

**INSTALLER: LEAVE THIS MANUAL WITH THE APPLIANCE.
 CONSUMER: RETAIN THIS MANUAL FOR FUTURE REFERENCE.
 NEVER LEAVE CHILDREN OR OTHER AT RISK INDIVIDUALS ALONE WITH THE APPLIANCE**

EN



INSTALLATION AND OPERATING INSTRUCTIONS

FR
PG
61

CERTIFIED UNDER CANADIAN AND AMERICAN NATIONAL STANDARDS: ANSI Z21.50, CSA 2.22 FOR VENTED GAS FIREPLACES.

CERTIFIED FOR CANADA AND UNITED STATES USING ANSI/CSA METHODS.

SAFETY INFORMATION

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 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.

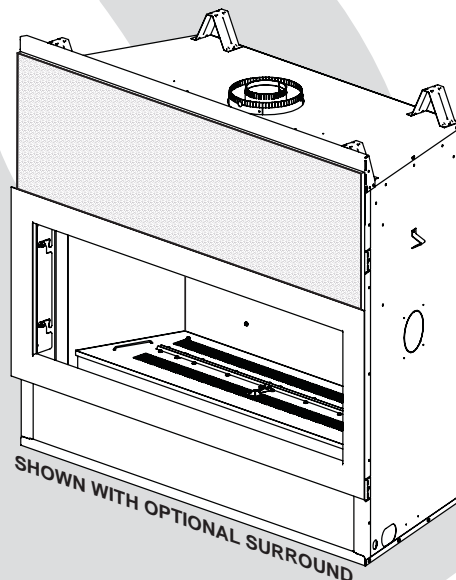
This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Decorative Product: Not for use as a heating appliance.



LHD45N
NATURAL GAS

LHD45P
PROPANE



WARNING

HOT GLASS WILL CAUSE BURNS.

DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.



Wolf Steel Ltd., 24 Napoleon Rd., Barrie, ON, L4M 0G8 Canada /
 103 Miller Drive, Crittenden, Kentucky, USA, 41030

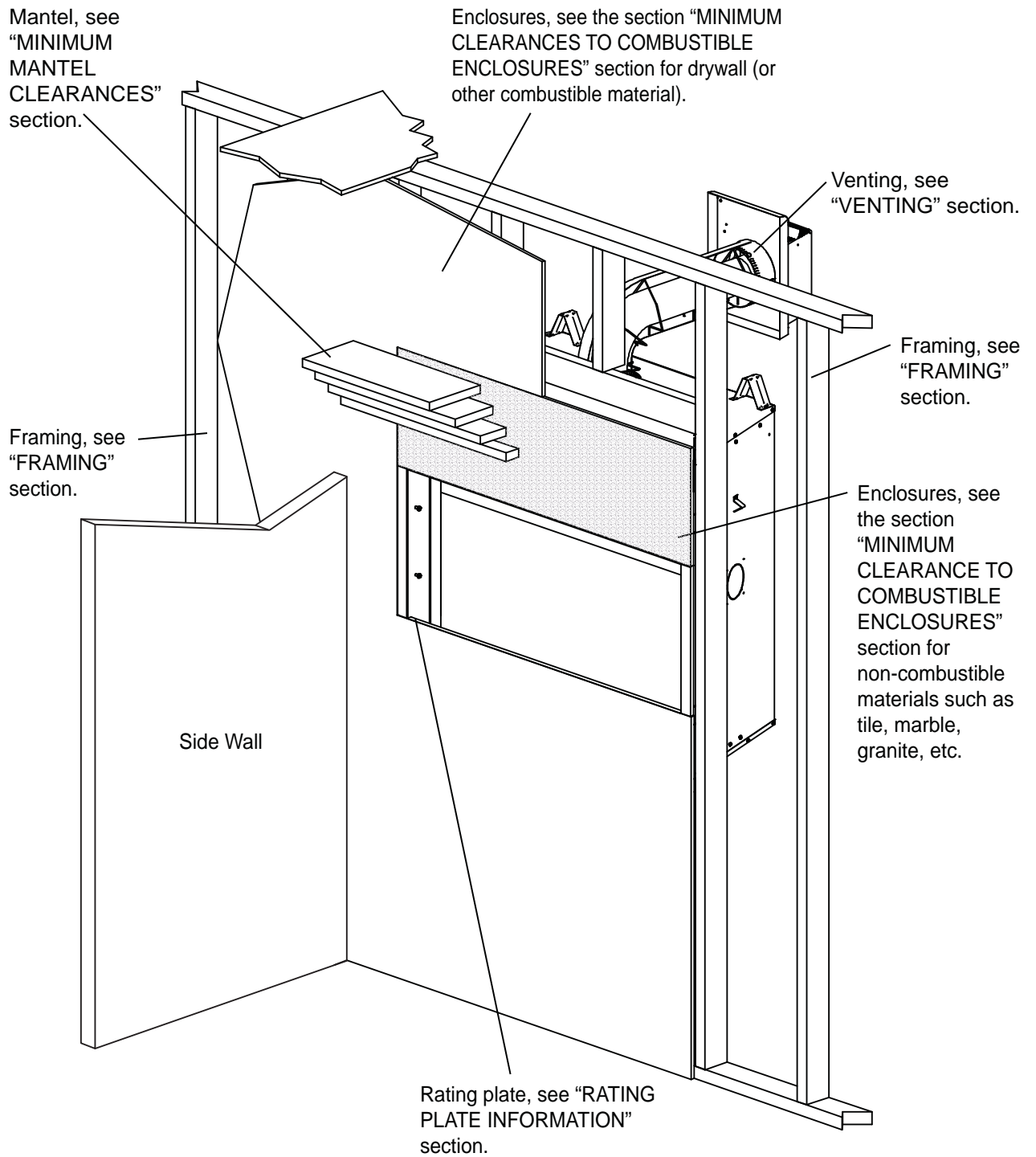
Phone (705)721-1212 • Fax (705)722-6031 • www.napoleonfireplaces.com • ask@napoleonproducts.com

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

1.0 INSTALLATION OVERVIEW



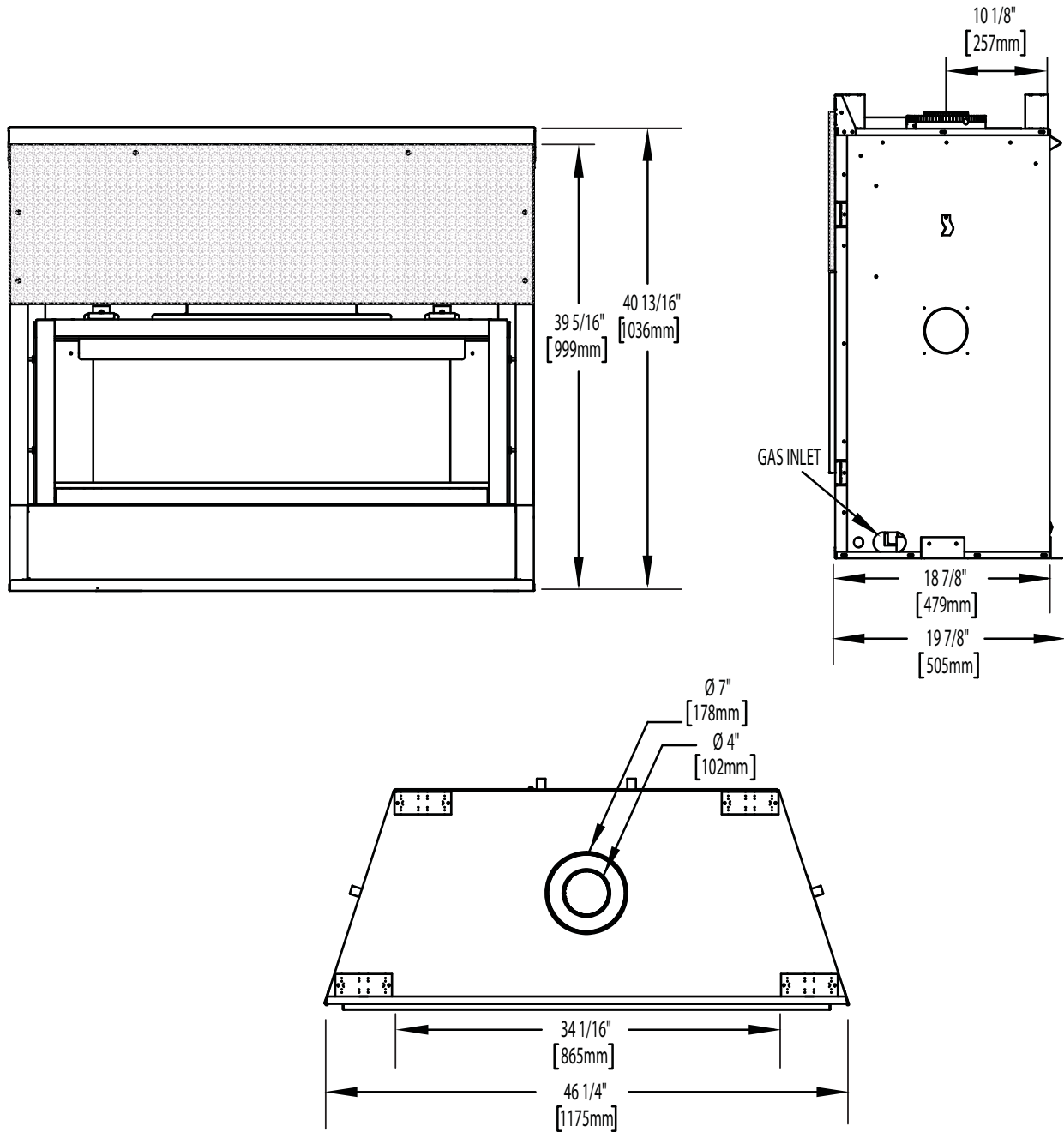
2.0 INTRODUCTION

 **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.
- Risk of fire or asphyxiation do not operate appliance with fixed glass removed.
- Do not connect 110 volts to the control valve.
- 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 and safety glasses during installation. Sheet metal edges may be sharp.
- Do not burn wood or other materials in this appliance.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to an appliance, 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.
- Ensure you have incorporated adequate safety measure to protect infants/toddlers from touching hot surfaces.
- Even after the appliance is out, the glass and/or screen 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 or guard removed for servicing must be replaced prior to operating the appliance.
- The appliance is a vented gas-fired appliance. Do not burn wood or other materials in 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.
- Under no circumstances should this appliance be modified.
- 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.
- Do not strike or slam shut the appliance glass door.
- 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.
- 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.
- 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.
- 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 of decorations, a T.V. or other electronic components.

3.2B

2.1 DIMENSIONS



2.2 GENERAL INSTRUCTIONS

EN

! 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" (1219.2mm) FROM THE FRONT FACE OF THE APPLIANCE.
SURFACES AROUND AND ESPECIALLY ABOVE THE APPLIANCE CAN BECOME HOT. AVOID CONTACT WHEN THE 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 PSIG. CLOSE THE MANUAL SHUT-OFF VALVE BEFORE PRESSURE TESTING GAS LINE AT TEST PRESSURES EQUAL TO OR LESS THAN 1/2 PSIG (35 mb).
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.

THIS GAS APPLIANCE SHOULD 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 Massachusetts State:

- 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 (914.4mm).
- 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.

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.

Some appliances have optional fans or blowers. If an optional fan or blower is installed, the junction box must be electrically connected and grounded in accordance with local codes, use the current CSA C22.1 Canadian Electrical Code in Canada or the ANSI/NFPA 70 National Electrical code in the United States.



4.1B

2.3 GENERAL INFORMATION

FOR YOUR SATISFACTION, THIS APPLIANCE HAS BEEN TEST-FIRED TO ASSURE ITS OPERATION AND QUALITY!

APPLIANCE		
	NG	LP
Altitude (FT)	0-4,500	0-4500
Max. Input (BTU/HR)	24,000	24,000
Max. Output Steady State (BTU/HR)	17,280	17,280
Efficiency (w/the fan on)	72%	72%
Min. Inlet Gas Supply Pressure	4.5" WC (11.2mb)	11" WC (27.4mb)
Max. Inlet Gas Supply Pressure	7" WC (17.4mb)	13" WC (32.4mb)
Manifold Pressure (Under Flow Conditions)	3.5" WC (8.7mb)	10" WC (25mb)

When the appliance is installed at elevations above 4,500ft (1371.6m), 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 (304.8m).

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.

Expansion / contraction noises during heating up and cooling down cycles are normal and are to be expected.


NOTE: 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.

2.4 RATING PLATE INFORMATION

CERTIFIED UNDER / HOMOLOGUE SELON LES NORMES: ANSI Z21.50b - 2009 • CSA 2.22b - 2009 VENTED GAS FIREPLACE / FOYER AU GAZ VENTILÉ

DIRECT VENT GAS FIREPLACE HEATER. APPROVED FOR BEDROOM, BATHROOM AND BED-SITTING ROOM INSTALLATION. SUITABLE FOR MOBILE HOME INSTALLATION IF INSTALLED IN ACCORDANCE WITH THE CURRENT STANDARD CAN/CSA Z240MH SERIES GAS EQUIPPED MOBILE HOMES, IN CANADA OR IN THE UNITED STATES THE MANUFACTURED HOME CONSTRUCTION AND SAFETY STANDARD, TITLE 24 CFR, PART 3280. WHEN THIS US STANDARD IS NOT APPLICABLE USE THE STANDARD FOR FIRE SAFETY CRITERIA FOR MANUFACTURED HOME INSTALLATIONS, SITES AND COMMUNITIES, ANSI / NFPA 501A. THIS APPLIANCE MUST BE INSTALLED IN ACCORDANCE WITH LOCAL CODES, IF ANY; IF NONE, FOLLOW THE CURRENT ANSI Z223.1, OR CSA B149, INSTALLATION CODES.

FOYER DE CHAUFFAGE AU GAZ AVEC ÉVACUATION, HOMOLOGUÉ POUR INSTALLATION DANS UNE CHAMBRE À COUCHER, UNE SALLE DE BAIN ET UN STUDIO. APPROPRIÉ POUR INSTALLATION DANS UNE MAISON MOBILE SI SON INSTALLATION CONFORME AUX EXIGENCES DE LA NORME CAN/CSA Z240MH SÉRIE DE MAISONS MOBILES ÉQUIPÉES AU GAZ, EN VIGUEUR AU CANADA OU AUX ÉTATS-UNIS DE LA NORME DE SÉCURITÉ ET DE CONSTRUCTION DE MAISONS MANUFACTURÉES, TITRE 24 CFR, SECTION 3280. DANS LE CAS OÙ CETTE NORME D'ÉTATS-UNIS NE PEUT ÊTRE APPLIQUÉE, SE RÉFÉRER À LA NORME RELATIVE AU CRITÈRE DE MESURES DE SÉCURITÉ CONTRE L'INCENDIE POUR LES INSTALLATIONS DANS LES MAISONS MANUFACTURÉES, LES SITES ET LES COMMUNAUTÉS, ANS/NFPA 501A. CODES. INSTALLER L'APPAREIL SELON LES CODES OU RÈGLEMENTS LOCAUX, OU EN L'ABSENCE DE TELS RÈGLEMENTS, SELON LES CODES D'INSTALLATION ANSI Z223.1 OU CSA-B149 EN VIGUER.



9700539 (WSL)
4001658 (NAC)

LHD45N CLHD45N MODEL CLHD45P LHD45P

0-4500FT (0-1370m) ALTITUDE / ÉLEVATION 0-4500FT (0-1370m)
24,000 BTU/h INPUT / ALIMENTATION 24,000 BTU/h

3.5" WATER COLUMN/D'UNE COLONNE D'EAU
4.5" WATER COLUMN/D'UNE COLONNE D'EAU
7.0" WATER COLUMN/D'UNE COLONNE D'EAU

MANIFOLD PRESSURE/PRESSION AU COLLECTEUR:
MINIMUM SUPPLY PRESSURE/PRESSION D'ALIMENTATION MINIMALE:
MAXIMUM SUPPLY PRESSURE/PRESSION D'ALIMENTATION MAXIMALE:

10" WATER COLUMN/D'UNE COLONNE D'EAU
11" WATER COLUMN/D'UNE COLONNE D'EAU
13" WATER COLUMN/D'UNE COLONNE D'EAU

NOT FOR USE WITH SOLID FUEL. FOR USE WITH GLASS DOORS CERTIFIED WITH THIS UNIT ONLY.

UN COMBUSTIBLE SOLIDE NE DOIT PAS ÊTRE UTILISÉ AVEC CET APPAREIL. UTILISER AVEC LES PORTES VITRÉES HOMOLOGUÉES SEULEMENT AVEC CETTE UNITÉ.

WARNING: DO NOT ADD ANY MATERIAL TO THE APPLIANCE, WHICH WILL COME IN CONTACT WITH THE FLAMES, OTHER THAN THAT SUPPLIED BY THE MANUFACTURER WITH THE APPLIANCE. MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS / DÉGAGEMENTS MINIMAUX DES MATÉRIEAUX COMBUSTIBLES:
TOP/ DESSUS 0" RECESSED DEPTH / PROFONDEUR D'ENCASTRE 20.5"
FLOOR / PLANCHER 0"
FRAMING (NOT INCLUDING FACE MATERIAL)/OSSATURE (MATÉRIAU DE FAÇON NON COMPRIS) SIDES / CÔTÉS 0" BACK / ARRIÈRE 0"
VENT TOP / DESSUS DU CONDUIT D'ÉVENT 2"
VENT SIDES & BOTTOM / CÔTÉS ET DESSOUS DU CONDUIT D'ÉVENT 4"
VERTICAL VENT / CONDUIT D'ÉVENT VERTICAL MANTEL / TABLETTE 8"
TOP, SIDES & BACK: PER STAND OFF SPACERS FOR FRAMING MATERIALS; FOR FINISHING MATERIALS SEE OWNERS MANUAL
DESSUS, CÔTÉS & ARRIÈRE: SELON LES ESPACEURS DE DÉGAGEMENT POUR LES MATÉRIEAUX D'OSSATURE SELON LA MANUEL DE PROPRIÉTAIRE POUR LES MATÉRIEAUX DE FINITION.
* MAXIMUM HORIZONTAL EXTENSION / L'EXTENSION HORIZONTALE MAXIMALE: 2". SEE INSTRUCTION MANUAL FOR GREATER EXTENSIONS; RÉFÉRER AU MANUEL D'INSTALLATION POUR DES EXTENSIONS PLUS GRANDES.
SEE OWNER'S INSTRUCTION MANUAL FOR MINIMUM AND MAXIMUM VENT LENGTHS. RÉFÉRER AU MANUEL D'INSTALLATION DE PROPRIÉTAIRE POUR LES LONGUEURS D'ÉVACUATION MINIMALE ET MAXIMALE.

AVERTISSEMENT: N'AJOUTEZ PAS A CET APPAREIL AUCUN MATÉRIAU DEVANT ENTRER EN CONTACT AVEC LES FLAMMES AUTRE QUE CELUI QUI EST FOURNI AVEC CET APPAREIL PAR LE FABRICANT.
THE APPLIANCE MUST BE VENTED USING THE APPROPRIATE NAPOLEON VENT KITS. SEE OWNERS INSTALLATION MANUAL FOR VENTING SPECIFICS. PROPER REINSTALLATION AND RESEALING IS NECESSARY AFTER SERVICING THE VENT-AIR INTAKE SYSTEM. L'APPAREIL DOIT ÉVACUER SES GAZ EN UTILISANT L'ENSEMBLE D'ÉVACUATION PROPRE A NAPOLEON. RÉFÉRER AU MANUEL D'INSTALLATION DE PROPRIÉTAIRE POUR L'ÉVACUATION PRÉCISE. IL EST IMPORTANT DE BIEN RÉINSTALLER ET RESCELLER L'ÉVENT APRES AVOIR ASSURÉ LE MAINTIEN DU SYSTÈME DE PRISE D'AIR.
ELECTRICAL RATING: 115V, 60HZ. LESS THAN 12 AMPERES
SPÉCIFICATIONS ÉLECTRIQUES: 115V, 60HZ. MOINS DE 12 AMPÈRE

WOLF STEEL LTD.
24 NAPOLEON ROAD, BARRIE, ON, L4M 0G8 CANADA

SERIAL NUMBER/NO. DE SÉRIE: LHD45

W385-0497 / D

INSTALLER: It is your responsibility to check off the appropriate box on the rating plate according to the model, venting and gas type of the appliance.

For rating plate location, see "INSTALLATION OVERVIEW" section.

This illustration is for reference only. Refer to the rating plate on the appliance for accurate information.

NOTE: The rating plate must remain with the appliance at all times. It must not be removed.

3.0 VENTING

WARNING

RISK OF FIRE, MAINTAIN SPECIFIED AIR SPACE CLEARANCES TO VENT PIPE AND APPLIANCE.

IF VENTING IS INCLUDED WITH SPACERS THE VENT SYSTEM MUST BE SUPPORTED EVERY 3FT (0.9m) FOR BOTH VERTICAL AND HORIZONTAL RUNS. USE SUPPORTS OR EQUIVALENT NON-COMBUSTIBLE STRAPPING TO MAINTAIN THE REQUIRED CLEARANCE FROM COMBUSTIBLES. USE WOLF STEEL LTD. SUPPORT RING ASSEMBLY W010-0370 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 SPACERS MUST NOT BE REMOVED.

THIS APPLIANCE USES A 4" (101.6mm) EXHAUST / 7" (177.8mm) AIR INTAKE VENT PIPE SYSTEM.

Refer to the section applicable to your installation.

For safe and proper operation of the appliance follow the venting instruction 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. 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.

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

7.1B

3.1 VENTING LENGTHS AND COMPONENTS FOR DIRECT VENT INSTALLATIONS

NOTE: There **MUST** be a 25% reduction in total horizontal length (H_r) when using flex vent.

