#### 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.



# INSTALLATION AND OPERATING INSTRUCTIONS

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

# HD4N NATURAL GAS

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

# SAFETY INFORMATION

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 Products: Not for use as a heating appliance.



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 EN

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13.0 WARRANTY

**<u>NOTE:</u>** 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**



HD4STG ILLUSTRATED

ΕN

### 2.2 GENERAL INSTRUCTIONS

# 

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



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

www.nficertified.org

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.

### 2.3 GENERAL INFORMATION

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

|   | NG                            | LP                           |
|---|-------------------------------|------------------------------|
| Altitude (FT)                             | 0-4,500                       | 0-4500                       |
| Max. Input (BTU/HR)                       | 30,000                        | 30,000                       |
| Max. Output Steady State (BTU/HR)         | 23,000                        | 23,000                       |
| Min. Inlet Gas Supply Pressure            | 4.5" (11.2mb)<br>Water Column | 11" (27.4mb)<br>Water Column |
| Max. Inlet Gas Supply Pressure            | 7" (17.4mb)<br>Water Column   | 13" (32.4mb)<br>Water Column |
| Manifold Pressure (Under Flow Conditions) | 3.5" (8.7mb)<br>Water Column  | 10" (24.9mb)<br>Water Column |

When the appliance is installed at elevations above 4,500 ft (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 1,000 ft (304.8m).

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

No external electricity (110 volts or 24 volts) is required for the gas system operation. Expansion / contraction noises during heating up and cooling down cycles are normal and are to be expected.

If utilizing one of Wolf Steel's trim or surround kits, follow the framing instructions and the finishing instructions, for removal of the top extension.

<u>NOTE:</u> 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 / LIGHTING INSTRUCTION LOCATION

# **A**WARNING

#### ALLOW THE APPLIANCE TO COOL BEFORE PERFORMING ANY MAINTENANCE OR CLEANING.

Both the rating plate and lighting instructions are attached to a cable and inserted in a mail slot on the right end of the appliance (access side). It is recommended to remove the door prior to instruction removal. Using your fingers or a tool such as a screw driver or pencil, gently pull the cable toward you. With the cable at the bulb end of the slot, wiggle the rating plate out being careful not to tear the instructions as they pass through the slot.

To replace, fold and slide the instructions and the cable back through the slot, as illustrated below, and re-attach the door (if removed).



# **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.

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.

8

# **3.0 VENTING**

# **A**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 5" (127mm) EXHAUST / 8" (203.2mm) AIR INTAKE VENT PIPE SYSTEM. Refer to the section applicable to your installation.

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

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

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

\_\_\_\_\_ 7.2C

## 3.1 VENTING LENGTHS AND COMPONENTS

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        | 5"/8"     | SUPPLIER       | WEBSITE                       |
|-------------|-----------|----------------|-------------------------------|
| Duravent    | W175-0170 | Wolf Steel     | www.duravent.com              |
| Amerivent   | 5DSC-N2   | American Metal | www.americanmetalproducts.com |
| Direct Temp | 5DT-AA    | Selkirk        | www.selkirkcorp.com           |
| SuperSeal   | 5DDA      | 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.

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

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

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

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

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

Horizontal runs may have a 0" (0mm) rise per foot/meter however for optimum performance it is recommended that all horizontal runs have a minimum 1/4" (6.4mm) rise per foot/meter using flexible venting. For safe and proper operation of the appliance, follow the venting instructions exactly.

A terminal shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings. Local codes or regulations may require different clearances. Do not allow the inside liner to bunch up on horizontal or vertical runs and elbows. Keep it pulled tight. A 1¼" (31.8mm) air gap all around between the inner liner and outer liner is required for safe operation.

— 8.3A

#### 3.2 TYPICAL VENT INSTALLATIONS



When venting, the horizontal run must be kept to a maximum of 20 feet (6.1m). If a 20 foot (6.1m) horizontal run is required, the appliance must have a minimum vertical rise immediately off the appliance of 57" (1447.8mm). When terminating vertically, the vertical rise is a minimum 36"(914.4mm) and a maximum 40 feet (12.2m) above the appliance.

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

\* See "VENTING" section.

