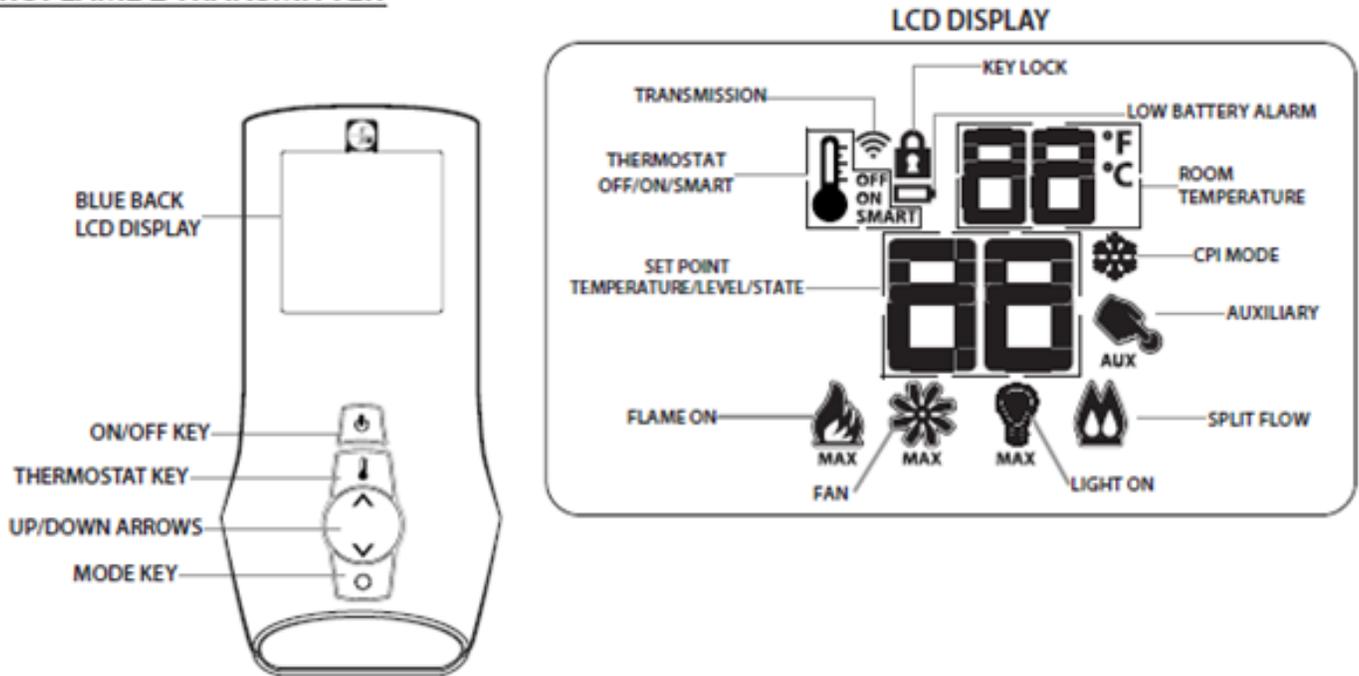


Figure 9.1 - Remote Control Overview

9.8.1 Temperature Display

1. With the system in the OFF position, simultaneously press the thermostat key and the mode key to change degrees from °F to °C
2. Visually check the LCD screen to verify either °F or °C is displayed on the right side of the room temperature display.

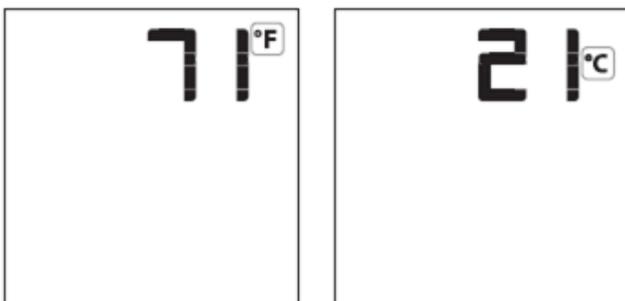


Figure 9.2 - Temperature Display

9.8.2 Key Lock

This function locks the keys to avoid unsupervised operation. Once activated, a lock icon will appear on the LCD screen.

1. Simultaneously press the mode key and the up arrow key to activate or deactivate this function.



Figure 9.3 - Key Lock

9.8.3 Pilot Ignition Selection (IPI/CPI)

This system has the option of a continuous (standing) pilot. This feature allows the system to change from a spark-to-pilot system to the standing pilot option. The standing pilot will keep the firebox warm and establish a draft in the vent, which allows the main burner to ignite with less air-flow disruption.

When the system is OFF, the LCD screen will display the snowflake icon during the setup of either IPI or CPI mode. To select the preferred pilot ignition feature,

1. With the system in the OFF position, press the mode key to index the CPI mode icon.
2. Press the up arrow key to activate CPI.
3. Press the down arrow key to return to IPI. A single 'beep' will confirm reception of the command.

When the system is ON,

IPI mode: LCD screen will not display the snowflake icon

CPI mode: LCD screen will display the snowflake icon

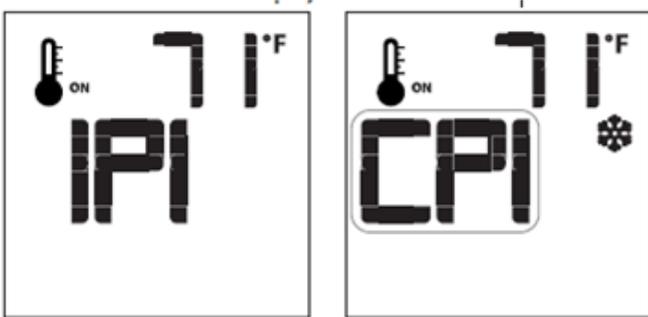


Figure 9.4 - Pilot Selection

9.8.4 Turn ON/OFF the Appliance

Turn ON the appliance

1. With the system in the OFF position, press the remote control ON/OFF key to turn ON the appliance. A single 'beep' will emit from the IFC module to confirm reception of the command.

The LCD screen will display all active icons, and the IFC module will start the ignition sequence.

Turn OFF the appliance

1. With the system in the ON position, press the remote control ON/OFF key to turn OFF the appliance. A single 'beep' will emit from the IFC module to confirm reception of the command.

The LCD screen will only display the room temperature and its icon, and the IFC module will turn off the main burner.

9.8.5 Remote Control Flame Adjustment

This control system has (6) flame levels. If the smart thermostat operation is activated, then the manual adjustment of the flame height will be disabled.

1. Verify the system is in the ON position and the flame level is set at maximum.
2. Press the down arrow key once to reduce flame height by one level until the flame is turned off.
3. Press the up arrow key once to increase flame height by one step. If the up arrow key is pressed while the system is on, but the flame is off, the flame will ignite on HI.
4. A single 'beep' will confirm reception of the command.

