

Komfort Zone Kit #KZK-045

For use with Bellingham 44 (#BHM-44), and Nordik 48 DV (#NDK-48-DV)

READ ALL THESE STEPS BEFORE STARTING INSTALLATION. LEAVE THESE INSTRUCTIONS WITH THE APPLIANCE.

This kit must be installed by a qualified installer, service agency, or gas supplier at the time of the heater installation.

These instructions must be used in conjunction with the installation and operation manual provided with the appliance.

Please read all appliance owner's manual completely before performing any procedures in these instructions.



English and French installation manuals are available through your local dealer. 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.

1.0 Introduction	3
1.1 Kit Contents	3
1.2 Suggest Configurations	4
1.3 Dimensions and Overview	6
1.4 Air Duct Run.....	7
2.0 Framing and Clearances	9
2.1 Clearance to Sprinkler	9
2.2 Framing.....	10
3.0 Facing and Finishing	15
3.1 Non-combustible Requirements	16
3.2 Finish Requirements	18
3.3 Hearth and Mantel Clearances.....	21
4.0 Fireplace Preparation & Installation	23
4.1 Bellingham 44	23
4.2 Nordik 48 DV.....	25

INSTALLER: Leave this manual with the appliance.
CONSUMER: Retain this manual for future reference.

IMPORTANT: Failure to read and follow these instructions may create a possible hazard and will void the fireplace warranty.

This optional convection duct kit redistributes the warm air flow away from the fireplace opening to a more desirable location using natural convection without the use of a fan. The warm air flow would be relocated to a position higher up the wall. The result is much cooler wall temperatures above the fireplace opening for locating televisions, artwork, etc.

1.0 Introduction

1.1 Kit Contents

ALL kit contents must be installed.

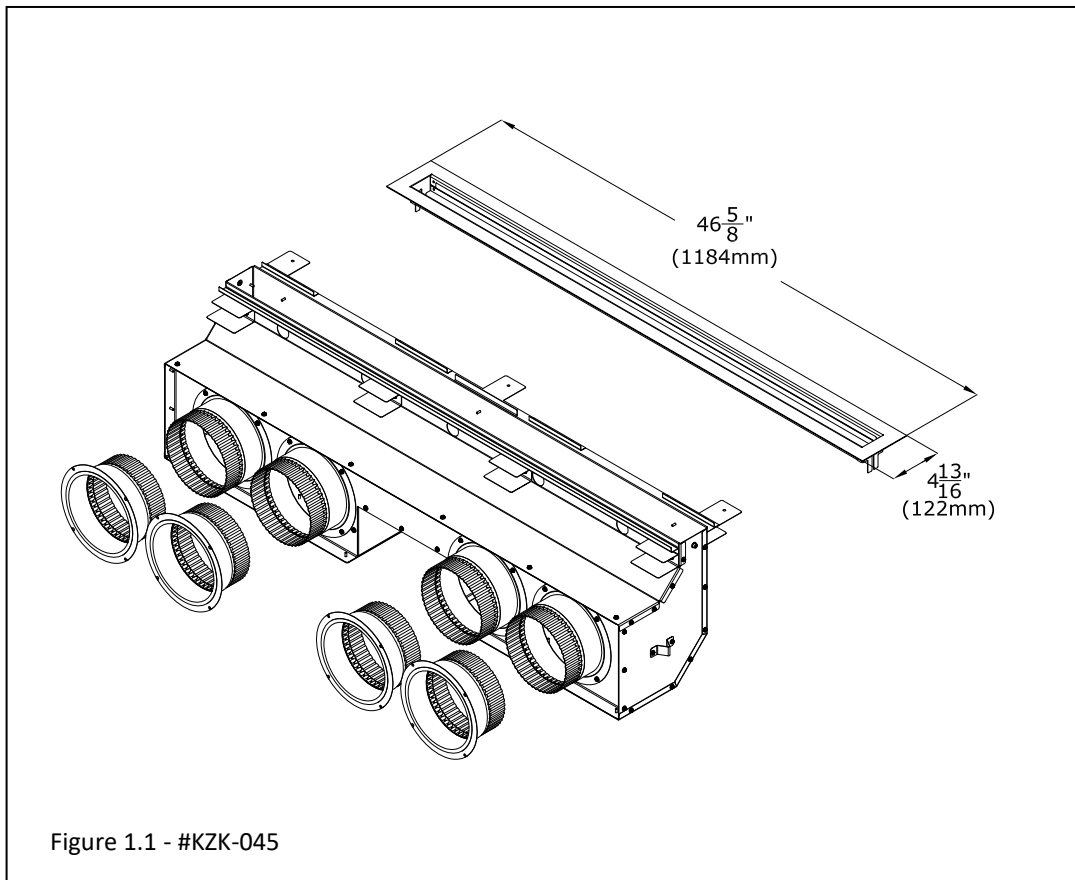
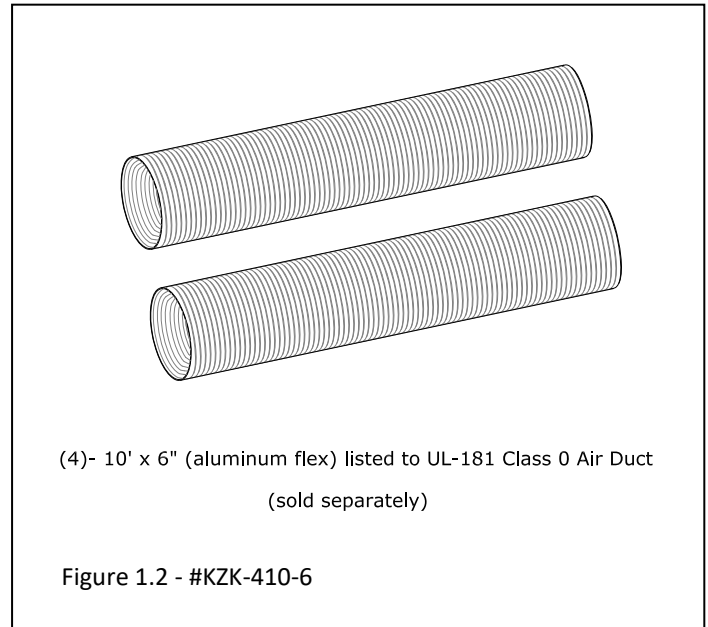
- (1) 45" plenum kit: KZK-045
- (1) plenum discharge trim: KZK-045DT
- (2) plenum support brackets
- (8) 6" collars - (4) to attach to the bottom of the plenum; (4) to attach to the unit where the cover plates are removed.

Additional Required Items

- (1) KZK-410-6 (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-410-6 kit.

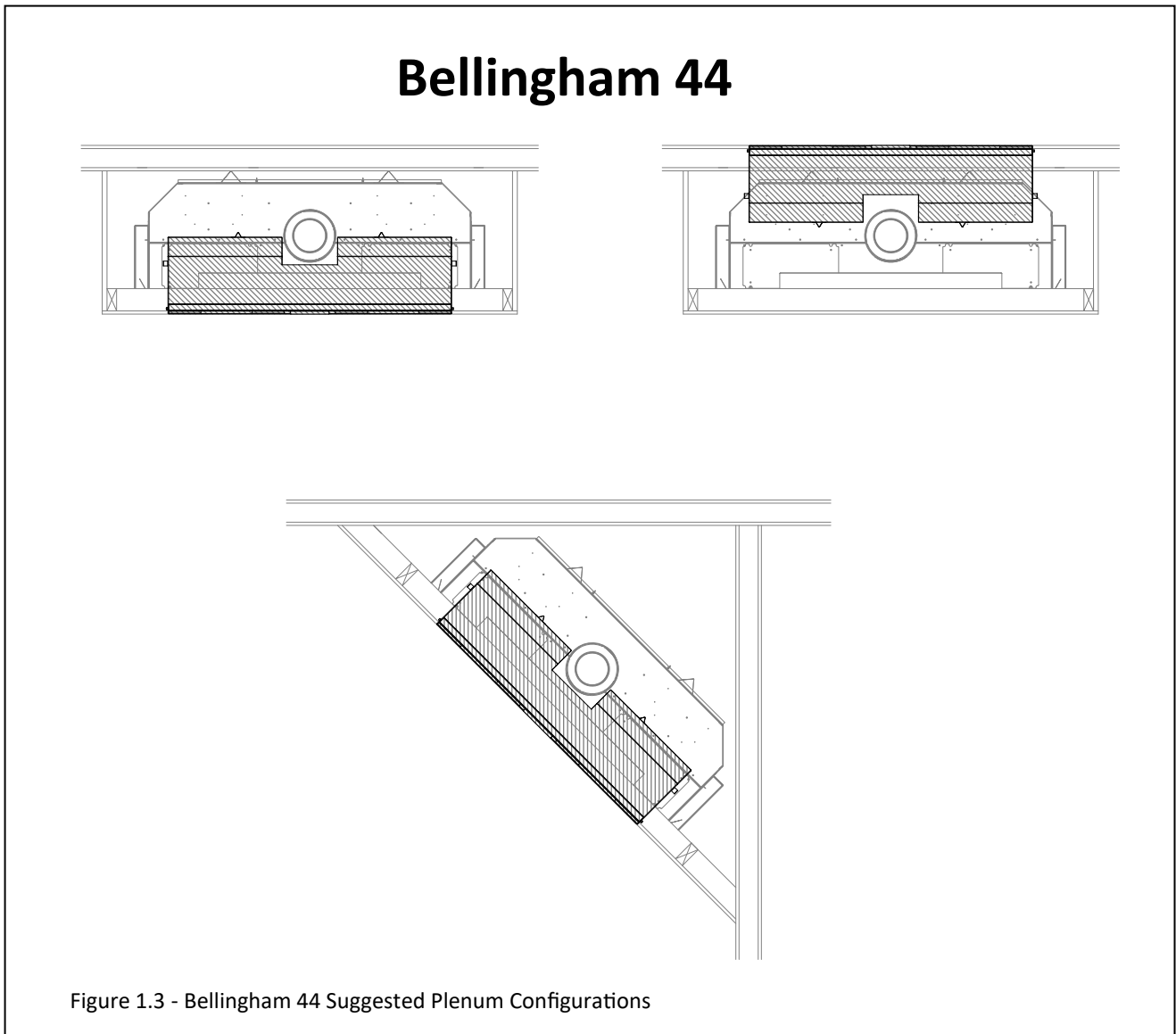
Optional Items

- KZK-CPL6 (sold separately) is (6) 6" couplers that connect (2) KZK-410-6. You will only need (4) 6" couplers for installation. If you are mounting the plenum above the fireplace between 10' to 20', you will need (2) KZK-410-6 kit and (1) #KZK-CPL6 coupler kit.



1.2 Suggested Configurations

- When installing the #KZK-045, take in consideration the fireplace venting and the plenum tube configuration.
- The #KZK-045 plenum can be installed so it discharges heat into the room the Bellingham 44 is installed in or an adjacent room behind the fireplace enclosure.



- When installing the #KZK-045, take in consideration the fireplace venting and the plenum tube configuration.
- The #KZK-045 plenum must be installed so it discharges heat into the room the Nordik 48 DV is installed in.

