

SAFETY INFORMATION

 **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.

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 neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency, or the supplier.

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. This appliance is not convertible for use with other gases, unless a certified kit is used.

INSTALLER:

Leave this manual with the appliance.

CONSUMER:

Retain this manual for future reference.

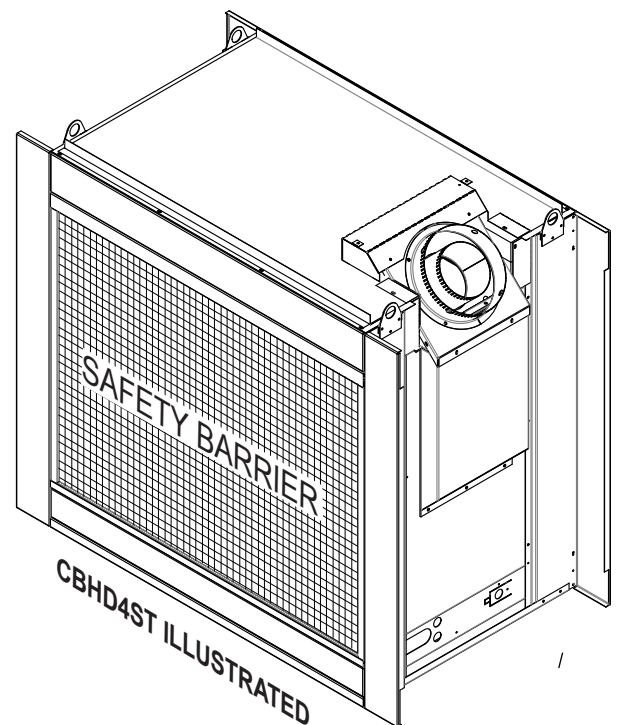
INSTALLATION AND OPERATION MANUAL

Builder Series

NATURAL GAS MODELS: CBHDPNA / CBHD4STNA / CBHD4PGNA / CDBH4STGNA

PROPANE GAS MODELS: CBHDPPA / CBHD4STPA / CBHD4PGPA / CDBH4STGPA

CBHD4ST ILLUSTRATED



FOR INDOOR USE ONLY

CERTIFIED TO THE CANADIAN AND AMERICAN NATIONAL STANDARDS:
 CSA 2.22 AND ANSI Z21.50 FOR VENTED DECORATIVE GAS APPLIANCES

APPLY SERIAL NUMBER LABEL FROM CARTON



! WARNING

- **This appliance is hot when operated and can cause severe burns if contacted.**
- **Any changes or alterations to this appliance or its controls can be dangerous and is prohibited.**
- Do not operate appliance before reading and understanding operating instructions. Failure to operate appliance according to operating instructions could cause fire or injury.
- Ensure the glass door is opened or removed when lighting the pilot for the first time and when the gas supply has run out.
- Risk of fire or asphyxiation, do not operate appliance with fixed glass removed and never obstruct the front opening of the appliance.
- Do not connect 110 volts to the control valve, with the exception of models; GSST8 and GT8.
- Risk of burns. The appliance should be turned off and cooled before servicing.
- Do not install damaged, incomplete or substitute components.
- Risk of cuts and abrasions. Wear protective gloves, protective footwear, and safety glasses during installation. Sheet metal edges may be sharp.
- Do not burn wood or other materials in this appliance.
- Provide adequate ventilation and combustion air. Provide adequate accessibility clearance for servicing and operating the appliance.
- High pressure will damage valve. Disconnect gas supply piping before pressure testing gas line at test pressures above 1/2 psig. Close the manual shut-off valve before pressure testing gas line at test pressures equal to or less than 1/2 psig (35mb).
- The appliance must not be operated at temperatures below freezing (32°F / 0°C). Allow the appliance to warm to above freezing prior to operation, with the exception of models; GSS36, GSS42; these appliances are suitable for 0°F / -18°C.
- **Children and adults should be alerted to 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 an appliance 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.**
- **Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.**
- Furniture or other objects must be kept a minimum of 4 feet (1.22m) away from the front of the appliance.
- Ensure you have incorporated adequate safety measures to protect infants/toddlers from touching hot surfaces.
- Even after the appliance is off, it will remain hot for an extended period of time.
- Check with your local hearth specialty dealer for safety screens and hearth guards to protect children from hot surfaces. These screens and guards must be fastened to the floor.
- **Any safety screen, guard or barrier removed for servicing the appliance, must be replaced prior to operating the appliance.**
- It is imperative that the control compartments, burners and circulating blower and its passageway in the appliance and venting system are kept clean. The appliance and its venting system should be inspected before use and at least annually by a qualified service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- If the appliance shuts off, do not re-light until you provide fresh air. If appliance keeps shutting off, have it serviced. Keep burner and control compartment clean.
- Under no circumstances should this appliance be modified.
- Do not allow wind or fans to blow directly into the appliance. Avoid any drafts that alter burner flame patterns.

DANGER

HOT GLASS WILL CAUSE BURNS.


DO NOT TOUCH GLASS UNTIL COOLED.



NEVER ALLOW CHILDREN TO TOUCH GLASS.

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

WARNING


- Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this appliance.
- This appliance must not be connected to a chimney flue pipe serving a separate solid fuel burning appliance.
- 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 which has been under water.
- Do not operate the appliance with the glass door removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person, if equipped.
- Do not strike or slam shut the appliance glass door, if equipped.
- **Only doors / optional fronts certified with the appliance are to be installed on the appliance.**
- Keep the packaging material out of reach of children and dispose of the material in a safe manner. As with all plastic bags, these are not toys and should be kept away from children and infants.
- Carbon or soot should not occur in a vent free appliance as it can distribute into the living area of your home. If you notice any signs of carbon or soot, immediately turn off your appliance and arrange to have it serviced by a qualified technician before operating it again.
- If equipped, the screen must be in place (closed) when the appliance is in operation.
- When equipped with pressure relief doors, they must be kept closed while the appliance is operating to prevent exhaust fumes containing carbon monoxide, from entering into the home. Temperatures of the exhaust escaping through these openings can also cause the surrounding combustible materials to overheat and catch fire.
- Carbon monoxide poisoning may lead to death; early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, the appliance may not be working properly. Get fresh air at once! Have appliance serviced. Some people; pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, those at high altitudes are more affected by carbon monoxide than others. Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.
- As with any combustion appliance, we recommend having your appliance regularly inspected and serviced as well as having a Carbon Monoxide Detector installed in the same area to defend you and your family against Carbon Monoxide (not applicable for outdoor appliances).
- Ensure clearances to combustibles are maintained when building a mantel or shelves above the appliance. Elevated temperatures on the wall or in the air above the appliance can cause melting, discolouration or damage to decorations, a TV or other electronic components.
- **For appliances equipped with a safety barrier; if the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.**
- **Installation and repair should be done by a qualified service person. It is imperative that control compartments, burners and circulating air passageways of the appliance be kept clean.**
- For outdoor products only: this appliance must not be installed indoors or within any structure that prevents or inhibits the exhaust gases from dissipating in the outside atmosphere.
- If applicable, the millivolt version of this appliance uses and requires a fast acting thermocouple. Replace only with a fast acting thermocouple supplied by Wolf Steel Ltd.

 WARNING: This product can expose you to chemicals including lead and lead compounds, which are known to the State of California to cause cancer, and chemicals including carbon monoxide, which are known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

 **WARNING** 

FIRE RISK HAZARD / DELAYED IGNITION

High supply pressure will damage the valve / controls.



Disconnect the appliance main gas valve/control from the supply piping when pressure testing that system at pressures in excess of 1/2 psi (3.5 kPa).

Isolate the appliance with its shut off valve during any pressure testing of the supply piping at pressures equal to or less than 1/2 psi (3.5 kPa).

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note:

Changes, other than editorial, are denoted by a vertical line in the margin.

Installer: please fill out the following information

Customer: _____
 Address: _____
 Date of Installation: _____
 Location of appliance: _____
 Installer: _____
 Dealer/Distributor contact number: _____
 Serial #: _____

Model: _____

- Natural Gas:** CBHD4PNA CBHD4STNA **Propane:** CBHD4PPA CBHD4STPA
 CBHD4PGNA CBHD4STGNA CBHD4PGPA CBHD4STGPA

Fuel Type	Natural Gas	Propane
Altitude (FT)	0-4,500	
Max. Input (BTU/hr)	30,000	
Max. Output (BTU/hr)	23,000	
Min. Inlet Gas Supply Pressure	4.5" w.c. (11mb)	11" w.c. (27mb)
Max. Inlet Gas Supply Pressure	13" w.c. (32mb)	13" w.c. (32mb)
Manifold Pressure (Under Flow Confic-tions)	3.5" w.c. (9mb)	10" w.c. (25mb)

Product Codes		
	Media type	Fuel type
CBHD4PNA	Logs	Natural Gas
CBHD4PPA	Logs	Propane
CBHD4STNA	Logs	Natural Gas
CBHD4STPA	Logs	Propane
CBHD4PGNA	Glass	Natural Gas
CBHD4PGPA	Glass	Propane
CBHD4STGNA	Glass	Natural Gas
CBHD4STGPA	Glass	Propane

1.0 general information

When the appliance is installed at elevations above 4,500ft (1372m), and in the absence of specific recommendations from the local authority having jurisdiction, the certified high altitude input rating shall be reduced at the rate of 4% for each additional 1,000ft (305m). Expansion / contraction noises during heating up and cooling down cycles are normal and are to be expected. Change in flame appearance from “HI” to “LO” is more evident in natural gas than in propane.

This appliance is approved for bathroom, bedroom and bed-sitting room installations and is certified for mobile home installation.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

note:

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with the appliance and must be installed.

The protective wrap on plated parts is best removed when the assembly is at room temperature but this can be improved if the assembly is warmed, using a hair dryer or similar heat source.

This appliance is a decorative product. It is not a source of heat and not intended to burn solid fuel.

No external electricity (110 volts or 240 volts) is required for the gas system operation. If utilizing one of Wolf Steel's trim or surround kits, follow the framing instructions and the finishing instructions for removal of the top extension.



Batteries must be disposed of according to the local laws and regulations. Some batteries may be recycled, and may be accepted for disposal at your local recycling center. Check with your municipality for recycling instructions.

WARNING

- Always light the pilot whether for the first time or if the gas supply has run out, with the glass door opened or removed.
- Provide adequate clearance for servicing and operating the appliance.
- Provide adequate ventilation.
- Never obstruct the front opening of the appliance.
- Objects placed in front of the appliance must be kept a minimum of 48" (121.9cm) from the front face of the appliance.
- Surfaces around and especially above the appliance can become hot. Avoid contact when appliance is operating.
- Fire risk. Explosion hazard.
- High pressure will damage valve. Disconnect gas supply piping before pressure testing gas line at test pressures above 1/2 PISG (35mb). Close the manual shut-off valve before pressure testing gas line at test pressures equal to or less than 1/2 PISG (35mb).
- Use only Wolf Steel approved optional accessories and replacement parts with this appliance using non-listed accessories (blowers, doors, louvres, trims, gas components, venting components, etc.) could result in a safety hazard and will void the warranty and certification.
- The appliance must not be operated at temperatures below freezing (32°F/0°C). Allow the appliance to warm to above freezing prior to operation.

THIS GAS APPLIANCE MUST BE INSTALLED AND SERVICED BY A QUALIFIED INSTALLER to conform with local codes. Installation practices vary from region to region and it is important to know the specifics that apply to your area, for example in the state of Massachusetts:

- This product must be installed by a licensed plumber or gas fitter when installed within the commonwealth of Massachusetts.
- The appliance damper must be removed or welded in the open position prior to installation of an appliance insert or gas log.
- The appliance off valve must be a "T" handle gas cock.
- The flexible connector must not be longer than 36 inches (0.9m).
- A carbon monoxide detector is required in all rooms containing gas fired appliances.
- The appliance is not approved for installation in a bedroom or bathroom unless the unit is a direct vent sealed combustion product.

The installation must conform with local codes or, in absence of local codes, the National Gas and Propane Installation Code CSA B149.1 in Canada, or the National Fuel Gas Code, ANSI Z223.1 / NFPA 54 in the United States. Suitable for mobile home installation if installed in accordance with the current standard CAN/CSA Z240MH Series, for gas equipped mobile homes, in Canada or ANSI Z223.1 and NFPA 54 in the United States.

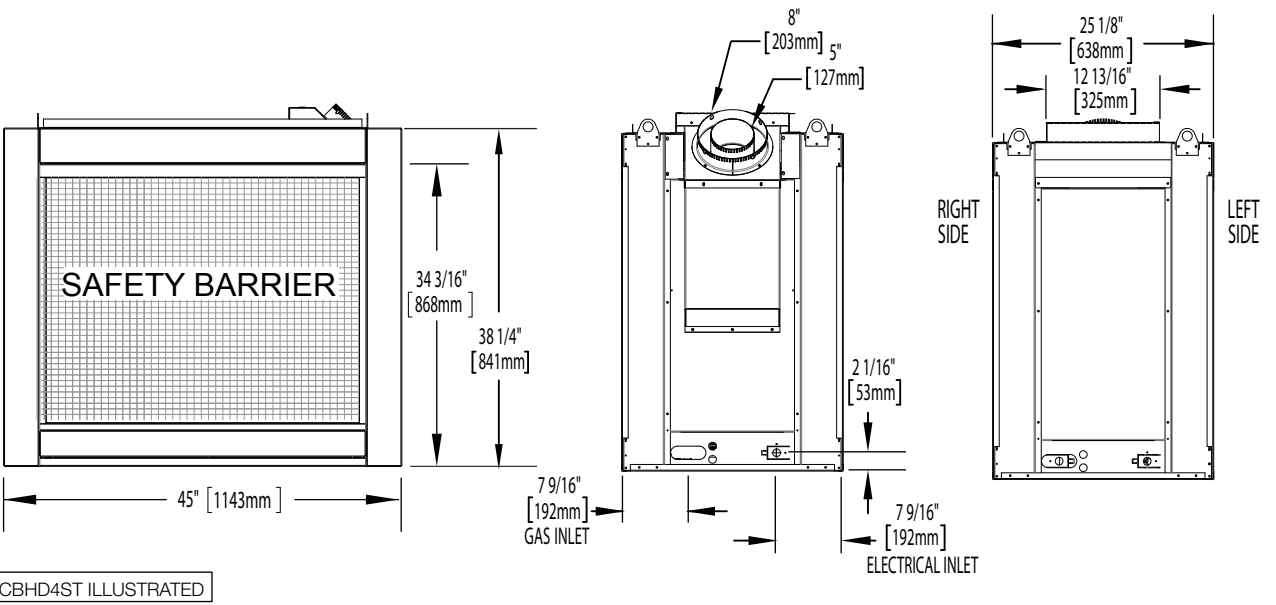
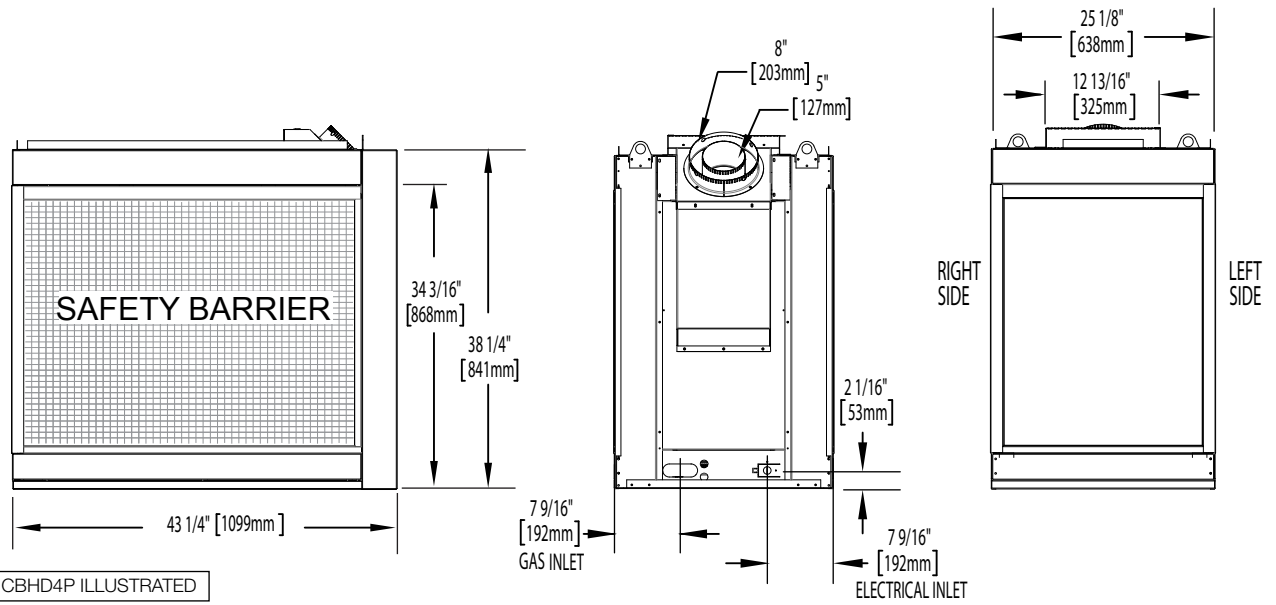
The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (35 mb).

The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (35 mb). When installed with a blower or fan, the junction box must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 Canadian Electrical Code in Canada or the ANSI / NFPA 70 National Electric Code in the United States. In the case where the blower is equipped with a power cord, it must be connected into a properly grounded receptacle. The grounding prong must not be removed from the cord plug.

The following does not apply to inserts; as long as the required clearance to combustibles is maintained, the most desirable and beneficial location for an appliance is in the center of a building, thereby allowing the most efficient use of the heat created. The location of windows, doors and, the traffic flow in the room where the appliance is to be located should be considered. If possible, you should choose a location where the vent will pass through the house without cutting a floor or roof joist. If the appliance is installed directly on carpeting, vinyl tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth, unless otherwise tested.



We suggest that our gas hearth products be installed and serviced by professionals who are certified in the U.S. by the National Fireplace Institute® (NFI) as NFI Gas Specialists



3.0 venting requirements

WARNING

- Risk of fire. Maintain specified air space clearances to vent pipe and appliance.
- The vent system must be supported every 3' (0.9m) for both vertical and horizontal runs. Use support ring assembly W010-0067 or equivalent non-combustible strapping to maintain the minimum clearance to combustibles for both vertical and horizontal runs. Spacers are attached to the inner pipe at predetermined intervals to maintain an even air gap to the outer pipe. This gap is required for safe operation. A spacer is required at the start, middle, and end of each elbow to ensure this gap is maintained. These spaces must not be removed.

This appliance uses a 5" (127mm) exhaust / 8" (203.2mm) air intake vent pipe system. Refer to the section applicable to your installation.

For safe and proper operation of the appliance follow the venting instructions exactly. Deviation from the minimum vertical vent length can create difficulty in burner start-up and/or carboning. Under extreme vent configurations, allow several minutes (5-15) for the flame to stabilize after ignition. Although not a requirement, it is recommended for vent lengths that pass through unheated spaces (attics, garages, crawl spaces) be insulated with the insulation wrapped in a protective sleeve to minimize condensation. Provide a means for visually checking the vent connection to the appliance after the appliance is installed. Use a firestop, vent pipe shield or attic insulation shield when penetrating interior walls, floor or ceiling.

The vent terminal may be painted with a high temperature paint to match exterior colours. Use an outdoor paint suitable for 400°F (200°C). Application and performance of paint is the consumer's responsibility. Spot testing is recommended.

note:

If for any reason the vent air intake system is disassembled; reinstall per the instructions provided for the initial installation.

This appliance must be installed with a continuous connection of exhaust and air intake vent pipes. Utilizing alternate constructions, such as a chimney as part of the vent system, is not permitted.

You may reduce the appliance from 5/8" venting to 4/7" venting for horizontal and vertical rise applications. Reducing must be done right off of the appliance and a new firestop spacer will be required.

Use only Wolf Steel, Metal-Fab, BDM, Simpson Dura-Vent, or Selkirk Direct Temp venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, clearances from vent pipes to combustibles and air terminal locations as set out in this manual apply to all vent systems and must be adhered to. For Metal-Fab, BDM, Simpson Dura-Vent, or Selkirk Direct Temp, follow the installation procedure provided with the venting components or on the website for your venting supplier.

A starter adaptor must be used with the following vent systems and may be purchased through Wolf Steel or from the corresponding supplier listed below:

Venting System	Manufacturer	Starter Adapter Part Number		Supplier	Website
SureSeal	Metal-Fab	5DNA	4DNA	Wolf Steel	www.mtlfab.com
Direct Vent Pro	Simpson DuraVent	W175-0170	W175-0053	Wolf Steel	www.duravent.com
Pro-Form	BDM	N/A	DVR6-STA7	BDM	www.dalsinmfg.com
Direct Temp	Selkirk	5DT-AAN	4DT-AAN	Selkirk	www.selkirkcorp.com
Ventis	Olympia Chimney and Venting	VDV-NA05-58F		Olympia Chimney and Venting	www.olympiachimney.com

Connections made by means of an adaptor at the appliance, as well as the connection at the vent terminal must be sealed. RTV sealant may be used on both the inner exhaust and outer intake vent pipe joints of all other approved vent systems, except for the exhaust vent pipe connection to the appliance flue collar which must be sealed using the black high temperature sealant Mill Pac.

For all vent systems is strongly recommend for all installations but required when power venting the appliance, that the outer air intake joints are sealed using either high temperature silicone (RTV) or a suitable aluminum tape that covers each joint in the vent system entirely around its circumference. This will ensure the best performance in every application and avoids performance or condensation concerns that may occur in "tightly" constructed homes, particularly those in cold climates.

FOR 5"/8" VENTING:

When using Wolf Steel venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: wall terminal kit **GD422R-2** or **ST58U-1**, or 1/12 to 7/12 pitch roof terminal kit **GD410**, 8/12 to 12/12 roof terminal kit **GD411**, flat roof terminal kit **GD412** or periscope kit **GD401** (for wall penetration below grade). With flexible venting, in conjunction with the various terminations, use either the 5 foot (1.5m) vent kit **GD420** or the 10 foot (3.1m) vent kit **GD430**.

For optimum flame appearance and appliance performance, keep the vent length and number of elbows to a minimum.

The air terminal must remain unobstructed at all times. Examine the air terminal at least once a year to verify that it is unobstructed and undamaged.

Rigid and flexible venting systems must not be combined. Different venting manufacturer components must not be combined.

These vent kits allow for either horizontal or vertical venting of the appliance. The maximum allowable horizontal run is 20 feet (6.1m). The maximum allowable vertical vent length is 40 feet (12.2m). The maximum number of vent connections is two horizontally or three vertically (excluding the appliance and the air terminal connections) when using flexible venting.

Horizontal runs may have a 0" (0mm) rise per foot/meter however for optimum performance it is recommended that all horizontal runs have a minimum 1/4" (21mm) rise per foot/meter using flexible venting. For safe and proper operation of the appliance, follow the venting instructions exactly.

A terminal shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings. Local codes or regulations may require different clearances.

Do not allow the inside liner to bunch up on horizontal or vertical runs and elbows. Keep it pulled tight. A 1/4" (31.8mm) air gap all around between the inner liner and outer liner is required for safe operation.

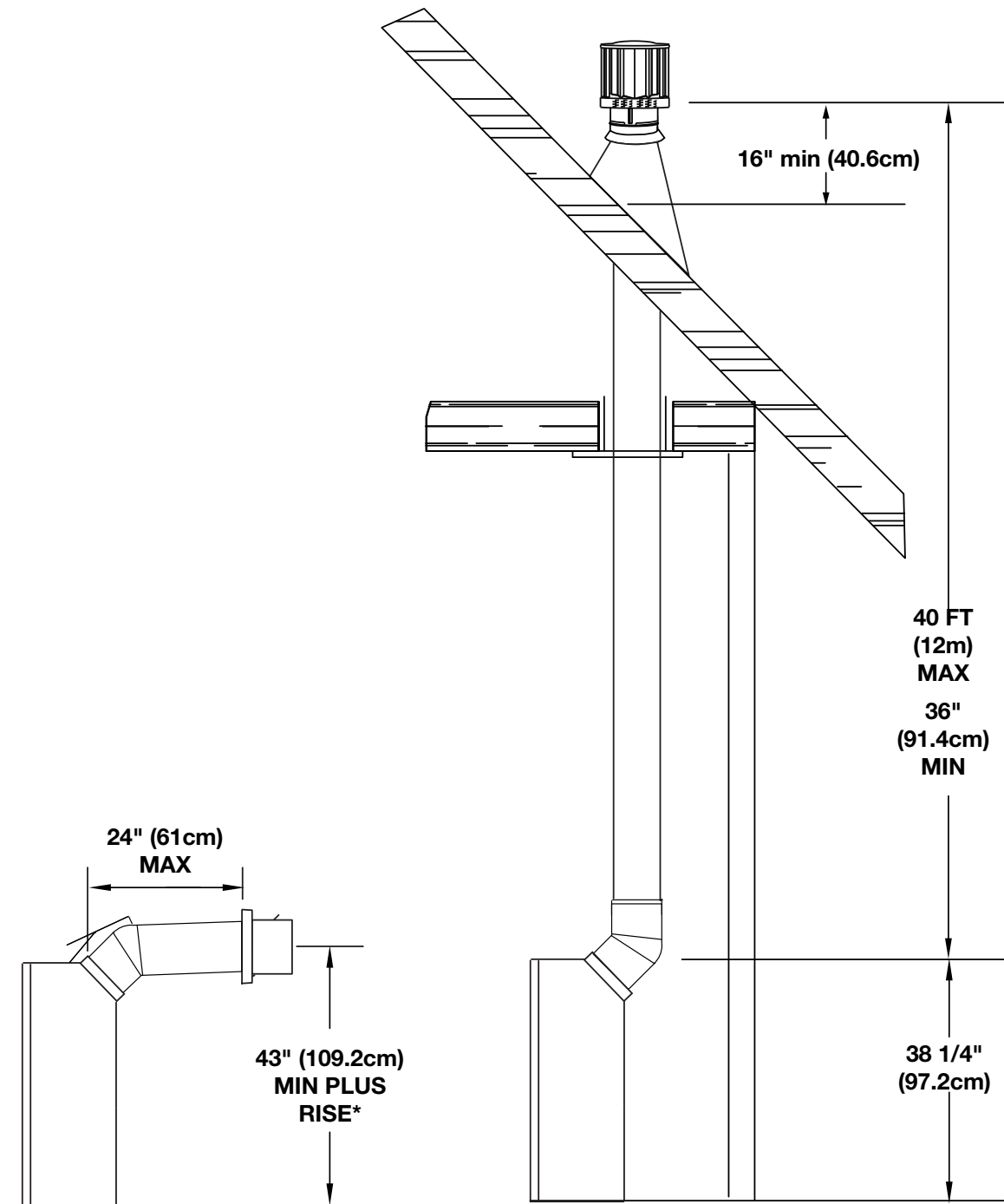
FOR 4" / 7" VENTING (USE REDUCER KIT A4758AK TO TRANSITION FROM 5" / 8" TO 4" / 7" VENTING)

When using Wolf Steel 4"/7" venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: wall terminal kit **GD222R**, or 1/12 to 7/12 pitch roof terminal kit **GD110**, 8/12 to 12/12 roof terminal kit **GD111**, flat roof terminal kit **GD112** or periscope kit **GD201** (for wall penetration below grade). With flexible venting, in conjunction with the various terminations, use either the 5 foot (1.5m) vent kit **GD220** or the 10 foot (3.1m) vent kit **GD330**.

When using Wolf Steel 5"/8" venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: wall terminal kit **GD422-1**, **GD422R-1**, or 1/12 to 7/12 pitch roof terminal kit **GD410**, 8/12 to 12/12 roof terminal kit **GD411**, flat roof terminal kit **GD412** or periscope kit **GD401** (for wall penetration below grade). With flexible venting, in conjunction with the various terminations, use either the 5 foot (1.5m) vent kit **GD420** or the 10 foot (3.1m) vent kit **GD430**.

venting requirements

3.1 typical vent installations



When venting, the horizontal run must be kept to a maximum of 20 feet (6m). If a 20 foot (6m) horizontal run is required, the appliance must have a minimum vertical rise off the appliance of 57" (144.8cm).

When terminating vertically, the vertical rise is a minimum 36" (91.4cm) and a maximum 40 feet (12m) above the appliance.