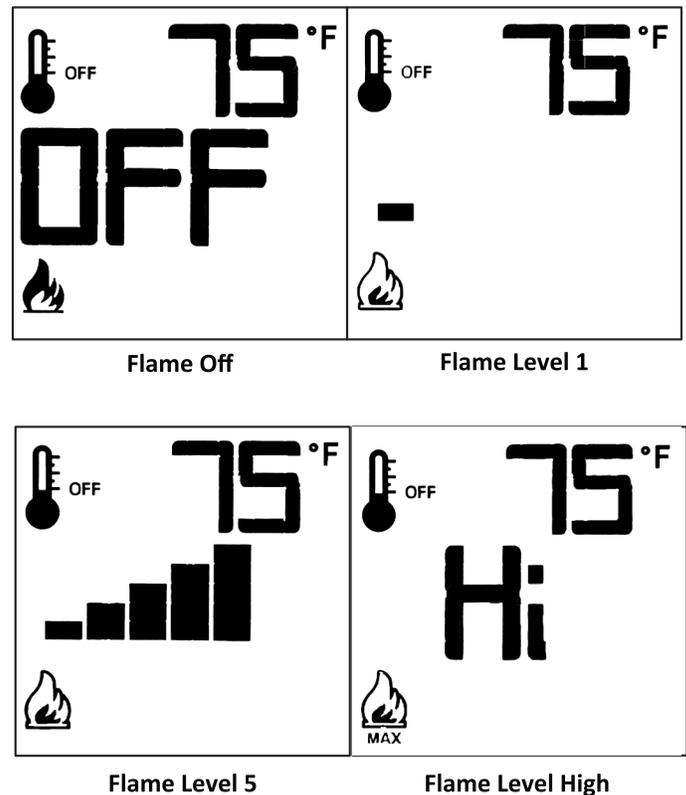


Figure 9.5 - Flame Adjustment

9.8.6 Deactivate Flame Modulation

1. Verify all (3) AAA batteries are installed in the remote control battery bay.
2. Remove (1) AAA battery.
3. Press and hold the on/off key and the mode key at the same time.
4. Reinsert (1) AAA battery.
5. While still holding the on/off key, let go of ONLY the mode key.
6. Index over to the flame graphic on the LCD screen to edit. Use the up or down arrow key to choose 'SEL' or 'CLR'. "SEL" means flame modulation is turned on and "CLR" means flame modulation is turned off.

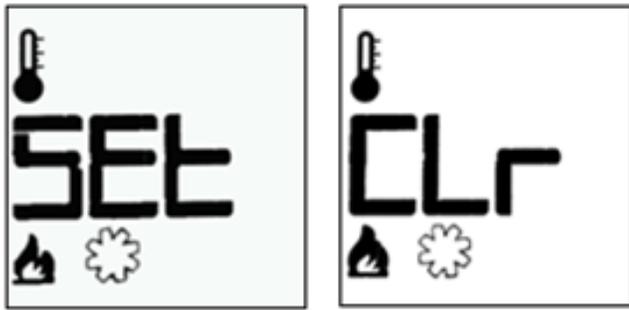


Figure 9.6 - Deactivate Flame Modulation

9.8.7 Remote Control Thermostat Operation Room Thermostat

The remote control can operate as a room thermostat. The thermostat can be set to a desired temperature to control a room's comfort level. To activate this function,

1. Press the thermostat key. The LCD screen will display a temperature bulb graphic, the room temperature and set temperature.
2. To adjust the set temperature, press the up or down arrow keys until the desired temperature is displayed on the LCD screen.

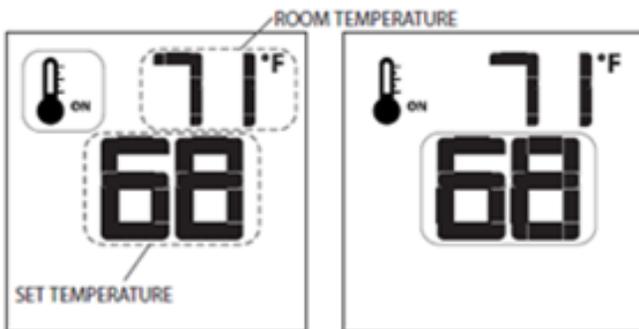


Figure 9.7 - Thermostat Operation

Smart Thermostat

The smart thermostat function will adjust the flame height based on the set temperature and the actual room temperature. The smart thermostat function automatically adjusts the flame down when the room temperature reaches the set point. To activate this function,

1. Press the thermostat key until the 'SMART' appears on LCD screen on the right side of the temperature bulb graphic.
2. To adjust the set temperature, press the up or down arrow keys until the desired temperature is displayed on the LCD screen.

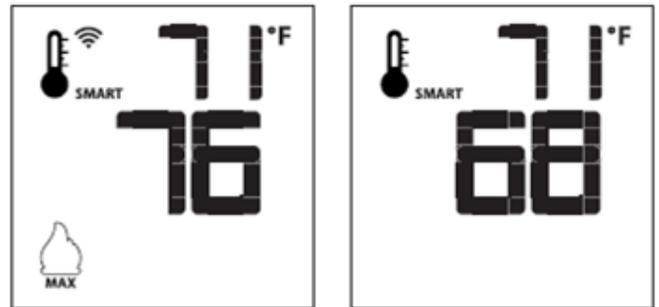


Figure 9.8 - Smart Thermostat Operation

9.8.8 Deactivate Remote Control Thermostat Operation

The thermostat operation function can be deactivated. The remote control will still operate the main burner on and off, and function flame, fan, and light modulation. To deactivate this function,

1. Verify all (3) AAA batteries are installed in the remote control. Remove (1) AAA battery.
 2. While reinserting the battery, push and hold the thermostat key. You will see "CLR" across the screen. This means the thermostat function is turned off. The temperature bulb graphic will not be displayed on the LCD screen.
- To reactivate remote thermostat operation, follow the same key sequence procedure above. The screen will then say "SEL" which means the thermostat function is turned on. The temperature bulb graphic will reappear on the LCD screen.

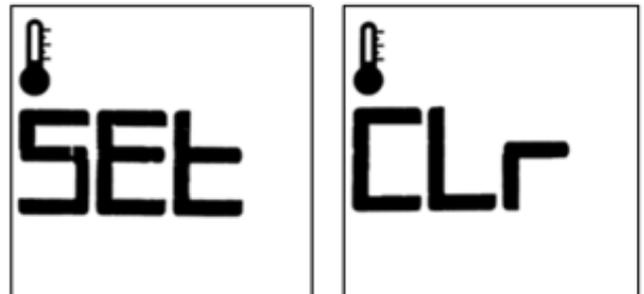


Figure 9.9 - Deactivate Thermostat Operation

9.8.9 Top Accent Light Kit Operation

The top light intensity can be adjusted through (6) levels.

1. Press the mode key to index to the light icon.
2. Press the up or down arrow keys to adjust the intensity level.
3. A single 'beep' will confirm reception of the command.