Use only Wolf Steel, Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent or Metal-Fab venting components. Minimum and maximum vent lengths, for both horizontal and vertical installations, and air terminal locations for either system are set out in this manual and must be adhered to. For Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent and Metal-Fab follow the installation procedure provided with the venting components.

A starter adaptor must be used with the following vent systems and may be purchased from the corresponding supplier:

PART	4"/7"	SUPPLIER	WEBSITE
Duravent	W175-0053	Wolf Steel	www.duravent.com
Amerivent	4DSC-N2	American Metal	www.americanmetalproducts.com
Direct Temp	4DT-AAN	Selkirk	www.selkirkcorp.com
SuperSeal	4DNA	Metal-Fab	www.mtlfab.com

For Simpson Dura-Vent, Selkirk Direct Temp, American Metal Amerivent and Metal-Fab follow the installation procedure found on the website for your venting supplier.

For vent systems that provide seals on the inner exhaust flue, only the outer air intake joints must be sealed using a red high temperature silicone (RTV). This same 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. High temperature sealant must be ordered separately.

When using Wolf Steel venting components, use only approved Wolf Steel rigid / flexible components with the following termination kits: wall terminal kit **GD222**, **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**.

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.

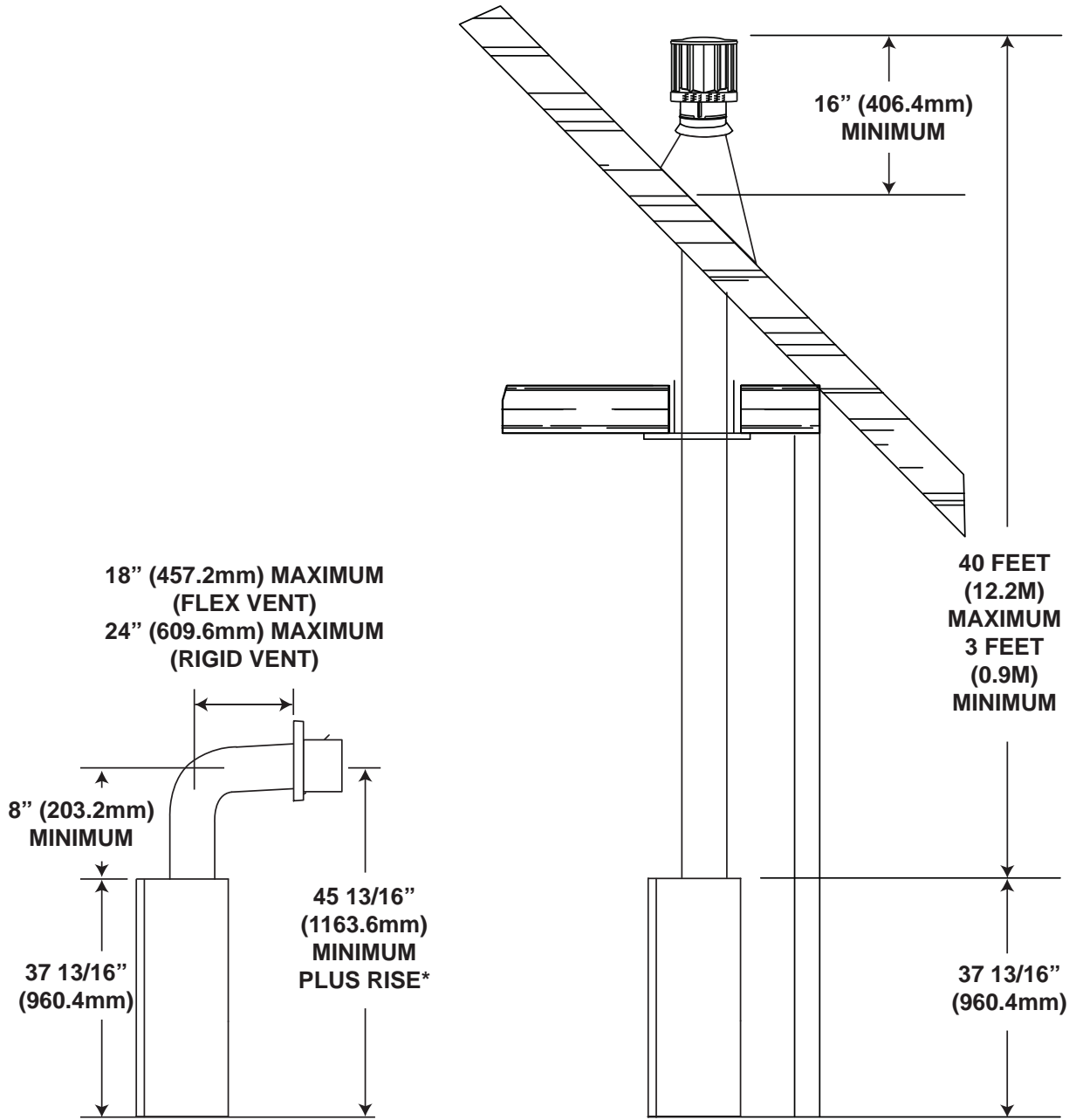
These vent kits allow for either horizontal or vertical venting of the appliance. The maximum allowable horizontal run is 20 feet (6.1m). The maximum allowable vertical vent length is 40 feet (12.2m). The maximum number of vent connections is two horizontally or three vertically (excluding the appliance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

8.1A

3.2 TYPICAL VENT INSTALLATIONS

EN

NOTE: There **MUST** be a 25% reduction in total horizontal length (H_T) when using flex vent.



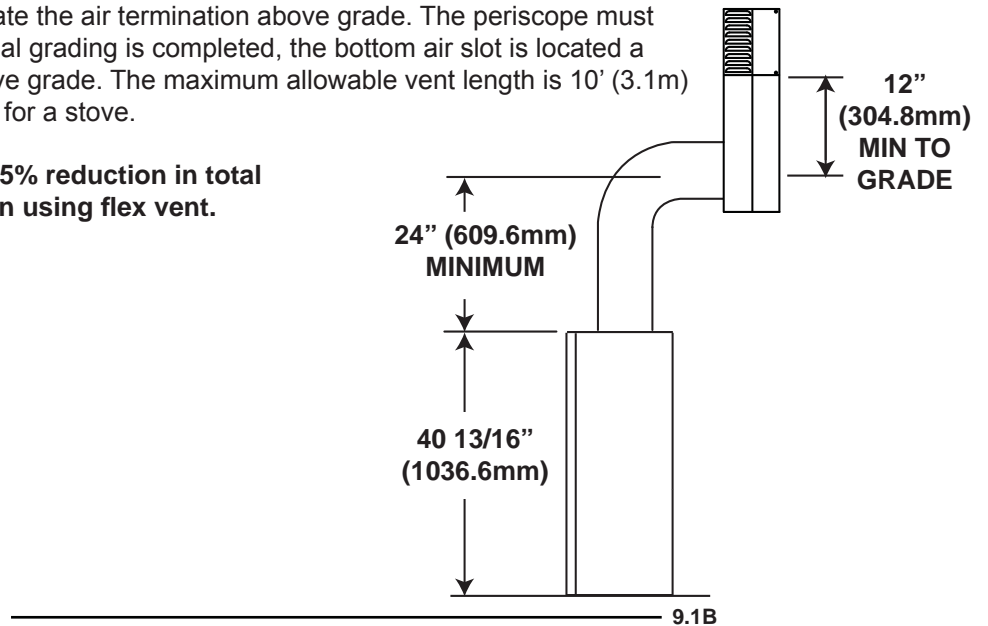
* See "VENTING" section.

3.3 SPECIAL VENT INSTALLATIONS

3.3.1 PERISCOPE TERMINATION

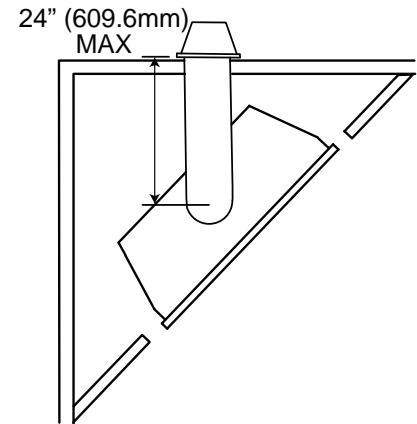
Use the periscope kit to locate the air termination above grade. The periscope must be installed so that when final grading is completed, the bottom air slot is located a minimum 12" (304.8mm) above grade. The maximum allowable vent length is 10' (3.1m) for a fireplace and 8' (2.4m) for a stove.

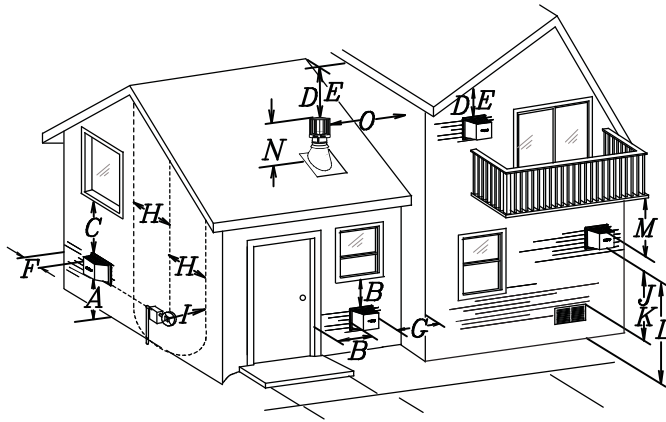
NOTE: There **MUST** be a 25% reduction in total horizontal length (H_T) when using flex vent.



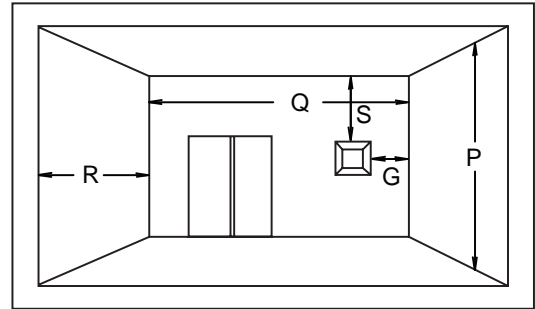
3.3.2 CORNER TERMINATION

The maximum vent length for a corner installation is 24" (609.6mm) of horizontal run with a minimum 8" (203.2mm) rise.





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			
CANADA	U.S.A.		
A	12" (305mm)	12" (305mm)	Clearance above grade, veranda porch, deck or balcony.
B	12" (305mm) ^Δ	9" (229mm) ^Δ	Clearance to windows or doors that open.
C	12" (305mm)*	12" (305mm) *	Clearance to permanently closed windows.
D	18" (457mm)**	18" (457mm)**	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" (305mm)**	12" (305mm)**	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" (305mm)	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" (305mm)††	12" (305mm)****	Clearance under a veranda, porch or deck.
N	16" (406mm)	16" (406mm)	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" (305mm)	12" (305mm)	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.

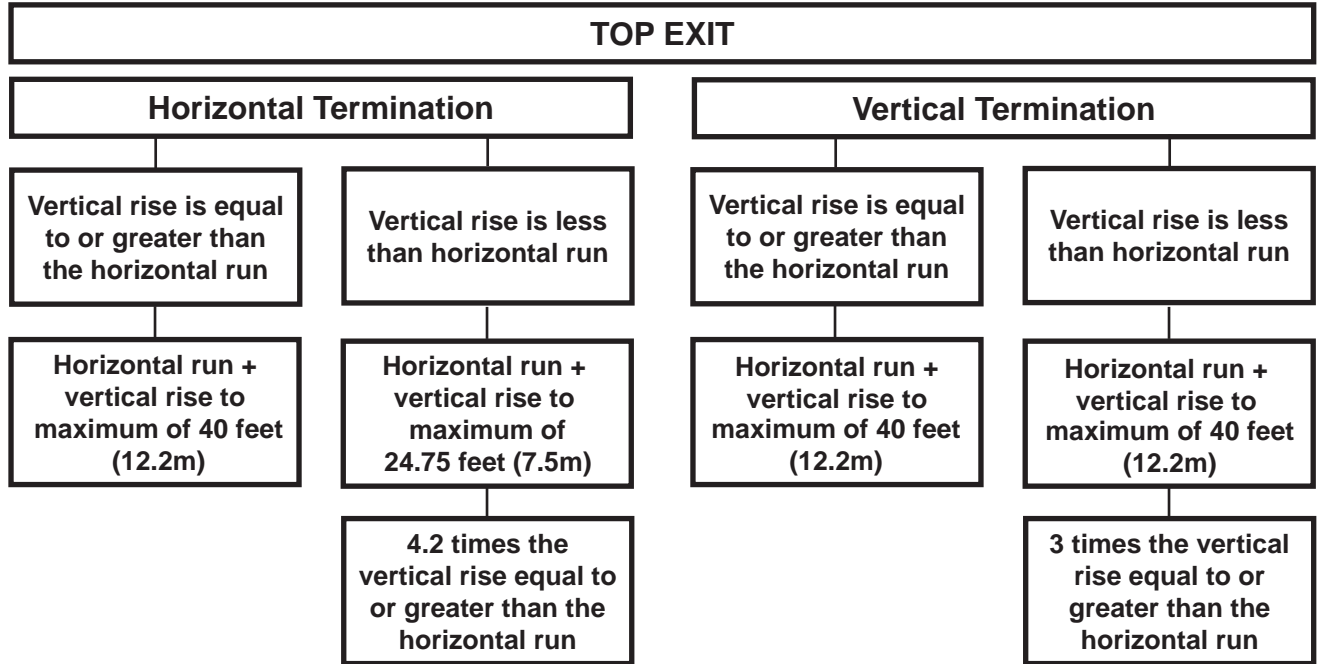
†† Permitted only if the veranda, porch, or deck is fully open on a minimum of two sides beneath the floor.

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

3.5 VENT APPLICATION FLOW CHART



13.1A

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

V_T - combined vertical vent lengths in feet

14.1

3.7 ELBOW VENT LENGTH VALUES

	<u>FEET</u>	<u>INCHES</u>	<u>MILLIMETERS</u>
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°

15.1A

NOTE: There **MUST** be a 25% reduction in total horizontal length (H_T) when using flex vent.

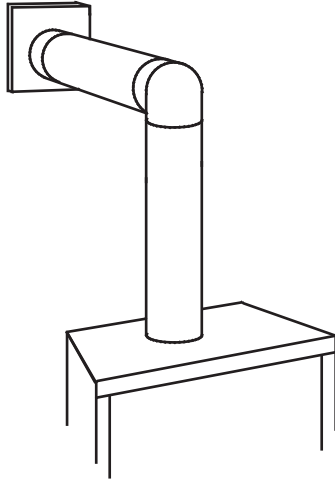
3.8 HORIZONTAL TERMINATION

EN

NOTE: There **MUST** be a 25% reduction in total horizontal length (H_T) when using flex vent.

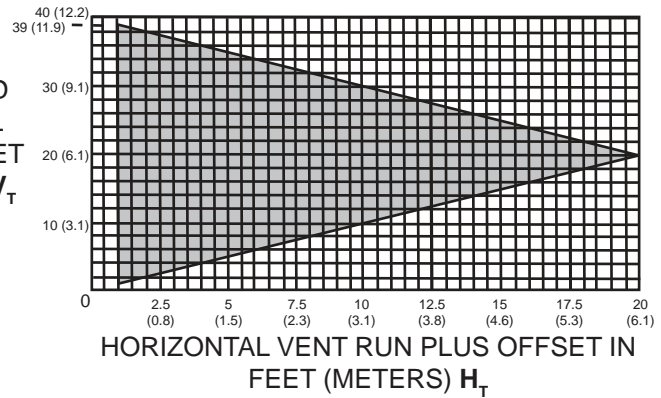
$$(H_T) \leq (V_T)$$

Simple venting configuration (only one 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



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

For vent configurations requiring more than 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:

$V_1 = 3 \text{ FT (0.9m)}$

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

$V_T = V_1 + V_2 = 3 \text{ FT (0.9m)} + 8 \text{ FT (2.4m)} = 11 \text{ FT (3.4m)}$

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

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

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

$H_O = .03 \text{ (three } 90^\circ \text{ elbows - } 90^\circ) = .03 \text{ (} 270^\circ - 90^\circ) = 5.4 \text{ FT (1.7m)}$

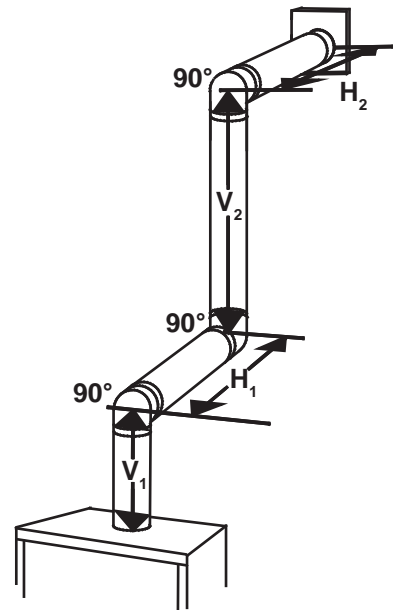
$H_T = H_R + H_O = 4.5 \text{ FT (1.4m)} + 5.4 \text{ FT (1.6m)} = 9.9 \text{ FT (3m)}$

$H_T + V_T = 9.9 \text{ FT (3m)} + 11 \text{ FT (3.4m)} = 20.9 \text{ FT (6.4m)}$

Formula 1: $H_T \leq V_T$
 $9.9 \text{ FT (3m)} \leq 11 \text{ FT (3.4m)}$

Formula 2: $H_T + V_T \leq 40 \text{ FT (12.2m)}$
 $20.9 \text{ FT (6.4m)} \leq 40 \text{ FT (12.2m)}$

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

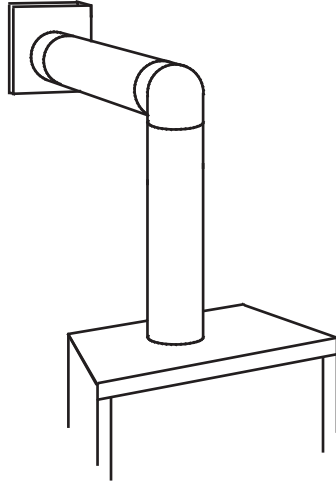


16.1B

NOTE: There **MUST** be a 25% reduction in total horizontal length (H_T) when using flex vent.

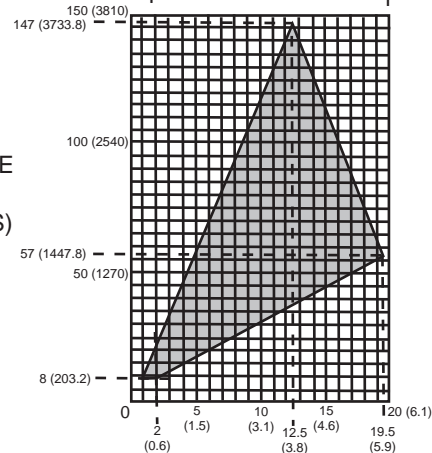
$$(H_T) > (V_T)$$

Simple venting configuration (only one 90° elbow)



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

REQUIRED VERTICAL RISE IN INCHES (MILLIMETERS)
 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 90° elbow, the following formulas apply:

Formula 1: $H_T \leq 4.2 V_T$

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

Example:

$V_1 = V_T = 6$ FT (1.8m)

$H_1 = 3$ FT (0.9m)

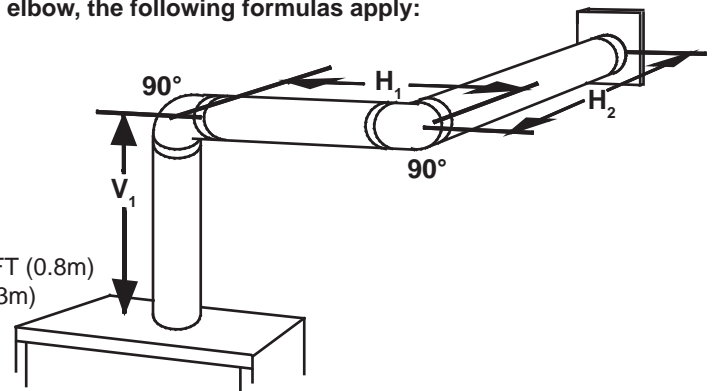
$H_2 = 5$ FT (1.5m)

$H_R = H_1 + H_2 = 3$ FT (0.9m) + 5 FT (1.5m) = 8 FT (2.4m)

$H_o = .03$ (two 90° elbows - 90°) = .03 (180° - 90°) = 2.7 FT (0.8m)

$H_T = H_R + H_o = 8$ FT (2.4m) + 2.7 FT (0.8m) = 10.7 FT (3.3m)

$H_T + V_T = 10.7$ FT (3.3m) + 6 FT (1.8m) = 16.7 FT (5.1m)



Formula 1:

$H_T \leq 4.2 V_T$

$4.2 V_T = 4.2$ FT (1.3m) x 6 FT (1.8m) = 25.2 FT (15.9m)

10.7 FT (3.3m) \leq 25.2 FT (15.9m)

Formula 2:

$H_T + V_T \leq 24.75$ FT

16.7 FT (3.3m) \leq 24.75 FT (7.5m)

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

Example:

$V_1 = 4$ FT (1.2m)

$V_2 = 1.5$ FT (0.5m)

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

$H_1 = 2$ FT (0.6m)

$H_2 = 1$ FT (0.3m)

$H_3 = 1$ FT (0.3m)

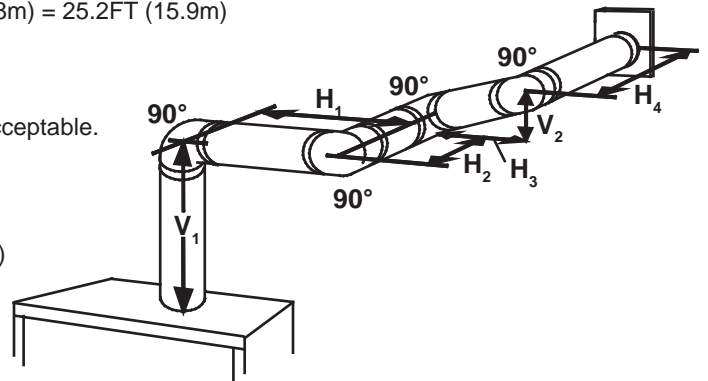
$H_4 = 1.5$ FT (0.5m)

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

$H_o = .03$ (four 90° elbows - 90°) = .03 (360° - 90°) = 8.1 FT (2.5m)

$H_T = H_R + H_o = 5.5$ FT (1.7m) + 8.1 FT (2.5m) = 13.6 FT (4.2m)

$H_T + V_T = 13.6$ FT (4.2m) + 5.5 FT (1.7m) = 19.1 FT (5.8m)



Formula 1:

$H_T \leq 4.2 V_T$

$4.2 V_T = 4.2$ FT (1.3m) x 5.5 FT (1.7m) = 23.1 FT (7m)

13.6 (4.1m) \leq 23.1 FT (7m)

Formula 2:

$H_T + V_T \leq 24.75$ FT (7.5m)

19.1 FT (5.8m) \leq 24.75 FT (7.5m)

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

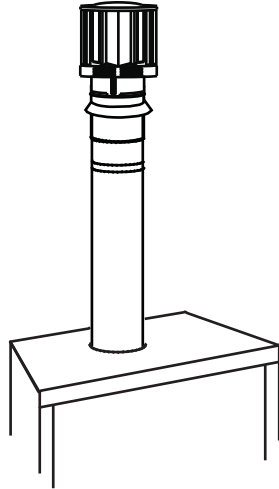
3.9 VERTICAL TERMINATION

EN

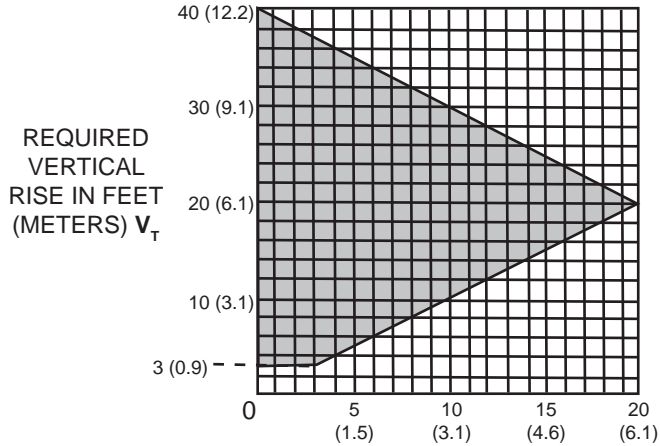
NOTE: There **MUST** be a 25% reduction in total horizontal length (H_T) when using flex vent.