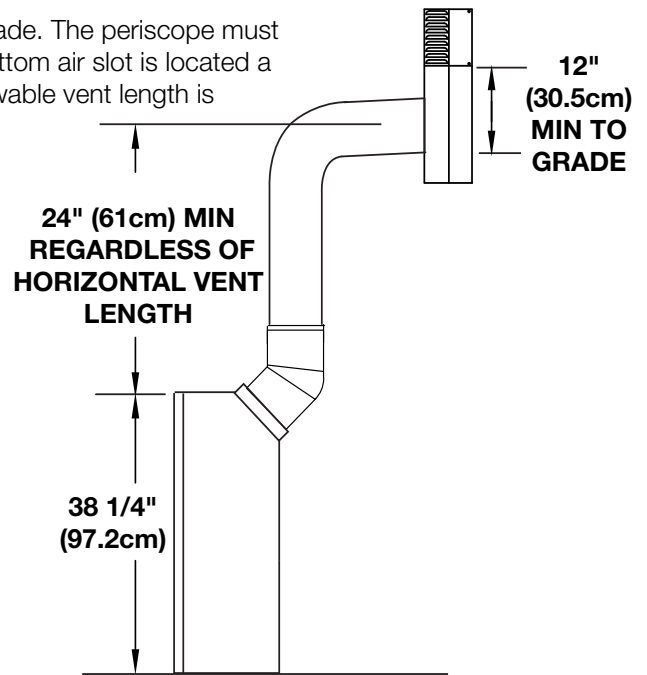
On all horizontal vent runs, ensure that the vent pipe does not slope downward.

* See "venting" section.

3.2 special vent installations

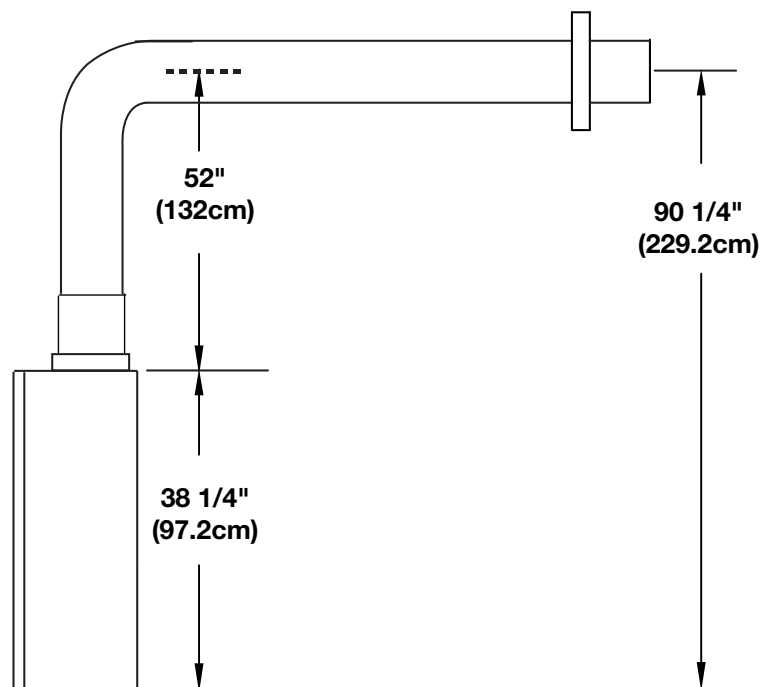
3.2.1 periscope termination

Use the periscope kit to locate the air termination above grade. The periscope must be installed so that when final grading is completed, the bottom air slot is located a minimum of 12" (305mm) above grade. The maximum allowable vent length is 10' (3.1m) for a fireplace and 8' (2.4m) for a stove.



3.2.2 reduced vent clearance to combustibles

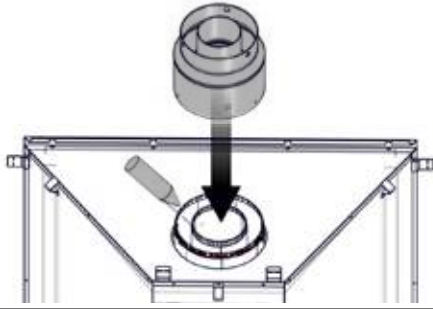
The minimum clearances around the horizontal vent pipe to the combustible material may be reduced from 3" (76.2mm) / 2" (50.8mm) to 1" (25.4mm) in installations with a minimum of 52" (132cm) vertical rise made immediately off the appliance collar and where the vent has been reduced to a 4/7" from 5/8" at the appliance.



venting requirements

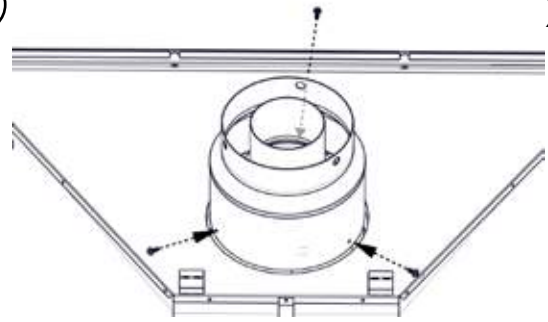
3.3 converting from 5/8" to 4/7" venting

1



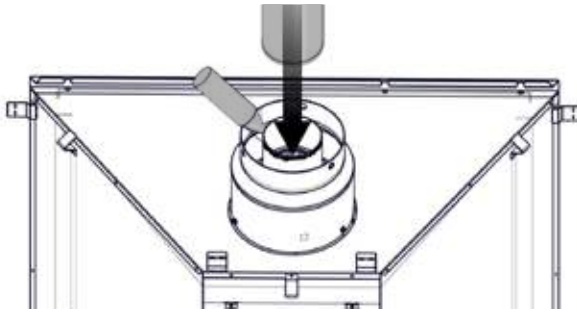
Use Mill Pac to seal adapter to the appliance collars.

2



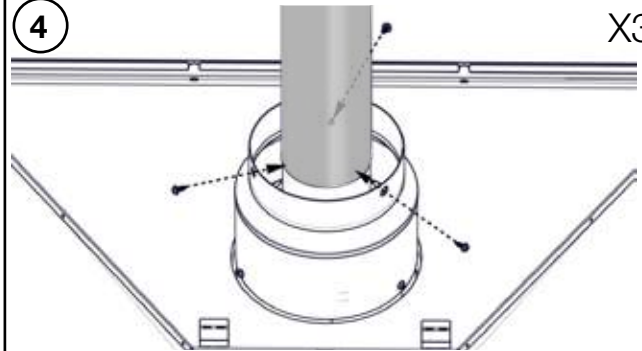
X3

3



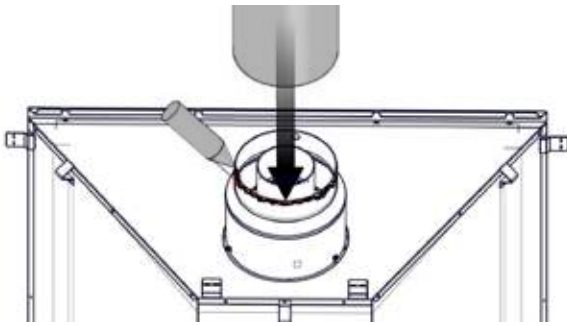
Use Mill Pac to seal adapter to the appliance collars.

4



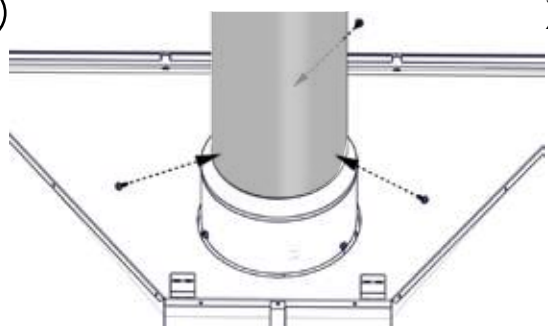
X3

5



Use Mill Pac to seal adapter to the appliance collars.

6

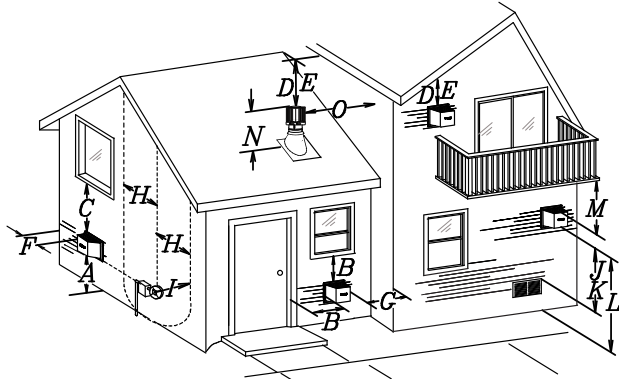


X3

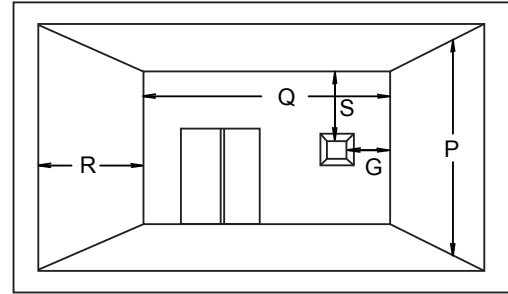
note:

Depending on your adaptor kit, the 4/7" venting components may not come pre-assembled.

3.4 vent terminal clearances



Covered balcony applications ††*



$Q_{MIN} = 3 \text{ feet}$ (0.9m)	$R_{MAX} = 2 \times Q_{ACTUAL}$	$R_{MAX} \leq 15 \text{ feet}$ (4.6m)
--------------------------------------	---------------------------------	--

	INSTALLATIONS		note:
	CANADA	U.S.A.	
A	12" (30.5cm)	12" (30.5cm)	Clearance above grade, veranda porch, deck or balcony.
B	12" (30.5cm) ^Δ	9" (229mm) ^Δ	Clearance to windows or doors that open.
C	12" (30.5cm)*	12" (30.5cm)*	Clearance to permanently closed windows.
D	18" (45.7cm)**	18" (45.7cm)**	Vertical clearance to ventilated soffits located above the terminal within a horizontal distance of 2' (0.6m) from the center line of the terminal.
E	12" (30.5cm)**	12" (30.5cm)**	Clearance to unventilated soffit.
F	0" (0mm)	0" (0mm)	Clearance to an outside corner wall.
G	0" (0mm)***	0" (0mm)***	Clearance to an inside non -combustible corner wall or protruding non -combustible obstructions (chimney, etc.).
	2" (51mm)***	2" (51mm)***	Clearance to an inside combustible corner wall or protruding combustible obstructions (vent chase, etc.).
H	3'(0.9m)	3'(0.9m)****	Clearance to each side of the center line extended above the meter / regulator assembly to a maximum vertical distance of 15' (4.6m).
I	3' (0.9m)	3' (0.9m)****	Clearance to a service regulator vent outlet.
J	12" (30.5cm)	9" (229mm)	Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.
K	6' (1.8m)	3' (0.9m) †	Clearance to a mechanical air supply inlet.
L	7' (2.1m) ‡	7' (2.1m) ****	Clearance above a paved sidewalk or paved driveway located on public property.
M	12" (30.5cm)††	12" (30.5cm)****	Clearance under a veranda, porch, deck or overhang.
N	16" (40.6cm)	16" (40.6cm)	Clearance above the roof.
O	2' (0.6m)†*	2' (0.6m) †*	Clearance from an adjacent wall including neighbouring buildings.
P	8' (2.4m)	8' (2.4m)	Roof must be non -combustible without openings.
Q	3' (0.9m)	3' (0.9m)	See chart for wider wall dimensions.
R	6' (1.8m)	6' (1.8m)	See chart for deeper wall dimensions. The terminal shall not be installed on any wall that has an opening between the terminal and the open side of the structure.
S	12" (30.5cm)	12" (30.5cm)	Clearance under a covered balcony

Δ The terminal shall not be located less than 6 feet under a window that opens on a horizontal plane in a structure with three walls and a roof.

* Recommended to prevent condensation on windows and thermal breakage

** It is recommended to use a heat shield and to maximize the distance to vinyl clad soffits.

*** The periscope requires a minimum 18 inches clearance from an inside corner.

**** This is a recommended distance. For additional requirements, check local codes.

† 3 feet above if within 10 feet horizontally.

‡ A vent shall not terminate where it may cause hazardous frost or ice accumulations on adjacent property surfaces.

†† Permitted only if the veranda, porch, or deck is fully open on a minimum of two sides beneath the floor.

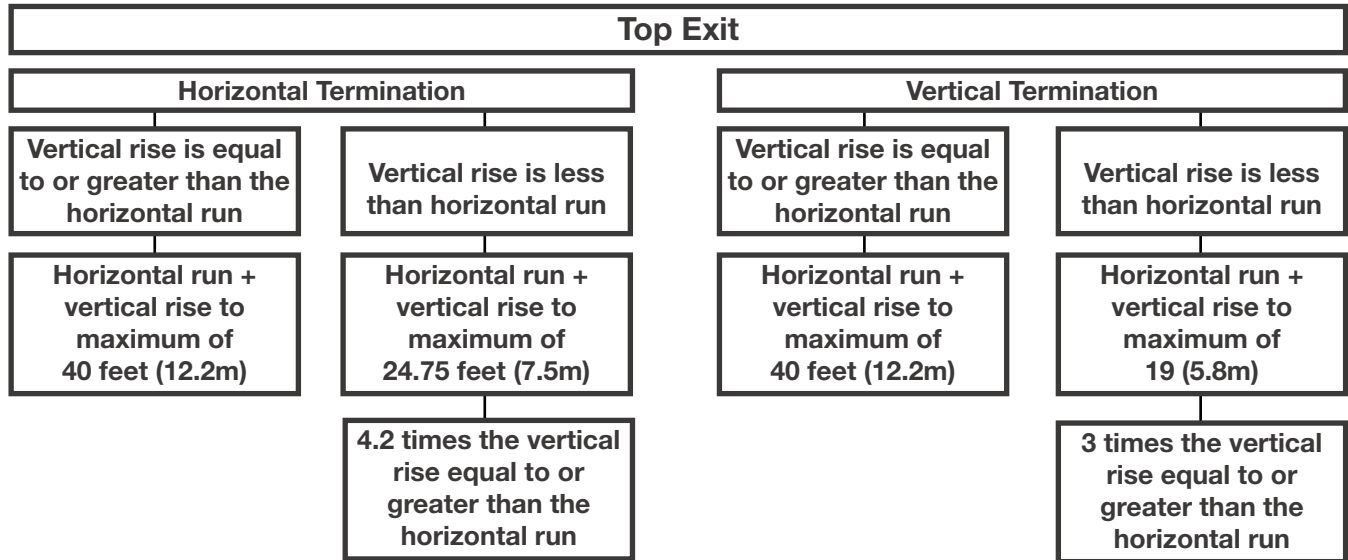
†* Recommended to prevent recirculation of exhaust products. For additional requirements, check local codes.

††* Permitted only if the balcony is fully open on a minimum of one side.

note:
Clearances are to be in accordance with local installation codes and the requirements of the gas supplier. In their absence, clearances are to be as listed above and are based on national codes.

venting requirements

3.5 vent application flow chart



3.6 definitions

For the following symbols used in the venting calculations and examples are:

> - greater than

≥ - equal to or greater than

< - less than

≤ - equal to or less than

H_T - total of both horizontal vent lengths (H_R) and offsets (H_O) in feet

H_R - combined horizontal vent lengths in feet

H_{O_1} - offset factor: .03 (total degrees of offset - 90°*) in feet

H_{O_2} - offset factor: .03 (total degrees of offset - 135°*) in feet

V_T - combined vertical vent lengths in feet

3.7 elbow vent length values

	Feet	Inches	Millimeters
1°	0.03	0.5	12.7
15°	0.45	6.0	152.4
30°	0.9	11.0	279.4
45°	1.35	16.0	406.4
90°*	2.7	32.0	812.8

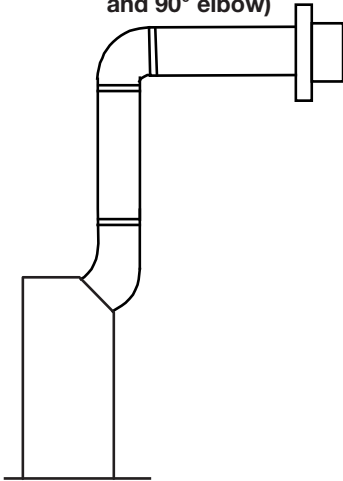
* The first 90° offset has a zero value and is shown in the formula as - 90°

* The first 45° and 90° offset have a zero value and is shown in the formula as -45° and -90° respectively or -135° when combined (**for 45° exit only**).

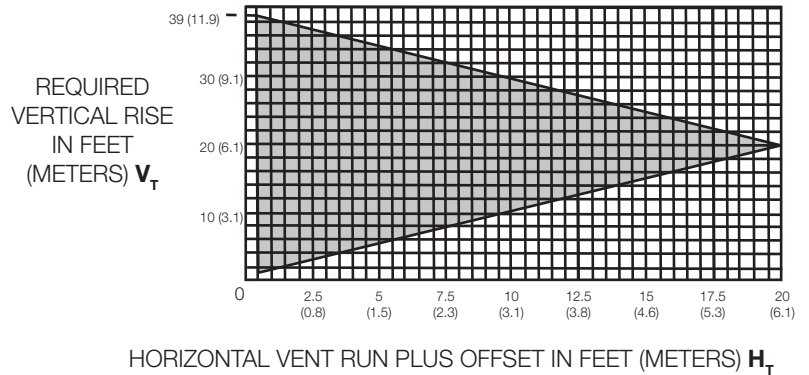
3.8 horizontal termination

$$(H_T) \leq (V_T)$$

Simple venting configuration (only one 45° and 90° elbow)



See graph to determine the required vertical rise V_T for the required horizontal run H_T .



The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than two 90° elbows, the following formulas apply:

Formula 1: $H_T \leq V_T$

Formula 2: $H_T + V_T \leq 40 \text{ feet (12.2m)}$

Example:

$V_1 = 8 \text{ FT (2.4m)}$

$V_T = V_1 = 8 \text{ FT (2.4m)}$

$H_1 = 2.5 \text{ FT (0.8m)}$

$H_2 = 2 \text{ FT (0.6m)}$

$H_R = H_1 + H_2 = 2.5\text{FT (0.8m)} + 2\text{FT (0.6m)} = 4.5\text{FT (1.4m)}$

$H_o = .03 \text{ (one } 45^\circ \text{ elbows + two } 90^\circ \text{ elbows - } 135^\circ) = .03 (225 - 135^\circ) = 2.7 \text{ FT (0.8m)}$

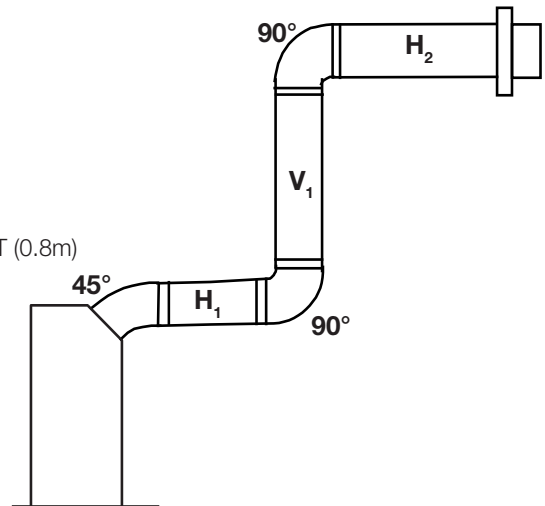
$H_T = H_R + H_o = 4.5\text{FT (1.4m)} + 2.7\text{FT (0.8m)} = 7.2\text{FT (2.2m)}$

$H_T + V_T = 7.2\text{FT (2.2m)} + 8\text{FT (2.4m)} = 15.2 \text{ FT (4.6m)}$

Formula 1: $H_T \leq V_T$
 $7.2 \text{ FT (2.2m)} \leq 8 \text{ FT (2.4m)}$

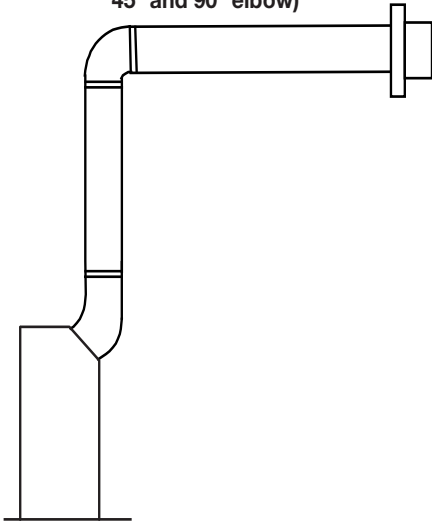
Formula 2: $H_T + V_T \leq 40 \text{ FT (12.2m)}$
 $15.2 \text{ FT (4.6m)} \leq 40 \text{ FT (12.2m)}$

Since both formulas are met, this vent configuration is acceptable.



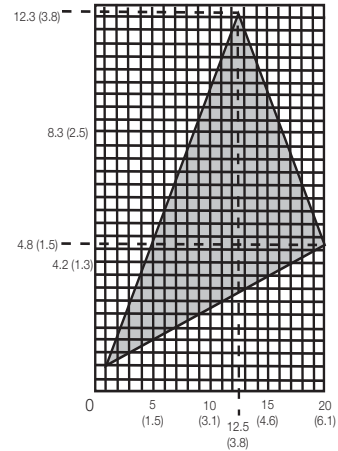
$$(H_T) > (V_T)$$

Simple venting configuration (only one
45° and 90° elbow)



See graph to determine the required vertical rise V_T for the required horizontal run H_T .

REQUIRED
VERTICAL RISE IN
FEET (METERS) V_T



HORIZONTAL VENT RUN PLUS OFFSET IN FEET (METERS) H_T

The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than two 90° elbows, the following formulas apply:

Formula 1: $H_T \leq 4.2V_T$

Formula 2: $H_T + V_T \leq 24.75$ feet (7.5m)

Example:

$$V_1 = 4 \text{ FT (1.2m)}$$

$$V_2 = 1.5 \text{ FT (0.5m)}$$

$$V_T = V_1 + V_2 = 4\text{FT (1.2m)} + 1.5\text{FT (0.5m)} = 5.5 \text{ FT (1.7m)}$$

$$H_1 = 2 \text{ FT (0.6m)}$$

$$H_2 = 1 \text{ FT (0.3m)}$$

$$H_3 = 1 \text{ FT (0.3m)}$$

$$H_4 = 1.5 \text{ FT (0.5m)}$$

$$H_R = H_1 + H_2 + H_3 + H_4 = 2\text{FT(0.6m)} + 1\text{FT(0.3m)} + 1\text{FT(0.3m)} + 1.5\text{FT(0.5m)} \\ = 5.5 \text{ FT (1.7m)}$$

$$H_O = .03 \text{ (one } 45^\circ \text{ elbow + four } 90^\circ \text{ elbows - } 135^\circ)$$

$$= .03 (405 - 135^\circ) = 8.1 \text{ FT (2.5m)}$$

$$H_T = H_R + H_O = 5.5 \text{ FT (1.7m)} + 8.1 \text{ FT (2.5m)} = 13.6 \text{ FT (4.2m)}$$

$$H_T + V_T = 13.6 \text{ FT (4.2m)} + 5.5 \text{ FT (1.7m)} = 19.1 \text{ FT (5.8m)}$$

Formula 1: $H_T \leq 4.2\text{FT (1.3m) } V_T$

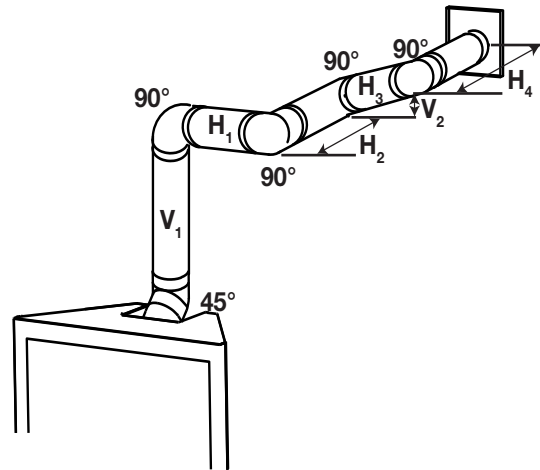
$$4.2\text{FT (1.3m) } V_T = 4.2 \text{ FT (1.3m)} \times 5.5 \text{ FT (1.7m)} \\ = 23.1 \text{ FT (7m)}$$

$$13.6 \text{ FT (4.2m)} < 23.1 \text{ FT (7m)}$$

Formula 2: $H_T + V_T \leq 24.75 \text{ FT (7.5m)}$

$$19.1 \text{ FT (5.8m)} < 24.75 \text{ FT (7.5m)}$$

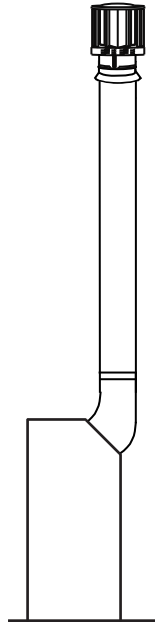
Since both formulas are met, this vent configuration is acceptable.



3.9 vertical termination

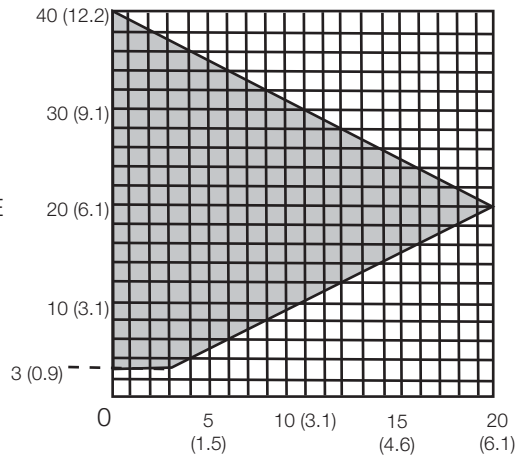
$$(H_T) \leq (V_T)$$

Simple venting configurations.



See graph to determine the required vertical rise V_T for the required horizontal run H_T .

REQUIRED VERTICAL RISE IN FEET (METERS) V_T



HORIZONTAL VENT RUN PLUS OFFSET IN FEET (METERS) H_T

The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than one 45° and one 90° elbow, the following formulas apply:

Formula 1: $H_T \leq V_T$

Formula 2: $H_T + V_T \leq 40 \text{ feet (12.2m)}$

Example:

$$V_1 = 5 \text{ FT (1.5m)}$$

$$V_2 = 10 \text{ FT (3.1m)}$$

$$V_T = V_1 + V_2 = 5 \text{ FT (1.5m)} + 10 \text{ FT (3.1m)} = 15 \text{ FT (4.6m)}$$

$$H_1 = 3 \text{ FT (0.9m)}$$

$$H_2 = 2.5 \text{ FT (0.8m)}$$

$$H_R = H_1 + H_2 = 3 \text{ FT (0.9m)} + 2.5 \text{ FT (0.8m)} = 5.5 \text{ FT (1.7m)}$$

$$H_o = .03 \text{ (one } 45^\circ \text{ + three } 90^\circ \text{ elbows - } 135^\circ)$$

$$= .03 (45 + 270 - 135^\circ) = 5.4 \text{ FT (1.6m)}$$

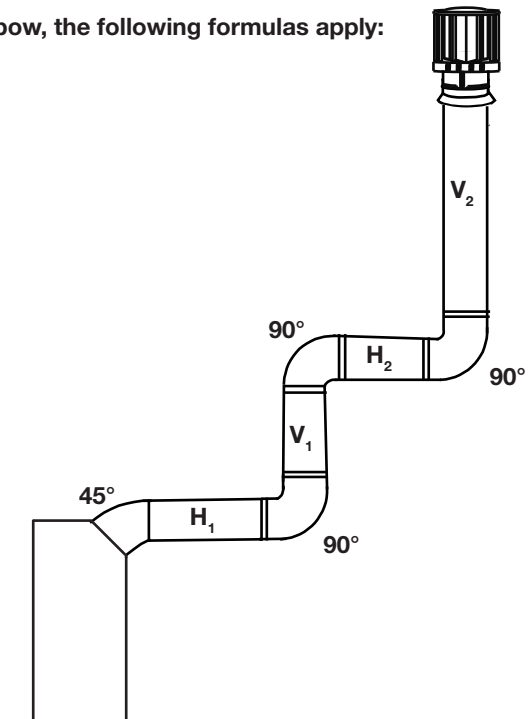
$$H_T = H_R + H_o = 5.5 \text{ FT (1.7m)} + 5.4 \text{ FT (1.6m)} = 10.9 \text{ FT (3.3m)}$$

$$H_T + V_T = 10.9 \text{ FT (3.3m)} + 15 \text{ FT (4.6m)} = 25.9 \text{ FT (7.9m)}$$

Formula 1: $H_T \leq V_T$
 $10.9 \text{ FT (3.3m)} \leq 15 \text{ (4.6m)}$

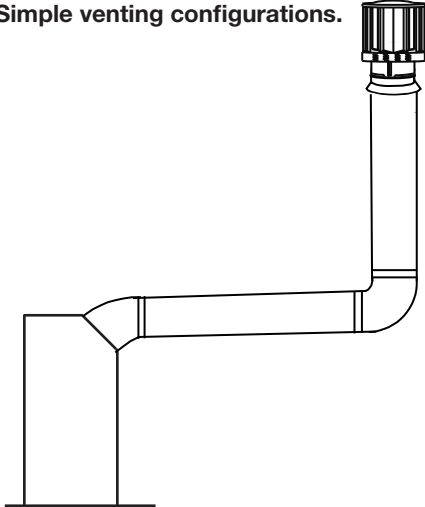
Formula 2: $H_T + V_T \leq 40 \text{ FT (12.2m)}$
 $25.9 \text{ FT (7.9m)} \leq 40 \text{ (12.2m)}$

Since both formulas are met, this vent configuration is acceptable.