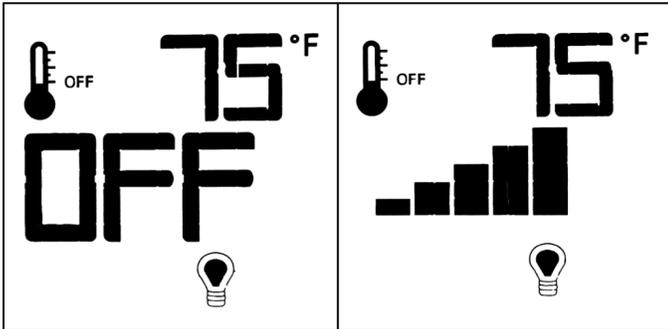


Figure 9.10 - Top Light Kit

9.8.11 Remote Control Low Battery Detection

Remote control battery lifespan depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etc.

- When the remote control batteries are low, a battery icon will appear on the LCD display before all battery power is lost.
- When the batteries are replaced, this icon will disappear.

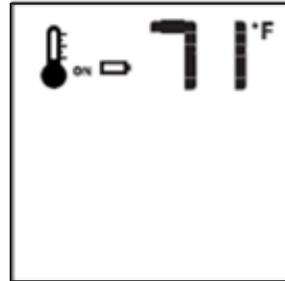


Figure 9.12 - Low Battery

9.8.10 Deactivation Top Light Kit

1. Verify all (3) AAA batteries are installed in the remote control battery bay.
2. Remove (1) AAA battery.
3. Press and hold the on/off key and the mode key at the same time.
4. Reinsert (1) AAA battery.
5. While still holding the on/off key, let go of ONLY the mode key.
6. Index over to the bulb graphic on the LCD screen to edit. Use the up or down arrow key to choose 'SEL' or 'CLR'.

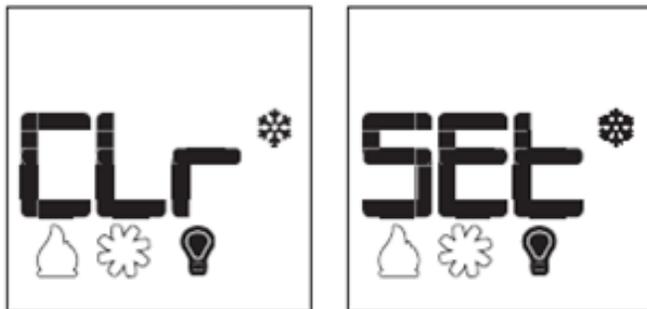


Figure 9.11 - Light Kit Deactivation

10.0 Pressure Testing and Burner Adjustments

10.1 Pressure Testing

NOTE: The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of 1/2 psi (3.5 kPa).

IMPORTANT: Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked OUT measures outgoing pressure. The pressure tap marked IN measures incoming pressure.

10.1.1 Inlet Pressure Test

NOTE: Make sure to apply these incoming pressure test with all other gas appliances on, or at full capacity, in the house for proper pressure reading.

IMPORTANT: If the inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure.

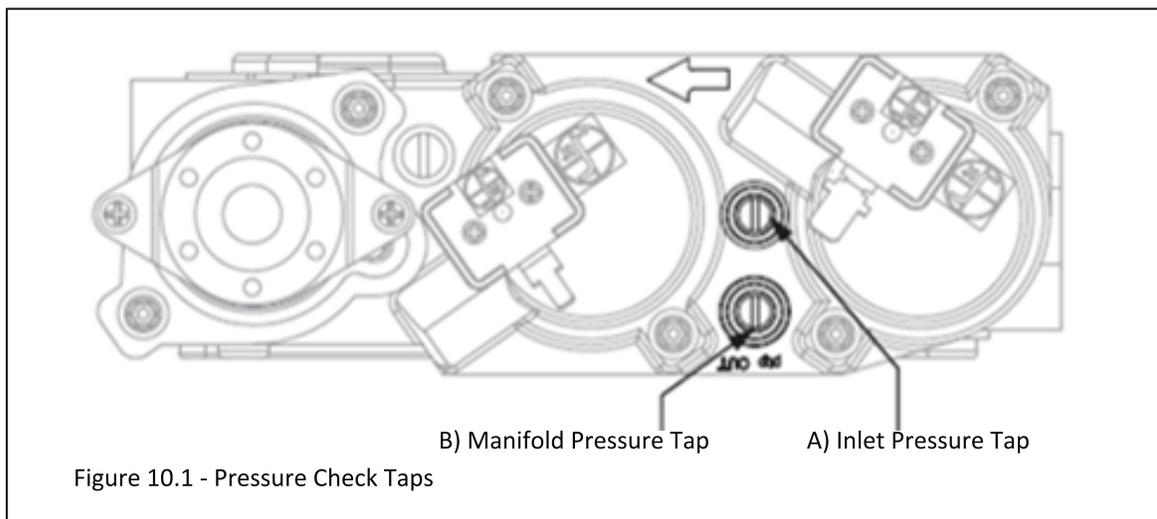
1. Loosen the inlet (IN) pressure tap by turning screw counter-clockwise. See (A) in Figure 10.1.
2. Attach manometer using a 1/4" (6mm) I.D. hose.
3. Light pilot and burner. Check pressure to ensure it is between the minimum and maximum recommended pressure settings (Table 10.1).
4. Turn off burner and pilot.
5. Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
6. Relight pilot and burner. Then reattach manometer to the inlet pressure tap (A) to verify the tap is completely sealed. Manometer should read no pressure.

10.1.2 Manifold Pressure Test

1. Light pilot. Loosen manifold (OUT) pressure tap by turning screw counter-clockwise. See (B) in Figure 10.1.
2. Attach manometer to pressure tap using a 1/4" (6mm) I.D. hose.
3. Light burner. Set burner to Low and High settings. Check manometer readings. Refer to Table 10.2.
4. Turn burner and pilot off.
5. Disconnect manometer hose and tighten the manifold (OUT) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
6. Attach the manometer to the manifold pressure tap (B) to verify it is completely sealed. The manometer should read no pressure when pilot and burner are on.

Table 10.1 - Inlet Pressures		
Fuel	Natural Gas	Propane
Gas Supply	Min - Max	Min - Max
Inlet Pressure Tap (A)	5" - 10.0" WC (1.25 - 2.49 kPa) 7" WC (1.74 kPa) Recommended	12" - 13" WC (2.99 - 3.24 kPa)

Table 10.2 - Manifold Pressures		
Fuel	Natural Gas	Propane
Gas Supply	Low - High	Low - High
Manifold Pressure Tap (B)	1.1" - 3.8" WC (0.27 - 0.95 kPa)	2.9" - 11" WC (0.72 - 2.74 kPa)



10.2 Flame Appearance Adjustment

WARNING: To avoid property damage or personal injury, allow the fireplace ample time to cool before making any adjustments.

