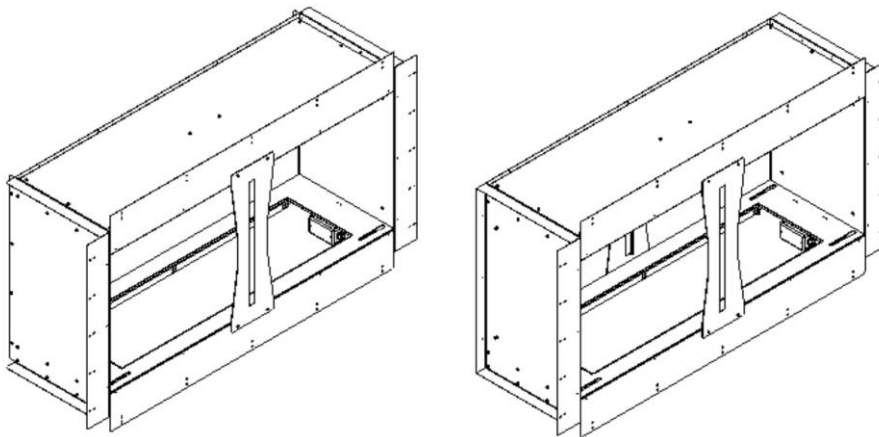


• INSTALLATION MANUAL

Please read these instructions completely before installing or operating the NetZero Firebox

NetZero Firebox Series

Models: AA-11-04776 – NZ36F Prime Fire SS/LC/RC/TS
AA-11-04760 – NZ40F SS/LC/RC/TS
AA-11-04761 – NZ40F ST/P
AA-11-04762 – NZ48F SS/LC/RC/TS
AA-11-04763 – NZ48F ST/P
AA-11-04764 – NZ60F SS/LC/RC/TS
AA-11-04765 – NZ60F ST/P
AA-11-04766 – NZ72F SS/LC/RC/TS
AA-11-04767 – NZ72F ST/P
AA-11-04777 – NZ90F SS/LC/RC/TS
AA-11-04778 – NZ90F ST/P
AA-11-04779 – NZ108F SS/LC/RC/TS
AA-11-04780 – NZ108F ST/P



Do not fill while
operating



Flammable



Keep away from
children

WARNING

If the information in these instructions is not followed exactly, a fire or explosion may result, causing property damage, personal injury, or loss of life.

Table of Contents

1 IMPORTANT INFORMATION.....	3
1.1 Certification.....	3
1.2 Safety Information	3
2 PLANNING FOR FIREBOX INSTALLATION.....	4
2.1 Clearances	4
2.2 Ventilation & Required Room Size	5
2.3 Burner Specifications	5
2.4 Fuel.....	5
2.5 TV and AC Installation	6
3 FIREBOX INSTALLATION	7
3.1 Preparing for Installation	7
3.2 Included Parts	7
3.2.1 Single-Sided, Right-Corner, Left-Corner, and Three-Sided Firebox	7
3.2.2 See-Through and Peninsula Firebox	7
3.3 Configuring the Firebox for Installation	8
3.3.1 Removing a Side from The Firebox	8
3.4 Framing	9
3.4.1 Single-Sided Installation.....	10
3.4.2 Left-Corner or Right-Corner Installation	11
3.4.3 Three-Sided Installation	12
3.4.4 See-Through Installation	13
3.4.5 Peninsula Installation	14
3.5 Firebox Installation.....	15
3.6 Installing Finishing Material	16
3.6.1 Definitions	16
3.6.2 Wall Finishing Options	16
3.6.3 Optional Finishing Guides	18
4 Electrical Connection	19
4.1 AC Power Connection	19
5 Burner Installation	20
5.1 Placing the Burner.....	20
5.2 Installing Technical Glass or Large Glass Barrier	20



1 IMPORTANT INFORMATION

1.1 Certification

This product has been certified by OMNI-Test Laboratories, Inc. to:

U.S. Certification Standard UL 1370

Canadian Certification Standard CAN/ULC-S674



ISSUED BY: OMNI-Test Laboratories, Inc.
13327 NE Airport Way
Portland, Oregon 97230

1.2 Safety Information

WARNING:

- 1) Risk of explosion
 - I. Never use any fuel other than the fuels specifically identified for use in the unvented decorative appliance. Never use gasoline.
 - II. Never refill unvented decorative appliance fuel reservoir when appliance is operating or still hot.
 - III. Never use unvented decorative appliance in areas where flammable vapors or gas may be present.
 - IV. Never store or transport the fuel in anything other than a metal or plastic container that is:
 - A) Acceptable for use with the specific fuel
 - B) Non-red in color
 - C) Is in the original container for the specific fuel
- 2) Never store fuel in the living space or same location as the appliance.
- 3) Due to high surface temperatures, keep children, clothing, and furniture away.
- 4) Risk of indoor air pollution – use unvented decorative appliance only in well-ventilated areas. People with breathing problems should consult a physician before using the unvented decorative appliance.
- 5) Do not use unvented decorative appliance to heat or boil water or use as a cooking appliance.
- 6) Do not use in a room with oxygen tanks in use.

WARNING: This appliance has not been tested with an unvented gas log set. To reduce risk of fire or injury, do not install an unvented gas log set into this appliance.

WARNING: This appliance has not been tested for use with doors. To reduce the risk of fire or injury, do not install doors.

- This product is a decorative burner creating real fire.
- Keep the fuel away while the burner is in operation.
- Wipe up fuel spills immediately with a dry cloth or paper towels.
- Do not make any alterations or put any objects or liquids inside the burner.
- Do not touch the filament or other hot elements.
- Do not transport the burner if fueled.
- Do not leave an operating burner unattended.
- Keep the provided USB cable for inspection purposes.
- Do not use the burner in humid or drafty spaces.
- Expansion and contraction of internal parts due to heating and cooling may create noise. This is normal.

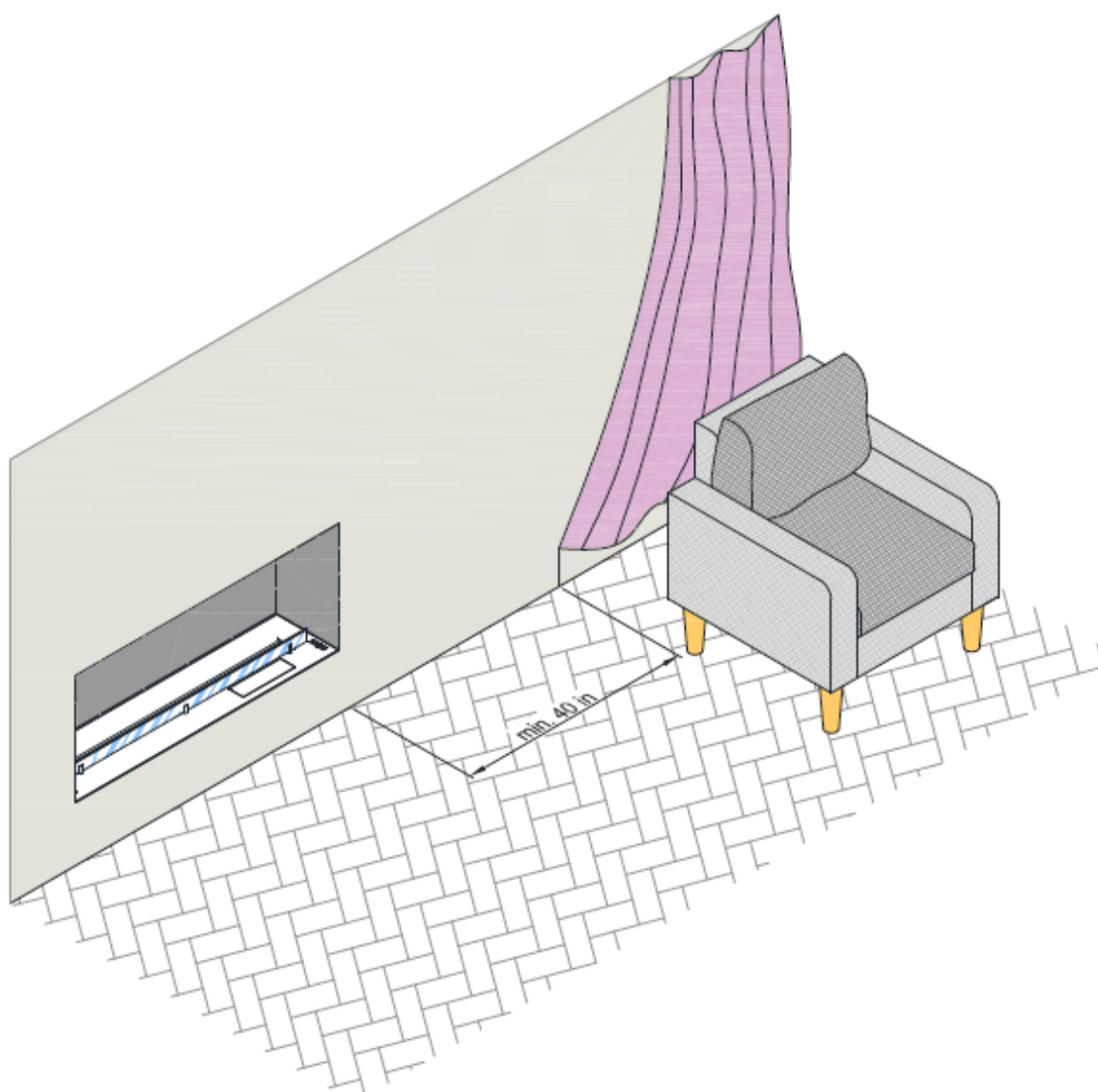
2 PLANNING FOR FIREBOX INSTALLATION

2.1 Clearances

The NetZero Firebox is designed as a zero-clearance enclosure for a NetZero Burner. The NetZero Firebox is designed to provide the required clearances to combustible framing.