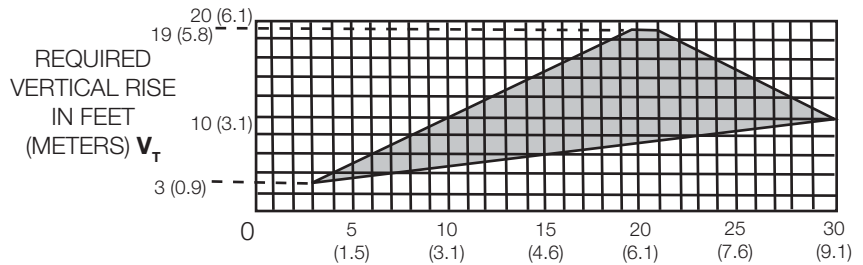


$$(H_T) > (V_T)$$

Simple venting configurations.



See graph to determine the required vertical rise V_T for the required horizontal run H_T .



HORIZONTAL VENT RUN PLUS OFFSET IN FEET (METERS) H_T

The shaded area within the lines represents acceptable values for H_T and V_T

For vent configurations requiring more than one 45° and one 90° elbow, the following formulas apply:

Formula 1: $H_T \leq 3V_T$

Formula 2: $H_T + V_T \leq 40$ feet (12.2m)

Example:

$$V_1 = 1 \text{ FT (0.3m)}$$

$$V_2 = 1.5 \text{ FT (0.5m)}$$

$$V_T = V_1 + V_2 = 1 \text{ FT (0.3m)} + 1.5 \text{ FT (0.5m)} = 2.5 \text{ FT (0.8m)}$$

$$H_1 = 6 \text{ FT (1.8m)}$$

$$H_2 = 2 \text{ FT (0.6m)}$$

$$H_R = H_1 + H_2 = 6 \text{ FT (1.8m)} + 2 \text{ FT (0.6m)} = 8 \text{ FT (2.4m)}$$

$$H_O = .03 \text{ (one } 45^\circ \text{ + three } 90^\circ \text{ elbows - } 135^\circ)$$

$$= .03 (45 + 270 - 135^\circ) = 5.4 \text{ FT (1.6m)}$$

$$H_T = H_R + H_O = 8 \text{ FT (2.4m)} + 5.4 \text{ FT (1.6m)} = 13.4 \text{ FT (4.1m)}$$

$$H_T + V_T = 13.4 \text{ FT (4.1m)} + 2.5 \text{ FT (0.8m)} = 15.9 \text{ FT (4.8m)}$$

Formula 1:

$$H_T \leq 3V_T$$

$$3V_T = 3 \text{ FT (0.9m)} \times 2.5 \text{ FT (0.8m)} = 7.5 \text{ FT (2.3m)}$$

$$13.4 \text{ FT (4.1m)} > 7.5 \text{ FT (2.3m)}$$

Since this formula is not met, this vent configuration is **unacceptable**.

Formula 2:

$$H_T + V_T \leq 40 \text{ FT (12.2m)}$$

$$15.9 \text{ FT (4.8m)} \leq 40 \text{ FT (12.2m)}$$

Since only formula 2 is met, this vent configuration is unacceptable and a new fireplace location or vent configuration will need to be established to satisfy both formulas.

Example:

$$V_1 = 1.5 \text{ FT (0.5m)}$$

$$V_2 = 8 \text{ FT (2.4m)}$$

$$V_T = V_1 + V_2 = 1.5 \text{ FT (0.5m)} + 8 \text{ FT (2.4m)} = 9.5 \text{ FT (2.9m)}$$

$$H_1 = 1 \text{ FT (0.3m)}$$

$$H_2 = 1 \text{ FT (0.3m)}$$

$$H_3 = 10.75 \text{ FT (3.3m)}$$

$$H_R = H_1 + H_2 + H_3 = 1 \text{ FT (0.3m)} + 1 \text{ FT (0.3m)} + 10.75 \text{ FT (3.3m)} = 12.75 \text{ FT (3.9m)}$$

$$H_O = .03 \text{ (three } 90^\circ \text{ elbows + two } 45^\circ \text{ elbows - } 135^\circ)$$

$$= .03 (270 + 90 - 135^\circ) = 6.75 \text{ FT (2.1m)}$$

$$H_T = H_R + H_O = 12.75 \text{ FT (3.9m)} + 6.75 \text{ FT (2.1m)} = 19.5 \text{ FT (5.9m)}$$

$$H_T + V_T = 19.5 \text{ FT (5.9m)} + 9.5 \text{ FT (2.9m)} = 29 \text{ FT (8.8m)}$$

Formula 1:

$$H_T \leq 3V_T$$

$$3V_T = 3 \times 9.5 = 28.5 \text{ FT (8.7m)}$$

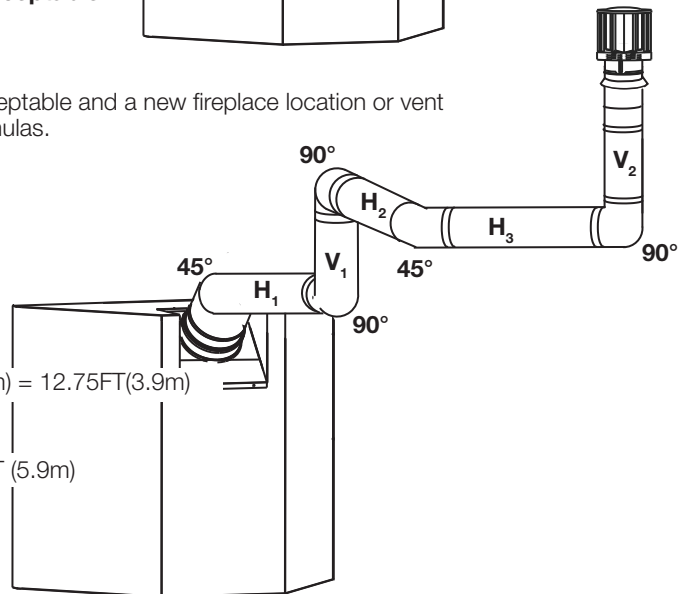
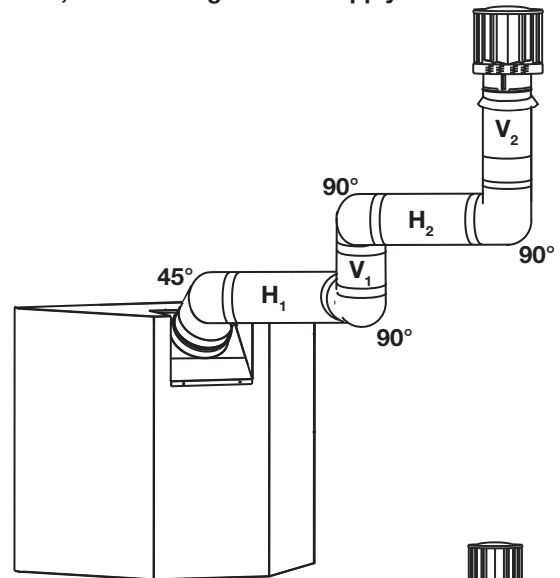
$$19.5 \text{ FT (5.9m)} \leq 28.5 \text{ FT (8.7m)}$$

Formula 2:

$$H_T + V_T \leq 40 \text{ FT (12.2m)}$$

$$29 \text{ FT (8.8m)} \leq 40 \text{ FT (12.2m)}$$

Since both formulas are met, this vent configuration is acceptable.



note:

When using optional finishing accessories, the framing dimensions and finishing materials may differ from what is outlined in the section below; refer to the leaflet instructions supplied in the accessory kit for specific framing and finishing specifications.

! WARNING

- Risk of fire!
- In order to avoid the possibility of exposed insulation or vapour barrier coming in contact with the appliance body, it is recommended that the walls of the appliance enclosure be "finished" (i.e. drywall / sheetrock), as you would finish any other outside wall of a home. This will ensure that clearance to combustibles is maintained within the cavity.
- Do not notch the framing around the appliance stand offs. Failure to maintain air space clearance may cause over heating and fire. Prevent contact with sagging or loose insulation or framing and other combustible materials. Block opening into the chase to prevent entry of blown-in insulation. Make sure insulation and other materials are secured.
- When constructing the enclosure, allow for finishing material thickness to maintain clearances. Framing or finishing material closer than the minimums listed must be constructed entirely of non-combustible materials. Materials consisting entirely of steel, iron, brick, tile, concrete, slate, glass or plasters, or any combination thereof are suitable. Materials that are reported as passing ASTM E136, standard test method for behaviour of materials in a vertical tube furnace at 1382°F (750°C) and UL763 shall be considered non-combustible materials.
- Minimum clearance to combustibles must be maintained or a serious fire hazard could result.
- The appliance requires a minimum enclosure height. Measure from the appliance base.
- If steel stud framing kits with cement board are provided, or specified in the installation instructions, they must be installed.
- If specified in the installation instruction, finishing must be done using a non-combustible board, ceramic tile, marble, etc. Do **NOT** use wood or drywall. Any fire rated drywall is **not** acceptable.

It is best to frame your appliance after it is positioned and the vent system is installed.

When roughing in the appliance, raise the appliance to accommodate for the thickness of the finished floor materials, i.e. tile, carpeting and hard wood.

Maintain these minimum clearances to combustibles from appliance and vent surfaces:**Combustible Appliance framing:**

- 1/4" (6.4mm) to the sides of appliance
- 8 1/4" (210mm) to the top of appliance

Combustible Appliance finishing:

- 0" (0mm) above the appliance opening
- 50" (127cm) from bottom of appliance to enclosure top
- 62 1/4" (158.2cm) from bottom of appliance to ceiling
- 3" (76mm) to top of vent pipe*
- 2" (51mm) to sides and bottom of vent pipe*
- 0" (0mm) to the sides and top of appliance

***HORIZONTAL VENT SECTIONS:** A minimum clearance of 3" (76mm) to the top and 2" (51mm) to the sides and bottom of the vent pipe on all horizontal runs to combustibles is required, see "minimum clearance to combustible enclosures" section.

note:

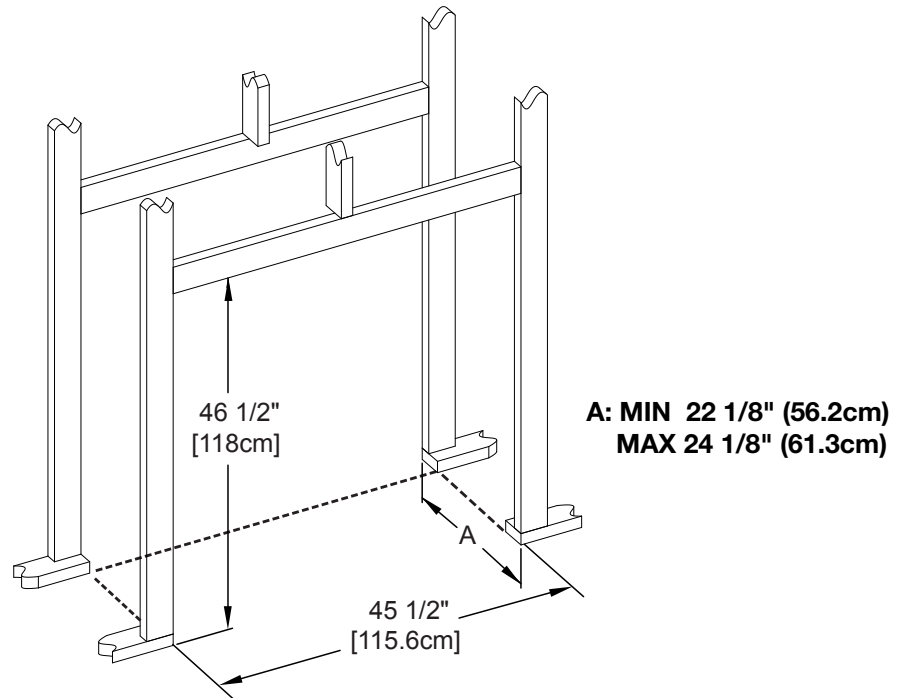
The minimum clearances around the horizontal vent pipe to combustible materials may be reduced from 3" (76.2mm) / 2" (50.8mm) to 1" (25mm) in those installations with a minimum 52" (132cm) vertical vent rise made immediately off the appliance collar and where the vent has been reduced to 4/7" from 5/8" at the appliance collars.

***VERTICAL VENT SECTIONS:** A minimum of 1" (25mm) all around the vent pipe on all vertical runs to combustibles is required.

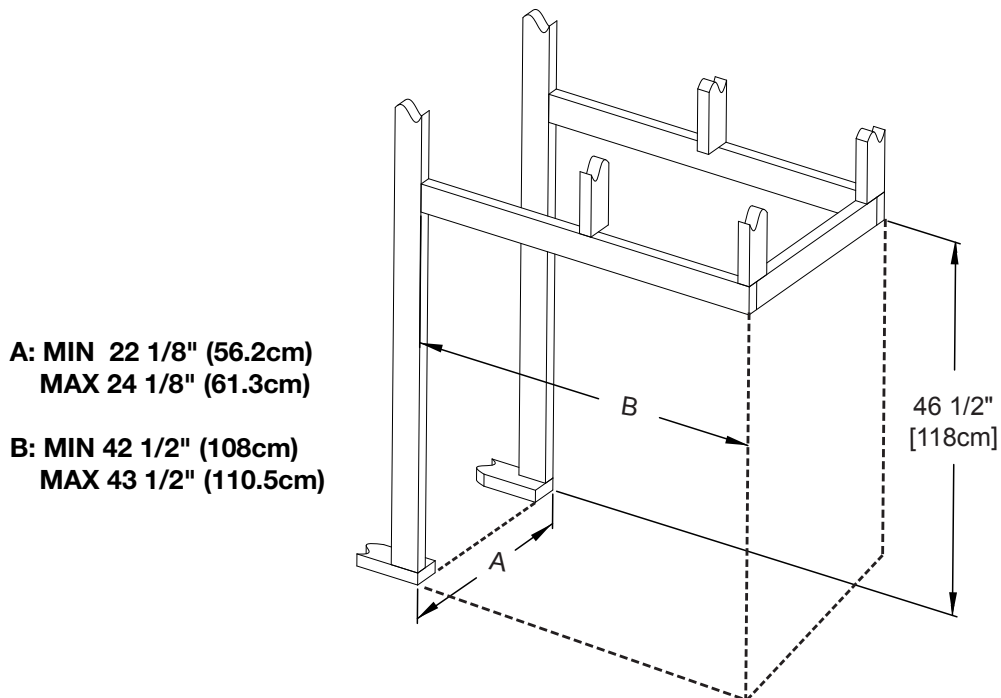
framing

4.1 framing

4.1.1 see-thru framing (CBHD4STA)



4.1.2 peninsula framing (CBHD4PA)



note:

All framing dimensions are based on the finishing material supports position. Framing may change depending on the finishing material thickness (see "finishing support adjustment" section).

4.2 minimum clearance to combustible enclosures

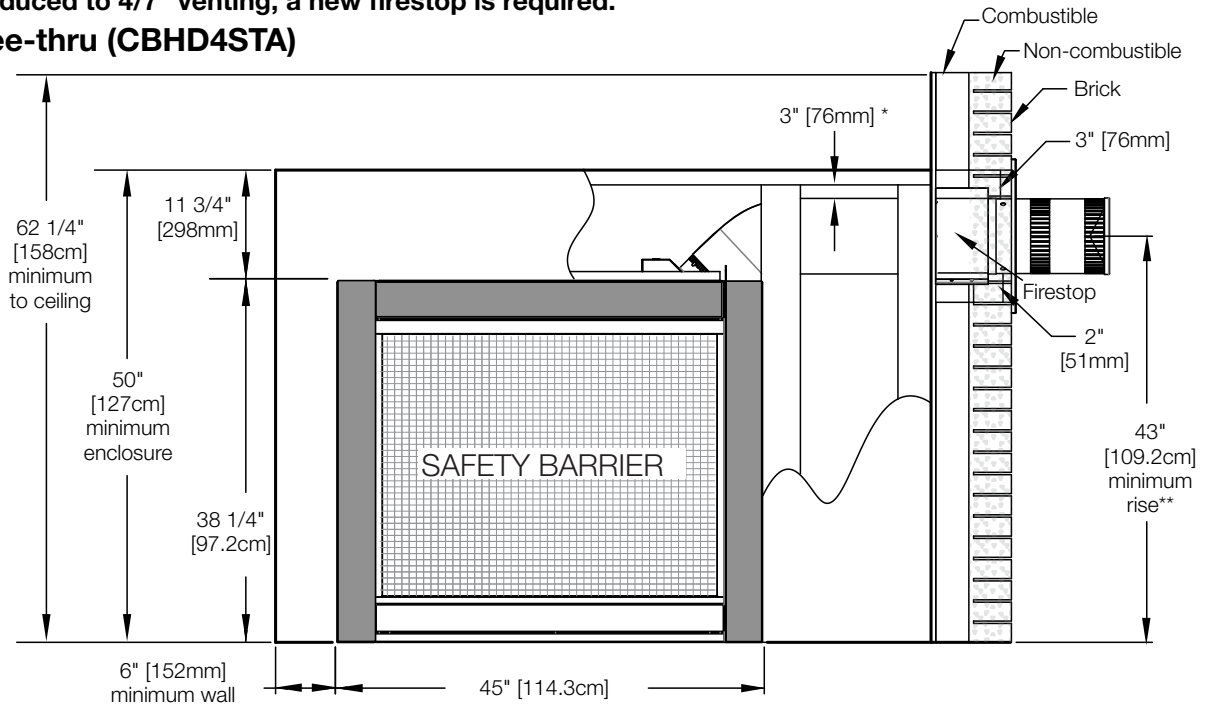
IMPORTANT: This appliance requires a minimum inside enclosure height of 50" (127cm), measured from the bottom of the appliance. For temperature requirements, this area must be left unobstructed.

note:
This appliance has a maximum load bearing weight of 250lbs (113kg).

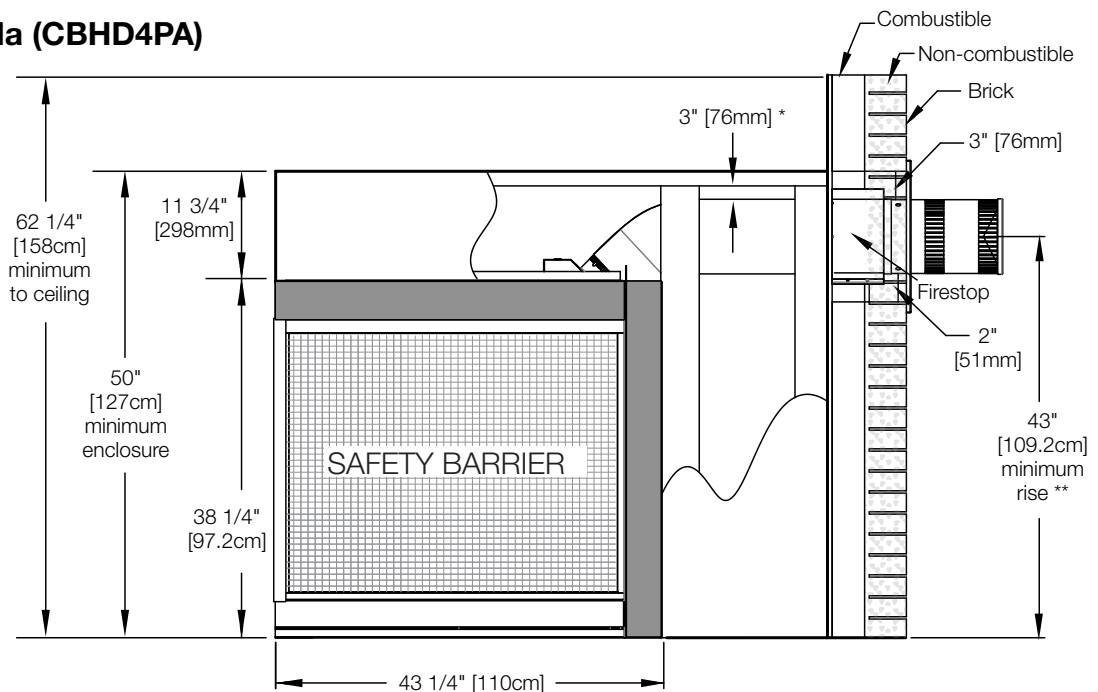
IMPORTANT: The firestop assembly provided must be used when the vent pipes pass through any walls or are terminated horizontally.

If reduced to 4/7" venting, a new firestop is required.

4.2.1 see-thru (CBHD4STA)



4.2.2 peninsula (CBHD4PA)



* Within the appliance enclosure a minimum 3" (76mm) clearance between the top of the vent pipe and combustible materials is required. All other clearances within the enclosure, including where the vent pipe exits the enclosure are subject to 2" (51mm) to the sides and bottom and 3" (76mm) to the top for horizontal and 2" (51mm) for vertical.

Shaded area can be finished with non-combustible material but must not protrude past the appliance opening.

** See "venting" section.

5.0 venting installation

⚠ WARNING

- Ensure to unpack all loose materials from inside the firebox prior to connecting the gas and electrical supply
- **If your appliance is supplied with a remote, ensure the remote receiver is in the "OFF" position prior to connecting the gas and electrical supply to the appliance.**
- For safe and proper operation of the appliance, follow the venting instructions exactly.
- **The appliance exhaust flue collar must be sealed using Mill Pac.** All exhaust and intake vent pipe joints must be sealed using red RTV high temp silicone sealant (W573-0002) (not supplied) or black high temp Mill Pac (W573-0007) (not supplied).
- If using pipe clamps to connect rigid vent components, a minimum of 3 screws must also be used to ensure the connection cannot slip off.
- Do not clamp the flexible vent pipe.
- Risk of fire, explosion, or asphyxiation. Improper support of the entire venting system may allow vent to sag and separate. Use vent run supports and connect vent sections per installation instructions.
- Risk of fire, do not allow loose materials or insulation to touch the vent pipe. Remove insulation to allow for the installation of the attic shield and to maintain clearances to combustibles.
- Do not fill the space between the vent pipe and enclosure with any type of material. Do not pack insulation or combustibles between ceiling firestops. Always maintain specified clearances around venting and firestop systems. Install wall shields and firestops as specified. Failure to keep insulation or other materials away from vent pipe may cause fire.
- **For gas stoves only:** If the appliance is installed directly on carpeting, vinyl tile, or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth, unless otherwise tested.

For optimum performance, it is recommended that all horizontal runs have a minimum of 1/4" (6mm) rise per foot using flexible venting.

note:

The vent shield is telescopic and must be adjusted to shield the first 30" (76.2cm) of vertical vent when applicable.

For vent shield installation, see "vent shield installation" section. For clearance to combustible materials from the vent pipe, see "minimum clearance to combustibles" section.

Power vent system are available with reduced vent pipe diameter and longer vent runs.

5.1 firestop spacer assembly

1. Install standoffs onto the firestop spacer (**Figure 1**).
2. Install one vent shield onto the standoff on one side of the firestop spacer (**Figure 2**).
3. Install the other vent shield on the opposite side of the firestop spacer (**Figure 3**).



Type 1 (x18)

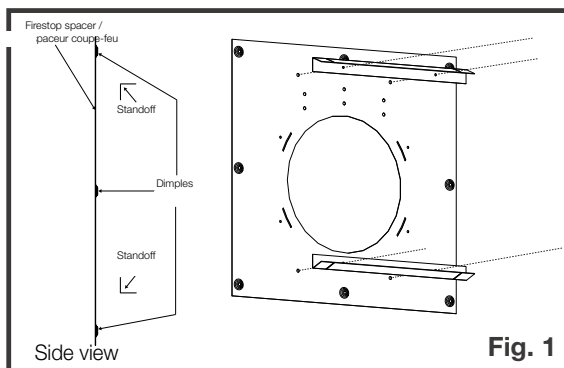


Fig. 1

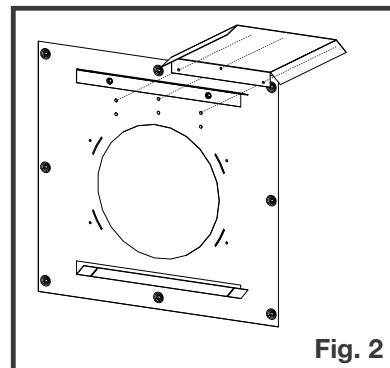


Fig. 2

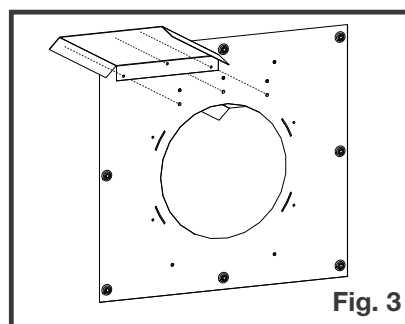


Fig. 3

4. Roll the vent sleeve as shown and ensure to clip the ends together (**Figure 4**).
5. Ensure both ends line up and secure ends with clip and fasteners (**Figure 5**).

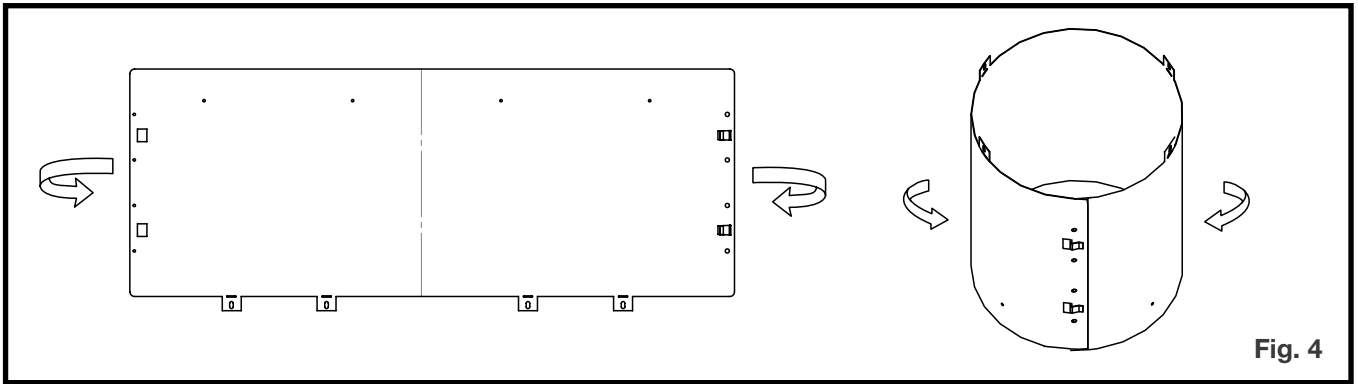


Fig. 4

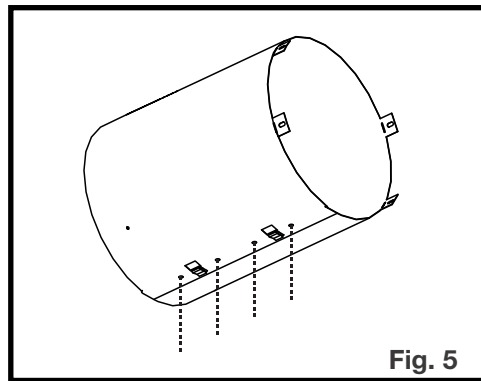


Fig. 5

6. Insert the vent sleeve tabs into the firestop spacer slots then bend the tabs over to secure to the firestop spacer along with 4 supplied fasteners (**Figure 6**).