11

## 3.3 SPECIAL VENT INSTALLATIONS

#### **3.3.1 PERISCOPE TERMINATION**



## 13

EN

#### 3.4 VENT TERMINAL CLEARANCES





|  |                               | 7                    |   |                       |  |                               |
|--|-------------------------------|----------------------|---|-----------------------|--|-------------------------------|
|  | INSTALL                       | ATIONS               | Q <sub>MIN</sub> =  | 3 feet                | $R_{MAX} = 2 \times Q_{ACTUAL}$                        | $R_{MAX} \le 15 \text{ feet}$ |
|  | CANADA                        | U.S.A.               |   | (0.511)               |  | (4.011)                       |
| Α  | 12" (304.8mm)                 | 12" (304.8mm)        | Clearance above grade, veranda porch  | n, deck or            | balcony.   |                               |
| в  | 12"<br>(304.8mm) <sup>∆</sup> | 9" (228.6mm)∆        | Clearance to windows or doors that op   | en.                   |  |                               |
| с  | 12"<br>(304.8mm)*             | 12"<br>(304.8mm)*    | Clearance to permanently closed winde   | ows.                  |  |                               |
| D  | 18"<br>(457.2mm)**            | 18"<br>(457.2mm)**   | Vertical clearance to ventilated soffits le 2' (0.6m) from the center line of the term  | ocated at<br>minal.   | pove the terminal within a l                           | horizontal distance of        |
| Е  | 12"<br>(304.8mm)**            | 12"<br>(304.8mm)**   | Clearance to unventilated soffit.   |                       |  |                               |
| F  | 0" (0mm)                      | 0" (0mm)             | Clearance to an outside corner wall.  |                       |  |                               |
| 6  | 0" (0mm)***                   | 0" (0mm)***          | Clearance to an inside <b>non</b> -combustible of (chimney, etc.).  | orner wall            | or protruding <b>non</b> -combustib                    | le obstructions               |
| 2" Clearance to an inside combustible corner wall or protrud chase, etc.). |                               |                      | r protruding combustible of   | ostructions (vent     |  |                               |
| н  | 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). |                       |  |                               |
| Ι  | 3' (0.9m)                     | 3' (0.9m)****        | Clearance to a service regulator vent outlet.   |                       |  |                               |
| J  | 12" (304.8mm)                 | 9" (228.6mm)         | Clearance to a non-mechanical air supply inlet to the building or a combustion air inlet to any other appliance.                      |                       |  |                               |
| к  | 6' (1.8m)                     | 3' (0.9m) †          | Clearance to a mechanical air supply in   | nlet                  |  |                               |
| L  | 7' (2.1m) ‡                   | 7' (2.1m) ****       | Clearance above a paved sidewalk or p   | aved driv             | veway located on public pr                             | operty.                       |
| м  | 12"<br>(304.8mm)††            | 12"<br>(304.8mm)**** | Clearance under a veranda, porch or deck.   |                       |  |                               |
| Ν  | 16" (406.4mm)                 | 16" (406.4mm)        | Clearance above the roof.   |                       |  |                               |
| 0  | 2' (0.6m) †*                  | 2' (0.6m) †*         | Clearance from an adjacent wall includ  | ing neigh             | bouring buildings.                                     |                               |
| Р  | 8' (2.4m)                     | 8' (2.4m)            | Roof must be <b>non</b> -combustible without  | opening               | S.   |                               |
| 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. an opening between the terminal and t   | The term<br>he open s | nal shall not be installed c<br>side of the structure. | on any wall that has          |
| S  | 12" (304.8mm)                 | 12" (304.8mm)        | Clearance under a covered balcony   |                       |  |                               |

Δ The terminal shall not be located less than 6 feet (1.8m) 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 (457.2mm) clearance from an inside corner.

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

† 3 feet (0.9m) above if within 10 feet (3.1m) horizontally.

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

the 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.

- 12.1D

# 14

#### 3.5 VENT APPLICATION FLOW CHART



#### 3.6 **DEFINITIONS**

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

- > greater than
- $\geq$  equal to or greater than
- < less than
- $\leq$  equal to or less than
- $\rm H_{\tau}$  total of both horizontal vent lengths (Hr) and offsets (Ho) in feet
- $H_{R}$  combined horizontal vent lengths in feet
- $H_{o}^{-}$  offset factor: .03 (total degrees of offset 135°\*) in feet
- $V_{\tau}^{-}$  combined vertical vent lengths in feet

#### 3.7 ELBOW VENT LENGTH VALUES

|      | <u>FEET</u> | <b>INCHES</b> | <b>MILLIMETERS</b> |
|------|-------------|---------------|--------------------|
| 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 45° and 90° offset has a zero value and is shown in the formula as -45° and - 90° respectively or -135° when combined.

– 15.2A

- 14.2

#### 3.8 HORIZONTAL TERMINATION



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

Formula 1:  $H_{T} \le V_{T}$ Formula 2:  $H_{T} + V_{T} \le 40$  feet (12.2m)

#### Example:



- 16.5A

EN



OFFSET IN FEET (METERS)  $\mathbf{H}_{\tau}$ 

The shaded area within the lines represents acceptable values for  $H_{\tau}$  and  $V_{\tau}$ 

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



- 16.5\_2A

#### 3.9



For vent configurations requiring more than one 45° and one 90° elbow, the following formulas apply: Formula 1:  $H_{T} \leq V_{T}$ Formula 2:  $H_{T}^{+} + V_{T}^{+} \le 40$  feet (12.2m)

Example:

 $V_1 = 5 FT (1.5m)$  $V_{2} = 10 \text{ FT} (3.1 \text{m})$  $V_{T} = V_{1} + V_{2} = 5 \text{ FT} (1.5 \text{m}) + 10 \text{ FT} (3.1 \text{m}) = 15 \text{ FT} (4.6 \text{m})$  $H_1 = 3 FT (0.9m)$  $H_{2} = 2.5 \text{ FT} (0.8 \text{m})$  $\mathbf{H}_{R} = \mathbf{H}_{1} + \mathbf{H}_{2} = 3FT (0.9m) + 2.5FT (0.8m) = 5.5 FT (1.7m)$  $H_0^{"}$  = .03 (one 45° + three 90° elbows - 135°) = .03 (45 + 270 - 135°) = 5.4 FT (1.6m)  $H_T = H_R + H_o = 5.5 \text{ FT} (1.7\text{m}) + 5.4 \text{ FT} (1.\text{m}) = 10.9 \text{ FT} (3.3\text{m})$  $H_T + V_T = 10.9 \text{ FT} (3.3\text{m}) + 15 \text{ FT} (4.6\text{m}) = 25.9 \text{ FT} (7.9\text{m})$ 45° H,  $H_{\tau} \leq V_{\tau}$ Formula 1:  $10.9FT(3.3m) \le 15(4.6m)$  $H_{T} + V_{T} \le 40 \text{ FT} (12.2 \text{m})$ Formula 2:  $25.9FT(7.9m) \leq 40(12.2m)$ Since both formulas are met, this vent configuration is acceptable.