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result, causing property damage, personal injury, or loss of life.

- Do not move or relocate the appliance while in use.
- For indoor use and in housing only. Minimum temperature of use is 50°F (10°C).
- Do not place any objects on the top of the burner except attached accessories.
- For service purposes, the surrounding area must allow for easy removal of the burner.
- Keep children, animals, and unauthorized persons at a safe distance at all times and never leave them unsupervised when the appliance is on or hot.
- A Class B fire extinguisher must be located in close proximity to the appliance in case of fire.
- No heat-sensitive or flammable objects can be placed within a 40-inch radius from, or directly above, the burner.



2.2 Ventilation & Required Room Size

Open fires consume oxygen. Use only in well-ventilated areas and those that are protected from the draft effects of cross ventilation. When selecting a location for the appliance it is important to consider the recommended minimum room sizes and clearances to walls and combustible materials (see Table A). An air exchange rate of 1/hour is recommended.

In a house of typical construction, that is, one that is not of unusually tight construction due to heavy insulation and tight seals against air infiltration, an adequate supply of air for combustion and ventilation is provided through infiltration. The unvented decorative appliance should be installed in a room where at least 200 ft.³ (5.7 m³) of air space is provided for each 1,000 BTU per hour of unvented decorative appliance rating (at maximum burner adjustment). See Table A for recommended minimum room size.

If the burner is installed in a room smaller than the recommended minimum room size, or in a home of unusually tight construction, the door(s) to adjacent room(s) should be kept open or a window to the outside should be opened at least 1 inch (25.4mm) to guard against potential buildup of indoor air pollution.

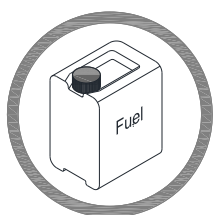
The decorative appliance may only be installed in a bathroom or bedroom if the room meets the recommended minimum room size.

2.3 Burner Specifications

Table A

Burner	Fuel Capacity	Heat Output MAX – MIN	Minimum Room Size	Approx. fuel consumption on MAX setting	Approx. fuel consumption on MIN setting	Approx. burn time on MAX setting – MIN setting
	Gallon - (Liter)	BTU/h	ft ³ – (m ³)	gal/h – (L/h)	gal/h – (L/h)	[h]
NZ36B	0.5 - (2)	15,000 – 7,000	3,000 – (85)	0.18 – (.69)	0.09 – (.32)	3 – 6.5
NZ40B	3.5 - (13.2)	24,000 – 10,000	4,800 – (136)	0.29 – (1.1)	0.12 – (.46)	12 – 29
NZ48B	4.5 - (17.0)	29,000 – 12,500	5,800 – (164)	0.35 – (1.3)	0.15 – (.58)	13 – 30
NZ60B	5.5 - (20.8)	38,000 – 17,000	7,600 – (215)	0.46 – (1.7)	0.21 – (.78)	12 – 27
NZ72B	7.1 - (26.9)	51,000 – 21,000	10,200 – (289)	0.62 – (2.3)	0.26 – (.97)	11.5 – 28
NZ90B	9.6 - (36.3)	72,000 – 26,500	14,400 – (408)	0.88 – (3.3)	0.32 – (1.2)	11 – 30
NZ108B	12.1 - (45.8)	94,000 – 32,200	18,800 – (532)	1.14 – (4.3)	0.39 – (1.5)	11 – 31.5

2.4 Fuel

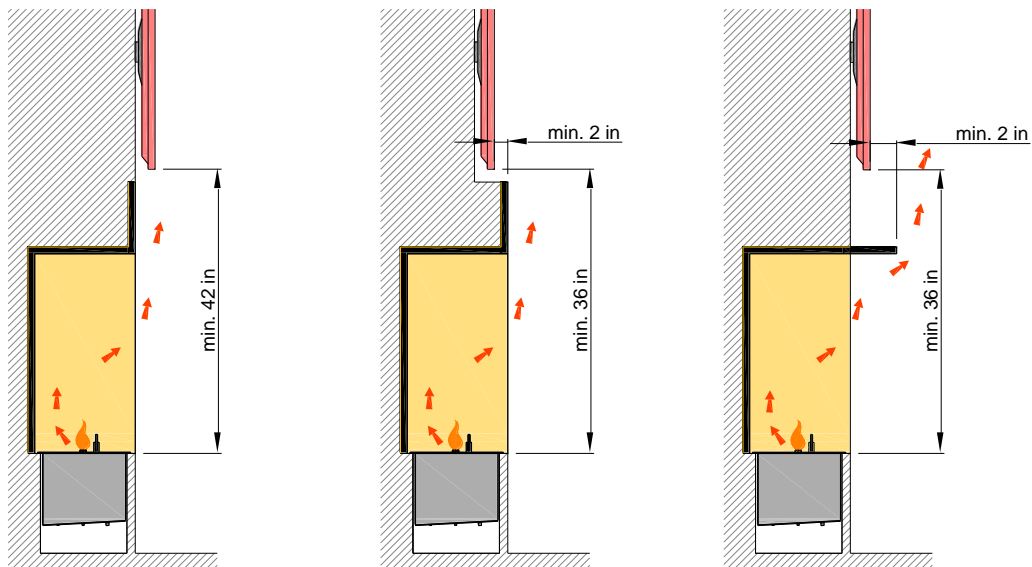


Do not use gel or thick fuels. Use only fuels consisting of 86-96.6% ethanol (not dehydrated) by volume. NetZero Fuel is recommended.

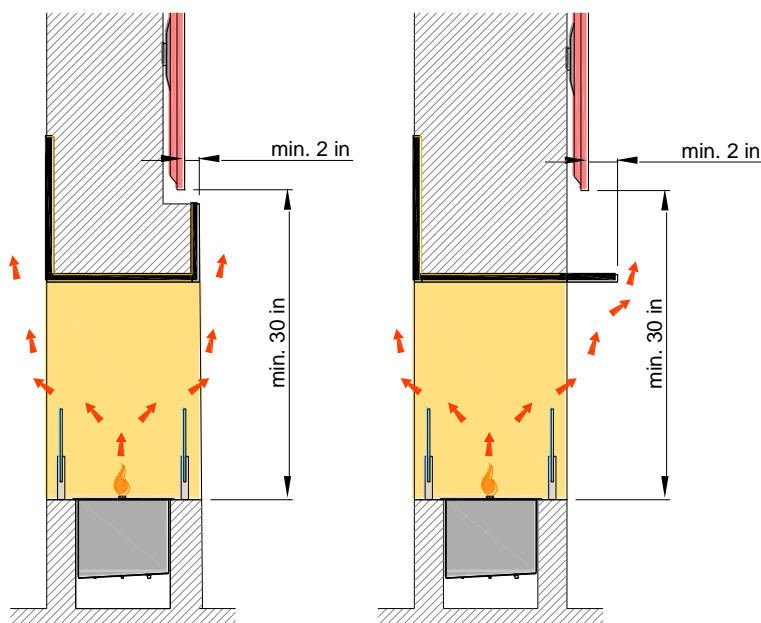
2.5 TV and AC Installation

A TV can be installed above the burner enclosure by following the methods shown below.

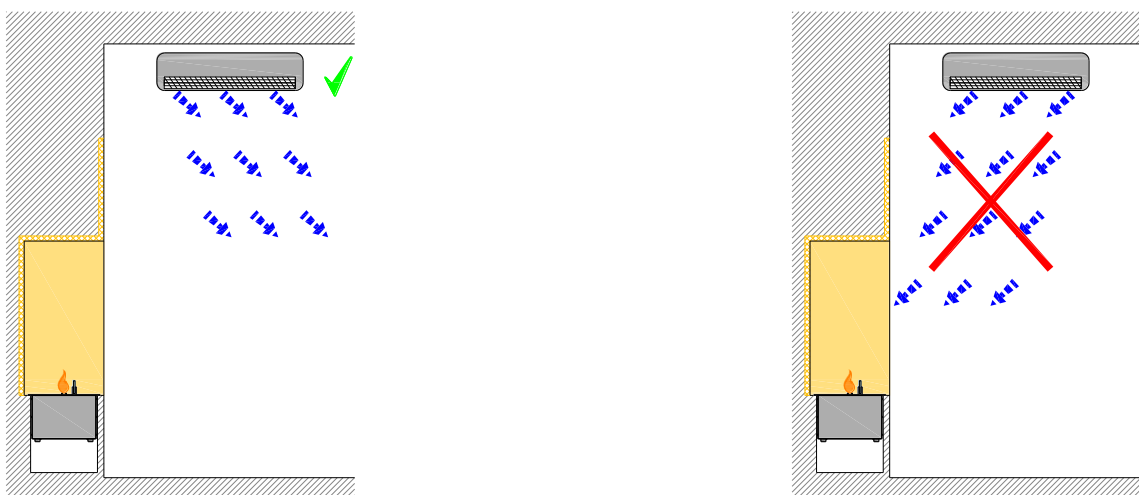
Single-Sided, Left-Corner, Right-Corner and Three-Sided Installations



See-Through and Peninsula Installations



If an air conditioning vent or fan is located near the burner, the vent or fan must be positioned to blow away from the burner.