Burner flame appearance and characteristics are affected by altitude, fuel quality, venting configuration, and other factors. After installation, this appliance may need additional adjustments to achieve optimum flame appearance and visual aesthetics.

10.2.1 Burner Venturi

WARNING: VENTURI ADJUSTMENT MUST BE DONE BY A QUALIFIED SERVICE TECHNICIAN.

NOTE: Burner venturi air shutter settings have been factory set. Refer to Table 10.3.

When this appliance is first lit, the burner flames will appear blue. During the first 15 minutes of operation, flame appearance will gradually turn to the desired yellow appearance. If the flames remain blue or become dark orange with evidence of sooting (black tips), adjustment of the air shutter opening may be necessary.

Regardless of venturi orientation, closing the air shutter will achieve a desired yellow flame, but may produce soot on the glass. Opening the air shutter will cause a short, blue flame that may lift off the burner.

10.2.2 Venturi Opening Adjustments

IMPORTANT: Slight adjustments to the venturi opening will create significant changes. Adjust at slight increments until desired look is achieved. Refer to Table 10.4.

1. Remove the exterior safety glass, perimeter media tray, firebox glass, and crushed glass.
2. Remove the firebox media tray and burner tube. Refer to Section 7.4 for details on removing the burner.
3. Loosen the screw on burner venturi and adjust as necessary. Re-tighten screw.
4. Reinstall all components previously removed.

Fuel	Natural Gas	Propane
Venturi Opening	1/8" (3mm)	1/2" (13mm)

Flame Characteristics	Cause	Solution
Dark, orange flame with black tips	Venturi closed too far	Open venturi slightly
Short, blue flames	Venturi open too far	Close setting slightly
Lighting (ghosting) flames	Gas pressure too high and/or venturi closed too far	Check manometer settings and/or open venturi setting slightly

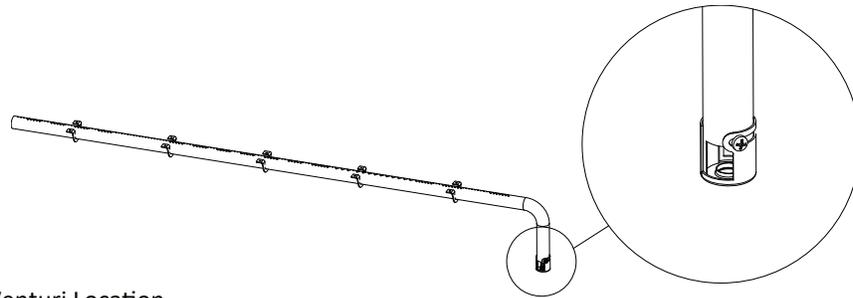
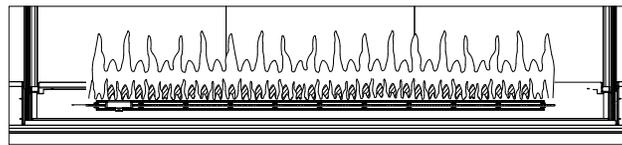
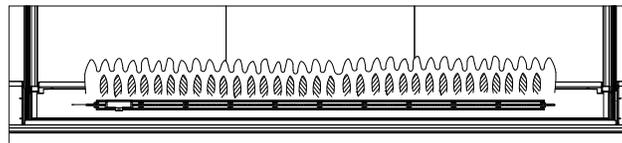


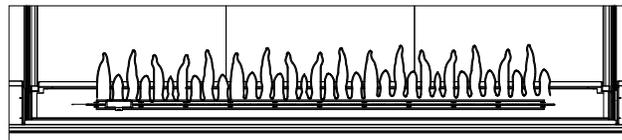
Figure 10.2 - Burner Venturi Location



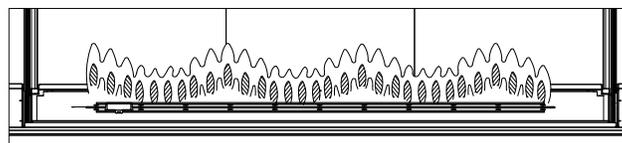
Lazy, yellow flames-no adjustment necessary
(Ideal Flame Appearance)



Short, blue flames
(Venturi open too far. Close venturi slightly)



Dark, orange flames with black tips
(Venturi closed too far. Open venturi slightly)



Lifting (ghosting) flames
(Venturi closed too far. Open venturi slightly)
OR
(Gas pressure too high-check with manometer)

Figure 10.3 - Flame Appearance

10.2.3 Vent Restriction (after installation)

WARNING: To avoid property damage or personal injury, allow the fireplace ample time to cool before making any adjustments.

WARNING: Improper vent installation may cause the burner flames to lift or “ghost.” Perform a visual check on flame appearance after restriction adjustment to ensure proper performance.

Vertical terminations may display an active, compact flame. If this appearance is not desirable, a restrictor plate may need to be installed or modified after vent termination installation. Access to the vent exit for restriction can be reached through the fireplace ceiling. See Figure 10.4

Refer to Table 10.4 and Figure 10.3 for flame appearance adjustments. Allow the fireplace to burn for 15 minutes before making any adjustments.

Restrictor Plate Installation

1. Remove the glass safety barrier and firebox glass.
2. Bend the tabs on the restrictor (included in fireplace components packet) to approximately 80° angles. This will create tension when the restrictor is inserted into the exhaust pipe.
3. Insert restrictor into the 5” (127mm) exhaust pipe with the tabs pointing towards you.
4. Reinstall all components previously removed.

Restrictor Plate Modification

1. Remove the glass safety barrier and firebox glass.
2. Remove the restrictor from the 5” (127mm) exhaust pipe by pulling the restrictor down and out.
3. Make necessary modifications to achieve desired flame appearance. See Table 10.5.
4. Insert restrictor into the 5” (127mm) exhaust pipe with the tabs pointing towards you, as shown in Figure 10.4.
5. Reinstall all components previously removed.

Table 10.5 - Restrictor Plate Adjustment Guidelines		
Flame Appearance	Draft Problem	Solution
Short, Flickering	Excessive draft and/or not enough restriction	Add restrictor plate
Lifting, ghosting*	Insufficient draft	Remove inner ring(s) on restrictor plate or remove restrictor plate

*If flames continue to lift or ghost after opening the restrictor plate and verifying correct vent installation, shut off the gas supply and call a qualified service technician.