$(H_T) \leq (V_T)$

Simple venting configurations.



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



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 one or more 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:

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

$V_2 = 6 \text{ FT (1.8m)}$

$V_3 = 10 \text{ FT (3.1m)}$

$V_T = V_1 + V_2 + V_3 = 5\text{FT (1.5m)} + 6\text{FT (1.8m)} + 10\text{FT (3.1m)} = 21\text{FT (6.4m)}$

$H_1 = 8 \text{ FT (2.4m)}$

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

$H_R = H_1 + H_2 = 8\text{FT (2.4m)} + 2.5\text{FT (0.8m)} = 10.5 \text{ FT (3.2m)}$

$H_o = .03 \text{ (four } 90^\circ \text{ elbows} - 90^\circ)$

$= .03 \text{ (} 360^\circ - 90^\circ) = 8.1 \text{ FT (2.5m)}$

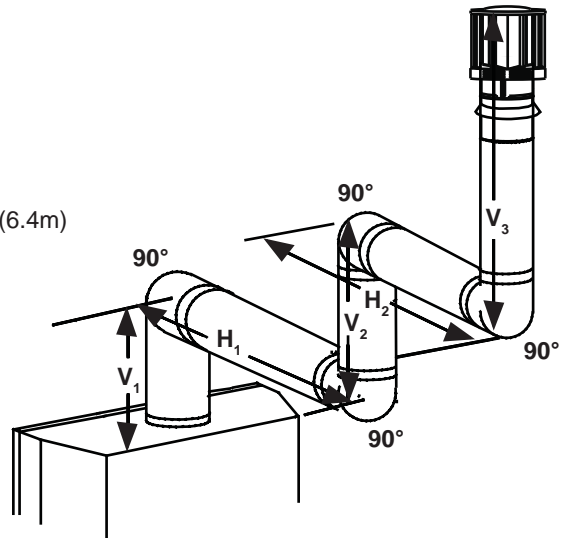
$H_T = H_R + H_o = 10.5\text{FT (3.2m)} + 8.1\text{FT (2.5m)} = 18.6\text{FT (5.7m)}$

$H_T + V_T = 18.6\text{FT (5.7m)} + 21\text{FT (6.4m)} = 39.6\text{FT (12.1m)}$

Formula 1: $H_T \leq V_T$
 $18.6\text{FT (5.7m)} \leq 21\text{FT (6.4m)}$

Formula 2: $H_T + V_T \leq 40 \text{ FT (12.19m)}$
 $39.6\text{FT (12.1m)} \leq 40\text{FT (12.2m)}$

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



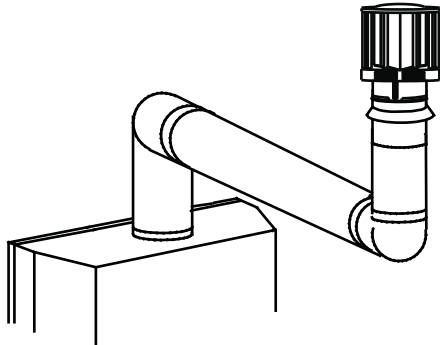
18.1A

NOTE: There **MUST** be a 25% reduction in total horizontal length (H_T) when using flex vent.

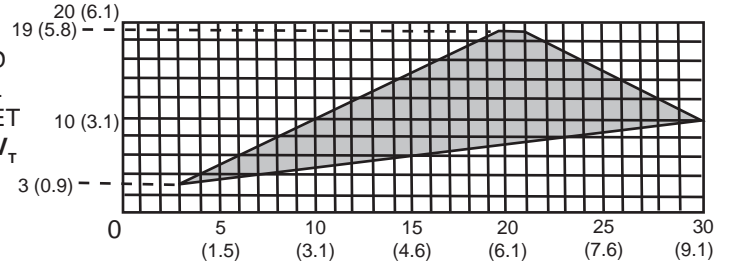
$$(H_T) > (V_T)$$

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 two 90° elbows the following formulas apply:

Formula 1: $H_T \leq 3V_T$

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

Example:

$V_1 = 2$ FT (0.6m)

$V_2 = 1$ FT (0.3m)

$V_3 = 1.5$ FT (0.5m)

$V_T = V_1 + V_2 + V_3 = 2\text{FT} (0.6\text{m}) + 1\text{FT} (0.3\text{m}) + 1.5\text{FT} (0.5\text{m}) = 4.5\text{FT} (1.4\text{m})$

$H_1 = 6$ FT (1.8m)

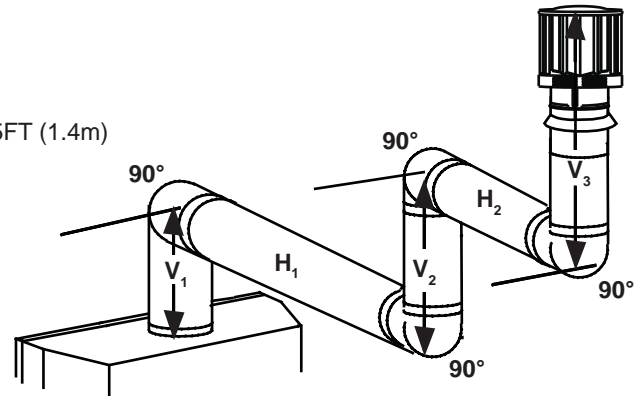
$H_2 = 2$ FT (0.6m)

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

$H_o = .03$ (four 90° elbows - 90°)
 $= .03 (360^\circ - 90^\circ) = 8.1\text{FT} (2.5\text{m})$

$H_T = H_R + H_o = 8\text{FT} (2.4\text{m}) + 8.1\text{FT} (2.5\text{m}) = 16.1\text{FT} (4.9\text{m})$

$H_T + V_T = 16.1\text{FT} (4.9\text{m}) + 4.5\text{FT} (1.4\text{m}) = 20.6\text{FT} (6.3\text{m})$



Formula 1:

$H_T \leq 3V_T$

$3V_T = 3\text{FT} (0.9\text{m}) \times 4.5\text{FT} (1.4\text{m}) = 13.5\text{FT} (4.1\text{m})$

$16.1\text{FT} (4.9\text{m}) > 13.5\text{FT} (4.1\text{m})$

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

Formula 2:

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

$20.6\text{FT} (6.3\text{m}) \leq 40 (12.2\text{m})$

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

18.1_2B

NOTE: All vent parameters are stated for rigid venting. If using approved Wolf Steel Ltd. flexible venting then maximum horizontal requirements are reduced by 25%.

3.10 VERTICAL THROUGH EXISTING CHIMNEY

EN

! WARNING**RISK OF FIRE!**

CO-AXIAL TO CO-LINEAR VENTING CONFIGURATIONS MUST ONLY BE USED IN A NON-COMBUSTIBLE CHIMNEY OR ENCLOSURE. INSTALLATION IN A COMBUSTIBLE ENCLOSURE COULD RESULT IN A FIRE.

This appliance is designed to be attached to a 3" (76.2mm) co-linear aluminum flex vent system running the full length of a masonry chimney.

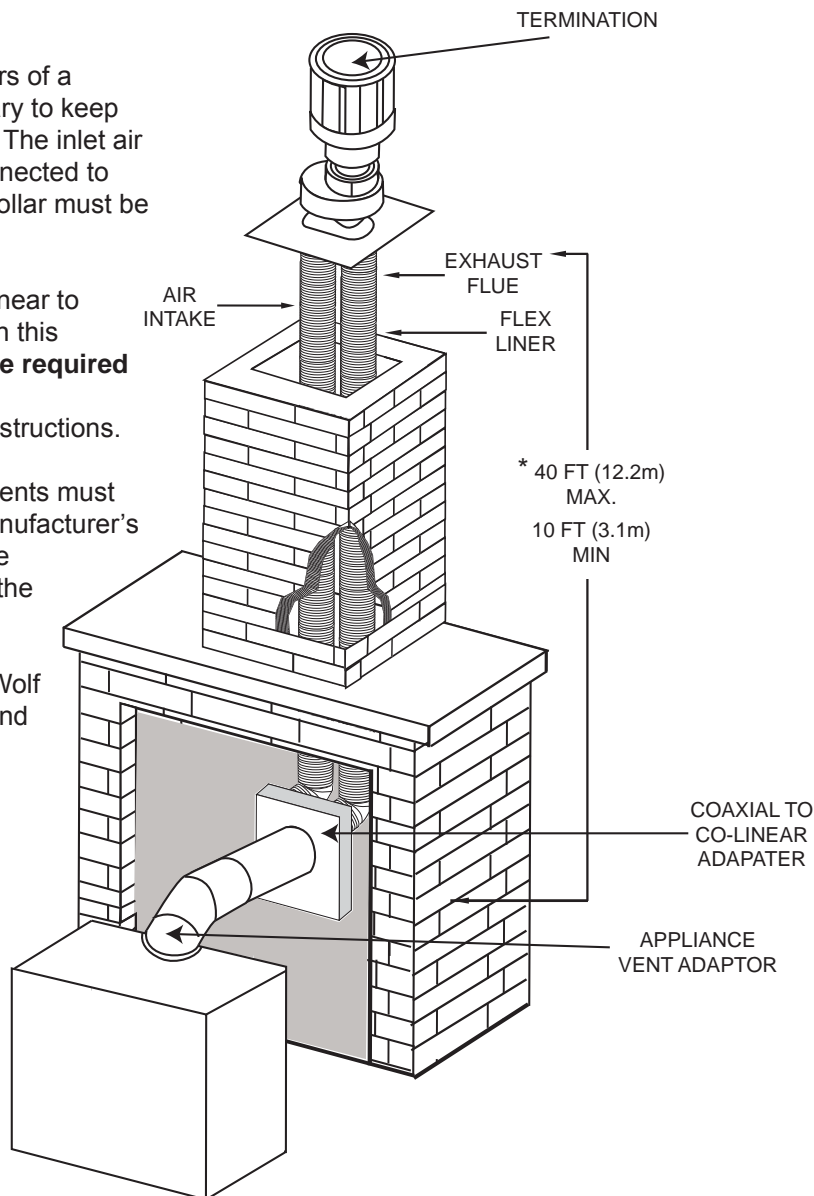
The flex liners accommodate any contours of a masonry chimney, however, it is necessary to keep the flexible liners as straight as possible. The inlet air collar of the termination cap must be connected to the air intake flex liner and the exhaust collar must be connected to the exhaust flexible liner.

Both Simpson Duravent and Selkirk co-linear to co-axial adaptors have been approved on this appliance (**NOTE: A vent adaptor will be required directly off the appliance**).

Follow vent manufacturer's installation instructions.

Different manufacturer's venting components must not be combined. Once the preferred manufacturer's appliance adaptor has been attached, the remainder of the system must be that of the same manufacturer.

The only exception to this rule is to use Wolf Steel's approved 3" (76.2mm) flex liner and co-linear termination.



* Measured from appliance flue collar to termination flue collar

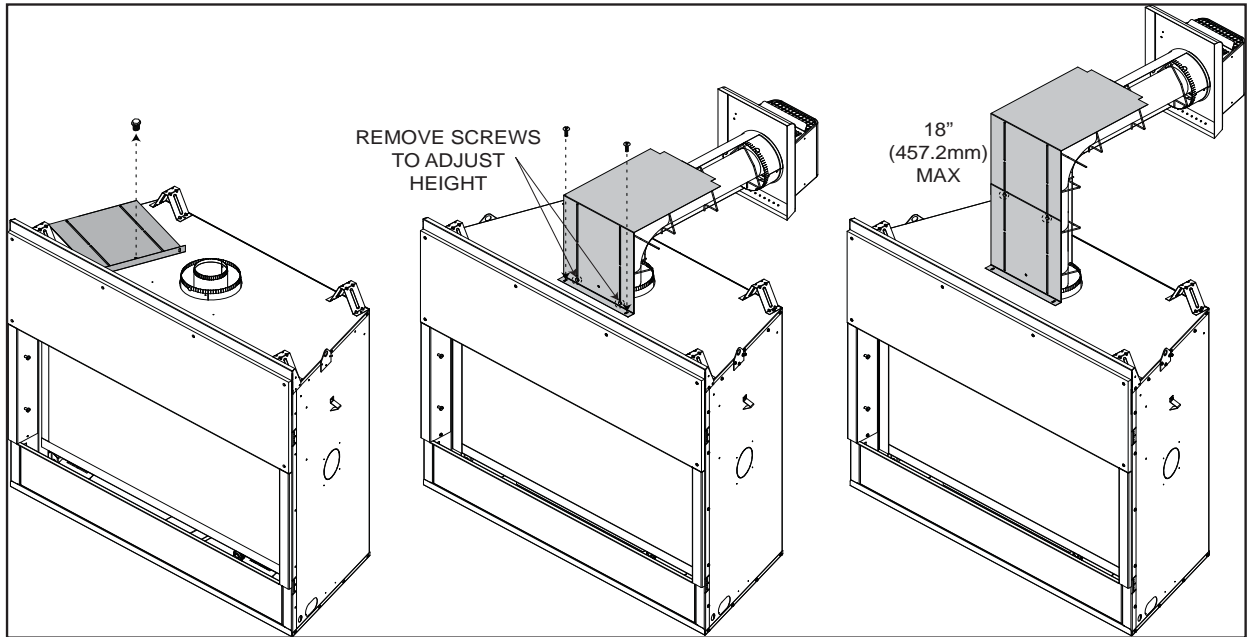
7.6A

3.11 VENT HEAT SHIELD INSTALLATION

For shipping purposes, the heat shield has been attached on top of the appliance.

If venting with a 90 degree elbow directly off of the top of the appliance, the elbow heat shield must be repositioned and secured with the two screws (supplied) as illustrated.

The heat shield can be adjusted up to a maximum of 18" (457.2mm). Remove the two screws as illustrated to adjust the shield. If the elbow height exceeds this height, the use of the shield is no longer required.



4.0 INSTALLATION

WARNING

ENSURE TO UNPACK ALL LOOSE MATERIALS FROM INSIDE THE FIREBOX PRIOR TO HOOKING UP THE GAS AND ELECTRICAL SUPPLY.

IF YOUR APPLIANCE IS SUPPLIED WITH A REMOTE ENSURE THE REMOTE RECEIVER IS IN THE "OFF" POSITION PRIOR TO HOOKING UP THE GAS AND ELECTRICAL SUPPLY TO THE APPLIANCE.

FOR SAFE AND PROPER OPERATION OF THE APPLIANCE, FOLLOW THE VENTING INSTRUCTIONS EXACTLY.

ALL INNER EXHAUST AND OUTER INTAKE VENT PIPE JOINTS MAY BE SEALED USING EITHER RED RTV HIGH TEMP SILICONE SEALANT W573-0002 (NOT SUPPLIED) OR BLACK HIGH TEMP MILL PAC W573-0007 (NOT SUPPLIED) WITH THE EXCEPTION OF THE APPLIANCE EXHAUST FLUE COLLAR WHICH MUST BE SEALED USING MILL PAC.

IF USING PIPE CLAMPS TO CONNECT VENT COMPONENTS, 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.

68.2B

4.1 WALL AND CEILING PROTECTION

WARNING

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.

70.1

For optimum performance it is recommended that all horizontal runs have a minimum of 1/4" (6.4mm) rise per 1ft (0.3m). For safe and proper operation of the appliance, follow the venting instructions exactly.

4.1.1 HORIZONTAL INSTALLATION

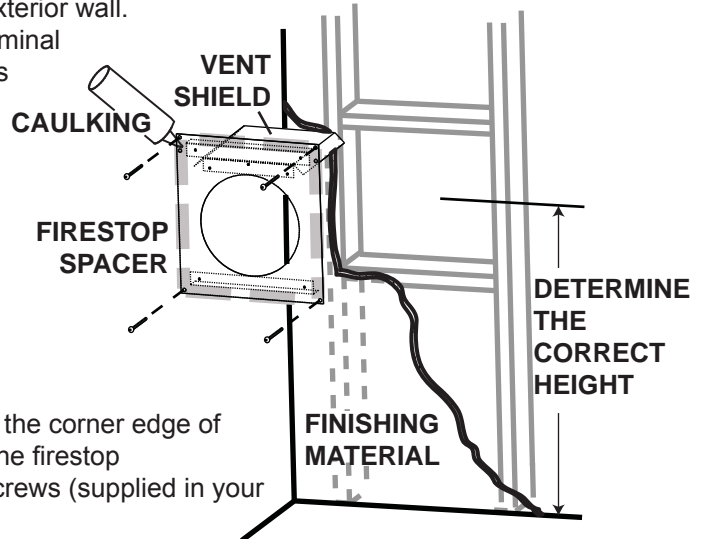
**WARNING**

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 length of the vent shield may be cut shorter for combustible walls that are less than 8 1/2" (215.9mm) thick but the vent shield must extend the full depth of the combustible wall.



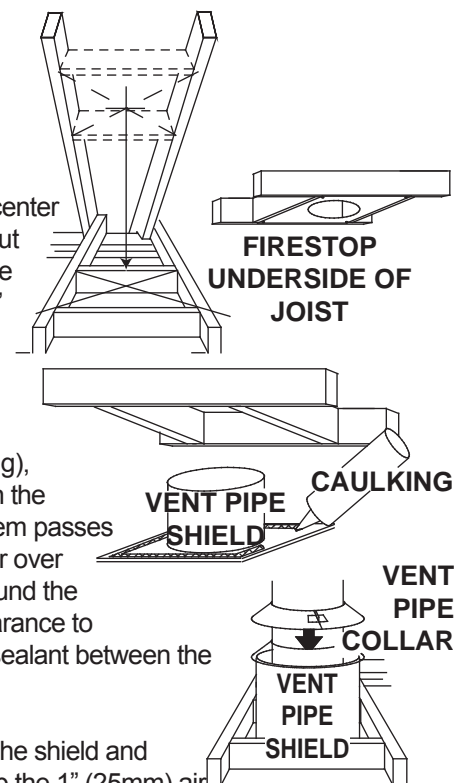
- A. Apply a bead of caulking (not supplied) around the corner edge of the inside surface of the firestop assembly, fit the firestop assembly to the hole and secure using the 4 screws (supplied in your manual baggie).
- B. Once the vent pipe is installed in its final position, apply high temperature sealant W573-0007 (not supplied) between the pipe and the firestop.

20.2A

4.1.2 VERTICAL INSTALLATION

This application occurs when venting through a roof. Installation kits for various roof pitches are available from your authorized dealer / distributor. See accessories 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 sealant 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.