**VERTICAL TERMINATION** 

EN

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90°

90°

18.3A

Η,

90°

ΕN

 $(H_{\tau}) > (V_{\tau})$ Simple venting configurations. See graph to determine the required vertical rise  $V_{\tau}$  for the required horizontal run H<sub>1</sub>. 20 (6.1) REQUIRED VERTICAL RISE IN FEET 10 (3.1) (METERS) V<sub>T</sub> 3 (0.9) 10 15 20 25 30 0 5 (1.5)(3.1)(4.6)(6.1)(7.6)(9.1)HORIZONTAL VENT RUN PLUS OFFSET IN FEET (METERS)H. The shaded area within the lines represents acceptable values for H<sub>T</sub> and V<sub>T</sub>



## 4.0 INSTALLATION

| 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<br>RTV HIGH TEMP SILICONE SEALANT W573-0002 (NOT SUPPLIED) OR BLACK HIGH TEMP MILL PAC<br>W573-0007 (NOT SUPPLIED) WITH THE EXCEPTION OF THE APPLIANCE EXHAUST FLUE COLLAR<br>WHICH MUST BE SEALED USING MILL PAC. |
| IF USING PIPE CLAMPS TO CONNECT VENT COMPONENTS, 3 SCREWS MUST ALSO BE USED TO<br>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<br>SYSTEM MAY ALLOW VENT TO SAG AND SEPARATE. USE VENT RUN SUPPORTS AND CONNECT<br>VENT SECTIONS PER INSTALLATION INSTRUCTIONS.   |
| RISK OF FIRE, DO NOT ALLOW LOOSE MATERIALS OR INSULATION TO TOUCH THE VENT PIPE.<br>REMOVE INSULATION TO ALLOW FOR THE INSTALLATION OF THE ATTIC SHIELD AND TO<br>MAINTAIN CLEARANCES TO COMBUSTIBLES.  |

68.2A

## 4.1 WALL AND CEILING PROTECTION

## 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 foot/meter using flexible venting. For safe and proper operation of the appliance, follow the venting instructions exactly.

For clearance to combustible materials from the vent pipe, see "MINIMUM CLEARANCE TO COMBUSTIBLES" section.

# <u>NOTE:</u> The firestop / vent shield supplied with this appliance must be used when passing through a combustible wall or floor.

## 4.1.1 HORIZONTAL INSTALLATION

# 

#### 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.



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.

## 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" (25.4mm) 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" (25.4mm) 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" (25.4mm) air space around the pipe.



20.7A

20

## 4.2 USING FLEXIBLE VENT COMPONENTS

WARNING

DO NOT ALLOW THE INNER FLEX PIPE TO BUNCH UP ON HORIZONTAL OR VERTICAL RUNS AND ELBOWS. KEEP IT PULLED TIGHT.

#### SPACERS ARE ATTACHED TO THE INNER FLEX PIPE AT PREDETERMINED INTERVALS TO MAINTAIN AN EVEN AIR GAP TO THE OUTER FLEX PIPE. THIS GAP IS REQUIRED FOR SAFE OPERATION. A SPACER IS REQUIRED AT THE START, MIDDLE AND END OF EACH ELBOW TO ENSURE THIS GAP IS MAINTAINED. THESE SPACERS MUST NOT BE REMOVED.

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

All inner flex pipe and outer flex pipe joints may be sealed using high temperature sealant W573-0002 (not supplied) or the high temperature sealant W573-0007 Mill Pac (not supplied). However, the high temperature sealant W573-0007 Mill Pac (not supplied) must be used on the joint connecting the inner flex pipe and the exhaust flue collar. **Use only approved flexible vent pipe kits marked:** 



"Wolf Steel Approved Venting" as identified by the stamp only on the outer flex pipe.

- 22.1



## 4.2.1 HORIZONTAL AIR TERMINAL INSTALLATION

- A. Stretch the inner flex pipe to the required length taking into account the additional length needed for the finished wall surface. Apply a heavy bead of the high temperature sealant W573-0007 Mill Pac (not supplied) to the inner sleeve of the air terminal. Slip the vent pipe a minimum of 2" (50.8mm) over the inner sleeve of the air terminal and secure with 3 #8 screws.
- **B.** Using the outer flex pipe, slide over the outer combustion air sleeve of the air terminal and secure with 3 #8 screws. Seal using high temperature sealant W573-0002 (not supplied).
- C. Insert the vent pipes through the firestop maintaining the required clearance to combustibles. Holding the air terminal (lettering in an upright, readable position), secure to the exterior wall and make weather tight by sealing with caulking (not supplied).
- If more vent pipe needs to be used to reach the fireplace, couple them together as illustrated. The vent system must be supported approximately every 3 feet (0.9m) for both vertical and horizontal runs. Use noncombustible strapping to maintain the minimum clearance to combustibles.

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

E. The vent shield must be installed only when terminating horizontally. Remove the two screws nearest the vent collars on the top of the appliance. Align the vent heat shield (supplied) and secure. Adjust the vent heat shield to touch the firestop spacer, as shown below.





CAULKING

## 4.2.2 VERTICAL AIR TERMINAL INSTALLATION

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- and flat washers. Seal the joint and screw holes using the high temperature sealant W573-0007 (not supplied).
- Install the outer flex pipe to the appliance. Attach and seal the joints Β. using the high temperature sealant W573-0002 (not supplied). TEMPERATURE



## 4.3 GAS INSTALLATION

# **A**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" gas supply. Without the connector it is designed to accept a 3/8" 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.