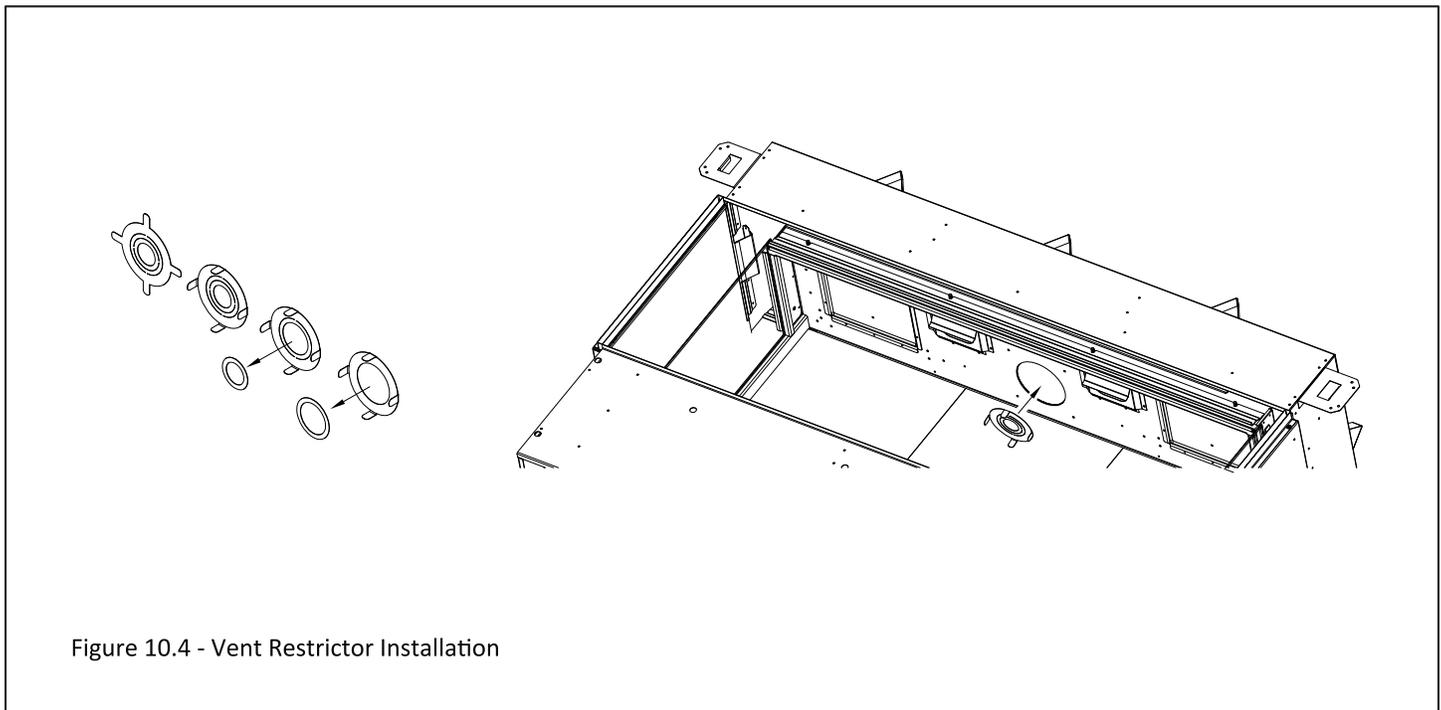


Figure 10.4 - Vent Restrictor Installation

11.0 Maintenance

ATTENTION: Installation and repair should only be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning might be required due to excessive lint from carpeting, bedding material, pets, etc. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. Use a vacuum to clean all components.

WARNING: The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

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

11.1 Firebox

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Vacuum and clean any debris in the firebox that is not supposed to be there.
- Inspect and operate the pressure relief plates on the top of the firebox. There is one plate on each side of the firebox. The plates should be free from obstruction.

11.2 Fans

Fan Maintenance

Performed by: Qualified Service Person

Frequency: Annually

Fan Kit Replacement

Performed by: Qualified Service Person

Frequency: Replaced as needed

Action:

1. Disconnect the electrical power of the fireplace. Locate the main shut-off valve upstream of the appliance connector and close the valve.
2. Remove the exterior safety glass (Section 7.1), perimeter media tray (Section 7.2), firebox glass (Section 7.3), and crushed glass.
3. Remove the (22) sheet metal screws in the center of the media tray that secure the metal tray to the burner tube. Remove the (1) sheet metal screw that secures the metal tray to the firebox perimeter. Remove the firebox media tray and burner tube.
4. Remove the (24) sheet metal screws securing the control board to the bottom of the firebox.
5. Remove the (2) sheet metal screws that secure the on/off switch bracket to the mounting plate that is located under the front perimeter media tray. The on/off switch bracket will go with the control board when you remove it.
6. Pull out the control board to reveal the top light kit connections and gas line flex tube from the fireplace valve to the supply gas line. Disconnect the top light kit from the wiring leads from the IFC control module. Disconnect the flexible gas line from the valve from the gas supply line that comes into the fireplace. Remove control board.
7. At this point you can gain access to the three fans in the front and one fan in the rear that provide airflow to cool the safety glass and fireplace enclosure. Disconnect the fan kit wiring. See Figure 11.1.
8. Remove the fan(s) by unscrewing the (2) 7/16" nuts that secure the fan bracket to the PEM studs. Remove the fan from inside the fireplace through the opening of the control board that was previously removed.
9. If you are servicing the fans - Service the fan(s) with a vacuum. The bearings are sealed and require no oiling. If you are replacing the fans then install the new fan to the existing bracket.
10. Reinstall all previously removed components in reverse order.