Nordik 48 DV

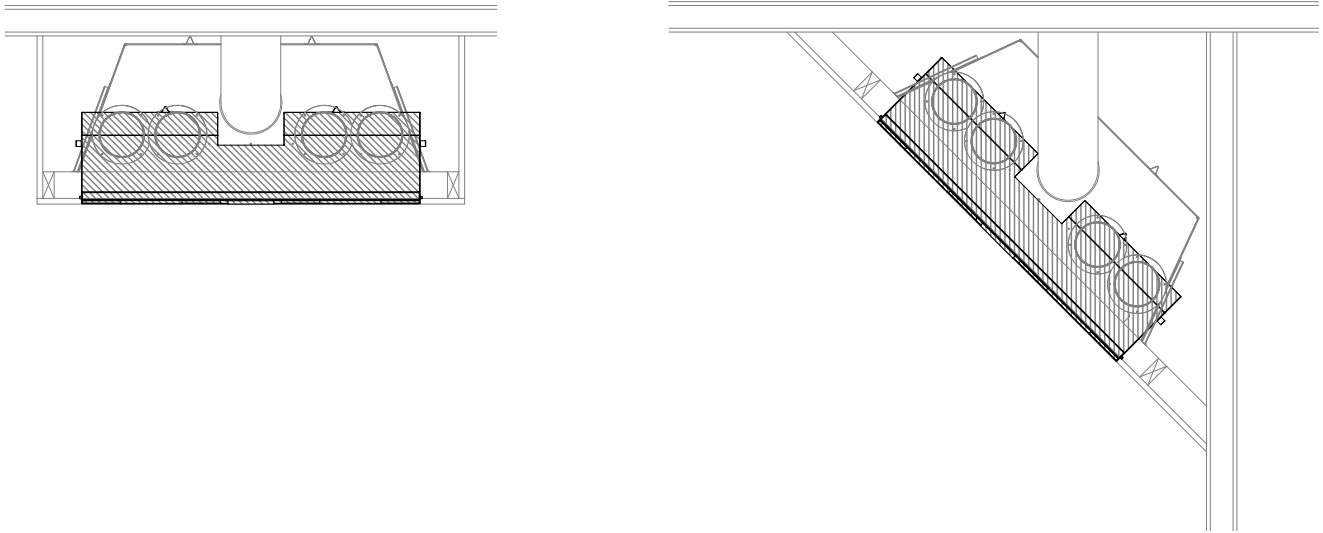


Figure 1.4 - Nordik 48 DV Suggested Plenum Configurations

1.3 Dimensions and Overview

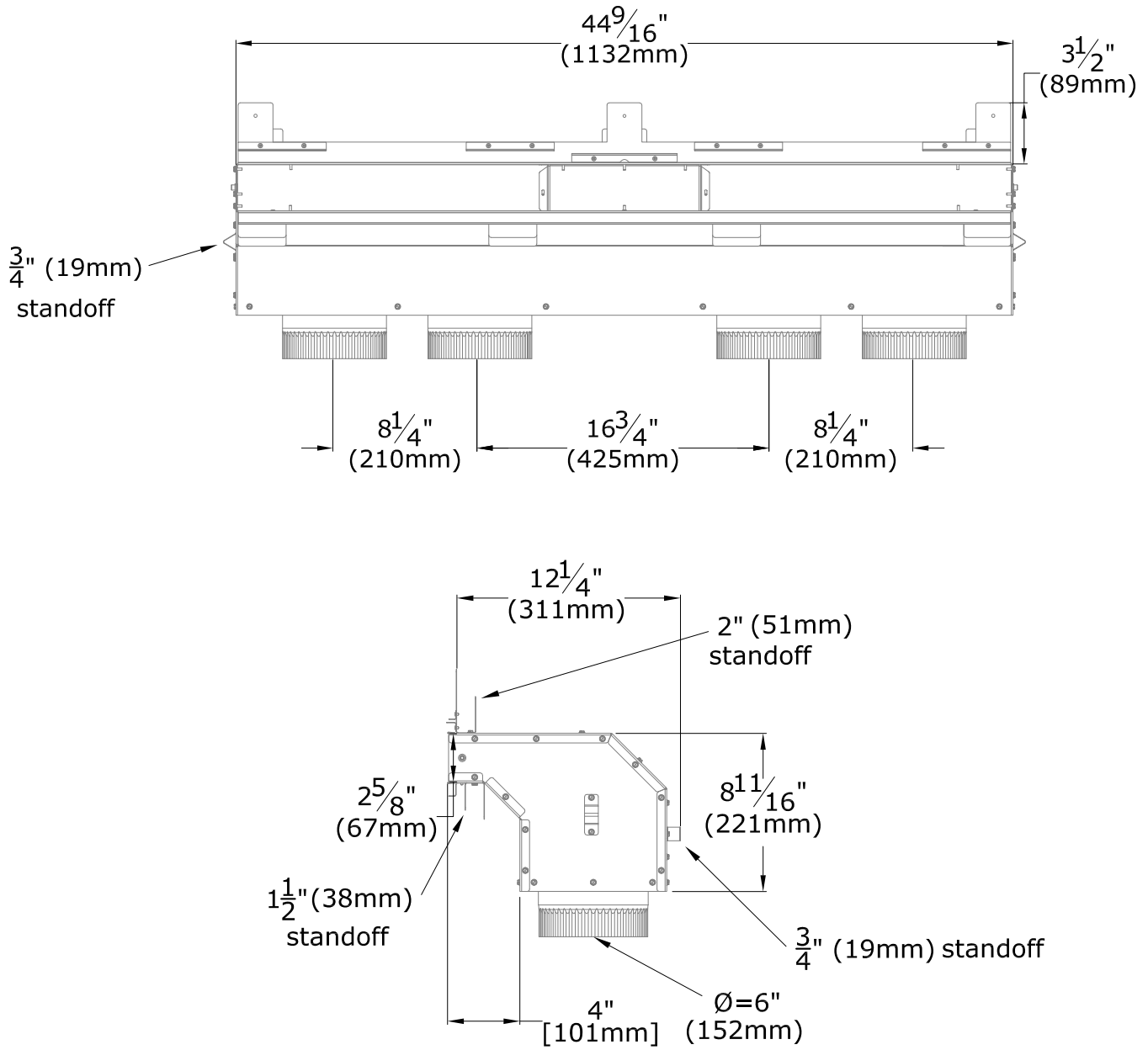


Figure 1.5 - KZK-045 Dimensions

1.4 Air Duct Run

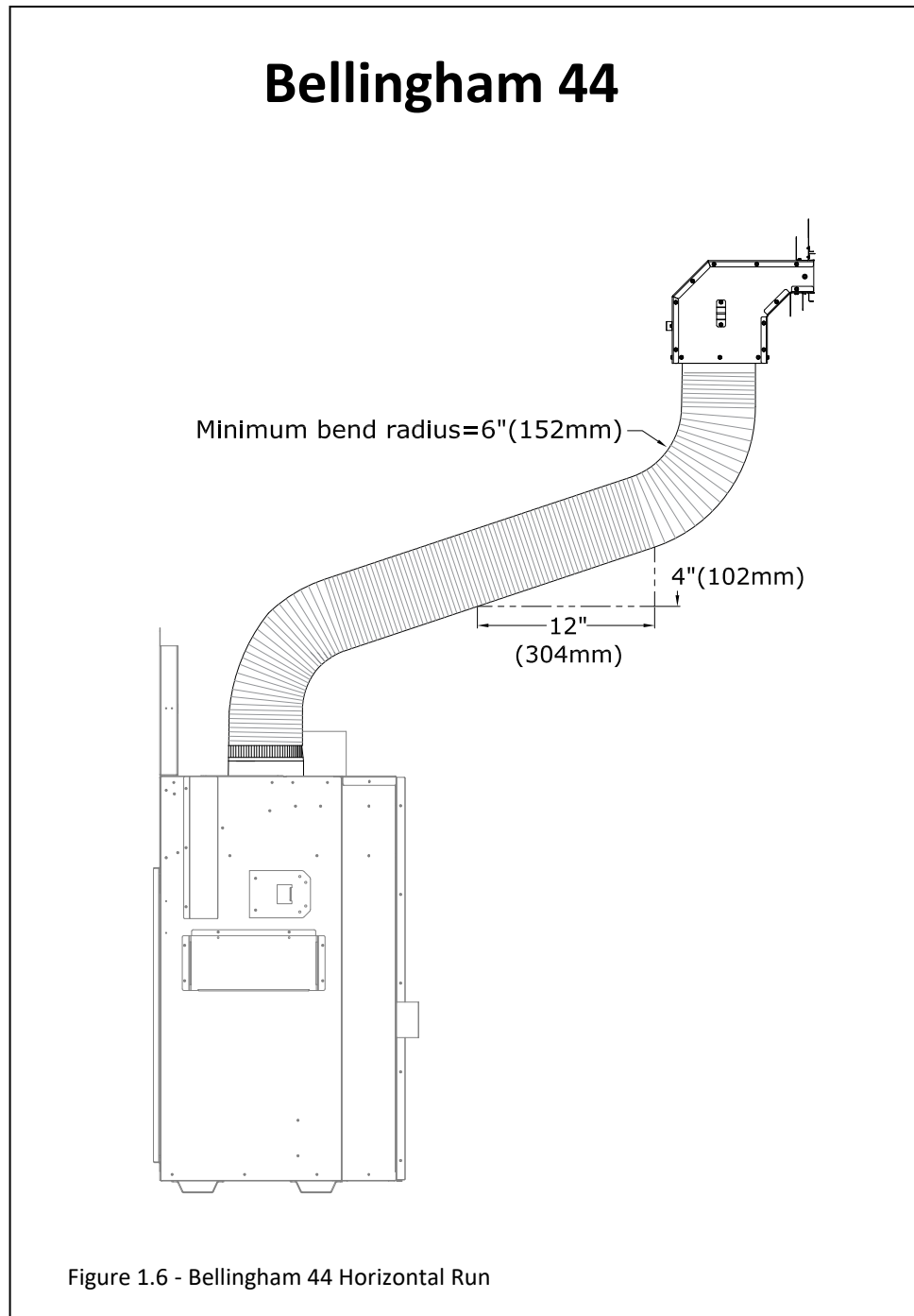
IMPORTANT: The air duct pipe cannot run horizontally without a vertical rise.

IMPORTANT: The 1/2" clearance around the air duct pipes must be maintained.

Use #KZK-410-6 UL181 Class 0 Air Duct piping to connect the plenum(s) to the unit.

Hussong Mfg. Co., Inc. requires pipes to be listed as UL181 Class 0 Air Duct to connect the plenum(s) to the unit.

Maximum Vent Run: 20' (6m)



Nordik 48 DV

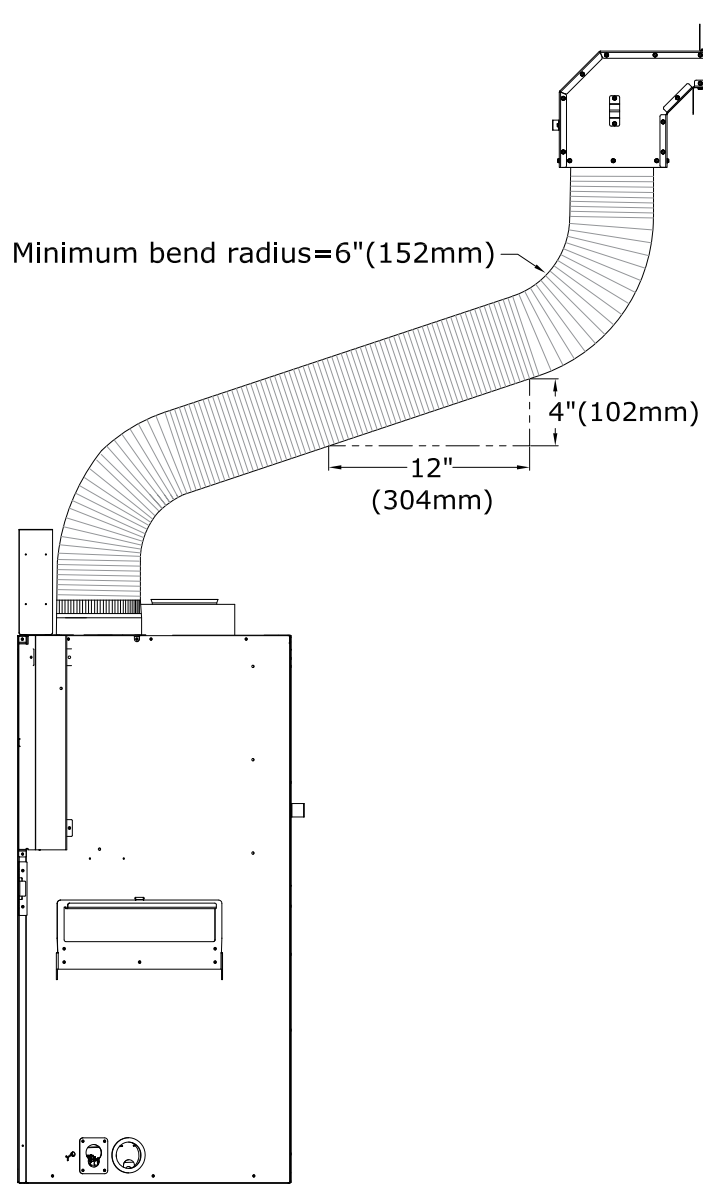


Figure 1.7 - Nordik 48 DV Horizontal Run

2.0 Framing and Clearances

2.1 Clearance to Sprinkler

- In a situation where a sprinkler head is installed within the proximity to a #KZK discharge opening, 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.

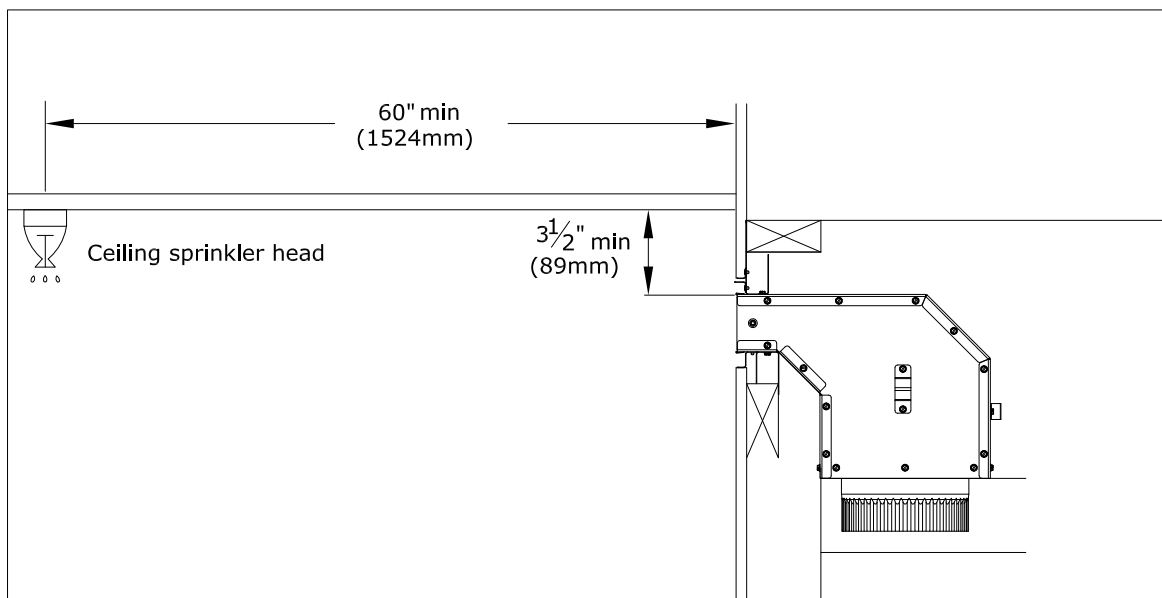


Figure 2.1 - Clearance to Sprinkler

2.2 Framing

Shown in this section are the rough opening dimensions and clearances for the plenum, unit installation, and unit installation with a TV recess construction.