3 FIREBOX INSTALLATION

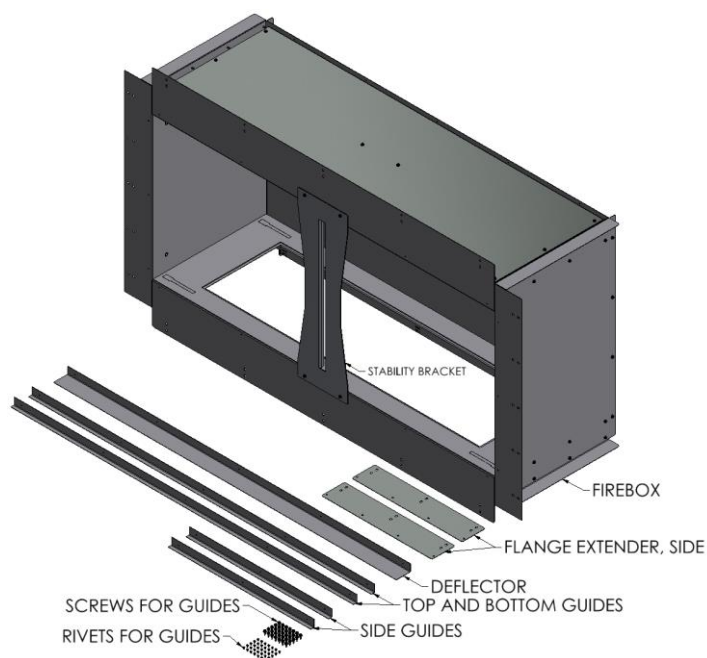
3.1 Preparing for Installation

- Prepare equipment: Power drill, screws, screwdriver, and level
- Carefully remove the firebox and components from the packaging
- Inspect and report any parts damaged in shipment
- Read all instructions before starting the installation. Follow these instructions carefully during the installation to ensure maximum safety and benefit.

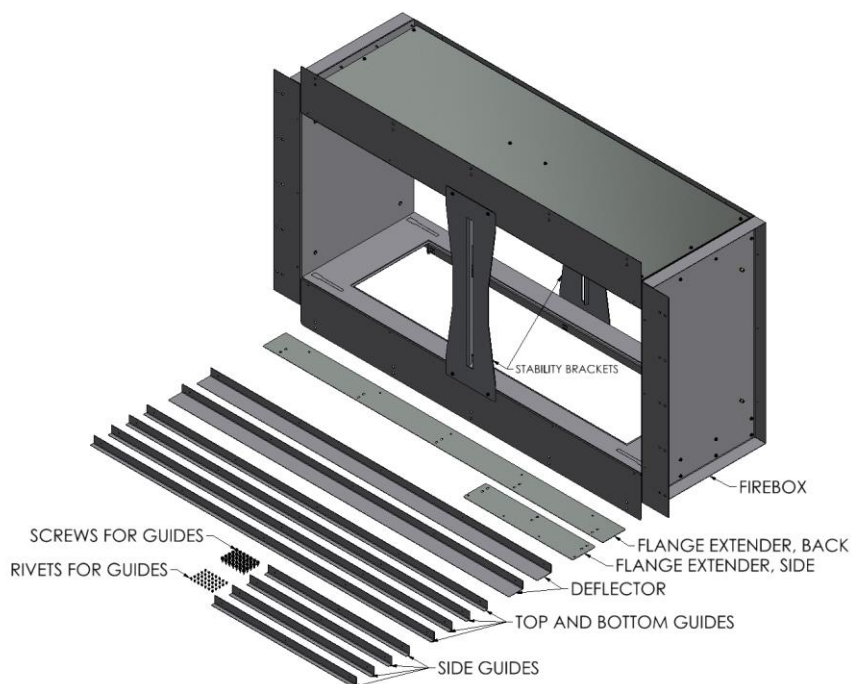
WARNING: Risk of fire or explosion! Damaged parts could impair safe operation. Do not install damaged, incomplete, or substitute components.

3.2 Included Parts

3.2.1 Single-Sided, Right-Corner, Left-Corner, and Three-Sided Firebox



3.2.2 See-Through and Peninsula Firebox

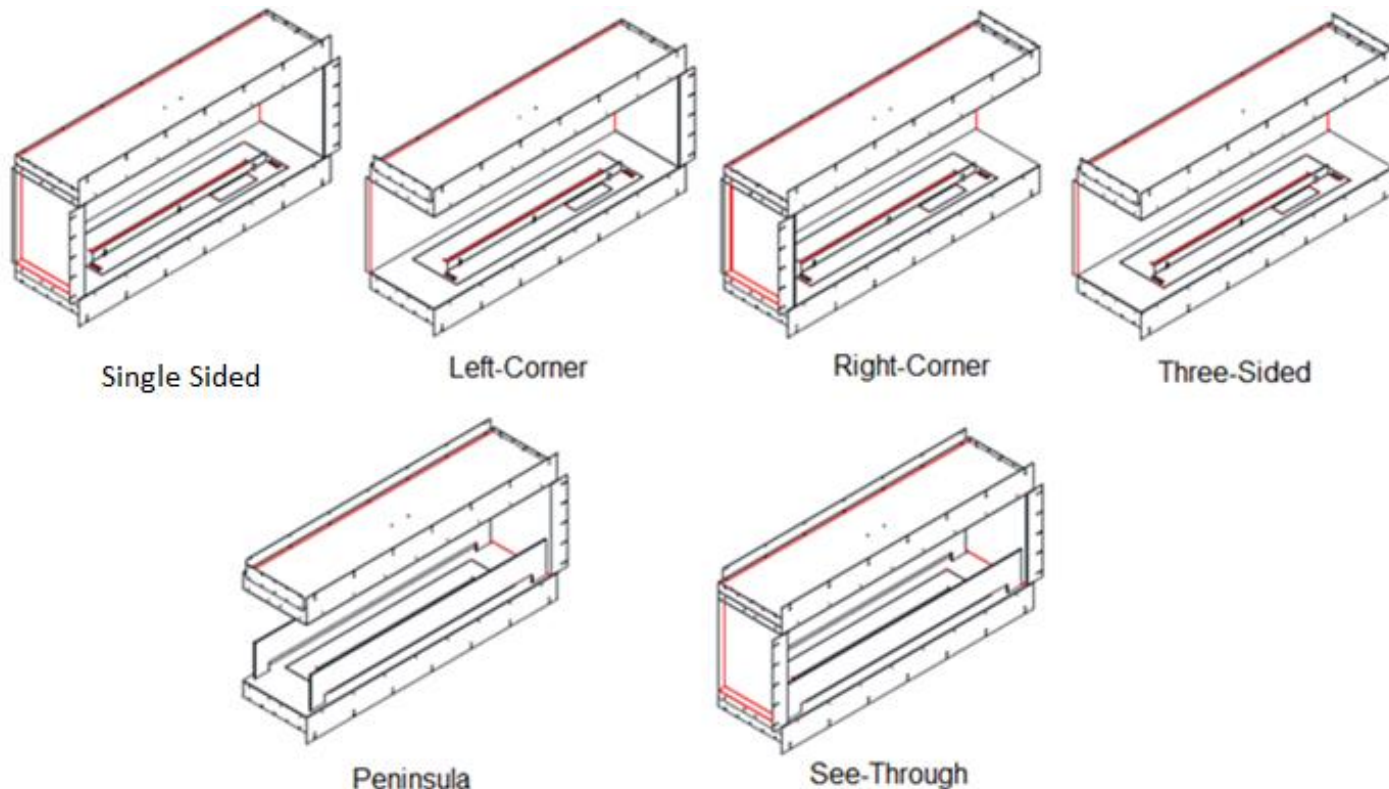


3.3 Configuring the Firebox for Installation

The NetZero Firebox can be installed in the following configurations. The firebox is ordered as a single-sided or see-through firebox.

The single-sided firebox can be configured into a left-corner, right-corner, or three-sided firebox by removing one or both sides.

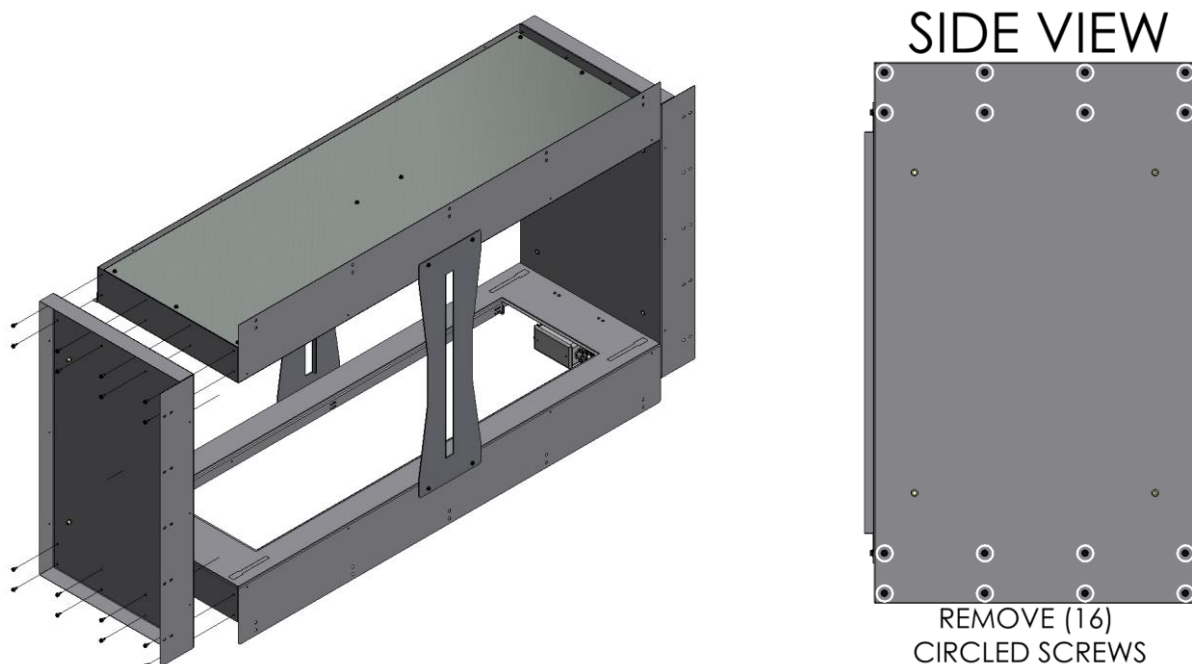
The see-through firebox can be configured into a peninsula firebox by removing one of the sides.



