



Horizon Bell Large Tunnel 3 CF

Direct Vent Gas Fireplace

Installation manual



WARNING



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

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

INSTALLER:

**Leave this manual with
the appliance.**

CONSUMER:

**Retain this manual for
future reference.**

WARNINGS

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

- 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.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- Installation and service must be performed by a qualified installer, service agency or the gas 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 types of gas indicated on the rating plate. A conversion kit is supplied with the appliance.

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Horizon Bell Large **Tunnel 3** CF :
 All warnings and instructions apply to both doors (front glass frames)
 and both barriers !

IMPORTANT SAFETY INSTRUCTIONS

WARNING: Improper installation, adjustment, alteration, services or maintenance can cause serious injury or property damage. Refer to this manual.

SAVE THESE INSTRUCTIONS

Make yourself fully aware of all the following instructions and the many features of the Bellfires direct vent gas fireplace appliance.

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

1. This appliance reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. The appliance will remain hot for a time after shutdown. Allow surfaces to cool before touching.



2. A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.
3. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.
4. Any safety screen, guard or barrier removed for servicing the appliance, must be replaced prior to operating the appliance.
5. Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
6. Young children MUST 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. The remote control handset should be kept out of reach of children. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.

IMPORTANT SAFETY INSTRUCTIONS

7. Keep the area around your appliance clear of combustible materials, gasoline and other flammable vapor and liquids.
8. Do not place embers, vermiculite granules or wood logs against the pilot light burner. Make sure that the pilot flame can burn at all times freely over the main burner. Only in this way is proper ignition of the main burner ensured. Ignoring these directions could lead to a dangerous situation.
9. Never place anything on top of the appliance.
10. Do not use this appliance to cook food or burn paper or other objects.
11. Do not use any solid or liquid fuels in this appliance. Use only the gas type indicated on the rating plate.
12. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is convertible for use with other gases. A conversion kit is supplied with this appliance.

WARNING: The conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction. If the information in these instructions is not followed exactly, a fire, explosion or production of carbon monoxide may result causing property damage, personal injury or loss of life. The qualified service agency is responsible for the proper installation of this kit. The installation is not proper and complete until the operation of the converted appliance, is checked as specified in the manufacturer's instruction supplied with this kit.

13. This appliance must not be connected to a chimney flue serving a separate solid-fuel burning appliance.
14. Installation and service must be performed by a qualified installer, service agency or gas supplier.
15. DO NOT operate the appliance with glass removed, cracked or broken.
16. DO NOT use abrasive cleaners on the panels. DO NOT attempt to clean the glass when it is hot.
17. DO NOT strike or slam the glass panel.
18. DO NOT modify the appliance under any circumstances. Any parts removed for servicing must be replaced prior to operating the appliance.
19. Turn the appliance off and let cool before servicing, installing or repairing. ONLY a qualified service person should install, service or repair the appliance. Have burner system inspected annually by a qualified service person.

IMPORTANT SAFETY INSTRUCTIONS

20. Keep control compartments, burners and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust. Turn off the gas valve and appliance (OFF on remote control) before cleaning the appliance.
21. The venting system **MUST** be checked annually by a qualified service person. If needed, have the venting system cleaned or repaired.
22. When the appliance is installed directly on carpeting, tile or other combustible material, it must be set on a metal panel or hearth pad extending at least the full width and depth of the appliance.
23. **DO NOT** obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
24. **DO NOT** use the appliance if any part has been exposed to or 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 submerged in water.
25. **DO NOT** operate the appliance if any log is broken.
26. The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.
27. This appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the *National Electrical Code*, *ANSI/NFPA 70*, or the *Canadian Electrical Code*, *CSA C22.1*.
28. The appliance is equipped with a safety system, whereby the door (front glass frame) will extract any over-pressure in a controlled way. In this, the door will briefly open. A safety strip limits the maximum degree to which the door can be tilted. To avoid any possible personal harm when the door opens due to an over-pressure, always maintain a minimum distance of 40 in (100 cm) to the appliance, when igniting and when burning. If an over-pressure situation occurs, the appliance should be thoroughly checked by the installer.

IMPORTANT:

Take care that no pipes get damaged and no compression fittings come loose when moving the gas regulator block. Prevent twisting the flexible pipes! Check all compression fittings for leaks afterwards!

WARNING: Never connect unit to private (non-utility) gas wells. This gas is commonly known as well-headed gas.

IMPORTANT SAFETY INSTRUCTIONS

CODE APPROVAL

Direct Vent type appliances draw all combustion air from outside of the dwelling through the vent pipe.

These appliances have been tested by CSA and found to comply with the established standards for VENTED GAS FIREPLACES in the USA and Canada as follows:

LISTED VENTED GAS FIREPLACES

Horizon Bell Large Tunnel 3 CF tested to:

- ANSI Z21. 88 - 2009 / CSA 2.33 - 2009 Vented Gas Fireplace Heaters
- ANSI Z21.88a - 2012 / CSA 2.33a - 2012 - Addenda 1 to ANSI Z21.88 - 2009 / CSA 2.33 - 2009
- CSA P4.1 - 09 Testing method for measuring annual fireplace efficiency (Canada).

A manufactured home (USA only) or mobile home OEM installation must conform with the ***Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280***, or when such a standard is not applicable, the ***Standard for Manufactured Home installations, ANSI/NCSBCS A225.1***, or ***Standard for Gas Equipped Recreational Vehicles and Mobile Housing, CSA Z240.4***.

PRE INSTALLATION INSTRUCTIONS

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

GENERAL

This 'direct vent' gas appliance must be installed by a qualified installer in accordance with local building codes, or in the absence of local codes, with the current CAN/CSA-B149.1 or .2 Installation Code (in Canada) or the current National Fuel Gas Code Z223.1-NFPA 54 when installed in the United States.

This appliance, when installed, must be electrically connected and grounded in accordance with local codes, or in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code or with the National Electrical Code; ANSI/NFPA 70 when installed in the United States. If you have any queries regarding the installation, please consult your local gas company.

IMPORTANT:

Before beginning the installation, check that the details on the rating plate correspond to the gas type and pressure to which the appliance will be connected.

The appliance is supplied with a "Centre Fire" double burner. This burner has a specific flame image which is defined by the perforation pattern in the burner cover. See Chapter "DIAGRAM ELECTRICITY AND GAS" and the Operating Manual.

The appliance is factory set to the correct nominal heat input. The pilot light is set to the correct level of consumption.

The appliance will be delivered from the factory with a 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " concentric connection for extracting the flue gases and supply of combustion air.

It is possible to install the appliance with either a wall or roof outlet. The roof connection must be carried out using a Bellfires adapter (5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 5" x 8") together with a reducer (5" x 8" to 4" x 6 $\frac{5}{8}$ ") or using a Bellfires adapter (5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 4" x 6 $\frac{5}{8}$ "), and the concentric flue system 4" x 6 $\frac{5}{8}$ ". The fumes are exhausted naturally to the outside environment through the inner 4" pipe whereas the combustion air supply passes between the 4" and 6 $\frac{5}{8}$ " pipes.

The wall connection must be carried out using a Bellfires adapter (5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 5" x 8") and the concentric flue system 5" x 8". The flue gases are evacuated outside by means of natural draft through the internal pipe of 5", whereas the combustion air is supplied between the pipes of 5" and 8".

The appliance can be installed in a completely sealed or mechanically ventilated house without extra ventilation and/or fume extraction.

PRE INSTALLATION INSTRUCTIONS

The appliance can be installed as an insert into an existing open fire place or as a built-in appliance in a new fire place. In order to prevent the fireplace heating up excessively, it must be properly ventilated by installing vents at the top of the fireplace.

The provided barrier safety screen designed to reduce the risk of burns from the hot viewing glass shall be installed.

If an existing chimney is to be used, please consult your installer first. If the chimney was previously used for a wood or coal fire, then it should be cleaned by an expert.

CONCENTRIC FLUE SYSTEMS

- **M&G DuraVent - Direct Vent Pro** 4" x 6⁵/₈" and 5" x 8"
- **SELKIRK - DIRECT-TEMP - Direct Vent Products** 4" x 6⁵/₈" and 5" x 8"
- **METAL-FAB - Sure-Seal - Direct Vent Products** 4" x 6.5" and 5" x 8"

The appliance, in combination with the concentric flue system [4" x 6⁵/₈"] and/or [5" x 8"] (rigid and/or flexible) for the brands, M&G DuraVent (Direct Vent Pro), Selkirk (Direct Temp) or Metal-Fab (Sure-Seal) has been approved in accordance with the ANSI / CSA standard for direct vented gas appliances and may therefore be used only with these systems.

The permitted components for these systems are listed in Chapter "Vent Installation".

The guarantee on the appliance lapses if it is installed, fully or partially, with other components or a different flue system.

The concentric flue [4" x 6⁵/₈"] and [5" x 8"] systems can be used with either a newly-built or existing chimney.

INCLUDED WITH THE APPLIANCE

Set documentation	<ul style="list-style-type: none">- Instructions for use- Installation instructions
Attributes	<ul style="list-style-type: none">- Barrier- Ceramic log set- Hook (for opening the frame and the glass)- Propane conversion kit Horizon Bell Large Tunnel 3 CF

N.B. If any part is missing, please contact your dealer.

PRE INSTALLATION INSTRUCTIONS

OPTIONS AND ACCESSORIES

The following options and accessories can be supplied by your dealer:

<u>Part no</u>	<u>Accessory</u>
329874	Set carrying brackets (2 pieces)
330361	Set of high adjustable feet (4 pieces) Feet height: max. +13¾ in.
311973	Mantle iron L = 1800 mm
337800	High altitude kit 2 000 - 4 500 ft Horizon Bell Large Tunnel 3 CF (Natural gas <u>and</u> Propane gas)
	M&G DuraVent - Direct Vent Pro concentric flue system See component summary
	SELKIRK - DIRECT-TEMP - Direct Vent Products concentric flue system See component summary
	METAL-FAB - Sure-Seal - Direct Vent Products concentric flue system See component summary

CLEARANCES

WARNING: Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

UNIT MUST SIT ON NON COMBUSTABLE SURFACE

The appliance must be installed on a non-combustible floor. If installed on, for example, carpet or vinyl flooring, the appliance shall be placed on a plate of non-combustible material extending the full width and depth of the appliance.

All clearances to combustible and non-combustible materials must be maintained as described in this manual.

Clearances are in accordance with local installation codes and the requirements of the gas supplier.

Never use combustible materials during the installation.

During installation of the appliance, a clearance of 0.12 in (3 mm) should be maintained on all sides of the appliance to allow for expansion of the appliance during operation.

Do not insulate the appliance! Only the top and sides may be fitted with a strip of white, loose insulation wool (heat-resistant to 1832°F (1000°C)), width 5.9 in (15 cm) max. to protect the wall.

Do not use fibreglass or Rockwool, or any other sort of insulating material. These emit a pungent odour. This is considered extremely unpleasant. They may also cause discolouring of the column.

Combustible materials, such as curtains, should not be placed in the vicinity of the appliance. Minimum safe distance: 40 in (100 cm).

Never place the appliance directly to a combustible or non-combustible rear wall and side wall.

CLEARANCES

Clearances to combustible material

Always place a non-combustible insulation plate (false side wall) with a thickness of min. 1" (2.54 cm) between the appliance and the side wall according to figure 1. Minimum clearances to combustible material must be maintained.

Clearance to combustible ceiling: Place a non-combustible insulation plate (false ceiling) with a thickness of min. 1¼" (3 cm) at a height of minimum 20" (50 cm) above the appliance. Maintain a free space of 4" (10 cm) between the insulation plate and a combustible ceiling. (See also figure 13 and 14.)

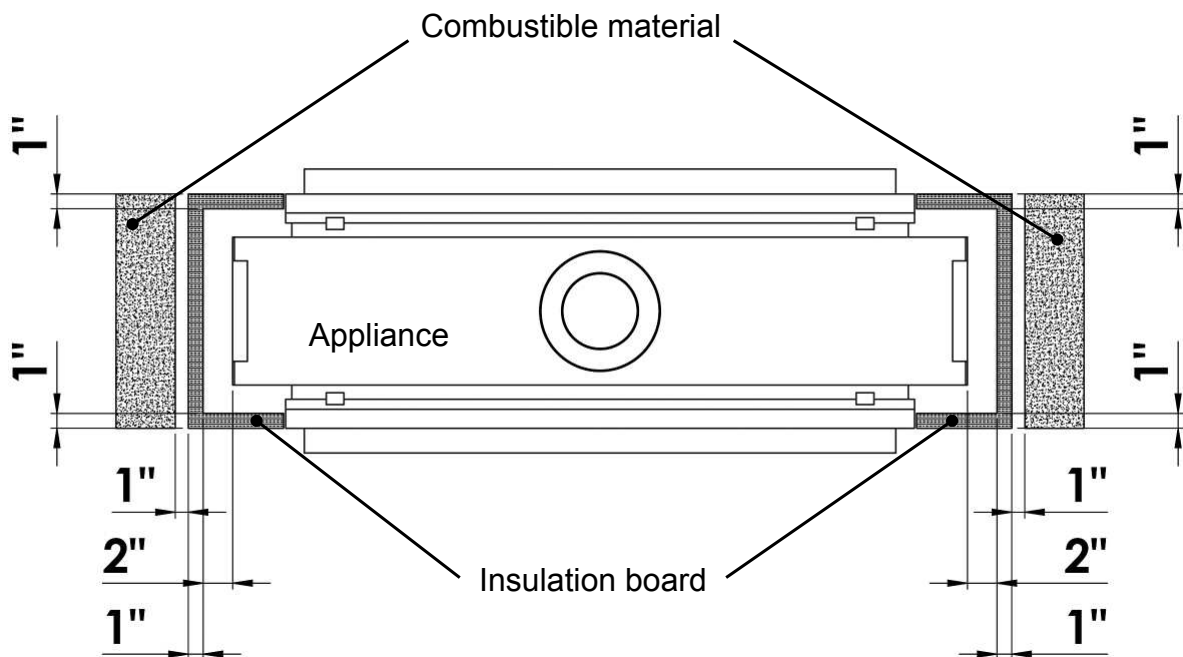


Figure 1: Clearances to combustible material

CLEARANCES

Clearance to non-combustible material

Always place a non-combustible insulation plate (false side wall), at least $\frac{1}{2}$ " (12 mm) thick between the appliance and a non-combustible side wall. Maintain a free space of at least $\frac{3}{4}$ " (2 cm) on either side of the insulation plate.

Minimum clearances as shown in figure 2 must be maintained.

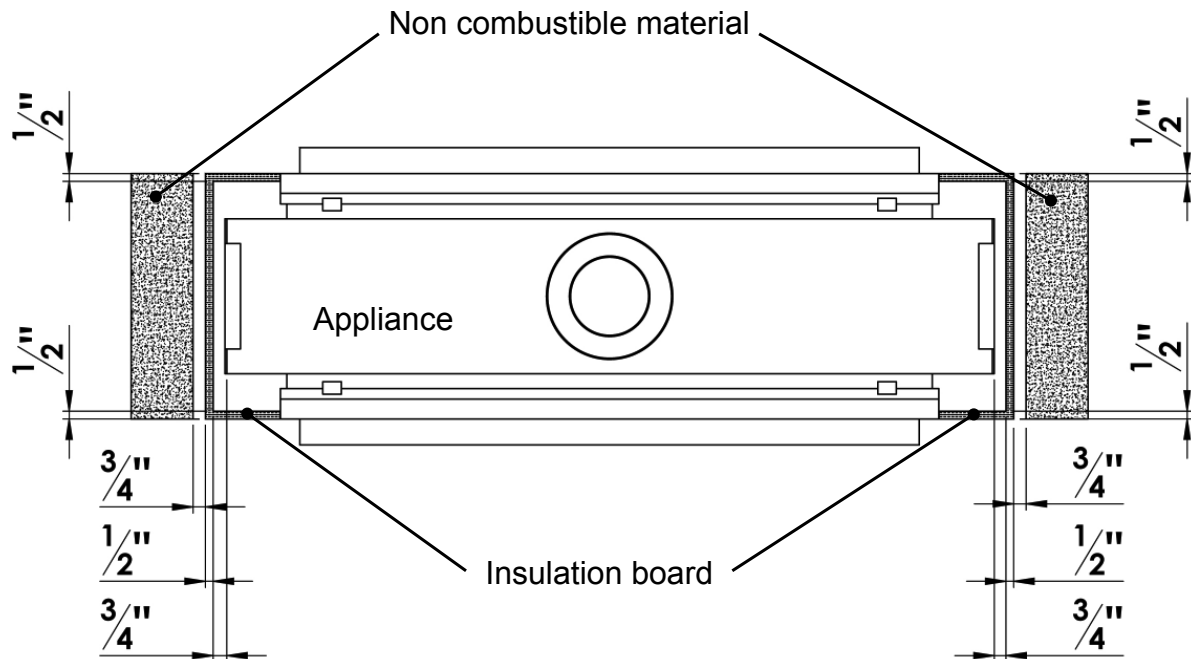


Figure 2: Clearances to non-combustible material

CLEARANCES

Ventilation

Ventilate the fireplace/chimney breast:

- all spaces between the appliance and the insulation plates
 - all spaces between the insulation plates and all surrounding walls
- by allowing vents above.

Minimal required net vent openings above must be total 46 sq ins (300 cm²).

This can be done by ventilation openings or grills.

The design of the ventilation openings/grills is free to choose.

Place the ventilation opening/grills at minimal 4" (10 cm) distance under the ceiling, to prevent discoloration.

Also an open distance between the fireplace/chimney breast and the ceiling of 2" (5 cm), over a minimal width of 23" (60 cm), is sufficient. (Is also total 46 sq ins (300 cm²).)

Non-combustible insulation plate/board

Any used insulation plates must have a maximum thermal conductivity of 0.69 BTU / (ft².h.°F/in) (0.10 W/m.K).

Suitable insulation materials are listed in table 1.

Do not use fibreglass or Rockwool, or similar material. These materials emit a pungent odour, which is considered extremely unpleasant.

Plate material	Thermal conductivity	
	BTU/(ft ² .h.°F/in)	(W/m.K)
Promat Promatect L insulating board	0.57	(0.083)
Skamol Skamotec 225	0.416	(0.06)
Skamol Super-Isol	0.55	(0.08)

Table 1: Suitable insulation material

CLEARANCES

Mantel clearances

Any mantel piece made of combustible material should be placed at least 2" from the side and top of the fireplace opening. Minimum mantel clearances are shown in figure 3 to 5.