Rough opening framing dimensions should allow for wall covering thickness and facing materials. Please refer to Section 3.0 for specific facing and finishing options.

Figure 2.3 show the minimum height of plenum framing for the Bellingham 44 and see Figure 2.4 for Nordik 48 DV.

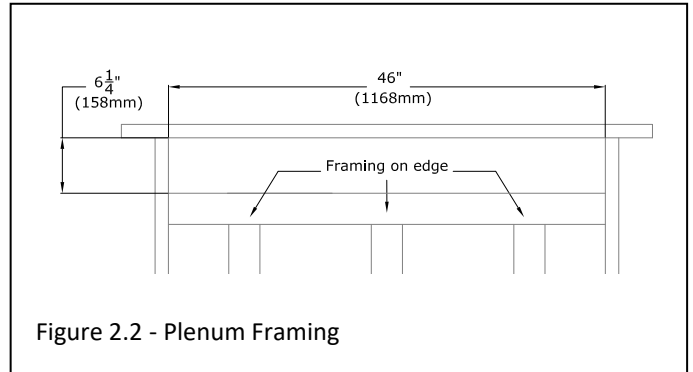


Figure 2.2 - Plenum Framing

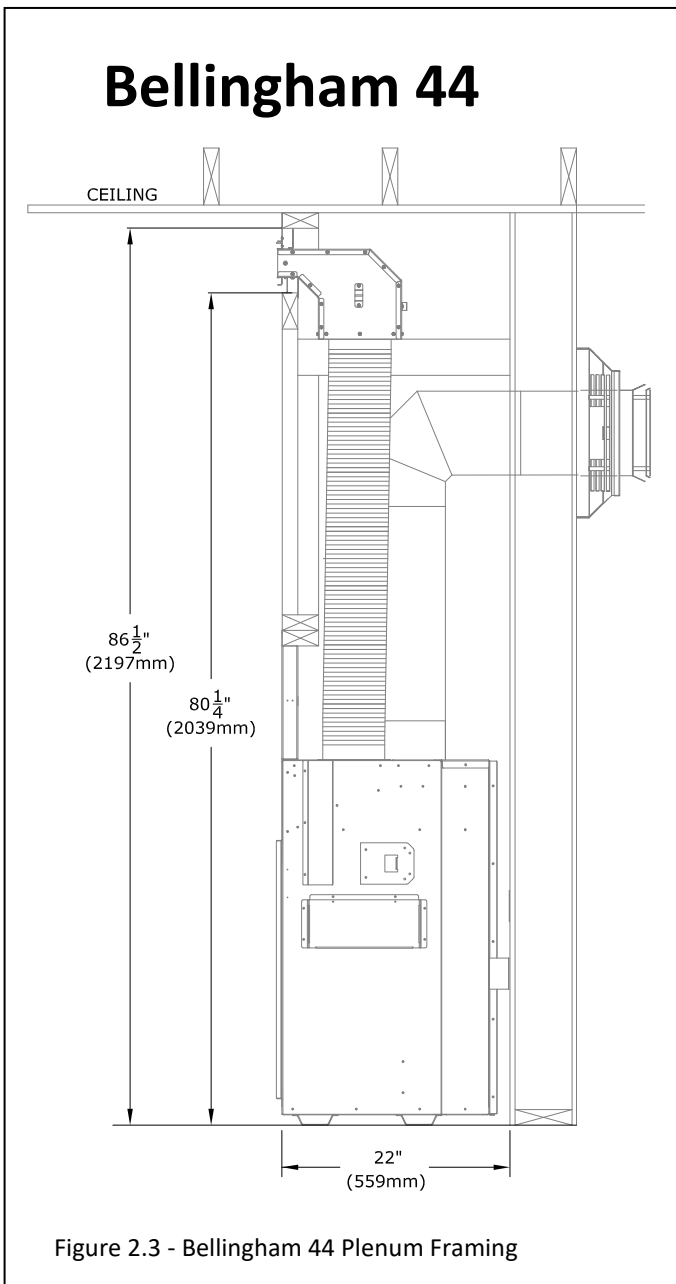


Figure 2.3 - Bellingham 44 Plenum Framing

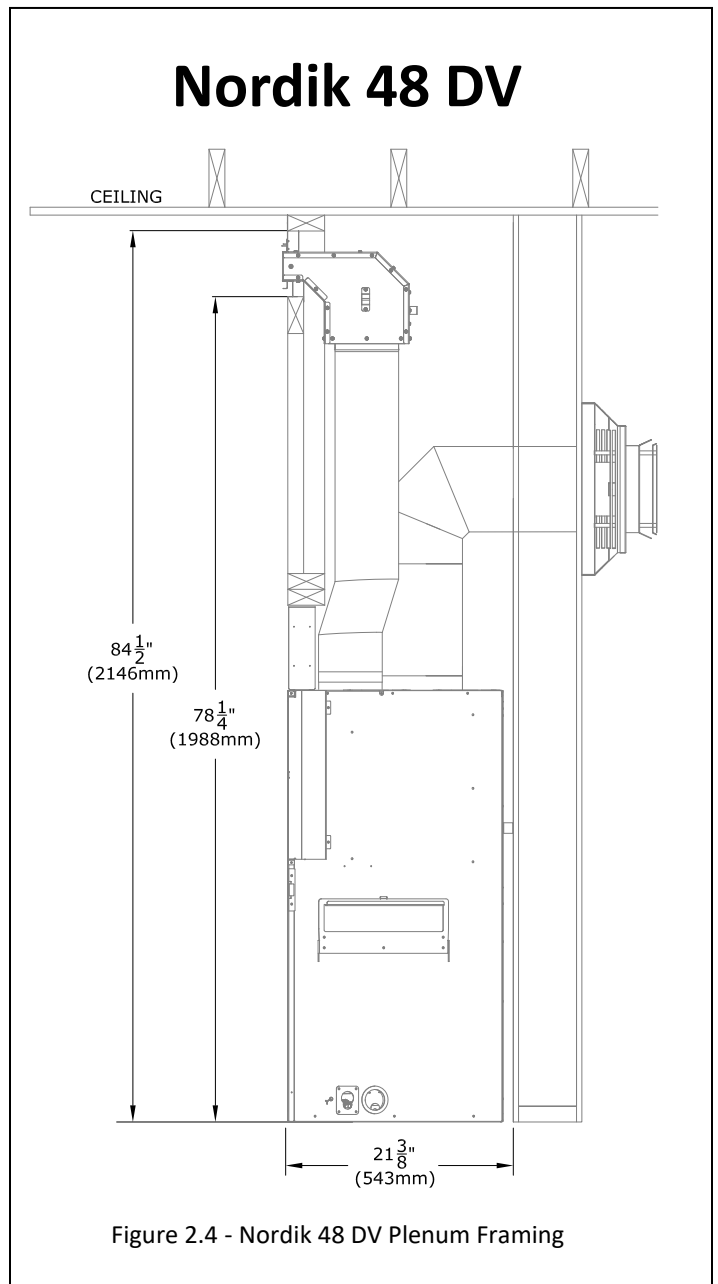


Figure 2.4 - Nordik 48 DV Plenum Framing

Figure 2.5 shows the minimum clearance between the top of the plenum opening and the ceiling. This applies to all models.

Figure 2.6 shows the minimum height of plenum framing from the top finishing edge of the fireplace. This applies to the Bellingham 44

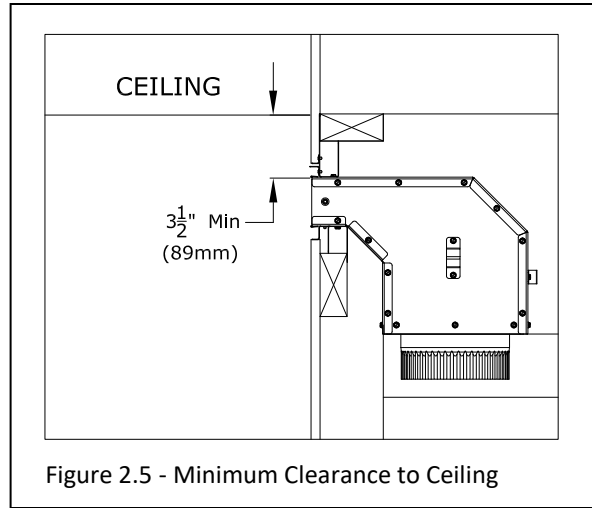


Figure 2.5 - Minimum Clearance to Ceiling

Bellingham 44

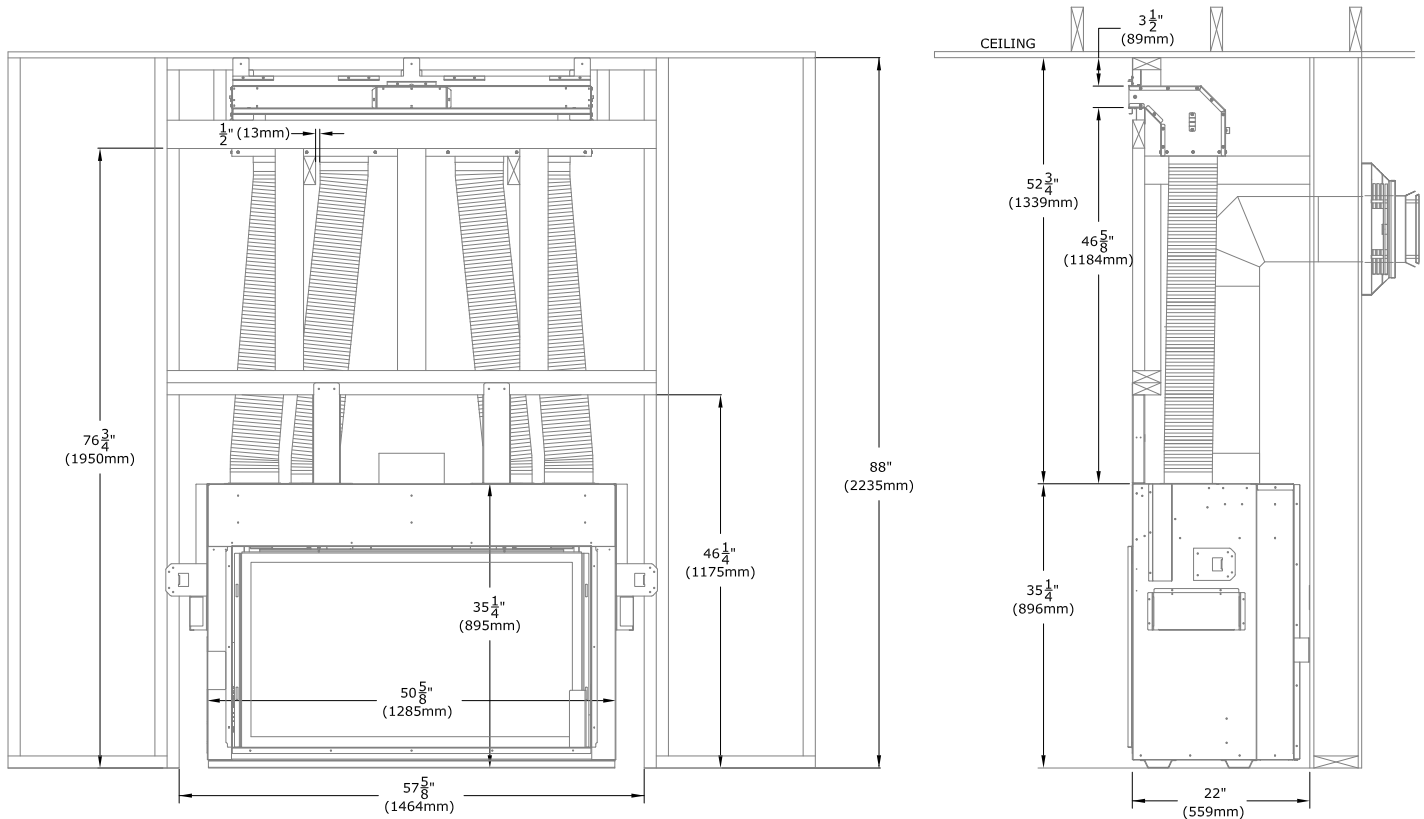


Figure 2.6 - Bellingham 44 Plenum Framing

Figure 2.7 shows the minimum height of plenum framing from the top finishing edge of the fireplace. This applies to the Nordik 48 DV