21.1

W415-0834 / E / 06.13.13

4.2 USING RIGID VENT COMPONENTS

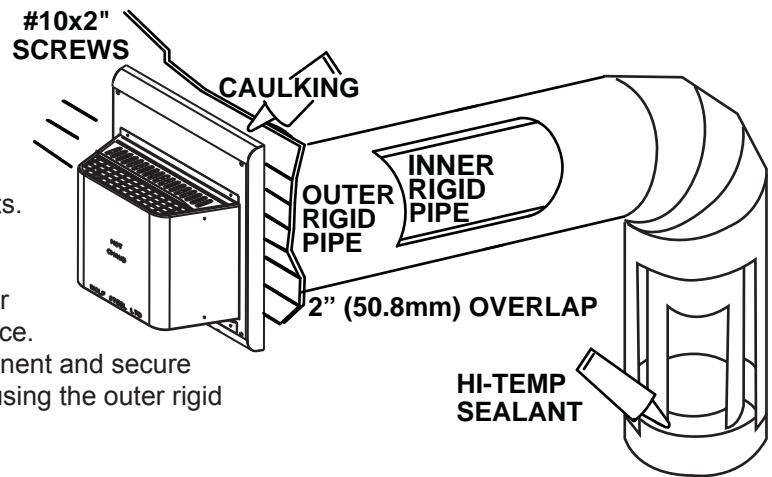
The vent system must be supported approximately every 3 feet (0.9m) for both vertical and horizontal runs. Use Wolf Steel Ltd. support ring assembly or equivalent noncombustible strapping to maintain the minimum clearance to combustibles for both vertical and horizontal runs.

All inner exhaust and outer intake vent pipe joints may be sealed using either red high temperature silicone sealant W573-0002 (not supplied) or black high temperature sealant W573-0007 Mill Pac (not supplied) with the exception of the appliance exhaust flue collar which must be sealed using Mill Pac.

25.1A

4.3 HORIZONTAL AIR TERMINAL INSTALLATION

- A.** Move the appliance into position. Measure the vent length required between terminal and appliance taking into account the additional length needed for the finished wall surface and any 1¼" (31.8mm) overlaps between venting components.
- B.** Apply high temperature sealant W573-0007 (not supplied) to the outer edge of the inner collar of the appliance. Attach the first inner rigid pipe component and secure using 3 self tapping screws. Repeat using the outer rigid pipe.
- 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).

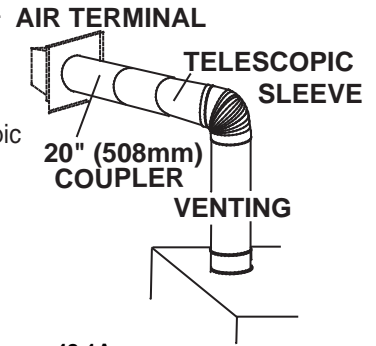


The air terminal mounting plate may be recessed into the exterior wall or siding no greater than the depth of the return flange.

26.3

4.4 EXTENDED HORIZONTAL AND CORNER TERMINAL INSTALLATION

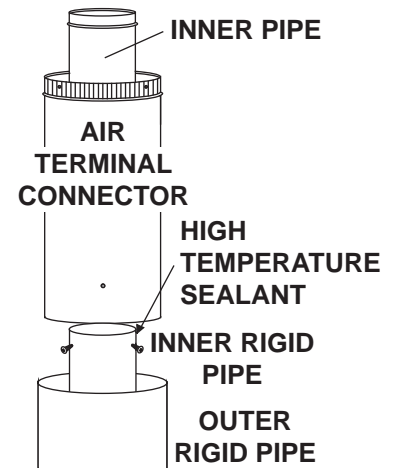
- A. Follow the instructions for "HORIZONTAL AIR TERMINAL INSTALLATIONS" section.
- B. Continue adding components alternating inner rigid pipe and outer rigid pipe. Ensure that all inner rigid pipe and elbows have sufficient vent spacers attached and each component is sealed and securely fastened to the one prior. Attach the inner telescopic sleeve to the vent run. Repeat using the outer telescopic sleeve. Seal and secure as before. To facilitate completion, attach inner and outer couplers to the air terminal.
- C. Install the air terminal. See "HORIZONTAL AIR TERMINAL INSTALLATION" section.



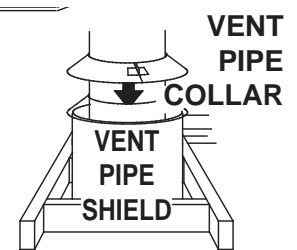
48.1A

4.5 VERTICAL AIR TERMINAL INSTALLATION

- A. Move the appliance into position.
- B. Fasten the roof support to the roof using the screws provided. 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.
- C. Apply high temperature sealant W573-0007 (not supplied) to the outer edge of the inner sleeve of the air terminal. Slip the inner coupler a minimum of 2" (50.8mm) over the sleeve and secure using 3 screws.
- D. Apply high temperature sealant W573-0002 (not supplied) to the outer edge of the of the outside sleeve of the air terminal connector. Slip the outer coupler over the sleeve and secure as before. Trim the outer coupler even with the inner coupler end.
- E. Thread the air terminal connector / vent pipe assembly down through the roof support and attach, ensuring that a minimum 16" (406.4mm) of air terminal connector will penetrate the roof when fastened. If the attic space is tight, we recommend threading the Wolf Steel vent pipe collar or equivalent loosely onto the air terminal connector / vent pipe assembly as it is passed through the attic. The air terminal connector must be located vertically and plumb.



- F. Remove nails from the shingles, above and to the sides of the air terminal connector. Place the flashing over the air terminal connector and slide it 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" (19.1mm) 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.
- G. Apply a heavy bead of waterproof caulking 2" (50.8mm) 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 connector and the collar is achieved.
- H. Continue adding rigid venting sections, sealing and securing as above. Attach the inner collapsed telescopic sleeve to the last section of rigid piping. Secure with screws and seal. Repeat using the outer telescopic sleeve.
- I. Run a bead of high temperature sealant W573-0007 (not supplied) around the outside of the inner collar on the appliance. Pull the telescopic sleeve a minimum of 2" (50.8mm) onto the collar. Secure with 3 screws. Repeat with the outer telescopic sleeve.
- J. 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" (25.4mm) air space around the pipe.



27.2A

4.6 USING FLEXIBLE VENTING

NOTE: All vent parameters are stated for rigid venting. If using approved Wolf Steel Ltd. flexible venting then total horizontal lengths (H_v) are reduced by 25%.

4.7 MOBILE HOME INSTALLATION

This appliance is also certified to be installed as an OEM (Original Equipment Manufacturer) installation in a manufactured home (U.S. only) or mobile home and must be installed in accordance with the manufacturer's instructions and the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280, in the United States or the Mobile Home Standard, CAN/CSA Z240 MH Series, in Canada. This appliance is only for use with the type(s) of gas indicated on the rating plate.

This Mobile/Manufactured Home Listed appliance comes factory equipped with a means to secure the unit. Built in appliances are equipped with 1/4" (6.4mm) diameter holes located in the front left and right corners of the base. Use #10 hex head screws, inserted through the holes in the base to secure. For free standing products contact your local authorized dealer / distributor for the appropriate securing kit. For mobile home installations, the appliance must be fastened in place. It is recommended that the appliance be secured in all installations. Always turn off the pilot and the fuel supply at the source, prior to moving the mobile home. After moving the mobile home and prior to lighting the appliance, ensure that the logs are positioned correctly.

This appliance is certified to be installed in an aftermarket permanently located, manufactured (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.

A conversion kit is supplied with the mobile home appliance.

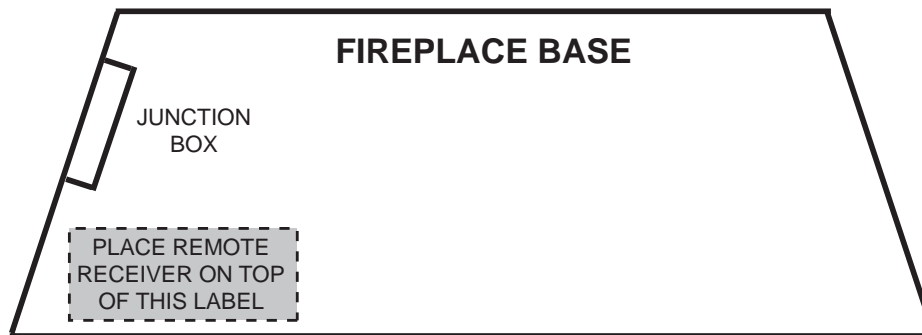
Conversion Kits

This appliance is field convertible between Natural Gas (NG) and Propane (LP).

To convert from one gas to another consult your Authorized dealer/distributor.

29.1A

4.8 REMOTE RECEIVER PLACEMENT



Position the remote receiver in the valve compartment close to the electrical junction box. Ensure the receiver is on top of the placement label, if equipped.

35.25

4.9 GAS INSTALLATION

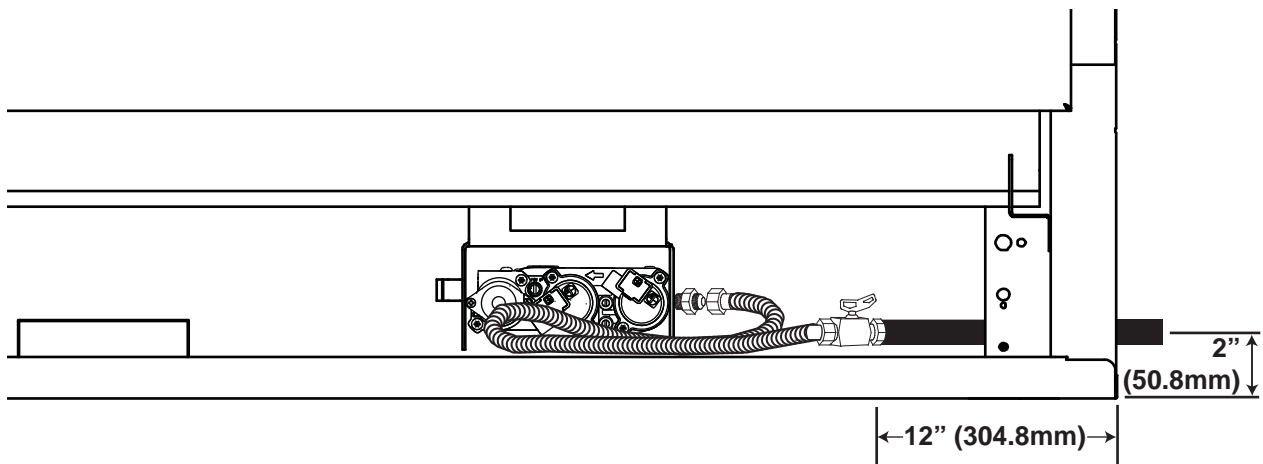
EN

! 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. ASSURE THAT A CONTINUOUS GAS FLOW IS AT THE BURNER BEFORE CLOSING THE DOOR. ENSURE ADEQUATE VENTILATION. FOR GAS AND ELECTRICAL LOCATIONS, SEE "DIMENSION" SECTION.
ALL GAS CONNECTIONS MUST BE CONTAINED WITHIN THE APPLIANCE WHEN COMPLETE.
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. **Do not use open flame.**

- Move the appliance into position and secure.
- If equipped with a flex connector the appliance is designed to accept a 1/2" (12.7mm) 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.
- Check for gas leaks by brushing on a soap and water solution.

30.1



NOTE: Connect the gas supply to the 1/2" (12.7mm) shut off and flex connector (supplied). Ensure gas supply is secured and that there is sufficient movement of the connector to permit lifting the burner base assembly for component servicing.

4.10 INSTALLING CEMENT BOARD

EN

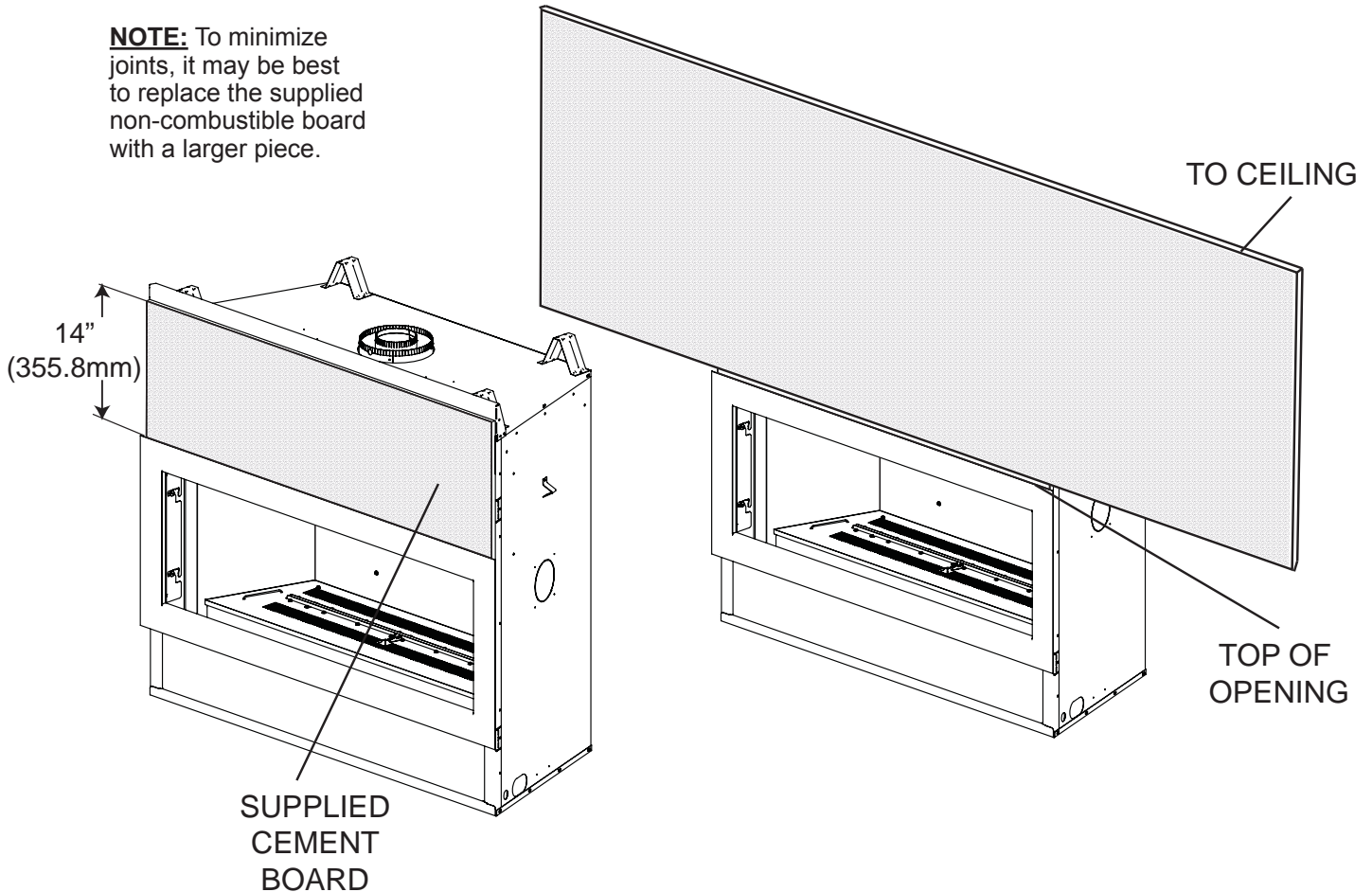
! WARNING

THE SURFACE ABOVE THE APPLIANCE GETS VERY HOT. IF PROPER FINISHING MATERIALS ARE NOT USED, CRACKING CAN OCCUR.

The 14" (355.8mm) above the appliance opening must not be finished with any combustible materials.

If only a painted surface is desired, a full single sheet of Wonder Board cement board should be used.

NOTE: To minimize joints, it may be best to replace the supplied non-combustible board with a larger piece.

**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

If using tiles, 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. Light coloured paints may discolour.

5.0 FRAMING

! 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" (IE: 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 E 136, STANDARD TEST METHOD FOR BEHAVIOUR OF MATERIALS IN A VERTICAL TUBE FURNACE AT 750°C/1382°F 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, THEY MUST BE INSTALLED.

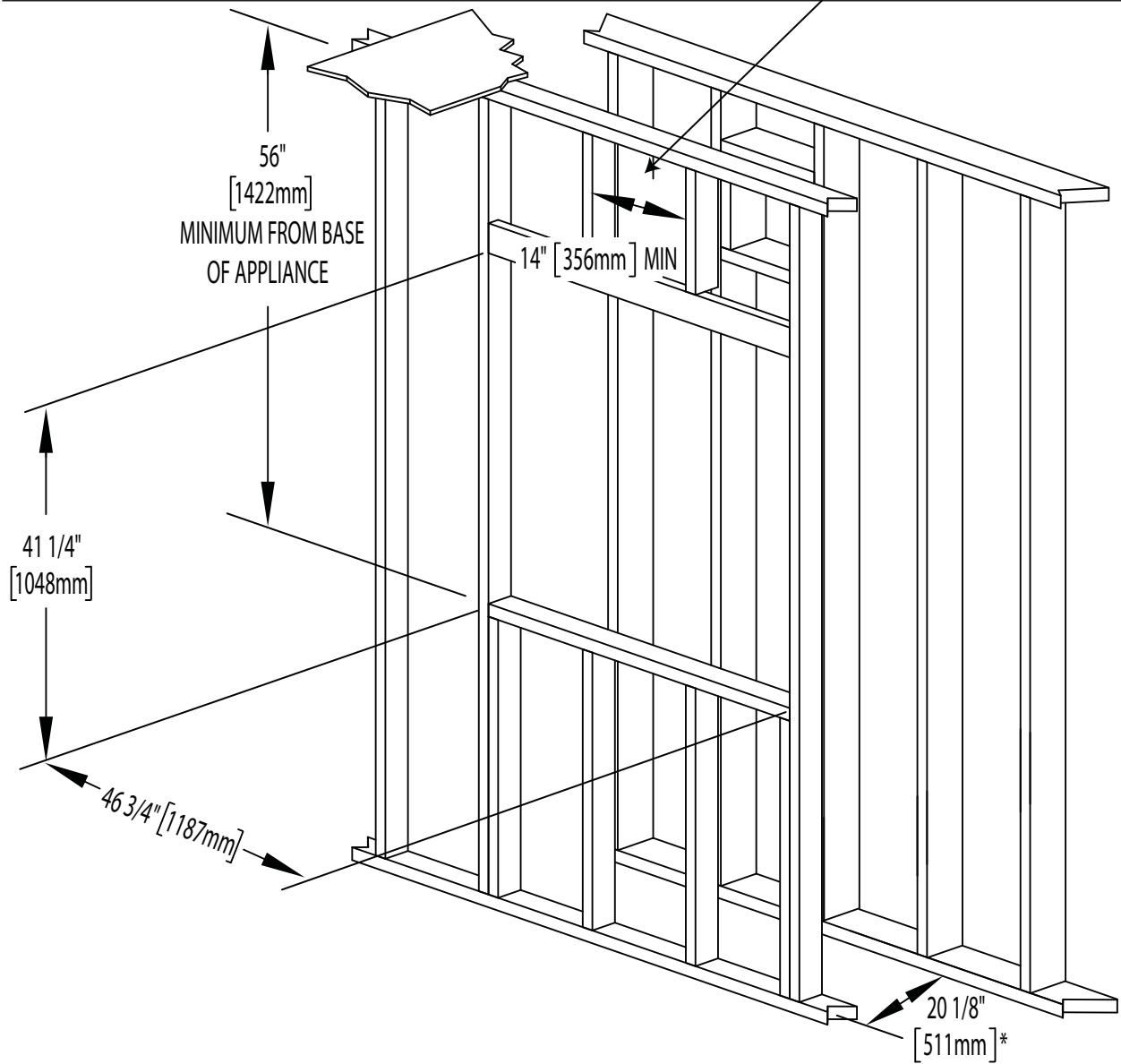
71.1

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

It is not necessary to install a hearth extension with this appliance. When roughing in the appliance, raise the appliance to accommodate for the thickness of the finished floor materials, i.e. tile, carpeting, hard wood.

! WARNING

DO NOT BUILD INTO THIS AREA - IT MUST BE LEFT CLEAR TO PROVIDE ADEQUATE CLEARANCE FOR THE VENT IN THIS 14" (355.6mm) WIDE AREA CENTERED ALONG THE FRONT OF THE FIREPLACE. NO COMBUSTIBLES ARE ALLOWED. FIREPLACE SHOULD BE IN ITS FINAL LOCATION BEFORE FRAMING.

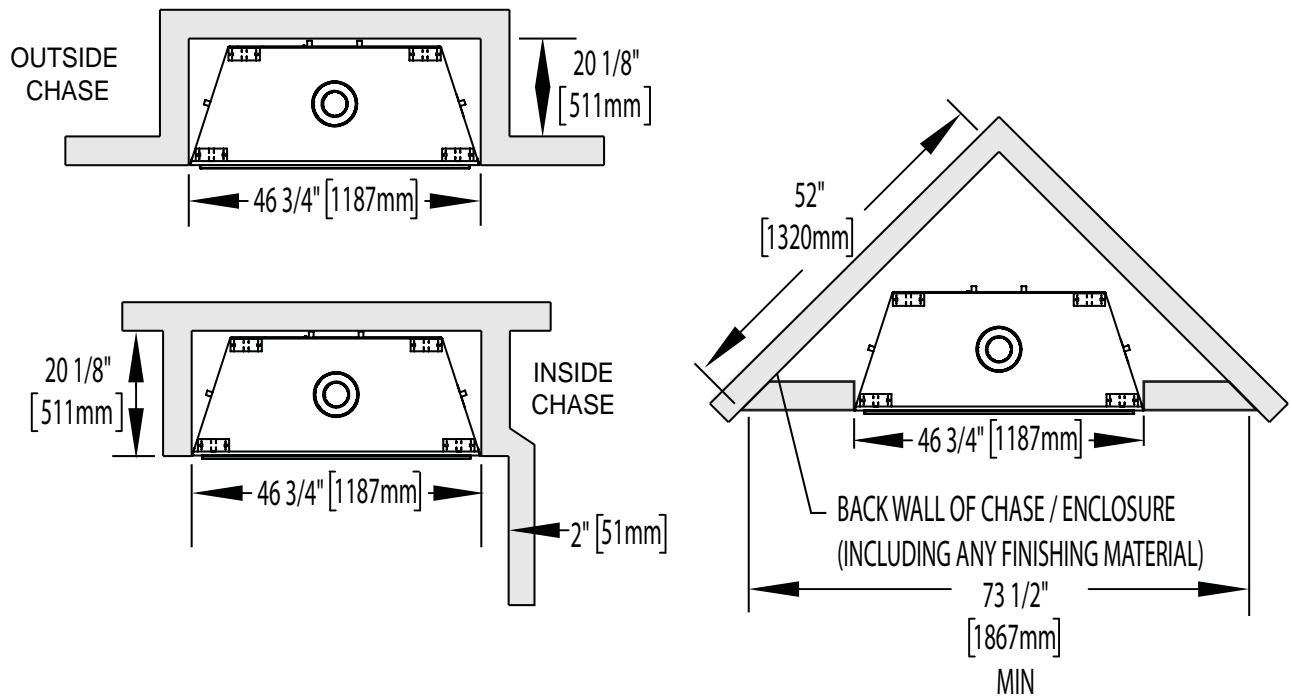


FRAMING			MAINTAIN THESE MINIMUM CLEARANCES TO COMBUSTIBLES FROM APPLIANCE AND VENT SURFACES:						
ROUGH OPENING									
HEIGHT	WIDTH	DEPTH	TO CEILING FROM BASE OF APPLIANCE	TO CEILING FROM TOP OF APPLIANCE OPENING	SIDE WALL	TO COMBUSTIBLE FINISHING ABOVE APPLIANCE	TOP OF VENT PIPE	SIDES AND BOTTOM OF VENT PIPE	REAR & SIDE STAND-OFFS
41 1/4" (1047.8mm)	46 3/4" (1187.5mm)	20 1/8" (511.2mm)*	56" (1422.4mm)	30 11/16" (779.5mm)	2" (50.8mm)	14" (355.6mm)	2" (50.8mm)**	1" (25.4mm)**	0" (0mm)

* When constructing the enclosure allow for finishing material thickness to maintain clearances.