3.3.1 Removing a Side from The Firebox

To remove one or both sides from the firebox remove the (16) screws circled in white below from each side.

Note: If a side is removed, a side flange extension must be added to that side after the firebox is installed into the framing.



3.4 Framing

The NetZero Firebox is designed as a zero-clearance enclosure for a NetZero Burner. The NetZero Firebox is designed to provide the required clearances to combustibles framing.

WARNING: If the information in these instructions is not followed exactly, a fire or explosion may result, causing property damage, personal injury, or loss of life.

IMPORTANT: The framing above the firebox must be self-supporting. The firebox is not load-bearing.

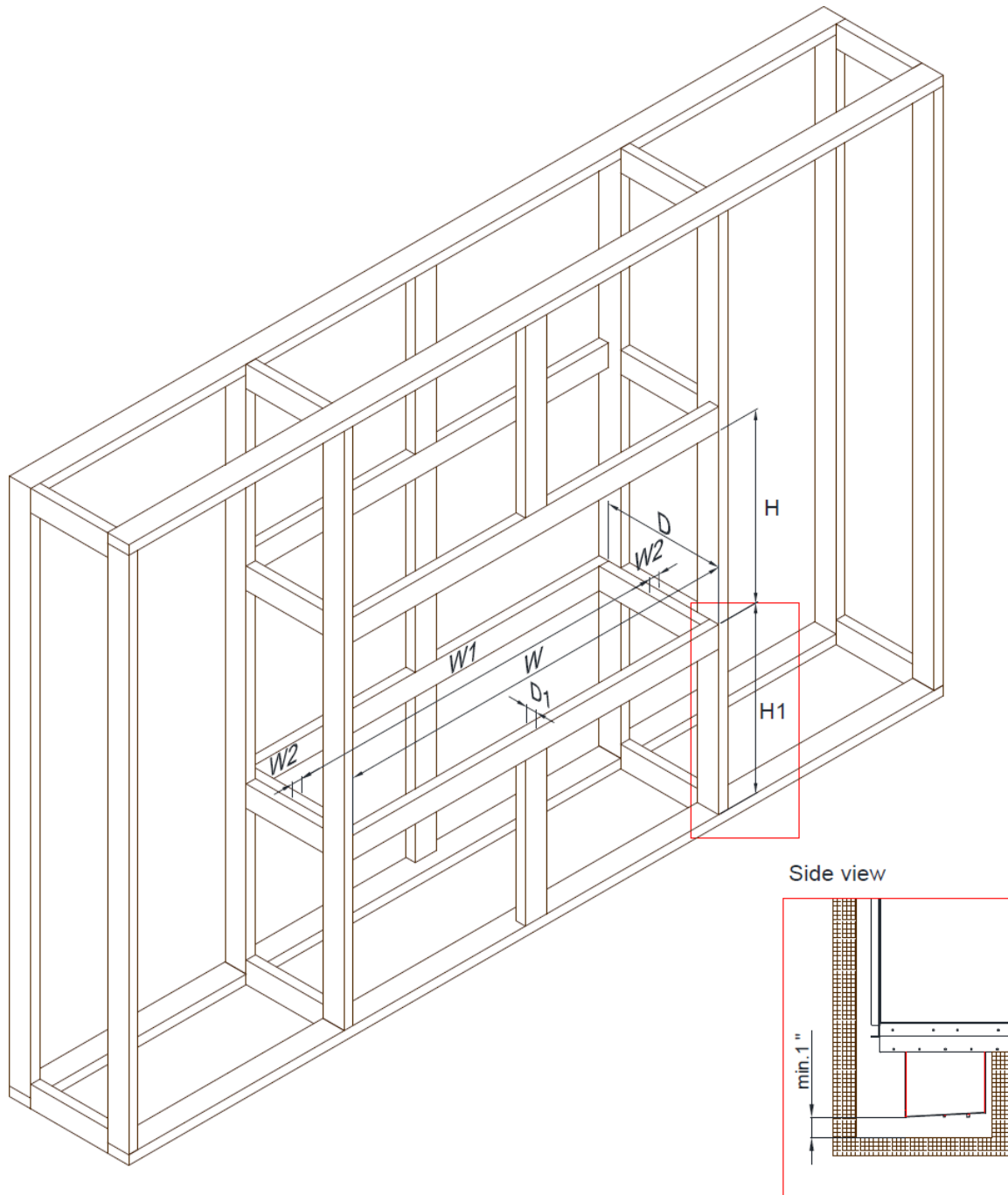
- The firebox must be installed on a level surface capable of supporting the firebox, burner, and full fuel capacity.
- The space within the framed wall must not be connected to any ventilation.

NOTE: Dimension W2 in the tables below must be wide enough to support the side flanges of the firebox.



3.4.1 Single-Sided Installation

Construct the main wall framework with the opening size shown in Table A.

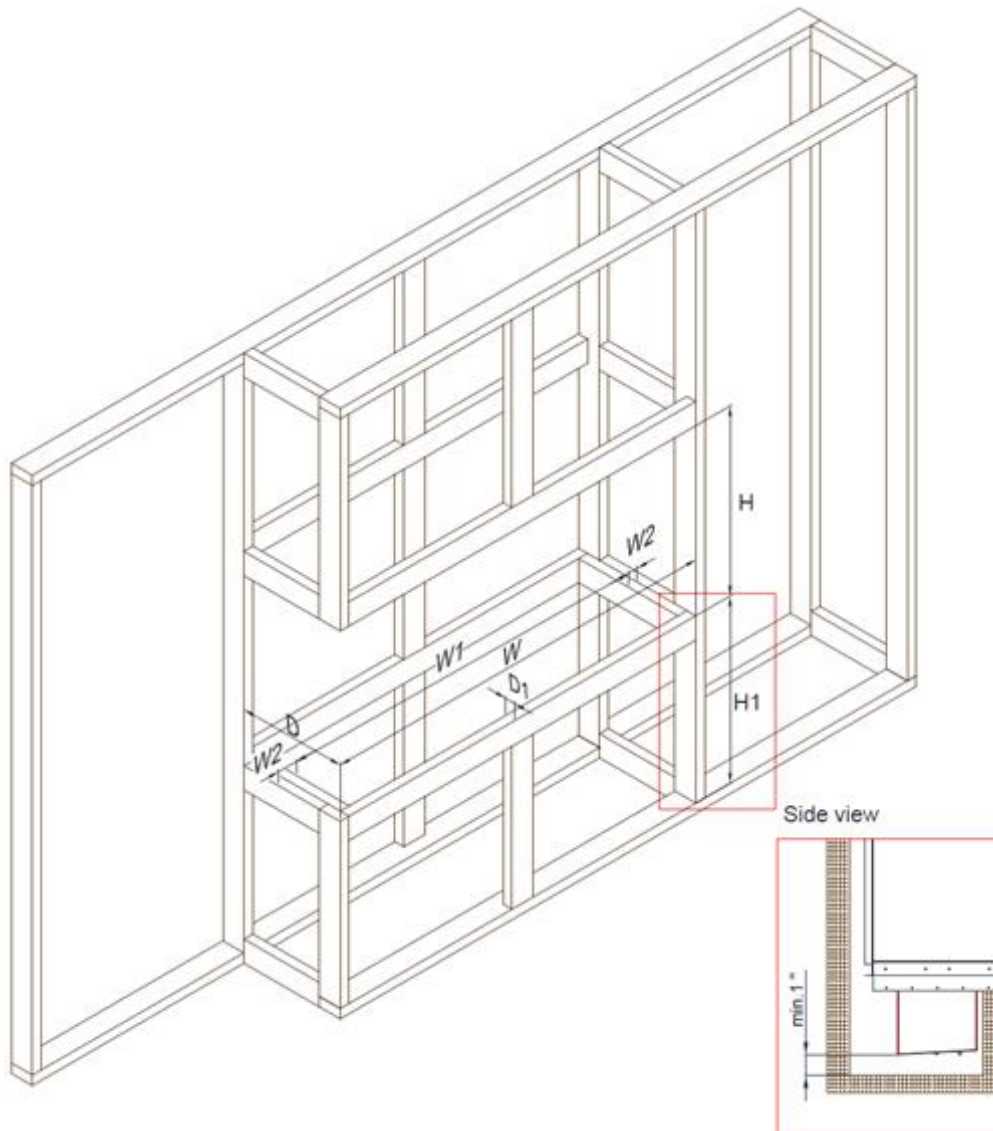


Firebox	W	W1	W2	D	D1 max	H	H1 min
	(in)	(in)	(in)	(in)	(in)	(in)	(in)
Single-Sided NZ36F	40	28-34	3-6	17 1/2	2	27 1/2	9
Single-Sided NZ40F	44	32-38					
Single-Sided NZ48F	52	40-46					
Single-Sided NZ60F	64	52-58					
Single-Sided NZ72F	76	64-70					
Single-Sided NZ90F	94	82-88					
Single-Sided NZ108F	112	100-106					

Table A

3.4.2 Left-Corner or Right-Corner Installation

Construct the main wall framework with the opening size shown in Table B.