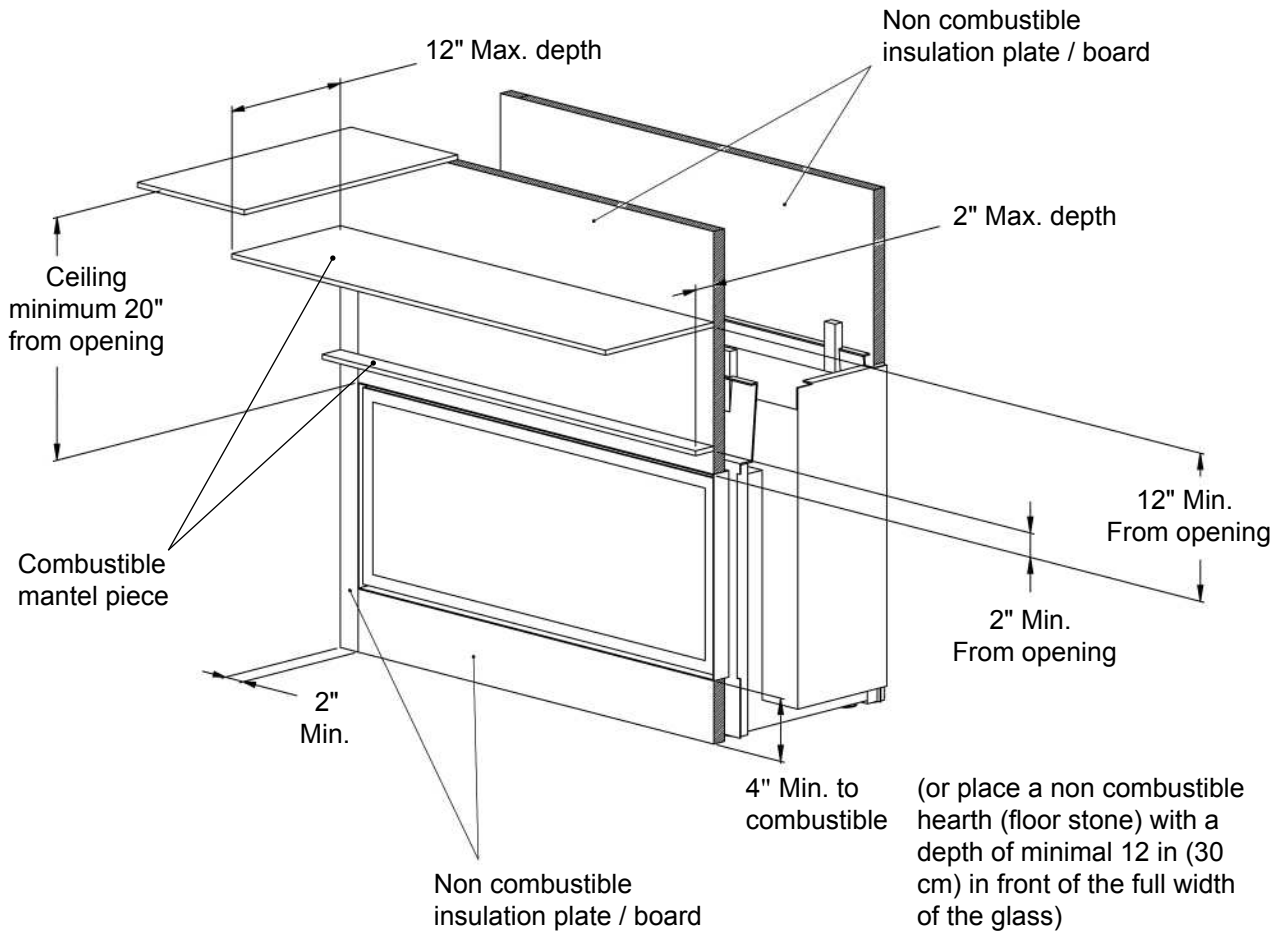


Figure 3: Mantel clearances

CLEARANCES

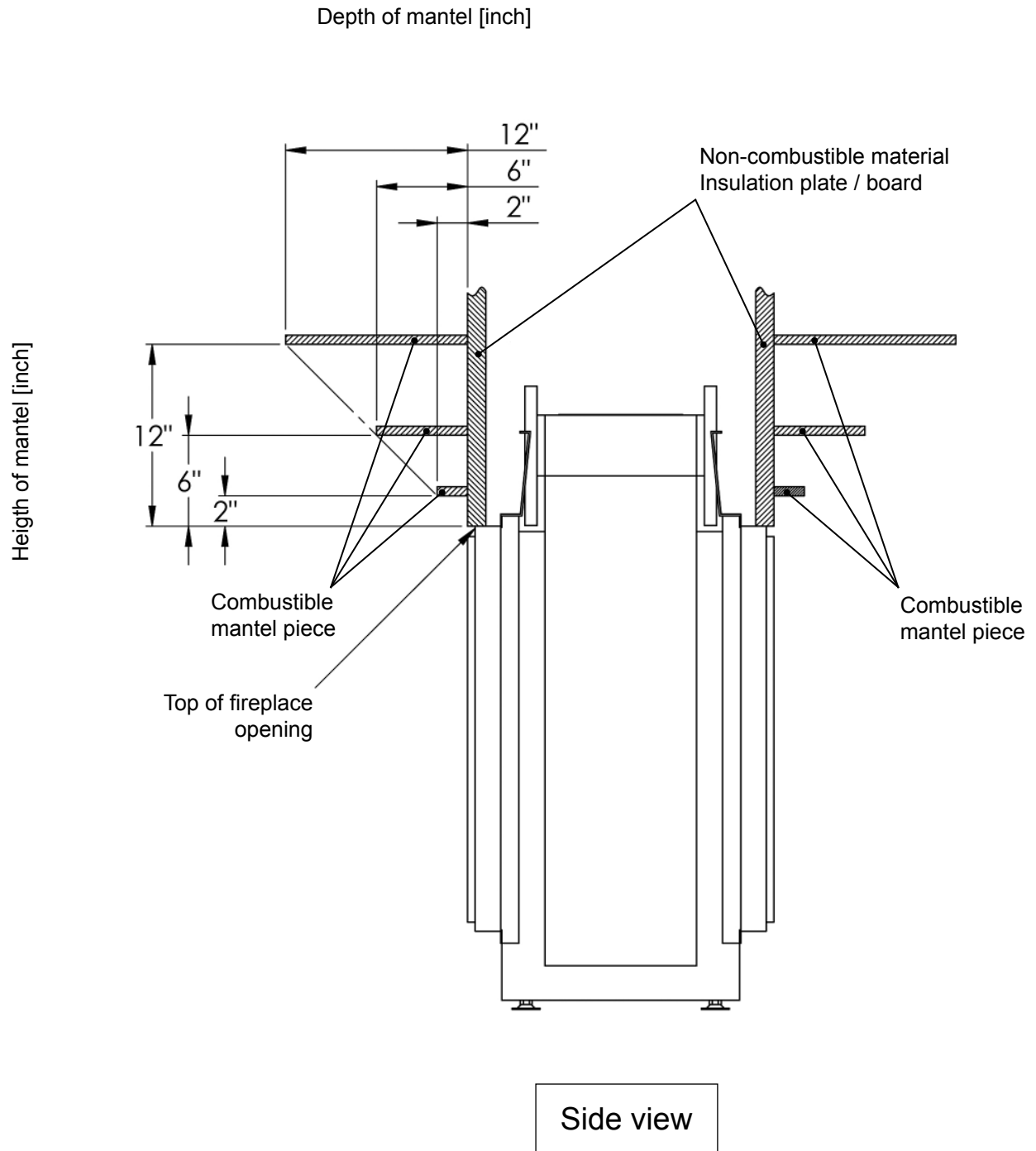


Figure 4: Top mantel clearances

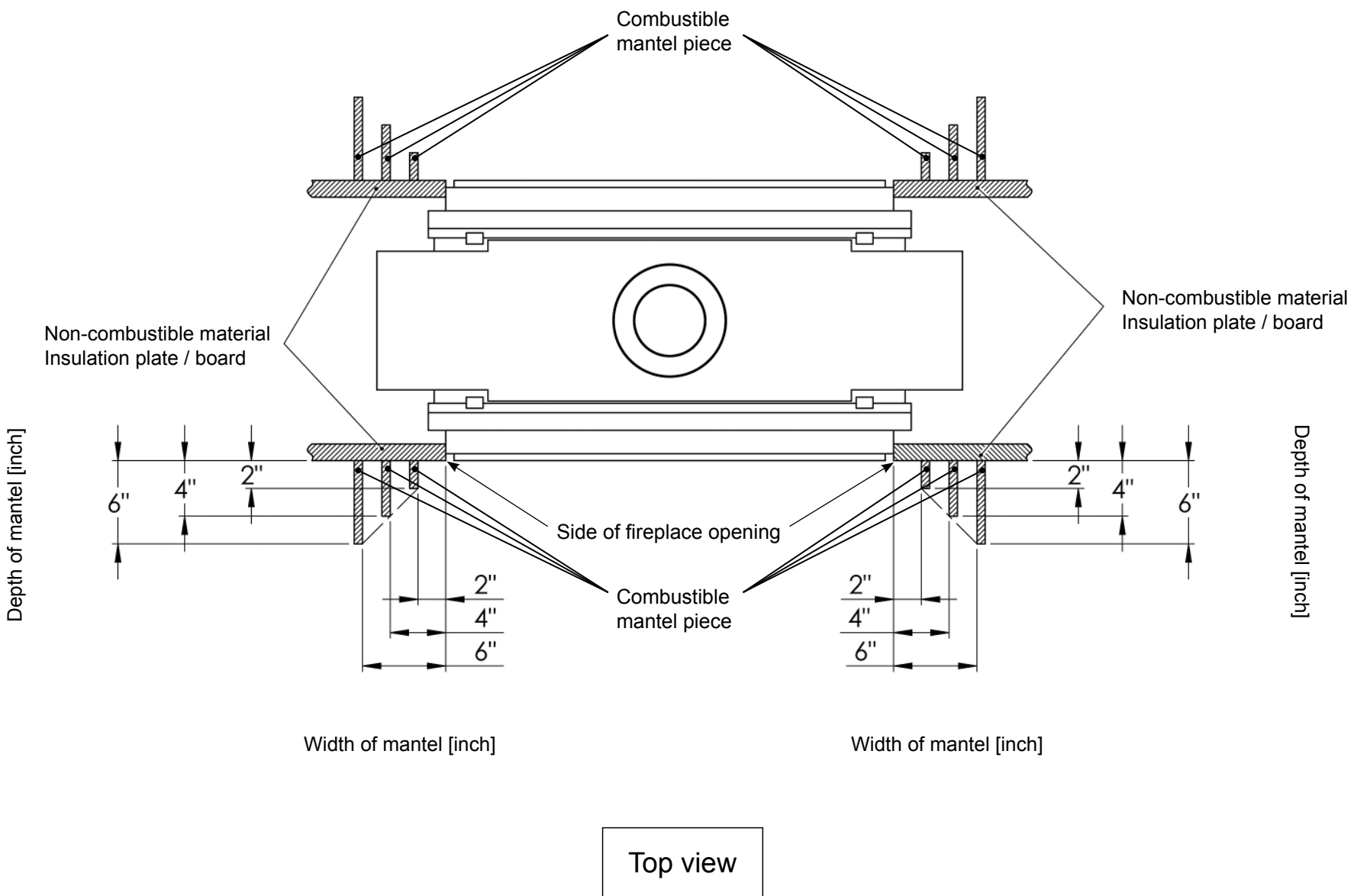


Figure 5: Side mantel clearances

CLEARANCES

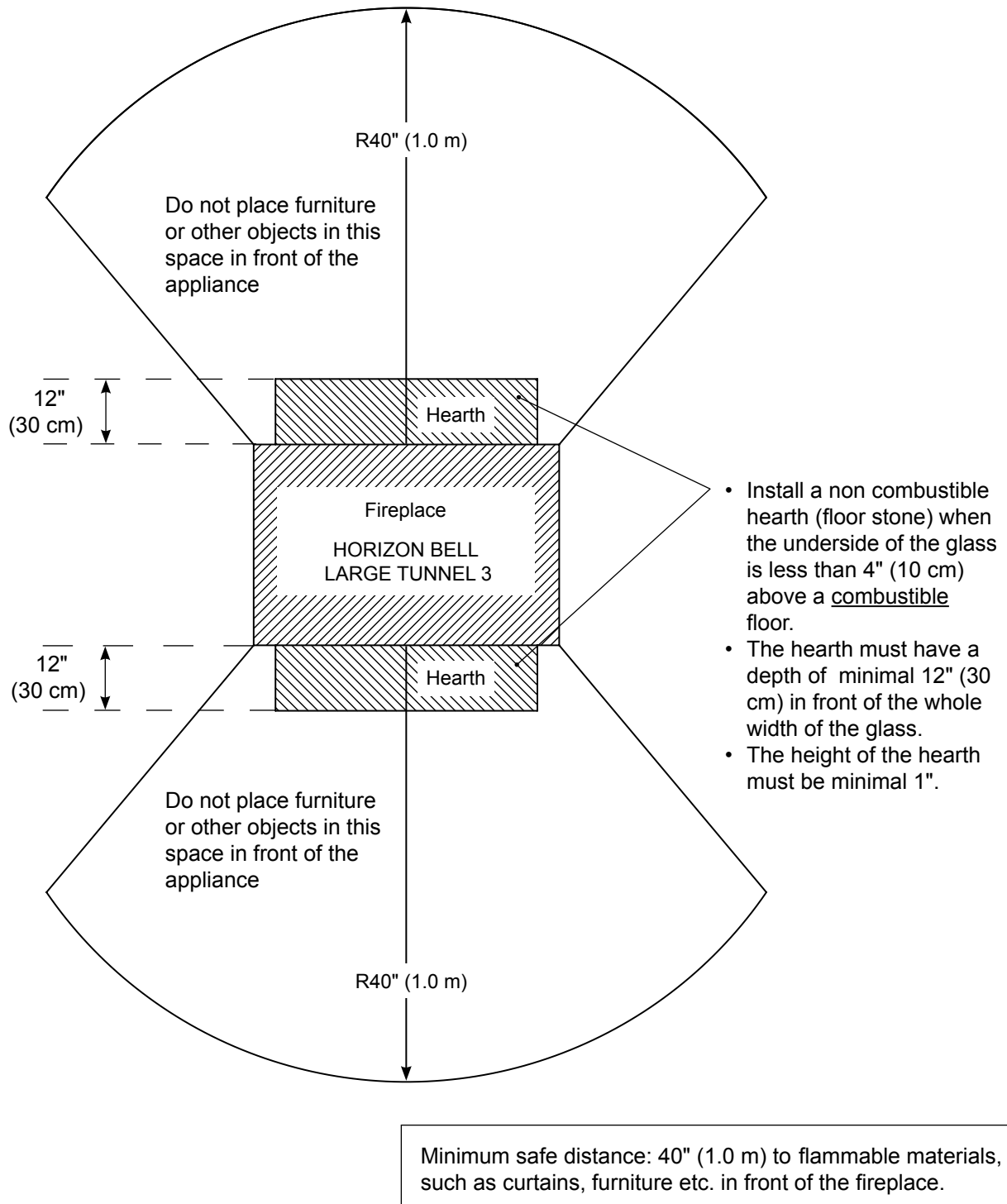
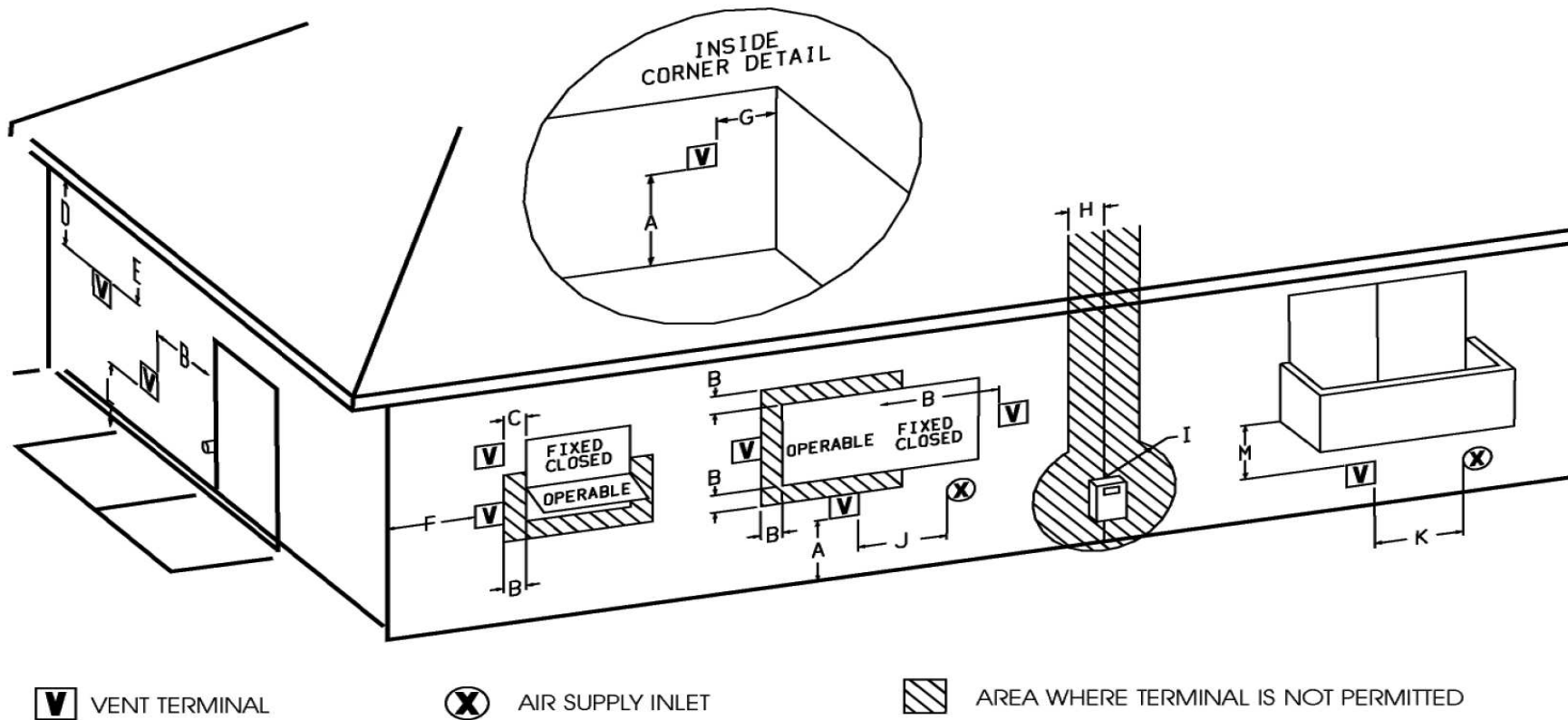


Figure 6: Safety distance front appliance



	Canadian Installations ¹	US Installations ²
A= Clearance above, grade, veranda, porch, deck or balcony	12 in (30 cm)	12 in (30 cm)
B= Clearance to window, or door that may be opened	12 in (30 cm)	9 in (23 cm)
C= Clearance to permanently closed window	12 in (30 cm)	9 in (23 cm)
D= Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (610 mm) from the center line of the terminal	18 in (46 cm)	18 in (46 cm)

	Canadian Installations ¹	US Installations ²
E= Clearance to unventilated soffit	12 in (30 cm)	12 in (30 cm)
F= Clearance to outside corner	20 in (51 cm)	20 in (51 cm)
G= Clearance to inside corner	20 in (51 cm)	20 in (51 cm)
H= Clearance to each inside of center line extended above meter / regulator assembly	3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly	3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly
I = Clearance to service regulator vent outlet	3 ft (91 cm)	3 ft (91 cm)
J= Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance	12 in (30 cm)	9 in (23 cm)
K= Clearance to a mechanical air supply inlet	6 ft (1.83 m)	3 ft (91 cm) above if within 10 ft (3 m) horizontally
L= Clearance above paved sidewalk or paved driveway located on public property	7 ft (2.13 m) †	7 ft (2.13 m) †
M= Clearance under veranda, porch, deck or balcony	20 in (51 cm) ‡	20 in (51 cm) ‡
<p>1 In accordance with the current CSA-B149 Installation Codes.</p> <p>2 In accordance with the current ANSI Z223.1/NFPA 54 National Fuel Gas Codes.</p> <p>† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings.</p> <p>‡ Permitted only if veranda, porch, deck or balcony is fully open on a minimum of two sides beneath the floor.</p> <p>NOTE: Local codes or regulations may require different clearances. Interfocos assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.</p>		

VENT INSTALLATION

M&G DuraVent - DIRECT VENT PRO 4" x 6⁵/₈" - Available approved components:

