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.

---

**WARNING**

FIRE OR EXPLOSION HAZARD
Failure to follow safety warnings exactly could result in serious injury, death or property damage.

— Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
— WHAT TO DO IF YOU SMELL GAS
  • Do not try to light any appliance.
  • Do not touch any electrical switch; do not use any phone in your building.
  • Leave the building immediately.
  • Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
  • If you cannot reach your gas supplier, call the fire department.
— Installation and service must be performed by a qualified installer, service agency or the gas supplier.

---

**WARNING**

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

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

**NOTE:** Barrier required, may be sold separately.

---

**DIRECT VENT ZERO CLEARANCE GAS FIREPLACE HEATER MODEL SERIES:**
MULTIFUNCTION REMOTE (MF)
DVLL36BP92(N,P)-1
DVLL48BP92(N,P)-2
UL FILE NO. MH30033

---

**WARNING**

If not installed, operated and maintained in accordance with the manufacturer’s instructions, this product could expose you to substances in fuel or from fuel combustion which can cause death or serious illness.

This appliance may be installed in an aftermarket, permanently located, manufactured home (USA only) or mobile home, where not prohibited by local codes. This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

---

**INSTALLER:**
Leave this manual with the appliance.

**CONSUMER:**
Retain this manual for future reference.

---

**DIRECT VENT ZERO CLEARANCE GAS FIREPLACE HEATER MODEL SERIES:**
MULTIFUNCTION REMOTE (MF)
DVLL36BP92(N,P)-1
DVLL48BP92(N,P)-2
UL FILE NO. MH30033
BEFORE YOU START

SAMPLE WARNINGS AND DEFINITIONS:

⚠️ DANGER
Indicates a hazardous situation which, if not avoided, will result in death or serious injury.

⚠️ WARNING
Indicates a hazardous situation which, if not avoided, could result in death or serious injury.

⚠️ CAUTION
Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE: Addresses practices not related to personal injury.

1. Read the safety information on pages 61 - 62.
2. If located in the Commonwealth of Massachusetts, please note the special requirements on page 63.
3. Are you going to install a blower into the fireplace? See pages 8 - 10.
4. Where are you going to install the fireplace? See page 13.
5. Frame the opening. See page 20.
6. Remove non-combustible boards from pallet and set aside.
7. Verify that the fireplace and components have not been damaged during shipping.
8. Set fireplace in a location near to its final installation location.

INSTALLATION CONSIDERATIONS - FIREPLACE

INSTALLATION GUIDELINES

When planning a fireplace installation, it’s necessary to determine:

- Gas supply piping (right side entrance).
- Electrical supply requirements (120V, 60Hz, 1 Amp) (right side entrance)
- These models do not include the Accent Light assembly. However, the Accent Light Kit may be purchased and installed during or after fireplace installation. Instructions are supplied with the Accent Light Kit.
- Proper opening size of framing required for installation of the fireplace. The framing of the fireplace will determine how the fireplace finishing materials will be applied. Refer to the installation information on pages 20 to 23.
- The blower kit is easier to install at the time of fireplace installations. See blower installation section on pages 8 to 10.

In planning the installation for the fireplace, determine where the fireplace is to be installed and whether optional accessories are desired. Gas supply piping should also be planned at this time.

The fireplace can be mounted on any of these surfaces:

1. A flat hard combustible or non-combustible surface.
2. A raised platform of combustible or non-combustible material.

If the fireplace is installed directly on carpeting, tile or other combustible material other than wood flooring, it should be installed on a metal or wood panel extending the full width and depth of the fireplace.

The fireplace is designed to be installed in a zero-clearance enclosure. This means that combustible materials must be located at clearances specified or provided by standoffs or spacers attached to the fireplace.

Combustible materials can come in contact with the nailing flanges provided.

UNPACKING THE FIREPLACE

1. Cut binding straps and shrink wrap.
2. Remove top board and corner posts.
3. Lift fireplace off of the pallet.
4. Remove non-combustible boards from pallet and set aside.
5. Set fireplace in a location near to its final installation location.

HOMEOWNER REFERENCE INFORMATION

Record the following information about your fireplace.

Model: ______________________________ Date Purchased/Installed: _________________
Serial Number: ______________________________ Location on Fireplace: ____________________
Dealership: ______________________________ Dealer Phone: _________________________
Notes: __________________________________________________________________________
## CARTON CONTENTS & HARDWARE PACK

Items not shown to scale.