## 4.4 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

## 5.0 FRAMING

| <b>A</b> WARNING   |
|--|
| RISK OF FIRE!  |
| IN ORDER TO AVOID THE POSSIBILITY OF EXPOSED INSULATION OR VAPOUR BARRIER COMING<br>IN CONTACT WITH THE APPLIANCE BODY, IT IS RECOMMENDED THAT THE WALLS OF THE<br>APPLIANCE ENCLOSURE BE "FINISHED" (IE: DRYWALL / SHEETROCK), AS YOU WOULD FINISH<br>ANY OTHER OUTSIDE WALL OF A HOME. THIS WILL ENSURE THAT CLEARANCE TO<br>COMBUSTIBLES IS MAINTAINED WITHIN THE CAVITY.   |
| DO NOT NOTCH THE FRAMING AROUND THE APPLIANCE STAND-OFFS. FAILURE TO MAINTAIN<br>AIR SPACE CLEARANCE MAY CAUSE OVER HEATING AND FIRE. PREVENT CONTACT WITH<br>SAGGING OR LOOSE INSULATION OR FRAMING AND OTHER COMBUSTIBLE MATERIALS. BLOCK<br>OPENING INTO THE CHASE TO PREVENT ENTRY OF BLOWN-IN INSULATION. MAKE SURE<br>INSULATION AND OTHER MATERIALS ARE SECURED.  |
| WHEN CONSTRUCTING THE ENCLOSURE ALLOW FOR FINISHING MATERIAL THICKNESS TO<br>MAINTAIN CLEARANCES. FRAMING OR FINISHING MATERIAL CLOSER THAN THE MINIMUMS<br>LISTED MUST BE CONSTRUCTED ENTIRELY OF NON-COMBUSTIBLE MATERIALS. MATERIALS<br>CONSISTING ENTIRELY OF STEEL, IRON, BRICK, TILE, CONCRETE, SLATE, GLASS OR PLASTERS,<br>OR ANY COMBINATION THEREOF ARE SUITABLE. MATERIALS THAT ARE REPORTED AS PASSING<br>ASTM E 136, STANDARD TEST METHOD FOR BEHAVIOUR OF MATERIALS IN A VERTICAL TUBE<br>FURNACE AT 1382° F (750°C) AND UL763 SHALL BE CONSIDERED NON-COMBUSTIBLE<br>MATERIALS. |
| MINIMUM CLEARANCE TO COMBUSTIBLES MUST BE MAINTAINED OR A SERIOUS FIRE HAZARD<br>COULD RESULT.   |
| THE APPLIANCE REQUIRES A MINIMUM ENCLOSURE HEIGHT. MEASURE FROM THE APPLIANCE BASE.  |
| IF STEEL STUD FRAMING KITS WITH CEMENT BOARD ARE PROVIDED, OR SPECIFIED IN THE INSTALLATION INSTRUCTIONS. THEY MUST BE INSTALLED.  |
| FINISHING MUST BE DONE USING A NON-COMBUSTIBLE MATERIAL PLACED FLUSH WITH THE<br>FRONT FACE OF THE UNIT AND EXTENDING FROM THE TOP OF THE UNIT SUCH AS<br>CEMENT BOARD, CERAMIC TILE, MARBLE, ETC. DO <u>NOT</u> USE WOOD OR DRYWALL.<br>ANY FIRE RATED DRYWALL IS NOT ACCEPTABLE.   |
| 71 1B  |

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

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

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

Non- Combustible Appliance finishing:

- Front 2" (50.8mm) to sides of appliance opening
  - 15 3/4" (400.1mm) above appliance opening

**Combustible Appliance finishing:** 

- 46" (1168.4mm) from bottom of appliance to enclosure top
  - 3" (76.2mm) to top of vent pipe\*
  - 2" (50.8mm) to sides and bottom of vent pipe\*

Non-combustible finishing material (ie. cement board, brick, stone, tile) must be used to finish around the front of the appliance.

\*HORIZONTAL VENT SECTIONS: A minimum clearance of 3" (76.2mm) to the top and 2" (50.8mm) 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 3" (76.2mm) at the top of the vent pipe, see "MINIMUM CLEARANCE TO COMBUSTIBLE ENCLOSURES" section. Use firestop assembly W010-2985.

\*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 W010-2985.

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

This appliance is supplied with four stand-offs. For convenience the stand-offs have been shipped flat and located on the top of the appliance. Before framing ensure the stand-offs are bent up and screwed into place ensuring a height of 10" (254mm). Stand-offs are not used for structural support



#### 5.1 FRAMING

#### 5.1.1 SEE-THRU FRAMING



<u>NOTE</u>: All framing dimensions are based on the finishing material supports position. Framing may change depending on the finishing material thickness. (See "FINISHING SUPPORT ADJUSTMENT" section).

#### 5.2 MINIMUM CLEARANCE TO COMBUSTIBLE ENCLOSURES



**IMPORTANT:** The HD4 requires a minimum inside enclosure height of 46" (1168.4mm), measured from the bottom of the appliance. For temperature requirements, this area must be left unobstructed.



\* Within the appliance enclosure a minimum 3" (76.2mm) clearance between the top of the vent pipe and combustible materials is required. All other clearances within the enclosure, including where the vent pipe exits the enclosure are subject to 2" (50.8mm)to the sides and bottom and 3" (76.2mm) to the top for horizontal and 1" (25.4mm) for vertical.

\*\* See venting section.

#### NOTE: THIS APPLIANCE IS NOT LOAD BEARING.

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

## 5.3 INSTALLING CEMENT BOARD

**WARNING** 

#### A NON-COMBUSTIBLE FINISHING MATERIAL BORDER, SUCH AS BRICK, MARBLE, GRANITE, ETC. IS REQUIRED. FINISHING WITH JUST CEMENT BOARD TO THE SIDES AND TOP OF THE APPLIANCE IS NOT ALLOWED.

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

If only a painted surface is desired, a full single sheet of Wonder Board cement board must be used above the door opening. We recommend the cement board to be cut and seamed as per illustrated below, when finishing the entire surface with a non-combustible decorative finishing material.



#### Joint Compound where required

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

#### Setting tiles and grouting

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

If grout is used between the tiles, a polymer-based grout, such as Mapei Ultracolour plus, is recommended.

#### **Primer/Paint**

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

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## 5.3.1 FINISHING SUPPORT ADJUSTMENT

Depending on the finishing material we have allowed from 0" (0mm) to 3/4" (19mm) of adjustment after the 1/2" (12.7mm) cement board has been installed. Loosen the 8 screws on each finishing support. Adjust the finishing support to the desired position.

<u>NOTE</u>: Peninsula models have one end support that can also be adjusted by loosening the two screws.