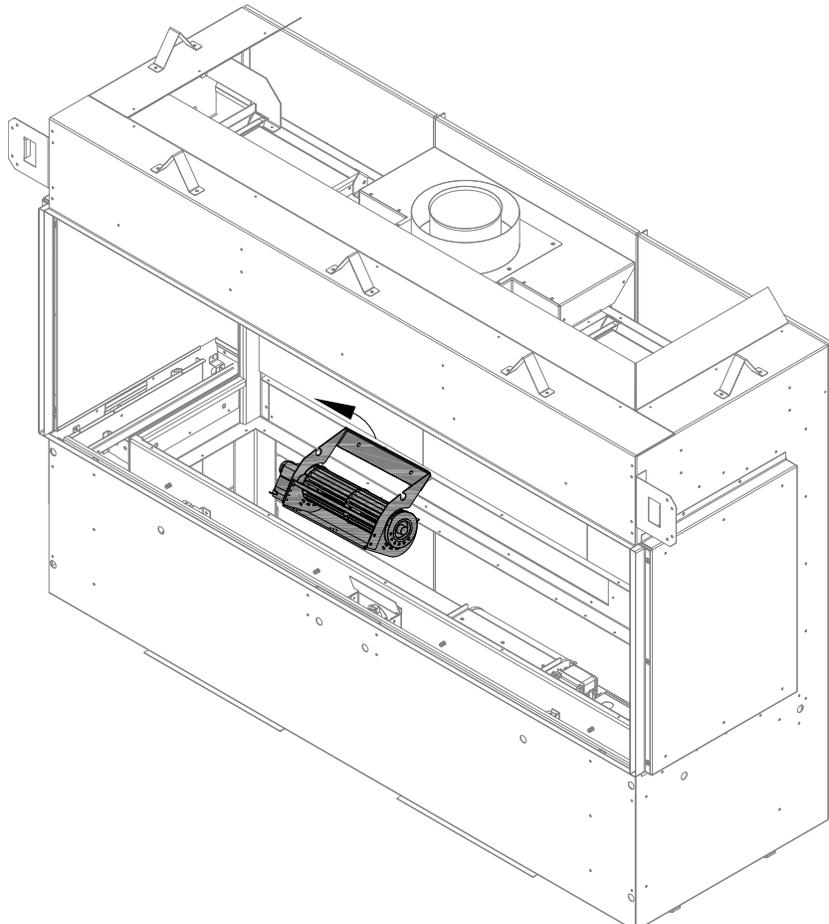
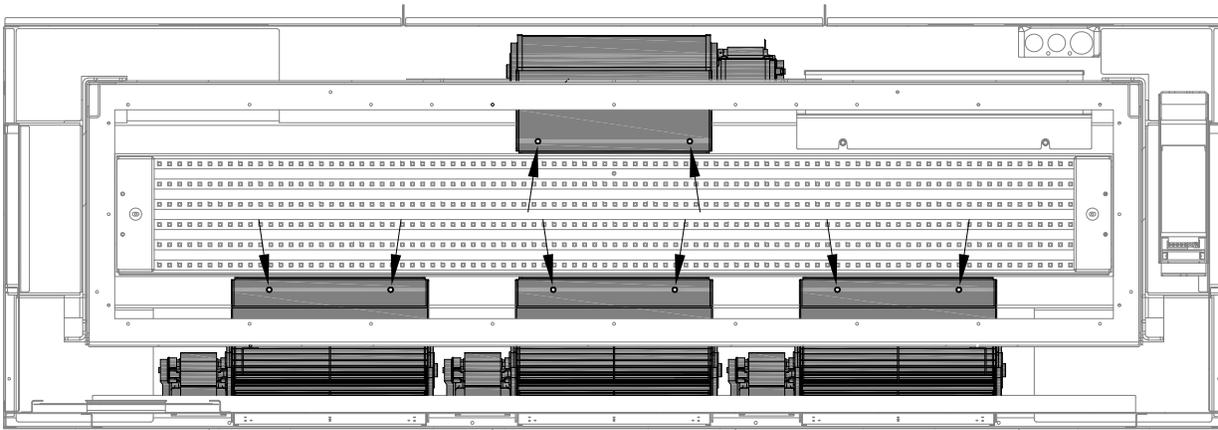


Figure 11.1 - Fan Removal

11.3 Vent System

NOTE: If the vent-air intake system is disassembled for any reason, reinstall per instructions provided with installation. If installing Kozy Power Vent (#KPV), please reference the manual included with the kit. For natural draft vent installation, refer to section 6.0, Venting System Requirements and Information.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Examination of the vent system is required.
- Inspect the condition of vent and vent terminal for sooting or obstruction and correct if present.
- The flow of combustion and ventilation air must not be obstructed.

11.4 Glass Assembly (Safety Glass or Firebox Glass)

CAUTION: Do not operate appliance with the glass assembly removed, cracked, or broken. Use protective gloves to handle any broken or damaged glass assembly components.

WARNING: Do not use substitute materials.

WARNING: Avoid striking or slamming glass assembly. Avoid abrasive cleaner. DO NOT clean glass while it is hot.

IMPORTANT: Any safety glass, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Prepare a work area large enough to accommodate the glass assembly on a flat, stable surface.
1. Remove the safety glass, perimeter media trays, and firebox glass.
 2. Clean glass window with a suitable fireplace glass cleaner using a soft cloth. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
 3. Inspect the firebox silicone strips that seals the front and side firebox glass. Silicone should not be cracked, torn, and create a good seal. Replace if necessary.
 4. Inspect the glass for cracks, scratches, and nicks. Replace the firebox glass (Part# G6020-FGF or G6020-FGS) or safety glass (Part# G6020-SGF or G6020-SGS) as necessary. Only Hussong Mfg. Co., Inc. will supply the replacement of glass.
 5. Reinstall firebox glass, perimeter media trays, and safety glass. Do not operate fireplace without these installed.

11.5 Burner and Pilot System

The burner assembly may be removed for easier access to the control compartment. See **Section 7.8 Control Board Removal and Installation** for instructions. See **Section 10.2 Flame Appearance Adjustment** for information on adjusting burner appearance.

Verify gas supply is turned on and filled. Consult with plumber or gas supplier as necessary.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Vacuum all components of the burner system.
- Check all accessible gas-carrying tubes, connections, pipes and other components for leaks.
- Inspect the operation of the flame safety system Pilot or Flame rectification device. Visually check pilot light when in operation.
- Inspect and ensure the lighting of the main burner occurs within (4) seconds of the main gas valve opening. Check for faulty or incorrect wiring and correct or replace as necessary. Inspect primary air openings (burner ports) for blockage, especially near the pilot. Burner ports in burner tube are shown in Figure 11.2.
- Visually check burner flame pattern when in operation. Flames should be steady, not lifting or floating.
- Test and measure the flame failure response time of the flame safety system. It must de-energize the safety shutoff in no more than 30 seconds.

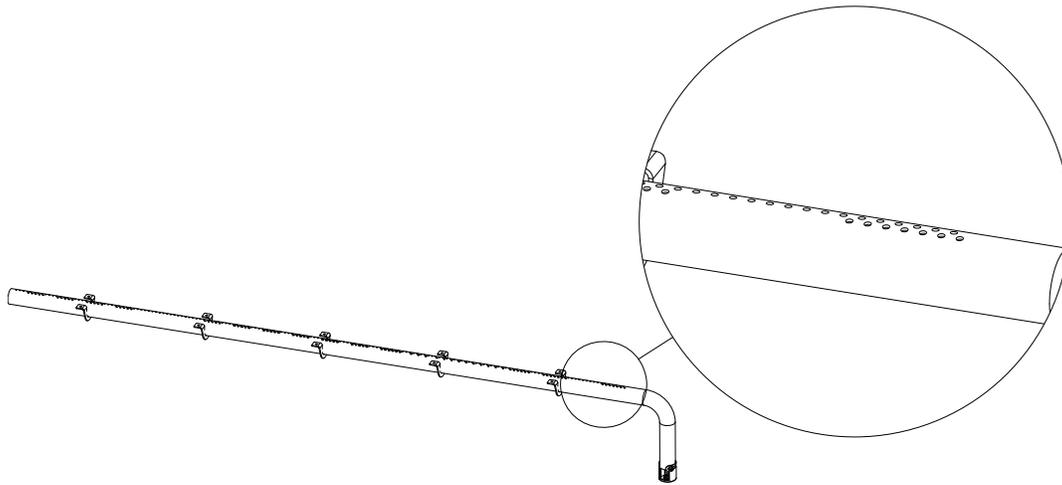


Figure 11.2 - Burner Ports

11.6 Top Halogen Light Kit

Note: The top light kit will have the halogen bulbs installed from the factory. Follow the instruction below for bulb replacement.

Performed by: Qualified Service Person

Frequency: Replaced as needed.