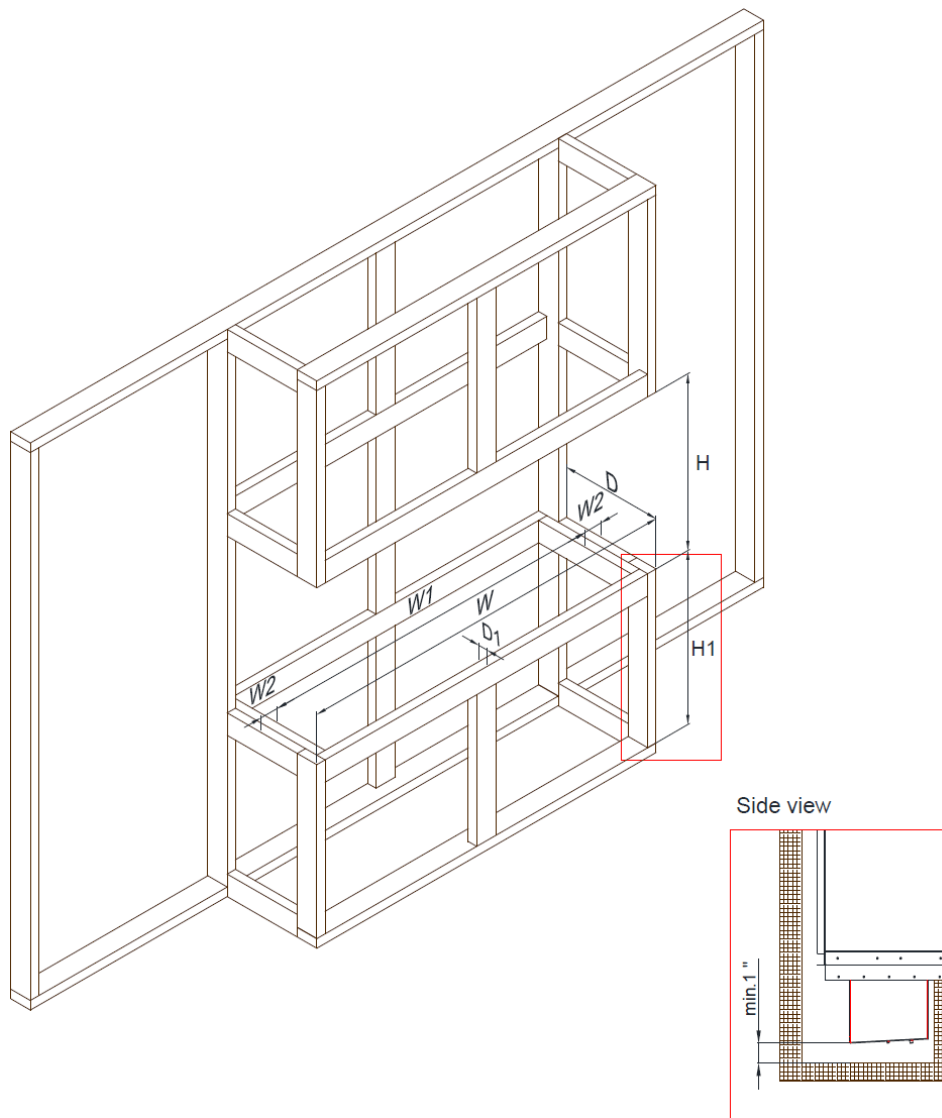


Firebox	W	W1	W2	D	D1 max	H	H1 min
	(in)	(in)	(in)	(in)	(in)	(in)	(in)
Left/Right-Corner NZ36F	38	26-32	3-6	17 1/2	2	27 1/2	9
Left/Right-Corner NZ40F	42	30-36					
Left/Right-Corner NZ48F	50	38-44					
Left/Right-Corner NZ60F	62	50-56					
Left/Right-Corner NZ72F	74	62-68					
Left/Right-Corner NZ90F	92	80-86					
Left/Right-Corner NZ108F	110	98-104					

Table B

3.4.3 Three-Sided Installation

Construct the main wall framework with the opening size shown in Table C.

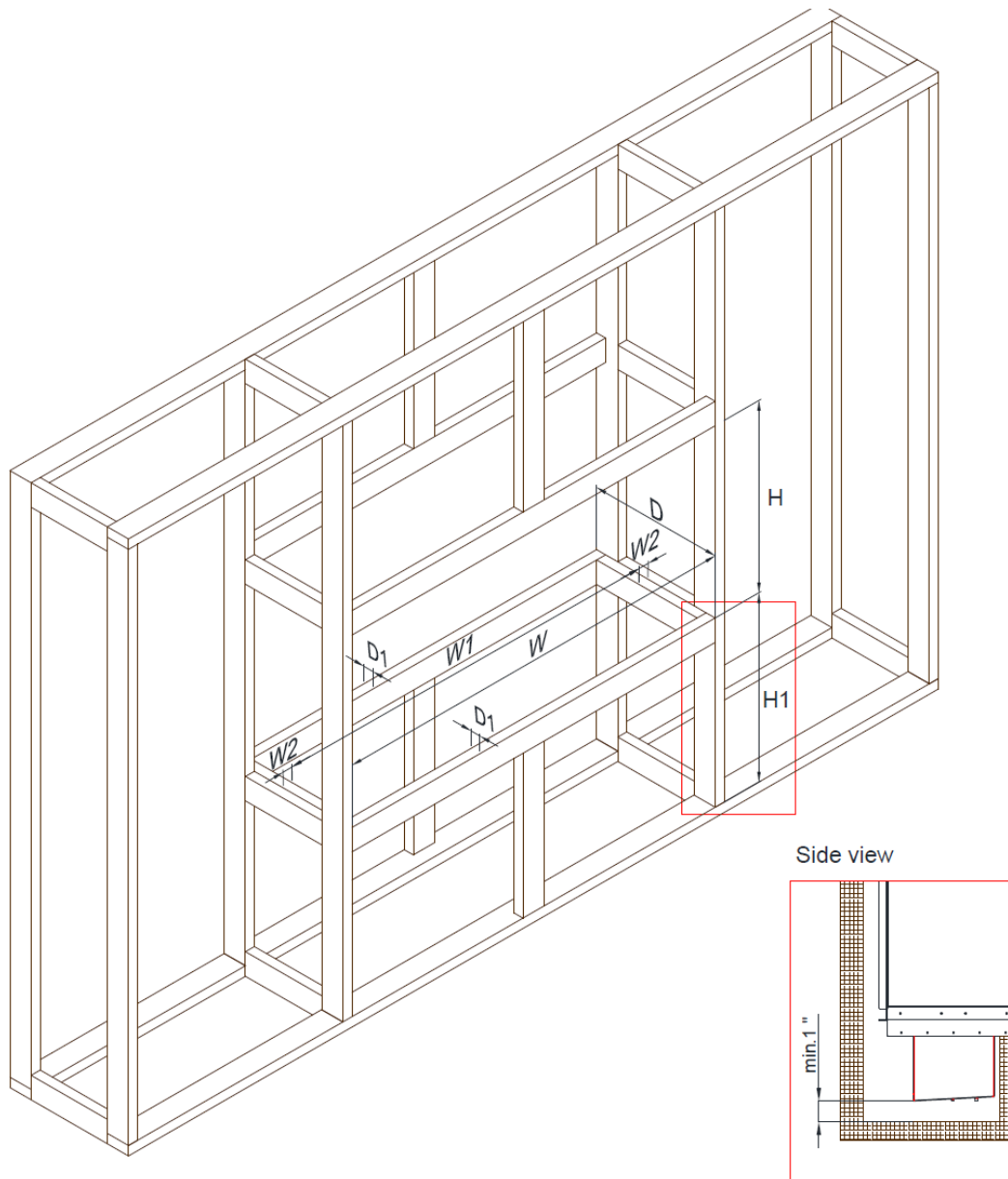


Firebox	W	W1 min	W2 max	D	D1 max	H	H1 min
	(in)	(in)	(in)	(in)	(in)	(in)	(in)
Three-Sided NZ36F	36	24	6	17 1/2	2	27 1/2	9
Three-Sided NZ40F	40	28					
Three-Sided NZ48F	48	36					
Three-Sided NZ60F	60	48					
Three-Sided NZ72F	72	60					
Three-Sided NZ90F	90	78					
Three-Sided NZ108F	108	96					

Table C

3.4.4 See-Through Installation

Construct the main wall framework with the opening size shown in Table D.