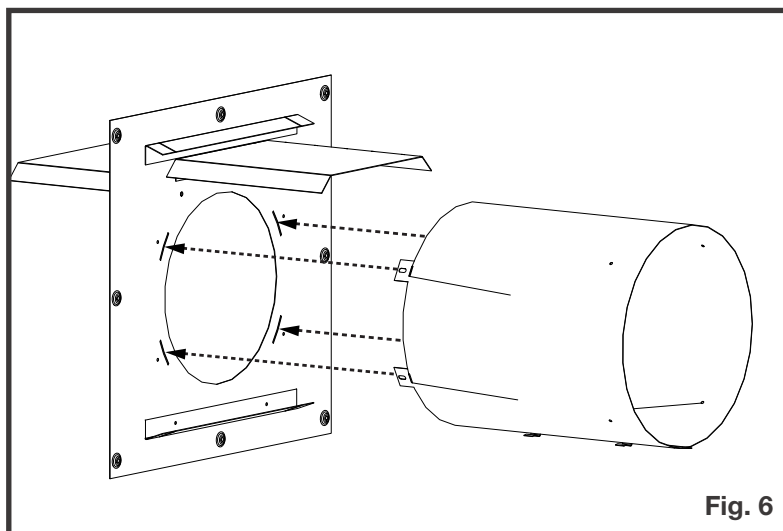


Fig. 6

note:

Note orientation of dimples and standoffs.

venting installation

5.2 horizontal installation

! WARNING

- The firestop assembly must be installed with the vent shield to the top.
- Terminals must not be recessed into a wall or siding more than the depth of the return flange of the mounting plate.

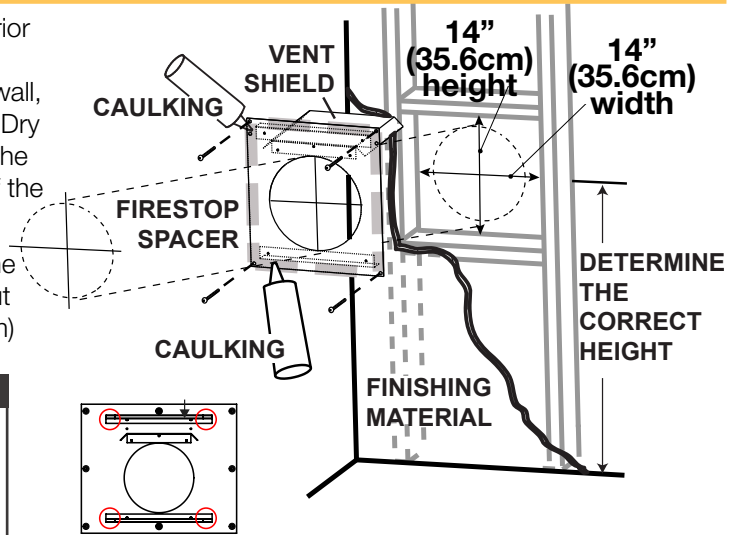
This application occurs when venting through an exterior wall. Having determined the correct height for the air terminal location, cut and frame a hole in the exterior wall, as illustrated, to accommodate the firestop assembly. Dry fit the firestop assembly before proceeding to ensure the brackets on the rear surface fit to the inside surface of the horizontal framing.

The vent shield must be installed to the full depth of the combustible wall. The length of the vent shield may cut shorter for combustible walls that less than 6" (152mm) thick.

note:

Bend the tabs for reduced side clearances or move the shield for reduced top clearances. Do not fill the air space between the firestop spacer and the exterior wall with any type of insulating material (i.e. spray foam).

- Apply a bead of caulking (not supplied) around the corner edge of the inside surface of the firestop assembly, fit the firestop assembly to the hole and secure using 4 screws.
- Once the vent pipe is installed in its final position, apply red RTV silicone (W573-0002) (not supplied) between the pipe and the firestop.



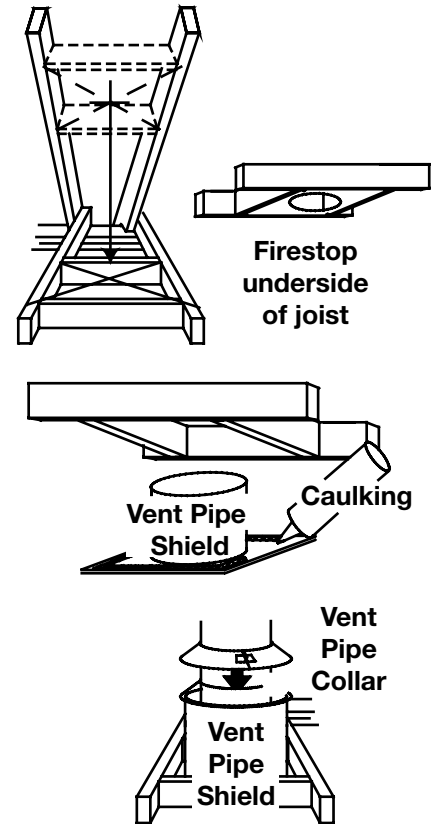
note:

The above is for illustration purposes only. Vents do not always pass through center of frame.

5.3 vertical installation

This application occurs when venting through a roof. Installation kits for various roof pitches are available from your authorized dealer / distributor. See the “accessories” section to order specific kits required.

- A. Determine the air terminal location, cut and frame a square opening, as illustrated, in the ceiling and the roof to provide the minimum 1" (25mm) clearance between the vent pipe and any combustible material. Try to center the vent pipe location midway between two joists to prevent having to cut them. Use a plumb bob to line up the center of the openings. A vent pipe shield will prevent any materials such as insulation, from filling up the 1" (25mm) air space around the pipe. Nail headers between the joist for extra support.
- B. Apply a bead of caulking (not supplied) to the framework or to the Wolf Steel vent pipe shield plate or equivalent (in the case of a finished ceiling), and secure over the opening in the ceiling. A firestop must be placed on the bottom of each framed opening in a roof or ceiling that the venting system passes through. Apply a bead of caulking all around and place a firestop spacer over the vent shield to restrict cold air from being drawn into the room or around the fireplace. Ensure that both spacer and shield maintain the required clearance to combustibles. Once the vent pipe is installed in its final position, apply red RTV silicone (W573-0002) (not supplied) between the pipe and the firestop assembly.
- C. In the attic, slide the vent pipe collar down to cover up the open end of the shield and tighten. This will prevent any materials, such as insulation, from filling up the 1" (25mm) air space around the pipe.



note:

Where the venting passes vertically through a ceiling you use **MUST** use a Wolf Steel firestop for all rigid and flex vent systems. The gap between the outside diameter of the vent and the firestop **MUST** be completely sealed with high temperature RTV.

For 4”/7” appliances:

When using flex venting, use firestop assembly W500-0292 (not supplied).

When using rigid venting, use firestop assembly 4DFS (not supplied).

For 5”/8” appliances:

When using flex venting, use firestop assembly W500-0028 (not supplied).

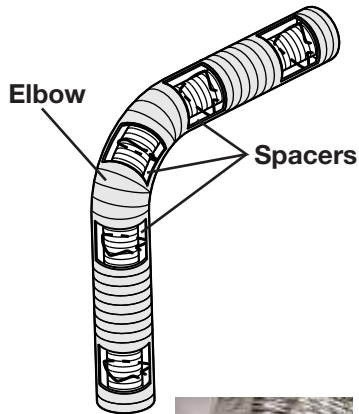
When using rigid venting, use firestop assembly 5DFS (not supplied).

venting installation

5.4 using flexible vent components

! WARNING

- Do not allow the inner flex pipe to bunch up on horizontal or vertical runs and elbows. Keep it pulled tight.
- Spacers are attached to the inner flex pipe at predetermined intervals to maintain an even air gap to the outer flex pipe. This gap is required for safe operation. A spacer is required at the start, middle, and end of each elbow to ensure this gap is maintained. These spacers must not be removed.



For safe and proper operation of the appliance, follow the venting instructions exactly.

The vent system must be supported approximately every 3 feet (0.9m) for both vertical and horizontal runs. Use Wolf Steel Ltd. support ring assembly or equivalent noncombustible strapping to maintain the minimum clearance to combustibles for both vertical and horizontal runs.

All inner flex pipe and outer flex pipe joints may be sealed using high temperature red RTV silicone W573-0002 (not supplied) or the high temperature sealant W573-0007 Mill Pac (not supplied). However, the high temperature sealant W573-0007 Mill Pac (not supplied) must be used on the joint connecting the inner flex pipe and the exhaust flue collar.

Use only approved flexible vent pipe kits marked:

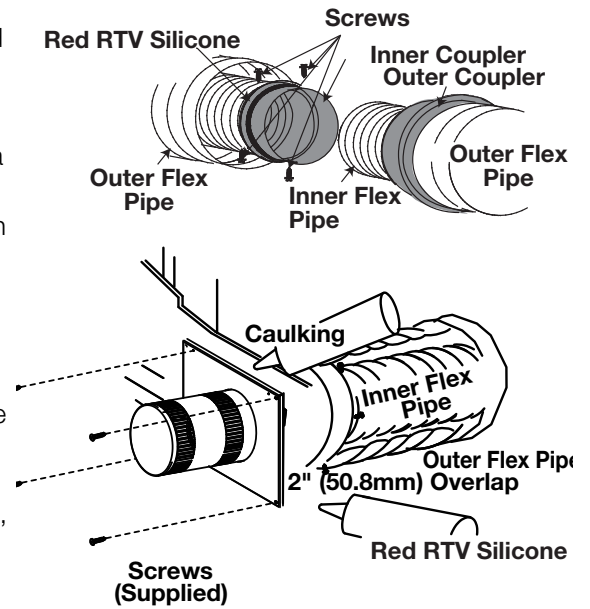


“Wolf Steel Approved Venting” or “E2” as identified by the stamp only on the flex pipes.

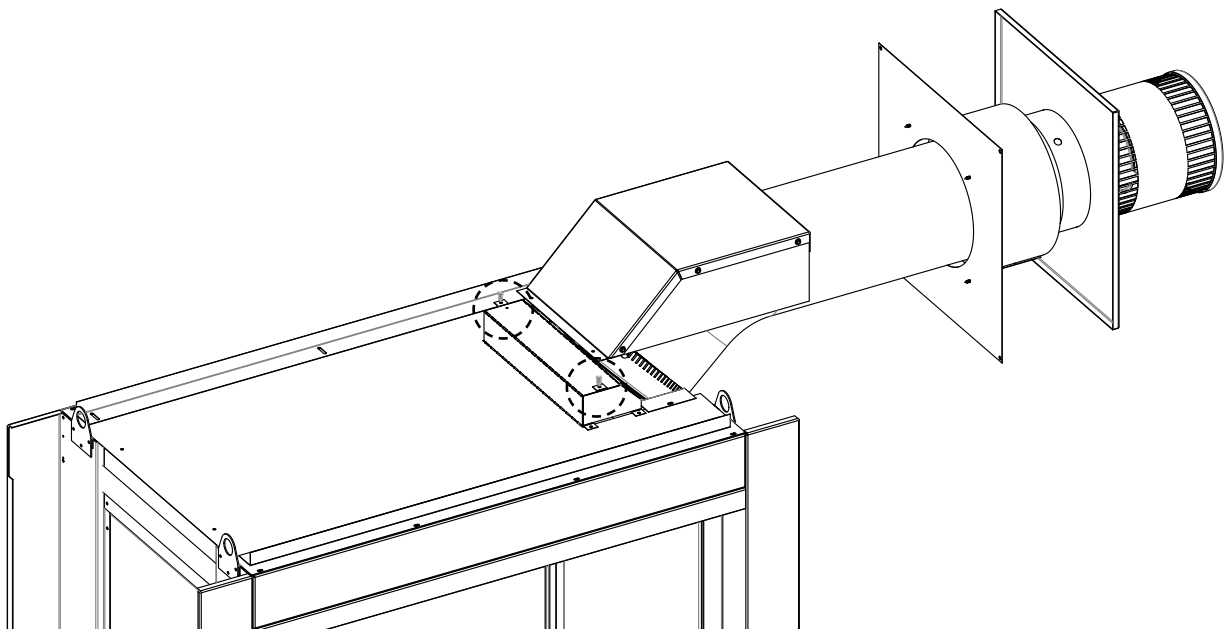
When installing using rigid vent components, follow the manufacturer’s installation and vent sealing requirements.

5.4.1 horizontal air terminal installation

- A. Stretch the inner flex pipe to the required length taking into account the additional length needed for the finished wall surface. Apply a heavy bead of the red RTV silicone (W573-0002) (not supplied) to the inner sleeve of the air terminal. Slip the vent pipe a minimum of 2" (50.8mm) over the inner sleeve of the air terminal and secure with a minimum of 3 screws.
- B. Using the outer flex pipe, slide over the outer combustion air sleeve of the air terminal and secure with a minimum of 3 screws. Seal using red RTV silicone (W573-0002) (not supplied).
- C. Insert the vent pipes through the firestop maintaining the required clearance to combustibles. Holding the air terminal (lettering in an upright, readable position), secure to the exterior wall and make weather tight by sealing with caulking (not supplied).
- D. If more vent pipe needs to be used to reach the fireplace, couple them together, as illustrated. The vent system must be supported approximately every 3 feet (0.9m) for both vertical and horizontal runs. Use non-combustible strapping to maintain the minimum clearance to combustibles.
- E. The vent shield must be installed only when terminating horizontally. Remove the two screws nearest the vent collars on the top of the appliance. Align the vent heat shield (supplied) and secure. Adjust the vent heat shield to touch the firestop spacer, as shown below.



The air terminal mounting plate may be recessed into the exterior wall or siding no greater than the depth of its return flange.



venting installation

5.4.2 vertical air terminal installation

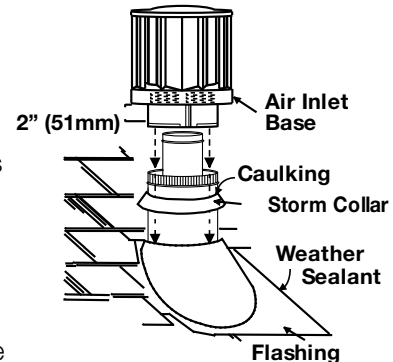
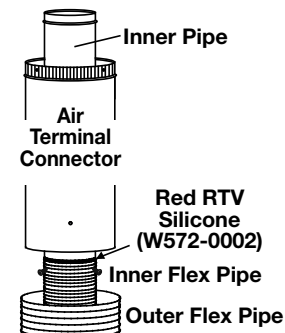
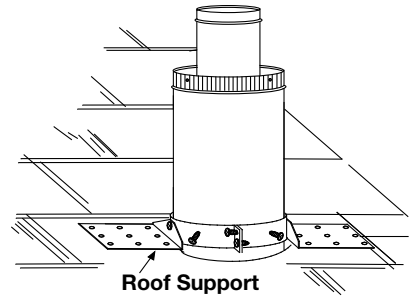
! WARNING

- Maintain a minimum 2" (51mm) space between the air inlet base and the storm collar.

note:

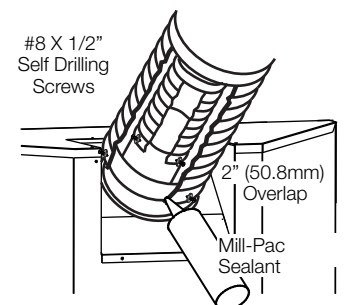
Fastening hardware provided with appropriate roof terminal and liner kits.

- Fasten the roof support to the roof using 6 screws. The roof support is optional. In this case, the venting is to be adequately supported using either an alternate method suitable to the authority having jurisdiction or the optional roof support.
- Stretch the inner flex pipe to the required length. Slip the inner flex pipe a minimum of 2" (51mm) over the inner pipe of the air terminal connector and secure with a minimum of three screws, when 4/7, 5/8 and 3/5 venting is used and a minimum of six screws when using 8/10 or 8/11 venting. Seal using a heavy bead of red RTV silicone sealant (W573-0002) (not supplied).
- Repeat using the outer flex pipe, using a heavy bead of red RTV silicone sealant (W573-0002) (not supplied) and a minimum of three screws, when 4/7, 5/8 and 3/5 venting is used and a minimum of six screws when using 8/10 or 8/11 venting.
- Thread the air terminal connector / vent pipe assembly down through the roof. The air terminal must be positioned vertically and plumb. Attach the air terminal connector to the roof support, ensuring that the top of the air terminal is 16" (40.6cm) above the highest point that it penetrates the roof.
- Remove nails from the shingles, above and to the sides of the air terminal connector. Place the flashing over the air terminal connector leaving a min. 3/4" (19mm) of the air terminal connector showing above the top of the flashing. Slide the flashing underneath the sides and upper edge of the shingles. Ensure that the air terminal connector is properly centered within the flashing, giving a 3/4" (19mm) margin all around. Fasten to the roof. Do not nail through the lower portion of the flashing. Make weather-tight by sealing with caulking. Where possible, cover the sides and top edges of the flashing with roofing material.
- Aligning the seams of the terminal and air terminal connector, place the terminal over the air terminal connector making sure the vent pipe goes into the hole in the terminal. Secure with a minimum of three screws, when 4/7, 5/8 and 3/5 venting is used and a minimum of six screws when using 8/10 or 8/11 venting.
- Apply a heavy bead of weatherproof caulking 2" (51mm) above the flashing. Install the storm collar around the air terminal and slide down to the caulking. Tighten to ensure that a weather-tight seal between the air terminal and the collar is achieved.
- If more vent pipe needs to be used to reach the appliance, see "**horizontal air terminal installation**" section.



5.4.3 appliance vent connection

- Install the inner flex pipe to the appliance. Secure with a minimum of three screws when installing 3"/5", 4"/7" or 5"/8" venting, or six screws when installing 8"/10" or 8"/11" venting. Seal the joint and screw holes using Mill Pac sealant (W573-0007) (not supplied).
- Install the outer flex pipe to the appliance. Secure with a minimum of three screws when installing 3"/5", 4"/7" or 5"/8" venting, or six screws when installing 8"/10" or 8"/11" venting. Seal the joints using high temperature red RTV silicone (W573-0002) (not supplied).

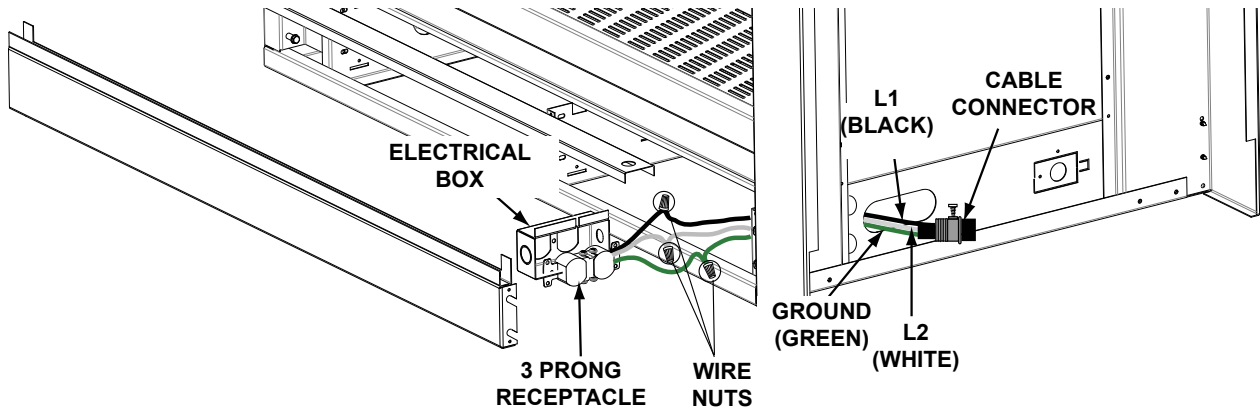


6.1 hard wiring connection

It is necessary to hard wire this appliance.

Permanently framing the appliance with an enclosure, requires the appliance junction box to be hard wired. This appliance must be electrically connected and grounded in accordance with local codes. In the absence of local codes, use the current CSA C22.1 Canadian electrical code in Canada or the ANSI/NFPA national electrical code in the United States.

6.2 receptacle wiring diagram



note:

Ensure that the transformer is plugged into the receptacle.

6.3 electronic wiring diagram

! WARNING

- Do not use this appliance if any part has been under water. Call a qualified service technician immediately to have the appliance inspected for damage to the electrical circuit.
- Risk of electrical shock or explosion. Do not wire 110V to the valve or to the appliance wall switch. Incorrect wiring will damage controls.
- All wiring should be done by a qualified electrician and shall be in compliance with local codes. In the absence of local codes, use the current CSA22.1 Canadian Electric Code in Canada or the current National Electric Code ANSI/NFPA NO. 70 in the United States.
- Always light the pilot whether for the first time or if the gas supply has run out, with the glass door opened or removed.

electrical information

6.4 battery back-up installation

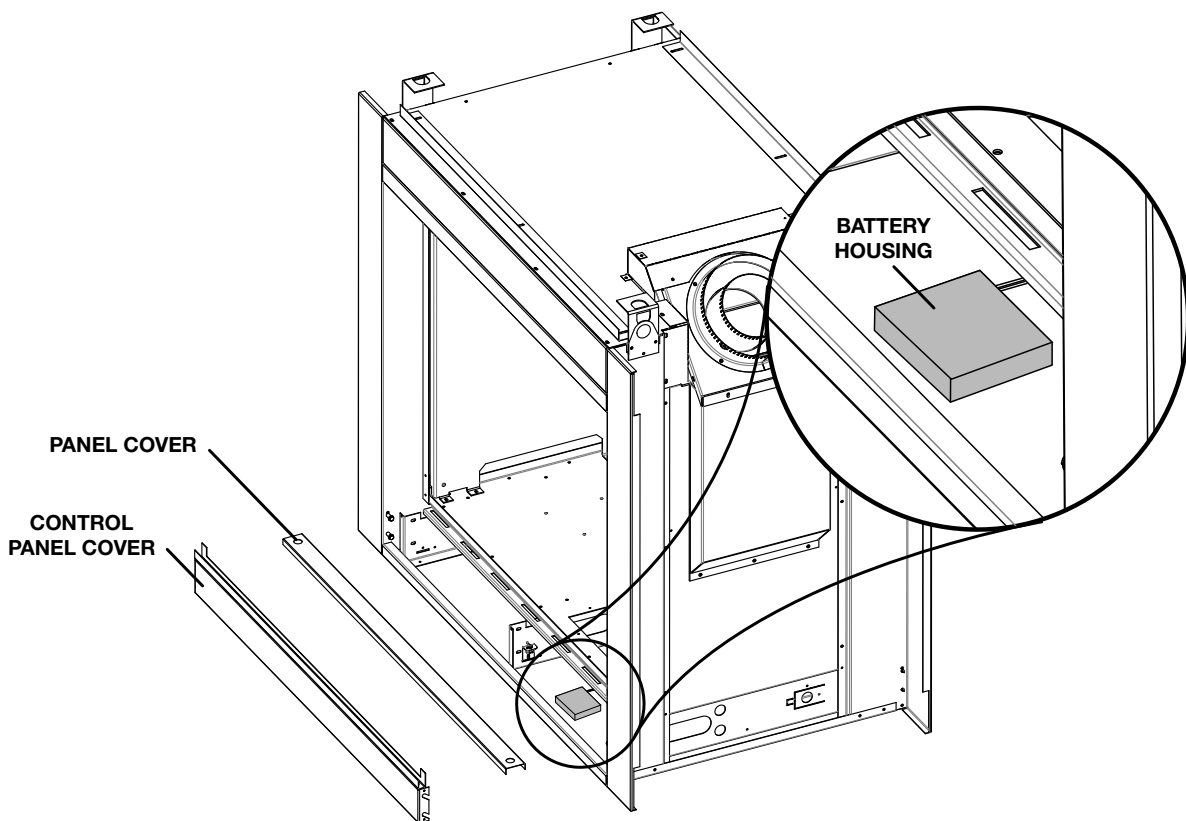
note:

In the event of a power failure, your appliance can be operated using the supplied battery back-up.

- A.** Remove the safety screen and door, refer to "main safety barrier removal / installation" and "main door removal / installation" sections.
- B.** Remove the panel cover using the two finger holes, then remove the control panel cover by lifting it up and off of the four shoulder screws. This will allow you to easily access the battery housing.
- C.** Locate the battery housing inside the valve compartment.
- D.** Install 2 "D" alkaline batteries (not supplied) into the battery housing. Ensure the positive and negative ends correspond with those identified on the holder.
- E.** Place the battery housing back into position or let it rest on the hearth, for the duration of the power failure.

note:

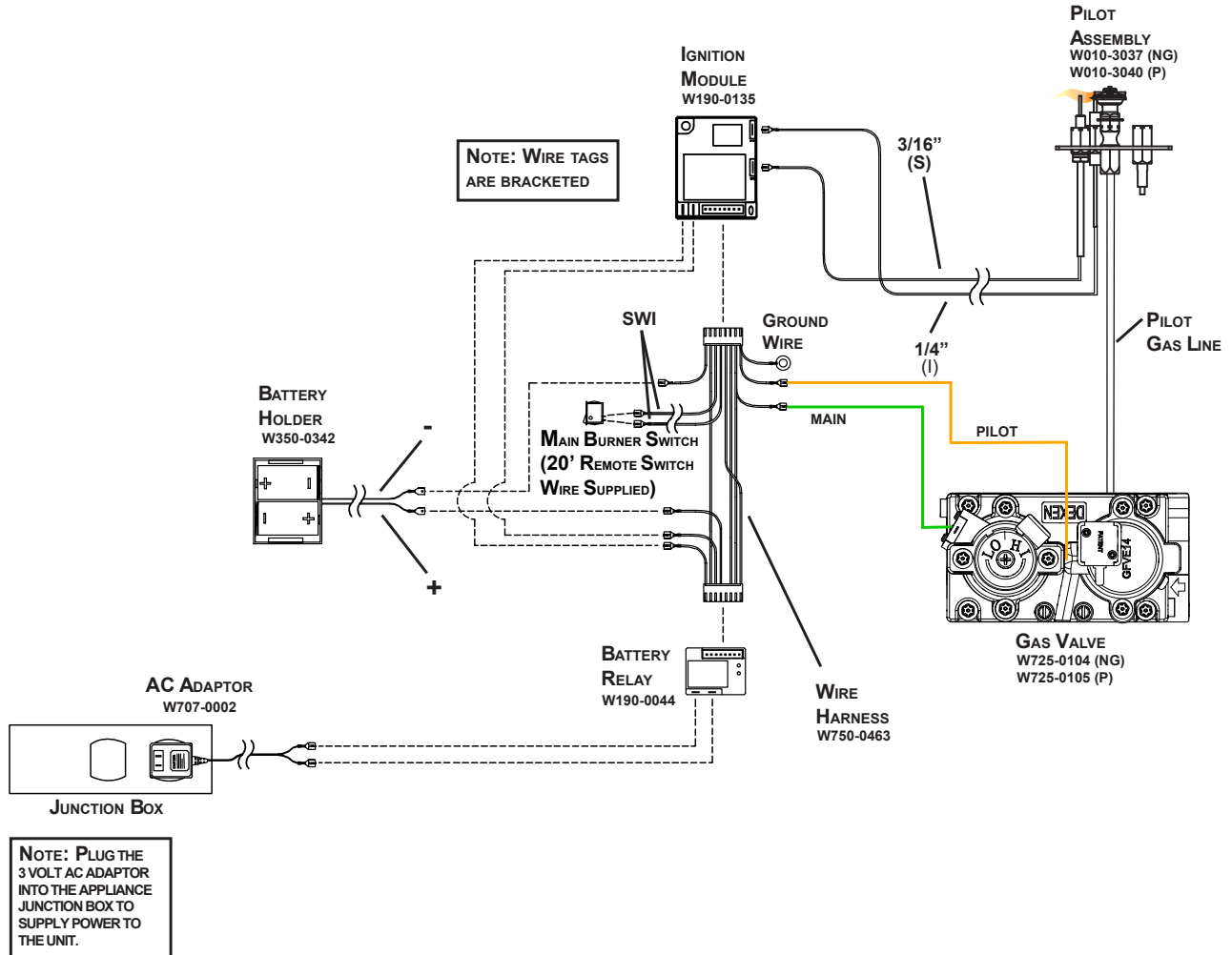
Once the power has been restored, remove the batteries from the holder.