M&G DuraVent - Direct Vent Pro Concentric (= Co-axial) direct vent system Size Diam. (in.) : 4" x 6 ⁵ / ₈ " Material Type : 0.020" aluminum inner wall - 0.018" galvanized steel outer wall		
Item no.	Description	DuraVent Part no.
1	Bellfires Adapter: 5 ¹ / ₈ " x 7 ⁷ / ₈ " to 4" x 6 ⁵ / ₈ " Direct Vent Pro	46DVA-AD-BF
2	Vertical Termination - High-Wind Termination Cap	46DVA-VCH
3	Vertical Wind Guard - Only for High Wind Termination Cap	46DVA-VWG
4	Vertical Termination - Low-Profile Termination Cap	46DVA-VC
5	Vertical Termination - Extended Vertical Termination Cap	46DVA-VCE
6	6" Pipe Length	46DVA-06
7	9" Pipe Length	46DVA-09
8	12" Pipe Length	46DVA-12
9	18" Pipe Length	46DVA-18
10	24" Pipe Length	46DVA-24
11	36" Pipe Length	46DVA-36
12	48" Pipe Length	46DVA-48
13	60" Pipe Length	46DVA-60
14	8 ¹ / ₂ " Pipe Extension	46DVA-08A
15	16" Pipe Extension	46DVA-16A
16	11"-17" Adjustable Pipe	46DVA-17TA
17	17"-24" Adjustable Pipe	46DVA-24TA
18	30° Elbow	46DVA-E30
19	45° Elbow	46DVA-E45
20	60° Elbow	46DVA-E60
21	90° Elbow	46DVA-E90
22	Elbow Strap	46DVA-ES
23	Wall Strap	46DVA-WS
24	Ceiling Support / Wall Thimble Cover	46DVA-DC
25	Cathedral Ceiling Support Box	46DVA-CS
26	Ceiling Firestop	46DVA-FS
27	Attic Insulation Shield	46DVA-IS
28	Adjustable Roof Flashing, 0/12 to 6/12 Roof Pitch	46DVA-F6
29	Steep Roof Flashing, 7/12 to 12/12 Roof Pitch	46DVA-F12
30	Flat Roof Flashing	46DVA-FF
31	Dead Soft Aluminum Flashing, 0/12 to 6/12 Roof Pitch	46DVA-F6DS
32	Dead Soft Aluminum Flashing, 7/12 to 12/12 Roof Pitch	46DVA-F12DS
33	Storm Collar	46DVA-SC
34	Flex Liner 4" (25 ft. long)	4DFA-25
35	Flex Coupling 4"	4DFA-FC
36	Connector for Flex Liner 4"	4SL-316

VENT INSTALLATION

M&G DuraVent - DIRECT VENT PRO 5" x 8" - Available approved components:

M&G DuraVent - Direct Vent Pro Concentric (= Co-axial) direct vent system Size Diam. (in.) : 5" x 8" Material Type : 0.020" aluminum inner wall - 0.018" galvanized steel outer wall		
Item no.	Description	DuraVent Part no.
101	Bellfires Adapter: 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 5" x 8" Direct Vent Pro	58DVA-AD-BF
102	Horizontal Termination - Round Termination Cap	58DVA-HRCS
103	Horizontal Termination - High Wind Square Termination Cap	58DVA-HC
104	Horizontal Termination - Sconce Termination Cap	58DVA-HSC
105	Horizontal Termination - High Wind Sconce Termination Cap	58DVA-HSCH
106	6" Pipe Length	58DVA-06
107	9" Pipe Length	58DVA-09
108	12" Pipe Length	58DVA-12
109	18" Pipe Length	58DVA-18
110	24" Pipe Length	58DVA-24
111	36" Pipe Length	58DVA-36
112	48" Pipe Length	58DVA-48
113	60" Pipe Length	58DVA-60
114	8 $\frac{1}{2}$ " Pipe Extension	58DVA-08A
115	16" Pipe Extension	58DVA-16A
116	11"-17" Adjustable Pipe	58DVA-17TA
117	17"-24" Adjustable Pipe	58DVA-24TA
118	30° Elbow	58DVA-E30
119	45° Elbow	58DVA-E45
120	60° Elbow	58DVA-E60
121	90° Elbow	58DVA-E90
122	Elbow Strap	58DVA-ES
123	Wall Strap	58DVA-WS
124	Ceiling Support / Wall Thimble Cover	58DVA-DC
125	Cathedral Ceiling Support Box	58DVA-CS
126	Ceiling Firestop	58DVA-FS
127	Attic Insulation Shield	58DVA-IS
128	Wall Thimble	58DVA-WT
129	Wall Thimble - Small	58DVA-WTS
130	Universal Wall Thimble	58DVA-WTU
131	Wall Firestop	58DVA-WFS
132	Vinyl Siding Standoff	58DVA-VSS
133	Vinyl Siding Standoff Kit	58DVA-VSK
134	Vinyl Siding Standoff Kit Small	58DVA-VSKS
135	Counter Flashing	58DVA-CFK /-S
136	Counter Flashing - Small	58DVA-CFKS
137	Flex Liner 5"	5DFA-25
138	Connector for Flex Liner 5"	5SL-316
139	Flex Adapter Starter	DVFF8A/8
140	Reducer: 5"x 8" to 4" x 6 $\frac{5}{8}$ "	58DVA-J

VENT INSTALLATION

SELKIRK - DIRECT-TEMP Direct Vent Products 4" x 6⁵/₈" - Available approved components:

SELKIRK – DIRECT-TEMP Direct Vent Products Concentric (= Co-axial) direct vent system Size Diam. (in.) : 4" x 6 ⁵ / ₈ " Material Type : 0.012" 304 stainless steel inner wall 0.018" galvanized steel outer wall		
Item no.	Description	SELKIRK Part no.
1	Bellfires Adapter: 5 ¹ / ₈ " x 7 ⁷ / ₈ " to 4" x 6 ⁵ / ₈ " Direct Temp	4DT-AAB
2	Vertical Termination	4DT-VT
6	DT - 6" Pipe	4DT-06
7	DT - 9" Pipe	4DT-09
8	DT - 12" Pipe	4DT-12
9	DT - 18" Pipe	4DT-18
10	DT - 24" Pipe	4DT-24
11	DT - 36" Pipe	4DT-36
12	DT - 48" Pipe	4DT-48
14	Adjustable Length 4-10"	4DT-AJ12
16	Telescopic Length 14-22"	4DT-TL 14
17	Telescopic Length 38-70"	4DT-TL 38
19	Elbow 45°	4DT-EL45
21	Elbow 90°	4DT-EL90S
23	Wall Support/Band	4DTWS/B
24	Ceiling Support	4DT-CS
25	Cathedral Ceiling Support Box	4DT-CCS
26	Firestop Spacer	4DT-FS
27	Attic Insulation Shield	4DT-AIS
-	Offset Support	4DT-OS
28	Roof Flashing, Adjustable 0/12 to 6/12	4DT-AF6
29	Roof Flashing, Adjustable 6/12 to 12/12	4DT-AF12
30	Roof Flashing, Rubber Boot	URBAK
33	Storm Collar	4DT-SC
-	Trim Plate	4DT-TP

VENT INSTALLATION

SELKIRK - DIRECT-TEMP Direct Vent Products 5" x 8" - Available approved components:

SELKIRK - DIRECT-TEMP Direct Vent Products Concentric (= Co-axial) direct vent system Size Diam. (in.) : 5" x 8" Material Type : 0.012" 304 stainless steel inner wall 0.018" galvanized steel outer wall		
Item no.	Description	SELKIRK Part no.
101	Bellfires Adapter: 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 5" x 8" Direct Temp	5DT-AAB
102	Horizontal Insulated Termination - Square	5DT-HC
106	DT - 6" Pipe	5DT-06
107	DT - 9" Pipe	5DT-09
108	DT - 12" Pipe	5DT-12
109	DT - 18" Pipe	5DT-18
110	DT - 24" Pipe	5DT-24
111	DT - 36" Pipe	5DT-36
112	DT - 48" Pipe	5DT-48
114	Adjustable Length 4-10"	5DT-AJ12
119	Elbow 45°	5DT-EL45
121	Elbow 90°	5DT-EL90
123	Wall Support/Band	5DTWS/B
124	Ceiling Support	5DT-CS
125	Cathedral Ceiling Support Box	5DT-CCS
126	Firestop Spacer	5DT-FS
127	Attic Insulation Shield	5DT-AIS
-	Offset Support	5DT-OS
128	Wall Thimble	5DT-WT
132	Vinyl Siding Standoff	5DT-VS
-	Trim Plate	5DT-TP
140	Reducer: 5"x 8" to 4" x 6 $\frac{5}{8}$ "	5DT-R4

VENT INSTALLATION

METAL-FAB - Sure-Seal Direct Vent Products 4" x 6.5" - Available approved components:

METAL-FAB - Sure-Seal Direct Vent Products Concentric (= Co-axial) direct vent system Size Diam. (in.): 4" x 6.5" Material Type : 0.012" 430 stainless steel inner wall 0.018" galvanized steel outer wall		
Item no.	Description	METAL-FAB Part no.
1	Bellfires Adapter: 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 4" x 6.5" Metal-Fab	54DBA
2	Vertical Termination - Termination Cap	4DVT
6	6" Pipe Straight Length assembly	4D6
8	12" Pipe Straight Length assembly	4D12
9	18" Pipe Straight Length assembly	4D18
10	24" Pipe Straight Length assembly	4D24
11	36" Pipe Straight Length assembly	4D36
12	48" Pipe Straight Length assembly	4D48
14	Adjustable Length 3"-10"	4DAL
19	Elbow 45°	4D45L
21	Elbow 90°	4D90L
23	Wall support	4DWS
26	Firestop	4DFS
-	Support Plate	4DSP
-	Decorative Cover Plate	4DCP
28	Roof Flashing, Roof Pitch $\pm 30^\circ$	4DF
29	Roof Flashing, Roof Pitch Steep $\pm 45^\circ$	4DF-S
-	Roof Flashing, Roof Pitch Extra Steep $\pm 60^\circ$	4DF-ES
30	Roof Flashing, Flat Roof	4DF-FR
33	Storm Collar	4DSC
-	Painted Roof Support	4DRS

VENT INSTALLATION

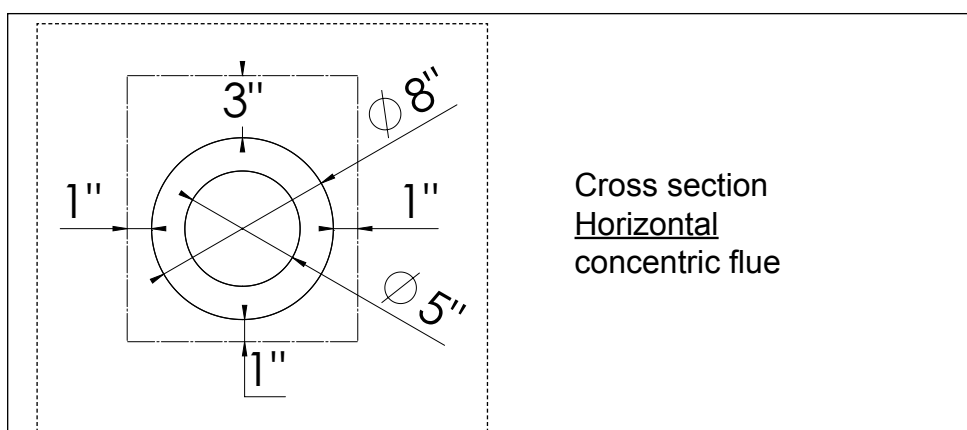
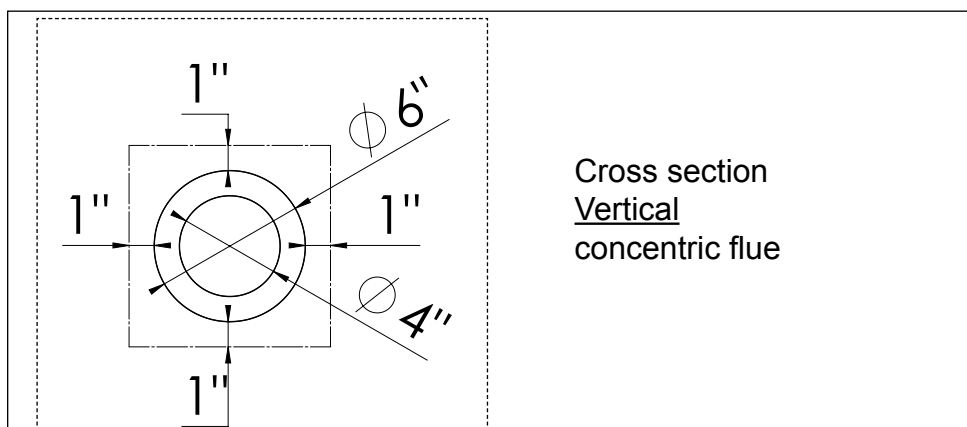
METAL-FAB - Sure-Seal Direct Vent Products 5" x 8" - Available approved components:

METAL-FAB – Sure-Seal Direct Vent Products Concentric (= Co-axial) direct vent system Size Diam. (in.) : 5" x 8" Material Type : 0.012" 430 stainless steel inner wall 0.018" galvanized steel outer wall		
Item no.	Description	METAL-FAB Part no.
101	Bellfires Adapter: 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 5" x 8" Metal-Fab	5DBA
102	Horizontal Termination -Square Termination Cap	5DHT
106	6" Pipe Straight Length assembly	5D6
108	12" Pipe Straight Length assembly	5D12
109	18" Pipe Straight Length assembly	5D18
110	24" Pipe Straight Length assembly	5D24
111	36" Pipe Straight Length assembly	5D36
112	48" Pipe Straight Length assembly	5D48
114	Adjustable Length 3"-10"	5DAL
119	Elbow 45°	5D45L
121	Elbow 90°	5D90L
123	Wall support	5DWS
126	Firestop	5DFS
-	Support Plate	5DSP
-	Decorative Cover Plate	5DCP
128	Wall Thimble	5DWT
132	Vinyl Siding Stand Off	5DVS
140	Reducer: 5"x 8" to 4" x 6.5"	54DTA

CONCENTRIC FLUE SYSTEM

IMPORTANT:

- The direct vent gas appliances have been approved in combination with the components of the concentric flue systems listed in this installation manual, according to the ANSI / CSA standards for gas appliances and may therefore be used **only** with these components. The use of a snorkel or power vent is **not** allowed.
- The components of the concentric flue system of M&G Duravent (Direct Vent Pro), Selkirk (Direct Temp) and Metal-Fab (Sure-Seal) may **not** be used together in one installation.
- Check whether the wall or roof termination kit to be used **exactly** matches one of those listed in this installation manual.
- Due to the high temperature of the outer walls (approx. 300°F 150°C), no flammable materials may be located or used in the vicinity of the flue system.
- Clearance to combustible materials:



- Do not insulate the concentric flue.
- For all other installation items; the venting must be installed according to the concentric flue manufacturer's installation instructions and local code requirements. (Which allow for installation in a combustible chase as long as a clearance to combustible requirements are met.)

VENT INSTALLATION

Vertical concentric flue system in cold climates

In cold climate conditions where temperatures go below 14°F (-10°C), we recommend that the chase be insulated and where the concentric flue pipe enters into the attic space that the pipe be wrapped with a non-combustible insulation sleeve. This will increase the temperature of the pipe and help the appliance to vent properly in cold weather conditions.

It is also important that appliances with a vertical concentric flue system, be operated daily during the winter months. This will help to stop the roof termination from freezing up. We recommend using the thermostat room temperature setting on the remote to allow the appliance to cycle.

IMPORTANT : Always keep the Pilot in the ON position (burning) when the outside temperature is below freezing.

IMPORTANT : Do not use Silicone/RTF products, as they will create a white residue on the glass! When necessary, use an alternative direct vent sealing compound. (for example Mill-Pac Sealant)

There are two basic types of direct-vent installation:

- Horizontal termination
- Vertical termination

The combined flue gas channel and combustion air intake requires one of concentric flue system configurations as depicted in figures 7 to 12.

VENT INSTALLATION

RIGID CONCENTRIC FLUE 4" x 6⁵/₈" SYSTEM CONNECTION POSSIBILITIES

Appliance: Concentric flue connection 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ "

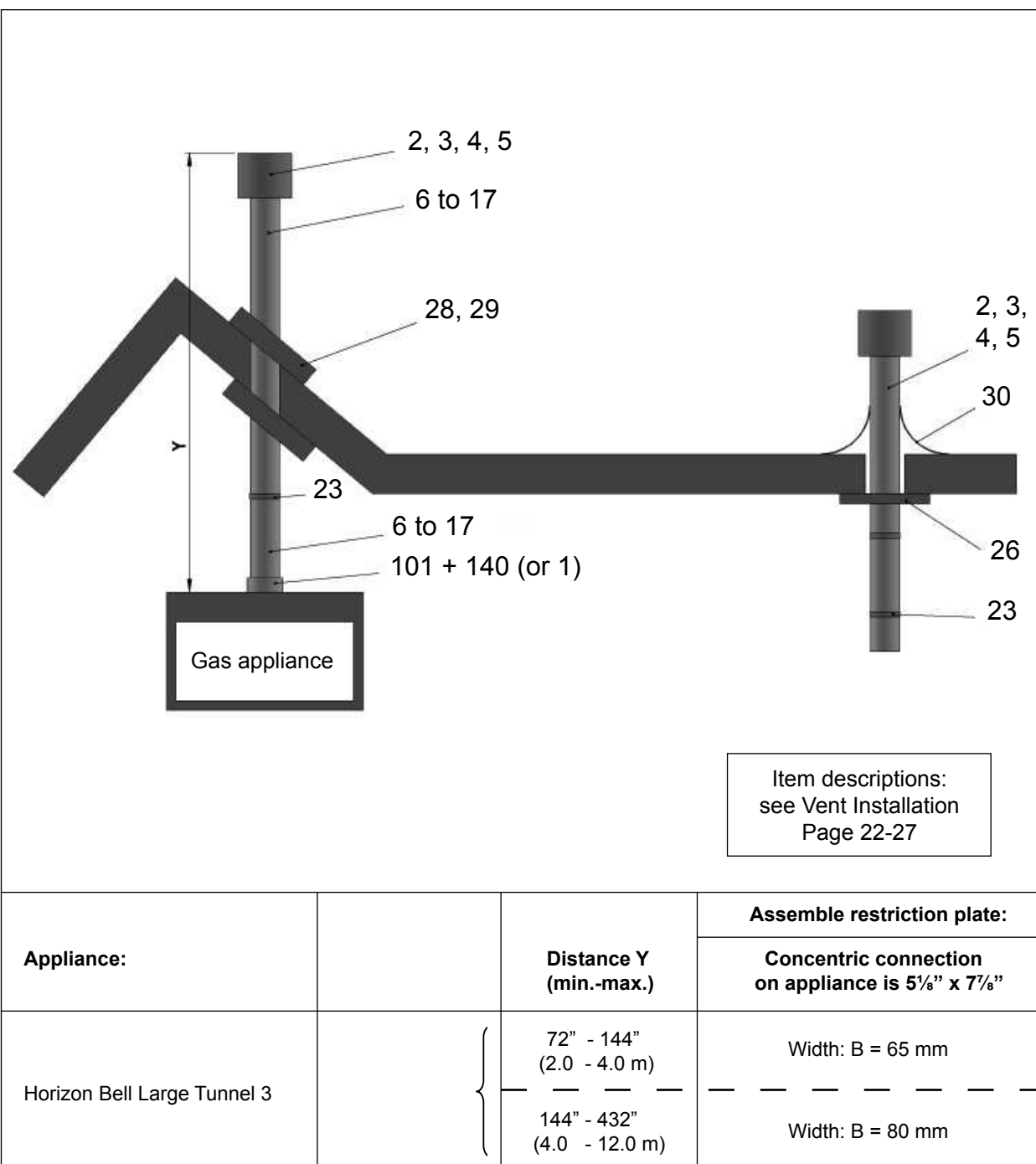


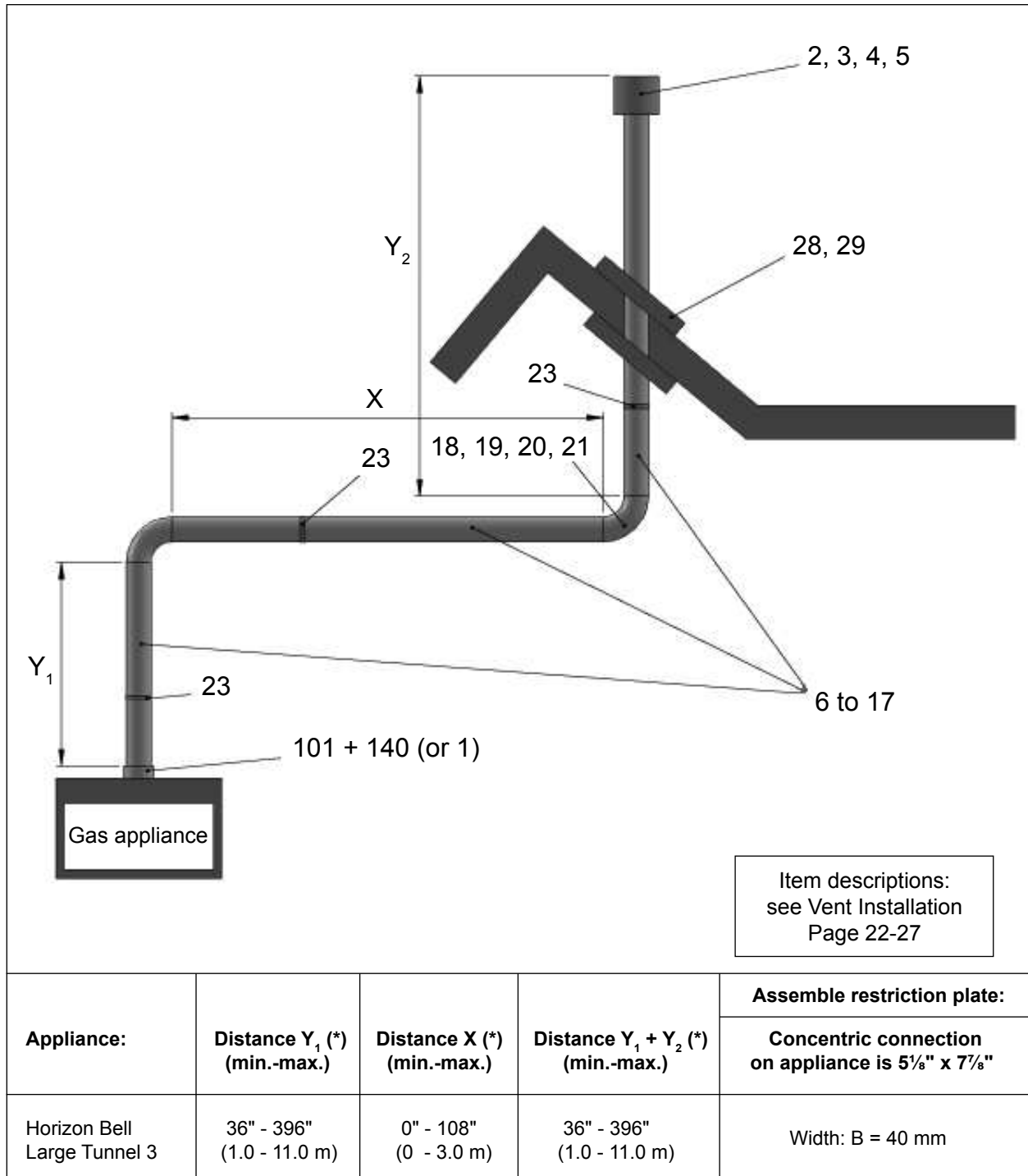
Figure 7: Vertical roof-mounted outlet without bend