SIDE VIEW

## 5.4 NON-COMBUSTIBLE FACING MATERIAL

**WARNING:** Non-combustible facing material must not project more than 1" (24.5mm) from the face of the door (all four sides). If greater projections are desired, increase the clearance to the sides and top by 2" (50.8mm) for every additional 1" (25.4mm) of projection. If using an optional surround, then 2" (50.8mm) clearance from the surround is required before projecting out a maximum 2" (50.8mm). If greater projections are desired, increase the clearance to the sides and top by 2" (50.8mm) clearance from the surround is required before projecting out a maximum 2" (50.8mm). If greater projections are desired, increase the clearance from the surround by 2" (50.8mm) for every 1" (25.4mm) of additional projection.



#### 5.5 ALCOVE ENCLOSURE



**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

## 5.6 MINIMUM MANTEL CLEARANCES

ΕN

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        |  |  |
| D 8" (203.2mm)         |               | 2" (50.8mm)  |  |  |
| <b>C</b> 10" (254mm)   |               | 4" (101.6mm) |  |  |
| <b>B</b> 12" (304.8mm) |               | 6" (152.4mm) |  |  |
| Α                      | 14" (355.6mm) | 8" (203.2mm) |  |  |



| Ref | Mantel Height | Ref                   | Mantel Depth |
|-----|---------------|-----------------------|--------------|
| Α   | 16" (406.4mm) | 6" (406.4mm) <b>G</b> |              |
| В   | 14" (355.6mm) | н                     | 2" (50.8mm)  |
| С   | 12" (304.8mm) | I                     | 4" (101.6mm) |
| D   | 10" (254mm)   | J                     | 6" (152.4mm) |
| E   | 8" (203.2mm)  | к                     | 8" (203.2mm) |
| F   | 6" (152.4mm)  | L                     | 10" (254mm)  |



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# 6.0 FINISHING

# **WARNING**

**RISK OF FIRE!** 

NEVER OBSTRUCT THE FRONT OPENING OF THE APPLIANCE.

THE FRONT OF THE APPLIANCE MUST BE FINISHED WITH ANY NON-COMBUSTIBLE MATERIALS SUCH AS BRICK, MARBLE, GRANITE, ETC., PROVIDED THAT THESE MATERIALS DO NOT GO BELOW THE SPECIFIED DIMENSION AS ILLUSTRATED.

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

FACING AND/OR FINISHING MATERIAL MUST NEVER OVERHANG INTO THE APPLIANCE OPENING.

THE GLASS DOOR ASSEMBLY IS DESIGNED TO PIVOT FORWARD WHEN RELIEVING EXCESS PRESSURE THAT MIGHT OCCUR. FINISHING OR OTHER MATERIALS MUST NOT BE LOCATED IN THE OPENING SURROUNDING THE DOOR AS THIS WILL INTERFERE WITH THE DOORS ABILITY TO RELIEVE THE PRESSURE.

#### 6.1 DOOR REMOVAL / INSTALLATION



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.

- A. There are 2 latches on the top of each door.
- **B.** Using the tool provided, pull the latch forward and upwards, out of the slot in the door, as shown. Ensure to keep one hand on the door at all times, to prevent it from falling on the floor.
- **C.** When both latches have been released tilt the door forward and out of the bottom door retainer.
- **D.** Reverse this process to install the door.



- 72.6

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

THE LATCHES ARE SHOWN IN THE ILLUSTRATION BELOW.



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## 6.2 END DOOR REMOVAL / INSTALLATION

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



## 6.3 HEARTH PAD INSTALLATION (HD4ST AND HD4P ONLY)

<u>NOTE</u>: The individual hearth pads can be easily identified by the numbers cast on the underside of each pad.

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

- A. Remove the main doors from the appliance, refer to the "DOOR REMOVAL/INSTALLATION" section.
- **B.** Place the #3 hearth pad on the pilot side of the burner, as shown in Figure B.
- **C.** Place the #1A hearth pad on the right side and the #1 hearth pad on the left side of appliance, as shown in Figure C.
- **D.** Place the two #2 hearth pads on the right and left sides, as shown in Figure D.
- **E.** Place the #4 hearth pad on the left end, as shown in Figure E.



## 6.4 LOG PLACEMENT (HD4ST AND HD4P ONLY)

# **WARNING**

#### FAILURE TO POSITION THE LOGS IN ACCORDANCE WITH THESE DIAGRAMS OR FAILURE TO USE ONLY LOGS SPECIFICALLY APPROVED WITH THIS APPLIANCE MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

LOGS MUST BE PLACED IN THEIR EXACT LOCATION IN THE APPLIANCE. DO NOT MODIFY THE PROPER LOG POSITIONS, SINCE APPLIANCE MAY NOT FUNCTION PROPERLY AND DELAYED IGNITION MAY OCCUR.

#### THE LOGS ARE FRAGILE AND SHOULD BE HANDLED WITH CARE.

- 76.1A

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

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

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

- 1. Remove the doors, refer to the "DOOR REMOVAL / INSTALLATION section for removal instructions.
- 2. Place the #1 log onto the one pin located on the corner of the burner, on the left side, and the second pin located on the left end hearth pad. Place one pin into the log, as shown in Figure 1.
- Place the #2 log onto the pin located in the #1 log, it should rest in the middle of the right side hearth pads as shown in Figure 2. Place one pin into the middle of the #2 log, as shown in Figure 2.
- 4. Place the #3 log onto the pin located in the #2 log and let it rest on the right side hearth pads, as shown in Figure 3 and in the right side view below. Place one pin into the #2 log, as shown in Figure 3.
- 5. Place the #4 log onto the pin located in log #2 and let it rest on the right end hearth pads, as shown in Figure 4 and in the left side view. Place one pin into the right side hearth pad, as shown in Figure 4.
- Place the #5 log onto the pin located in the right side hearth pad and let it rest on the burner, as shown in Figure 5. <u>NOTE:</u> Ensure log #5 does not cover any burner ports.
- Place the #6 log onto the pin located on the corner of the burner, on the left side, then place one pin into middle of the log, as shown in Figure 6. <u>NOTE:</u> Ensure log #6 does not cover any burner ports.