6.5 wiring diagram

! WARNING

- Do not wire 110 volts to the valve or wall switch.



note:

This appliance comes equipped with a battery back-up. If this back-up is used, install 2 'D' batteries (not supplied) into the holder. The backup is controlled by a relay which will automatically switch to the back-up in the event of a power failure. If the back-up is used, it must be connected to this 3 volt battery pack (supplied). Do not use any other type of battery pack.

7.0 gas installation

! WARNING

- Risk of fire, explosion, or asphyxiation. Ensure there are no ignition sources such as sparks or open flames.
- Support gas control when attaching gas supply pipe to prevent damaging gas line.
- Always light the pilot whether for the first time or if the gas supply has run out with the glass door opened or removed. Purging of the gas supply line should be performed by a qualified service technician. Ensure that a continuous gas flow is at the burner before closing the door. Ensure adequate ventilation. For gas and electrical locations, see "dimensions" section.
- All gas connections must be contained within the appliance when complete **(gas fireplaces only)**.
- High pressure will damage valve. Disconnect gas supply piping before testing gas line at test pressures above 1/2 PSIG.
- Valve settings have been factory set, do not change.

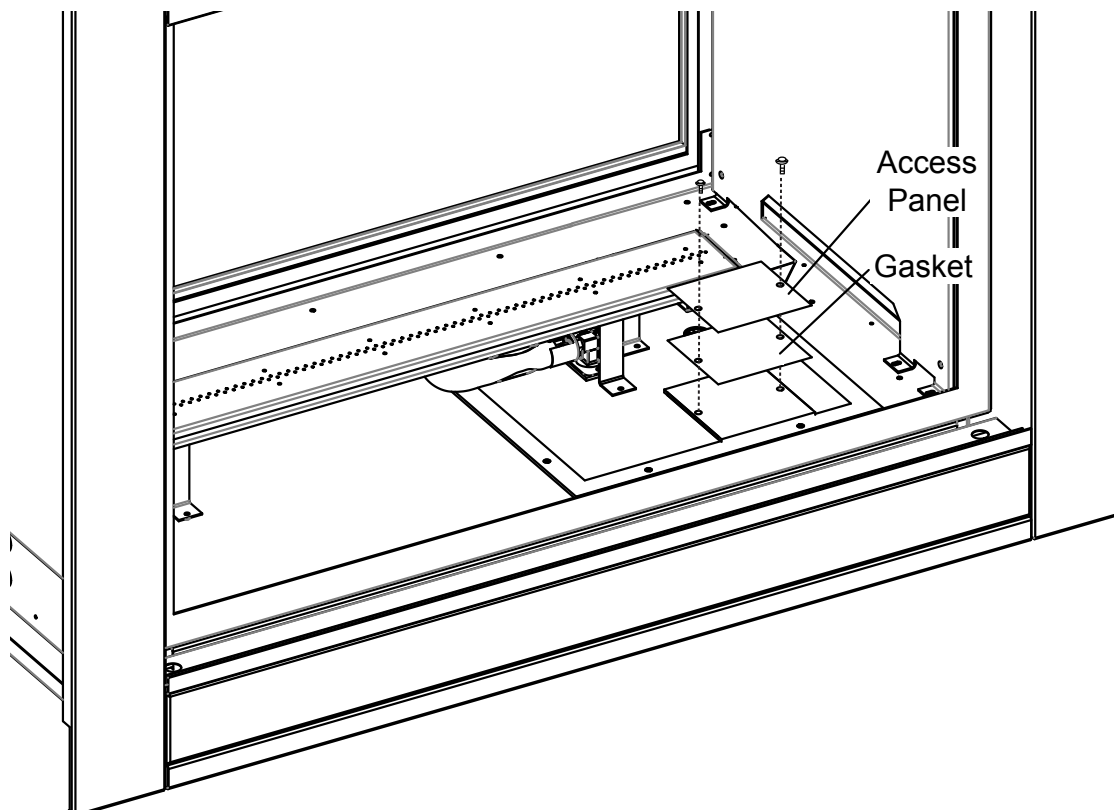
Installation and servicing to be done by a qualified installer.

- Move the appliance into position and secure.
- If equipped with a flex connector, the appliance is designed to accept a 1/2" (13mm) gas supply. Without the connector, it is designed to accept a 3/8" (9.5mm) gas supply. The appliance is equipped with a manual shut off valve to turn off the gas supply to the appliance.
- Connect the gas supply in accordance to local codes. In the absence of local codes, install to the current CAN/CSA-B149.1 Installation Code in Canada or to the current National Fuel Gas Code, ANSI Z223.1 / NFPA 54 in the United States.
- When flexing any gas line, support the gas valve so that the lines are not bent or kinked.
- The gas line flex-connector should be installed to provide sufficient movement for shifting the burner assembly on its side to aid with servicing components.
- Check for gas leaks by brushing on a soap and water solution. **Do not use open flame.**

After installing the electrical wiring and gas lines, ensure to test the appliance before finishing the framing and finishing the appliance.

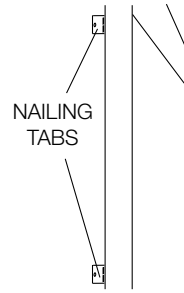
7.1 access panel for gas line connection

- Remove the screen and door from the appliance, see "side screen removal / door removal" section.
- Remove media and media tray from the appliance, see "cradle burner removal" section.
- Unscrew the 2 screws that hold the access panel to the firebox.
- Remove the gasket (careful not to tear).



8.0 nailing tab installation EN

- A. Nailing tabs are provided as part of the frames, as shown. To determine the final location and where to bend the nailing tabs you must first determine the thickness of your finishing material (i.e. drywall). This will determine the dimension from the front edge of the corner post to the nailing tab. Once the nailing tab is in the desired location and secure using an appropriate fastener*.



* Additional fasteners may be installed.

9.0 operation

! WARNING

- If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.
- If applicable, always light the pilot whether for the first time or if the gas supply has run out with the glass door opened or removed.

When lit for the first time, the appliance will emit an odor for a few hours. This is a normal temporary condition caused by the “burn-in” of paints and lubricants used in the manufacturing process and will not occur again. After extended periods of non-operation, such as, following a vacation or warm weather season, the appliance may emit a slight odor for a few hours. This is caused by dust particules in the heat exchanger burning off. In both cases, open a window to sufficiently ventilate the room.

FOR YOUR SAFETY READ BEFORE LIGHTING

- Do not turn on if children or other at risk individuals are near the appliance.
- This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- Before operating, smell all around the appliance area for gas and next to the floor because some gas is heavier than air and will settle on the floor.
- Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and any gas control which has been underwater.

WHAT TO DO IF YOU SMELL GAS

- Turn off all gas to the appliance.
- Open windows.
- 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 neighbour's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

LIGHTING INSTRUCTIONS

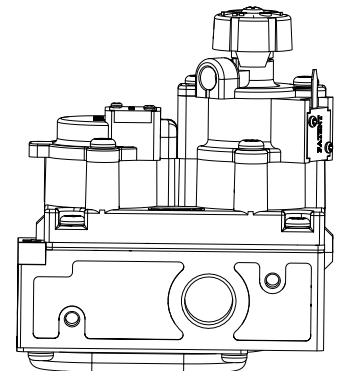
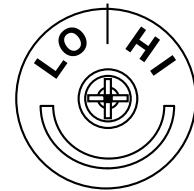
note:

This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.

- Stop! Read the above safety information on this label.
- Remove batteries from the transmitter and set thermostat to lowest setting, if equipped.
- Turn off all electrical power to the appliance.
- Open the glass door, if equipped.
- Turn the manual shut-off valve clockwise to the “OFF” position. (Shut-off valve is located on the flex connector).
- Wait five (5) minutes to clear out any gas. If you smell gas including near the floor, **STOP!** Follow the instructions above in the “WHAT TO DO IF YOU SMELL GAS” section. If you don't smell gas; close the glass door and go to the next step.
- Turn the manual shut-off valve counter clockwise to the “ON” position.
- Turn on all electrical power to the appliance and re-install the batteries into the transmitter. Set thermostat to desired setting, if equipped.
- Turn on the remote wall switch to the appliance.
- If the appliance will not operate, follow instructions “TO TURN OFF GAS” and call your service technician or gas supplier.

TO TURN OFF GAS

- Set thermostat to lowest setting, if equipped.
- Turn off the remote wall switch to the appliance.
- Turn off all electric power to the appliance if service is to be performed.
- Turn manual shutoff valve clockwise to the “OFF” position. Do not force.



When lit for the first time, the appliance will emit a slight odour for a few hours. This is a normal temporary condition caused by the “burn-in” of internal paints and lubricants used in the manufacturing process and will not occur again. Simply open a window to sufficiently ventilate the room. After extended periods of non-operation such as following a vacation or a warm weather season, the appliance may emit a slight odour for a few hours. This is caused by dust particles in the heat exchanger burning off. Open a window to sufficiently ventilate the room.

10.1 operating instructions - for your safety read before operating

OPERATING INSTRUCTIONS / INSTRUCTIONS D'OPÉRATION
FOR YOUR SAFETY READ BEFORE OPERATING / POUR VOTRE SÉCURITÉ LIRE AVANT DE FAIRE FONCTIONNER

WARNING: DO NOT TURN ON IF CHILDREN OR OTHER AT RISK INDIVIDUALS ARE NEAR THE APPLIANCE. IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE. INITIAL LIGHTING OF THE PILOT AND MAIN BURNERS MUST BE DONE WITH THE GLASS DOOR OFF. DO NOT CONNECT VALVE OR WALL SWITCH TO ELECTRICITY. SEE INSTALLATION INSTRUCTIONS.

ATTENTION: NE PAS ALLUMER SI DES ENFANTS OU D'AUTRES INDIVIDUS À RISQUE SONT À PROXIMITÉ DU FOYER. QUICONQUE NE RESPECTE PAS À LA LETTRE LES INSTRUCTIONS DANS LA PRÉSENTE NOTICE, RISQUE DE DÉCLENCHER UN INCENDIE OU UN EXPLOSION ENTRAÎNANT DES DOMMAGES, DES BLESSURES OU LA MORT. L'ALLUMAGE INITIAL DE LA VEILLEUSE ET DU BRÛLEUR PRINCIPAL DOIT SE FAIRE AVEC LA PORTE VITRÉE ENLEVÉE. NE RACCORDEZ PAS LA SOUPEPE OU L'INTERRUPTEUR MURAL À L'ÉLECTRICITÉ. CONSULTEZ LES INSTRUCTIONS D'INSTALLATION.

A. THIS APPLIANCE IS EQUIPPED WITH AN IGNITION DEVICE WHICH AUTOMATICALLY LIGHTS THE PILOT. DO NOT TRY TO LIGHT BY HAND.
 B. BEFORE OPERATING, SMELL ALL AROUND THE APPLIANCE AREA FOR GAS AND NEXT TO THE FLOOR BECAUSE SOME GAS IS HEAVIER THAN AIR AND WILL SETTLE ON THE FLOOR.

A. CET APPAREIL EST MUNI D'UN DISPOSITIF D'ALLUMAGE QUI ALLUME AUTOMATIQUEMENT LA VEILLEUSE. NE TENTEZ PAS D'ALLUMER LA VEILLEUSE MANUELLEMENT.
 B. AVANT DE FAIRE FONCTIONNER, RENIFLEZ TOUT AUTOUR DE L'APPAREIL POUR DÉCELER UN ODEUR DE GAZ. RENIFLEZ PRÈS DU PLANCHER, CAR CERTAINS GAZ SONT PLUS LOURDS QUE L'AIR ET PEUVENT S'ACCUMULER AU NIVEAU DU SOL.

WHAT TO DO IF YOU SMELL GAS:

- TURN OFF ALL GAS TO THE APPLIANCE.
- OPEN WINDOWS.
- DO NOT TRY TO LIGHT ANY APPLIANCE.
- DO NOT TOUCH ANY ELECTRICAL SWITCH; DO NOT USE ANY PHONE IN YOUR BUILDING.
- IMMEDIATELY CALL YOUR GAS SUPPLIER FROM A NEIGHBOUR'S PHONE. FOLLOW THE GAS SUPPLIER'S INSTRUCTIONS.
- IF YOU CANNOT REACH YOUR GAS SUPPLIER, CALL THE FIRE DEPARTMENT.

QUÉ FAIRE SI VOUS DÉTECTEZ UNE ODEUR DE GAZ:

- COUPEZ L'ALIMENTATION DE GAZ PRINCIPALE.
- OUVREZ LES FENÊTRES.
- NE PAS TENTER D'ALLUMER D'APPAREIL.
- NE TOUCHEZ À AUCUN INTERRUPTEUR; NE PAS VOUS SERVIR DES TÉLÉPHONES SE TROUVANT DANS LE BÂTIMENT.
- APPELEZ IMMÉDIATEMENT VOTRE FOURNISSEUR DE GAZ DEPUIS UN VOISIN. SUIVEZ LES INSTRUCTIONS DU FOURNISSEUR.
- SI VOUS NE POUVEZ REJOINDRE LE FOURNISSEUR APPELEZ LE SERVICE DES INCENDIES.

C. DO NOT TRY TO REPAIR ANY PART OF THIS ASSEMBLY; 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 REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL WHICH HAS BEEN UNDER WATER.

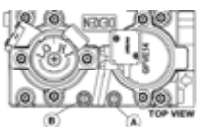
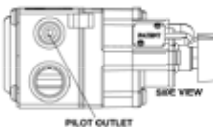

C. N'ESSAYEZ PAS DE RÉPARER AUCUNE PIÈCE DE CET ASSEMBLAGE. APPELÉZ UN TECHNICIEN QUALIFIÉ. FORCER OU TENTER DE RÉPARER L'ASSEMBLAGE POURRAIT CAUSER UN FEU OU UNE EXPLOSION.
 D. N'UTILISEZ PAS CET APPAREIL S'IL A ÉTÉ PLONGÉ DANS L'EAU, MÊME PARTIELLEMENT. FAITES INSPECTER L'APPAREIL PAR UN TECHNICIEN QUALIFIÉ ET REMPLACEZ TOUTE PARTIE DU SYSTÈME DE CONTRÔLE ET TOUTE COMMANDE QUI ONT ÉTÉ PLONGÉS DANS L'EAU.

W385-2357

10.2 lighting instructions

LIGHTING INSTRUCTIONS / INSTRUCTIONS D'ALLUMAGE

1. **STOP!** READ ALL INFORMATION OF OPERATING AND LIGHTING INSTRUCTIONS BEFORE PROCEEDING.
2. TURN OFF ELECTRICAL POWER TO THE APPLIANCE.
3. THIS APPLIANCE IS EQUIPPED WITH AN IGNITION DEVICE WHICH AUTOMATICALLY LIGHTS THE PILOT. DO NOT TRY TO LIGHT THE PILOT BY HAND.
4. OPEN THE GLASS DOOR.
5. TURN MANUAL SHUTOFF VALVE CLOCKWISE TO OFF.
6. WAIT FIVE (5) MINUTES TO CLEAR OUT ANY GAS. IF YOU SMELL GAS, INCLUDING NEAR THE FLOOR, **STOP!** FOLLOW "B" OF THE OPERATING INSTRUCTIONS. IF YOU DON'T SMELL GAS, GO TO THE NEXT STEP.
7. TURN MANUAL SHUTOFF VALVE COUNTER-CLOCKWISE TO ON.
8. CLOSE THE GLASS DOOR.
9. TURN ON ALL ELECTRICAL POWER TO THE APPLIANCE.
10. TURN ON MAIN BURNER.

1. **ARRÊTEZ!** LISEZ TOUTES LES INSTRUCTIONS DE FONCTIONNEMENT ET D'ALLUMAGE AVANT DE CONTINUER.
2. COUPEZ L'ALIMENTATION ÉLECTRIQUE À L'APPAREIL.
3. CET APPAREIL EST MUNI D'UN DISPOSITIF D'ALLUMAGE QUI ALLUME LA VEILLEUSE AUTOMATIQUEMENT, N'ESSAYEZ PAS D'ALLUMER LA VEILLEUSE MANUELLEMENT.
4. OUVREZ LA PORTE VITRÉE.
5. TOURNEZ LA SOUPEPE DE SECTIONNEMENT MANUELLE VERS LA DROITE À « OFF ».
6. ATTENDEZ CINQ (5) MINUTES POUR QUE LE GAZ PUISSE S'ÉCHAPPER. SI VOUS DÉTECTEZ UNE ODEUR DE GAZ, **ARRÊTEZ!** SUIVEZ « B » DANS LES INSTRUCTIONS DE FONCTIONNEMENT. S'IL N'Y A PAS D'ODEUR DE GAZ, PASSEZ À L'ÉTAPE SUIVANTE.
7. TOURNEZ LA SOUPEPE DE SECTIONNEMENT MANUELLE VERS LA GAUCHE À « ON ».
8. FERMEZ LA PORTE VITRÉE.
9. RÉTABLISSEZ L'ALIMENTATION ÉLECTRIQUE AU FOYER.
10. ALLUMEZ LE BRÛLEUR PRINCIPAL.

TO TURN OFF GAS / INSTRUCTIONS POUR COUPER LE GAZ

1. TURN OFF ALL ELECTRICAL POWER TO THE APPLIANCE IF SERVICE IS TO BE PERFORMED.
2. TURN MANUAL SHUTOFF VALVE CLOCKWISE TO OFF. DO NOT FORCE.
1. COUPEZ L'ALIMENTATION ÉLECTRIQUE AU FOYER SI UN TRAVAIL D'ENTRETIEN DOIT SE FAIRE.
2. TOURNEZ LA SOUPEPE D'ARRÊT MANUELLE VERS LA DROITE À « OFF ». NE FORCEZ PAS.

W385-2357

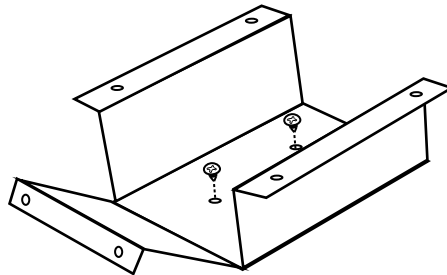
11.0 finishing

WARNING

- Risk of fire!
- Never obstruct the front opening of the appliance.
- The front of the appliance must be finished with any non-combustible materials such as brick, marble, granite, etc., provided that these materials do not go below the specified dimension, as illustrated.
- Do not strike, slam, or scratch. Do not operate appliance with glass removed, cracked, or scratched.
- Facing and/or finishing material must never overhang into the appliance opening.
- The glass door assembly is designed to pivot forward when relieving excess pressure that might occur. Finishing or other materials must not be located in the opening surrounding the door as this will interfere with the doors ability to relieve pressure.

11.1 shipping bracket

- Remove the door(s), refer to "door removal / installation " section for instructions.
- Cut the strap holding the glass and vent thimble in place.
- Remove the 2 screws holding the shipping bracket / vent shield in place, as shown.



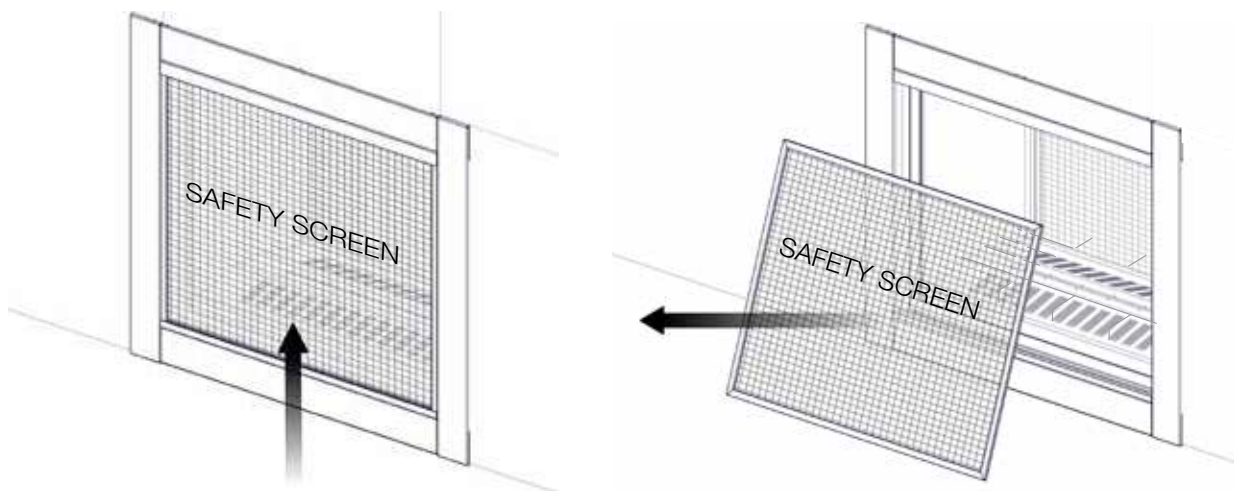
note:

The two screws removed from the shipping bracket vent shield **MUST** be replaced.

11.2 main safety barrier removal / installation

A barrier designed to reduce the risk of burns from the hot viewing glass is provided with the appliance and shall be installed.

Before the glass door can be removed, the safety barrier must be removed. Lift the safety barrier up and pull it out of the bottom retainer. Pull the safety barrier down and out of the top retainer.



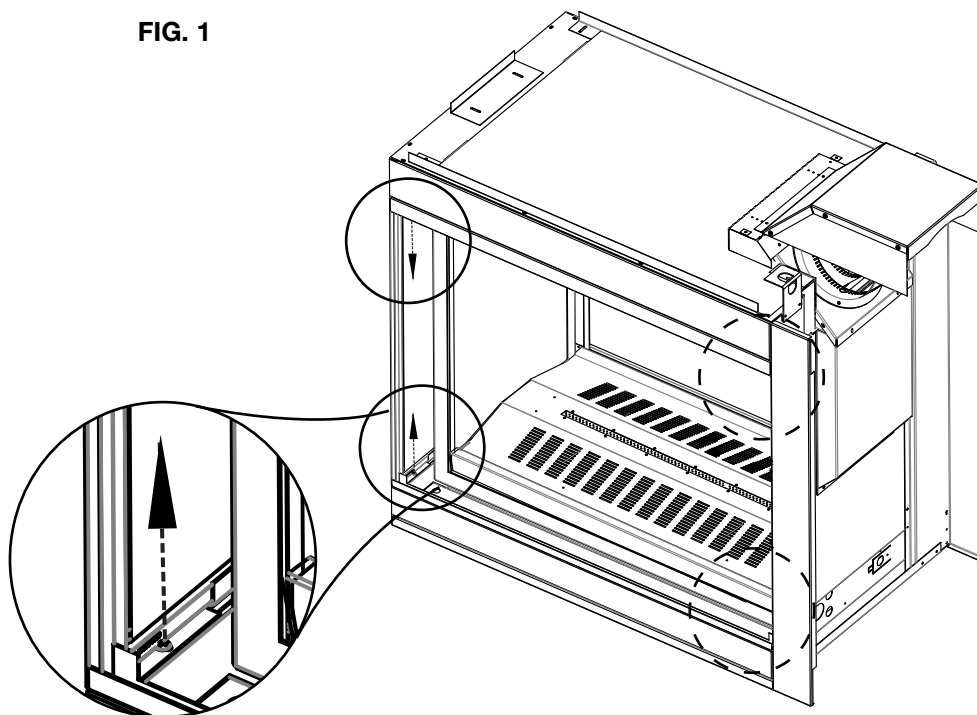
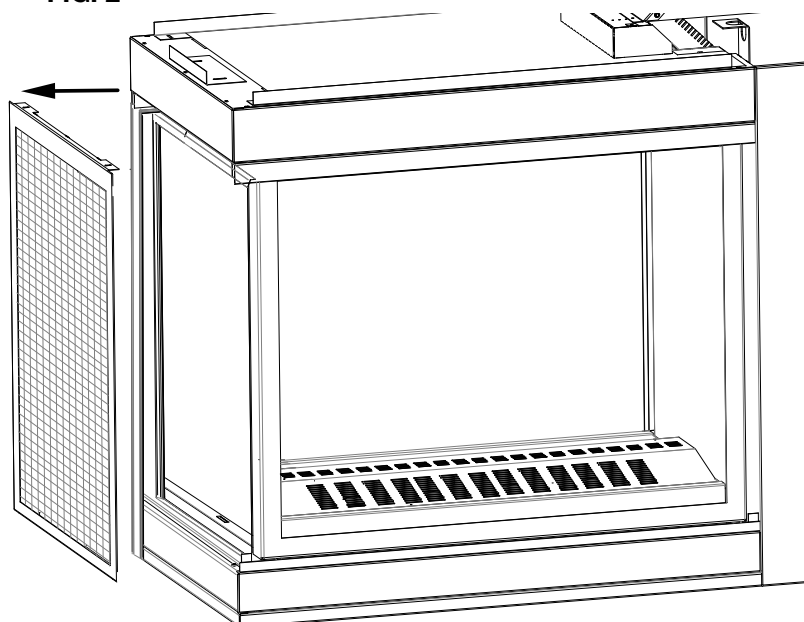
Reverse these steps to reinstall the safety screen. Ensure it is installed correctly.

11.3 end safety barrier removal / installation (CBHD4PA only)

note:

One of the main safety barriers must be removed prior to end barrier removal, see "main safety barrier removal / installation" section.

- A. Remove the 4 securing screws from the top and bottom of the end screen retainer, refer to Figure 1.
- B. Pull the safety barrier forward and out from the appliance, refer to Figure 2.

FIG. 1**FIG. 2**

11.4 main door removal / installation

! WARNING

- Glass may be hot. Do not touch glass until cooled.
- If equipped with door latches that are part of a safety system, they must be properly engaged. Do not operate the appliance with latches disengaged.
- Facing and/or finishing materials must not interfere with air flow through air openings, louvre openings, operation of louvres, or doors/access for service. Observe all clearances when applying combustible materials.
- Before door is removed, turn the appliance off and wait until appliance is cool to the touch. Doors are heavy and fragile so handle with care.

- Remove the safety barrier, see "main safety barrier removal / installation" section.
- Loosen but do not remove the three securing screws from the top retainer and pull retainer away from the appliance, refer to Figure 1.
- There are two latches on the top of each door, refer to Figure 2. Using the tool provided, pull the latch forward and upwards, out of the slot in the door, as shown. **Ensure to keep one hand on the door at all times, to prevent it from falling on the floor.**
- When both latches have been released, tilt the door forward and out of the bottom door retainer.
- Reverse this process to install the door.