Action:

1. Disconnect electrical power.
2. Remove the fireplace safety glass, perimeter media tray, and firebox glass.
3. Remove the control board to gain access to the wiring at the IFC control module. You can disconnect the top light kit leads from the control module wiring.
4. Next remove the top light kit. Remove the light kit cover, glass, and glass gasket via (4) screws.
5. Install (1) halogen bulb into each lamp base. There are (2) locations in the top of the firebox for halogen bulbs for the top light kit.
6. Reinstall all components previously removed. Ensure the glass gasketing is correctly installed.

11.7 LED Light Kit

Note: The bottom LED light kit will be preinstalled from the factory. Follow the instruction below for replacement.

The LED light kit is comprised of the bottom LED assembly, perimeter LED assembly, LED controller, LED power supply, and LED remote control. See the "LED Supplemental Manual" for more information.

Performed by: Qualified Service Person

Frequency: Replaced as needed.

Action:

1. Disconnect electrical power.
2. Remove the glass safety barrier, perimeter media tray. If you need to service and replace the perimeter LED assembly you can disconnect this LED strip on the right hand side.
3. Remove the firebox glass, crushed media, burner tube, and control board.
4. You now have access to the bottom LED tray. Disconnect
5. Reinstall in reverse order. Reinstall all previously removed components

12.0 Troubleshooting

ATTENTION: Troubleshooting must be performed by a qualified technician.

Before proceeding with the steps in the following troubleshooting guide,

- Verify proper 120VAC power supply to the control module.
- Verify the remote control batteries are fresh and installed with correct polarity.
- Verify all connections between the wire harnesses and the system components are proper and positive.
- Verify inlet pressure meets the recommended inlet pressure. If necessary, adjust line pressure regulator.
- Verify the communication link is established between the remote control and the IFC module.
- CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.
- Verify proper operation after servicing.

Issue	Cause	Solution
Pilot will not light	Electrical power interrupted or disconnected	Restore electrical power to appliance.
	Wiring disconnection	Use wiring schematic in this manual to determine that all wiring connections are secure and correct (Section 8.0).
	Gas supply turned off	Check remote shut-off valves from the appliance. Usually there is a valve near the main gas line. There may be more than (1) valve between the appliance and main gas line.
Pilot will not stay lit	No propane in tank	Check propane tank. Refill if necessary.
	Low gas pressure	Consult a plumber or gas supplier Can be caused by situation such as a bent line, too narrow diameter or pipe, or a low line pressure
	Pilot adjustment screw not sealed	Seal pilot adjustment screw. Do not over-tighten.
	Pilot flame not making contact with the flame rectification sensor on the pilot assembly	Verify the pilot envelopes the top of the flame sensor and extends far enough onto the burner for ignition
Pilot flame always on, or will not extinguish	Control system set to CPI mode.	Set control system to IPI mode.
Flame burns blue and lifts off burner	Improper venturi setting	The venturi air shutter may need to be closed slightly to allow less air into the gas mix. Refer to section 10.2.1, Burner Venturi.
	Incorrect vent cap installation	Adjust if necessary.
	Blockage or leakage of the vent system	Check the vent pipes for leaks and the vent cap for debris. Repair the vent pipes or remove debris from vent cap, if necessary.

Issue	Cause	Solution
Burner flame will not light	ON/OFF rocker switch in OFF position	Switch rocker switch to ON position.
	Gas supply turned off	Check for multiple shut-offs in the supply line. Verify gas supply is turned on.
	Low gas supply	Consult with plumber or gas supplier. Check propane tank. Refill if necessary.
	Wiring disconnection or improper wiring	Check for faulty or incorrect wiring. Refer to Section 8.0 Electrical Information.
	Plugged burner orifice	Remove blockage.
	Pilot flame	Verify the pilot flame is properly directed to ignite burner. See pilot flame troubleshooting in sections above.
	Remote control not working	Replace Batteries.
	No call for heat / Burner will not ignite	Verify remote control is powered ON and thermostat operation is turned OFF.
Check to see if the Appliance Safety System has been activated. Look for the LED indicator. See Section 2.4 for information about the Safety System.		
Pilot and burner extinguish while in operation	No propane in tank	Check propane tank, Refill if necessary.
	Incorrect firebox glass assembly installation	Refer to Section 7.3 Firebox Glass.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
	Improper pitch on horizontal venting	1/4" (6mm) rise for ever 12" (305mm) of travel is required on horizontal venting.
	Exhaust vent pipe leaking exhaust gases back into firebox	Check for leaks and repair if necessary.
	Excessive draft	A restrictor may need to be installed or modified. Refer to section 10.2.3 Vent Restriction (after installation).
	No call for heat	Check to see if the Appliance Safety System has been activated. Look for the LED indicator. See Section 2.4 for information about the Safety System.

Issue	Cause	Solution
Soot appears on glass	Improper log placement	Refer to the log set instructions.
	Improper venturi setting	Venturi air shutter may need to be opened slightly to allow more air into the gas mix. Refer to section 10.2.1, Burner Venturi.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
No reaction to command on SIT fireplace remote	Remote control batteries low	Replace the batteries.
	No communication between remote control and control module	Reprogram remote control to IFC module
		Check that the remote control antenna extension is in the correct location and completely seated into the IFC connection
A maximum number of failed ignitions or flame restorations has been reached.	Reset IFC module	
LED lights will not turn on**	LED remote control batteries low	Replace batteries
	No communication between the LED remote control to the LED Controller.	Ensure power is present to fireplace and LED Controller. Reprogram the remote to the LED Controller.

** See the LED Supplemental Manual for additional information

13.0 Replacement Parts List



HUSSONG MANUFACTURING CO., INC.
P.O. Box 557, 204 Industrial Park Road
Lakefield, Minnesota USA 56150-0577

Replacement parts are available through your local dealer. Contact your local dealer for availability and pricing. The following warning is for replacement parts for this appliance.

⚠ WARNING: This product can expose you to chemicals including Lead, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

Control Board and Parts				
S.I.T. Complete Board Assembly - Natural Gas	G6020-150		IPI Pilot Assembly - Natural Gas	900-064A
S.I.T. Complete Board Assembly - Propane	G6020-151		IPI Pilot Assembly - Propane	900-064-1
S.I.T. IPI Gas Valve - Natural Gas	700-567		Pilot Orifice - Natural Gas - #.023NG	700-123
S.I.T. IPI Gas Valve - Propane	700-567-1		Pilot Orifice - Propane - #.014LP	700-114
Main Power Wire Harness	700-350A		PSE Conversion Kit - Natural Gas	NCK-G6020-P50
Proflame 2 IFC Module	700-652		PSE Conversion Kit - Propane	LCK-G6020-P50
SIT Wire Harness Assembly	700-653		Natural Gas - Valve Stepper Motor	700-504
Fan / Light Kit Wire Harness	700-657		Propane - Valve Stepper Motor	700-504-1
ON/OFF Wire Harness	700-656		Burner Orifice - #30 - Natural Gas	700-230
Ember Bed AUX Harness	800-AUX		Burner Orifice - #5/64" - Propane	700-2564
36" Black 3/8" Gas Line (into valve)	700-383B		Burner Tube	G6020-350
32" Flare x Brazed Fitting	700-232F			
S.I.T. Transmitter (Remote Control)	700-408			
Remote Learn Button	700-422			
Remote Antenna Extension	700-ANT			