- 8. Place the #7 log onto the pin located in log #6 and onto the pin in the #5 log, as shown in Figure 7.
- 9. Place the #8 log on the hearth pad and let it rest against the notch in the side of the #7 log, as shown in Figure 8. **HINT: The best view of the #8 log is shown in the left side view below.**
- 10. Place the #9 log onto the pin located in the #6 log and let it rest on the right side, corner hearth pad and then place one pin into the #6 log, as shown in Figure 9.
- 11. Place the #10 log onto the pin located in the #7 log and let is rest in the middle of the left side hearth pads, as shown in Figure 10. Place one pin into the #1 log, as shown in Figure 10.
- 12. Place the #11 log onto the pin located in the #1 log and let is rest on the left end hearth pads, as shown in Figure 11.
- 13. Place the #12 charcoal lump onto the two pins located in the center of the burner, as shown in Figure 12.
- 14. Tear the ember material into small thin pieces and spread evenly on top of the burner. Ember material will only glow when exposed to direct flame.
- 15. Sprinkle the charcoal embers around the hearth then place the charcoal lumps on top of the charcoal embers, as shown below.

# <u>NOTE:</u> Do not cover the pilot or burner ports with media or embers. Do not overfill.





#### 6.5 GLASS MEDIA INSTALLATION

| CLEAN THE GLASS MEDIA PRIOR TO INSTALLATION. BEFORE APPLYING THE CLEANED GLASS, ENSURE<br>THAT IT IS DRY.  |
|--|
| DO NOT CHANGE OR SUBSTITUTE THE GLASS MEDIA MATERIAL PROVIDED WITH THIS APPLIANCE. IF<br>REPLACING, USE ONLY THE REPLACEMENT GLASS MEDIA AVAILABLE FROM YOUR AUTHORIZED<br>DEALER / DISTRIBUTOR. |
| DO NOT PLACE ANY MEDIA (GLASS OR VERMICULITE) ON THE PILOT MESH. THIS WILL INTERFERE WITH<br>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.

<u>NOTE:</u> Glass media may cover the entire media tray. Care should be taken around the pilot mesh. We recommend that no media should be placed directly on the pilot mesh.

## (HD4STG AND HD4PG ONLY)



## (HD4STC AND HD4C ONLY)



## 6.6 OPTIONAL ROCK PLACEMENT (HD4STC AND HD4C ONLY)

Place the refractory driftwood rocks onto the media tray, around, but not on the burner ports or pilot mesh.



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## 6.7 LOGO PLACEMENT



## **7.0 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.

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#### 7.1 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.

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## 7.2 RECEPTACLE WIRING DIAGRAM



**<u>NOTE:</u>** Ensure that the transformer is plugged into the receptacle.

## 7.3 BATTERY BACK-UP INSTALLATION

- A. In case of a power outage locate your battery housing (supplied in the manual baggie).
- **B.** Install the 4 "AA" batteries, if not already installed.
- **C.** Connect the battery housing to the battery connector located in the bottom corner of the appliance (refer to the illustration below).

NOTE: It is recommended that you change the battery at the start of the heating season.



## 7.4 WIRING DIAGRAM



ΕN

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# **8.0 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.

## 8.1 OPERATING INSTRUCTIONS - FOR YOUR SAFETY READ BEFORE OPERATING



## 8.2 LIGHTING INSTRUCTIONS



## 8.3 ANTI CONDENSATION SWITCH

This appliance has the ability to switch from an electronic intermittent pilot ignition (IPI) to a standing pilot (ACS) for cold climates. The heat generated by the standing pilot will improve the start up operation on colder climate days. Therefore we recommend switching to the standing pilot on those colder days. The anti condensation switch (standing pilot) is located in the control panel. Using your finger, flip the switch up for standing pilot, or down for intermittent pilot ignition.



ΕN

# 9.0 ADJUSTMENT

#### 9.1 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) counterclockwise 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 (9.5mm - 12.7mm) SCREWS CLOCKWISE FIRMLY TO RESEAL. DO NOT OVER TORQUE.

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

# **PILOT SCREW**

3/8" - 1/2"

## PILOT BURNER ELECTRODE FLAME MUST ENVELOP UPPER 3/8" (9.5mm) TO 1/2" (12.7mm) OF FLAME SENSOR

FLAME SENSOR

**VENTURI ADJUSTMENT** 

9.2

Leak test with a soap and water solution.

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!**

| VENTURI ADJUSTMENT CHART |               |               |               |  |  |
|--------------------------|---------------|---------------|---------------|--|--|
| FUEL HD4                 |               | HD4G          | HD4C          |  |  |
| NG                       | 1/16" (1.6mm) | 1/16" (1.6mm) | 1/16" (1.6mm) |  |  |
| LP                       | 5/16" (7.9mm) | 5/16" (7.9mm) | 5/16" (7.9mm) |  |  |



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#### 9.3 **FLAME CHARACTERISTICS**

ΕN

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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. FLAME SENSOR 3/8" - 1/2" (9.5mm - 12.7mm) PILOT BURNER ELECTRODE n r FLAME MUST ENVELOP UPPER 3/8" (9.5mm) TO 1/2" (12.7mm) OF FLAME SENSOR - 54.1B LOG BURNER **GLASS BURNER ROCK/GLASS BOWL** 

# **10.0 MAINTENANCE**

# 

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.

**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.

#### **10.1 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.

- 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. <u>NOTE</u>: The flame sensor may require to be cleaned with an abrasive, such as emery cloth, to remove any oxides.
- 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.