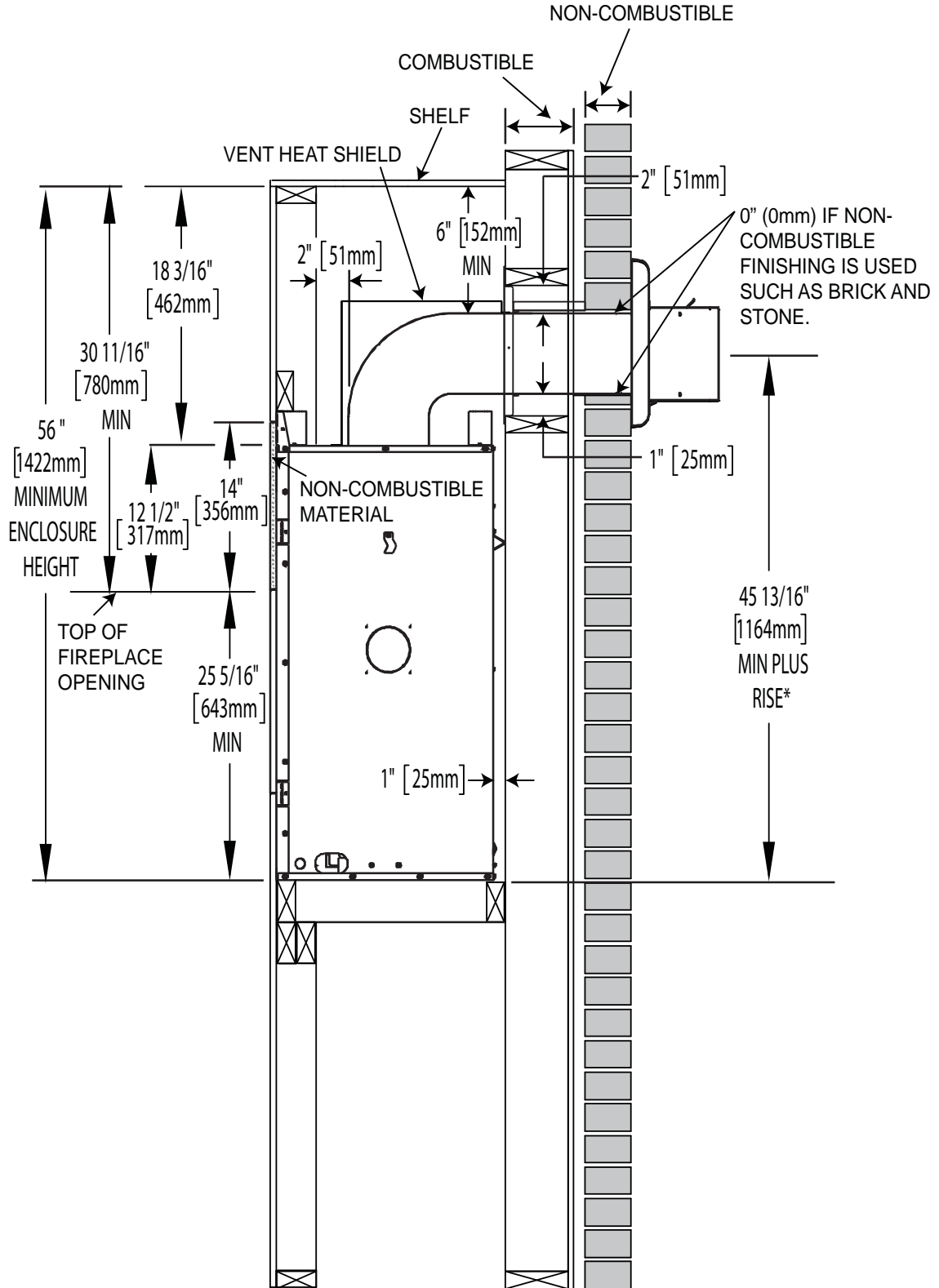
** **HORIZONTAL VENT SECTIONS:** A minimum clearance of 2" (50.8mm) to the top and 1" (25.4mm) to the sides and bottom of the vent pipe on all horizontal runs to combustibles is required. Horizontal vent sections within enclosures require a minimum clearance of 6" (152.4mm) at the top of the vent pipe, see "MINIMUM CLEARANCE TO COMBUSTIBLE ENCLOSURES" section. Use firestop spacer W010-1777 (supplied).

** **VERTICAL VENT SECTIONS:** A minimum of 1" (25.4mm) all around the vent pipe on all vertical runs to combustibles is required except for clearances in appliance enclosures. Vertical vent sections within enclosures require a minimum clearance of 2" (50.8mm) around the vent pipe. Use firestop spacer W500-0096 (not supplied).

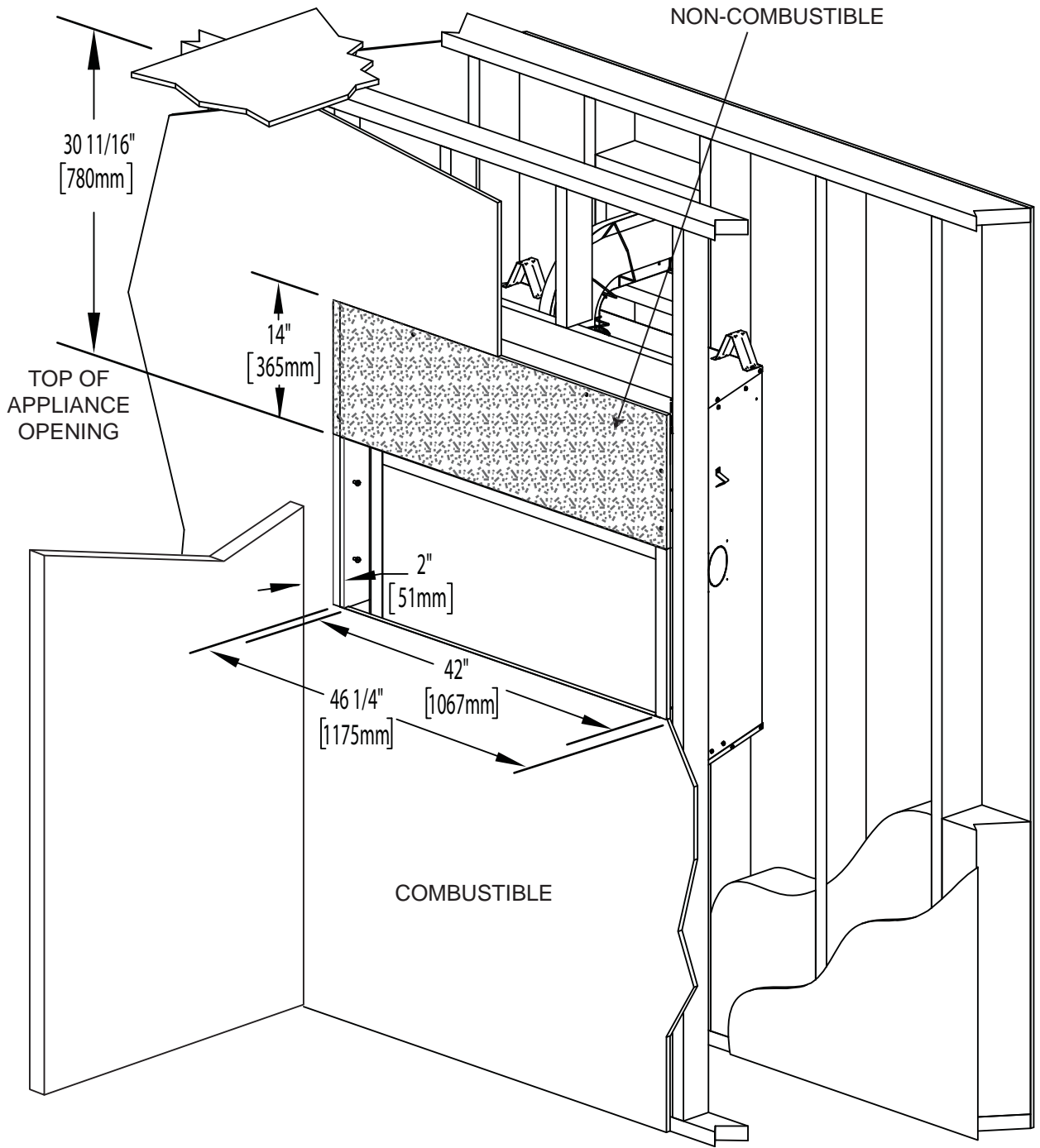


5.1 MINIMUM CLEARANCE TO COMBUSTIBLE ENCLOSURES

IMPORTANT: The LHD45 requires a minimum inside enclosure height of 56" (1422.4mm), measured from the bottom of the appliance. For temperature requirements, this area must be left unobstructed. It is recommended that the enclosure be ventilated at the top and bottom to circulate the hot air.



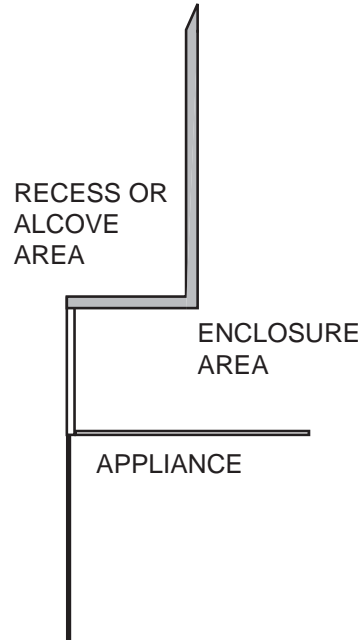
* See "VENTING" section.



Finishing material may be secured directly to the appliance body where practical.

5.2 ALCOVE ENCLOSURE

EN



NOTE: Recesses or alcoves above the appliance can be made as deep as desired provided the minimum clearances to combustibles are maintained.

Non-combustible material can be used, provided the minimum clearances to combustible materials are applied. The minimum enclosure volume must be increased by no less than the volume of the recess. This adjustment can be made by increasing any or all of the height, width and depth of the enclosure.

71.2

5.3 MINIMUM MANTEL CLEARANCES

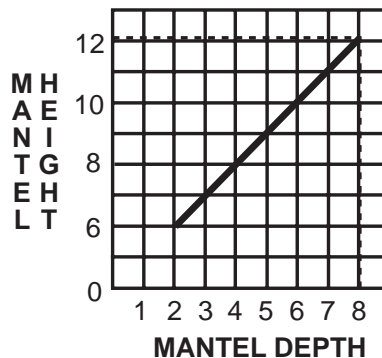
! WARNING

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.

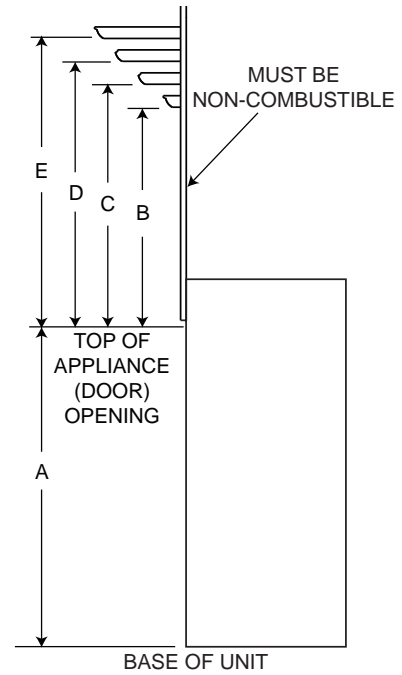
WHEN USING PAINT OR LACQUER TO FINISH THE MANTEL, THE PAINT OR LACQUER MUST BE HEAT RESISTANT TO PREVENT DISCOLOURATION.

73.1

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



MANTEL DIMENSIONS		
Ref	Height	Depth
A	25 5/16" (642.9mm)	
B	6" (152.4mm)	2" (50.8mm)
C	8" (203.2mm)	4" (101.6mm)
D	10" (254mm)	6" (152.4mm)
E	12" (304.8mm)	8" (203.2mm)

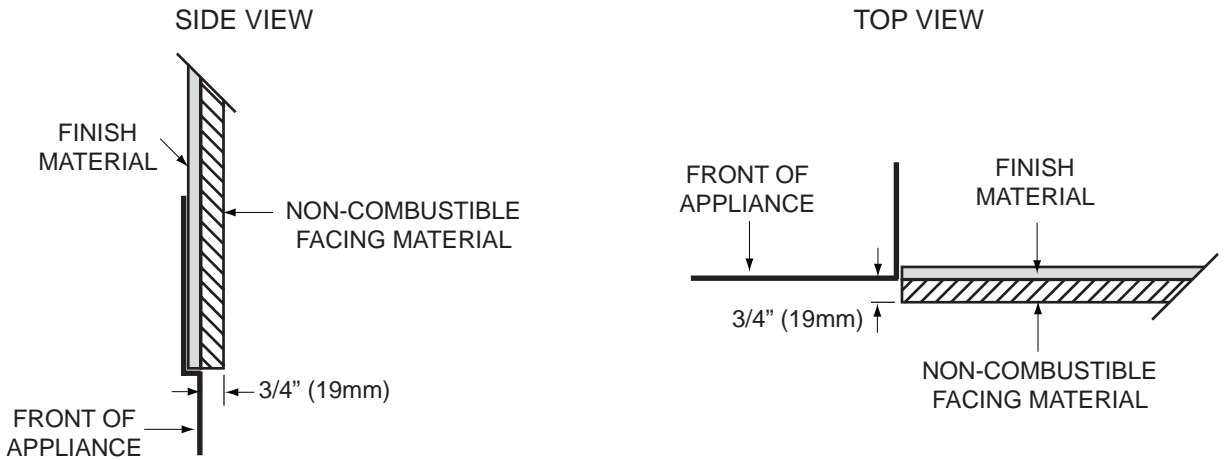


5.4 MINIMUM OVERHANG

NOTE: Projection must be non-combustible.

FROM TOP OF APPLIANCE OPENING		
Ref	Height	Depth
A	25 5/16" (642.9mm)	
B	0	2" (50.8mm)
C	2" (50.8mm)	6" (152.4mm)
D	4" (101.6mm)	10" (254mm)

5.5 NON-COMBUSTIBLE FACING MATERIAL



WARNING: Non-combustible facing material must not protrude more than 3/4" (19mm) from the top, and/or sides of the appliance. If it does, it is considered a combustible mantel and must meet the combustible mantel clearance requirements.

71.3A

6.0 FINISHING

EN

! 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 GLASS. DO NOT OPERATE APPLIANCE WITH GLASS REMOVED, CRACKED, BROKEN OR SCRATCHED.
FACING AND/OR FINISHING MATERIAL MUST NEVER OVERHANG INTO THE APPLIANCE OPENING.

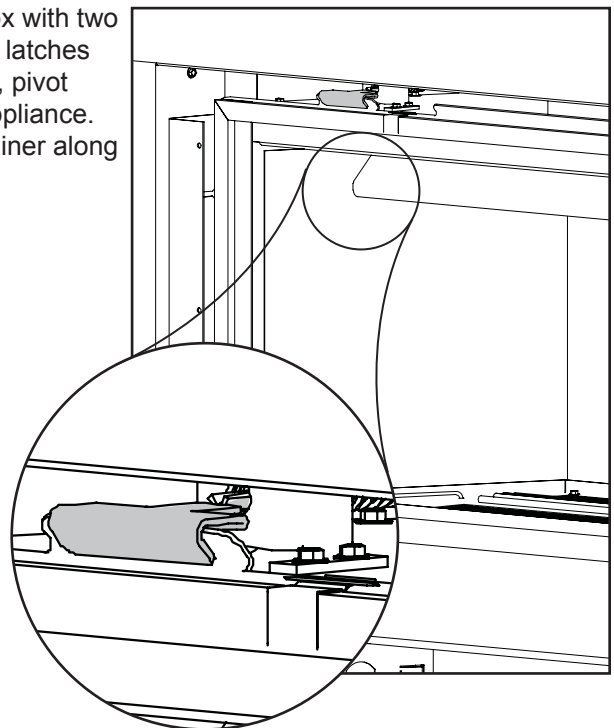
72.1A

6.1 DOOR REMOVAL / INSTALLATION

! WARNING
GLASS MAY BE HOT, DO NOT TOUCH GLASS UNTIL COOLED.
THE DOOR LATCHES ARE PART OF A SAFETY SYSTEM AND 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, LOUVRES OPENINGS, OPERATION OF LOUVRES OR DOORS OR 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.

75.1

The glass door is secured to the top front edge of the firebox with two latches. Pull the handles of the latches forward, then lift the latches out from the door frame to release the top of the door. Next, pivot the door forward until the top edge clears the front of the appliance. Carefully grip the sides of the door lifting it out from the retainer along the bottom of the door.



6.2 BATTERY HOUSING INSTALLATION



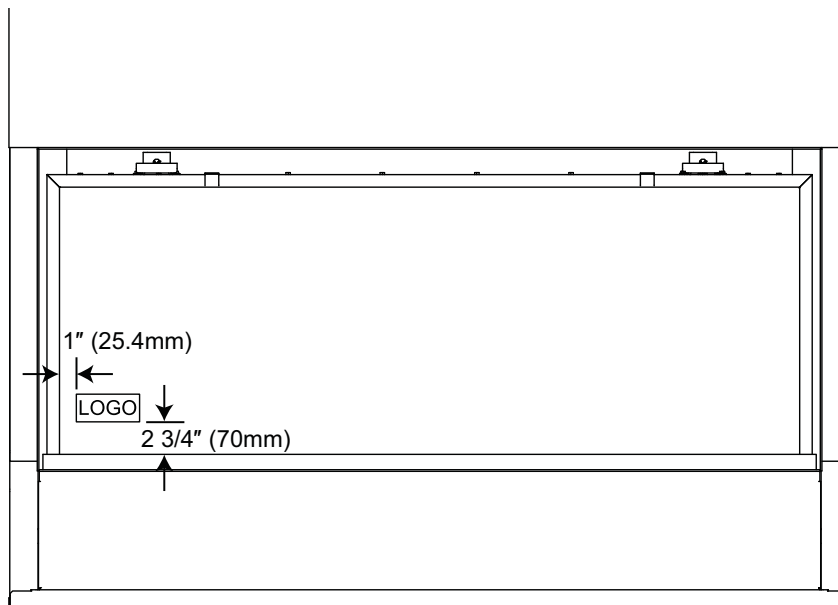
WARNING

ENSURE THE GAS AND ELECTRICAL POWER IS TURNED OFF TO THE APPLIANCE.

APPLIANCE MAY BE HOT, DO NOT SERVICE UNTIL THE APPLIANCE HAS COOLED.

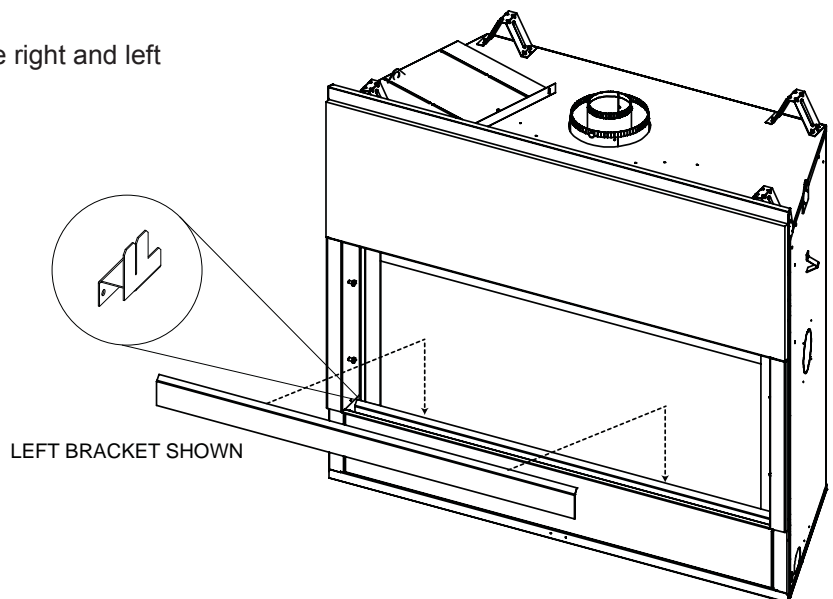
- A. Insert 4 AA batteries (not supplied) into the battery housing supplied, note the polarity of the batteries and insert as indicated on the cover (+/-). (To open the battery housing slide the back piece upwards and off of the battery housing).
- B. Attach the wires from the wiring harness of the appliance to the battery housing.
- C. Place the battery housing into the valve compartment below the burner, ensure that the battery housing is placed in a clean and easily accessible location.
- D. Turn the gas and electrical power back on to begin operating the appliance.