ALL SIZES INCLUDE THE LENGTH OF THE ROOF OR WALL TERMINATION

VENT INSTALLATION

RIGID CONCENTRIC FLUE 4" x 6⁵/₈" SYSTEM CONNECTION POSSIBILITIES

Appliance: Concentric flue connection 5¹/₈" x 7⁷/₈"



(*) : (Y₁ + Y₂) : X ≥ 2 : 1

(Vertical to horizontal ratio (or 45° upwards) is always at least 2 to 1)

Figure 8: Vertical roof-mounted outlet with bend

ALL SIZES INCLUDE THE LENGTH OF THE ROOF OR WALL TERMINATION

VENT INSTALLATION

FLEXIBLE CONCENTRIC FLUE 4" x 6⁵/₈" SYSTEM CONNECTION POSSIBILITIES

Appliance: Concentric flue connection 5¹/₈" x 7⁷/₈"

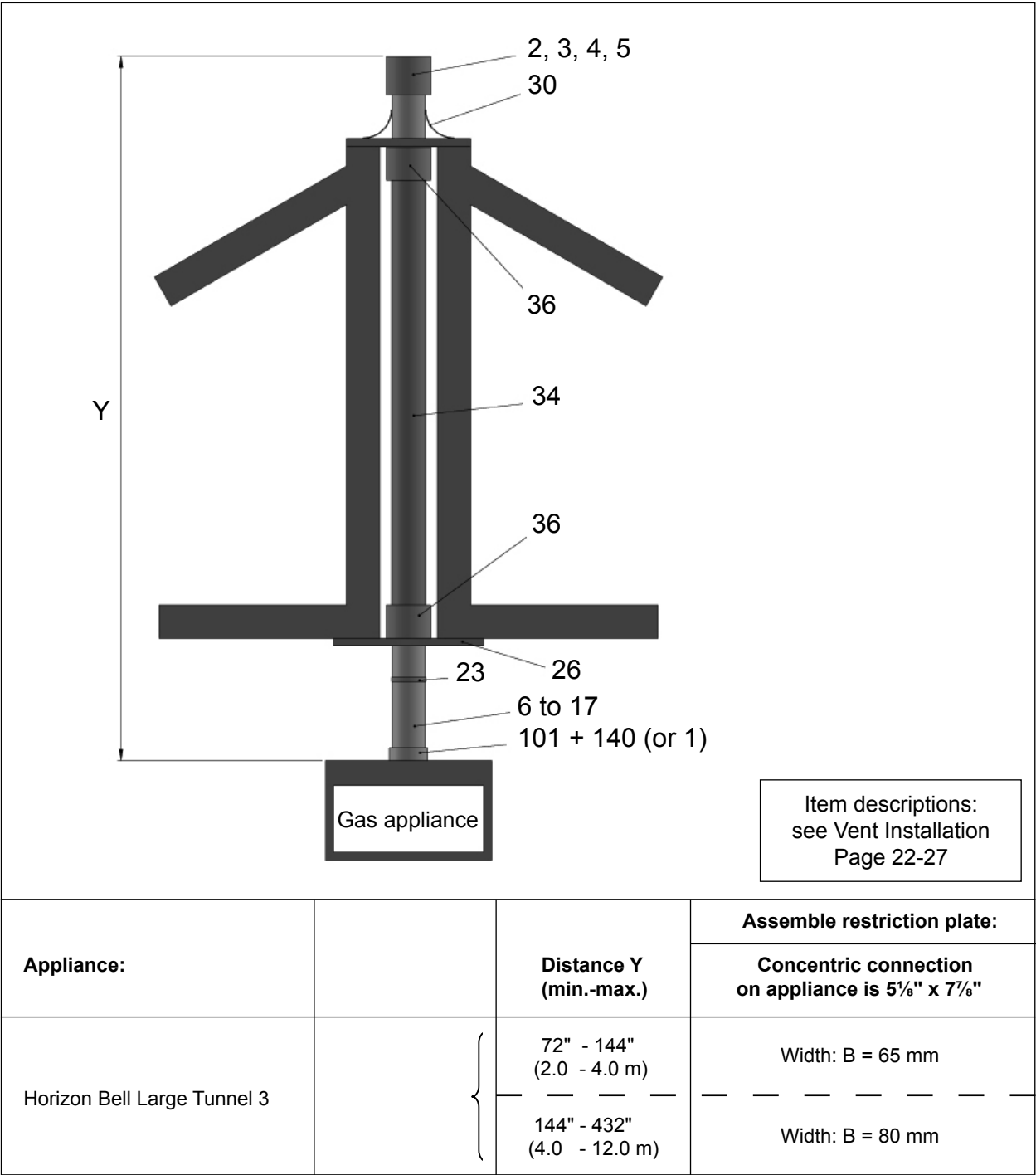


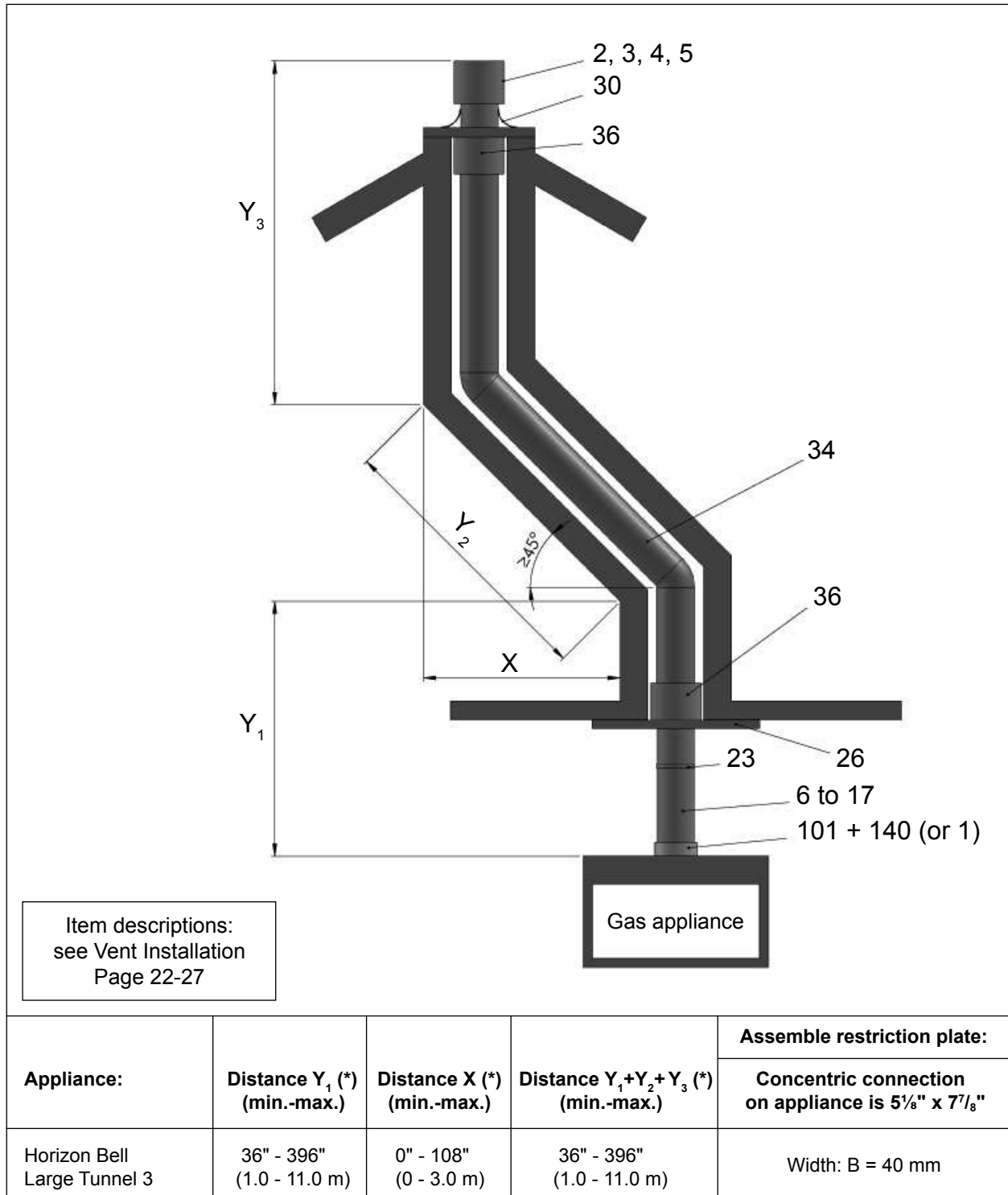
Figure 9: Vertical chimney outlet using an existing lined chimney
(Flexible 4" and/or rigid 4" x 6⁵/₈")

ALL SIZES INCLUDE THE LENGTH OF THE ROOF OR WALL TERMINATION

VENT INSTALLATION

FLEXIBLE CONCENTRIC FLUE 4" x 6⁵/₈" SYSTEM CONNECTION POSSIBILITIES

Appliance: Concentric flue connection 5¹/₈" x 7⁷/₈"



(*) : (Y₁ + Y₂ + Y₃) : X ≥ 2 : 1

(Vertical to horizontal ratio (or 45° upwards) is always at least 2 to 1)

Figure 10: Vertical chimney outlet using a lined chimney with a bend ≥ 45°
(Flexible 4" and/or rigid 4" x 6⁵/₈")

ALL SIZES INCLUDE THE LENGTH OF THE ROOF OR WALL TERMINATION

VENT INSTALLATION

RIGID CONCENTRIC FLUE 5" x 8" SYSTEM CONNECTION **POSSIBILITIES and with wall outlet 5" x 8"**

Appliance: Concentric flue connection 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ "

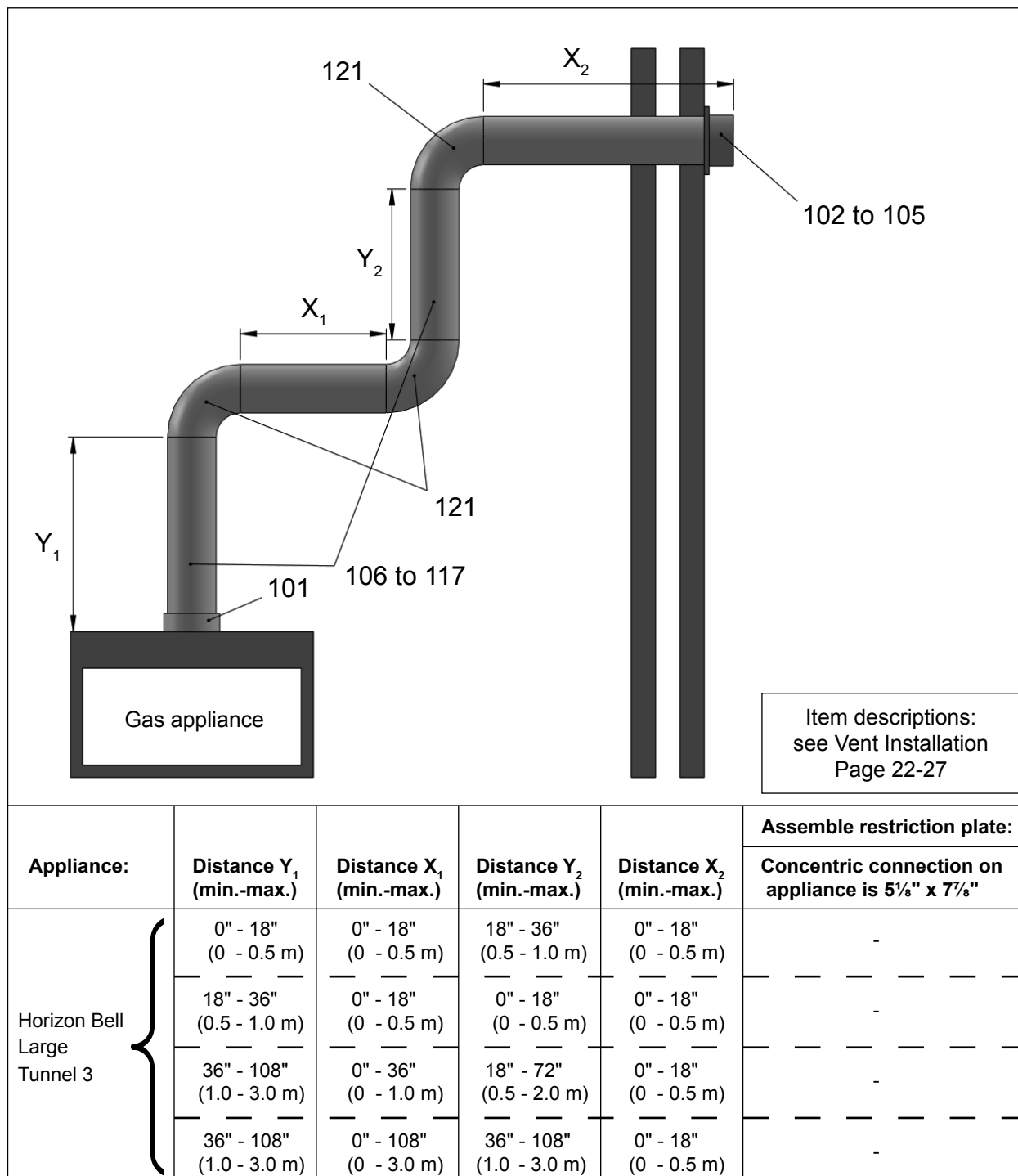


Figure 11: Horizontal wall termination

ALL SIZES INCLUDE THE LENGTH OF THE ROOF OR WALL TERMINATION

IMPORTANT : For propane appliances: Always use a minimum of 12" rise (= 12" pipe length of 5" x 8") on top of the unit first, before working further according to the table above.

VENT INSTALLATION

RIGID CONCENTRIC FLUE 5" x 8" SYSTEM CONNECTION POSSIBILITIES and with wall outlet Ø5" x Ø8"

Appliance: Concentric flue connection 5⅞" x 7⅞"

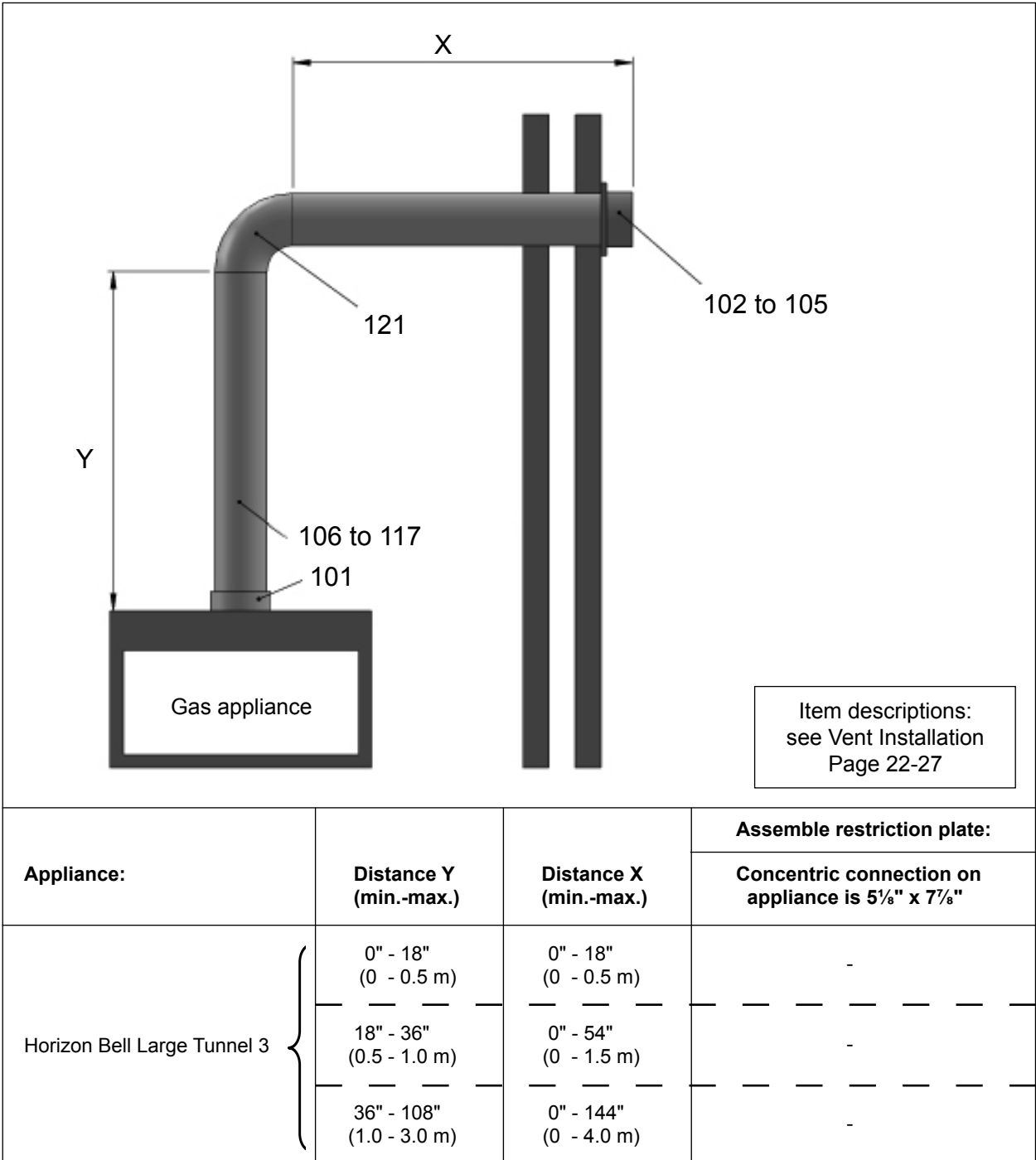


Figure 12: Horizontal wall termination

ALL SIZES INCLUDE THE LENGTH OF THE ROOF OR WALL TERMINATION

IMPORTANT : For propane appliances: Always use a minimum of 12" rise (= 12" pipe length of 5" x 8") on top of the unit first, before working further according to the table above.