Nordik 48 DV

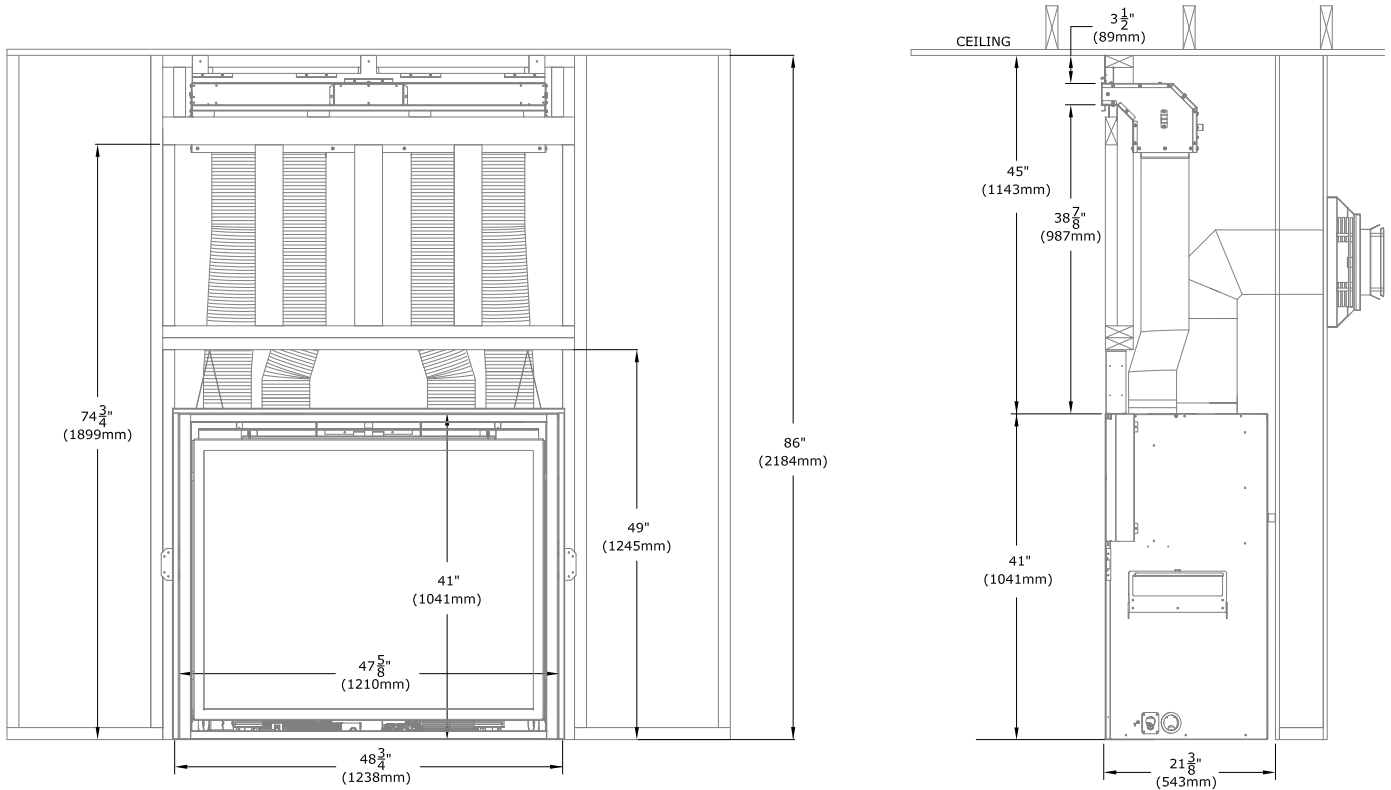


Figure 2.7 - Nordik 48 DV Plenum Framing

Bellingham 44

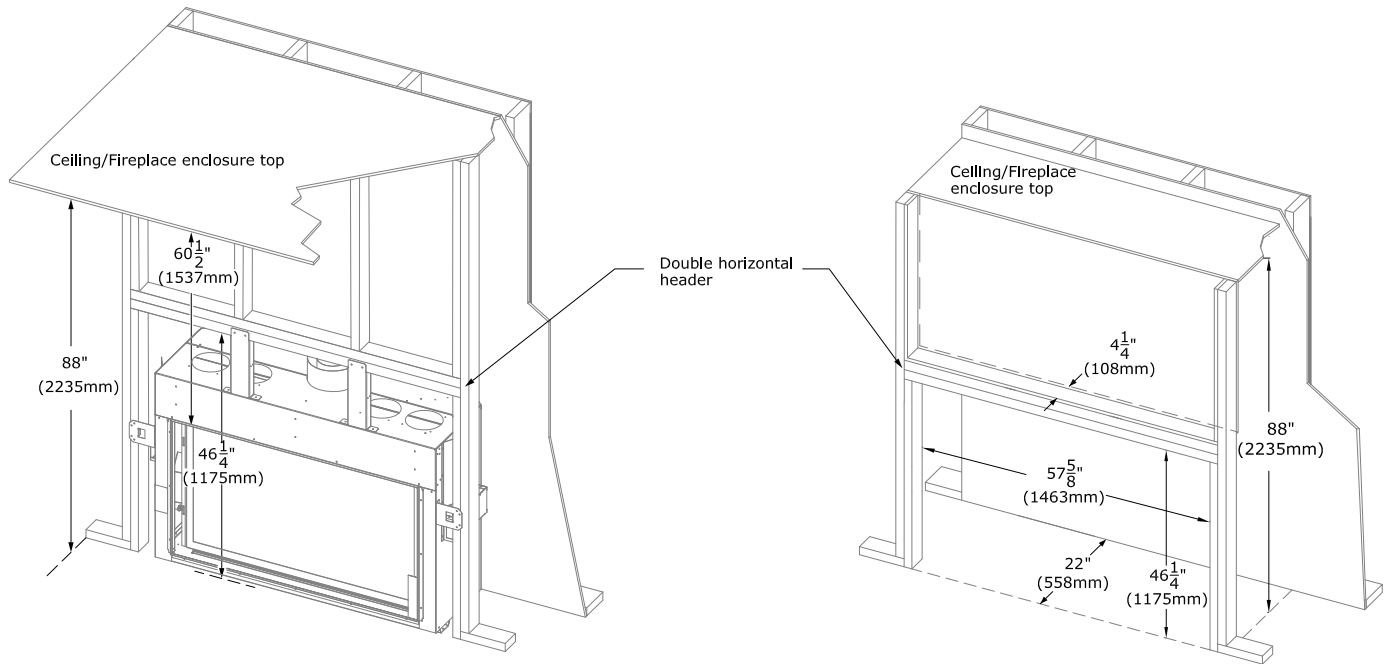


Figure 2.8 - Bellingham 44 Wall Enclosure Rough Opening

Nordik 48 DV

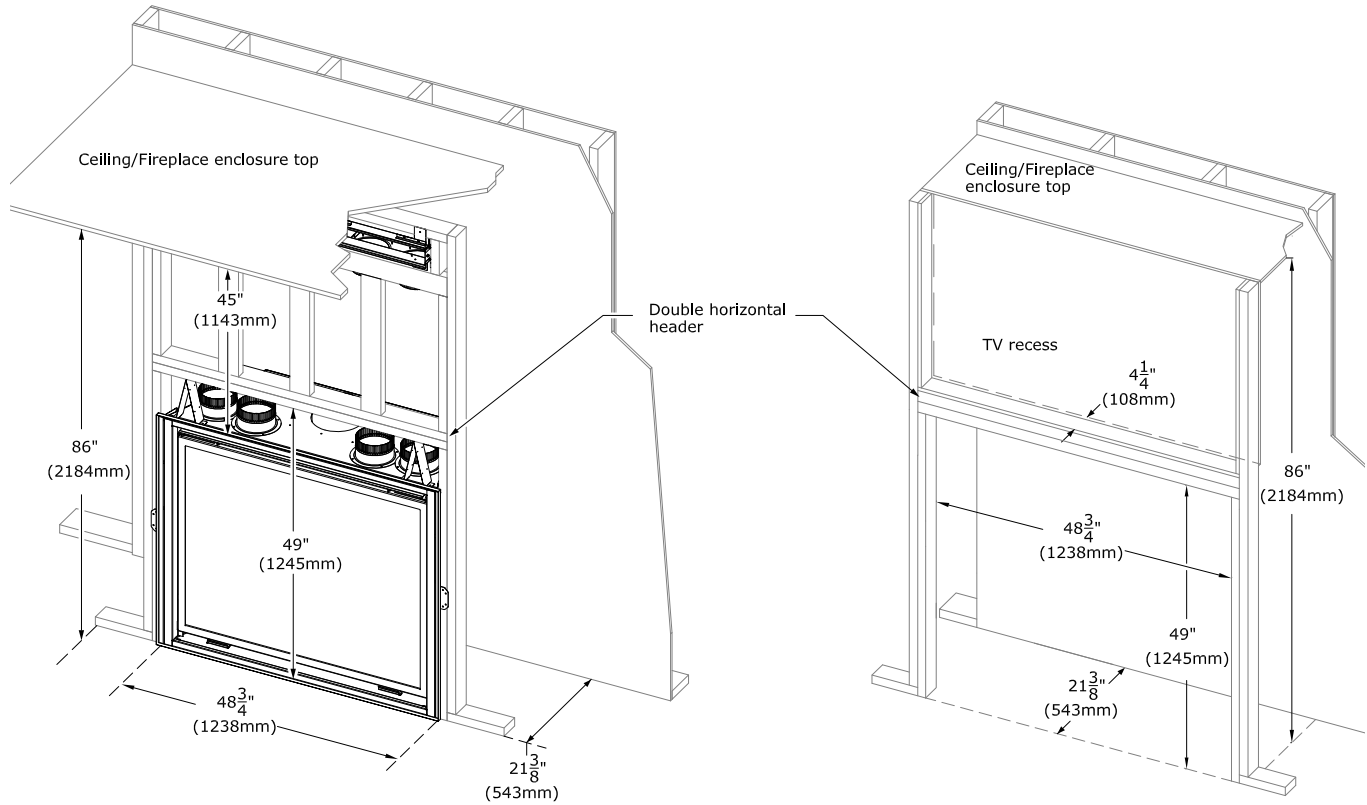


Figure 2.9 - Nordik 48 DV Wall Enclosure Rough Opening

3.0 Facing and Finishing

See below for some fireplace specific finishing material information:

Bellingham 44

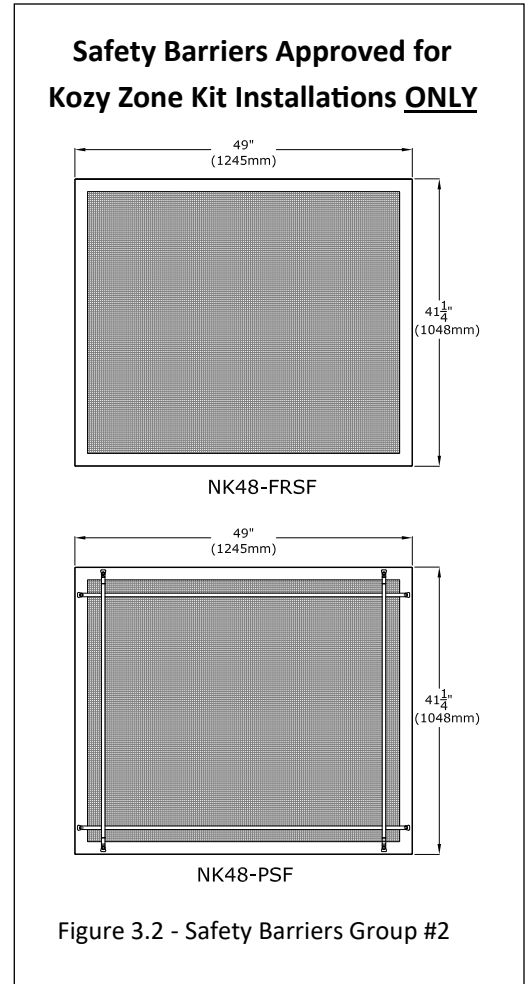
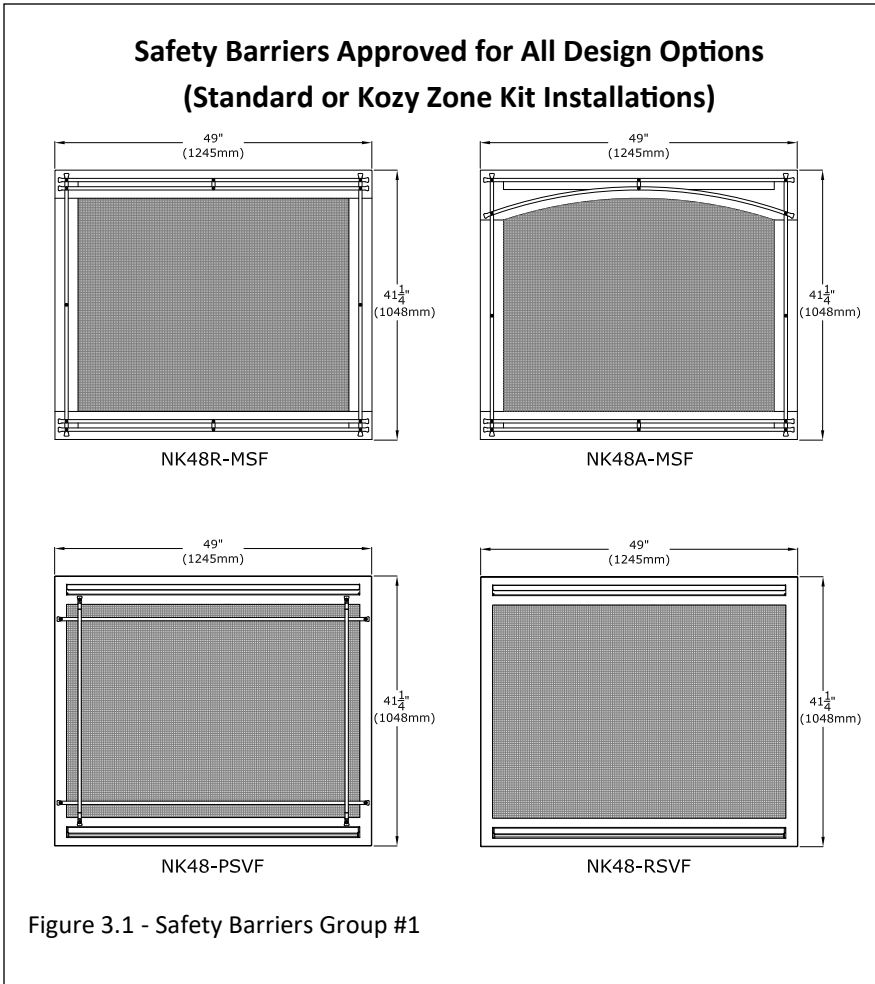
The Bellingham 44 are equipped only with a safety screen that fits inside the finishing edge. Finishing material, mantel projections, and hearth projections may butt up against the finishing edge.

- If you are purchasing the optional rectangle surround (Part #BH44-RS) finishing material up to 1-1/4" in total thickness can continue to be finished up to the fireplace finishing edge and the optional surround can be installed over the top of the finishing material. These optional surrounds have a slotted bracket to secure the surround to the fireplace that allow this installation over up to 1-1/4" thick finishing material.
- If you have combined thickness of finishing material over 1-1/4" we recommend butting the finishing material up against the finishing edge and not using the optional surround.
- The optional surround must be able to be removed for service work. Ensure the finishing material does not inhibit this.

Nordik 48 DV

The Nordik 48 DV is supplied with a "Finishing Trim Kit". It is highly recommended that this kit is installed and used with the fireplace. The finishing trim kit provides a finishing edge for material to butt up against while providing the necessary clearance for the safety screen barrier to be removed.

IMPORTANT: The NK48-PSF and NK48-FRSF (Figure 3.1) are ONLY approved for use when the Nordik 48 DV is installed with the #KZK-045. The other (4) safety barriers shown in Figure 3.2 are approved in all installation scenarios.



KZK Plenum

Section 3.2 will provide information about finishing material around the KZK plenum.

Nordik 48 DV

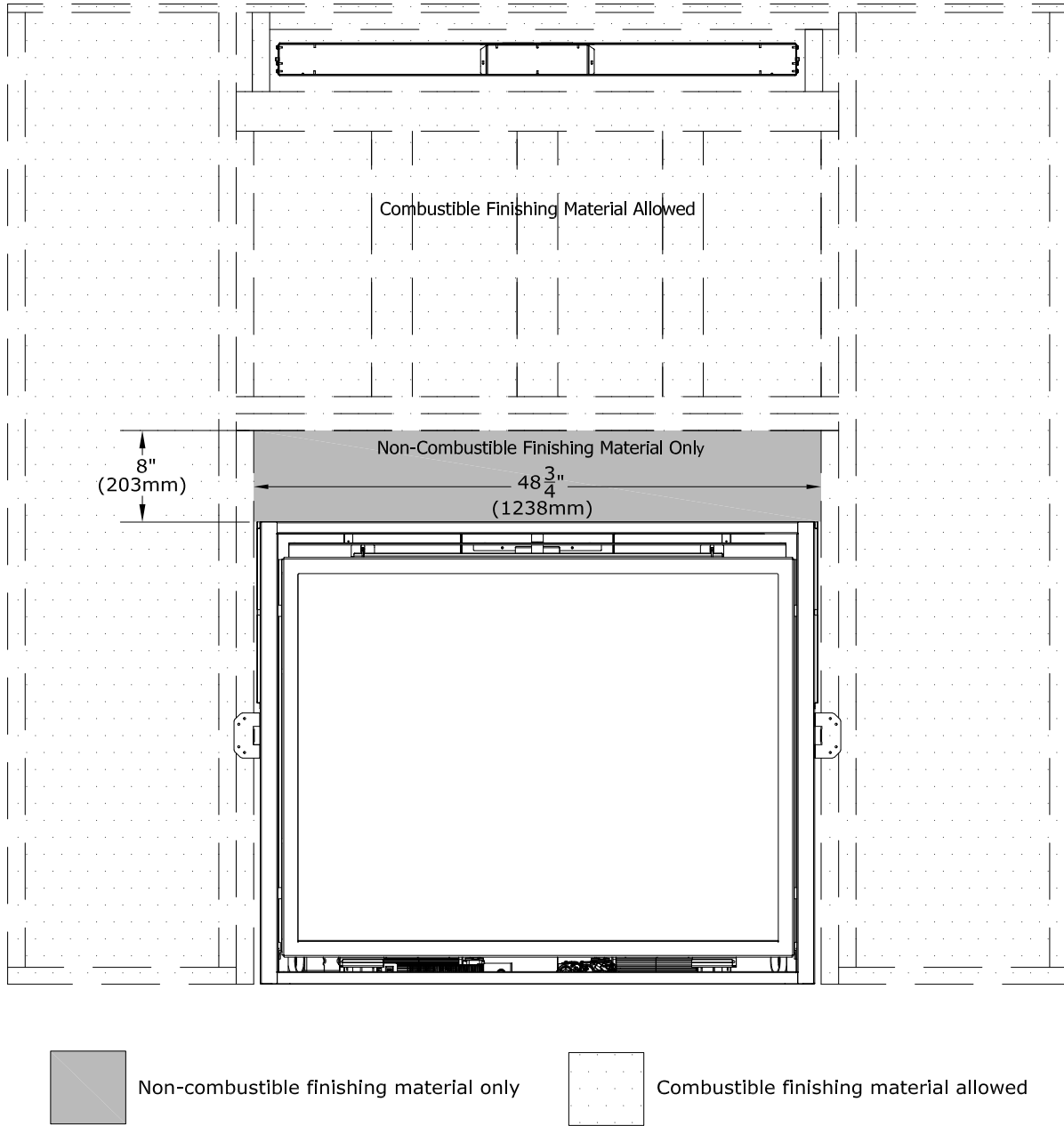


Figure 3.4 - Nordik 48 DV Minimum Non-Combustible Finishing Dimensions

3.2 Finishing Requirements

3.2.1 Finishing Options - Plenum Air Discharge

NOTE: It is not required to use the discharge trim (#KZK-045DT). You are allowed to run non-combustible finishing material up to the air discharge opening. See Figure 3.5 for finishing options. Finishing material must not block the opening and must be run evenly along the plenum opening.

WARNING! RISK OF OVERHEATING AND FIRE! Ensure the KZK duct system is installed in accordance to this manual

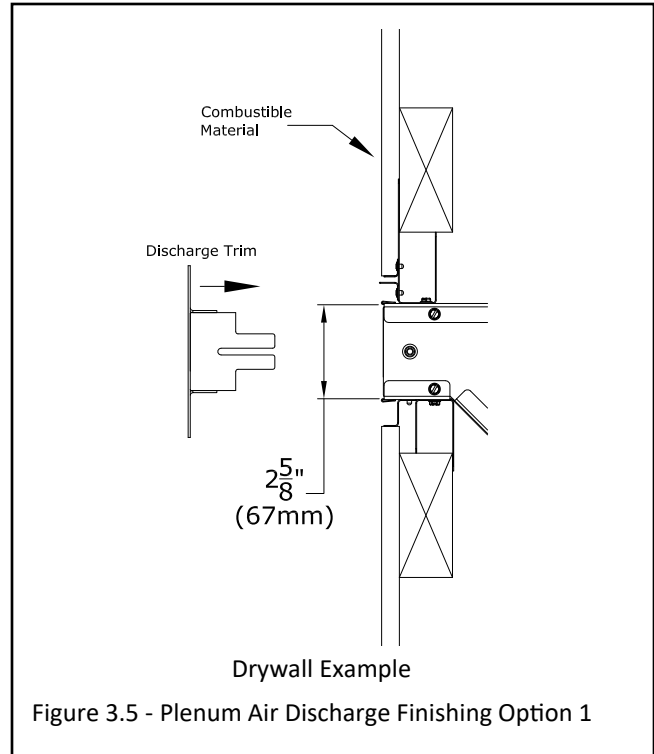
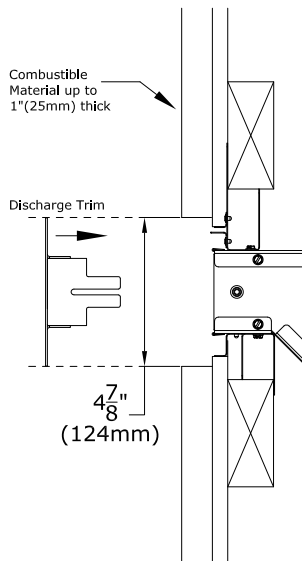


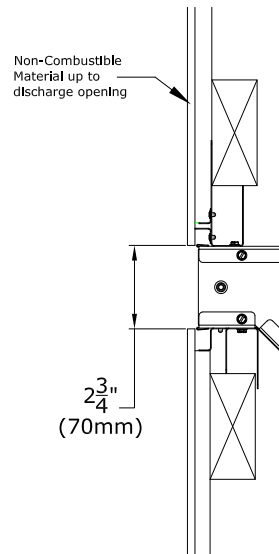
Figure 3.5 - Plenum Air Discharge Finishing Option 1

Up to 1" (25mm) thick combustible material up to the edge of discharge trim. 1" (25mm) combustible material cannot go closer to discharge opening. 1" (25mm) combustible material goes on top of any required non-combustible material on fireplace

Non-combustible material, such as tile or stone, up to the air discharge opening. Minimum air discharge opening must be maintained the length of the air discharge opening. Discharge trim is optional for this installation.



1" (25mm) Combustible overlay on top of initial 1/2" (13mm) finishing material



Example of noncombustible finishing material such as tile

Figure 3.6 - Plenum Air Discharge Finishing Option 2

3.2.2 Combustible Wall Finish Requirements

- Figure 3.6 shows installation of combustible wall finish up to 1" thick for the Bellingham 44. This combustible material goes on top of any required non-combustible materials as required in Figure 3.3.
- This 1" (25mm) combustible material is able to go down to the fireplace finishing edge.
- See Figure 3.5 on page 14 for up to 1" (25mm) thick combustible material installation around the KZK air discharge trim.