6.3 LOGO PLACEMENT



6.4 TRIM INSTALLATION

Place trim as shown into the slots of the right and left brackets behind the access panel.



! 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 AUTHORIZED DEALER / DISTRIBUTOR.

DO NOT PLACE ANY MEDIA (GLASS OR VERMICULITE) IN OR AROUND THE PILOT OPENING. THIS WILL INTERFERE WITH THE PILOT OPERATION

Evenly spread the glass media onto the media tray, ensuring 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 authorized dealer / distributor.

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 around the burner.

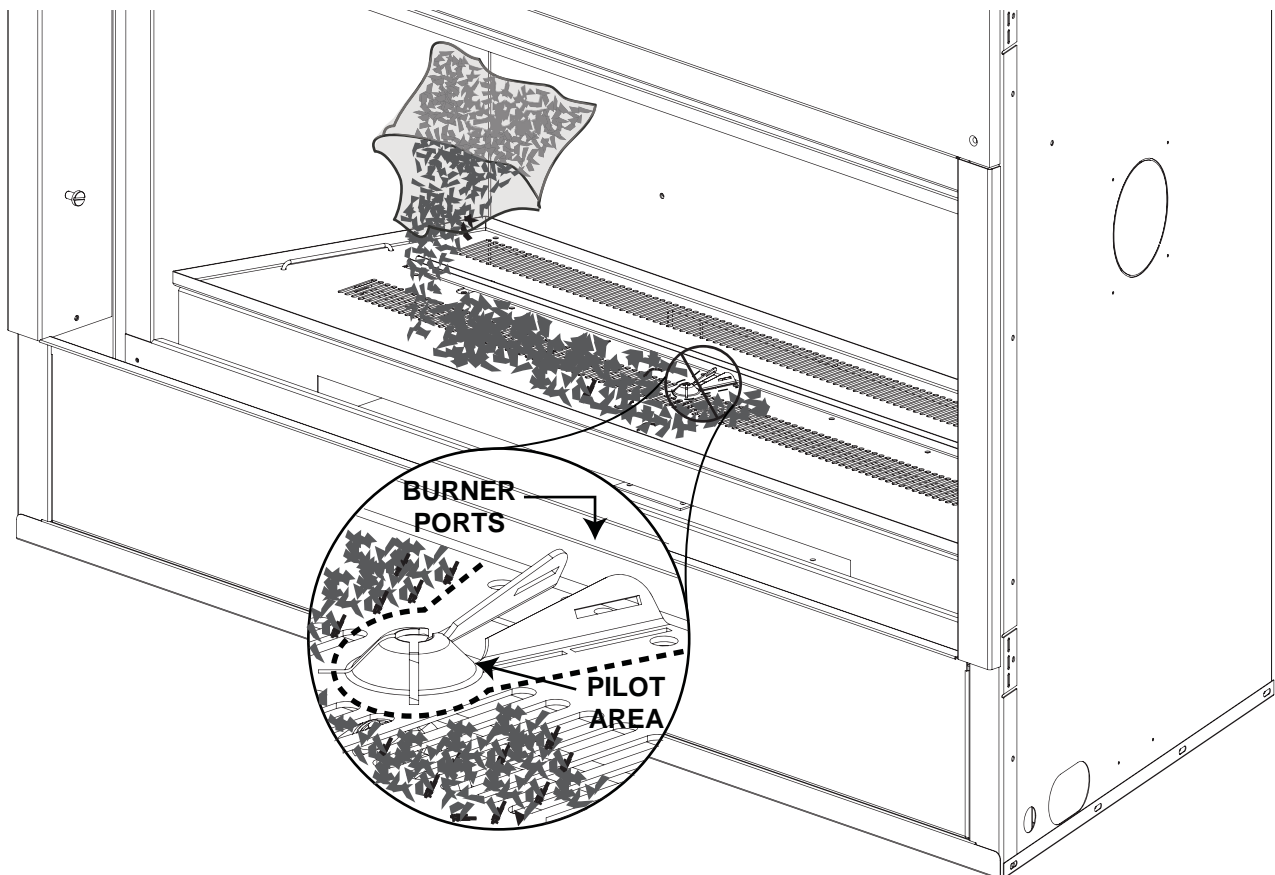
74.2B

WARNING: DO NOT PLACE MEDIA ON OR AROUND THE PILOT, THIS WILL INTERFERE WITH PILOT OPERATION. USE ONLY MEDIA APPROVED FOR USE WITH THIS APPLIANCE. DO NOT OVERFILL MEDIA, USE ONLY THE AMOUNT SUPPLIED WITH THE APPLIANCE.

NOTE: Care must be taken to ensure glass embers are kept .250" (6.35mm) clear of the pilot area on the media tray and aren't interfering with the pilot operation.

Glass embers must not cover burner ports.

When the flames impinge on the glass, the glass may discolour slightly and the edges may soften.



7.0 OPTIONAL BLOWER INSTALLATION

! WARNING

RISK OF FIRE AND ELECTRICAL SHOCK.

TURN OFF THE GAS AND ELECTRICAL POWER BEFORE SERVICING THIS APPLIANCE.

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.

ENSURE THAT THE FAN'S POWER CORD IS NOT IN CONTACT WITH ANY SURFACE OF THE APPLIANCE TO PREVENT ELECTRICAL SHOCK OR FIRE DAMAGE. DO NOT RUN THE POWER CORD BENEATH THE APPLIANCE.

THE WIRE HARNESS PROVIDED IN THE BLOWER KIT IS A UNIVERSAL HARNESS. WHEN INSTALLED, ENSURE THAT ANY EXCESS WIRE IS CONTAINED, PREVENTING IT FROM MAKING CONTACT WITH MOVING OR HOT OBJECTS.

51.5

HELPFUL HINT: Prior to finishing in the appliance, we recommend installing the blower through the pre-finishing access panel.

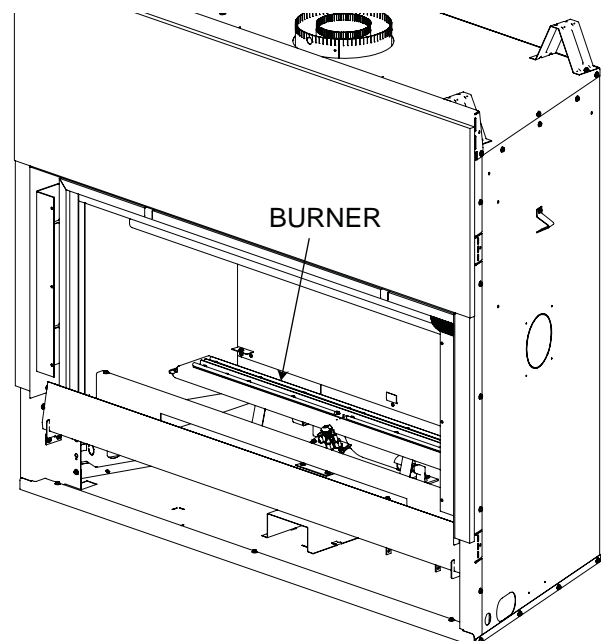
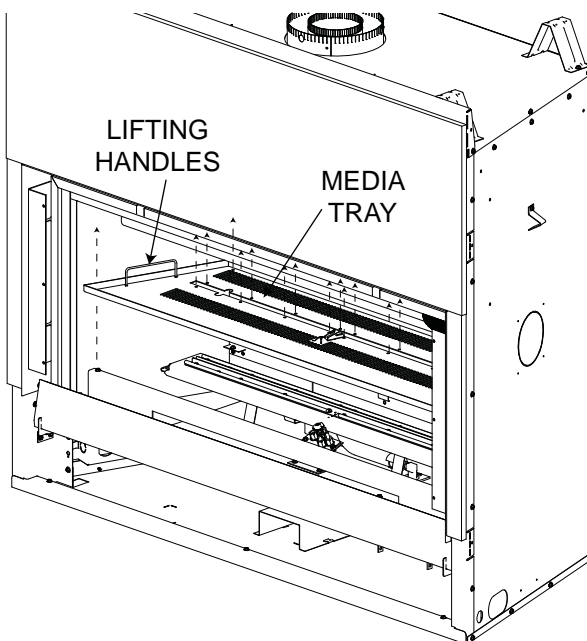
7.1 ACCESSING THE BLOWER

! WARNING

BE CAREFUL NOT TO TEAR THE BURNER TRAIN GASKET. A REPLACEMENT GASKET CAN BE ORDERED FROM YOUR LOCAL AUTHORIZED DEALER / DISTRIBUTOR.

7.1.1 BURNER REMOVAL

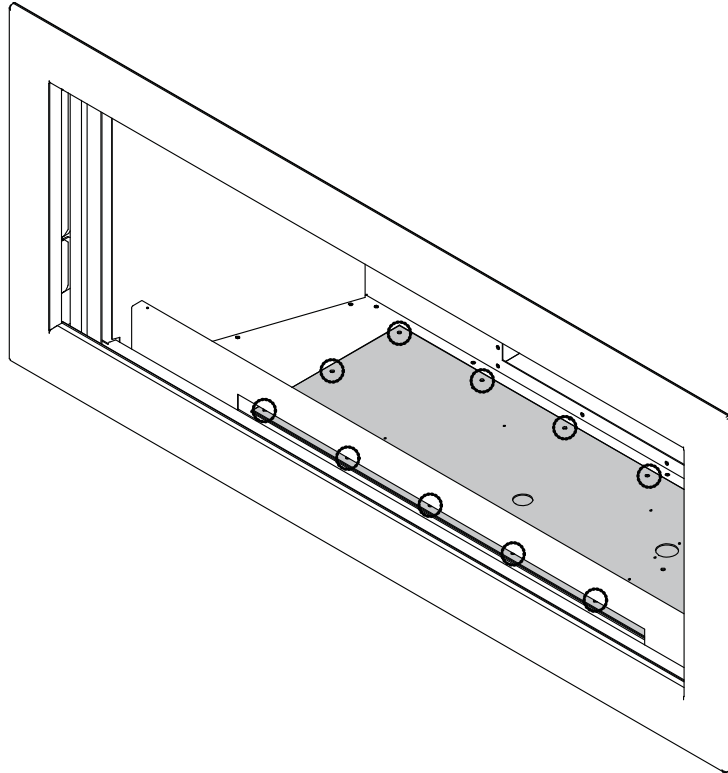
- A. Remove the door, see "DOOR REMOVAL / INSTALLATION" section.
- B. Remove the 20 screws (8 per side and each corner) that secure the media tray in place. Using the lifting handles lift the tray up and out.
- C. Remove the 4 screws that secure the burner in place. Lift the burner up and out.



7.1.2 VALVE TRAIN ASSEMBLY

- A. Remove the door, see “DOOR REMOVAL / INSTALLATION” section.
- B. Remove the media tray and burner, see “BURNER REMOVAL” section.
- C. Remove the fourteen screws from the valve train assembly. Carefully lift the valve train assembly and turn off the manual shut-off valve, see “GAS INSTALLATION” section.

NOTE: A new gasket may be required, when re-installing the valve train assembly, contact your local Authorized dealer / distributor.



7.2 INSTALLING THE BLOWER

INSTALLATION TO BE DONE BY A QUALIFIED INSTALLER and 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 Electrical Code in the United States

The three slots on the blower mounting bracket allow ease of adjustment when attaching the blower. For a quiet running blower, do not allow the assembly to sit on the firebox base. Slide the vibration reducing pad (A) into the clip (C) and up against the threaded stud (B) at the other end. The blower must be able to be positioned entirely onto the pad.

Tilt the blower onto its side. Slide it past the controls and into the clip (C). Secure to the threaded stud using the lock washer and wing nut provided.

Ensure that the blower does not touch the appliance base or the firebox.

Attach the connectors from the black and white wires to the thermal switch. Ensure that the thermal switch makes contact with the burner base.

Attach the connectors from the black and red wires to the blower. Ensure that the wires are routed safely away from hot objects and retained from the blower impellers.

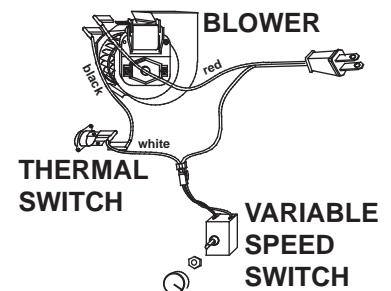
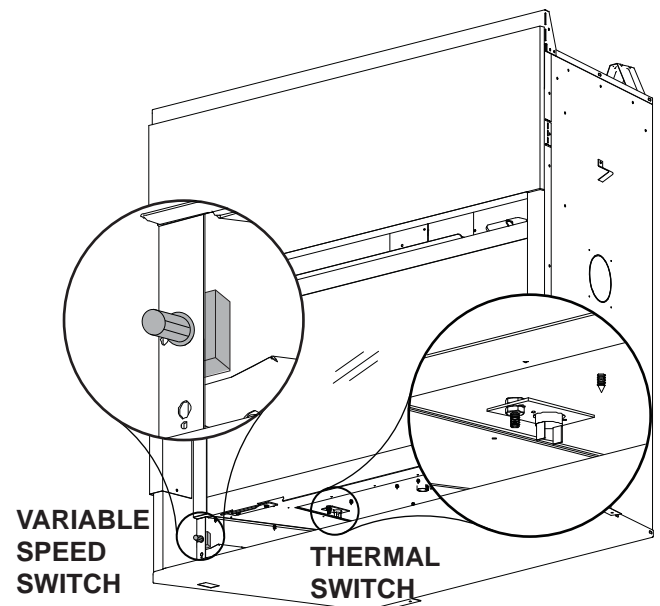
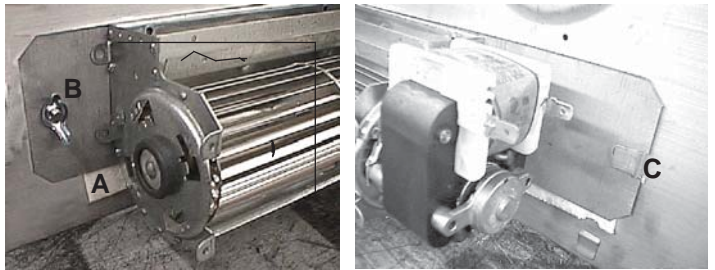
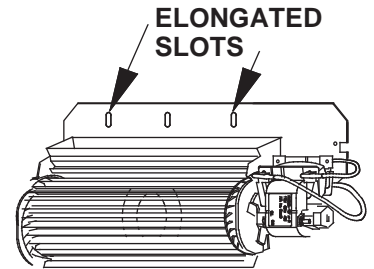
Attach and secure the variable speed switch to the corner post. However this is difficult to access when the appliance is operating. For frequent useage consider an alternative position beside your appliance wall switch. If the wire does not reach, then it must be cut and a splice added.

These connections must conform with local codes or, in the absence of local codes, use the current CSA C22.1 Canadian Electrical Code in Canada or the ANSI/NFPA 70 National Electrical Code in the United States.

Plug the blower cord into the receptacle.

Drywall dust will penetrate into the blower bearings, causing irreparable damage. Care must be taken to prevent drywall dust from coming into contact with the blower or its compartment. Any damage resulting from this condition is not covered by the warranty policy.

Because the blower is thermally activated, when turned on, it will automatically start approximately 10-30 minutes after lighting the appliance and will run for approximately 30-40 minutes after the appliance has been turned off. Use of the fan increases the heat output of the appliance.



8.0 ELECTRICAL CONNECTION

! 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.

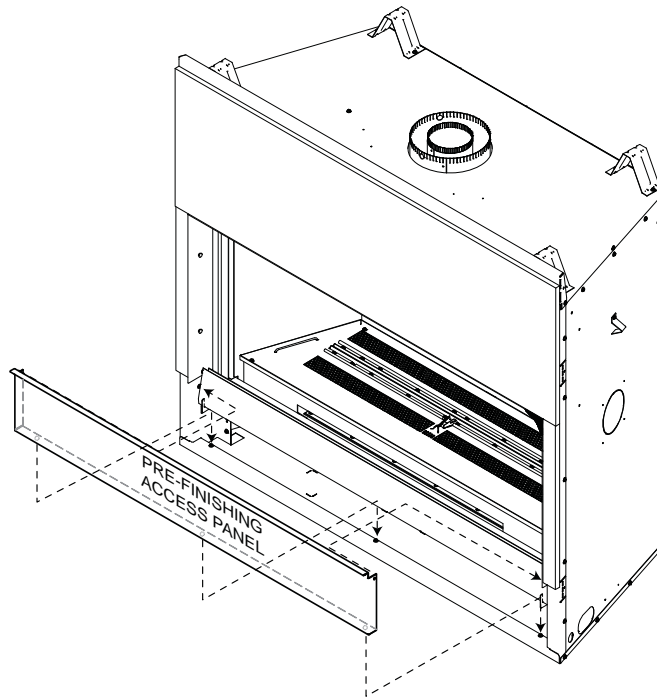
RISK OF ELECTRICAL SHOCK OR EXPLOSION. DO NOT WIRE 110V TO THE VALVE OR TO THE APPLIANCE WALL SWITCH. INCORRECT WIRING WILL DAMAGE CONTROLS.

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 RAN OUT, WITH THE GLASS DOOR OPENED OR REMOVED.

69.2

If access to the control area is necessary BEFORE INSTALLATION, remove the pre-finishing access panel. The access panel must be re-installed before operating the appliance.

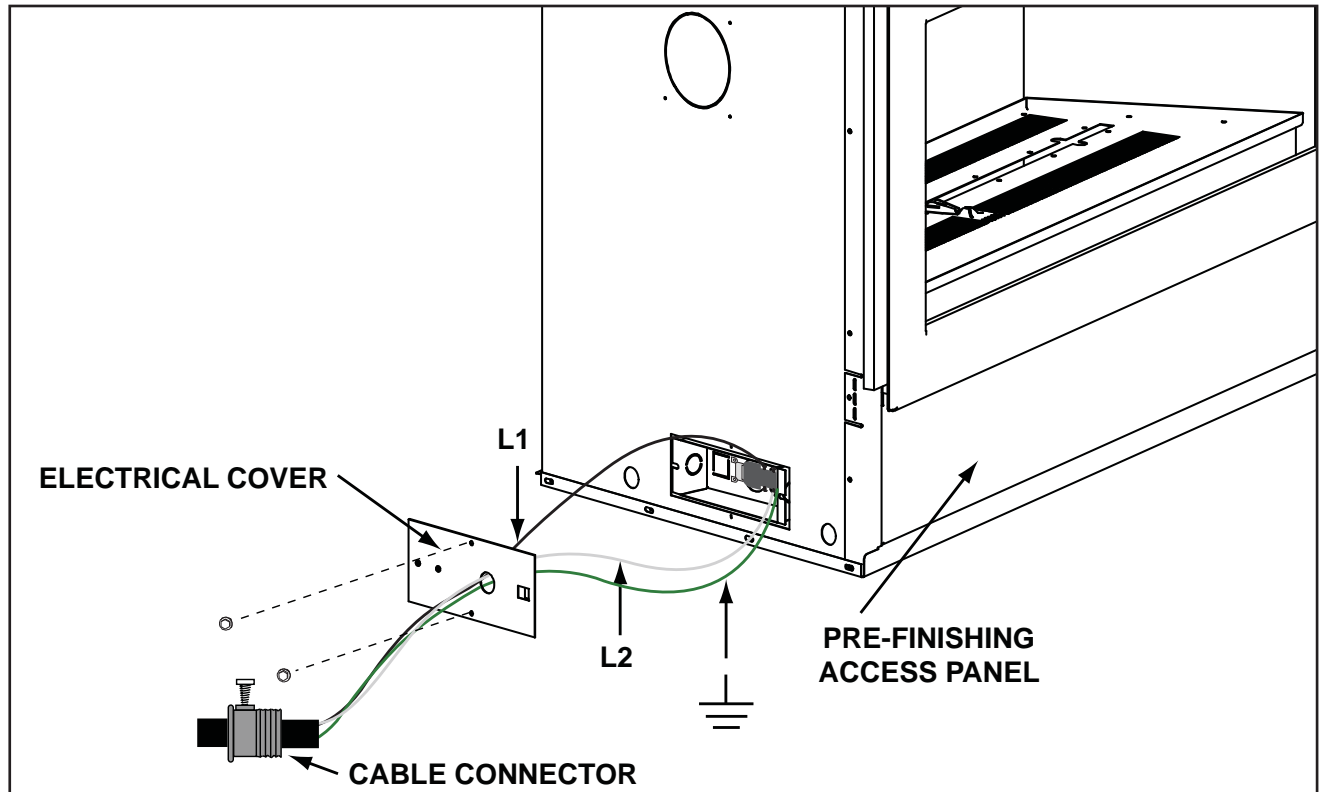


8.1 HARD WIRING CONNECTION

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 70-1996 national electrical code in the United States.