IMPORTANT:

- The appliance must be constructed on a sufficiently solid floor that can bear the weight of the appliance.
 - Ensure a free space of at least 0.4 in (1 cm) between the bottom of the appliance and the floor.
 - Ensure that the temperature of the floor under and in front of the appliance can never rise above 185 °F (85°C)! Make use of a temperature protection plate; Hearth (of noncombustible material) on the floor if necessary.
 - Take care with a floor made of a combustible material.
 - Refer for the minimum clearances to (non)combustible material to the “CLEARANCES” chapter elsewhere in this manual.
 - Fit the separate operating unit, where the gas regulator block and receiver will be placed, on **MAXIMUM 20" (50 cm)** from either side of the appliance.
-
- Never position the appliance directly against the wall, but always in accordance with the installation instructions in chapter; “CLEARANCES”. Use only the specified insulation plates!
 - Never use combustible materials during the installation.
 - Ventilate the fireplace, by allowing vents above the fireplace.
 - During installation of the appliance, a clearance of 0.12" (3 mm) should be maintained on all sides of the appliance to allow for expansion of the appliance during operation.
 - Do not insulate the appliance! Only the top and sides may be fitted with a strip of white, loose insulation wool (heat-resistant to 1832°F (1000°C)), width 6" (15 cm) max. to protect the wall.
 - Do not use fibreglass or Rockwool, or any other sort of insulating material. These emit a pungent odour. This is considered extremely unpleasant. They may also cause discolouring of the column.
 - Flammable materials, such as curtains, should not be placed in the vicinity of the appliance. Minimum safe distance: 40" (100 cm). See also chapter; “CLEARANCES”.



The appliance can be easily installed using a set of carrying brackets (accessory).
After installing: remove carrying brackets!

POSITIONING THE APPLIANCE

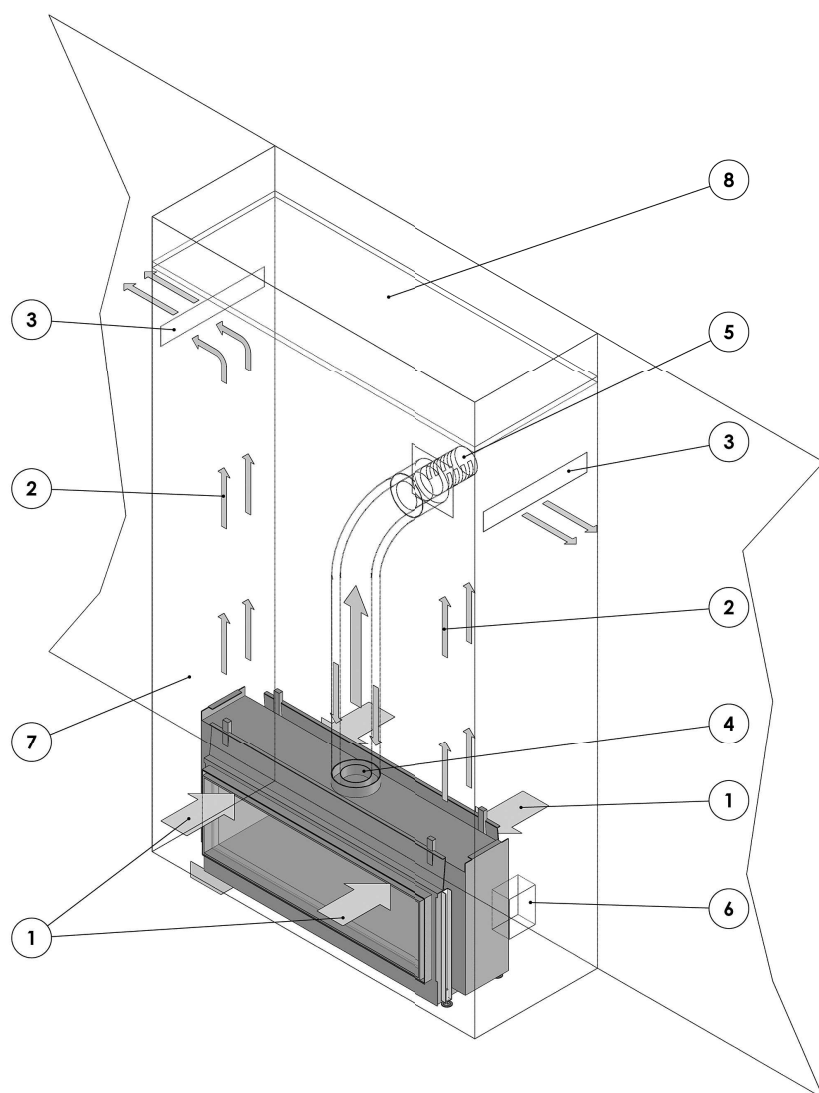


Figure 13: Appliance installed in ventilated chimney breast / Enclosure
Horizontal outlet of the flue gas exhaust /combustion air supply
via the wall.

- **Fitted with the accessory: high adjustable feet**

- 1 Inlet opening (appliance) convection air for chimney breast/Enclosure
- 2 Natural convection in the chimney breast/Enclosure
- 3 Outlet opening (chimney breast/Enclosure) convection air. Total minimal required: 46 in² (300 cm²)
- 4 Concentric flue connection appliance; 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ ", with an adapter:
 Bellfires 5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ " to 5" x 8" (See available approved components)
 for a horizontal wall outlet
- 5 Concentric flue system; 5" x 8" with a horizontal wall outlet
- 6 Built in operating unit with gas regulator block and receiver
- 7 Chimney breast/Enclosure (*)
- 8 False ceiling (*)

(*) Made of a non-combustible insulation plate / board, according the material specifications in the Chapter: CLEARANCES.

IMPORTANT: Install the appliance and the insulation plate / board according to the Chapter: CLEARANCES.

POSITIONING THE APPLIANCE

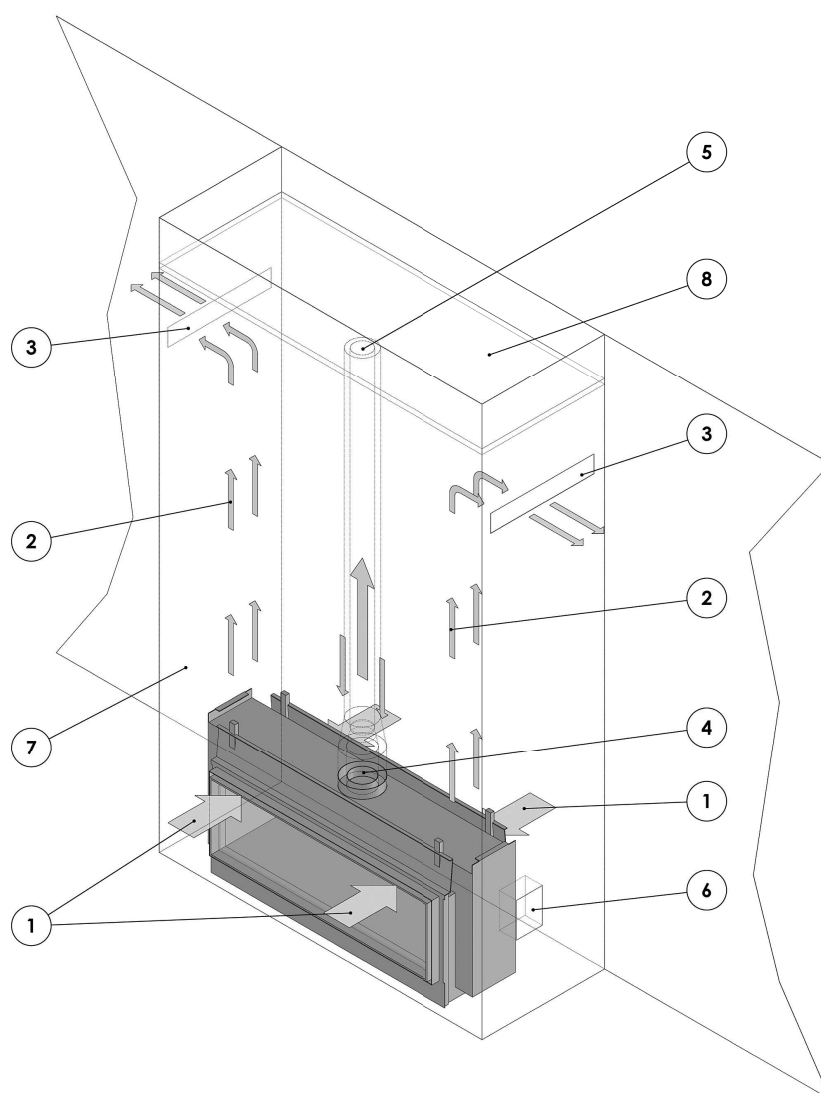


Figure 14: Appliance installed in ventilated chimney breast / Enclosure
Vertical outlet of the flue gas exhaust / combustion air supply
via the roof.

- 1 Inlet opening (appliance) convection air for chimney breast / Enclosure
- 2 Natural convection in the chimney breast / Enclosure
- 3 Outlet opening (chimney breast/Enclosure) convection air. Total minimal required: 46 in² (300 cm²)
- 4 Concentric flue connection appliance; 5¹/₈" x 7⁷/₈", with an adapter:
 Bellfires 5¹/₈" x 7⁷/₈" to 5" x 8" (See available approved components)
 then a reducer: 5" x 8" to 4" x 6⁵/₈" (See available approved components)
 for a vertical roof outlet
- 5 Concentric flue system; 4" x 6⁵/₈" for a vertical roof outlet
- 6 Built in operating unit with gas regulator block and receiver
- 7 Chimney breast / Enclosure (*)
- 8 False ceiling (*)

(*) Made of a non-combustible insulation plate / board, according the material specifications in the Chapter: CLEARANCES.

IMPORTANT: Install the appliance and the insulation plate / board according to the Chapter: CLEARANCES.

POSITIONING THE APPLIANCE

When fitting the appliance, it can be levelled with the adjustable feet. These adjustable feet can be reached via the openings (4x), after removing the protective covers, in the corners of the floor of the combustion chamber. The floor of the combustion chamber can be reached after the window and the grill around the burner have been removed (see Chapter: "DISMANTLING / ASSEMBLING OF THE GLASS"). Using an Allen key (no. 5), the appliance can be adjusted to the required height.

IMPORTANT:

Press the 4 protecting covers back into the floor.



Press the 4 protecting covers back into the floor.



- Position 4 protecting covers.



- Protecting cover.



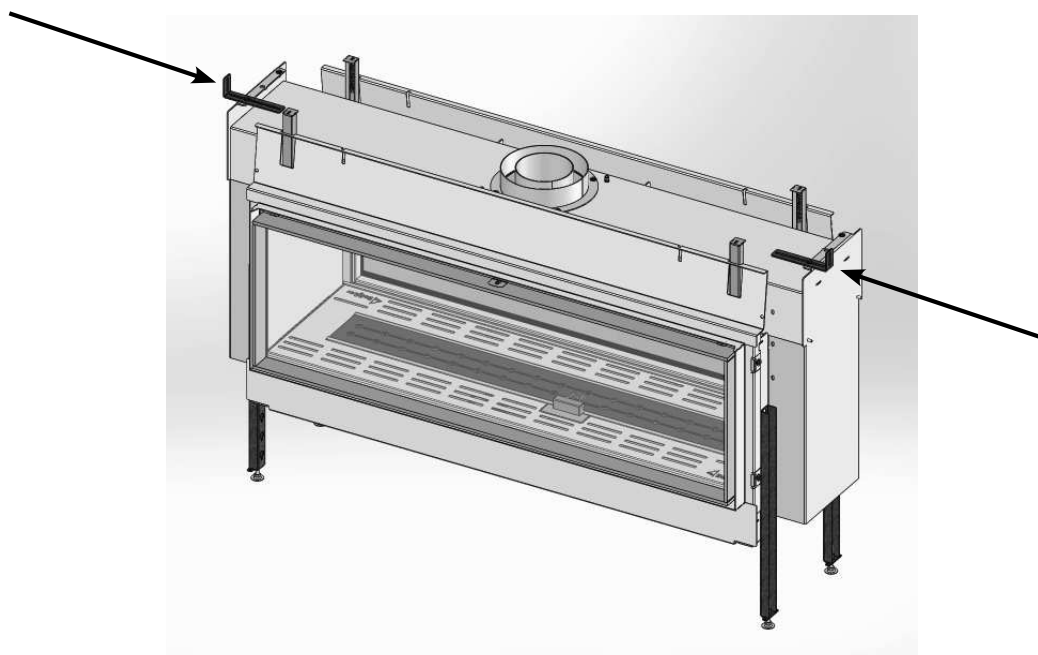
- Adjustable feet seen from the bottom of the appliance.



- Adjust height with Allenkey no. 5.

POSITIONING THE APPLIANCE

- Position the gas supply pipe such that it can be easily mounted after installation. Because the control system is outside the appliance, the gas pipe must lead to where the operating unit (built in), the gas regulator block (and the receiver) assembly are fitted.
- Position the appliance in accordance with the installation instructions in chapter; CLEARANCES. Use only the specified insulation plates.
- Attach the appliance to the wall with 2 wedge bolts. Use the adjustable mounting brackets at the side of the appliance for this.



- 2x Mounting bracket.

WARNING:

Connection of the appliance to gas supply must be performed by a qualified installer, service agency or the gas supplier. Follow the local codes.

IMPORTANT:

During gas connection, take care not to twist the gas regulator block. Make sure that both the gas regulator block and the supply pipes are not subjected to stresses.

GAS LINE INSTALLATION

The appliance is supplied with a built-in operating unit.

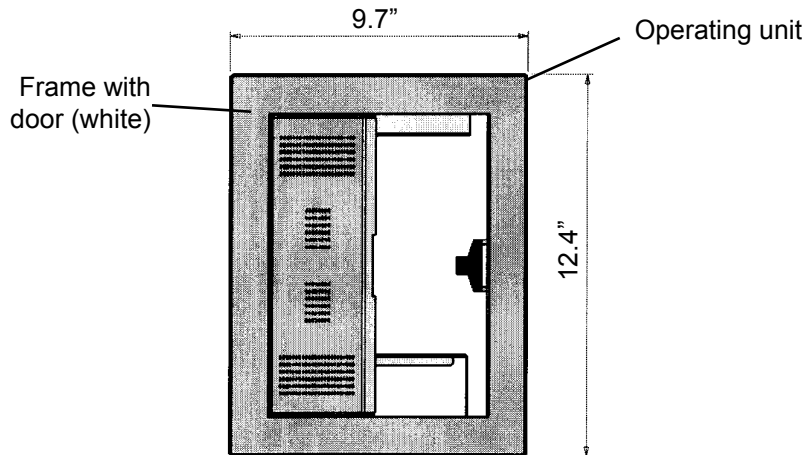


Figure 15: Operating unit

Remove the decorative edging and door of the operating unit.

Fit the separate operating unit, where the gas regulator block and receiver will be placed, on MAXIMUM 20" (50 cm) from either side of the appliance.

The burner, gas regulator block and receiver have been fully factory assembled.

Disconnect the bracket with the gas regulator block and receiver from the appliance. Carefully move the bracket with the gas regulator block, receiver, pipes and cables to the operating unit. Mount the bracket at the bottom of the operating unit.

IMPORTANT:

Take care that no pipes get damaged and no compression fittings come loose when moving the gas regulator block. Prevent twisting the flexible pipes! Check all compression fittings for leaks afterwards!

Mount the receiver in the top of the operating unit. Check afterwards that all electric connections are properly connected.

Route all piping and cables from the operating unit to the appliance through an easily accessible hollow cavity. During subsequent installation of the operating unit, protect the gas regulator block and piping against encasement by cement etc.

Note: When the installation of the built-in operating unit is not possible; one can place the gas regulator block and receiver under the appliance.

Important:

- Keep a minimal distance of 4" (10 cm) between the gas regulator block / receiver and the bottom of the appliance.
- Attach the gas regulator block fixed to the wall/floor.
- Gas regulator block and receiver must always be accessible for maintenance.

GAS LINE INSTALLATION

The gas line connection can be made using ½" rigid tubing or an approved flex connector. Since some municipalities have additional local codes it is always best to consult your local authorities and the current edition of the National Fuel Gas Code ANSI.Z223.1, NFPA54. In Canada CSA-B149 (1 or 2) Installation Code.

A CSA design-certified equipment shutoff valve must be installed upstream of the appliance. Contact your dealer for the purchase of CSA design-certified equipment shutoff valve. The gas regulator block is equipped with a screw type pressure test point (inlet pressure tap in figure 18). Therefore it is not necessary to provide a ⅛" test point up stream of the control.

The CSA design-certified shutoff valve (main gas valve) must be installed in an accessible location. This main gas valve is used for opening or closing off the gasflow to the appliance.

IMPORTANT:

Cement and chalk can damage the piping and can, in turn, lead to gas leaks.

Disassembly and assembly of pipes and cables:

If necessary for mounting, all pipe compression fittings and cable connectors can be temporarily disassembled. After mounting, carefully reassemble all pipes and cables. Check afterwards all compression fittings for leaks and that all electric connections are properly connected.

IMPORTANT:

Screw the thermocouple connection (and thermocouple interrupter) manually into the gas regulator block. Afterwards, carefully fasten a half turn with a spanner.

Note: Check that the flexible burner pipes are correctly connected! The gas connection of the gas valve "rear burner" must be connected to the "rear burner"! See figure 16 and Chapter; DIAGRAM ELECTRICITY AND GAS.

Switching over the flexible burner pipes during assembly can lead to an explosive ignition. Prevent this at all costs!

The appliance must not be subjected to any test pressures exceeding ½ psi (= 3.45 kPa = 34.5 mbar). Isolate or disconnect this and any other gas appliance control from the gas line when pressure testing.

After connection of the gas supply, check that all connections are completely gas tight using soapy water (mixture of 50/50 water and soap solution) or a leak tester.