FIG. 1

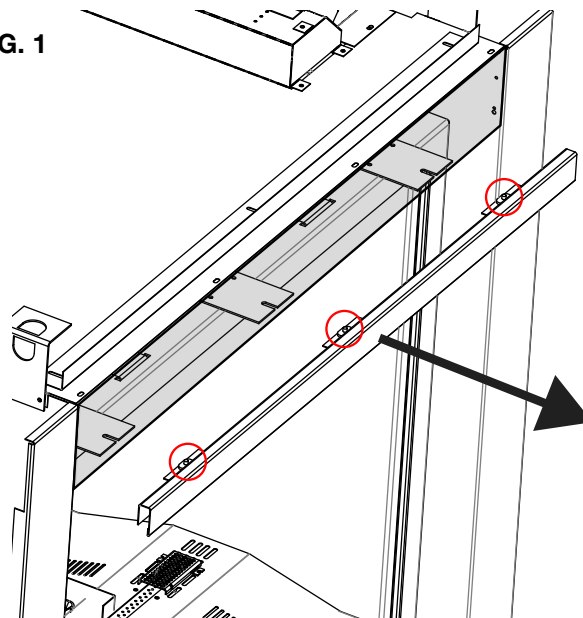
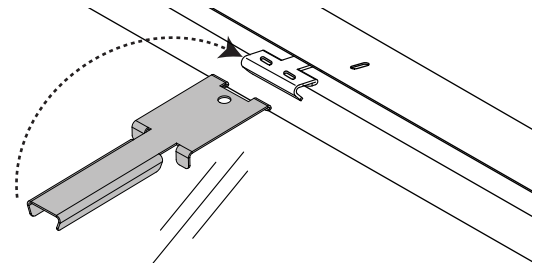
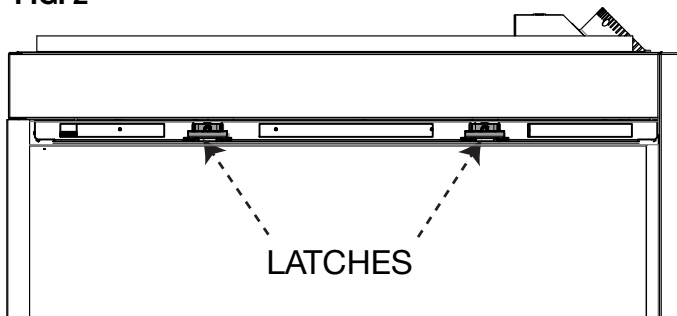


FIG. 2



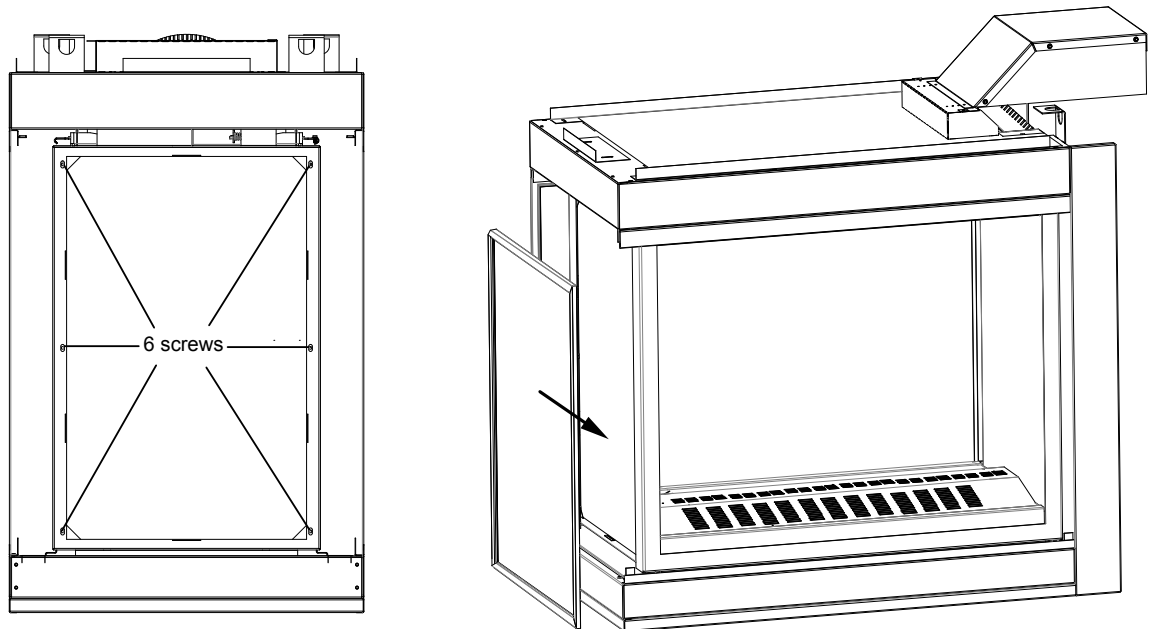
IMPORTANT: Once latches are engaged, test that the door is secure and will not fall forward before letting go.

11.5 end door removal / installation (CBHD4PA only)

note:

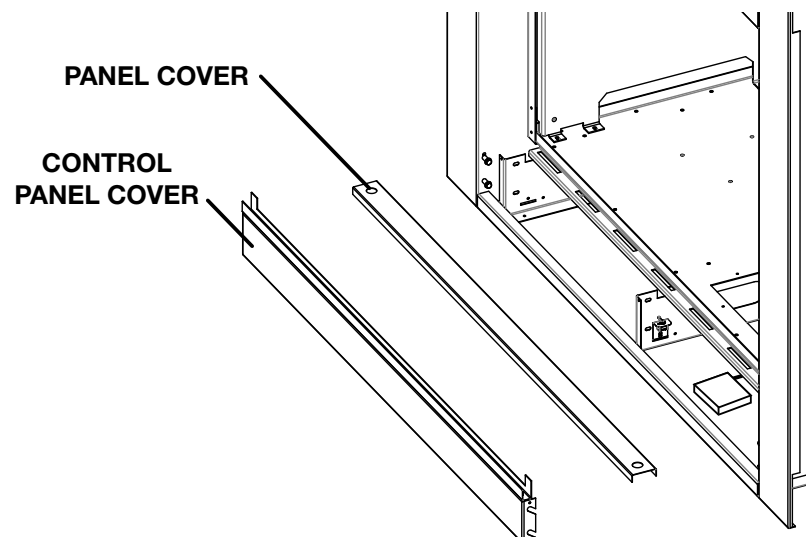
One of the main safety barriers and doors must be removed prior to end barrier removal, see "main safety barrier removal / installation" section and "main door removal / installation" sections for detailed instructions.

- A. Remove the 6 screws securing the end door in place, as shown below. **Ensure to keep one hand on the door, from the inside of the appliance, at all times to prevent it from falling.**
- B. Tilt the door from the top downwards and carefully remove it from the appliance.
- C. To install the end door, reverse these steps.



11.6 control panel removal

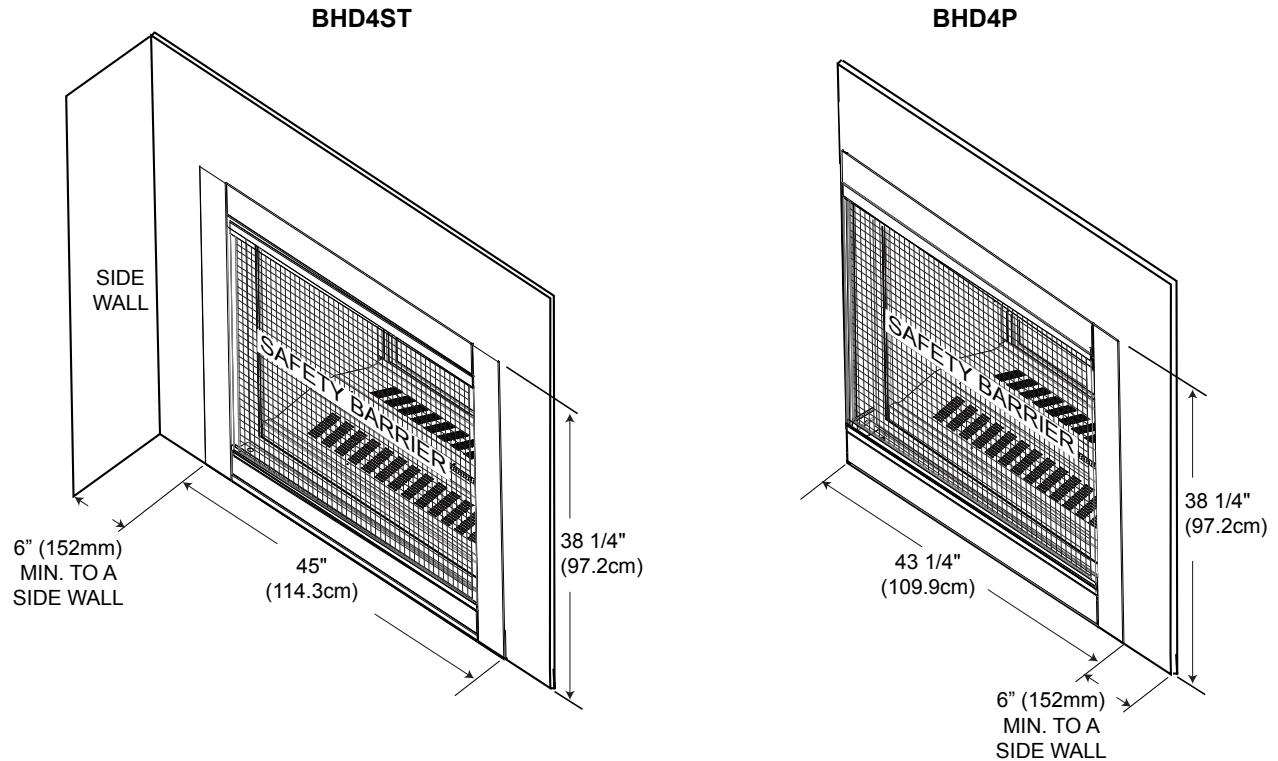
- A. Remove the main safety barrier, see "main safety barrier removal / installation" section.
- B. Remove the panel cover using the two finer holes, lift it up and away from the appliance, as shown below.
- C. Remove the control panel cover by lifting it up and off of the four shoulder screws, as shown below.



11.7 installing combustible board

! WARNING

- The surface above the appliance gets very hot. If proper finishing materials are not used, cracking can occur.
- Ensure clearances are maintained for surround removal, as it must lift off the appliance for maintenance.

**Joint Compound where required**

Joint compounds such as Durabond 90 and tapes that are resilient to heat and cracking should be used when taping and mudding seams.

Setting tiles and grouting

We recommend you use tiles with a dry butt joint to be installed using a two-part mortar with an acrylic latex additive, such as Mapei Kerabond/Kerlastic, to allow for slight movement in the normal operation of the appliance. If grout is used between the tiles, a polymer-based grout, such as Mapei Ultracolor plus, is recommended.

Primer/Paint

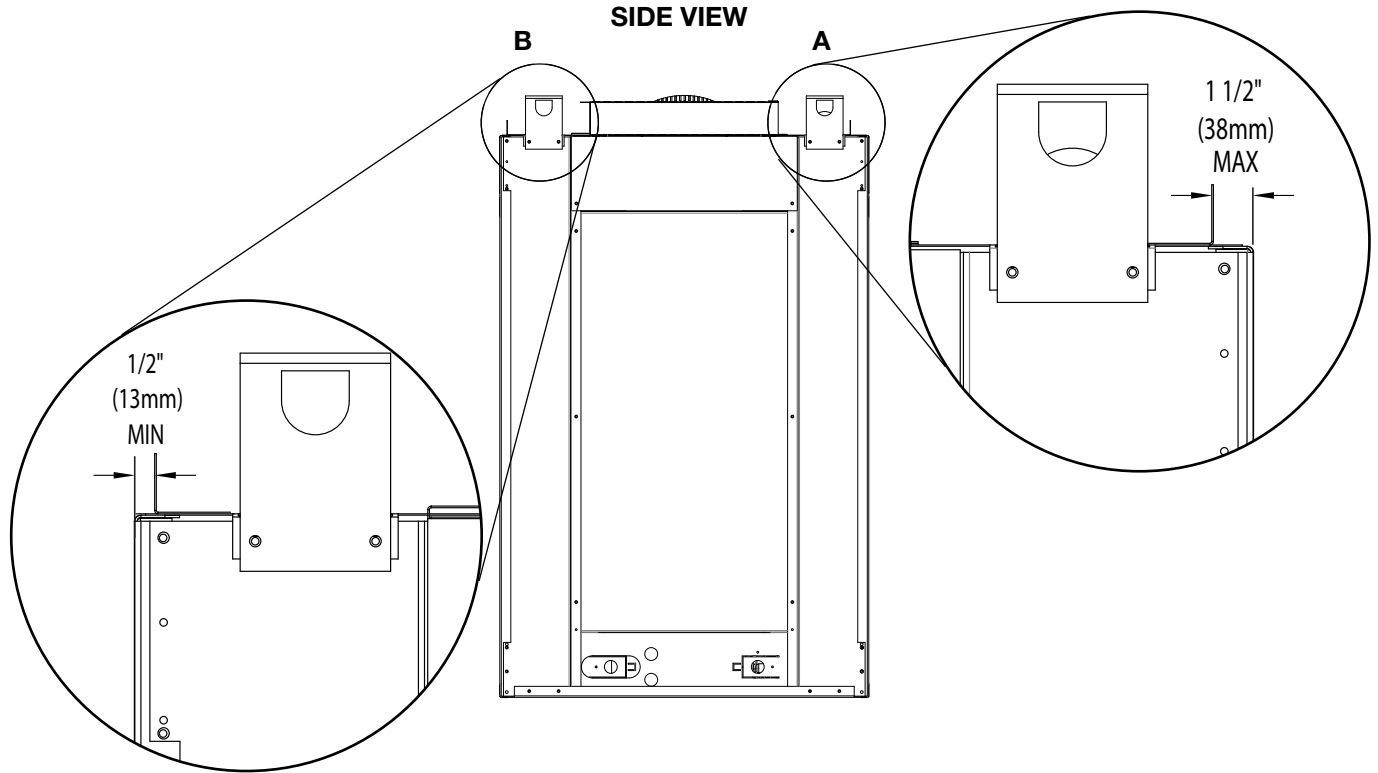
For a painted surface, use a 100% acrylic latex primer and finish coat. Paints may discolour.

11.7.1 finishing support adjustment

Depending on the finishing material we have allowed from 0" (0mm) to 1" (25mm) of adjustment after the 1/2" (13mm) combustible board has been installed. Loosen the 8 screws on each finishing support. Adjust the finishing support to the desired position.

note:

Peninsula models have one end support that can also be adjusted by loosening the two screws.



note:

Framing dimensions "A" and "B" will be affected as the finishing supports are adjusted outwards, refer to "framing" section.

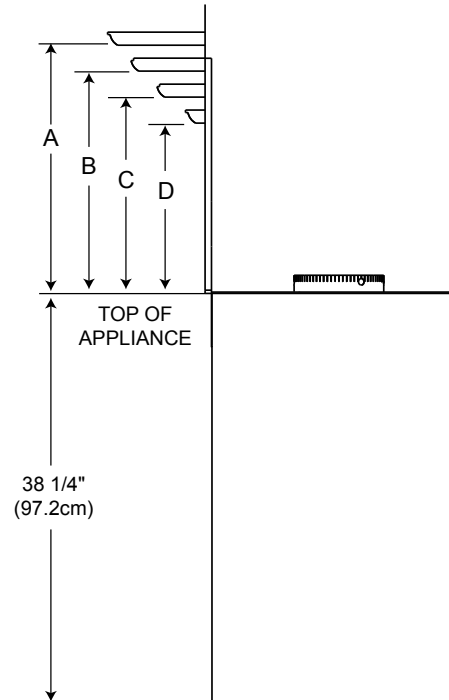
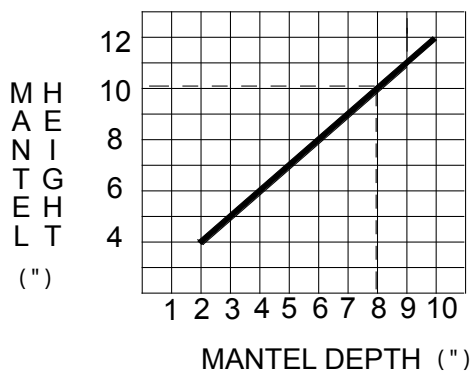
11.8 minimum mantel clearances

! WARNING

- Risk of fire. Maintain all specified air space clearances to combustibles. Failure to comply with these instructions may cause a fire or cause the appliance to overheat. Ensure all clearances (i.e. back, side, top, vent, mantel, front, etc.) are clearly maintained.
- When using paint or lacquer to finish the mantel, the paint or lacquer must be heat resistant to prevent discolouration.

Combustible mantel clearance can vary according to the mantel depth. Use the graph to help evaluate the clearance needed.

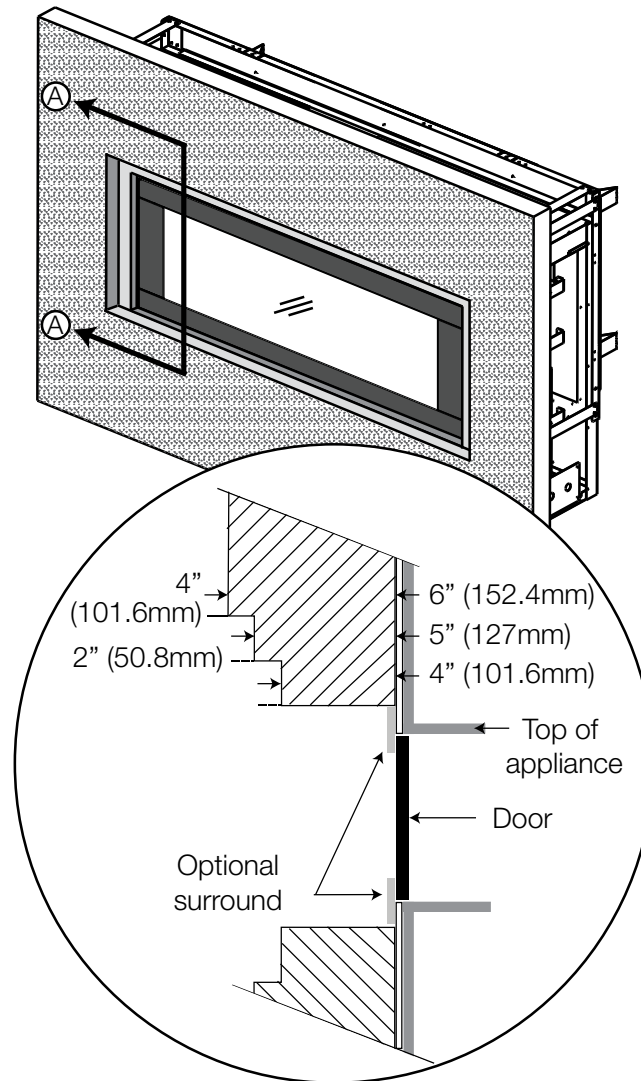
MANTEL DIMENSIONS		
Ref	Height	Depth
D	4" (102mm)	2" (51mm)
C	6" (152mm)	4" (102mm)
B	8" (203mm)	6" (152mm)
A	10" (254mm)	8" (203mm)



11.9 non-combustible facing material

! WARNING

Non-combustible facing material must not project more than 4" (101.6mm) from the face of the door (all four sides). If greater projections are desired, increase the clearance to the sides, bottom and top by 2" (50.8mm) for every additional 1" (25.4mm) of projection. If using an optional surround, the same rule applies, starting from the top of the surround. Ensure clearances are maintained for surround removal, as it must lift off the appliance for maintenance.



11.10 log placement

! WARNING

- Failure to position the logs in accordance with these diagrams or failure to use only logs specifically approved with this appliance may result in property damage or personal injury.
- Logs must be placed in their exact location in the appliance. Do not modify the proper log positions, since appliance may not function properly and delayed ignition may occur.
- The logs are fragile and should be handled with care.

note:

The individual logs can be easily identified by the numbers cast on the underside of each log.

Phazer™ logs and glowing embers, exclusive to Continental™, provide a unique and realistic glowing effect that is different in every installation. During the initial use of the appliance, log colours may vary. During the initial use of the appliance, the colours will become more uniform as colour pigments burn in during the heat activated curing process.

Blocked burner ports can cause an incorrect flame pattern.

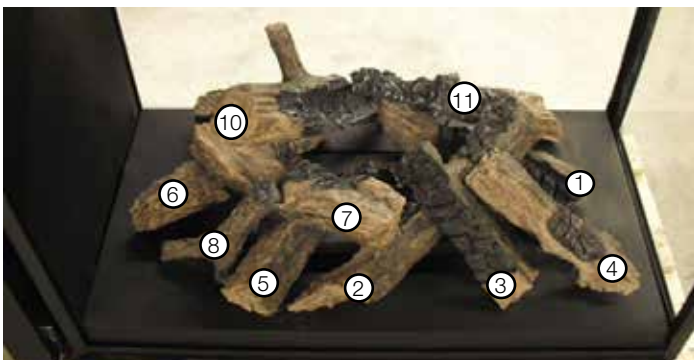
note:

The pilot is located on the right end in these instructions.

1. Remove the main safety barriers and doors, see "main safety barrier removal / installation" and "main door removal / installation" sections for removal instructions.
2. Line the hole in the bottom of log #1 with the screw and spacer in the log support. Then place onto the screw and spacer located in the corner of the burner, on the right side. Place a pin into the center of log #1 (**Fig. 1**).
3. Place log #2 onto the pin located in the log #1, it should rest in the middle of the left side log support as shown in Figure 2. Place one pin into the middle of log #2 (**Fig. 2**).
4. Place log #3 onto the pin located in log #2 and let it rest on log #2, as shown in Figure 3 and in the left side view below. Place another pin into log #2 (**Fig. 3**).
5. Place log #4 onto the pin located in log #2 and let it rest on log #2 (**Fig. 4**) and in the left side view.
6. Place log #5 onto the screw and spacer located in the left side log support and let it rest on the burner (**Fig. 5**).

note:

Ensure log #5 does not cover any burner ports.



LEFT SIDE VIEW



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5

- Place log #6 onto the pin located on the right side corner of the burner, then place one pin into middle of the log #6 and log #5 (**Fig. 6**).

note:

Ensure log #6 does not cover any burner ports.

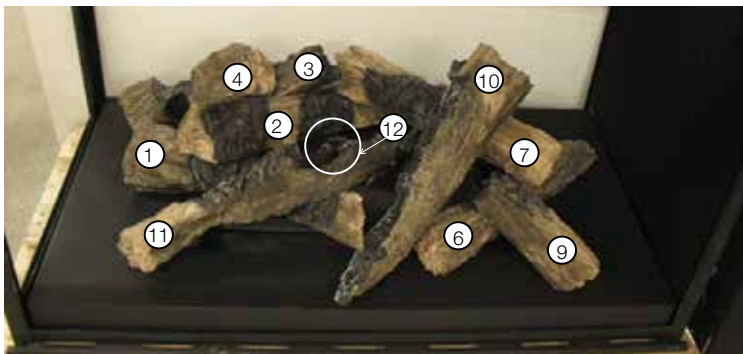
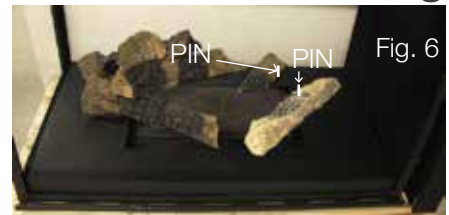
- Place log #7 onto the pin located in log #6 and onto the pin in log #5 (**Fig. 7**).
- Place log #8 on the log support and let it rest against the notch in the side of log #7 (**Fig. 8**).

HINT: The best view of log #8 is shown in the left side view below.

- Place log #9 onto the pin located in log #6 and let it rest on the right side corner log support and then place one pin into log #7 (**Fig. 9**).
- Place log #10 onto the pin located in log #7 and let it rest in the middle of the right side log support (**Fig. 10**). Place one pin into log #1 (**Fig. 10**).
- Place log #11 onto the pin located in log #1 and let it rest on the right end log support (**Fig. 11**).
- Place charcoal lump #12 onto the two pins located in the center of the burner (**Fig. 12**).
- Install the glowing embers, see "glowing embers" section.
- Sprinkle the charcoal embers around the log support, see "charcoal embers" section. (Use illustration below as reference).
- Place the charcoal lumps on top of the charcoal embers, see "charcoal lumps" section. (Use illustration below as reference).

note:

Do not cover the pilot or burner ports with media or embers. Do not overfill.



RIGHT SIDE VIEW



LEFT SIDE VIEW

11.10.1 glowing embers **WARNING**

- Completely blocking the burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition.

Tear the embers into pieces and loosely layer above the burner ports covering the burner area. Care should be taken to shred the embers into thin, small irregular pieces as only the exposed edges of the fibre hairs will glow.

The ember material will only glow when exposed to direct flame; however, care should be taken to not block off the burner ports.

Blocked burner ports can cause an incorrect flame pattern, carbon deposits and delayed ignition. **PHAZER™** logs glow when exposed to direct flame. Use only certified “glowing embers” and **PHAZER™** logs available from your local authorized dealer / distributor.

11.10.2 charcoal embers **WARNING**

- Do not block or close off the burner ports. Blocked ports can cause an incorrect flame pattern, carbon deposits and delayed ignition.
- When supplied, charcoal embers, charcoal lumps and vermiculite are not to be placed on the burner.

Randomly place the charcoal embers along the front and sides of the log support in a realistic manner.

Fine dust found in the bottom of the bag should not be used.

note:

Charcoal embers are not to be placed on the burner.

11.10.3 charcoal lumps **WARNING**

- Do not block or close off the burner ports. Blocked ports can cause an incorrect flame pattern, carbon deposits and delayed ignition.
- When supplied, charcoal embers, charcoal lumps and vermiculite are not to be placed on the burner.

Place the lumps in front of the logs in a realistic manner taking care not to block or close off any of the burner ports.

11.11 glass media installation

! WARNING

- Clean the glass media prior to installation. Before applying the cleaned glass, ensure that it is dry.
- Do not change or substitute the glass media material provided with this appliance. If replacing, use only the replacement glass media available from your local authorized dealer / distributor.
- Glass media over the burner must not be more than one layer high. More than one layer over the burner will cause flame lifting and sooting problems.
- Do not place any media (glass or vermiculite) in or around the pilot opening and/or on the burner ports. This will interfere with the pilot operation.

Evenly spread the glass media onto the media tray, covering the burner tube and tray. Ensure no glass media falls into the pilot opening. If this happens, insert a clean bag into your vacuum cleaner and vacuum out the glass media. Replacement glass can be purchased from your local dealer / distributor.

note:

Do not use more media than what was certified with the appliance.

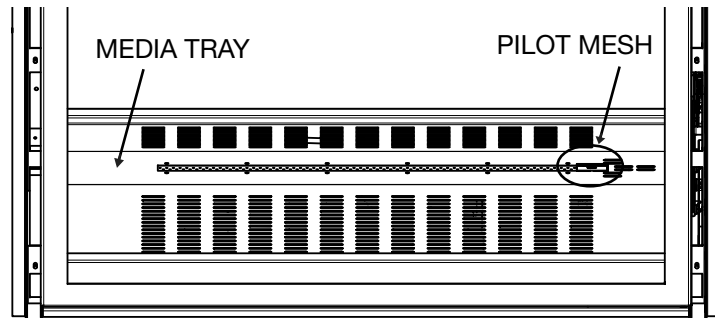
Cleaning Glass Media

Glass media may have a fine oil residue that needs to be cleaned prior to installation. Clean the glass with mild dish soap, drain, rinse thoroughly and dry before placing over the burner.

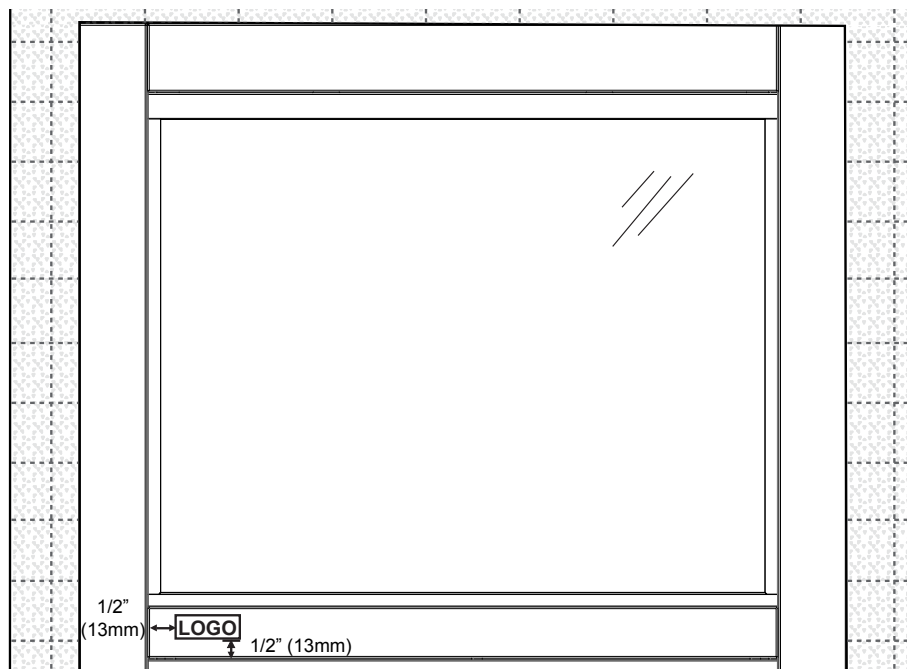
note:

Glass media may cover the entire media tray. Care should be taken around the pilot mesh. We recommend that no media should be placed directly on the pilot mesh.

CBHD4STG AND CBHD4PG ONLY



11.12 logo placement



12.0 adjustments

12.1 check pressure readings

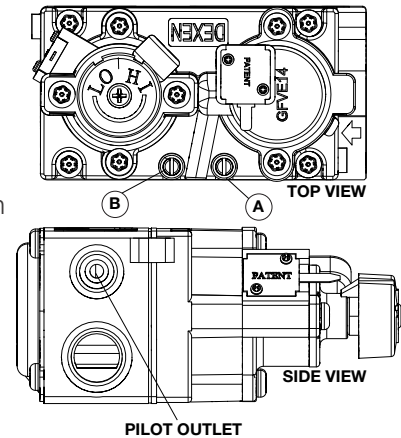
Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read as described on the chart below. Check pressure with main burner operating on "HI".

Outlet pressure can be checked the same as above using screw (B). Gauge should read as described on the chart below. Check pressure with main burner operating on "HI".

After taking pressure readings, be sure to turn screws clockwise firmly to reseal. Do not overtorque.

Leak test with a soap and water solution.