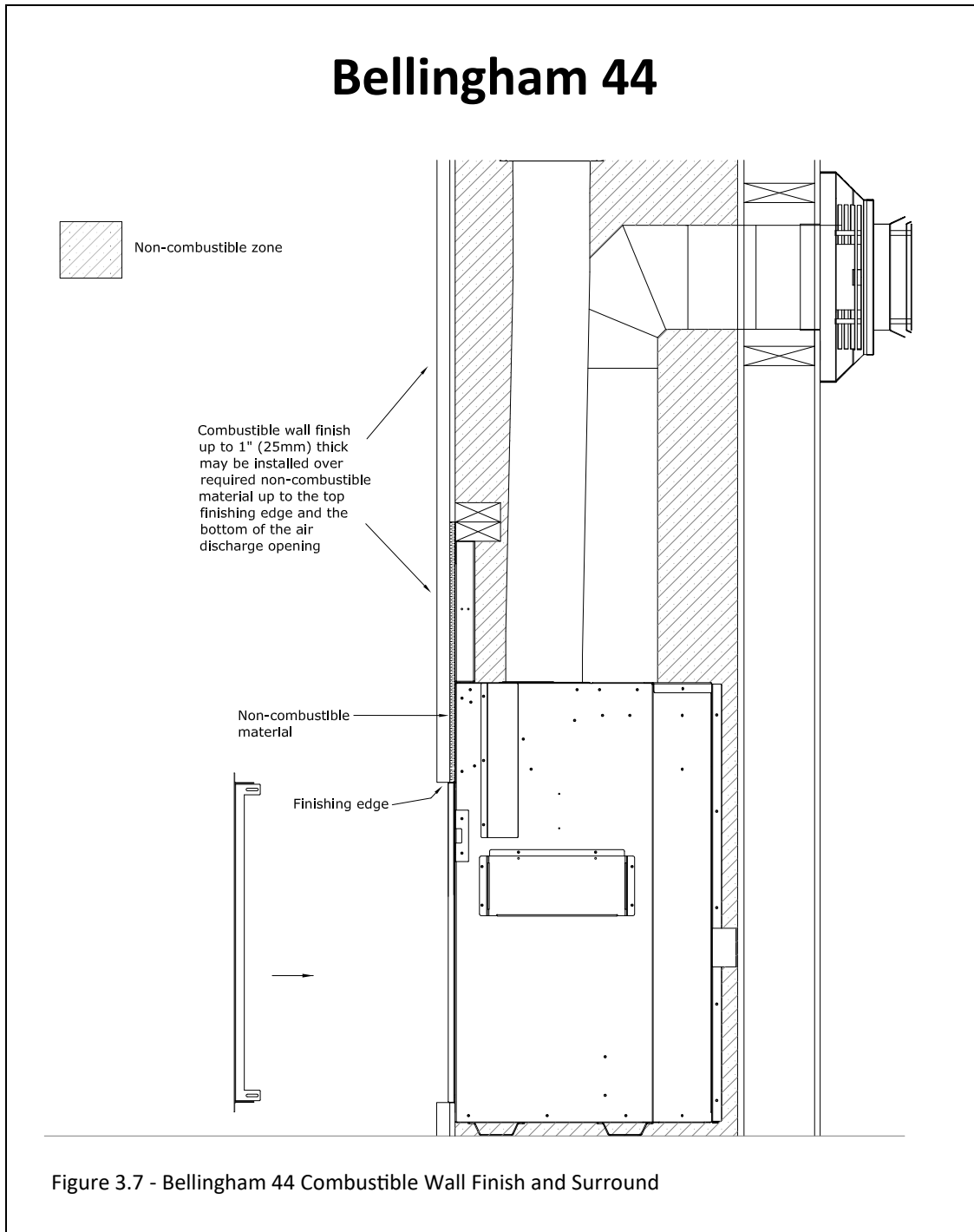
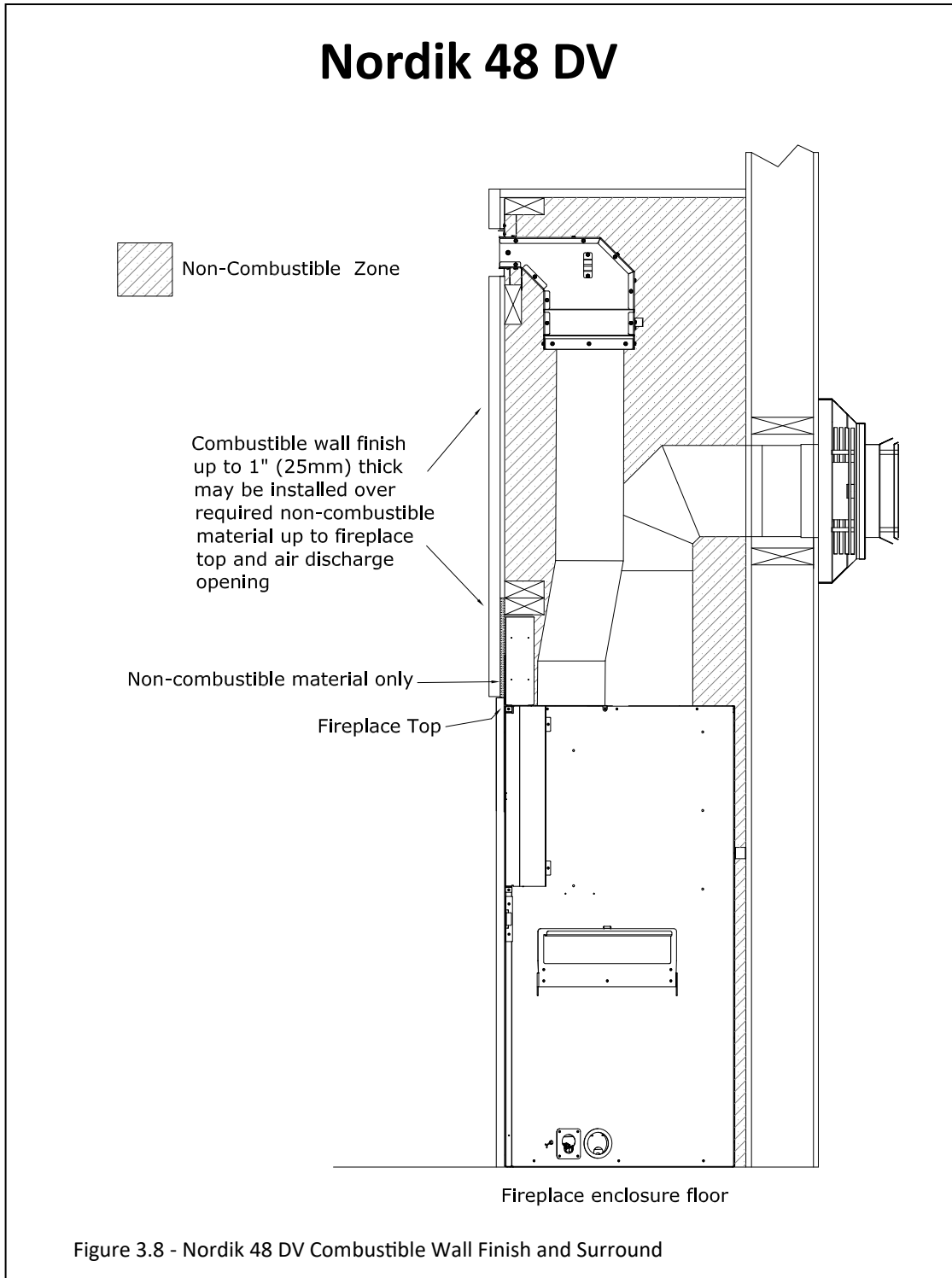


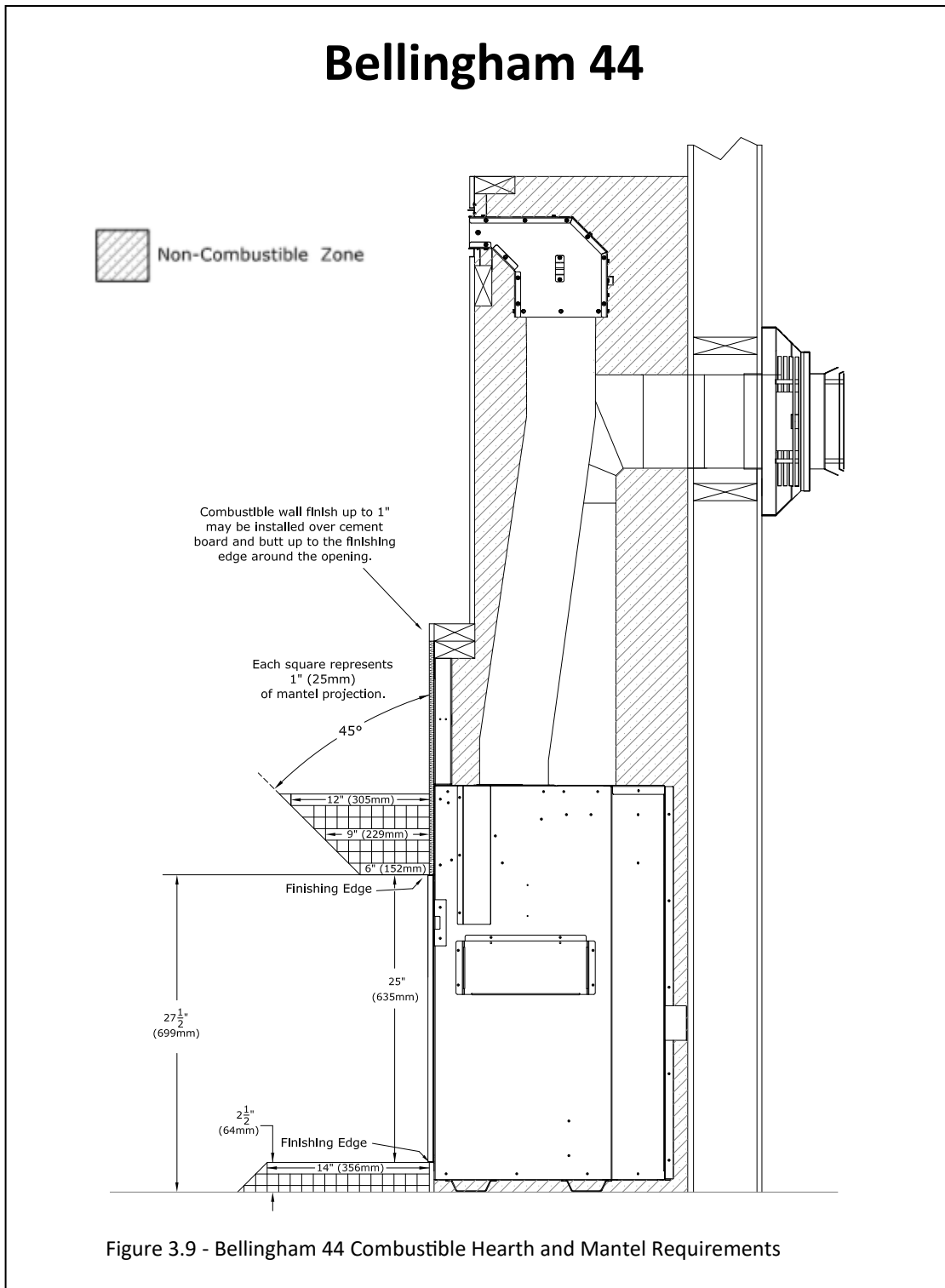
Figure 3.7 - Bellingham 44 Combustible Wall Finish and Surround

- Figure 3.8 shows installation of combustible wall finish up to 1" thick for the Nordik 48 DV. This combustible material goes on top of any required non-combustible materials as required in Figure 3.5.
- This 1" (25mm) combustible material is able to go down to the fireplace finishing edge.
- See Figure 3.5 on page 14 for up to 1" (25mm) thick combustible material installation around the KZK air discharge trim.

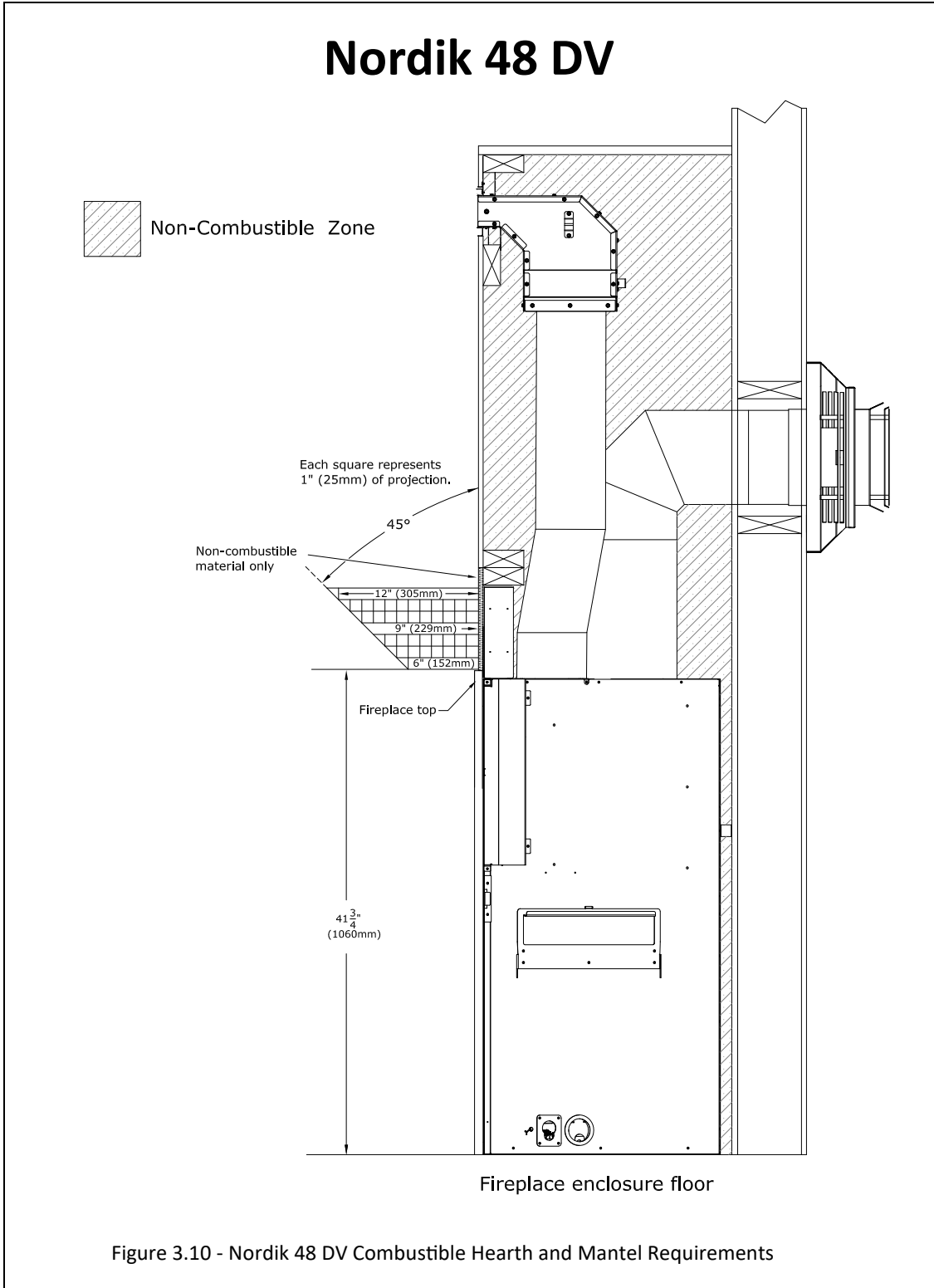


3.3 Hearth and Mantel Clearances

- Figure 3.9 shows the mantel and hearth projections for the Bellingham 44 allowed when using this KZK-045. The image below shows the mantel projection starting at the top fireplace finishing edge.
- Combustible flooring can run underneath this appliance which would then allow an unlimited combustible hearth projection. The hearth projection cannot be elevated (vertically) past the base of the fireplace / enclosure floor.