GAS LINE INSTALLATION

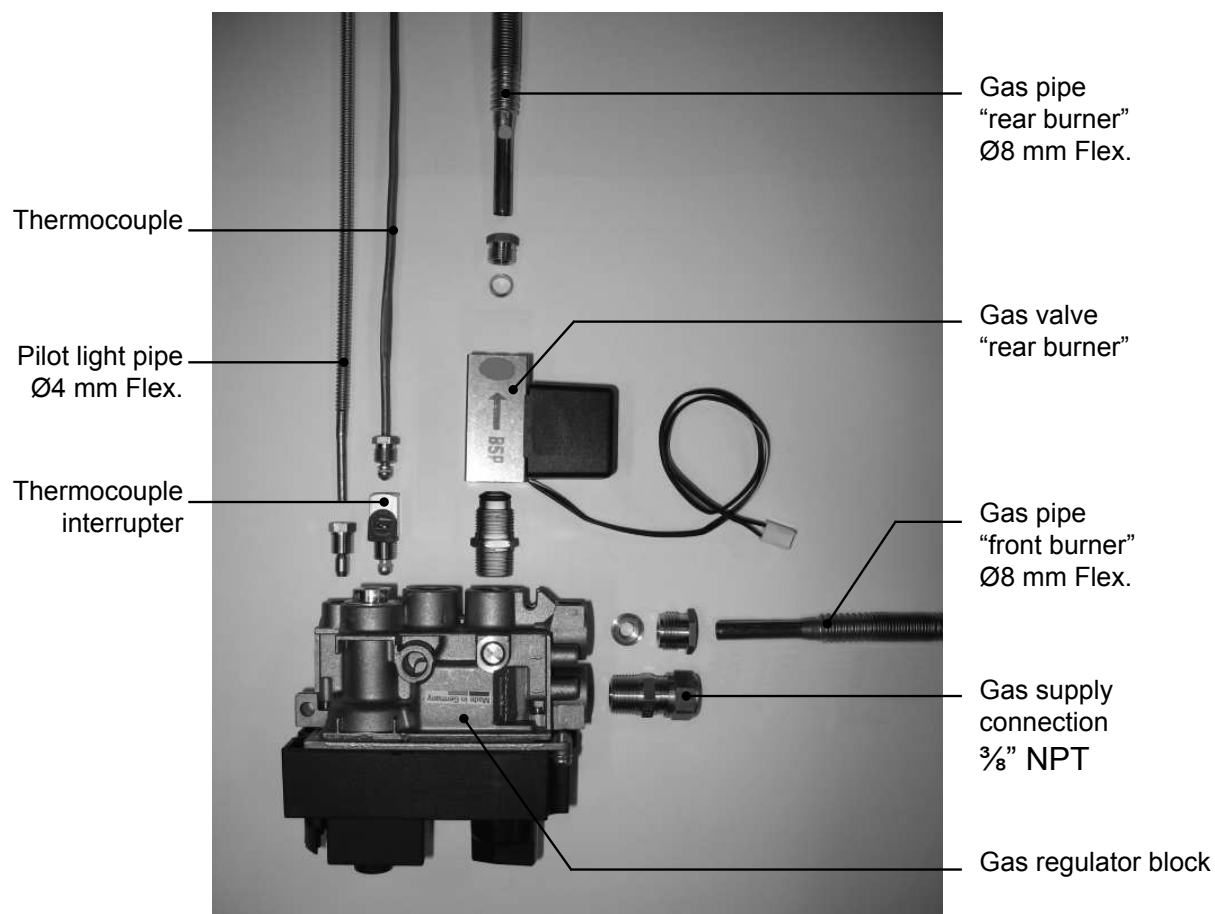


Figure 16: Gas regulator block and gas valve: Gas and thermocouple connections

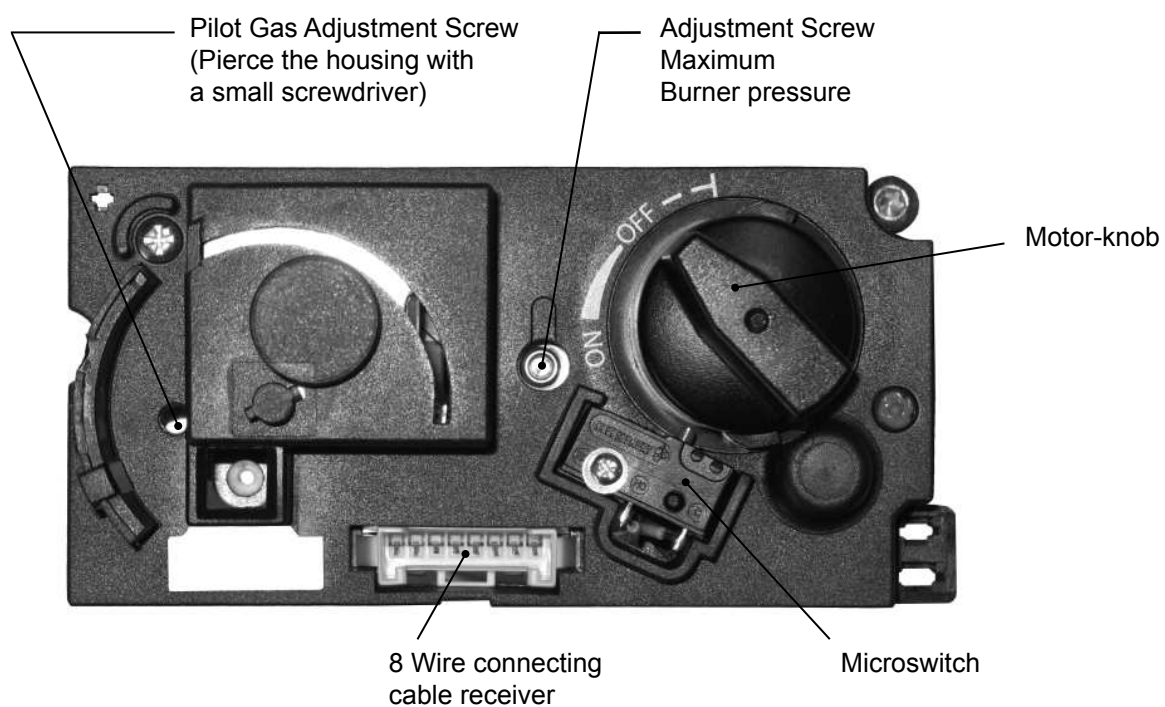


Figure 17: Gas regulator block - Front

GAS LINE INSTALLATION

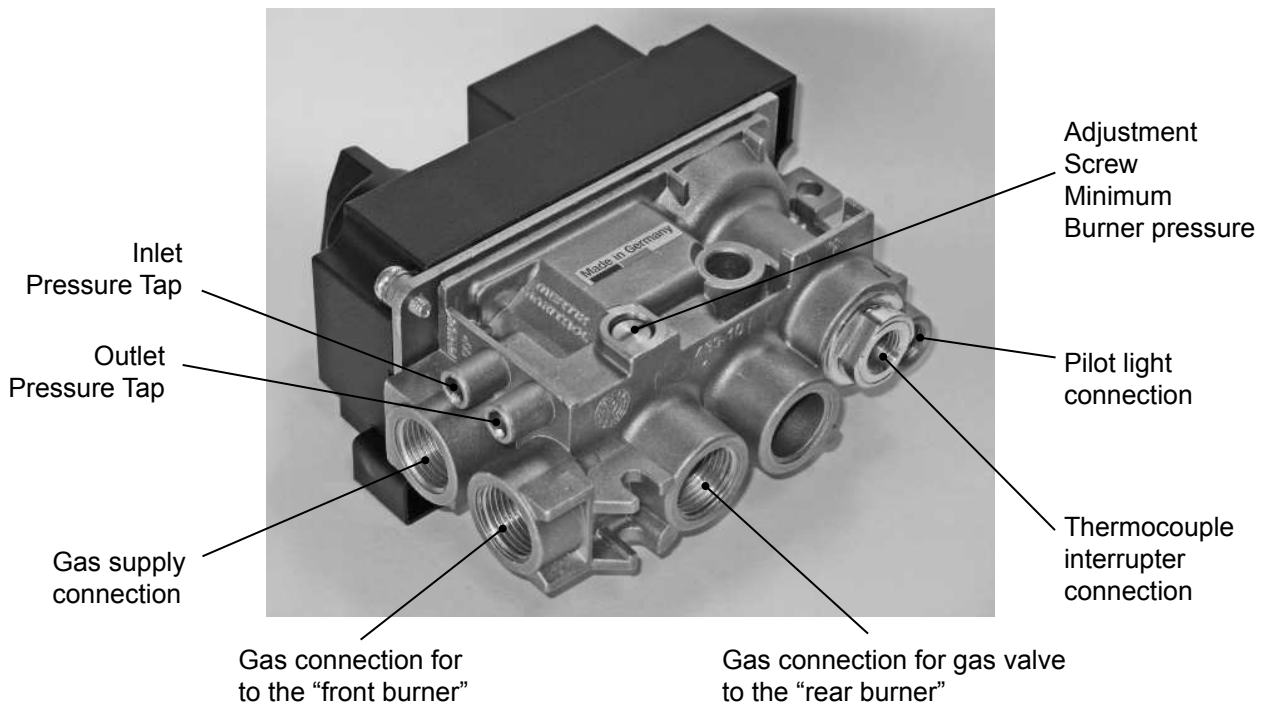


Figure 18: Gas regulator block - Rear

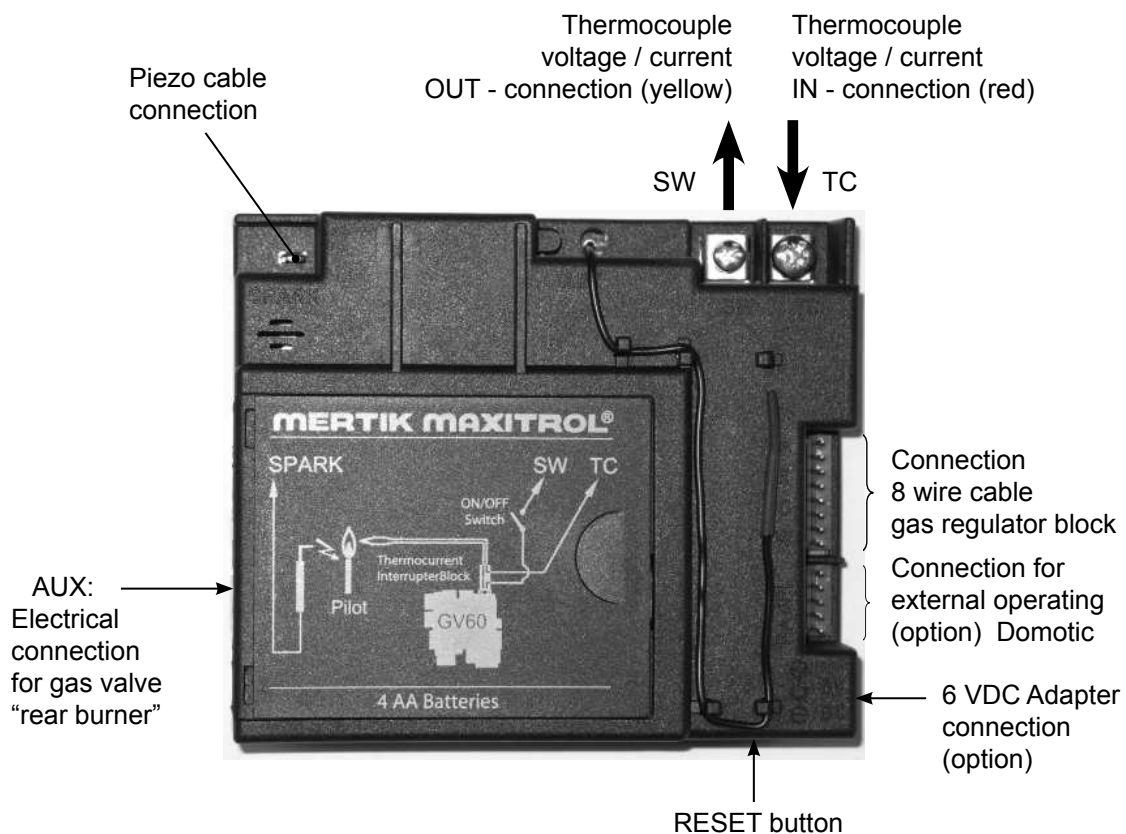


Figure 19: Receiver - Top

GAS LINE INSTALLATION

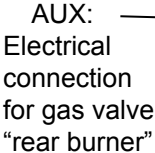


Figure 20: Receiver - AUX connection - RESET button

BUILDING IN THE APPLIANCE

Connecting the concentric flue

Assemble the concentric direct vent system according to one of the examples in figure 7 to 12 inclusive.

Make sure that all connections are completely gas tight.

Building in the appliance

Remove the front of the casing, if applicable. (See Chapter: DISMANTLING / ASSEMBLING OF THE GLASS.)

Decide on positions of the convection vents (openings/grids above the fireplace).

The brickwork must be built up around the appliance. In connection with the appliance expanding during burning: there must be at least 0.12" (3 mm) clearance on either side of the appliance. Do not build up the brickwork farther than the angle irons/brackets (keep in mind the thickness of any plastering!).

IMPORTANT:

Do not use masking tape on the appliance when installing and plastering. Tape can damage the finish of the appliance.

The optional mantle iron is intended for supporting the brickwork above the hearth. The mantle iron must rest on the brickwork on both sides so that upward building is possible. The brickwork therefore must not rest on the fireplace; there must be approx. 0.12" (3 mm) clearance in connection with the weight. Put ceramic felt on the top of the mantle iron, before laying bricks or using other nonflammable structural materials.

If using other materials, such as stone or heat-resistant plating, you should follow the supplier's instructions.

Checking the gas connection

After connection of the gas supply, check once again that all connections are completely gas tight using soapy water or a leak tester.

Once the fireplace has been finished, you can now, fit the frame with the small door to the operating unit.

Depending of enclosure: After installation in a new fireplace and/or applying new cement work, the appliance cannot be used for at least four weeks.

PLACING OF CERAMIC LOG SET

The appliance is supplied with a ceramic log set, embers and vermiculite granules.

IMPORTANT:

- Carefully place the chips of wood/embers/vermiculite granules and log set, on and around the main burner according to the directions in this chapter.
- Do not place any chips of wood/embers/vermiculite granules or log set against the pilot light burner. For that reason, the main burner has a protective pilot-light protector. Never remove this protector! Make sure that the pilot flame can burn at all times freely over the main burner. Only in this way is proper ignition of the main burner ensured. Ignoring these directions could lead to a dangerous situation.
- Make sure that all burner orifices remains free at all times!
- The burner bed (with chips of wood/embers/vermiculite granules) and the positioning of the logs must not be changed.
- Only use those items supplied! These been rigorously checked and the quantities adapted to the appliance.
- Replacement parts, including the ceramic mat are available from your dealer.
- Fitting may only be carried out by a qualified person.

Remove the glass according to the instructions in Chapter: DISMANTLING / ASSEMBLING OF THE GLASS.

This section only applies for appliances delivered with a ceramic log set.

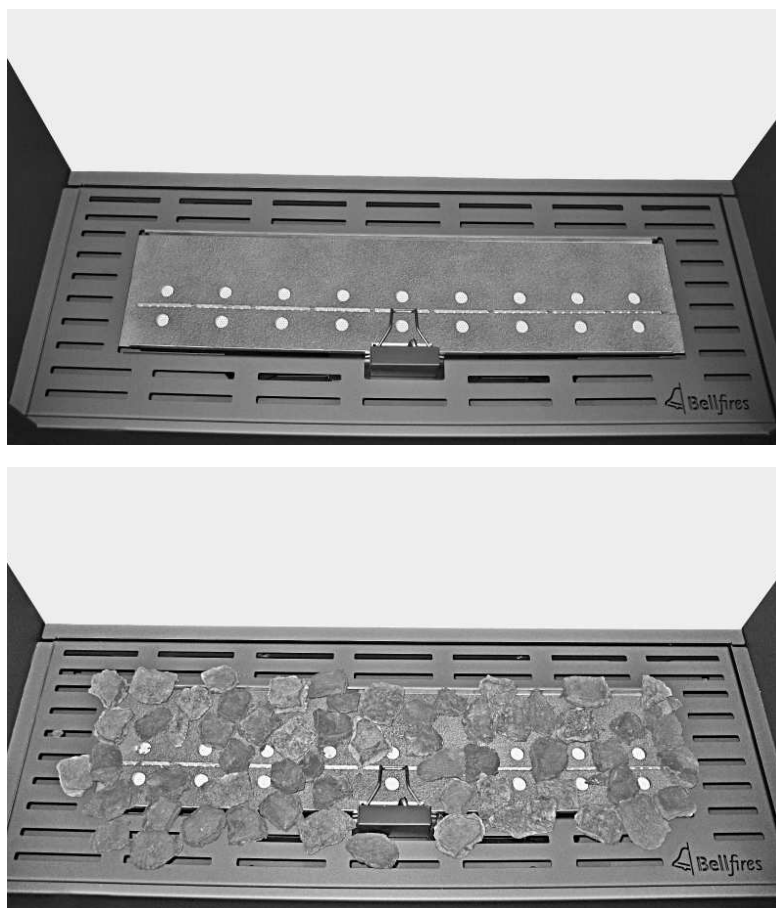
WARNING: Make sure that all burner openings remain free !!
Burner orifices, which are not open, could lead to a dangerous situation.

Ceramic log set + embers + vermiculite granules

1. Place the ceramic mat on the burner in such a way that the holes in the mat are in line with the burner openings. (Note: The ceramic mat is already placed on the burner when delivered from the factory.)
2. Remove the embers carefully from their packaging and spread them evenly over the burner mat and the grate around the burner. DO NOT COVER BURNER OPENINGS !
3. Remove the black vermiculite granules from their packaging and distribute the vermiculite granules (50 gram) evenly over the burner. DO NOT COVER BURNER OPENINGS !

PLACING OF CERAMIC LOG SET

WARNING: Embers and vermiculite granules should not block the large burner openings (Centre fire burner - 0.62 in (16 mm)). Embers and vermiculite must not be placed next to the pilot light burner.



- Place the ceramic logs on the burner as shown in figure 21 and figure 22.
Natural gas burner → refer to figure 21
Propane burner → refer to figure 22

WARNING: Make sure that the ceramic logs do not cover the burner openings.

PLACING OF CERAMIC LOG SET

Logs:



Log no ❶



Log no ❷



Log no ❸



Log no ❹



Log no ❺



Log no ❻



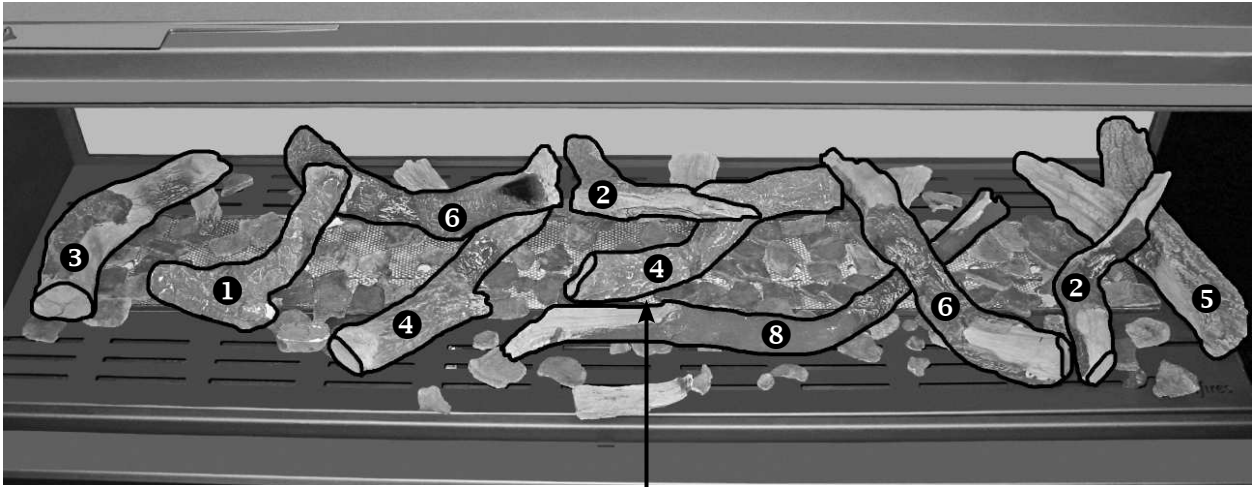
Log no ❼



Log no ❽

PLACING OF CERAMIC LOG SET

NATURAL GAS :

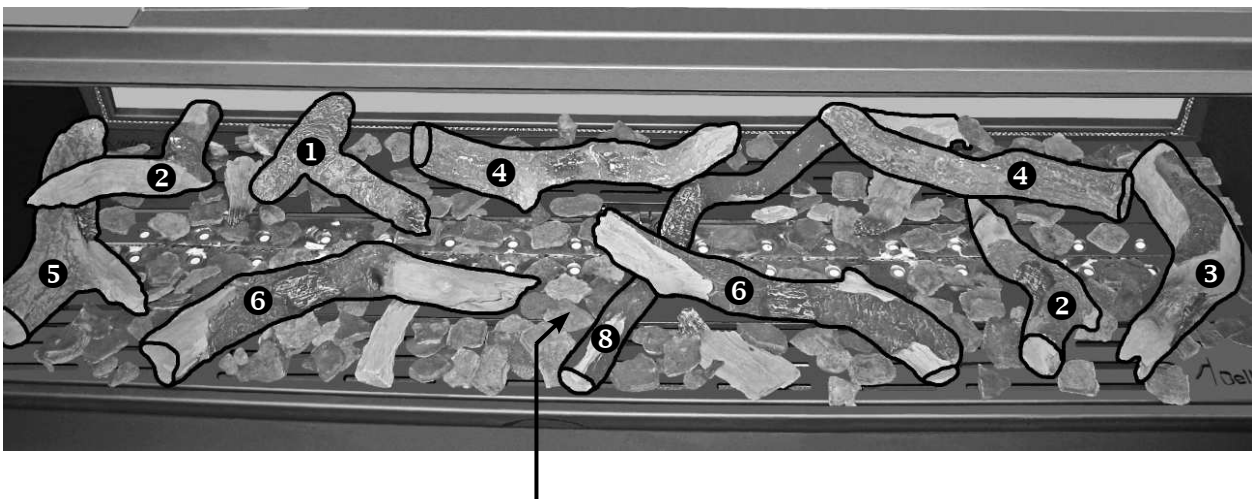


Embers must not be placed next to the pilot light burner

Keep the burner orifices unblocked!