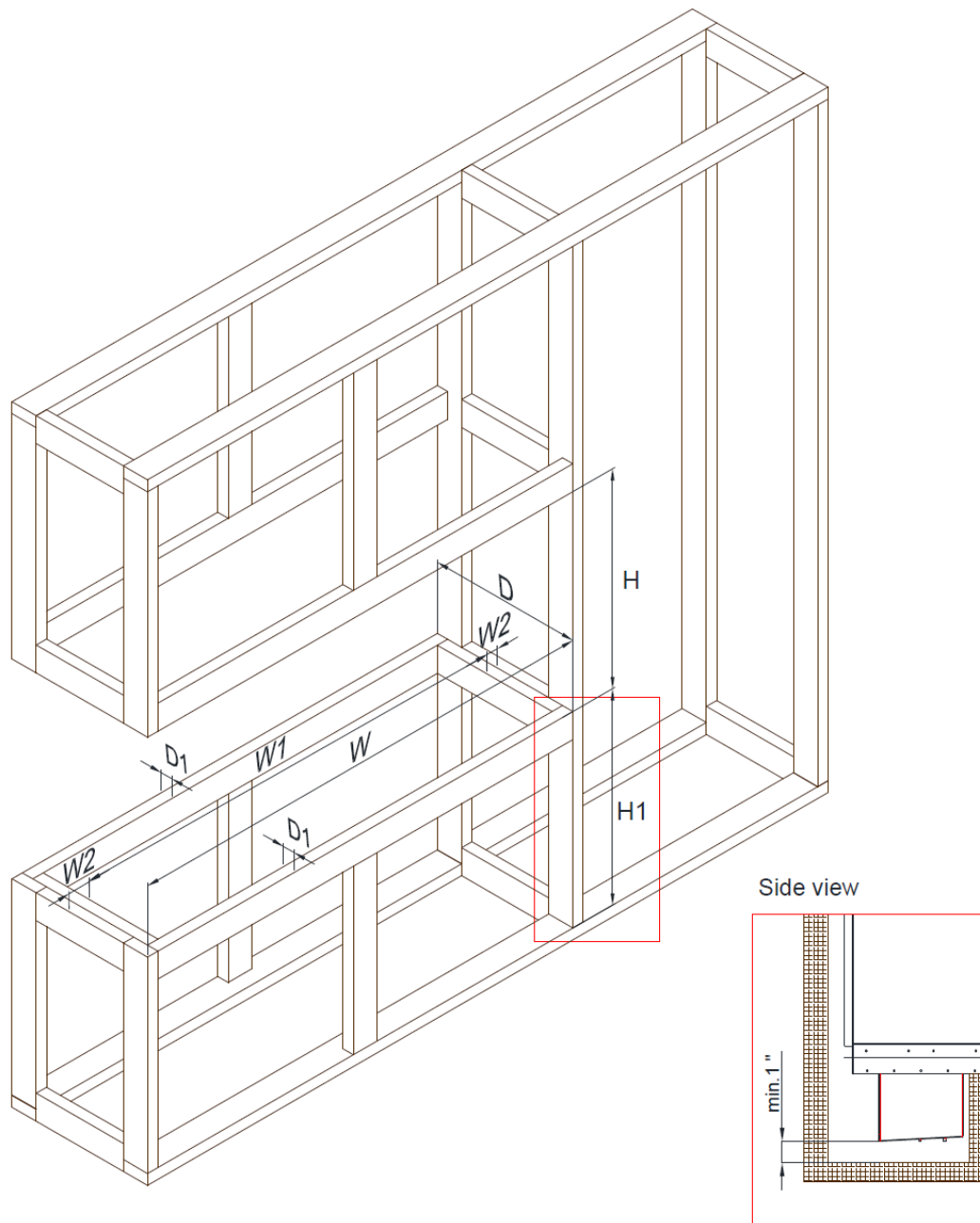


Firebox	W	W1	W2	D	D1 max	H	H1 min
	(in)	(in)	(in)	(in)	(in)	(in)	(in)
See-Through NZ40F	44	32-38	3-6	16	2	27 1/2	9
See-Through NZ48F	52	40-46					
See-Through NZ60F	64	52-58					
See-Through NZ72F	76	64-70					
See-Through NZ90F	94	82-88					
See-Through NZ108F	112	100-106					

Table D

3.4.5 Peninsula Installation

Construct the main wall framework with the opening size shown in Table E.



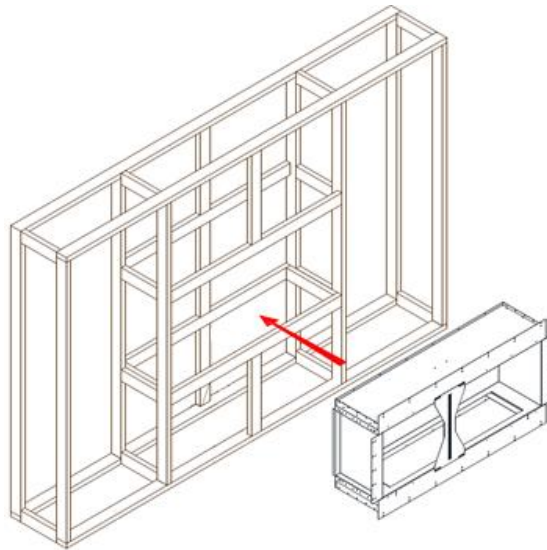
Firebox	W	W1	W2	D	D1 max	H	H1 min
	(in)	(in)	(in)	(in)	(in)	(in)	(in)
Peninsula NZ40F	42	30-36	3-6	16	2	27 1/2	9
Peninsula NZ48F	50	38-44					
Peninsula NZ60F	62	50-56					
Peninsula NZ72F	74	62-68					
Peninsula NZ90F	92	80-86					
Peninsula NZ108F	110	98-104					

Table E

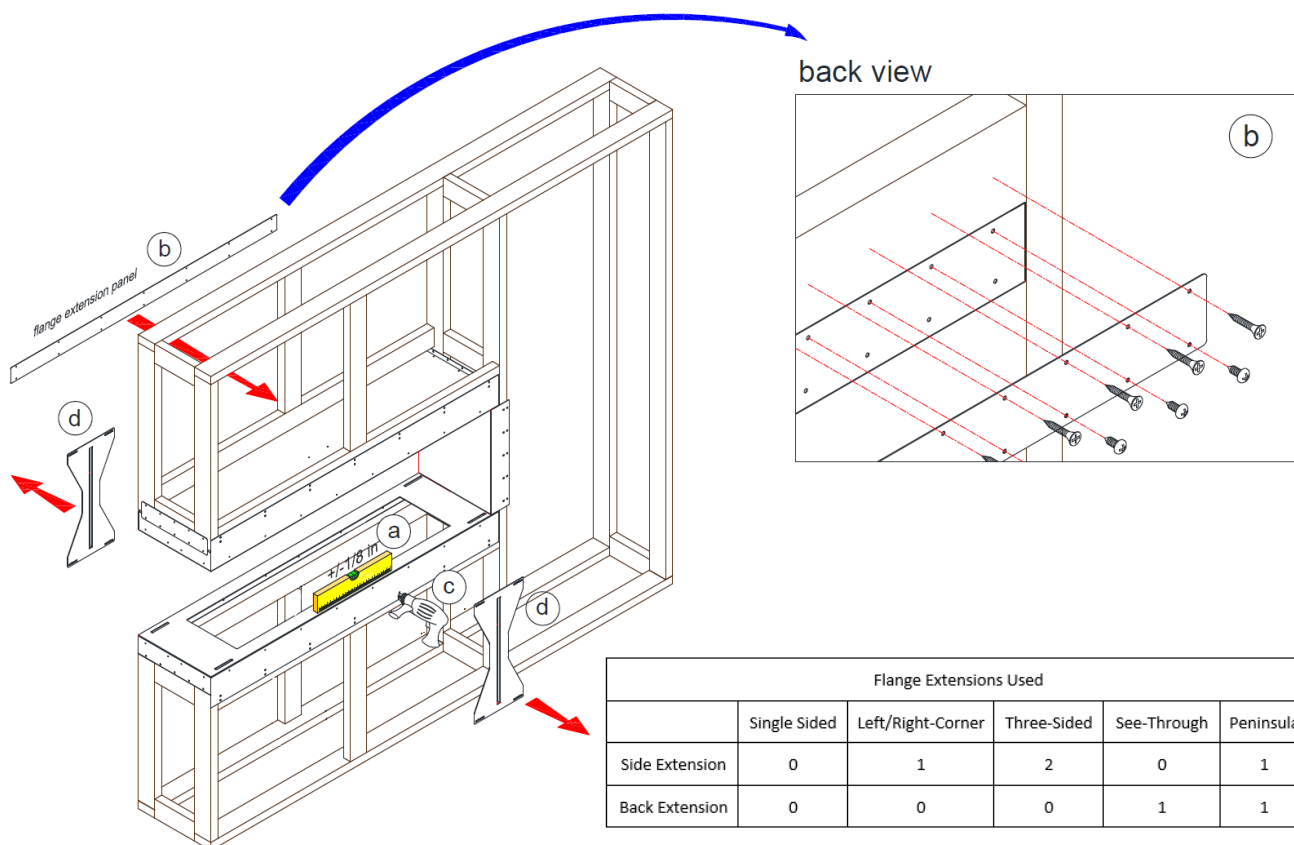
3.5 Firebox Installation

WARNING: Do not modify the firebox in any way during installation. Cutting of sheet metal parts of the firebox is prohibited.

NOTE: Framing may look different based on configuration, the same steps still apply.



- Slide the firebox into the framing cavity. The firebox is shipped with stability bracket(s) installed on the open side(s) to keep the firebox square while in transport and during installation. Keep the bracket(s) on while installing the firebox into the framing. Once the firebox is secured in the framing the stability brackets can be removed. Make sure the firebox is level before securing it in place.
- For Left-Corner, Right-Corner, Three-Sided, See-Through, and Peninsula configurations, once the firebox has been slid into the framing, attach the included flange extension panels to the firebox. The extensions will allow the ends of the firebox to be attached to the framing.



Flange Extensions Used					
	Single Sided	Left/Right-Corner	Three-Sided	See-Through	Peninsula
Side Extension	0	1	2	0	1
Back Extension	0	0	0	1	1

- Secure the firebox to the framework with screws using the existing mounting holes on the firebox flanges.
- Remove the stability brackets.

3.6 Installing Finishing Material

3.6.1 Definitions

Combustible materials - Materials made of, or surfaced with, wood, compressed paper, plant fibers, plastics, or other material that can ignite and burn, whether flame produced or not, or plastered or unplastered, shall be considered combustible materials.

Non-combustible materials - Materials which will not ignite and burn. Such materials are those consisting entirely of steel, iron, brick, tile, concrete, slate, glass, or plasters, or any combination thereof. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750C shall be considered non-combustible materials. HardieBacker® cement board is a preferred material for finishing the wall above the firebox where non-combustible material is required. Do not use WonderBoard® or Durock® brand cement board as these contain polymers that will smell and break down when heated.