- 37.1

- 40.1A

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## 10.2 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.

- Place the door frame face down careful not to scratch Α. the paint.
- Center the gasketed glass inside the door frame with the Β. thick side of the gasket facing up.
- С. 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.



#### 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

WARNING HOT GLASS WILL CAUSE BURNS. DO NOT TOUCH GLASS UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

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.

- 5.4



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#### **10.4 BURNER REMOVAL**

#### 10.4.1 LOG BURNER REMOVAL (HD4ST AND HD4P ONLY)

- A. Remove the door(s) refer to the "DOOR REMOVAL/INSTALLATION" section for instructions.
- B. Carefully remove the logs from the appliance.
- **C.** Remove all of the hearth pads, from the appliance. Refer to the "HEARTH PAD INSTALLATION/ REMOVAL" section for instructions.
- **D.** Remove the 4 screws securing the burner in place. Then slide the burner off the the orifice and remove from the appliance.
- E. To reinstall the burner reverse these steps. <u>NOTE</u>: When reinstalling the burner ensure that the venturi rests on the orifice.



#### 10.4.2 GLASS BURNER REMOVAL (HD4STG AND HD4PG ONLY)

- A. Remove the door(s) refer to the "DOOR REMOVAL/INSTALLATION" section for instructions.
- **B.** Vacuum the glass media out of the appliance. Ensure you insert a clean bag into your vacuum cleaner.
- **C.** Remove the 12 screws securing the media tray, then remove the media tray from the appliance, as shown below.
- **D.** Remove the 4 screws securing the burner, as shown below. Then slide the burner off of the orifice and remove from the appliance.
- E. To reinstall the burner reverse these steps. <u>NOTE</u>: When reinstalling the burner ensure that the venturi rests on the orifice.



## 10.4.3 GLASS AND ROCK BURNER REMOVAL (HD4STC AND HD4PC ONLY)

- A. Remove the door(s) refer to the "DOOR REMOVAL/INSTALLATION" section for instructions.
- **B.** Carefully remove the glass or rocks from the appliance.
- **C.** To remove the media tray from the appliance remove the 4 screws, as shown below. Then lift the media tray and the media shelf up and out of the appliance.
- **D.** Remove the 4 screws securing the burner in place, as shown below. Then slide the burner off the the orifice and remove from the appliance.
- E. To reinstall the burner reverse these steps. <u>NOTE</u>: When reinstalling the burner ensure that the venturi rests on the orifice.



## **10.5 VALVE TRAIN REPLACEMENT**

- A. Remove the glass door. See "DOOR REMOVAL AND INSTALLATION" section. Remove the burners, see "BURNER REMOVAL" section.
- B. Remove the 12 screws holding the valve train in place.
   <u>NOTE:</u> A new gasket may be required when reinstalling the valve train assembly. Contact your local authorized dealer/distributor.
- **C.** Carefully lift the valve train assembly out far enough to access the manual shut off valve and turn to the off position. Disconnect the flex connector from the valve. You may now lift the valve train out of the appliance.



## **10.6 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.

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## 11.0 REPLACEMENTS



FAILURE TO POSITION THE PARTS IN ACCORDANCE WITH THIS MANUAL OR FAILURE TO USE ONLY PARTS SPECIFICALLY APPROVED WITH THIS APPLIANCE MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY.

\*\* THIS IS A FAST ACTING THERMOCOUPLE. IT IS AN INTEGRAL SAFETY COMPONENT. REPLACE ONLY WITH A FAST ACTING THERMOCOUPLE SUPPLIED BY WOLF STEEL LTD.

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. \_\_\_\_\_\_ 41.2

| COMMON COMPONENTS |           |                            |  |  |  |
|-------------------|-----------|----------------------------|--|--|--|
| REF NO.           | PART NO.  | DESCRIPTION                |  |  |  |
| 1                 | W725-0065 | NATURAL GAS VALVE          |  |  |  |
| 1                 | W725-0066 | PROPANE GAS VALVE          |  |  |  |
| 2*                | W385-0334 | NAPOLEON LOGO              |  |  |  |
| 3                 | W010-3024 | PILOT ASSEMBLY - NG        |  |  |  |
| 4                 | W240-0014 | ELECTRODE                  |  |  |  |
| 5                 | W245-0040 | SENSOR                     |  |  |  |
| 6                 | W456-0037 | BURNER ORIFICE #37 - NG    |  |  |  |
| 6                 | W456-0052 | BURNER ORIFICE #52 - LP    |  |  |  |
| 7*                | W190-0029 | CONTROL BOARD (IPI)        |  |  |  |
| 8*                | W290-0223 | VALVE TRAIN GASKET         |  |  |  |
| 9*                | W010-2829 | DOOR LATCH ASSEMBLY        |  |  |  |
| 10*               | W010-2812 | MAIN DOOR ASSEMBLY         |  |  |  |
| 11                | W010-2885 | LATCH KEY                  |  |  |  |
| 12                | W010-2898 | COMPLETE END DOOR ASSEMBLY |  |  |  |
| 13*               | W010-1985 | WIRE HARNESS               |  |  |  |