Figure 21: Log set Horizon Bell Large Tunnel 3 CF
Position natural gas burner

PROPANE GAS :



Embers must not be placed next to the pilot light burner

Keep the burner orifices unblocked!

Figure 22: Log set Horizon Bell Large Tunnel 3 CF
Position propane burner

GAS FIRE DECORATION KITS

Fire Proof Material	Size	Colours
Stone Pebbles	½" - 1¼" (12-30 mm)	Different
Crushed Glass	½" - 1¼" (12-30 mm)	Different

Stone Pebbles



Crushed Glass



GAS FIRE DECORATION KITS

This instruction gives installation instructions for the safe installation of a decoration kit, or the conversion from the original log set to a decoration kit, in your gas appliance.

These decoration kits are only for use in a **Bellfires Horizon Bell Large Tunnel 3 Centre Fire (CF)** gas appliance.

The following decoration kits can be installed in the appliance:

Direct Vent Gas Fireplace: **Bellfires Horizon Bell Large Tunnel 3 CF**

Fire Proof Material	Size	Weight	Volume
Stone Pebbles	½" - 1¼" (12-30 mm)	22.0 lbs (10.0 kg)	0.21 Ft³ (6.0 dm³)
Crushed Glass	½" - 1¼" (12-30 mm)	16.8 lbs (7.6 kg)	0.19 Ft³ (5.4 dm³)

- It is not allowed to mix different decoration kits!
- It is not allowed to use more decoration material (pebbles/glass) then mentioned in above table.
- Put max. 1 layer of decoration material on the burner and grate!

The content of a decoration kit :

- Set of pebbles or glass, in the amount as approved for the appliance.
- Installation instructions

WARNING:

The installation/conversion shall be carried out by qualified service agency, in accordance with the requirements of the manufacturer, provincial or territorial authorities having jurisdiction and in accordance with the requirements of the CAN/CGA-B149.1 or CAN/CGA-B149.2 installation codes.

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

The qualified service agency is responsible for the proper installation of this kit.

The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

GAS FIRE DECORATION KITS

This instruction describes the replacement of the original log set to a decoration kit of pebbles or glass.

WARNING: The decoration kit must be installed by a qualified service technician.

1. Turn off the gas supply with the main gas valve to the appliance
2. Remove the glass front → For instructions see chapter “DISMANTLING / ASSEMBLING OF THE GLASS”.
3. Remove the ceramic log set.
4. Remove the embers carefully.
Prevent damaging the ceramic mat on the burner, which is very fragile!
5. Check the condition of the ceramic mat. Replace the mat when damaged.
6. Check if the holes in the ceramic mat are exactly in line with the burner openings.
7. Spread the ‘stone pebbles’ or ‘crushed glass’ evenly over the whole burner bed (burner and grate around the burner). Make sure that the pilot light remains free.

IMPORTANT:

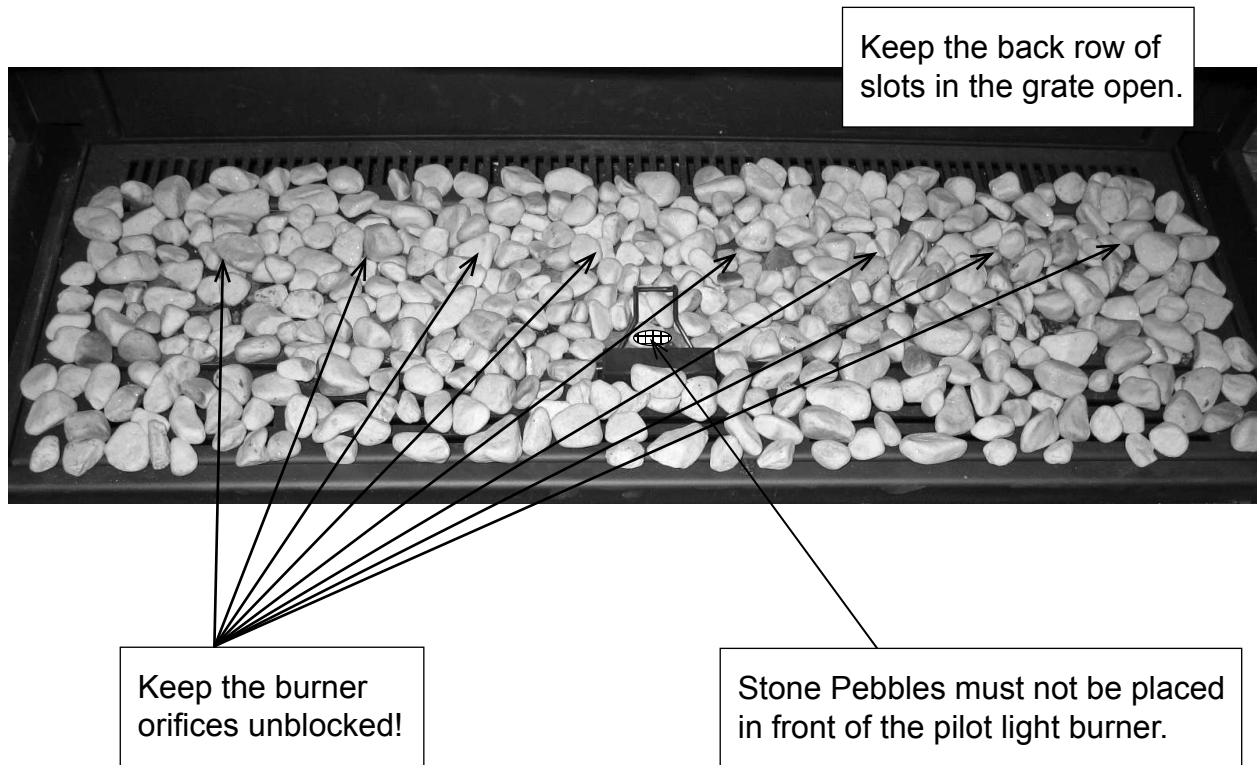
- Do not place any pebbles/glass in front of the pilot light.
Make sure that the pilot light can burn freely over the main burner.
- Keep the burner orifices unblocked.
- Keep also the back row of slots in the grate open.

Only this way a proper ignition of the main burner and proper combustion is ensured.

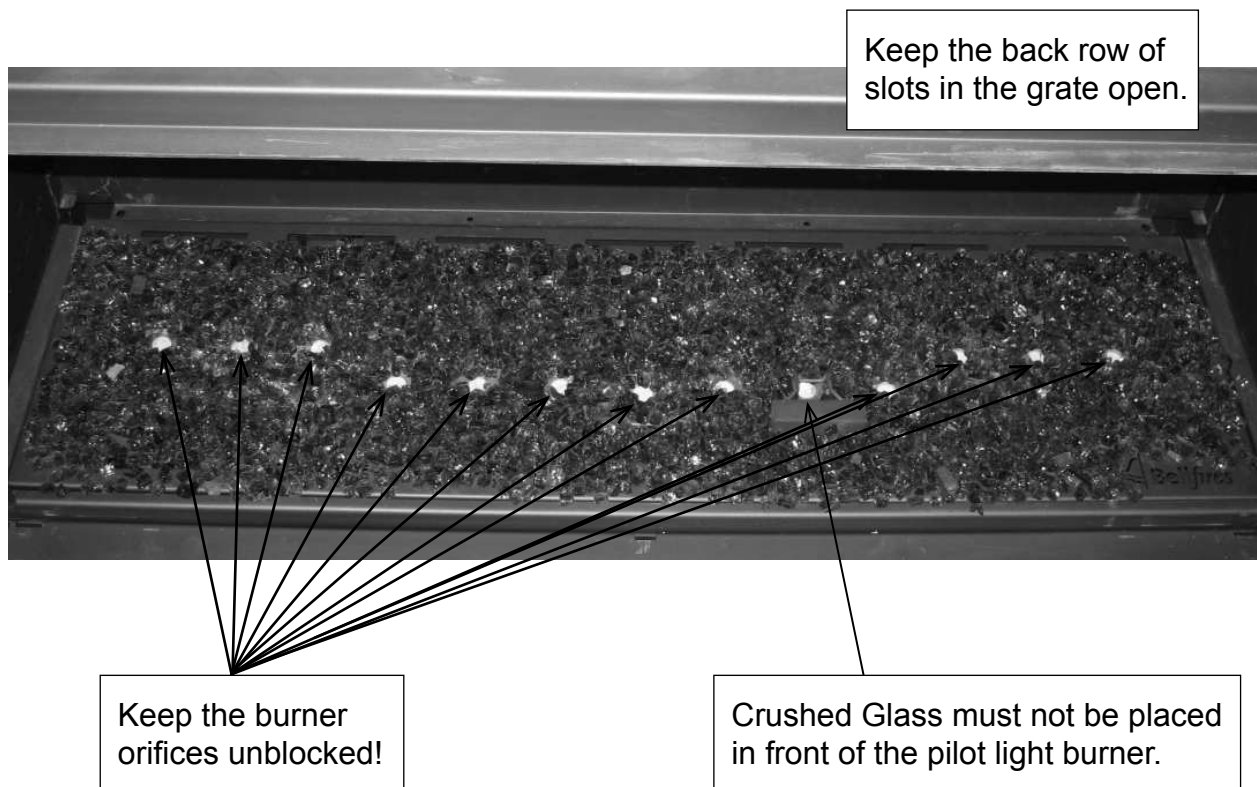
8. Once the ‘stone pebbles’ or ‘crushed glass’ have been positioned, replace the glass front in the appliance, → For instructions see the installation manual of the gas appliance, chapter “DISMANTLING / ASSEMBLING OF THE GLASS”.
9. After installation, check the ignition of the pilot light and main burner. visually check the gas flame. When the fire is ignited, the flames should be short and blue/yellow in colour. These flames should gradually increase in height and become more yellow. When all flames are yellow, the gas fire has reached the correct temperature.
10. The gas fire is now ready for use.

GAS FIRE DECORATION KITS

Stone Pebbles



Crushed Glass



MOUNTING OF FLUE GAS RESTRICTION PLATE

Depending on the length and shape of the concentric flue system and the chimney construction, you should, if indicated, fit a restriction plate with a certain width (B) into the ceiling of the combustion chamber. To do this, see the set-up options as listed in figure 7 through 12.

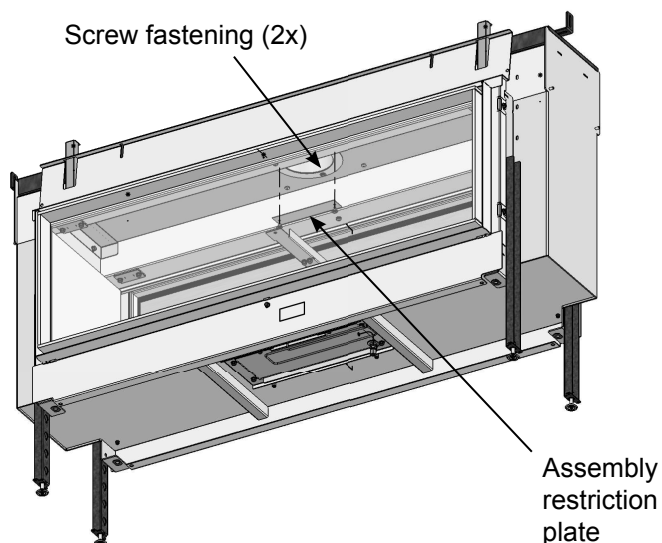
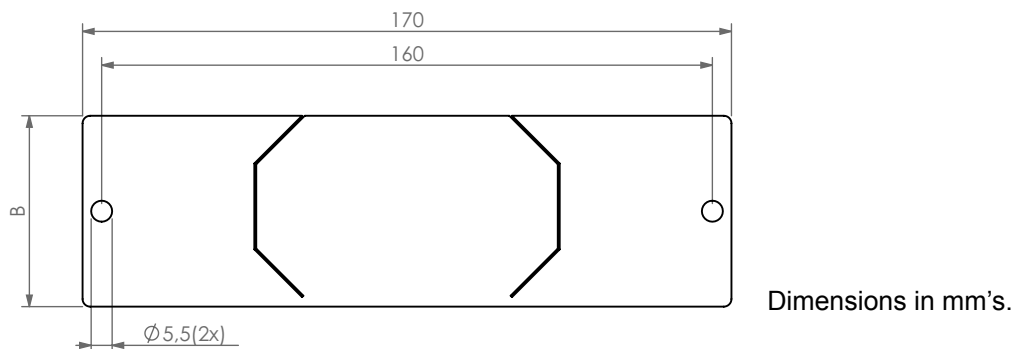


Figure 23: Positioning restriction plate

The following restriction plates are supplied:



Restriction plate:	Concentric flue connection appliance [5 $\frac{1}{8}$ " x 7 $\frac{7}{8}$ "] (Roof terminal)
Width:	B = 40 mm
Width:	B = 50 mm
Width:	B = 65 mm
Width:	B = 80 mm

The size of each plate (in mm's) is printed on the plates.

After installation, visually check the gas flame. When the fire is ignited, the flames should be short and blue/yellow in colour. These flames should gradually increase in height and become more yellow. When all flames are yellow, the gas fire has reached the correct temperature.

THE GAS FIRE IS NOW READY FOR USE

IMPORTANT:

It is essential that the appliance, the complete concentric flue system (where possible) and the outlet are cleaned and inspected annually by a certified gas technician. The safe operation of the appliance will thus remain guaranteed.

Maintenance consists of the following:

- Remove first the embers, vermiculite granules and logs set from the main burner and carefully clean these with a soft and dry brush. Do not use water !!
- Clean and inspect (visually) the main burner, pilot light, combustion chamber, flue system and combustion air intake. Dust can be removed using a vacuum cleaner.
- Clean the glass on the inside of the appliance with glass spray or ceramic glass cleaner. This also applies to the black mirror rear wall and side panels, if the appliance is fitted with these.
- After cleaning; Carefully replace the embers, vermiculite granules and logs set on and around the main burner according to the installation directions in this instruction booklet.

Do not place any embers, vermiculite granules or logs against the pilot light burner. Make sure that the pilot flame can burn at all times freely over the main burner. Only in this way is proper ignition of the main burner ensured. Ignoring these directions could lead to a dangerous situation.

- Check the gas supply, flue system, and combustion air supply route for leaks.
- Check the correct operation of the gas regulator block, thermocouple circuit and the ignition of the main burner.
- Check the gas inlet-pressure (both when the appliance is off and when it burns at maximum) and the burner pressure.
- Check the complete concentric flue system including the outlet construction. A camera can be used to inspect the whole length of the flue gas outlet and the combustion air intake.
Also check that all connections are secure.

POSSIBLE REASONS

Possible reasons for the gas fire going out are:

- The concentric flue system is not installed according to one of the methods detailed in Vent Installation.
- An incorrect “flue gas restriction plate” is fitted.
- The pilot light extinguishes if fumes are not exhausted or are insufficiently exhausted.
- The pilot light is either dirty or defective.
- Insufficient gas pressure.
- (Internal) leak of the concentric flue system.
- Thermocouple voltage is too low. This is usually caused by insufficient heating of the thermocouple by the pilot light.
- Dirty electrical contacts in the thermo-electrical system; for example, the thermocouple connection.
- Batteries in receiver or remote control are flat.

SAFETY MEASURES IN THE APPLIANCE

Thermo-electric pilot light shut off

The appliance is protected by means of a thermo-electric pilot light shut off in the event of a gas escape from the main burner.

Over pressure safety system

The appliance is fitted with a patented safety system, whereby the door (front glass frame) will extract any over-pressure that arises in a controlled way. In this, a spring system briefly causes the door to hinge forward a few centimetres. A loud noise can occur.

A safety strip limits the maximum degree to which the door can be tilted.

If an over-pressure situation occurs, the appliance should be thoroughly checked by the installer.

DISMANTLING / ASSEMBLING OF THE GLASS

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

Dismantling of the glass:

Place paperboard on the chimney breast, under the appliance.

This helps to prevent damage.



- Derby Large Tunnel 3
Floating Frame



- Use the hook supplied (see photo)
for opening the frame and the glass.



- With the hook, pull the thin, metal spring strips on the top left and right from the studs on the frame.

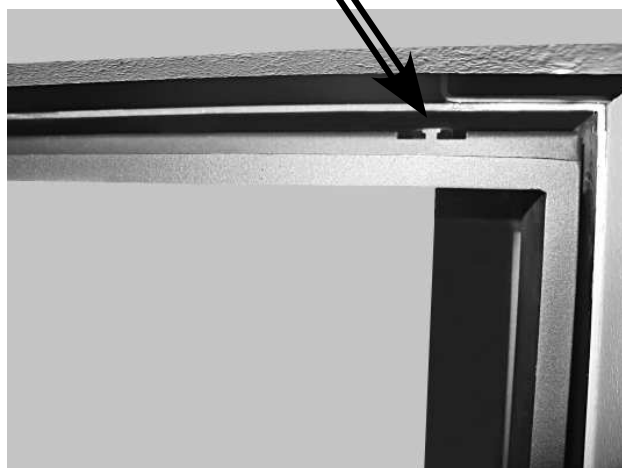
DISMANTLING / ASSEMBLING OF THE GLASS

Note ! :



When loosening the frame and after it has been loosened, support it with your hand to prevent it falling forward !

stud (right)



- Detail of the stud (right).



- Place paperboard on the chimney breast, under the frame. This helps prevent damage.



- Dismantle the safety strip from the frame.

DISMANTLING / ASSEMBLING OF THE GLASS



- Carefully tilt the frame and the window forwards.

Note ! : Frame and window are two separate parts !



- Take hold of the frame and the glass clamped together and pull these upwards.



- Frame and glass are now removed from the appliance.