8.2 RECEPTACLE WIRING DIAGRAM

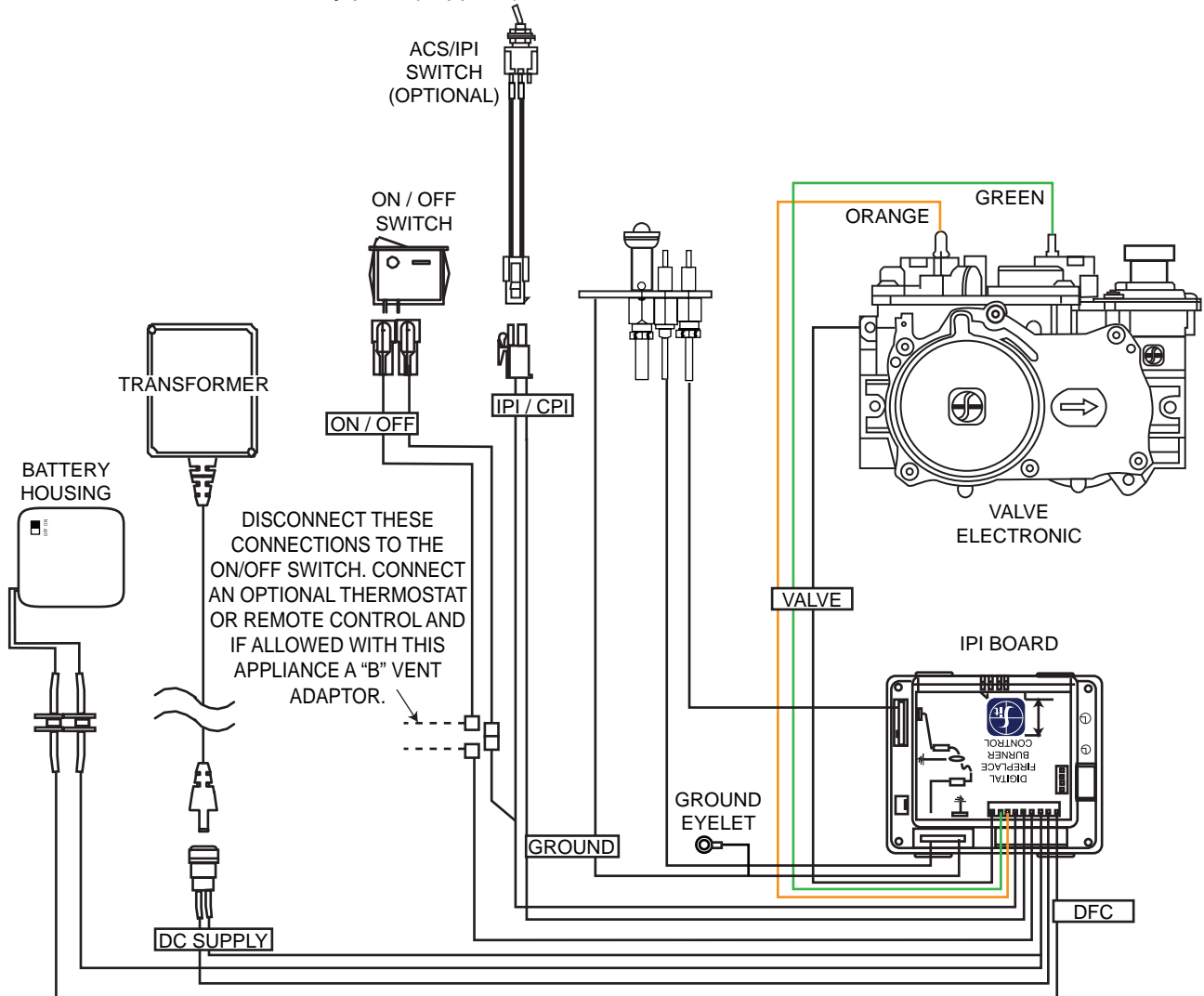


- A. Remove the two screws that secure the junction box assembly to the outer shell on the left side of the appliance and remove the junction box assembly.
- B. Remove the one screw that secures the junction box to the junction box plate and slide off the clip.
- C. Route the supply wire through the 7/8" (22.2mm) hole of the junction box plate with a box connector (not supplied).
- D. Connect the 120 volt supply wire to the receptacle as per the CSA C22.1 Canadian Electrical Code in Canada or the ANSI/NFPA 70-1996 National Electrical Code in the United States.
- E. Once the wiring is complete, re-install the junction box to the junction box plate and re-secure the screw that was previously removed.
- F. Re-install the junction box assembly by reversing step A.

NOTE: If the appliance is already installed inside the enclosure, you can access the junction box from inside the appliance by removing the burner base assembly, see "BURNER REMOVAL" section and "VALVE TRAIN REMOVAL" section.

**WARNING****DO NOT WIRE 110 VOLTS TO THE VALVE OR WALL SWITCH.**

This appliance comes equipped with a battery back-up. If this backup is used, install 4 AA batteries (not supplied) into the holder and connect to the wire harness. Place near the IPI board. Connect the battery holder to the wire harness before using the appliance. Place near the IPI board. If backup is used, it must be connected to the 6 volt battery pack (supplied).



WITH "B" VENT ADAPTORS THE SPILL SWITCH MUST BE WIRED IN SERIES WITH EITHER THE EXISTING SWITCH OR OPTIONAL WALL SWITCH, THERMOSTAT OR REMOTE.

69.5A





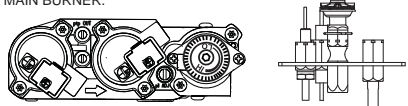


9.0 OPERATING INSTRUCTIONS

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.

9.1 OPERATING INSTRUCTIONS - FOR YOUR SAFETY READ BEFORE OPERATING

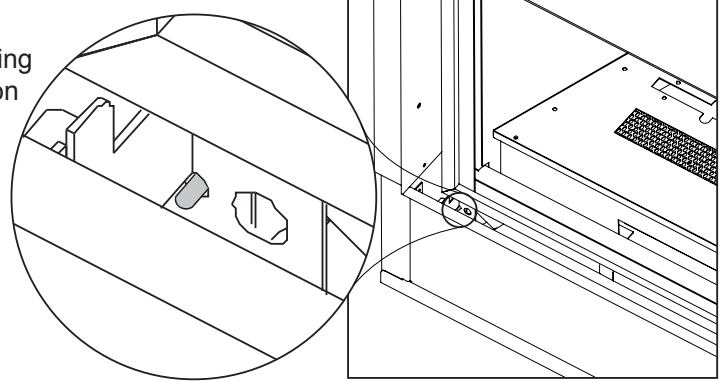
OPERATING INSTRUCTIONS / INSTRUCTIONS D'OPERATION	
FOR YOUR SAFETY READ BEFORE OPERATING / POUR VOTRE SÉCURITÉ LIRE AVANT DE FAIRE FONCTIONNER	
<p>WARNING: IF YOU DO NOT FOLLOW THESE INSTRUCTIONS EXACTLY, A FIRE OR EXPLOSION MAY RESULT CAUSING PROPERTY DAMAGE, PERSONAL INJURY OR LOSS OF LIFE.</p> <p>INITIAL 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.</p> <p>A. THIS FIREPLACE IS EQUIPPED WITH AN IGNITION DEVICE WHICH AUTOMATICALLY LIGHTS THE PILOT. DO NOT TRY TO LIGHT BY HAND.</p> <p>B. BEFORE OPERATING SMELL ALL AROUND THE FIREPLACE AREA FOR GAS AND NEXT TO THE FLOOR BECAUSE SOME GAS IS HEAVIER THAN AIR AND WILL SETTLE ON THE FLOOR.</p> <p>WHAT TO DO IF YOU SMELL GAS:</p> <ul style="list-style-type: none"> • TURN OFF ALL GAS TO THE FIREPLACE. • 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. • 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. • DO NOT USE THIS FIREPLACE IF ANY PART HAS BEEN UNDER WATER. IMMEDIATELY CALL A QUALIFIED SERVICE TECHNICIAN TO INSPECT THE FIREPLACE AND REPLACE ANY PART OF THE CONTROL SYSTEM AND ANY GAS CONTROL WHICH HAS BEEN UNDER WATER. 	<p>ATTENTION: SI CES INSTRUCTIONS NE SONT PAS OBSERVÉES A LA LETTRE, UN FEU OU UNE EXPLOSION POURRAIT S'ENSUIVRE CAUSANT DES DOMMAGES A LA PROPRIÉTÉ, DES BLESSURES CORPORELLES OU PERTE DE VIE.</p> <p>L'ALLUMAGE INITIAL DE LA VEILLEUSE ET DU BRÛLEUR PRINCIPAL DOIT SE FAIRE AVEC LA PORTE VITRÉE ENLEVÉE. NE RACCORDEZ PAS LA SOUPAPE OU L'INTERRUPTEUR MURAL A L'ELECTRICITÉ. CONSULTEZ LES INSTRUCTIONS D'INSTALLATION.</p> <p>A. CET APPAREIL EST MUNI D'UN DISPOSITIF D'ALLUMAGE QUI ALLUME LA VEILLEUSE AUTOMATIQUÉMENT. N'ESSAYEZ PAS D'ALLUMER LA VEILLEUSE MANUELLEMENT.</p> <p>B. AVANT D'ALLUMER SENTEZ L'AIR AUTOUR DE L'APPAREIL ET PRÈS DU PLANCHER (CERTAINS GAZ SONT PLUS LOURDS QUE L'AIR ET SE DÉPOSERONT AU NIVEAU DU PLANCHER) POUR DÉTECTER UNE FUITE POSSIBLE.</p> <p>QUE FAIRE SI VOUS DÉTECTEZ UNE ODEUR DE GAZ:</p> <ul style="list-style-type: none"> • COUPEZ L'ALIMENTATION DE GAZ PRINCIPALE. • OUVREZ LES FENÊTRES. • N'ALLUMEZ AUCUN APPAREIL. • NE TOUCHEZ PAS À AUCUN INTERRUPTEUR ÉLECTRIQUE; N'UTILISEZ AUCUN TÉLÉPHONE DANS VOTRE IMMEUBLE. • APPELEZ IMMÉDIATEMENT VOTRE FOURNISSEUR DE GAZ D'UN TÉLÉPHONE VOISIN ET SUIVEZ SES INSTRUCTIONS. • SI VOUS NE POUVEZ PAS REJOINDRE VOTRE FOURNISSEUR DE GAZ, APPELEZ LE SERVICE DES INCENDIES. • N'ESSAYEZ PAS DE RÉPARER AUCUNE PIÈCE DE CET ASSEMBLAGE. APPELEZ UN TECHNICIEN QUALIFIÉ. FORCER OU TENTER DE RÉPARER L'ASSEMBLAGE POURRAIT CAUSER UN FEU OU UNE EXPLOSION. • N'UTILISEZ PAS CET APPAREIL SI UN DE SES COMPOSANTS A ÉTÉ SUBMÉRGÉ. CONTACTEZ IMMÉDIATEMENT UN TECHNICIEN DE SERVICE QUALIFIÉ POUR INSPECTER L'APPAREIL ET REMPLACER TOUT SYSTÈME DE CONTRÔLE DE GAZ TOUCHÉ PAR L'EAU.
	W385-0460

9.2 LIGHTING INSTRUCTIONS

LIGHTING INSTRUCTIONS / INSTRUCTIONS D'ALLUMAGE	
<ol style="list-style-type: none"> 1. STOP! READ ALL INFORMATION OF OPERATING AND LIGHTING INSTRUCTIONS BEFORE PROCEEDING. 2. TURN OFF ELECTRIC POWER TO THE FIREPLACE. 3. THIS FIREPLACE 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 ELECTRIC POWER TO THE FIREPLACE. 10. TURN ON MAIN BURNER. 	<ol style="list-style-type: none"> 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 AUTOMATIQUÉMENT, N'ESSAYEZ PAS D'ALLUMER LA VEILLEUSE MANUELLEMENT. 4. OUVREZ LA PORTE VITRÉE. 5. TOURNEZ LA SOUPAPE DE SECTIONNEMENT MANUELLE VERS LA DROITE  A "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 SOUPAPE DE SECTIONNEMENT MANUELLE VERS LA GAUCHE  A "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	
<ol style="list-style-type: none"> 1. TURN OFF ALL ELECTRICAL POWER TO THE FIREPLACE IF SERVICE IS TO BE PERFORMED. 2. TURN MANUAL SHUTOFF VALVE CLOCKWISE  TO OFF. DO NOT FORCE. 	<ol style="list-style-type: none"> 1. COUPEZ L'ALIMENTATION ÉLECTRIQUE AU FOYER SI UN TRAVAIL D'ENTRETIEN DOIT SE FAIRE. 2. TOURNEZ LA SOUPAPE D'ARRÊT MANUELLE VERS LA DROITE  À "OFF" NE FORCEZ PAS.

9.3 ANTI CONDENSATION SWITCH (OPTIONAL)

This appliance has the option to switch from an electronic intermittent pilot ignition (IPI) to a standing pilot (ACS) for cold climates. The anti condensation switch (standing pilot) is located in the center of the control panel. Using your finger, flip the switch up for standing pilot, or down for intermittent pilot ignition.



10.0 ADJUSTMENT

10.1 PILOT BURNER ADJUSTMENT

Adjust the pilot screw to provide properly sized flame. Turn in a clockwise direction to reduce the gas flow.

Check Pressure Readings:

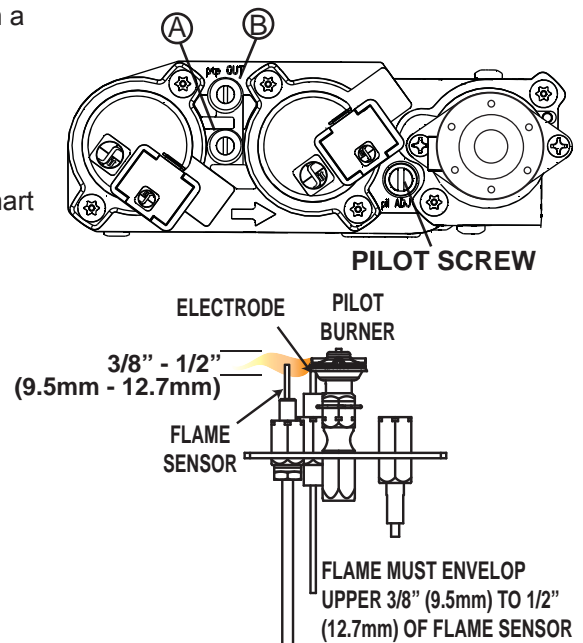
Inlet pressure can be checked by turning screw (A) counter-clockwise 2 or 3 turns and then placing pressure gauge tubing over the test point. Gauge should read as described on the chart below. Check that main burner is operating on "HI".

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 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 sandpaper 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" (MIN. 4.5")	17.4mb (MIN. 11.2mb)	13" (MIN. 11")	32.4mb (MIN. 27.4mb)
Outlet	3.5"	8.7mb	10"	24.9mb

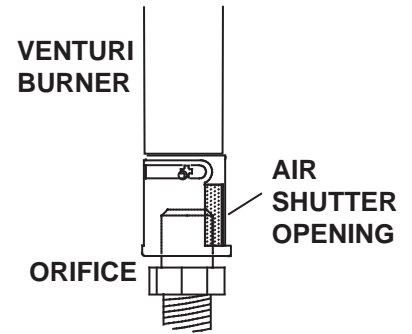
39.1C

10.3 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 carboning. 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!

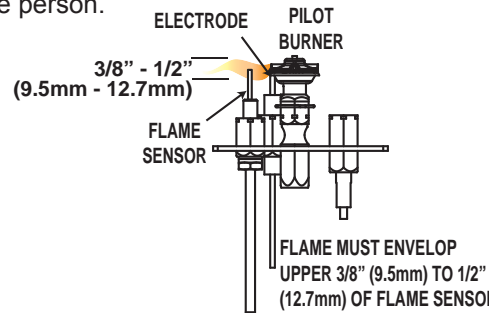


49.1

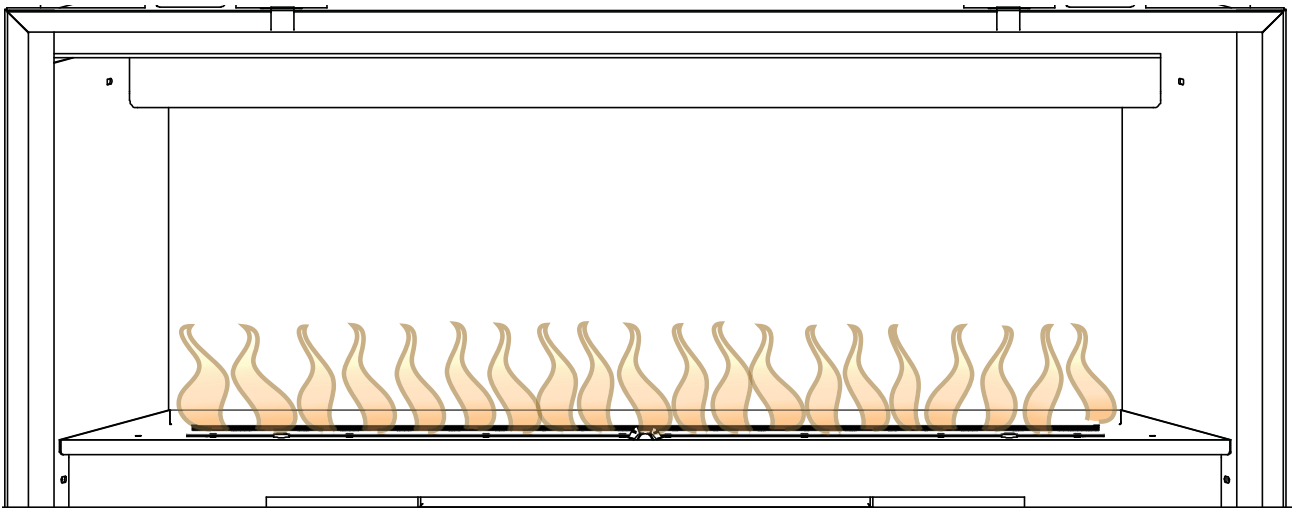
VENTURI ADJUSTMENT CHART	
FUEL	LHD45
NG	1/32" (0.8mm)
LP	1/8" (3.2mm)

10.2 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.



54.1B



11.0 MAINTENANCE

! 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.****DO NOT PAINT THE PILOT ASSEMBLY.**

CAUTION: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing. This appliance and its venting system should be inspected before use and at least annually by a qualified service person. 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.

- A. In order to properly clean the burner and pilot assembly, remove the logs, rocks and/or glass to expose both assemblies.
- B. Keep the control compartment, media, burner, air shutter opening and the area surrounding the logs clean by vacuuming or brushing, at least once a year.
- C. 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.
- D. Check to see that the pilot flame is large enough to engulf the flame sensor and/or thermocouple / thermopile as well as reaches the burner.
- E. 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.
- F. Check to see that the main burner ignites completely on all openings when turned on. A 5 to 10 second total light-up period is satisfactory. If ignition takes longer, consult your local authorized dealer / distributor.
- G. Check that the gasketing on the sides, top and bottom of the door is not broken or missing. Replace if necessary.
- H. If for any reason the vent air intake system is disassembled, re-install and re-seal per the instructions provided for the initial installation.

40.1B

11.2 ANNUAL MAINTENANCE

! WARNING
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 a 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.
- Also gently remove any build-up on the pilot assembly including, if equipped; thermopile, thermocouple, flame sensor and igniter. **NOTE: The flame sensor may require to be cleaned with an abrasive, such as emery cloth, to remove any oxides. It is important that the pilot assembly is not painted.**
- Inspect all accessible gaskets and replace as required.
- Access the blower, if equipped and clean using a soft brush and vacuum.
- Re-assemble the various components in reverse order.
- Inspect the relief system. The appliance relief through the main glass door or through the flaps on the firebox top. Ensure they open freely, and close sealed.

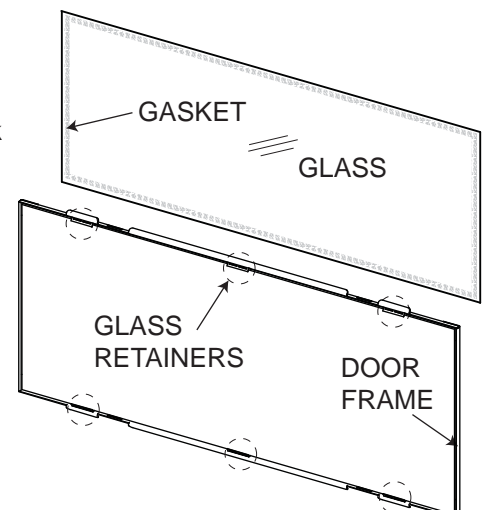
37.1A

11.1 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 THE APPLIANCE BEFORE OPERATION.
DO NOT STRIKE, SLAM OR SCRATCH GLASS. DO NOT OPERATE APPLIANCE WITH GLASS REMOVED, CRACKED, BROKEN OR SCRATCHED.

56.2

- Place the door frame face down careful not to scratch the paint.
- Center the gasketed glass inside the door frame with the thick side of the gasket facing up.
- Bend the glass retainers located along the edge of the door frame over the gasket holding the glass in place. Be careful not to break the glass.



11.6 CARE OF GLASS

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 10 hours of operation with a recommended fireplace glass cleaner. **NOTE: Vinegar-based or ammonia-free glass cleaners have generally 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.

Do not contact the inside surface of the glass with razor blades, steel wool or other metallic objects as a thin layer of metal removed from the object may be deposited onto the coating which results in a discoloured stain or scratch like mark. Such marks are not removed using the normal cleaning procedures given but require specialized techniques.

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



11.3 CARE OF PLATED PARTS

If the appliance is equipped with plated parts, you must clean fingerprints or other marks from the plated surfaces before operating the appliance for the first time. Use a glass cleaner or vinegar and towel to clean. If not cleaned properly before operating for the first time, the marks can cause permanent blemishes on the plating. After the plating is cured, the fingerprints and oils will not affect the finish and little maintenance is required, just wipe clean as needed. Prolonged high temperature burning with the door ajar may cause discoloration on plated parts.

NOTE: 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.