- Figure 3.10 shows the mantel and hearth projections for the Nordik 48 DV allowed when using this KZK-045. The image below shows the mantel projection starting at the top fireplace finishing edge.
- Combustible flooring can run underneath this appliance which would then allow an unlimited combustable hearth projection. The hearth projection cannot be elevated (vertically) past the base of the fireplace / enclosure floor.



4.0 Fireplace Preparation & Installation

4.1 Bellingham 44

All contents in this kit are required and must be installed.

The Kozy Zone Kit requires that the convection baffle, located above the firebox inside the appliance metal cabinet, to be removed to allow the hot airflow to convect upwards into the air ducts installed on the fireplace. You will also remove the cover plates.

See additional requirements and installation information in the appliance manual.

1. Remove the convection baffle from the appliance. The baffle is secured by (4) screws right behind the upper edge of the fireplace opening. There is a small baffle clip in the center where you remove (2) screws and then the remaining (2) screws will involve (1) screw being on each side of the convection baffle. Recycle this panel as it is no longer needed. See Figure 4.1.
2. Remove (4) cover plates on top of the appliance (4 screws each).
3. Align the take off collars to the corresponding holes on the top of the appliance. Secure with the previously removed screws. Install the take off collars on the corresponding openings on the plenum. Use the supplied screws to attach the collars.
4. Frame the rough opening of the fireplace and KZK plenum. Refer to all pages of this KZK-045 manual and the Bellingham 44 manual. Previous pages of this manual will give plenum positions and rough frame opening sizes.
5. Install stand-off assembly on top of the appliance. See Figure 4.3. Discard the header heat shield. Attach stand-off assembly as shown in Figure 4.3.
6. Install the plenum into the rough frame opening maintaining minimum clearances to combustibles as listed in this manual. Fix the plenum to the framing using nails or screws through the top mounting bracket.
7. Use metal strapping (not supplied) as needed to further secure the plenum to framing.
8. Attach the piping from all (4) plenum vent collars to all (4) fireplace collars. If you are mounting the plenum 10' or less above the fireplace use (1) #KZK-410 kit or UL-181 Class 0 approved air duct. If you are mounting the plenum between 10'-20' above the fireplace then you will need (2) #KZK-410 kits and #KZK-CPL.
9. An upward slope must be maintained in horizontal sections of the pipes for proper convection. Support horizontal sections every 24".
10. Install the plenum discharge trim once finishing material is installed.

If desired, the discharge trim may be painted. Use high temperature paint (250°F).

Continue with fireplace installation.

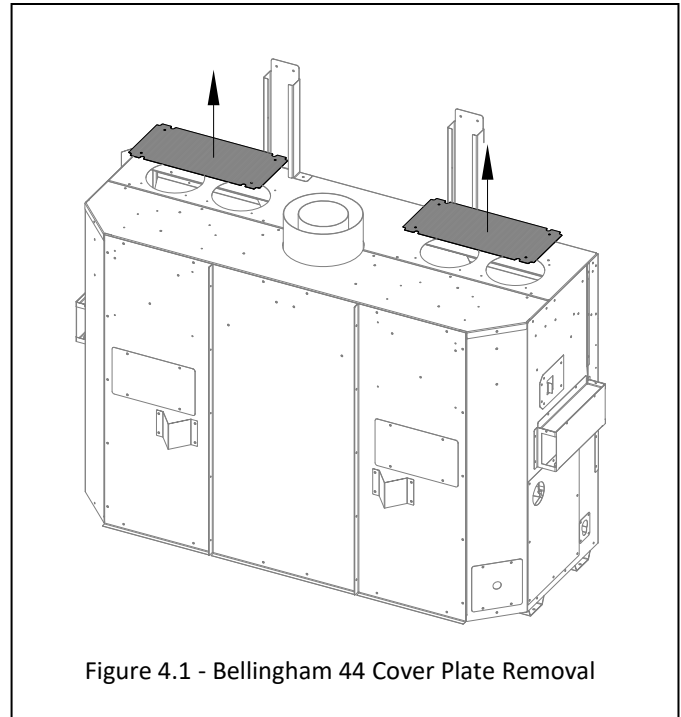


Figure 4.1 - Bellingham 44 Cover Plate Removal

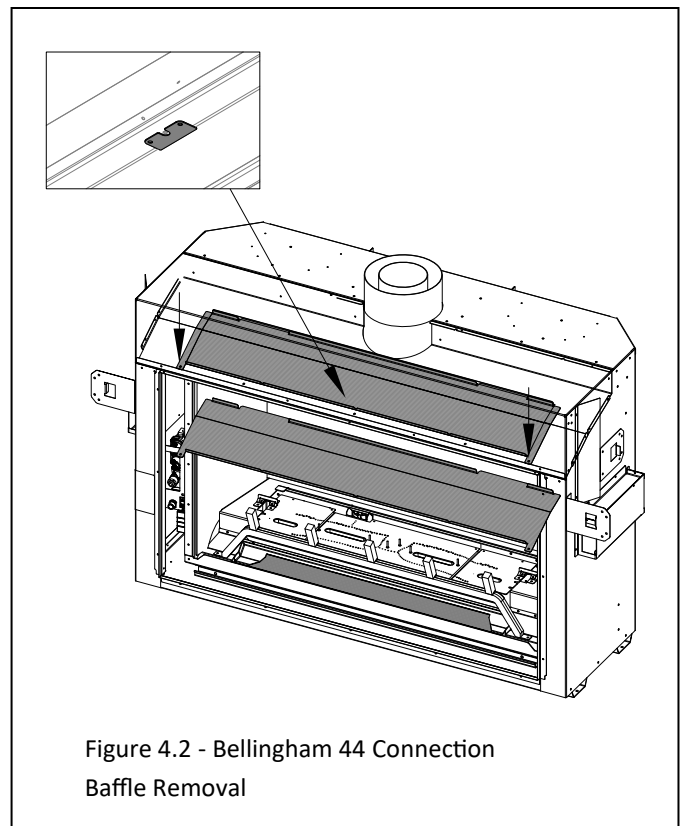
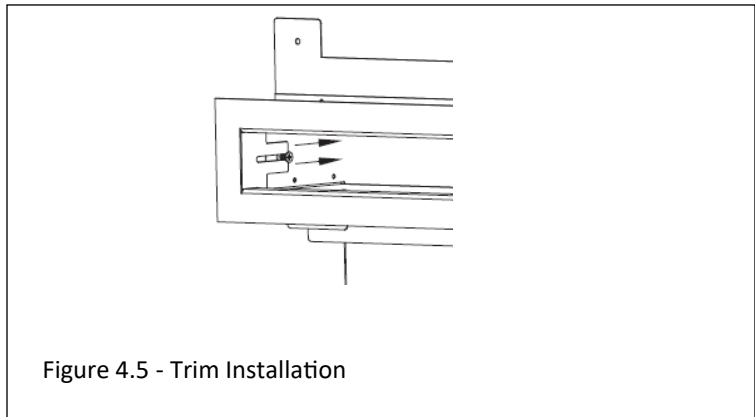
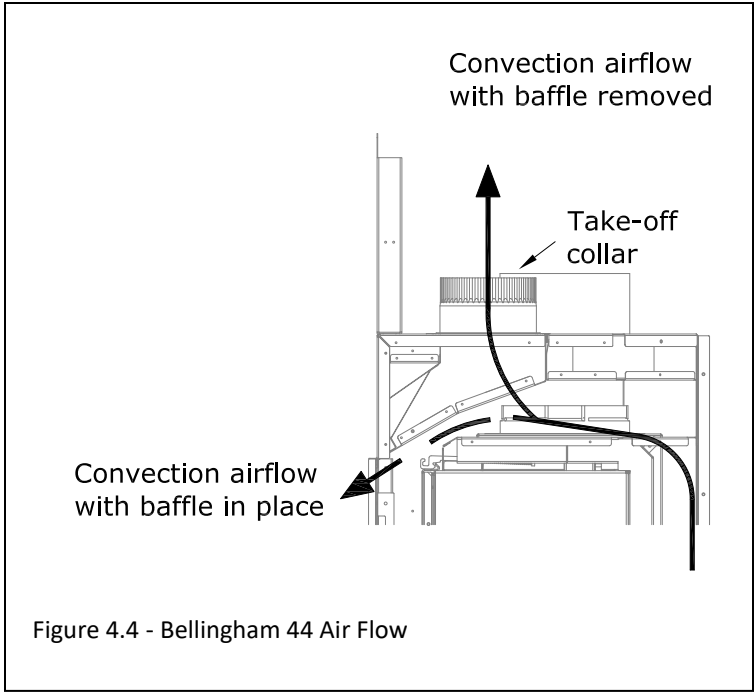
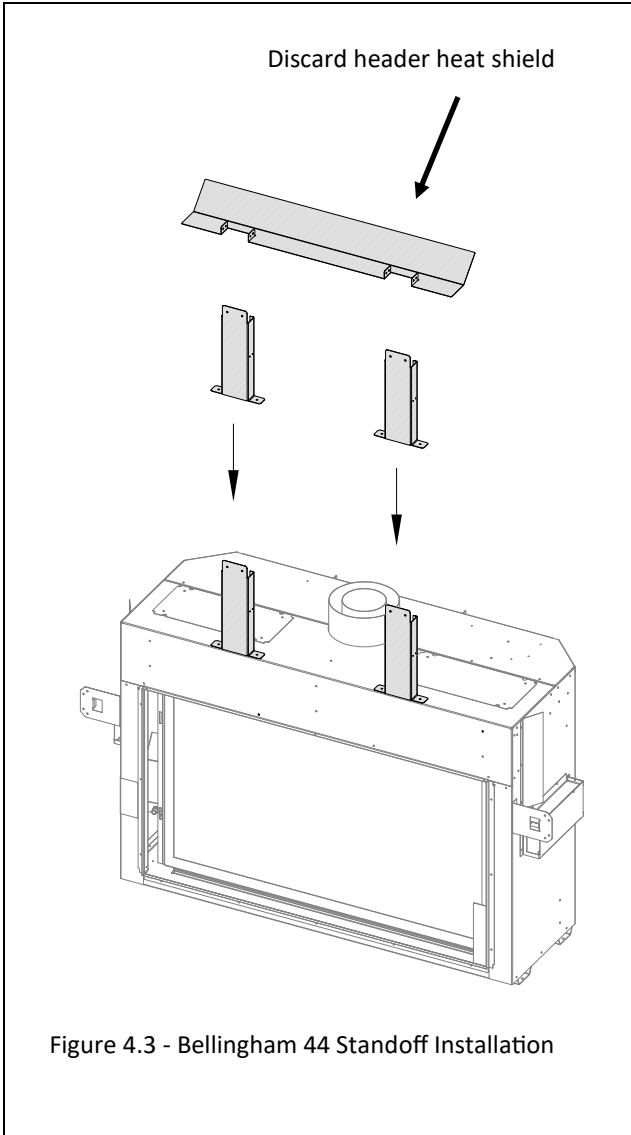


Figure 4.2 - Bellingham 44 Connection Baffle Removal



4.2 Nordik 48 DV

All contents in this kit are required and must be installed.