Glass and Glass Parts	
Firebox Glass - Front	G6020-FGF
Firebox Glass - Side	G6020-FGS
Safety Glass - Front	G6020-SGF
Firebox Glass Gasket (attaches to firebox) - 25'	500-426
Front Firebox Glass Brackets	G6020-FFB
Side Firebox Glass Brackets	G6020-SSB
Firebox Silicone Strips - Clear (seals side and front firebox glass panes)	700-20C
Firebox Silicone Strips - Black (seals side and front firebox glass panes)	700-20B

Fan System	
Fan (fireplace uses 4 of these)	600-093
Fan Wire Harness	600-093WH
Thermal Switch - Fan System	700-TSF

Safety System	
Fan Safety Kit (Includes module and wire harnesses)	GEN-FSK
Safety Control Module	700-SCM
Thermal Sensor Wire	700-TSW
Fan Current Sensing Coil	700-FCC
Safety Power Harness	700-SPH
Safety On/Off Toggle Wire Harness	700-STH
Safety LED Wire	700-SLW

Top Light Kit	
20W Halogen Bulb	600-676
Light Kit - Top	600-TLK
Bottom LED Light Kit	
Firebox 46" LED Assembly	LED46
Perimeter 86" LED Assembly	LED86
LED Controller (V5-LWT)	LED-DRV
Power Supply (shared with safety system)	LED-POW
3-Wire Adapter (LED Controller)	LED-WHA
LED Remote	LED-RT4

Log Set Replacement Parts		
	Weathered Log Set	Birch Log Set
8 Piece Log Set	G6020-500	G6020-B501
Log #1	G6020-1	G6020-B1
Log #2	G6020-2	G6020-B2
Log #3	G6020-3	G6020-B3
Log #4	G6020-4	G6020-B4
Log #5	G6020-5	G6020-B5
Log #6	G6020-6	G6020-B6
Log #7	G6020-7	G6020-B7
Log #8	G6020-8	G6020-B8

Surround	
1-Piece Rectangle Surround	G6020-RS

Corner Conversion Kit*	
Glass Corner Conversion Kit	G6020-CCK
*Order one kit for left or right corner installation and order two kits for 3-sided "Bay" Installation	

Additional Components	
3/4" Ice Crushed Glass - 25 lbs.	425-ICE
5" (127mm) Restrictor Plate	900-086
Manual 3/8" Gas Shut-off Valve	700-380

Limited Lifetime Warranty

Warranty Coverage

Hussong Manufacturing Company, Inc. (Hussong Mfg.) warrants this Kozy Heat gas appliance from the date of purchase to the original purchaser, that it is free of defects in materials and workmanship at the time of manufacture. Registering your fireplace warranty does not require any documents to be sent in to Hussong Mfg. Please retain your proof of purchase reflecting the date of purchase along with the serial number and model of your fireplace for any future warranty claims.

If a defect is noted within the warranty period, the customer should contact their authorized dealer for service within 30 days.

30 Days: Parts & Labor*

- Paint
- Light bulbs
- Gasket material
- Glass media and media dam

Year 1: Parts & Labor*

All parts and material except the items listed in the 30 day warranty and any exclusions or limitations that may apply

- Ceramic Firebox Viewing Glass (thermal shock only)
- Tempered Safety Glass
- LED System
- Safety System

****Hussong Mfg. will issue labor reimbursement to an authorized dealer only. Hussong Mfg. will not be liable for charges occurred as a result of any service performed by a non-authorized service provider, without pre-authorization.***

Years 2 through Lifetime: Parts Only

- Firebox
- Heat Exchanger
- Logs
- Burner tube or pan
- Outer shell
- Heat shield(s)

EXCLUSIONS AND LIMITATIONS

1. **This appliance must be installed by a licensed, authorized service technician or contractor. It must be installed, operated and maintained at all times in accordance with the instructions in the owner's manual or the warranty is void.**
2. **This warranty is nontransferable and is made to the original purchaser only.**
3. **This warranty excludes standard wear and tear of the appliance which is considered normal usage over time.**
4. **Discoloration and some minor expansion, contraction or movement of certain parts, resulting in noise, is normal and not a defect.**
5. **Warranty is automatically voided if the appliance's serial number and/or testing label is removed or if the appliance is altered or tampered with in any way.**
6. **Warranty is void if the appliance is subject to submersion in water or prolonged periods of dampness or condensation. Any damage to any part of the appliance due to water or weather damage which is the result of, but not limited to, improper chimney/venting installation will also render this warranty void.**
7. **This warranty does not cover installation and operational related problems such as environmental conditions, nearby trees, buildings, hilltops, mountains, inadequate venting or ventilation, excessive offsets, negative air pressures caused by any mechanical systems.**
8. **Chimney components and other Non-Hussong Mfg. accessories used in conjunction with the installation of this appliance are not covered under this warranty.**
9. **Damage to plated surfaces or accessories, if applicable, caused by scratches, fingerprints, melted items or other external sources left on the surfaces from the use of cleaners is not covered under this warranty.**

Limited Lifetime Warranty

EXCLUSIONS AND LIMITATIONS (continued)

10. It is expressly agreed and understood that this warranty is Hussong Mfg.'s sole obligation and purchaser's exclusive remedy for defective fireplace equipment. Hussong Mfg. is free of liability for any damages caused by this appliance, as well as inconvenience expenses and materials. Incidental or consequential damages are not covered by this warranty. In some states, the exclusion of incidental or consequential damage may not apply. Hussong Mfg. shall not be held to implied warranties and this warranty shall replace all previous warranties.
11. This limited lifetime warranty is the only warranty supplied by Hussong Mfg. Any warranties extended to the purchaser by the dealer/distributor, whether expressed or implied, are hereby disclaimed and the purchaser's recourse is expressly limited to the warranties set forth herein.
12. Any part repaired or replaced during the limited warranty period will be warranted under the terms of the limited warranty for a period not to exceed the remaining term of the original limited warranty.
13. Any replacement part repaired after the warranty period will include a 90 day parts coverage.
14. Hussong Mfg. may require the defective part to be returned using a pre-authorized RGA number or a photo of the defective component. Failure to provide either can result in a denied claim.
15. This warranty does not cover the appliances ability to heat a desired space, as there are many factors that can impact the heating performance in each home. Consideration should be implied to the appliance's location, room size, home design, environmental conditions, insulation, and tightness of the home.
16. Hussong Mfg. reserves the right to make changes at any time, without notice, in design, material, specifications, and prices. Hussong Mfg. reserves the right to discontinue models and products.

July 2025