Prior to pilot adjustment, ensure that the pilot assembly has not been painted. If overspray or painting of the pilot assembly has occurred remove the paint from the pilot assembly, or replace. Fine emery cloth or a synthetic scrub pad (such as Scotch-Brite™) can be used to remove the paint from the pilot hood, electrode and flame sensor.



Pressure	Natural Gas (inches)	Natural Gas (millibars)	Propane (inches)	Propane (millibars)
Inlet	*7" (minimum 4.5")	17.4mb (minimum 11.2mb)	13" (minimum 11")	32.4mb (minimum 27.4mb)
Outlet	3.5"	8.7mb	10"	24.9mb

***Maximum inlet pressure not to exceed 13"**

12.2 venturi adjustment

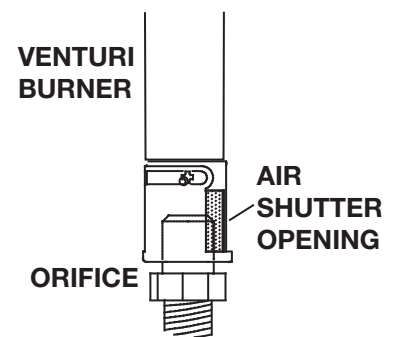
This appliance has an air shutter that has been factory set open according to the chart below:

Regardless of venturi orientation, closing the air shutter will cause a more yellow flame, but can lead to carbonization. Opening the air shutter will cause a more blue flame, but can cause flame lifting from the burner ports. The flame may not appear yellow immediately; allow 15 to 30 minutes for the final flame colour to be established.

AIR SHUTTER ADJUSTMENT MUST ONLY BE DONE BY A QUALIFIED INSTALLER.

note:

It is important that the orifice is securely inserted into the venturi.



VENTURI ADJUSTMENT CHART

NG	1/16" (1.6mm)
P	5/16" (8mm)

12.3 restricting vertical vents

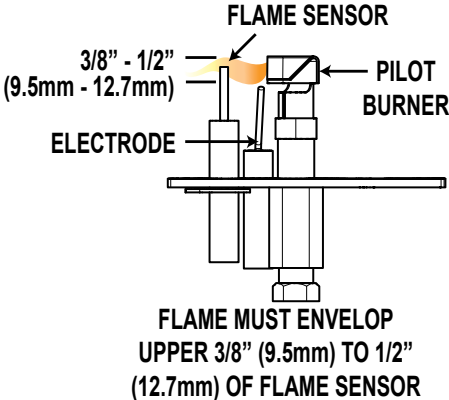
Vertical installations may display a very active flame. If this appearance is not desirable, the vent exit must be restricted using a restrictor vent kit. Refer to the "replacement parts" section of the owner's manual for the appropriate kit. This will reduce the velocity of the exhaust gases, slowing down the flame pattern and creating a more traditional gentle flame appearance. Specific instructions are included with the kit.

note:

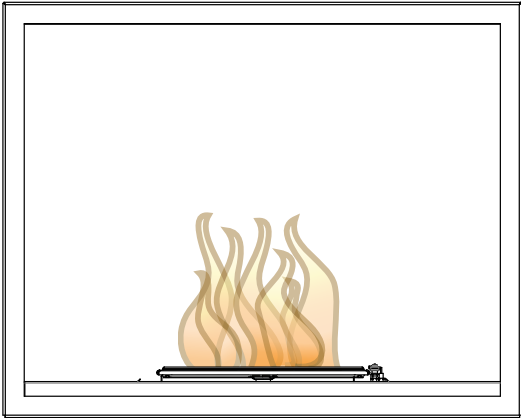
If the appliance has been reduced to 4/7" venting only, use an RP4 to restrict vertical venting.

12.4 flame characteristics

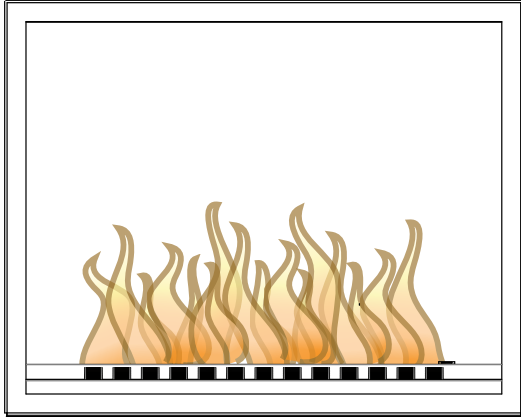
It's important to periodically perform a visual check of the pilot and burner flames. Compare them to the illustration provided. If any flames appear abnormal, call a service person.



LOG BURNER



GLASS BURNER



WARNING

- Turn off the gas and electrical power before servicing the appliance.
- Appliance may be hot. Do not service until appliance has cooled.
- Do not use abrasive cleaners on glass.
- Do not paint the pilot assembly.

This appliance and its venting system should be inspected before use and at least annually by a qualified service person. The following suggested checks should be performed by a qualified technician. The appliance area must be kept clear and free of combustible materials, gasoline, or other flammable vapors and liquids. The flow of combustion and ventilation air must not be obstructed.

note:

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

1. In order to properly clean the burner and pilot assembly, remove the logs, rocks and/or glass to expose both assemblies.
2. Keep the control compartment, media, burner, air shutter opening and the area surrounding the appliance clean by vacuuming or brushing, at least once a year.
3. Check to see that all burner ports are burning. Clean out any of the ports which may not be burning or are not burning properly.
4. Check to see that the pilot flame is large enough to engulf the flame sensor and/or thermocouple / thermopile as well as it reaches the burner.
5. If your appliance is equipped with a safety barrier, cleaning may be necessary due to excessive lint / dust from carpeting, pets, etc. simply vacuum using the brush attachment.
6. If your appliance is equipped with relief doors, ensure the system performs effectively. Check that the gasket is not worn or damaged. Replace if necessary.
7. Replace the cleaned logs, rocks or glass. Failure to properly position the media may cause carboning which can be distributed in the surrounding living area, inside the firebox and on exterior surfaces surrounding vent termination.
8. Check to see that the main burner ignites completely on all ports when turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your local authorized dealer / distributor.
9. Visually inspect the appliance for carbon build up. Using a small whisk or brush, brush off the carbon and vacuum up or sweep into garbage.
10. **This step is not applicable for Vent Free appliances:** Check to see that the appliance is venting correctly. Ensure chimney system is safe and unobstructed. (If for any reason the vent air intake system is disassembled, re-install and re-seal per the instructions provided for the initial installation).

13.1 care of glass

WARNING

- Do not clean glass when hot! Do not use abrasive cleaners to clean glass.

Buff lightly with a clean dry soft cloth to remove accumulated dust or fingerprints. Clean both sides of the glass after the first 4 hours of operation with an ammonia-free glass cleaner.

note:

Vinegar-based glass cleaners have demonstrated an ability to provide a clean, streak free glass surface.

Thereafter, clean as required. If the glass is not kept clean permanent discoloration and / or blemishes may result. Contact you local authorized dealer / distributor for complete cleaning instructions.

Razor blades, steel wool, or other metallic objects must not be used on both surfaces of the glass. Doing so can remove a thin layer of metal from the razor blades, steel wool, or other metallic objects that may then be deposited onto the coating. This can result in a discoloured stain or scratch-like mark. More importantly, this can scratch the glass surface, thereby reducing its strength.

Do not operate the appliance with broken glass, as leakage of flue gases may result.

Contact your local authorized dealer / distributor for complete cleaning instructions.

If the glass should ever crack or break while the fire is burning, do not open the door until the fire is out. Do not operate the appliance until the glass has been replaced. Contact you local authorized dealer / distributor for replacement parts. **DO NOT SUBSTITUTE MATERIALS.**

This appliance is factory equipped with 5mm tempered glass. Use only replacement parts as supplied by the appliance manufacturer. **DO NOT SUBSTITUTE MATERIALS.**

13.2 annual maintenance

WARNING

- Annual maintenance should be performed by a qualified service technician
- The firebox becomes very hot during operation. Let the appliance cool completely or wear heat resistant gloves before conducting service.
- Never vacuum hot embers.
- Do not paint the pilot assembly

- This appliance will require maintenance which should be planned on an annual basis.
- Service should include cleaning, battery replacement, venting inspection and inspection of the burner, media, and firebox. Refer to the door removal section and remove the door as instructed.
- Carefully remove media if necessary (logs, glass, brick panels, etc.).
- Using a vacuum with soft brush attachment, gently remove any dirt, debris, or carbon build up from the logs, firebox, and burner. For glass media, follow the installation instructions for pre-cleaning.
- Gently remove any build-up on the pilot assembly including thermopile, thermocouple, flame sensor, and igniter (if equipped).

note:

Clean flame sensor using a fine emery cloth or a synthetic scrub pad (such as Scotch-Brite™) to remove any oxides. Clean the pilot assembly using a vacuum with a soft brush attachment. It is important that the pilot assembly is not painted.

- Inspect all accessible gaskets and replace as required.
- If equipped with a blower, access the blower and clean using a soft brush and vacuum.
- Re-assemble the various components in reverse order.
- Inspect the relief system. The appliance relieves through the main glass door or through the flaps on the firebox top. Ensure they open freely, and close sealed.
- Check the gas control valve pilot and Hi / Lo knobs move freely, if equipped. Replace if any stiffness in movement is experienced.
- Check for gas leaks on all gas connections up and downstream from the gas valve including pilot tube connections.

13.3 glass / door replacement**! WARNING**

- Do not use substitute materials.
- Glass may be hot. Do not touch glass until cooled.
- Care must be taken when removing and disposing of any broken door glass or damaged components. Be sure to vacuum up any broken glass from inside appliance before operation.
- Do not strike, slam, or scratch. Do not operate appliance with glass removed, cracked, broken, or scratched.

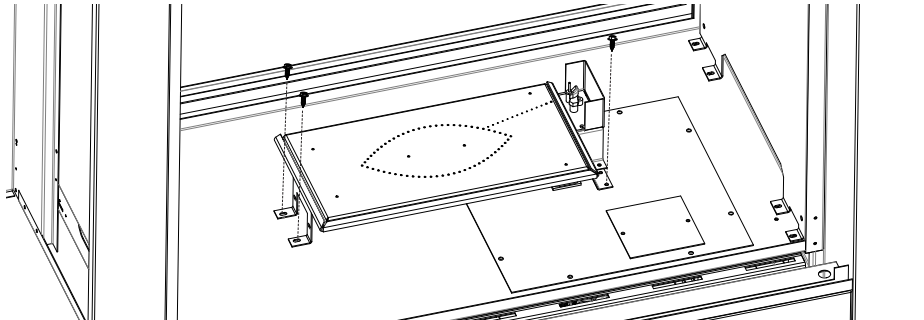
Replacement glass/frame assembly shall be replaced as a complete unit as supplied by the appliance manufacturer.

13.4 burner removal**13.4.1 log burner removal**

- A. Remove the main door(s) from the appliance, see "main door removal / installation" section for detailed removal instructions.
- B. Carefully remove the charcoal embers, charcoal lumps, glowing embers and logs from the appliance.
- C. Remove all of the hearth pads, from the appliance, see "hearth pad installation / removal" section for instructions.
- D. Remove the 4 screws securing the burner in place. Then slide the burner off the orifice and remove from the appliance.
- E. To reinstall the burner, reverse these steps.

note:

When reinstalling the burner, ensure that the venturi rests on the orifice.

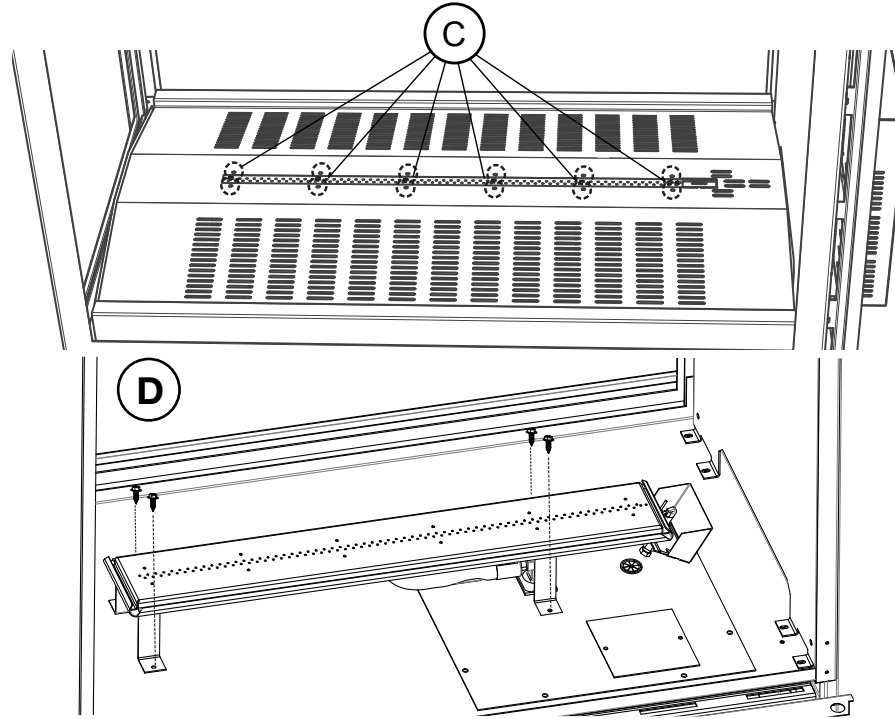


13.4.2 glass burner removal

- A. Remove the main door(s) from the appliance, see "main door removal / installation" section for detailed removal instructions.
- B. Vacuum the glass media out of the appliance. Ensure you insert a clean bag into your vacuum cleaner.
- C. Remove the 12 screws securing the media tray, then remove the media tray from the appliance, as shown below.
- D. Remove the 4 screws securing the burner, as shown below. Then slide the burner off of the orifice and remove from the appliance.
- E. To reinstall the burner reverse these steps.

note:

When reinstalling the burner, ensure that the venturi rests on the orifice.



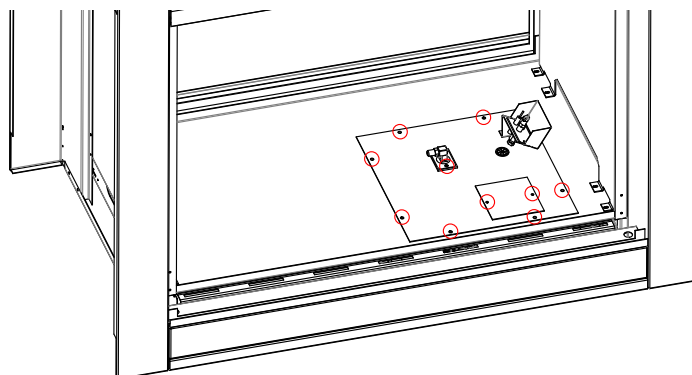
13.5 valve train replacement

- A. Remove the safety barrier and main door(s). See "main safety barrier removal / installation" and "main door removal / installation" sections for detailed removal instructions.
- B. Remove the burners, see "burner removal" section.
- C. Remove the 12 screws holding the valve train in place, as shown below.

note:

A new gasket may be required when reinstalling the valve train assembly. Contact your local authorized dealer/distributor.

- D. Carefully lift the valve train assembly out far enough to access the manual shut off valve and turn to the off position. Disconnect the flex connector from the valve. You may now lift the valve train out of the appliance.



14.0 replacement parts

WARNING

- Failure to position the parts in accordance with this manual or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.
- **This is a fast acting thermocouple. It is an integral safety component. Replace only with a fast acting supplied by Wolf Steel Ltd.

Contact your dealer for questions concerning prices and policies on replacement parts. Normally, all parts can be ordered through your Authorized dealer / distributor.

For warranty replacement parts, a photocopy of the original invoice will be required to honour the claim.

When ordering replacement parts always give the following information:

- Model & Serial Number of appliance
- Installation date of appliance
- Part number
- Description of part
- Finish

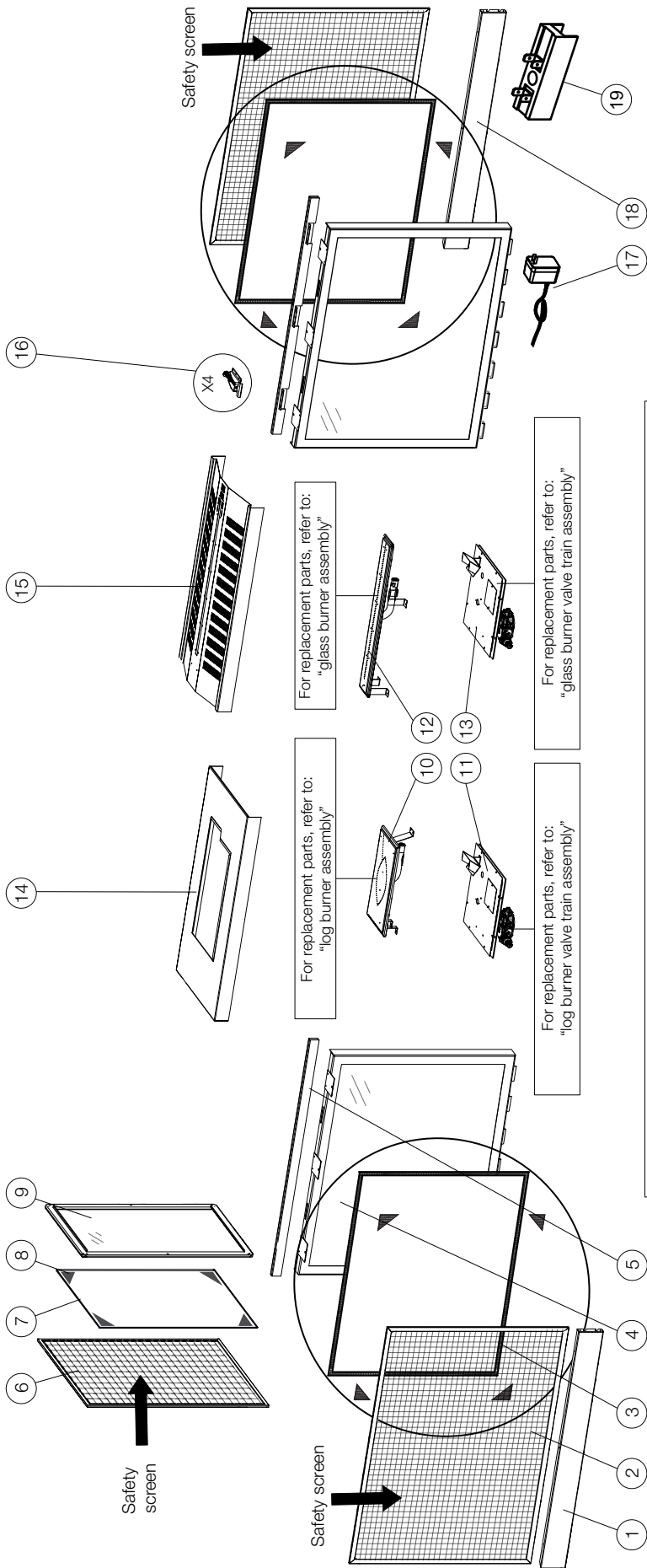
Parts, part numbers, and availability are subject to change without notice.

Parts identified as stocked will be delivered within 2 to 5 business days for most delivery destinations.

Parts not identified as stocked will be delivered within a 2 to 4 week period, for most cases.

Parts identified as 'SO' are special order and can take up to 90 days for delivery

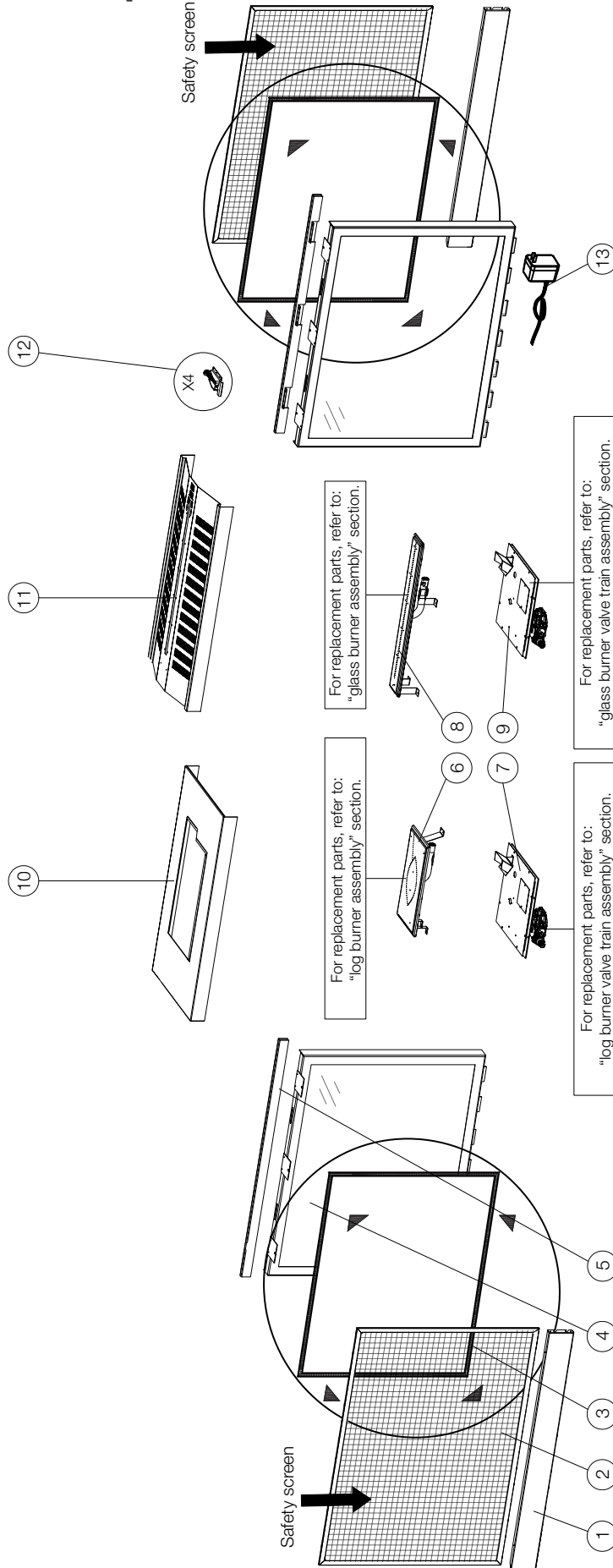
14.1 CBHD4PA overview



Items may not appear exactly as illustrated

Ref. No.	Part number	Description	Stocked
1	W010-3209-SER	(RS) Control panel assembly	
2	W565-0264-SER	Main door safety barrier	
3	W562-0068	Door gasket assembly	Yes
4	W010-3205	Main door assembly	Yes
5	W010-3192-SER	Screen retainer assembly	
6	W565-0265-SER	End door safety barrier	
7	W562-0007	End door gasket	
8	W667-0018-SER	Corner door gasket	Yes
9	W010-2898	End door assembly	Yes
10	W100-0161-SER	Log burner assembly	Yes
11	W010-5054	Log burner valve train assembly	Stocked
12	W100-0160	Glass burner assembly	Yes
13	W010-5055	Glass burner valve train assembly	
14	W655-0519-SER	Log support	
15	W710-0059-SER	Glass media tray	
16	W010-2829	Door latch assembly	Yes
17	W707-0002	Transformer	
18	W010-3208-SER	(L-S) Control panel assembly	
19	W060-0019	Terminal Block	

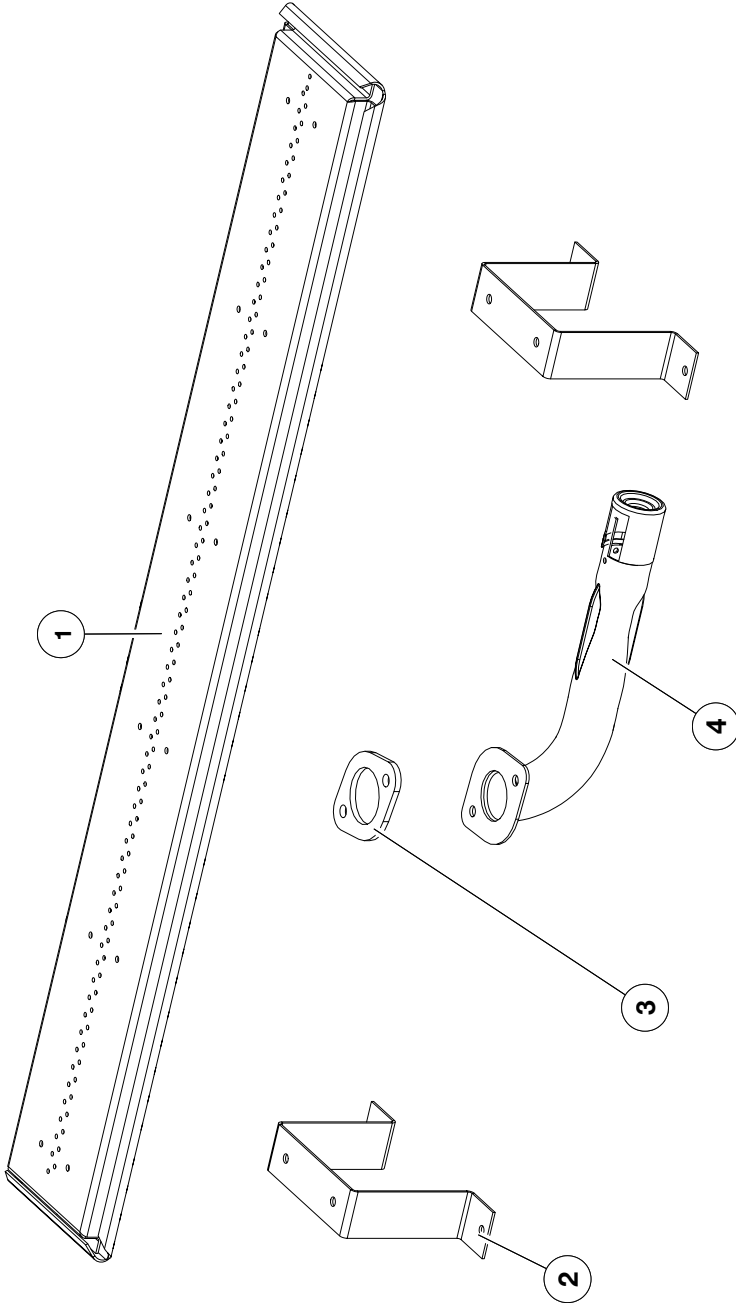
14.2 CBHD4STA overview



Items may not appear exactly as illustrated

Ref. No.	Part number	Description	Stocked
1	W475-0928-SER	Control access panel	
2	W565-0263-SER	Main door safety barrier	
3	W562-0068	Door gasket assembly	Yes
4	W010-3205	Main door assembly	Yes
5	W010-3191-SER	Screen retainer assembly	
6	W100-0161-SER	Log burner assembly	Yes
7	W010-5054	Log burner valve train assembly	
Ref. No.	Part number	Description	Stocked
8	W100-0160	Glass burner assembly	Yes
9	W010-5055	Glass burner valve train assembly	
10	W655-0519-SER	Log support	
11	W710-0059-SER	Glass media tray	
12	W010-2829	Door latch assembly	
13	W707-0002	Transformer	Yes

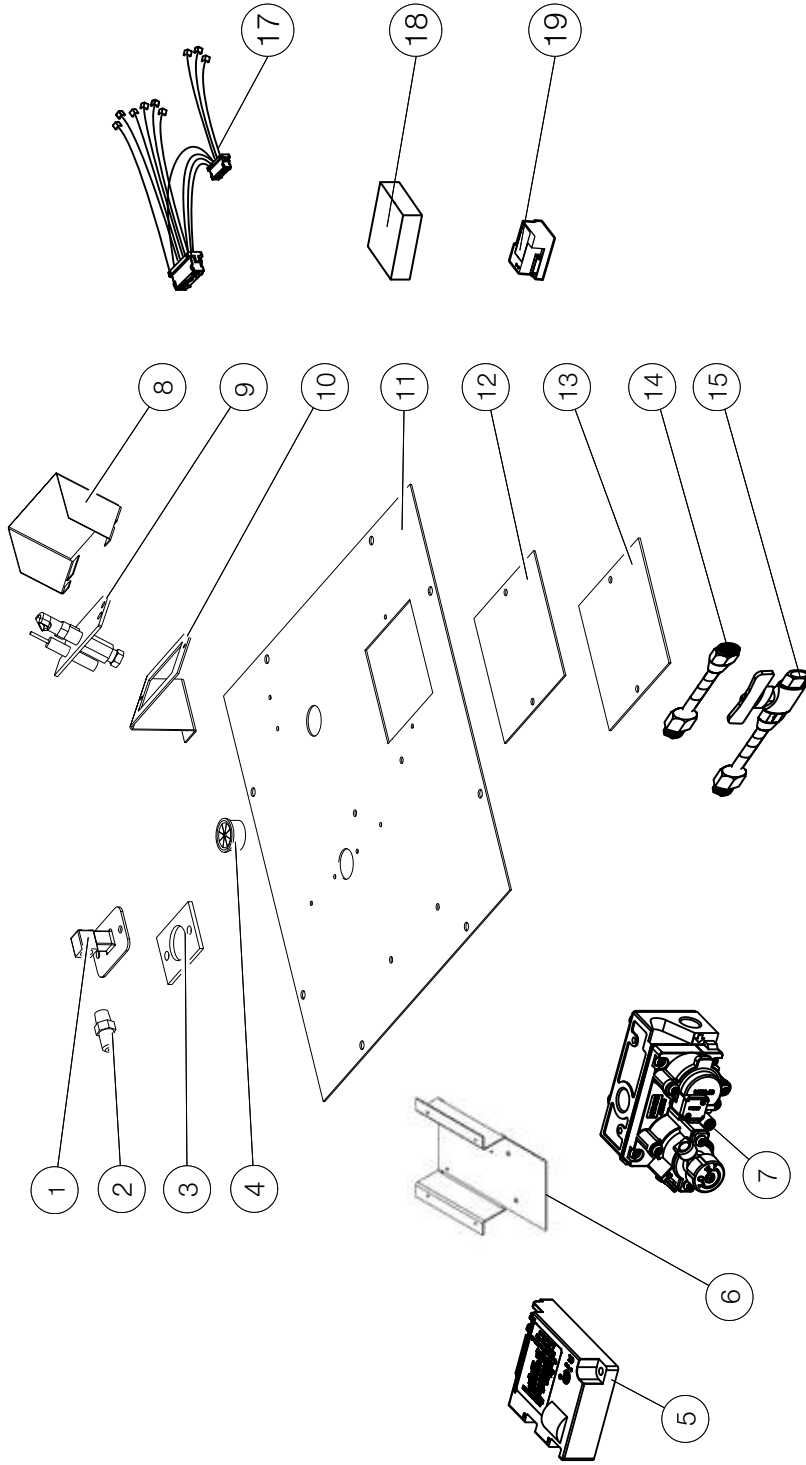
14.3 glass burner assembly



Items may not appear exactly as illustrated.