The Kozy Zone Kit requires that the convection plates, and insulation blanket to be removed to allow the hot airflow to convect upwards into the air ducts installed on the fire-place.

See additional requirements and installation information in the appliance manual.

1. Remove the (13) sheet metal screws that secure the top outer shell assembly. Pull this assembly straight up around the exhaust stack to remove it from the appliance. See the first image in Figure 4.6.
2. Remove the (4) cover plates where each cover plate is secured with (4) sheet metal screws. See the second image in Figure 4.6. Discard these cover plates.
3. Remove (3) sheet metal screws from the top of the assembly (see close up in Figure 4.7) and (2) sheet metal screws on the side of the assembly (one screw on each side shown in the second image of Figure 4.1). You are now able to separate the two sections of the top outer shell assembly. Remove and discard both the insulation and the bottom section of the top assembly.
4. Reinstall the top outer shell assembly on the appliance with the previously removed (13) sheet metal screws.
5. Align the take off collars to the corresponding holes on top of the appliance. Secure with screws previously removed. Install the take off collars to the corresponding opening(s) on the plenum(s). Use supplied screws.
6. Frame the rough opening of the fireplace and KZK plenum. Refer to all pages of this KZK-045 manual and the Nordik 48 DV manual. See previous pages of this manual for allowable plenum positions and rough frame opening sizes.

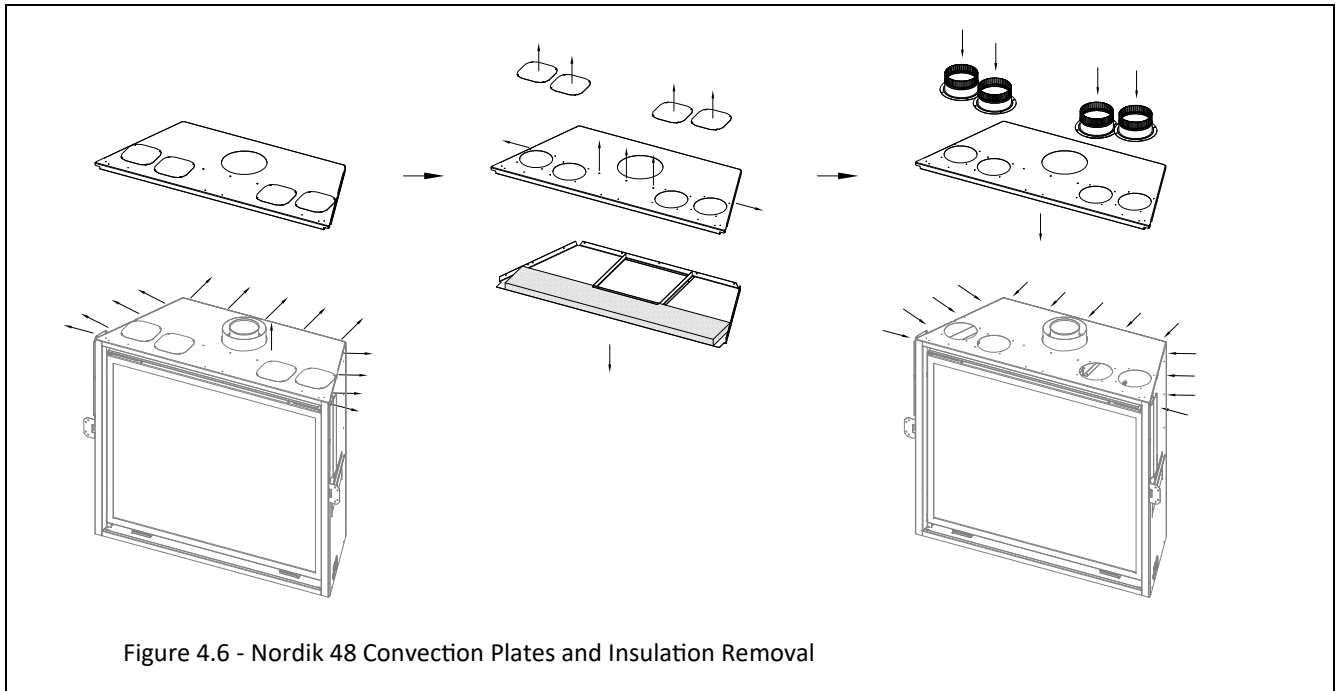


Figure 4.6 - Nordik 48 Convection Plates and Insulation Removal

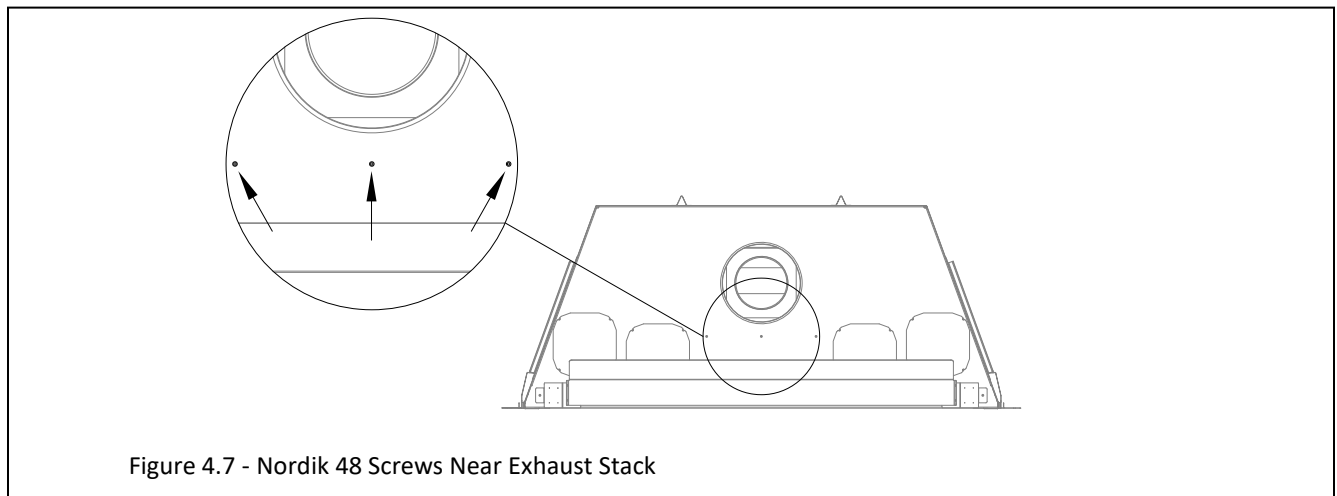


Figure 4.7 - Nordik 48 Screws Near Exhaust Stack

7. Install stand-off assembly on top of the appliance. See Figure 4.9. Remove and save (4) screws securing stand-off heat shields and stand-off brackets on top of the fireplace. Form each top stand-off bracket by bending at perforations, as shown. Align the holes in the formed top stand-offs with the holes in the fireplace top. Secure with the (4) screws previously removed along with (4) screws located on top of the fireplace.
8. Discard the (2) horizontal heat shields.
9. Install the plenum into the rough frame opening maintaining minimum clearances to combustibles as listed (see previous pages). Fix the plenum to the framing using nails or screw through the top mounting bracket.

NOTE: Mounting brackets are not intended to carry the weight of the plenum and pipes. Provide support to the underside of the plenum and ensure the plenum is level and its outlet is not distorted.

10. Use metal strapping (all-around, not supplied) as required to further secure the plenum to framing.
11. Attach the piping from all (4) plenum vent collars to all (4) fireplace vent collars. If you are mounting the plenum 10' or less above the fireplace, use (1) #KZK-410 kit or UL-181 Class 0 approved air duct. If you are mounting the plenum between 10' to 20' above the fireplace then you will need (2) #KZK-410 kits and #KZK-CPL or UL-181 Class 0 approved air duct.
12. An upward slope must be maintained in horizontal sections of pipes for proper convection. Support horizontal sections every 24 inches.
13. Install the plenum discharge trim provided with the kit using (2) screws.

If desired, the air grille may be painted. Use high temperature paint (250°F).

Continue with fireplace installation.

IMPORTANT: The NK48-PSF and NK48-FRSF (Figure 3.2) are ONLY approved for use when the Nordik 48 DV is installed with the #KZK-045. The other (4) safety barriers shown in Figure 3.1 are approved in all installation scenarios.

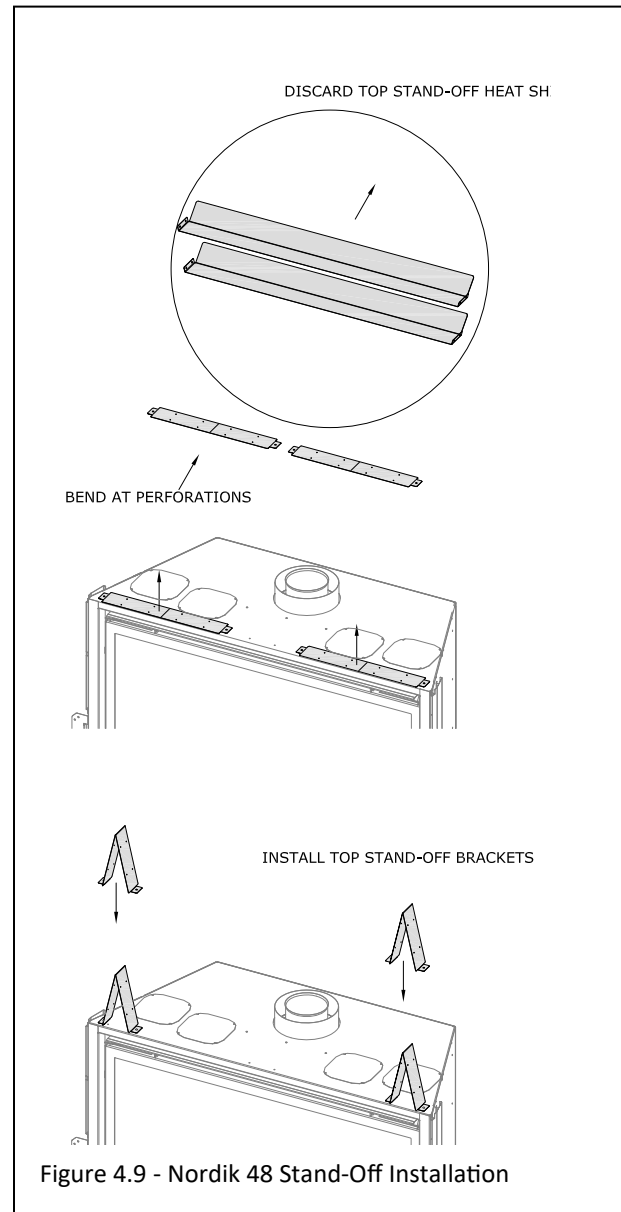


Figure 4.9 - Nordik 48 Stand-Off Installation

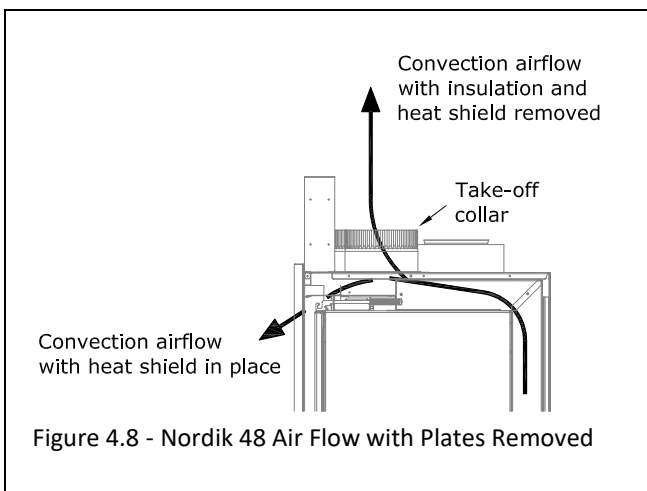


Figure 4.8 - Nordik 48 Air Flow with Plates Removed

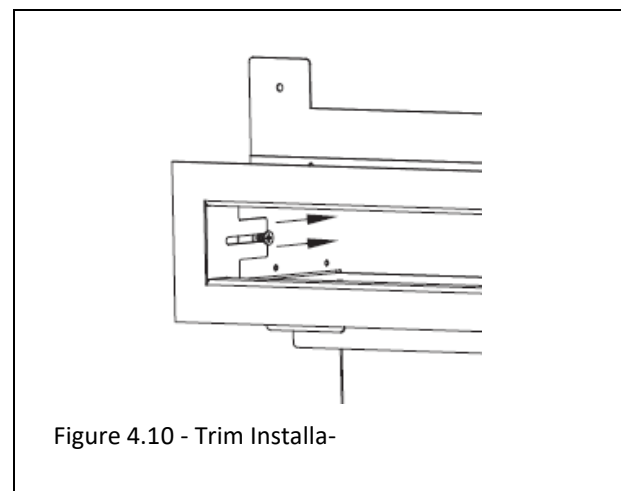


Figure 4.10 - Trim Installation