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| COMPONENTS |            |                    |                                  |   |  |  |  |
|------------|------------|--------------------|----------------------------------|---|--|--|--|
| REF NO.    | HD4ST/HD4P | HD4PB/HD4STB       | HD4STG/HD4PG                     | DESCRIPTION                                   |  |  |  |
| 14*        |            |                    | W300-0135                        | CRUSHED GLASS [6LBS (2.7KG) / 2 BAGS REQUIRED |  |  |  |
| 15         |            |                    | W100-0152                        | GLASS BURNER                                  |  |  |  |
| 16         |            |                    | W710-0059                        | GLASS MEDIA TRAY                              |  |  |  |
| 17*        |            | W590-0015          |                                  | MEDIA, BOWL SHELF                             |  |  |  |
| 18*        |            | W010-2998          |                                  | MEDIA, BOWL ASSEMBLY                          |  |  |  |
| 19         | W100-0153  |                    |                                  | BURNER LOGS                                   |  |  |  |
| 20         | W135-0527  |                    |                                  | LOG #1  |  |  |  |
| 21         | W135-0528  |                    |                                  | LOG #2  |  |  |  |
| 22         | W135-0529  |                    |                                  | LOG #3  |  |  |  |
| 23         | W135-0530  |                    |                                  | LOG #4  |  |  |  |
| 24         | W135-0531  |                    |                                  | LOG #5  |  |  |  |
| 25         | W135-0532  |                    |                                  | LOG #6  |  |  |  |
| 26         | W135-0533  |                    |                                  | LOG #7  |  |  |  |
| 27         | W135-0534  |                    |                                  | LOG #8  |  |  |  |
| 28         | W135-0535  |                    |                                  | LOG #9  |  |  |  |
| 29         | W135-0536  |                    |                                  | LOG #10                                       |  |  |  |
| 30         | W135-0537  |                    |                                  | LOG #11                                       |  |  |  |
| 31         | GL 686     |                    |                                  | LOG SET                                       |  |  |  |
| 32         | W135-0540  |                    |                                  | CHARCOAL CHUNK #12                            |  |  |  |
| 33*        | W333-0020  |                    |                                  | HEARTH PAD, NOTCHED                           |  |  |  |
| 34*        | W333-0021  |                    |                                  | HEARTH PAD, SIDES                             |  |  |  |
| 35*        | W333-0022  |                    |                                  | HEARTH PAD, END                               |  |  |  |
|            |            | ROOF <sup>·</sup>  | TERMINAL KI                      | TS  |  |  |  |
| REF NO.    | PART NO.   | DESCRIPTION        |                                  |   |  |  |  |
| 36*        | GD410      | 1/2 TO 7/12 PITCH  |                                  |   |  |  |  |
| 37*        | GD411      | 8/12 TO 12/12 PITC | Н                                |   |  |  |  |
| 38*        | GD412      | FLAT ROOF          |                                  |   |  |  |  |
| 39         | W490-0074  | 5/8" (15.9mm) INNE | 5/8" (15.9mm) INNER/OUTER SLEEVE |   |  |  |  |
| 40         | W670-0007  | 5/8" (15.9mm) TERM | 5/8" (15.9mm) TERMINAL           |   |  |  |  |
| 41         | W170-0086  | STORM COLLAR       | STORM COLLAR                     |   |  |  |  |
| 42         | W263-0066  | ROOF FLASHING 1    | ROOF FLASHING 1/12 TO 7/12 PITCH |   |  |  |  |

ROOF FLASHING 8/12 TO 12/12 PITCH W263-0055 W010-0453 ROOF SUPPORT **TERMINAL KITS** PART NO. DESCRIPTION GD401 PERISCOPE GD422R-1 ROUND WALL TERMINAL VENT KITS PART NO. DESCRIPTION

ROOF FLASHING 1/12 TO 7/12 PITCH ROOF FLASHING FLAT ROOF

5/8" (15.9mm) VENT KIT (5 FT) (1.5M)

5/8" (15.9mm) VENT KIT (10 FT) (3.1M)

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46

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48\*

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REF NO.

REF NO.

W263-0065

GD 420

GD 430

| ACCESSORIES |           |   |  |  |  |
|-------------|-----------|---|--|--|--|
| REF NO.     | PART NO.  | DESCRIPTION                                     |  |  |  |
| 50*         | W573-0007 | 10.3 OZ TUBE HIGH TEMPERATURE SEALANT MIL PAC   |  |  |  |
| 51*         | 270       | BLACK PAINT (13 OZ)                             |  |  |  |
| 52*         | W175-0166 | 5" (127mm) COUPLER                              |  |  |  |
| 53*         | W175-0002 | 8" (203.2mm) COUPLER                            |  |  |  |
| 54*         | GD 501    | HEAT GUARD                                      |  |  |  |
| 55*         | W175-0363 | CONVERSION KIT - NG TO LP                       |  |  |  |
| 56*         | W175-0362 | CONVERSION KIT - LP TO NG                       |  |  |  |
| 57*         | GD 850 KT | DECORATIVE BRICK PANELS - NEW PORT - SEE-THRU   |  |  |  |
| 58*         | GD 851 KT | DECORATIVE BRICK PANELS - NEW PORT - PENINSULA  |  |  |  |
| 59*         | PRP4ST    | PORCELAIN REFLECTIVE RADIANT PANELS - SEE-THRU  |  |  |  |
| 60*         | PRP4P     | PORCELAIN REFLECTIVE RADIANT PANELS - PENINSULA |  |  |  |
| 61*         | MEGK      | MEDIA ENHANCEMENT KIT - GLASS EMBERS - BLACK    |  |  |  |
| 62*         | MEGB      | MEDIA ENHANCEMENT KIT - GLASS EMBERS - BLUE     |  |  |  |
| 63*         | MEGR      | MEDIA ENHANCEMENT KIT - GLASS EMBERS - RED      |  |  |  |
| 64*         | MEGA      | MEDIA ENHANCEMENT KIT - GLASS EMBERS - AMBER    |  |  |  |
| 65*         | GD826N    | MODULATING REMOTE KIT - NG                      |  |  |  |
| 66*         | GD826P    | MODULATING REMOTE KIT - LP                      |  |  |  |
| 67*         | MEKR      | MEDIA ENHANCEMENT KIT - RIVER ROCK              |  |  |  |
| 68*         | GPV       | POWER VENT TERMINAL                             |  |  |  |
| 69*         | RP5       | RESTRICTOR PLATE                                |  |  |  |
| 70*         | PVA 40    | POWER VENT ADAPTER                              |  |  |  |



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