<table>
<thead>
<tr>
<th>INDEX NUMBER</th>
<th>DESCRIPTION</th>
<th>QUANTITY SUPPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Door Removal Tool (attached to fireplace)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Product Registration Card</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>AA Battery</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>AAA Battery</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Cover Plate, Battery Box</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Remote</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Junction Box Cover</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Duplex Receptacle</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>Flue Restrictor Assembly</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Battery Box</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Grommet, 5/8 DIA</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Wire Assembly, Module to Interface</td>
<td>1</td>
</tr>
<tr>
<td>A</td>
<td>#10 x 1/2 Screw</td>
<td>22</td>
</tr>
<tr>
<td>B</td>
<td>#8 x 1 Self-Drilling Screw*</td>
<td>15</td>
</tr>
<tr>
<td>C</td>
<td>Nailing Flange</td>
<td>4</td>
</tr>
</tbody>
</table>

* For use in mounting non-combustible board to standoffs.

See Parts Lists on pages 50 for ordering replacement parts. Do not order batteries, bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.
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<th>PAGE</th>
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<td>Clearances</td>
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<td>43 - 50</td>
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<td>Intermittent Pilot Lighting Instructions</td>
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<td>Control System Troubleshooting</td>
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<td>Parts View</td>
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<td>Requirements For Massachusetts</td>
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<td>Master Parts Distributor List</td>
<td>66</td>
</tr>
<tr>
<td>How To Order Repair Parts</td>
<td>66</td>
</tr>
<tr>
<td>Warranty</td>
<td>67</td>
</tr>
</tbody>
</table>

Page 4
INSTRUCTIONS TO INSTALLER

1. Leave instruction manual with owner.
2. Have owner fill out and mail Product Registration Card supplied with the fireplace.
3. Show owner how to start and operate the fireplace.

This direct-vent gas fireplace heater is designed to operate with all combustion air being siphoned from the outside of the building and all exhaust gases expelled to the outside of the building. The information contained in this manual pertains to all models and gas control systems unless otherwise noted.

APPLIANCE CERTIFICATION

WARNING
This fireplace is not for use with solid fuels. Solid fuels could cause personal injury or property damage.

This fireplace is design certified in accordance with American National Standard/CSA Standard ANSI Z21.88/CSA 2.33 and by Underwriters Laboratories as a Direct Vent Gas Fireplace Heater and shall be installed according to these instructions. Consult your local building code agency, prior to installation, to ensure compliance with local codes—including permits and inspections.

The fireplace, when installed, must be electrically grounded in accordance with local codes or, in absence of local codes, with the National Fuel Gas Code ANSI Z223.1/NFPA 54* Natural Gas and Propane Installation Code, or CSA B149.1 in Canada. *Available from the American National Standards Institute, Inc. 11 West 42nd St., New York, N.Y. 10036.

Any alteration of the original design, installed other than as shown in these instructions or use with a type of gas not shown on the rating plate is the responsibility of the person and company making the change.

IMPORTANT
All correspondence should refer to complete Model Number, Serial Number and type of gas.

HIGH ALTITUDE

When installing this fireplace at an elevation above 2000 feet (in the United States) it may be necessary to decrease the input rating by changing the existing burner orifice to a smaller size. Generally, input should be reduced 4 percent for each 1000 feet above sea level. However, if the heating value of the gas has been reduced, this general rule may not apply. Check with Empire Comfort Systems for proper orifice size identification.

CANADIAN HIGH ALTITUDE

Altitude: 0-4500 feet (0-1370 m)

When installing this fireplace at an elevation above 4500 feet (in Canada), consult your local gas utility for assistance in determining the proper orifice for your location.

PREPARATION

This direct vent gas fireplace and its components are tested and safe when installed in accordance with this installation manual. Report to your dealer any parts damaged in shipment, specifically check glass condition. Do not install fireplace with damaged, incomplete, or substitute parts. Read all instructions before starting installation and follow these instructions carefully during installation to insure maximum benefit and safety. Failure to follow them will void your warranty and may present a fire hazard.

The warranty will be voided by, and the warranter disclaims any responsibility for the following actions:

• Installation of any damaged fireplace or vent system component.
• Modification of the fireplace or direct vent system.
• Installation other than as instructed by Empire Comfort Systems Inc.
• Improper positioning of the glass door, or decorative accessories including logs, rocks, crushed glass or other approved media.
• Installation and/or use of any component part not manufactured or approved by manufacturer.