Assembling of the glass:

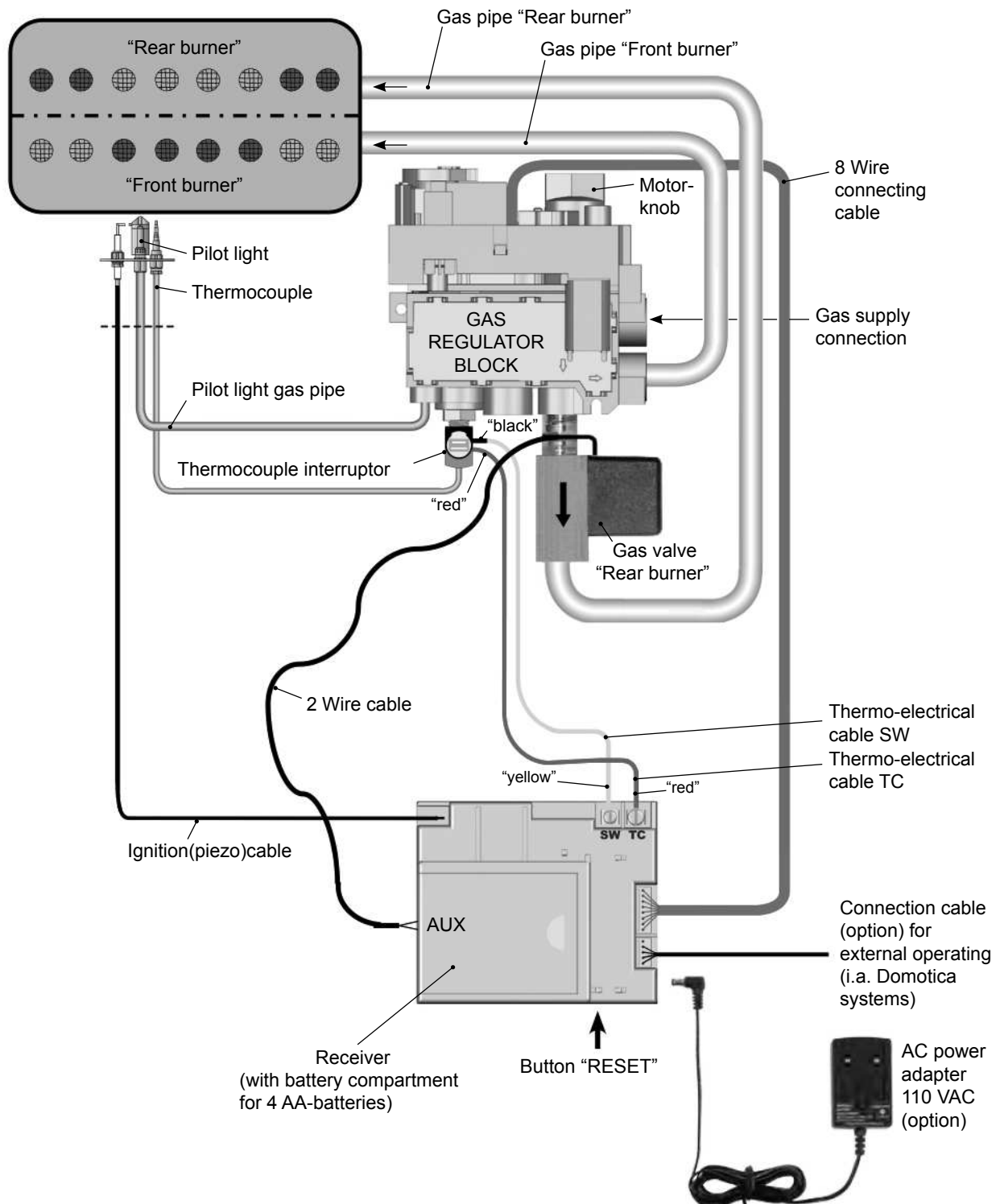
The assembly of the glass takes place in reverse order.

Important:

- Check whether the frame is properly positioned underneath in the 2 holes of the front.
- Check whether the frame is placed in the middle of the front.
- Check whether the safety strip is securely fastened to the top of the frame (middle).
- The glass (frame) must fit tightly all round to the edge of the combustion chamber.
- Check that the spring strips, on the top, remain in their proper place.

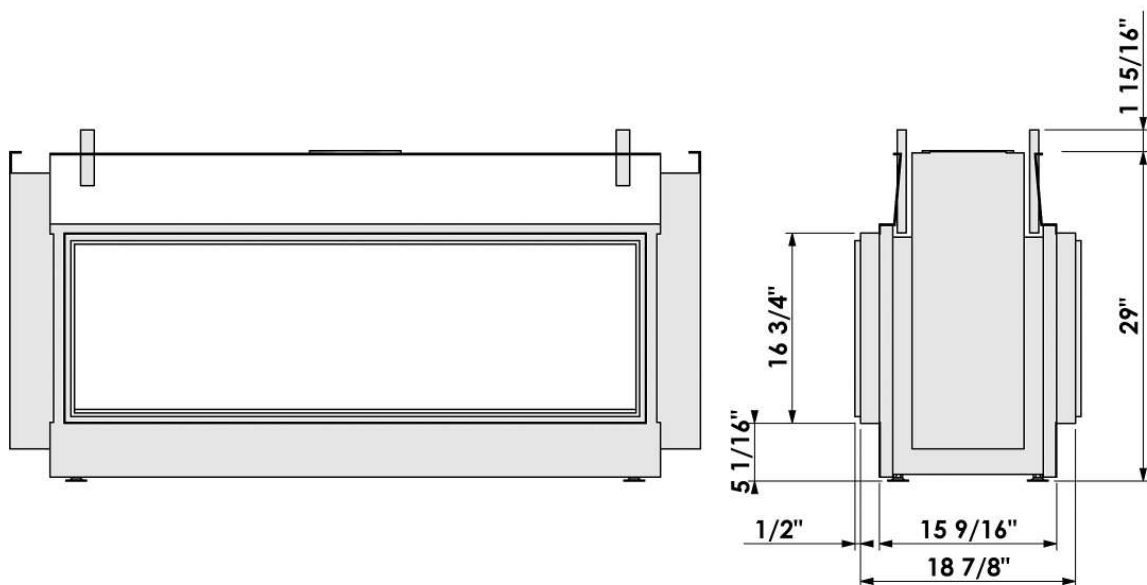
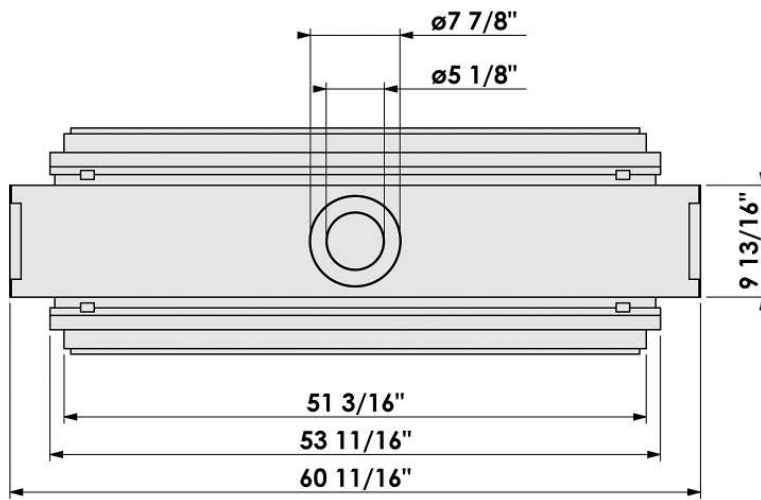
DIAGRAM ELECTRICITY AND GAS

Double burner:  : Perforation pattern "Centre Fire" double burner.

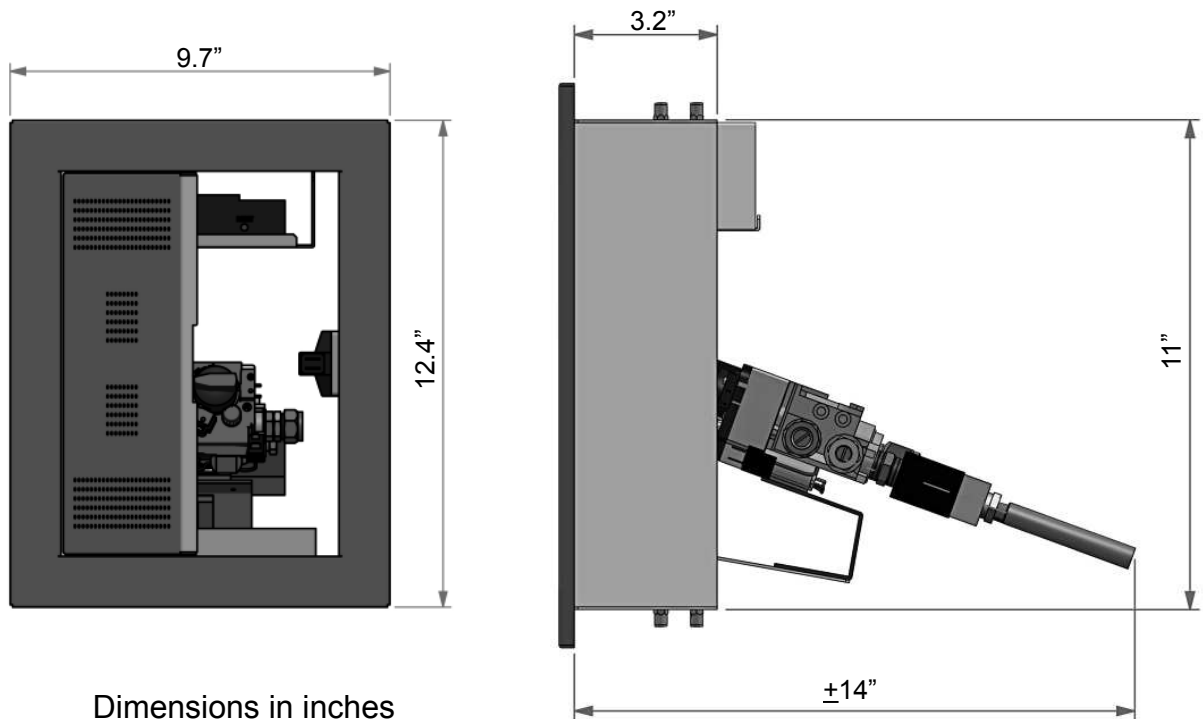


DIMENSIONS

HORIZON BELL LARGE TUNNEL 3 - Floating Frame



OPERATING UNIT



TECHNICAL DETAILS

APPLIANCE RATINGS

Horizon Bell Large Tunnel 3 CF (Centre fire)

Gas		Natural gas	Propane
Thermal efficiency	[%]	82.4	65.9
Annual fireplace efficiency (P4)	[%]	77.7	65.5
Input maximum	Btu/hr	43,000	32,000
Input minimum	Btu/hr	12,300	8,500
Supply pressure	in. w.c.	7.0	11.0
	kPa	1.74	2.74
Manifold pressure maximum (hot)	in. w.c.	5.10	10.8
	kPa	1.27	2.69
Manifold pressure maximum (cold)	in. w.c.	4.90	10.8
	kPa	1.22	2.69
Manifold pressure minimum	in. w.c.	0.60	1.00
	kPa	0.15	0.25
Main burner Injector marking (back)		Nr. 210 (=1xØ2.10 mm)	Nr. 120 (=1xØ1.20 mm)
Main burner Injector marking (front)		Nr. 210 (=1xØ2.10 mm)	Nr. 120 (=1xØ1.20 mm)
Pilot Injector marking		Nr. 36 (SIT 0.977.091)	Nr. 23 (SIT 0.977.150)

REPLACEMENT PART LIST

When requesting service or ordering replacement parts, please quote the model type and serial number. All parts listed in this manual may be ordered from a Bellfires dealer.

No	Article no	Description
1	334844	Main burner "Centre Fire" 1092 x 130 mm <u>Natural gas</u> / <u>Propane</u> Natural gas: 1x Ø10.0 mm front + 1x Ø10.0 mm rear Propane: 1x Ø20.0 ^{+corner} mm + 2x Ø5.0 mm front and 1x Ø20.0 ^{+corner} mm + 2x Ø5.0 mm rear
2	334847	Burner mat L = 1092 mm "Centre Fire"
3	334876	Burner injector <u>Natural gas</u> ; Front: no 210 (1x Ø2.10 mm)
4	334876	Burner injector <u>Natural gas</u> ; Rear: no 210 (1x Ø2.10 mm)
5	334874	Burner injector <u>Propane</u> ; Front: no 120 (1x Ø1.20 mm)
6	334874	Burner injector <u>Propane</u> ; Rear: no 120 (1x Ø1.20 mm)
7	336506	Gas regulator block; GV 60 (M10 Thermocouple connection)
8	302122	3/8" male x 12 Compression fitting
9	302084	Nut Ø8 mm for burner supply GV 60 for "front burner"
10	302089	Olive Ø8 mm for burner supply GV 60 for "front burner"
11	333607	Gas valve "rear burner"
12	333608	Adapter 3/8"bsp x 3/8"+ O-ring
13	333610	Nut Ø8 mm for gas valve "rear burner"
14	333611	Olive Ø8 mm for gas valve "rear burner"
15	302086	Cut-off nipple Ø4 mm GV 60
16	333601	Cable (sw): Receiver - Thermocouple interrupter, L = 500 mm
17	333602	Cable (tc): Receiver - Thermocouple interrupter, L = 500 mm
18	336505	Hand-held transmitter: Display screen: Temperature and two programmes
19	333599	Cover battery compartment hand-held transmitter - with imprint: Operating double burner
20	336504	Receiver GV 60
21	302068	8 Wire connecting cable Gas regulator block - Receiver, L = 500 mm
22	302421	Piezo ignition cable, 2x ∇ 2.8 x 0.8 mm, L = 1500 mm
23	321926	Thermocouple M10 - 1500 mm
24	333604	Thermocouple interrupter M10
25	310908	Pilot light set outer casing, Double flame
26	310909	Pilot gasket set outer casing
27	310910	Pilot light injector; <u>Natural gas</u> ; no 36
28	310912	Pilot light injector; <u>Propane</u> ; no 23
29	310907	Piezo electrode for pilot light, 2.8 x 0.5 mm
30	302062	Nut piezo electrode
31	319842	Nut thermocouple
32	332552	Pilot light olive; Ø4 mm, steel
33	332553	Pilot light nut; Ø4 mm, steel
34	322552	Pilot light pipe; Ø4 mm, L = 1500 mm, Flexible, Stainless steel
35	325750	Burner pipe; Ø8 mm, L = 1500 mm, Flexible, Stainless steel - 10 kW+, "front burner"
36	325750	Burner pipe; Ø8 mm, L = 1500 mm, Flexible, Stainless steel - 10 kW+, "rear burner"

REPLACEMENT PART LIST

No	Article no	Description
37	326055	Nut; Ø8 mm, compression elbow main burner
38	326054	Olive; Ø8 mm, compression elbow main burner
39	330598	Glass Horizon Bell Large 3 (Tunnel) Floating Frame (1282 x 405 x 4 mm)
40	301669	Tube ceramic glue
41	301593	Black fibre glass tape 15 x 3 mm, adhesive
42	319664	Black fibre glass tape 30 x 2 mm, adhesive
43	311006	Black fibre glass tape 20 x 2 mm, adhesive
44	301617	Black fibre glass cord Ø10 mm

Logs - Chips of wood - Embers - Vermiculite granules

Appliance	Log set											
	Set	Log no								Chips of wood set	Embers with Glow-effect Anthracite	Vermiculite no 4 black filtered
		1	2	3	4	5	6	7	8			
	Art. no:	331357	331358	331359	331360	331361	331362	331363	331364	xxxxxx	301863	332583
HB Large Tunnel 3	M 331587	1x	2x	1x	2x	1x	2x	-	1x	2x	4x	1x

PROPANE CONVERSION KIT

A propane conversion kit is supplied with this appliance. For safe use of this kit, refer to the installation instructions included with the propane conversion kit.

This conversion kit is only for use in the Bellfires gas appliance model stated on the front page of this manual and also stated on the included propane conversion kit and must only be used when the gas type for this appliance is changed from natural gas to propane.

WARNING:

This conversion kit shall be installed by a qualified service agency in accordance with the manufacturer's instructions and all applicable codes and requirements of the authority having jurisdiction.

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

The qualified service agency is responsible for the proper installation of this kit.

The installation is not proper and complete until the operation of the converted appliance is checked as specified in the manufacturer's instructions supplied with the kit.

Warranty terms

Interfocos B.V. develops and manufactures all Bellfires hearths to the highest possible quality standards. All Bellfires hearths (product) are warranted against defects in material and workmanship by Interfocos B.V, subject to the following conditions.

Article 1: Warranty

- 1.1. Interfocos B.V. will repair or replace, at its option, any parts which upon examination of a Bellfires dealer are found to be defective, subject to the conditions, limitations and exclusions listed under Article 3 and Article 6.
- 1.2. Repair or replacement of the Bellfires product will be undertaken by a Bellfires dealer as designated by our local importer, at the purchaser's expense.

Article 2: Warranty Terms

- 2.1. Should you wish to claim under the Warranty, please contact your Bellfires dealer.
- 2.2. Complaints should be reported immediately upon discovery.
- 2.3. Claims will only be accepted if they are reported to the Bellfires dealer together with the serial number of the Bellfires hearth which is stated on the front of the instructions for use.
- 2.4. In addition, the original receipt (invoice, receipt, cash receipt) showing the date of purchase must also be submitted.
- 2.5. Repairs and replacements during the Warranty Period do not give any entitlement to an extension of the Warranty Period. After a repair or replacement of Warranty parts, the warranty period shall be deemed to have started on the date of purchase of the product by the consumer.
- 2.6. If a certain part is eligible for the Warranty and the original part is no longer available, Interfocos B.V. shall ensure that an alternative part of at least the same quality shall be provided.
- 2.7. Any labour, travel and shipping costs related to Warranty replacement or repair are at the purchaser's expense.

Article 3: Warranty Exclusions

- 3.1. The Warranty on the Bellfires product ceases to be in effect if:
 - a. it is not installed according to the supplied installation instructions, and to national and/or local regulations;
 - b. it has been installed, connected or repaired by a non-Bellfires dealer;
 - c. it has not be used or maintained according to the instructions for use;
 - d. it has been changed, neglected or roughly treated;
 - e. it has been damaged as a result of external causes (outside the hearth itself), for example, lightning strike, water damage or fire;
- 3.2. In addition, the Warranty ceases to be in effect if the original purchase receipt shows any change, deletion, removal or if it is illegible.
- 3.3. This Warranty does not cover damage to the barrier (safety screen), log breakage or damage to the product while in transit.

Article 4: Warranty Area

- 4.1. The Warranty is in effect only where Bellfires product is sold through the official Bellfires dealer network.

Article 5: Warranty Period

- 5.1. This Warranty will only be granted during the Warranty Period, as defined in Article 6.

Article 6: Warranty Limitations

- 6.1. **Limited Lifetime Warranty on Body and Main Burner:** The body and main burner of the Bellfires hearth are warranted against defects in construction, materials or workmanship, during the period in which the product is owned by the original owner and installed in the original installation location.
- 6.1.1 During the first 10 years Interfocos B.V. will provide a replacement body or burner free of charge (subject to labour costs and shipping costs at the expense of the purchaser). After 10 years from date of purchase, Interfocos B.V. will provide a replacement body or burner at 50% of the current published retail price.
- 6.1.2 This Limited Lifetime Warranty is not transferrable.
- 6.1.3 The Limited Lifetime Warranty does not include replacement for discoloration due to corrosion or for other normal wear and tear.
- 6.1.4 The Limited Lifetime Warranty of the main burner does not include the pilot burner, thermocouple or burner mat.
- 6.2. **One-year parts warranty:** All other parts of the Bellfires hearth are warranted for a period of one year from date of purchase by the consumer.
- 6.3. **Warranty until after first burning:** Wear items such as glass, glass cord, and the paint, are warranted against manufacturer's defects up until the time the Bellfires hearth is first fired.

Article 7: Limitation of Liability

- 7.1. Interfocos B.V. makes no express warranties except as stated in this Warranty. Interfocos' sole obligation and the purchaser's exclusive remedy under this Warranty, or under any other express or implied warranty, in tort, contract or otherwise, is limited to the replacement, repair, or refund of parts as specified in this Warranty. In no event is Interfocos B.V. responsible for an incidental, consequential or special damages or expenses caused by defects in the Bellfires hearths, whether such damages occurs or is discovered before or after any replacement and repair provided under this Warranty. Interfocos B.V. makes no representation or warranty, express or implied, of fitness for a particular use or purpose.
- 7.2. The provisions of these Warranties are in addition to and not a modification of or subtraction of any statutory warranties or other rights and remedies provided by law.
- 7.3. All agreements entered into by Interfocos B.V. are, unless specifically stated otherwise in writing and to the extent that they are permitted based on applicable law, subject to the Conditions of the Dutch Metal and Engineering Association (METAALUNIEVOORWAARDEN), as filed with the registrar of the Court of Rotterdam on 1 January 2014.

Interfocos B.V.
Hallenstraat 17
5531 AB Bladel
The Netherlands
Tel: +31-497339200
Email: info@Bellfires.com

Carefully retain the instructions for use; they show the serial number of the hearth. You will need this if you wish to claim under the warranty.



FOR YOUR BELLFIRES DEALER

VISIT

www.neefireplaces.ca

OR

www.neefoyers.ca

Serial number:

Production date:

02 - 010915 - 337352