3.6.2 Wall Finishing Options

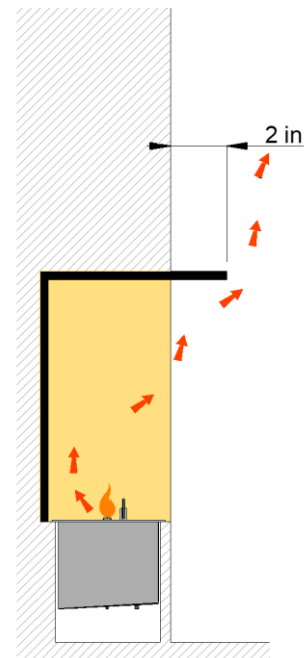
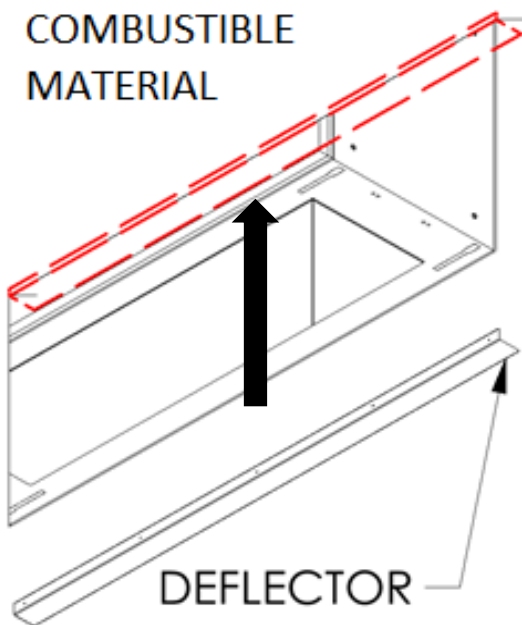
A 2-inch wide deflector is included with the firebox. If the deflector is installed at the top opening of the firebox as shown below combustible finishing material can be installed directly above the deflector. This would include common wall finishing materials like gypsum board (drywall). The finishing material used must not be thicker than 2 inches.

WARNING: Do not use wall finishing materials that are heat sensitive such as wallpaper or veneered wood around the firebox.

Option A

Standard solution

(combustible materials with deflector)



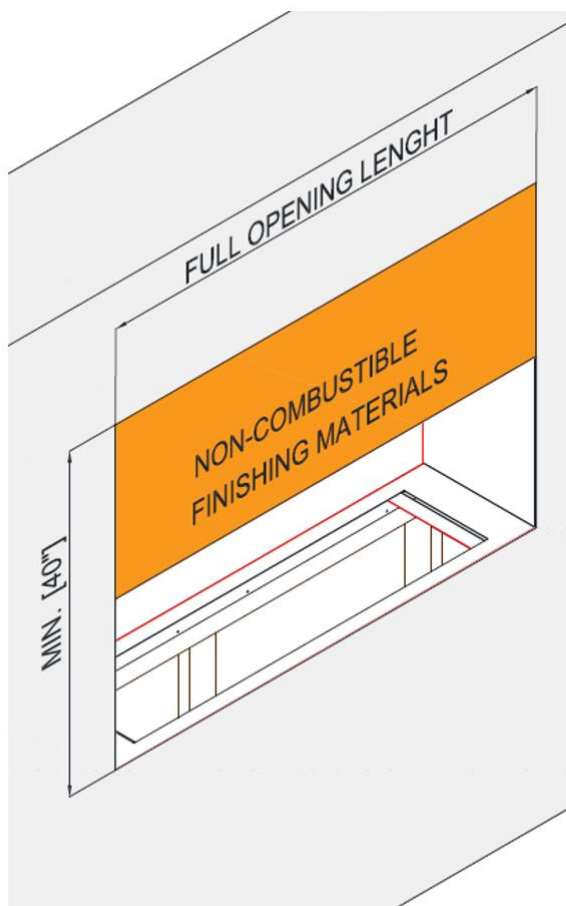
- Use the included rivets or screws to install the deflector to the top of the firebox.
- If desired, install the optional finishing guides along the sides and bottom of the firebox. See the section on optional finishing guides for additional information.
- Install wall finishing material around the opening of the firebox.

If the deflector is not used, non-combustible finishing material must be used above the firebox opening. The non-combustible finishing material must extend to a height of at least 40 inches above the floor of the firebox. HardieBacker® cement board is a preferred material for finishing the wall above the firebox where non-combustible material is required. Do not use WonderBoard® or Durock® brand cement board as these contain polymers that will smell and break down when heated.

Option B

Alternative solution

(non-combustible materials *without* deflector)

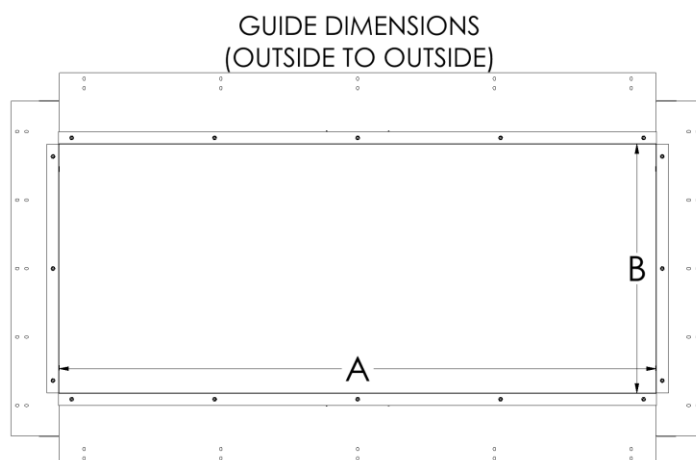
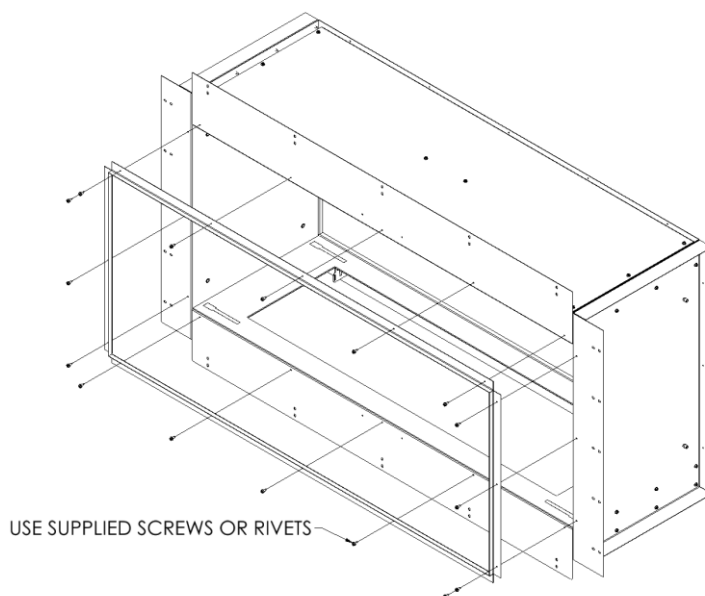


- a) If desired, install the optional finishing guides along the sides, top, and bottom of the firebox. See the section on optional finishing guides for additional information.
- b) Complete the construction by finishing the wall around the firebox. Ensure the finishing material above the opening are non-combustible materials.

3.6.3 Optional Finishing Guides

The firebox comes with optional finishing guides. These guides install to the front face of the firebox. They provide an edge that can be finished up to with finishing material and will then cover the cut edge of the finishing material. The guides protrude 1/2 inch from the face of the firebox. For the best results use 1/2 inch thick finishing material with the guides.

Install the guides using the included rivets or screws. If using the deflector at the top of the firebox the deflector will serve as the top guide. After installing the guides verify that the guides meet in the corners and that the opening matches the dimensions below.



Guide Dimensions		
Firebox	A	B
	(in)	(in)
NZ36F	36 1/16"	20 1/16"
NZ40F	40 1/16"	
NZ48F	48 1/16"	
NZ60F	60 1/16"	
NZ72F	72 1/16"	
NZ90F	90 1/16"	
NZ108F	108 1/16"	

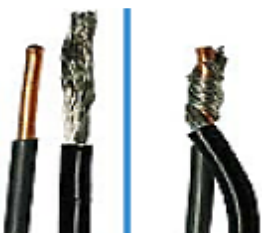
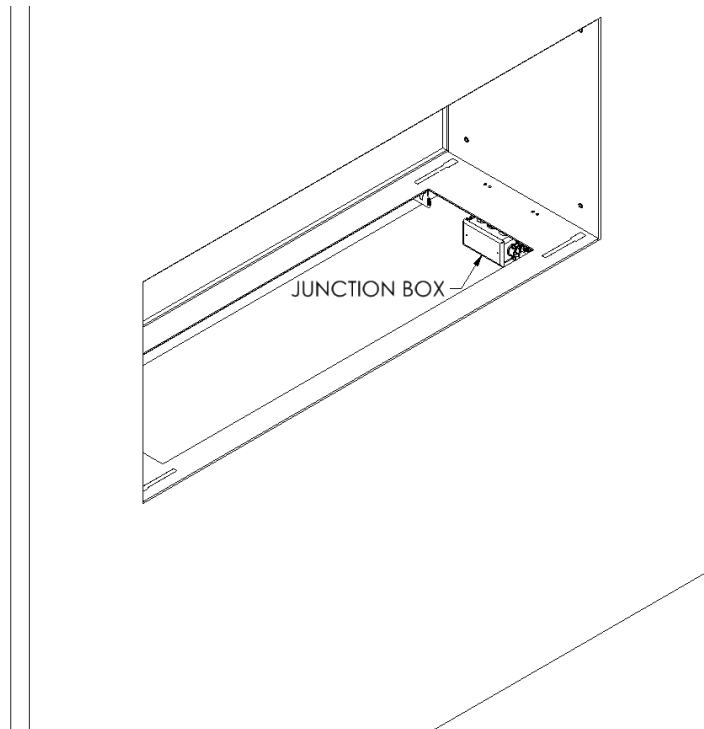
4 Electrical Connection

4.1 AC Power Connection

Burners NZ36B, NZ40B, NZ48B, NZ60B, and NZ72B must be connected to a dedicated 115V min. 15-amp circuit. Burners NZ90B and NZ108B must be connected to a dedicated 115V min. 20-amp circuit. A junction box for hardwiring the burner is included with the firebox.

Under the right side of the firebox, you will find an electrical junction box. To connect AC power to the burner, follow these steps:

1. Remove the junction box cover plate (secured with two screws), route the house power line to the junction box through one of the strain relief clamps.
2. Set the burner near the firebox so that the power cord on the burner can reach the junction box. Route the power cord through one of the strain relief clamps.
3. Strip the ends of the wires and connect the house power to the burner power cord using wire nuts.
 - a. Connect the Black wire on the power cord to the HOT wire from the house power.
 - b. Connect the White wire on the power cord to the NEUTRAL wire from the house power.
 - c. Connect the Green wire on the power cord to the GROUND wire from the house power.
4. Place connected wire ends within the junction box, then close and secure the junction box cover plate.