Commonwealth of Massachusetts: The installation must be made by a licensed plumber or gas fitter in the Commonwealth of Massachusetts.

WARNING

ANY CHANGE TO THIS FIREPLACE OR ITS CONTROLS CAN BE DANGEROUS.
Improper installation or use of the fireplace can cause serious injury or death from fire, burns, explosions, or carbon monoxide poisoning.
## SPECIFICATIONS

<table>
<thead>
<tr>
<th>DVLL36BP</th>
<th>DVLL48BP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>Propane</td>
</tr>
<tr>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Input BTU/Hr Maximum</td>
<td>29,000</td>
</tr>
<tr>
<td>Input BTU/Hr Minimum</td>
<td>19,000</td>
</tr>
<tr>
<td>KWH (Maximum)</td>
<td>8.49</td>
</tr>
<tr>
<td>KWH (Minimum)</td>
<td>5.56</td>
</tr>
<tr>
<td>Orifice</td>
<td>#37 (P-213)</td>
</tr>
<tr>
<td>Air Shutter Opening</td>
<td>1/8-in</td>
</tr>
<tr>
<td>Height Without Standoff</td>
<td>34-5/16</td>
</tr>
<tr>
<td>Width</td>
<td>49-in</td>
</tr>
<tr>
<td>Gas Inlet Shut-Off Valve (Pipe)</td>
<td>1/2-in NPT</td>
</tr>
<tr>
<td>Vent Size</td>
<td>4 x 6-5/8</td>
</tr>
</tbody>
</table>

**NOTICE:** Air shutter settings are factory minimum settings. Some venting configurations may require minor air shutter adjustments for optimum performance.

### GAS SUPPLY PRESSURES  (Dimensions In Inches Water Column - W.C.)

<table>
<thead>
<tr>
<th>Gas Type</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Manifold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural</td>
<td>14</td>
<td>4.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Propane</td>
<td>14</td>
<td>11</td>
<td>10</td>
</tr>
</tbody>
</table>
The following accessory parts can be obtained from your Empire Comfort Systems dealer. Contact your Empire Dealer for more accessory options. If you need additional information beyond what your dealer can furnish, contact Empire Comfort Systems Inc., 918 Freeburg Ave., Belleville, Illinois 62220-2623.

### ACCESSORIES

<table>
<thead>
<tr>
<th>Description</th>
<th>DVLL36BP</th>
<th>DVLL48BP</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fireplace Models</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ridgeback Liner*</td>
<td>DVP36LPZ</td>
<td>DVP48LPZ</td>
<td>Bronze</td>
</tr>
<tr>
<td>Porcelain Liner*</td>
<td>DVP36LKR</td>
<td>DVP48LKR</td>
<td>Gloss Black</td>
</tr>
<tr>
<td>Trim Kit - Beveled</td>
<td>DF36BL</td>
<td>DF48BL</td>
<td>Black</td>
</tr>
<tr>
<td>Trim Kit - Beveled</td>
<td>DF36HP</td>
<td>DF48HP</td>
<td>Hammered Pewter</td>
</tr>
<tr>
<td>Beveled Window Frame - 2 inches</td>
<td>DF362LNB</td>
<td>DF482NB</td>
<td>Nickel Brushed</td>
</tr>
<tr>
<td>Beveled Window Frame - Oil-Rubbed Bronze, Light</td>
<td>DF362LBZT</td>
<td>DFL482LBZT</td>
<td>Bronze, Light</td>
</tr>
<tr>
<td>Beveled Window Frame - Textured Black</td>
<td>DF362LBLX</td>
<td>DFL482LBLX</td>
<td>Textured Black</td>
</tr>
<tr>
<td>Decorative Front, Forged Iron</td>
<td>DFF36LFPD</td>
<td>DFF48FPD</td>
<td>Distressed Pewter</td>
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<tr>
<td>Decorative Front, Forged Iron Frame, Black</td>
<td>DFF36LBL</td>
<td>DFF48LBL</td>
<td>Black</td>
</tr>
<tr>
<td>Decorative Front, Forged Iron Frame, Oil-Rubbed Bronze, Light</td>
<td>DFF36LBZT</td>
<td>DFF48LBZT</td>
<td>Bronze, Light</td>
</tr>
<tr>
<td>Rustic Contemporary Logs &amp; Stones</td>
<td>LSM1THF</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Accent Light Kit</td>
<td>LK9</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Blower Kit</td>
<td>FBB20</td>
<td>N/A</td>
<td></td>
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<tr>
<td>Power Vent - Horizontal</td>
<td>DVKPM</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Decorative Crushed Glass - Blue Clear</td>
<td>DG1BUC</td>
<td>Blue Clear</td>
<td></td>
</tr>
<tr>
<td>Decorative Crushed Glass - Black Polished</td>
<td>DG1BKP</td>
<td>Black Polished</td>
<td></td>
</tr>
<tr>
<td>Decorative Crushed Glass - Clear Frosted</td>
<td>DG1CLF</td>
<td>Clear Frosted</td>
<td></td>
</tr>
<tr>
<td>Decorative Crushed Glass - Bronze Reflective</td>
<td>DG1BZR</td>
<td>Bronze Reflective</td>
<td></td>
</tr>
<tr>
<td>Decorative Crushed Glass - Copper Reflective</td>
<td>DG1BCR</td>
<td>Copper Reflective</td>
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</tr>
<tr>
<td><strong>CONVERSION KITS</strong></td>
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<tr>
<td>Conversion Kit - Propane to Natural</td>
<td>40513</td>
<td>40511</td>
<td>N/A</td>
</tr>
<tr>
<td>Conversion Kit - Natural to Propane</td>
<td>40512</td>
<td>40510</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*The DVLL36BP or DVLL48BP fireplaces are shipped with a factory installed metal liner. If desired, it can be replaced with one of the other liner options. The fireplace must have a liner installed prior to operation.