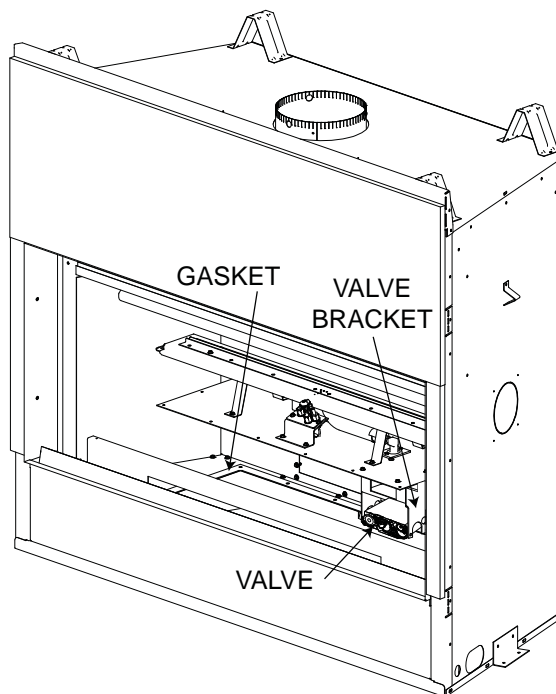
11.4 VALVE REMOVAL

- A. Carefully lift the valve train assembly and turn off the manual shut-off valve, see "VALVE TRAIN ASSEMBLY" and "GAS INSTALLATION" section.

NOTE: A new gasket may be required, when re-installing the valve train assembly, contact your local Authorized dealer / distributor.

Disconnect the flex connector from the valve. Remove the valve wire connections, labeling each one to aid with re-connection.

- B. Remove the four screws from the valve bracket and remove the valve.
- C. Replace all components before returning the appliance to service.
- D. Check for gas leaks by brushing on a soap and water solution.



11.5 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 "ACCESORIES" in the "REPLACEMENTS" section 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.

77.3

12.0 REPLACEMENTS

Contact your dealer or the factory 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

*** IDENTIFIES ITEMS WHICH ARE NOT ILLUSTRATED. FOR FURTHER INFORMATION, CONTACT YOUR AUTHORIZED DEALER.**

41.1

! 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.

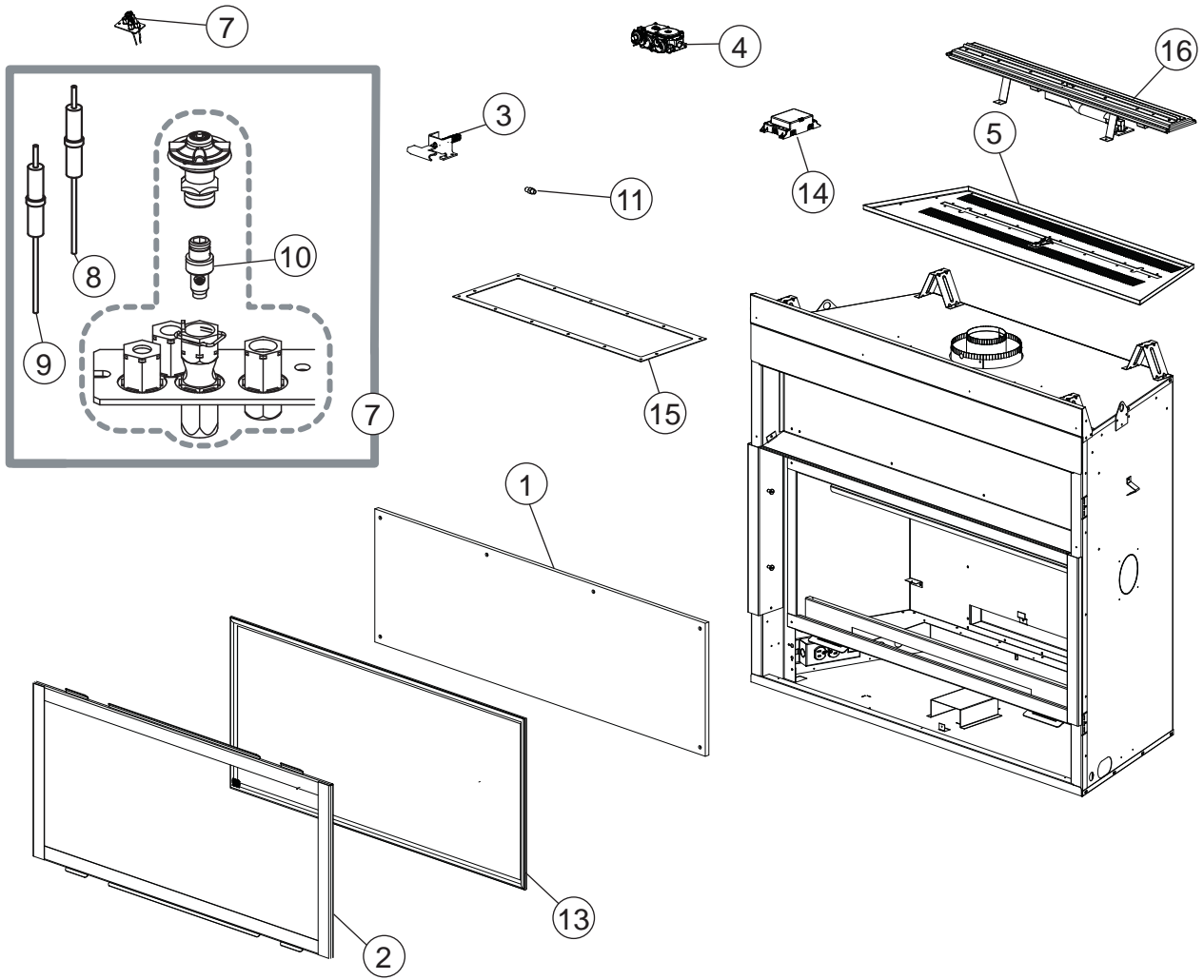
EN

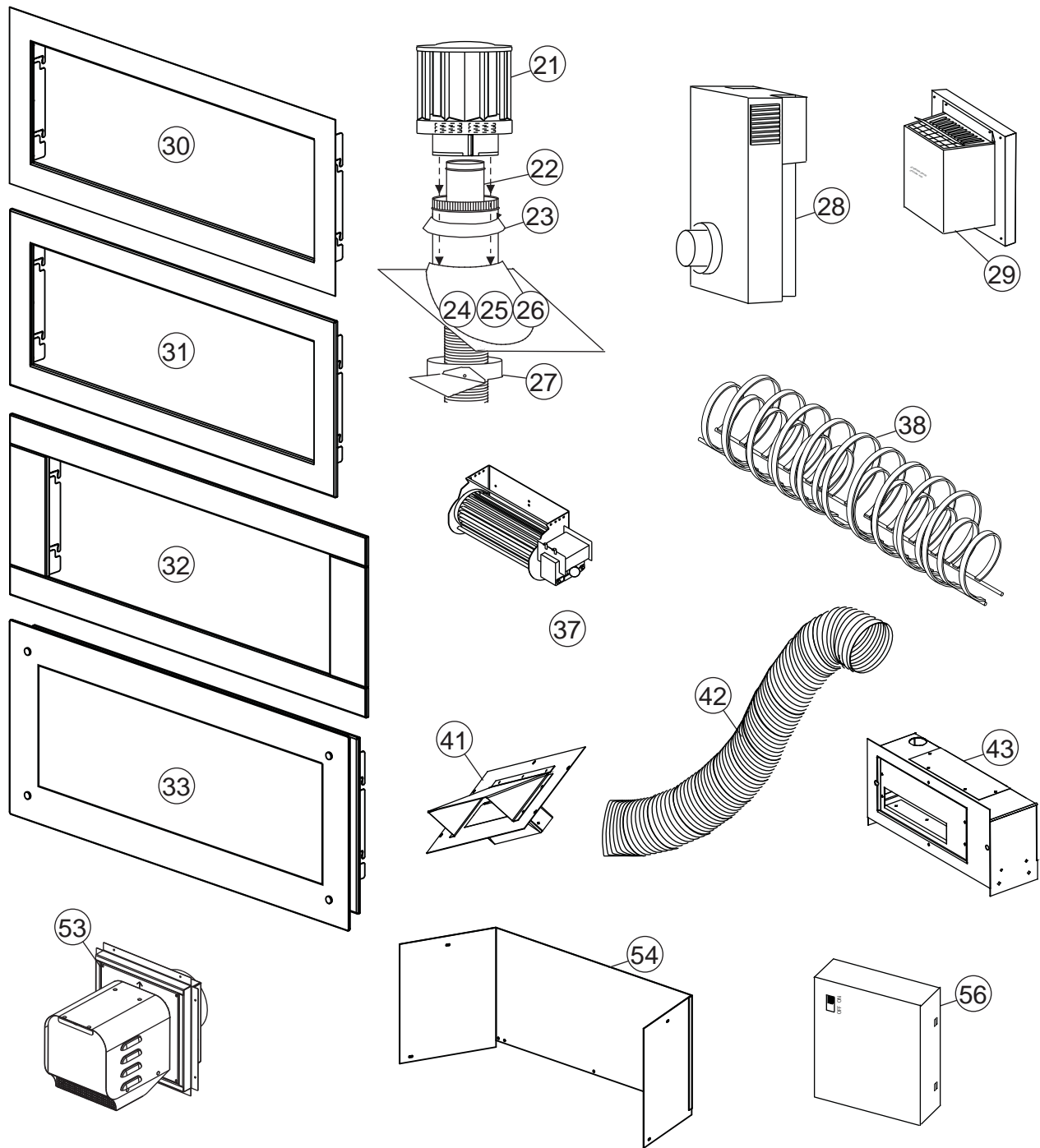
COMPONENTS		
REF	PART NO.	DESCRIPTION
1	W475-0680	CEMENT BOARD
2	W010-2222	BLACK DOOR FRAME
3	W010-2109	ASSY, DOOR LATCH
4	W725-0065	NATURAL GAS VALVE
4	W725-0066	PROPANE GAS VALVE
5	W710-0031	TRAY, MEDIA
6*	W385-0334	NAPOLEON® LOGO
7	W010-1865	PILOT ASSEMBLY NG
8	W240-0011	ELECTRODE
9	W245-0025	SENSOR
10	W455-0069	PILOT INJECTOR - NATURAL GAS
10	W455-0068	PILOT INJECTOR - PROPANE
11	W456-0043	#43 NATURAL GAS ORIFICE
11	W456-0054	#54 PROPANE ORIFICE
12*	W300-0135	CRUSHED GLASS
13	W010-2350	REPLACEMENT GLASS C/W GASKET
14	W190-0029	CONTROL, IPI IGNITION BOARD
15	W290-0152	VALVE TRAIN GASKET
16	W100-0119	BURNER

NOTE: Care must be taken when removing and disposing of any broken glass or damaged components. Be sure to vacuum up any broken glass from inside the appliance before operation.

ROOF TERMINAL KITS		
REF	PART NO.	DESCRIPTION
18*	GD-110	1/12 TO 7/12 PITCH
19*	GD-111	8/12 TO 12/12 PITCH
20*	GD-112	FLAT ROOF
21	W670-0006	4/7 TERMINAL
22	W490-0073	4/7 INNER/OUTER SLEEVE
23	W170-0063	STORM COLLAR
24	W263-0054	ROOF FLASHING 1/12 TO 7/12 PITCH
25	W263-0055	ROOF FLASHING 8/12 TO 12/12 PITCH
26	W263-0056	ROOF FLASHING FLAT ROOF
27	W010-0453	ROOF SUPPORT

TERMINAL KITS		
REF	PART NO.	DESCRIPTION
28	GD-201	PERISCOPE
29	GD-222	WALL TERMINAL
ACCESSORIES		
REF	PART NO.	DESCRIPTION
30	LS45K	4 SIDED SURROUND - BLACK
31	LDS45K	DELUXE 4 SIDED SURROUND - BLACK
31	LDS45N	DELUXE 4 SIDED SURROUND - BROWN
31	LDS45W	DELUXE 4 SIDED SURROUND - WHITE
32	LPS45SS	PREMIUM 4 SIDED SURROUND - STAINLESS STEEL
33	LGF45	LINEAR GLASS FRONT AND SURROUND
34*	W175-0326	CONVERSION KIT NG - LP
35*	MEGK	MEDIA ENHANCEMENT KIT - GLASS EMBERS - BLACK
35*	MEGB	MEDIA ENHANCEMENT KIT - GLASS EMBERS - BLUE
35*	MEGR	MEDIA ENHANCEMENT KIT - GLASS EMBERS - RED
35*	MEGA	MEDIA ENHANCEMENT KIT - GLASS EMBERS - AMBER
36*	W500-0033	VARIABLE SPEED SWITCH MOUNTING PLATE
37	GZ550-1KT	BLOWER KIT
38	LDAC	DESIGNER FINE ART - COIL
39*	MKRY	GREY RIVER ROCKS
40*	MKRM	MULTI-COLOURED RIVER ROCKS
41	GA-72	HOT AIR EXHAUST KIT
42	GA-70	EXTENSION KIT, 5FT
43	GA-566	HOT AIR DISTRIBUTION KIT
44*	MKGK	GLASS EMBERS BLACK
44*	MKGB	GLASS EMBERS BLUE
44*	MKGR	GLASS EMBERS RED
44*	MKGA	GLASS EMBERS AMBER
44*	MKGC	GLASS EMBERS CLEAR
45*	MEKR	MEDIA ENHANCEMENT KIT - RIVER ROCKS
45*	MEKG	MEDIA ENHANCEMENT KIT - GEO SHAPES
46*	B440-KT	BLOWER - WITH VARIABLE SPEED & THERMOSTATIC CONTROL
47*	F40	ON/OFF REMOTE
48*	F40-6	ON/OFF REMOTE - BULK OF 6
49*	W660-0026	TIMER, 120 VOLT
50*	ACS-SIT	ANTI-CONDENSATION SWITCH
51*	PVAL45	POWER VENT ADAPTOR KIT
52*	270	PAINT THURMALOX - BLACK
53	GPV	POWER VENT TERMINAL
54	PRP45	PORCELAIN REFLECTIVE RADIANT PANELS
55*	RP4	RESTRICTOR PLATE
56	W010-2980	BATTERY HOUSING





13.0 TROUBLESHOOTING

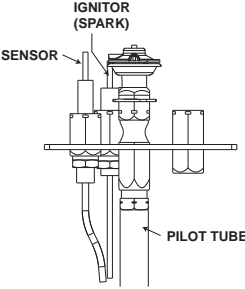
! WARNING

ALWAYS LIGHT THE PILOT WHETHER FOR THE FIRST TIME OR IF THE GAS SUPPLY HAS RAN OUT, WITH THE GLASS DOOR OPEN OR REMOVED.

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.

SYMPTOM	PROBLEM	TEST SOLUTION
Pilot will not light.	Wiring.	- Verify the wire for the sensor and the wire for the ignitor are connected to the correct terminals (not reversed) on the module. NOTE: Sensor has 3/16" (4.8mm) connection and ignitor has 1/8" (3.2mm) connection.
Makes noise with no spark at pilot burner.	Loose connection.	- Verify no loose connections, electrical shorts in the wiring or ground out to any metal object.
	Module.	- Turn the ON/OFF switch to the "OFF" position. Remove the igniter wire from the module. Place the ON/OFF switch to the "ON" position. Hold a grounded wire about 3/16" (4.8mm) away from the ignitor (spark) terminal on the module. If no spark the ignitor terminal module must be replaced. If there is a spark the ignitor terminal is fine. Inspect pilot assembly for a shorted wire or cracked insulator around the electrode.
	Igniter Spark gap is incorrect.	- Spark gap of the ignitor to the pilot should be 1/8" (3.2mm).
	Transformer.	- Verify the transformer is installed and plugged into the module. Check voltage of the transformer under load at the spade connections on the module with the ON/OFF switch in the "ON" position. Acceptable readings of a good transformer are between 6.2 and 7.0 volts A.C.
	Battery backup (if power is off)	- Check batteries.
	A shorted or loose Connection.	- Remove and reinstall the wiring harness that plugs into the module. Remove and verify continuity of each wire in wiring harness.
	Improper switch wiring.	- Troubleshoot the system with the simplest ON/OFF switch.
	Module is not grounded.	- Verify the valve and pilot assemblies are properly grounded to the metal chassis of the appliance or log set.
Pilot sparks but will not light.	Gas supply.	- 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 14" W.C. (34.9mb).
	Out of propane gas.	- Fill the tank.

42.7A

SYMPTOM	PROBLEM	TEST SOLUTION
Carbon is being deposited on glass, logs, rocks, media or combustion chamber surfaces.	Air shutter has become blocked.	- Ensure air shutter opening is free of lint or other obstructions.
	Flame is impinging on the glass, logs, rocks, media or combustion chamber.	- Check that the glass, logs, rocks or media are correctly positioned. - 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 values. - Check that the door gasketing is not broken or missing and that the seal is tight. - Check that both vent liners are free of holes and well sealed at all joints. - Check that minimum rise per foot has been adhered to for any horizontal venting.
Continues to spark and pilot lights, but main burner will not light.	Short or loose connection in sensor rod.	- Verify all connections. Verify the connections from the pilot assembly are tight; also verify these connections are not grounding out to any metal.
	Poor flame rectification or contaminated sensor rod.	- Verify the flame is engulfing the sensor rod. This will increase the flame rectification. Verify correct pilot orifice is installed and inlet gas specifications to manual. (Remember, the flame carries the rectification current, not the gas. If the 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.
	Poor grounding between pilot assembly and gas valve.	- Verify that the wire harness is firmly connected to module. Verify that the ceramic insulator around the sensor rod is not cracked, damaged, or loose. Verify the connection from the sensor rod to the sensor wire.
	Damaged pilot or dirty sensor rod.	- Clean sensor rod with an emery cloth to remove any contamination that may have accumulated on the sensor rod. Verify continuity with multimeter with ohms set at the lowest range.
Pilot lights Stops sparking / pilot remains lit but burner will not turn on.	Wiring / Connection.	- Inspect all wires, ensure good tight connections. Verify that all wiring is installed exactly as specified.
	Wiring harness.	- Inspect the wiring harness, and verify the harness is tightly connected to the module. Verify that all wires are connected in the right order. See "WIRING DIAGRAM" section.
Exhaust fumes smelled in room, headaches.	Appliance is spilling.	- Check all seals. - Check if exhaust is re-entering through an open door or window.

42.7_2

SYMPTOM	PROBLEM	TEST SOLUTION
White / grey film forms.	Sulphur from fuel is being deposited on glass, logs or combustion chamber surfaces.	<ul style="list-style-type: none"> - Clean the glass, see "CARE OF GLASS" section - DO NOT CLEAN GLASS WHEN HOT. - If deposits are not cleaned off regularly, the glass may become permanently marked.
Flames are very aggressive.	Door is ajar.	- Tighten door clamps if applicable.
	Venting action is too great.	- Restrict vent exit with restrictor plate. See "RESTRICTING VENTS" section if applicable.
Main burner flame is a blue, lazy, transparent flame.	Blockage in vent.	- Remove blockage. In really cold conditions, ice buildup may occur on the terminal and should be removed. To minimize this from happening again, it is recommended that the vent lengths that pass through unheated spaces (attics, garages, crawl spaces) be wrapped with an insulated mylar sleeve. Prevent sleeve from sagging. Contact your local authorized dealer for more information.
	Compromised venting.	- Check venting system parameters (seal, length, rise, etc.).
Main burner goes out: pilot goes out.	Vent recirculation.	- Check joint seals and installation.

42.7_3B

14.0 WARRANTY

NAPOLEON® products are manufactured under the strict Standard of the world recognized ISO 9001 : 2008 Quality Assurance Certificate.

NAPOLEON® 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 NAPOLEON®.

NAPOLEON® GAS APPLIANCE PRESIDENT'S LIFETIME LIMITED WARRANTY

The following materials and workmanship in your new NAPOLEON® gas appliance are warranted against defects for as long as you own the appliance. 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 such as blowers, gas valves, thermal switch, switches, wiring, remote controls, ignitor, gasketing, and pilot assembly are covered and NAPOLEON® will provide replacement parts free of charge during the first year of the limited warranty.*

Labour related to warranty repair is covered free of charge during the first year. Repair work, however, requires the prior approval of an authorized company official. Labour costs to the account of NAPOLEON® are based on a predetermined rate schedule and any repair work must be done through an authorized NAPOLEON® dealer.

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

CONDITIONS AND LIMITATIONS

NAPOLEON® 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. NAPOLEON® 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 NAPOLEON® 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.

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 President's Lifetime Limited Warranty, NAPOLEON® 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).

NAPOLEON® 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 President's Lifetime Limited Warranty, NAPOLEON'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 NAPOLEON® with respect to the NAPOLEON® gas appliance and any other warranties expressed or implied with respect to this product, its components or accessories are excluded.

NAPOLEON® neither assumes, nor authorizes any third party to assume, on its behalf, any other liabilities with respect to the sale of this product.

NAPOLEON® 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 NAPOLEON®.

All parts replaced under the President's Limited Lifetime Warranty Policy are subject to a single claim.

During the first 10 years NAPOLEON® will replace or repair the defective parts covered by the lifetime warranty at our discretion free of charge. From 10 years to life, NAPOLEON® will provide replacement parts at 50% of the current retail price.

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.

Warranty labour allowance is only for the replacement of the warranted part. Travel, diagnostic tests, shipping and other related charges are not covered by this warranty.

ALL SPECIFICATIONS AND DESIGNS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE DUE TO ON-GOING PRODUCT IMPROVEMENTS. NAPOLEON® IS A REGISTERED TRADEMARK OF WOLF STEEL LTD.

AS REQUIRED BY THE DEPARTMENT OF ENERGY IN THE UNITED STATES, 10 CFR PART 430, THE WARRANTY IS VOID IF THIS PRODUCT IS USED WITH A THERMOSTAT. THIS APPLIES TO PRODUCT ONLY INSTALLED IN THE UNITED STATES.

Other Napoleon Products



Fireplace Inserts • Charcoal Grills • Gas Fireplaces • Waterfalls • Wood Stoves
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