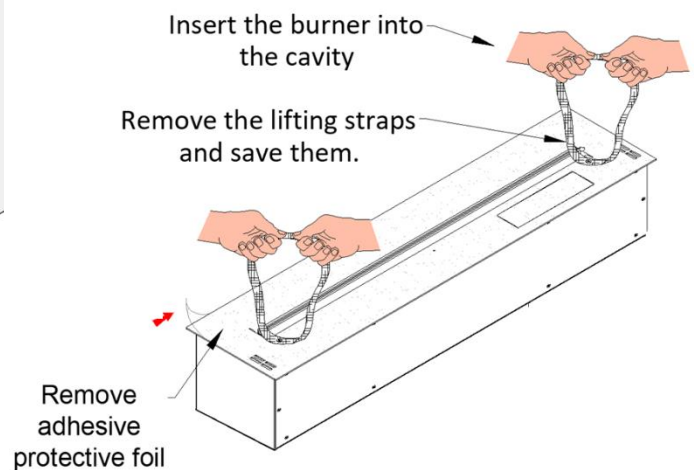
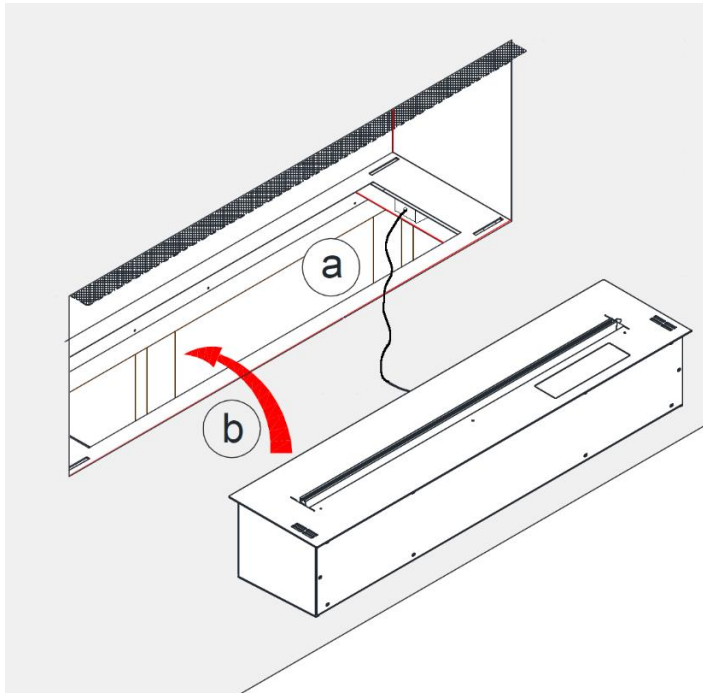


Note: When connecting two braided wires using wire nuts, strip both braided wire ends at least $\frac{1}{2}$ " and twist the two bare ends together before using wire nuts. When connecting a braided wire to a solid copper wire, strip the solid copper wire end $\frac{1}{2}$ " and the braided wire end $\frac{3}{4}$ ". Twist the braided wire around the solid copper wire end before applying the wire nut.

5 Burner Installation

5.1 Placing the Burner

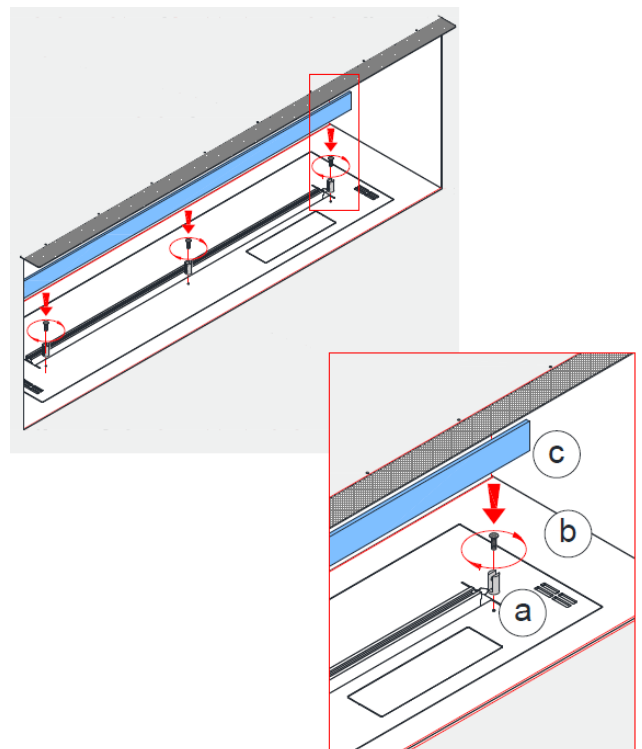
- a) Wire the burner to the junction box on the right side of the firebox as shown in the Electrical Connection section.
- b) Use the lifting straps on the burner to lift the burner and place it in the firebox. Once the burner is in place remove the lifting handles and protective film from the burner top. Save the lifting straps for future removal of the burner.



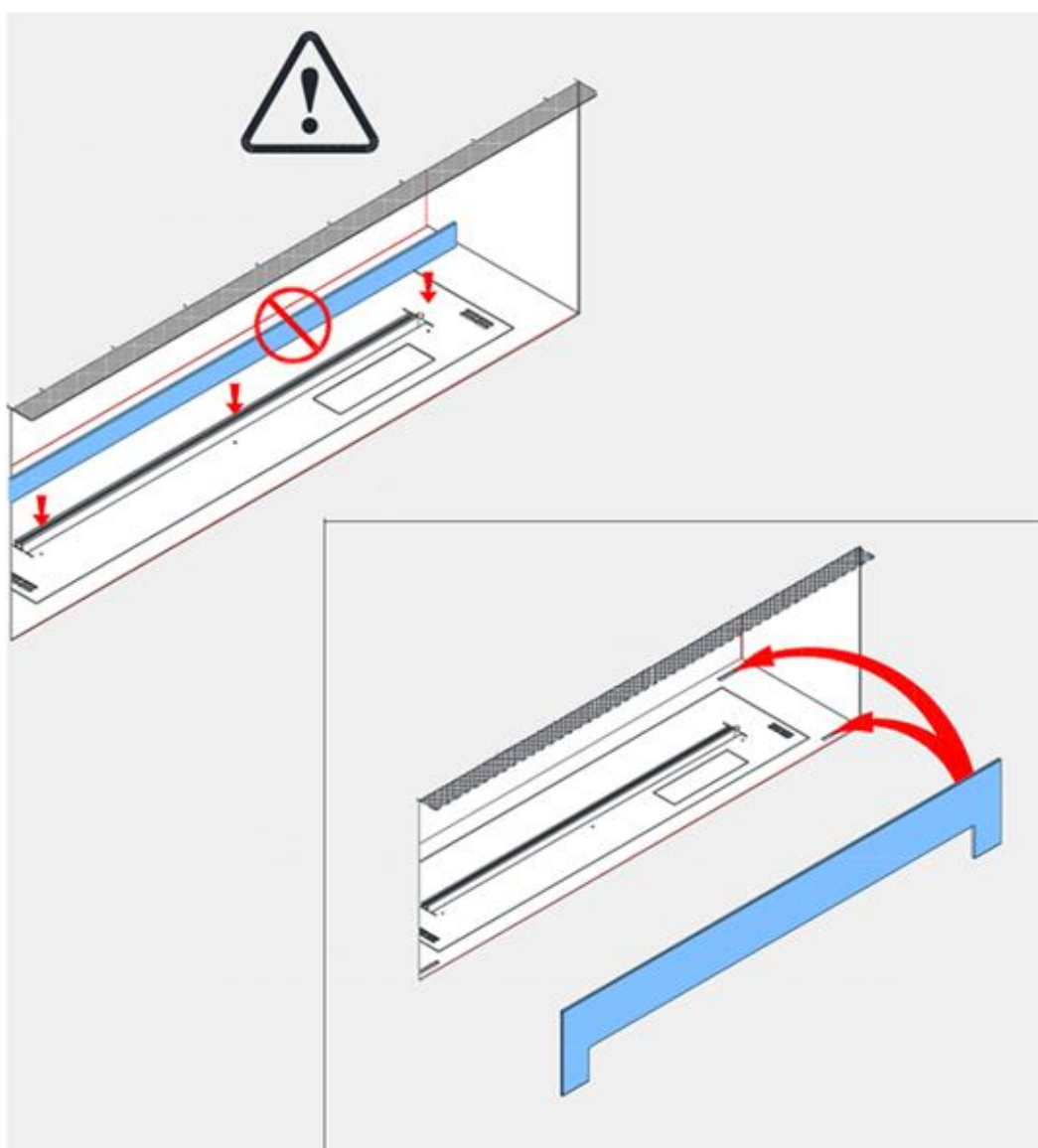
5.2 Installing Technical Glass or Large Glass Barrier

For Single-Sided, Left/Right-Corner, and Three-Sided installations the technical glass that comes with the burner must be installed on the burner.

- a) Align the small holder with the holes on the burner top
- b) Screw it into place using the included screws
- c) Place the Technical Glass into the holders



See-Through and Peninsula configurations require a Large Glass Barrier to be installed. The Large Glass Barrier will install into cutouts in the floor of the firebox. To install the Large Glass Barrier simply place the ends of the glass into the slots in the floor.



Large Glass Barrier	
MODEL	PART NUMBER
NZ40F	AA-11-05170
NZ48F	AA-11-05171
NZ60F	AA-11-05178
NZ72F	AA-11-05182
NZ90F	AA-11-05171 X2
NZ108F	AA-11-05178 X2