**NOTICE:** If the optional blower kit is desired, installation into the fireplace through the rear access panel is easier, prior to placing the fireplace into the framed out location.

Crushed glass is required on the burner screen for proper operation.

For application and the amount of crushed glass to use, refer to the “Glass Placement” section on page 42.
FBB20 BLOWER INSTALLATION

BLOWER ASSEMBLY PARTS LIST

<table>
<thead>
<tr>
<th>Index No.</th>
<th>Part No.</th>
<th>Description</th>
<th>Qty.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>35727</td>
<td>Blower Assembly - Single</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>R12390</td>
<td>Wire Harness</td>
<td>1</td>
</tr>
</tbody>
</table>

TOOLS NEEDED:
- 5/16 inch Nut Driver or Screw Gun

**CAUTION**

Sharp edges. Use gloves when installing these blowers.

INSTALLATION - PRIOR TO SETTING FIREPLACE INTO FINAL POSITION

1. Unpack the FBB20 Blower assembly.
2. Using a 5/16 inch hex drive, remove the 11 screws holding rear blower access cover plate, then lay the access plate on the floor. **See Figure 1.**
3. Use a rag to wipe the inside bottom of the fireplace (where the blowers will be placed) to remove dirt or construction dust.
4. Place blowers on the floor behind the fireplace. Position the blowers with the two black connecting wires and green ground wire towards the left hand side when facing the back of the fireplace. **See Figure 2.**
5. Locate the blower wire terminals inside the bottom of the fireplace and make the three connections as shown in **Figure 3.**
6. Begin installing the left blower assembly into the bottom of the fireplace. Once the blower is about half way in, secure wiring within the white plastic wire retention clips provided in the fireplace. See Figure 4.

7. Finish installing the left blower so that the left edge of the blower base bracket is about even with the left edge of the access opening. Route the wiring away from the blower wheel. See Figure 5.

8. Next, install the right hand blower assembly towards the right side of the access opening. The right hand edge of the blower base bracket should be about even with the right edge of the access opening. Route wiring away from the blower wheel. See Figure 6.

9. Snap the wire harness into the white plastic wire retention clip located at the center bottom of the fireplace. See Figure 7.
10. Make sure the blower base brackets are pulled rearward against the bottom flange of the fireplace. The magnets on the blower base bracket will keep the blowers in place. See Figure 8.