Ref. No.	Part number	Description	Stocked
1	W010-2954-SER	Burner assembly	Yes
2	W080-1400-SER	Burner bracket	
3	W290-0018	Venturi gasket	Yes
4	W720-0005	Venturi	

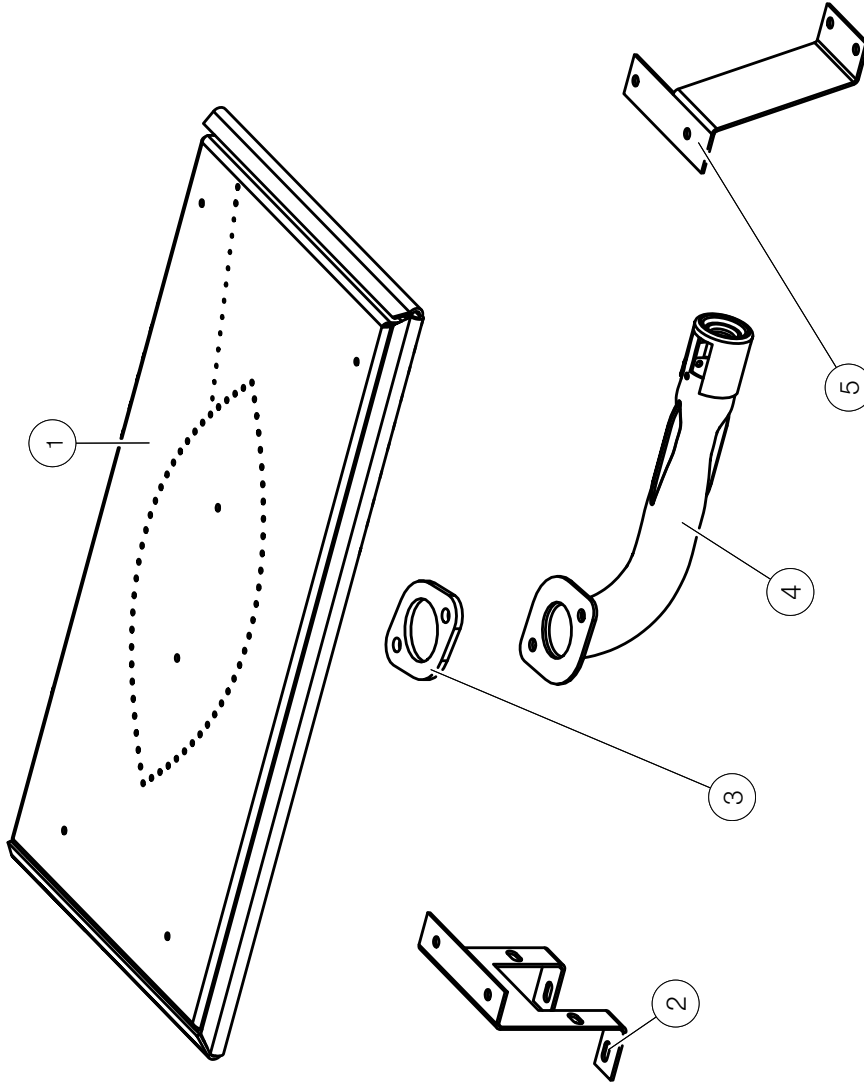
14.4 glass burner valve train assembly



Items may not appear exactly as illustrated

Ref. No.	Part number	Description	Stocked	Ref. No.	Part number	Description	Stocked
1	W432-0103	Gas manifold		9	W010-3040	Pilot assembly (P)	Yes
2	W456-0037	Burner orifice #37 (NG)	Yes	10	W080-1304-SER	Pilot bracket	
2	W456-0052	Burner orifice #52 (P)	Yes	11	W035-0337-SER	Valve train base	
3	W290-0157	Manifold gasket	Yes	12	W200-0456	Valve access cover	
4	W105-0001	Bushing		13	W290-0247	Valve access gasket	Yes
5	W190-0135	Control board	Yes	14	W175-0311	3/8" Flex connector	
6	W080-2066	Valve bracket		15	W175-0217	Flex connector c/w valve	Yes
7	W725-0104	Valve (NG)	Yes	16*	W530-0045	Regulator (P)	Yes
7	W725-0105	Valve (P)	Yes	17*	W750-0463	Wire harness	
8	W585-0790-SER	Pilot shield		18	W350-0342	Battery harness	Yes
9	W010-3037	Pilot assembly (NG)	Yes	19	W190-0044	Battery relay	Yes

14.5 log burner assembly

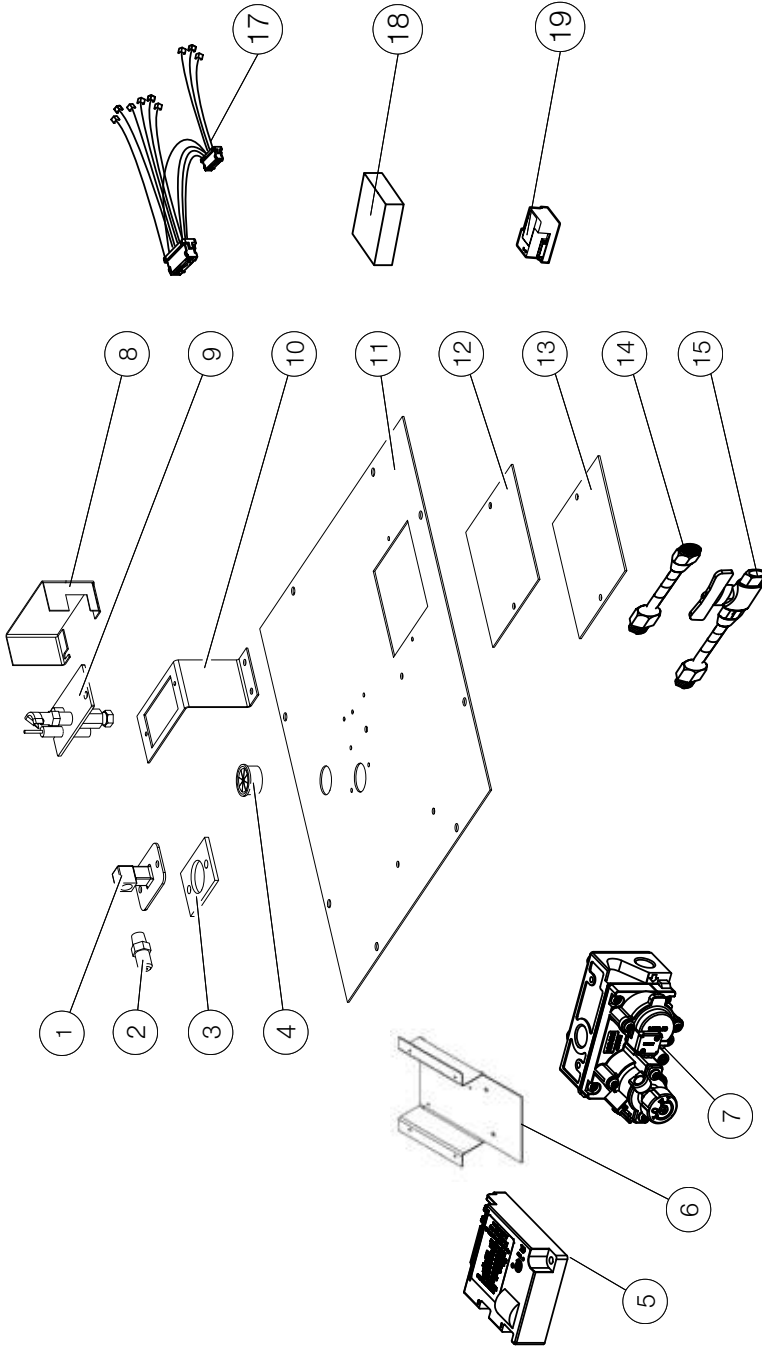


Items may not appear exactly as illustrated

Ref. No.	Part number	Description	Stocked
1	W010-2955	Burner assembly	Yes
2	W080-1463	Burner bracket	
3	W290-0018	Venturi gasket	Yes

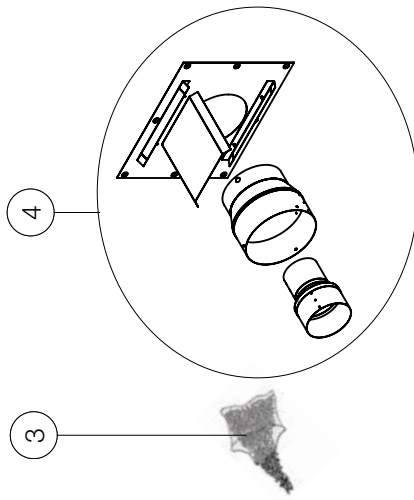
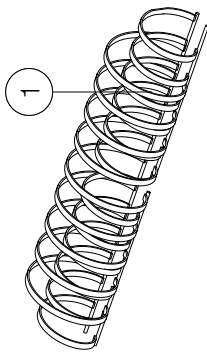
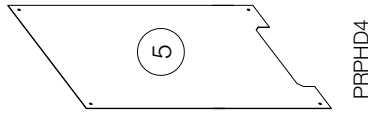
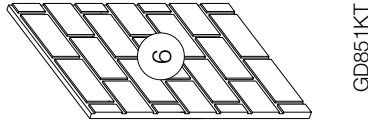
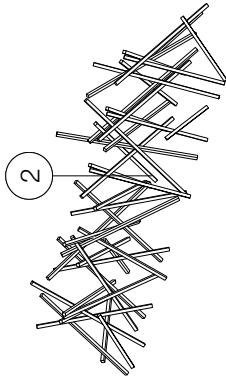
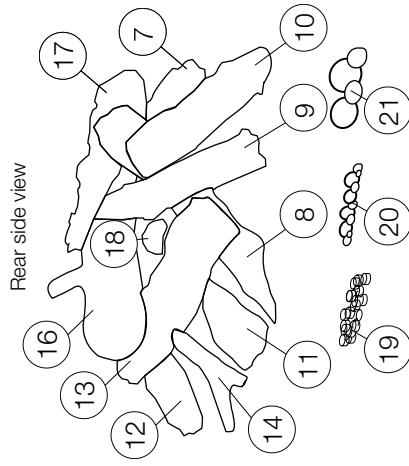
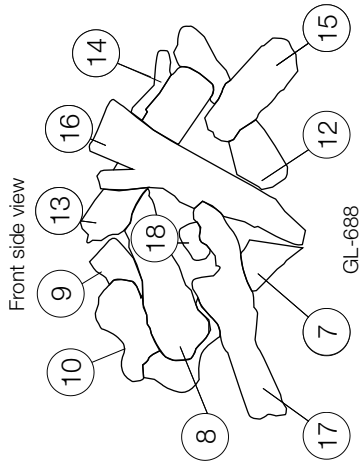
Ref. No.	Part number	Description	Stocked
4	W720-0005	Venturi	
5	W080-1399	Burner bracket	

14.6 log burner valve train assembly



Items may not appear exactly as illustrated

Ref. No.	Part number	Description	Stocked	Ref. No.	Part number	Description	Stocked
1	W432-0103	Gas manifold		9	W010-3040	Pilot assembly (P)	Yes
2	W456-0037	Burner orifice #37 (NG)	Yes	10	W080-1372	Pilot bracket	
2	W456-0052	Burner orifice #52 (P)	Yes	11	W035-0338	Valve train base	
3	W290-0157	Manifold gasket	Yes	12	W200-0456	Valve access cover	
4	W105-0001	Bushing		13	W290-0247	Access gasket	Yes
5	W190-0135	Control board	Yes	14	W175-0311	3/8" Flex connector	Yes
6	W080-2066	Valve bracket		15	W175-0217	Flex connector c/w valve	Yes
7	W725-0104	Valve (NG)	Yes	16*	W530-0045	Regulator (P)	Yes
7	W725-0105	Valve (P)	Yes	17*	W750-0463	Wire harness	
8	W350-0840	Pilot housing		18	W350-0342	Battery harness	Yes
9	W010-3037	Pilot assembly (NG)	Yes	19	W190-0044	Battery relay	Yes



Items may not appear exactly as illustrated

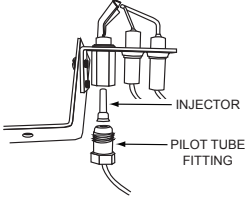
Ref. No.	Part number	Description	Stocked
10	W135-0530	Log #4	Yes
11	W135-0531	Log #5	Yes
12	W135-0532	Log #6	Yes
13	W135-0533	Log #7	Yes
14	W135-0534	Log #8	Yes
15	W135-0535	Log #9	Yes
16	W135-0536	Log #10	Yes
17	W135-0537	Log #11	Yes
18	W135-0540	Charcoal chunk #12	Yes
19	W361-0016	Glowing embers	Yes
20	W550-0001	Charcoal embers	Yes
21	W550-0002	Charcoal lumps	Yes

Ref. No.	Part number	Description	Stocked
1	LDAC	Designer fire art coil design	
2	LDNS	Designer fire art nickel stix	
3	MEGK	Black glass embers (1lb)	
3	MEGB	Blue glass embers (1lb)	
3	MEGR	Red glass embers (1lb)	
3	MEGA	Amber glass embers (1lb)	
3	MEGT	Topaz glass embers (1lb)	
4	A4758AK	5/8" to 4/7" adaptor kit	
5	W500-0706-BK2GL	Porcelain panel (PRPHD4)	
6	W475-0871	Newport brick panel (GD851KT)	
7	W135-0527	Log #1	Yes
8	W135-0528	Log #2	Yes
9	W135-0529	Log #3	Yes

16.0 troubleshooting

! WARNING

- Always light the pilot whether for the first time or if the gas supply has run out, with the glass door open or removed.
- Turn off gas and electrical power before servicing the appliance.
- Appliance may be hot. Do not service until appliance has cooled.
- Do not use abrasive cleaners

symptom	problem	test solution															
Main burner flame is a blue, lazy, transparent flame. (This is not applicable in outdoor appliances)	Blockage in vent. Incorrect installation.	- Remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed as required. (To minimize this from reoccurring, the vent lengths that pass through unheated spaces (attics, garages, crawl spaces) should be wrapped with an insulated mylar sleeve). - Refer to "venting" section to ensure correct installation.															
Flames are consistently too large or too small. Carboning occurs.	Appliance is over-fired or under-fired.	- Check pressure readings: Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read as described on the chart below. Check that main burner is operating on 'HI'. Outlet pressure can be checked the same as above using screw (B). Gauge should read as described on the chart below. Check that main burner is operating on 'HI'. After taking pressure readings, be sure to turn screws clockwise firmly to reseal. DO NOT OVER TORQUE. Leak test with a soap and water solution.															
 <p>The diagram shows a gas valve assembly with two screws labeled 'A' and 'B'. Screw 'A' is the inlet pressure adjustment screw, and screw 'B' is the outlet pressure adjustment screw. The injector and pilot tube fitting are also labeled.</p>		<table border="1"> <thead> <tr> <th>Pressure</th> <th>Natural Gas (inches)</th> <th>Natural Gas (millibars)</th> <th>Propane (inches)</th> <th>Propane (millibars)</th> </tr> </thead> <tbody> <tr> <td>Inlet</td> <td>*7" (minimum 4.5")</td> <td>17.4mb (minimum 11.2mb)</td> <td>13" (minimum 11")</td> <td>32.4mb (minimum 27.4mb)</td> </tr> <tr> <td>Outlet</td> <td>3.5"</td> <td>8.7mb</td> <td>10"</td> <td>24.9mb</td> </tr> </tbody> </table> <p style="text-align: center;">*Maximum inlet pressure not to exceed 13" w.c.</p>	Pressure	Natural Gas (inches)	Natural Gas (millibars)	Propane (inches)	Propane (millibars)	Inlet	*7" (minimum 4.5")	17.4mb (minimum 11.2mb)	13" (minimum 11")	32.4mb (minimum 27.4mb)	Outlet	3.5"	8.7mb	10"	24.9mb
Pressure	Natural Gas (inches)	Natural Gas (millibars)	Propane (inches)	Propane (millibars)													
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Outlet	3.5"	8.7mb	10"	24.9mb													
	Air shutter improperly adjusted.	- Return air shutter to specified opening, see " venturi adjustments " section in the installation manual.															
Carbon is being deposited on glass, logs, rocks, media, or combustion chamber surfaces.	Air shutter is blocked. Flame is impinging on the glass, logs, rocks, media or combustion chamber.	- Ensure air shutter opening is free of lint or other obstructions. - Ensure the media is positioned correctly in the appliance. - Open air shutter to increase the primary air. - Check the input rate: check the manifold pressure and orifice size as specified by the rating plate. - Ensure door gaskets are not broken or missing and the seal is tight. - Ensure vent liners are free of holes and well sealed at all joints. - Check that minimum rise per foot (meters) has been adhered to for any horizontal venting.															
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs, or combustion chamber surfaces.	- Clean the glass with a recommended gas fireplace glass cleaner. DO NOT CLEAN GLASS WHEN HOT. - If deposits are not cleaned off regularly, the glass may become permanently marked.															
Exhaust fumes smelled in room, headaches.	Appliance is spilling. (This is not applicable in outdoor appliances).	- Check door seal. - Check for exhaust damage. - Check that venting is installed correctly. - Room is in negative pressure; increase fresh air supply.															

symptom	problem	test solution
Pilot will not light. Makes noise with no spark at pilot burner.	Wiring: short, loose, or damaged connections (poor flame rectification).	<ul style="list-style-type: none"> - Verify the thermocouple/sensor is clean and the wiring is undamaged. - Verify the interrupter block is not damaged or too tight. Verify connections from pilot assembly are tight; also verify the connections are not grounding out to any metal. (Remember, the flame carries the rectification current, not the gas. If flame lifts from pilot hood, the circuit is broken. A wrong orifice or too high of an inlet pressure can cause the pilot flame to lift)*. The sensor rod may need cleaning.
	No signal from remote with no pilot ignition.	<ul style="list-style-type: none"> - Reprogram receiver code. - Replace receiver.
	Poor grounding.	<ul style="list-style-type: none"> - Verify the valve / pilot assembly are properly grounded
	Improper switch wiring.	<ul style="list-style-type: none"> - Troubleshoot the system with the simplest on/off switch.
	Dirty, painted, or damaged pilot and/or dirty sensor rod.	<ul style="list-style-type: none"> - Clean sensor rod with a green Scotch-Brite™ pad to remove any contamination that may have accumulated. Verify continuity with multimeter with ohms set at the lowest range.
Pilot sparks but will not light.	Gas supply.	<ul style="list-style-type: none"> - Verify that the incoming gas line ball valve is "open". - Verify that the inlet pressure reading is within acceptable limits, inlet pressures must not exceed 13" W.C. (32.4mb).
	Out of propane gas.	<ul style="list-style-type: none"> - Fill the tank.
	Pilot supply line may contain air.	<ul style="list-style-type: none"> - Repeat ignition process several times or purge the pilot supply line.
	Incorrect wiring / grounding.	<ul style="list-style-type: none"> - Ensure correct polarity of wiring of thermocouple (if equipped). - Verify pilot assembly / valve are properly grounded.
	Receiver (if equipped).	<ul style="list-style-type: none"> - Reset program: hold reset button on receiver and wait for 2 beeps. Release after second beep. Press small flame button on remote within 20 seconds, you will hear an additional beep (this signals a successful reset). - Replace receiver.
	Valve.	<ul style="list-style-type: none"> - Check valve and replace if necessary (Do not to overtighten thermocouple).
Burner continues to spark and pilot lights but main burner does not light.	Short or loose connection in sensor rod.	<ul style="list-style-type: none"> - Verify all connections. Verify the connections from the pilot assembly are tight. Also, verify these connections are not grounding out to any metal.
	Dirty, painted, or damaged pilot assembly components.	<ul style="list-style-type: none"> - Clean using a green Scotch-Brite™ pad to remove any contamination that may have accumulated on the sensor rod, pilot hood, ignitor, or flame sensor. Verify continuity with multimeter with ohms set at the lowest range.
Remote wall switch is in "off" position; burner comes on.	Wall switch mounted upside down.	<ul style="list-style-type: none"> - Reverse.
	Remote wall switch and/or wire is grounding.	<ul style="list-style-type: none"> - Replace. - Check for ground (short); repair ground or replace wire.
	Faulty wire	<ul style="list-style-type: none"> - Replace.
Remote and / or receiver is not functioning properly.	Remote controls lights but no spark or flame. (Remote is locked out).	<ul style="list-style-type: none"> - Reset by turning power source off then on. <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> <p>note: If back up batteries are installed, they must also be removed to re-program</p> </div>
	Receiver or remote has low battery.	<ul style="list-style-type: none"> - Replace batteries.
	Appliance functions but does not respond to receiver / remote	<ul style="list-style-type: none"> - Ensure appliance is being operated by the same device that turned it on. Remote controls function if appliance was turned on by remote. Receiver controls function if appliance was turned on by receiver.
	Error with synchronizing.	<ul style="list-style-type: none"> - Reset receiver and remote.
	Remote too far away from receiver.	<ul style="list-style-type: none"> - Refer to "wiring diagram" section.
	Wire connector pins are bent.	<ul style="list-style-type: none"> - Straighten pins.
	Valve wiring is damaged.	<ul style="list-style-type: none"> - Replace valve.

symptom	problem	test solution
Lights or blower won't function (if equipped).	Control module switch in wrong position.	- Verify ON/OFF switch is in the "I" position which denotes on.
	COM switch is unplugged.	- Verify "COM" switch is plugged into the front of the control module.
Flames are very aggressive.	Door is ajar.	- Ensure door is secured properly.
	Venting action is too great.	- Check to ensure venting is properly sealed or restrict vent exit with restrictor plate. (Not available in all appliances).
Appliance won't perform any functions.	No power to the system.	- Check breaker to verify it's in the "on" position.
	Receiver switch in wrong position (if equipped).	- Verify that the 3 position switch on the receiver is in the remote position (middle).
	Transmitter isn't operational.	- Check battery power and battery orientation.

Continental® products are manufactured under the strict standard of the world recognized ISO 9001 : 2015 Quality Management System.

Continental® products are designed with superior components and materials assembled by trained craftsmen who take great pride in their work. The burner and valve assembly are leak and test-fired at a quality test station. The complete appliance is again thoroughly inspected by a qualified technician before packaging to ensure that you, the customer, receives the quality product that you expect from Continental®.

Continental® Gas Appliance Limited Warranty

The following materials and workmanship in your new Continental® gas appliance are warranted against defects for a period of 5 years, this covers: combustion chamber, heat exchanger, stainless / steel burner, Phazer™ logs and embers, rocks, ceramic glass (thermal breakage only), gold plated parts against tarnishing, porcelainized enameled components and aluminum extrusion trims.*

Electrical (110V and millivolt) components and wearable parts are covered and Continental® will provide replacement parts free of charge during the first year of the limited warranty. This covers: blowers, gas valves, thermal switches, switches, wiring, remote controls, ignitors, gaskets and pilot assemblies.*

Any labour related to warranty repair is not covered.

* Construction of models vary. Warranty applies only to components included with your specific appliance.

Conditions and Limitations

Continental® warrants its products against manufacturing defects to the original purchaser only. Registering your warranty is not necessary. Simply provide your proof of purchase along with the model and serial number to make a warranty claim. Continental® reserves the right to have its representative inspect any product or part thereof prior to honouring any warranty claim. Provided that the purchase was made through an authorized Continental® dealer your appliance is subject to the following conditions and limitations:

Warranty coverage begins on the date of original installation. This factory warranty is non-transferable and may not be extended whatsoever by any of our representatives. The gas appliance must be installed by a licensed, authorized service technician or contractor. Installation must be done in accordance with the installation instructions included with the product and all local and national building and fire codes. This limited warranty does not cover damages caused by misuse, lack of maintenance, accident, alterations, abuse or neglect, and parts installed from other manufacturers will nullify this warranty. This limited warranty further does not cover any scratches, dents, corrosion or discoloring caused by excessive heat, abrasive and chemical cleaners nor chipping on porcelain enamel parts, mechanical breakage of Phazer™ logs and embers. In the first year only, this warranty extends to the repair or replacement of warranted parts which are defective in material or workmanship provided that the product has been operated in accordance with the operation instructions and under normal conditions. After the first year, with respect to this Limited Warranty, Continental® may, at its discretion, fully discharge all obligations with respect to this warranty by refunding to the original warranted purchaser the wholesale price of any warranted but defective part(s).

Continental® will not be responsible for installation, labour, or any other expenses related to the reinstallation of a warranted part and such expenses are not covered by this warranty. Notwithstanding any provisions contained in the Limited Warranty, Continental®'s responsibility under this warranty is defined as above and it shall not in any event extend to any incidental, consequential or indirect damages. This warranty defines the obligations and liability of Continental® with respect to the Continental® gas appliance and any other warranties expressed or implied with respect to this product, its components or accessories are excluded. Continental® neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product. Continental® will not be responsible for: over-firing, downdrafts, spillage caused by environmental conditions such as rooftops, buildings, nearby trees, hills, mountains, inadequate vents or ventilation, excessive venting configurations, insufficient makeup air, or negative air pressures which may or may not be caused by mechanical systems such as exhaust fans, furnaces, clothes dryers, etc. Any damages to the appliance, combustion chamber, heat exchanger, plated trim or other components due to water, weather damage, long periods of dampness, condensation, damaging chemicals or cleaners will not be the responsibility of Continental®. All parts replaced under the Limited Warranty Policy are subject to a single claim.

All parts replaced under the warranty will be covered for a period of 90 days from the date of their installation. The manufacturer may require that defective parts or products be returned or that digital pictures be provided to support the claim. Returned products are to be shipped prepaid to the manufacturer for investigation. If a product is found to be defective, the manufacturer will repair or replace such defect. Before shipping your appliance or defective components, your dealer must obtain an authorization number. Any merchandise shipped without authorization will be refused and returned to sender. Shipping costs are not covered under this warranty. Additional service fees may apply if you are seeking warranty service from a dealer. Labour, travel diagnostic tests, shipping and other related charges are not covered by this warranty.

All specifications and designed are subject to change without prior notice due to on-going product improvements. Continental® is a registered trademark of Wolf Steel Ltd.