11. Re-attach the Blower Access Panel with the 11 screws removed in step 2. See Figure 1.

12. Blower installation is complete.
## FIREPLACE DIMENSIONS

<table>
<thead>
<tr>
<th>INDEX LETTER</th>
<th>DIMENSION DESCRIPTION</th>
<th>DVLL36BP9</th>
<th>DVLL48BP9</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>The maximum height of firebox face (excluding standoffs)</td>
<td>34-1/4</td>
<td>34-1/4</td>
</tr>
<tr>
<td>B</td>
<td>The maximum width of the firebox face (excluding nailing flanges)</td>
<td>49</td>
<td>61</td>
</tr>
<tr>
<td>C</td>
<td>The maximum depth of the firebox</td>
<td>19-1/2</td>
<td>19-1/2</td>
</tr>
<tr>
<td>D</td>
<td>The height of the firebox opening</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>E</td>
<td>The width of the firebox opening</td>
<td>40-1/4</td>
<td>52-1/4</td>
</tr>
<tr>
<td>F</td>
<td>The interior depth of the firebox (not shown)</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>G</td>
<td>The rear exterior width of the firebox</td>
<td>49</td>
<td>61</td>
</tr>
<tr>
<td>H</td>
<td>The height to the firebox standoffs</td>
<td>49-3/8</td>
<td>49-3/8</td>
</tr>
<tr>
<td>I</td>
<td>Width from the left side of the box to the centerline of vent</td>
<td>24-9/16</td>
<td>30-9/16</td>
</tr>
<tr>
<td>J</td>
<td>Depth from back of box to centerline of top vent</td>
<td>7-1/8</td>
<td>7-1/8</td>
</tr>
<tr>
<td>K</td>
<td>Height from the bottom of the box to the gas line opening</td>
<td>14-3/4</td>
<td>14-3/4</td>
</tr>
<tr>
<td>L</td>
<td>Depth from the front of the box to gas line opening</td>
<td>14-11/16</td>
<td>14-11/16</td>
</tr>
<tr>
<td>M</td>
<td>Depth from rear of box to gas line opening</td>
<td>3-3/4</td>
<td>3-3/4</td>
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<tr>
<td>N</td>
<td>Glass height</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>O</td>
<td>Glass width</td>
<td>36</td>
<td>48</td>
</tr>
<tr>
<td>P</td>
<td>Depth from front of box to centerline of vent</td>
<td>12-3/8</td>
<td>12-3/8</td>
</tr>
<tr>
<td>Q</td>
<td>Distance from floor to fireplace opening</td>
<td>7-3/8</td>
<td>7-3/8</td>
</tr>
<tr>
<td>R</td>
<td>Height from floor to vent collar</td>
<td>35-15/16</td>
<td>35-15/16</td>
</tr>
<tr>
<td>S</td>
<td>Overall height to header</td>
<td>49-1/2</td>
<td>49-1/2</td>
</tr>
<tr>
<td>T</td>
<td>Distance between framing bracket ends</td>
<td>57-1/16</td>
<td>69-1/16</td>
</tr>
<tr>
<td>U</td>
<td>Interior rear width of firebox (not shown)</td>
<td>33</td>
<td>45</td>
</tr>
<tr>
<td>V</td>
<td>Bottom of fireplace to screen opening</td>
<td>10-1/8</td>
<td>10-1/8</td>
</tr>
<tr>
<td>X</td>
<td>Top Panel Height</td>
<td>8-3/4</td>
<td>8-3/4</td>
</tr>
<tr>
<td>Y</td>
<td>Bottom Panel Height</td>
<td>7-5/16</td>
<td>7-5/16</td>
</tr>
</tbody>
</table>
CLEARANCES

### CLEARANCE TO COMBUSTIBLES

<table>
<thead>
<tr>
<th>Back</th>
<th>See Figure 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Side</td>
<td>3 inch</td>
</tr>
<tr>
<td>Floor</td>
<td>0 inch</td>
</tr>
<tr>
<td>Top Stand-off Bracket</td>
<td>0 inch</td>
</tr>
<tr>
<td>Top Framing Edge</td>
<td>16 inch</td>
</tr>
</tbody>
</table>

**NOTE A:** See Figure 12 for maximum mantel depth and minimum height above fireplace.

**Figure 9**

The minimum clearance from bottom of the fireplace to ceiling is 65 inch. The minimum clearance from side of the fireplace opening to adjacent sidewall is 8 inch.

**Figure 10**

The minimum clearance from bottom of the fireplace to ceiling is 57 5/8 inch (146 cm). The minimum clearance from floor of the fireplace opening to finished wall is 65 inch (165 cm).

**Figure 11**

**MANTEL CHART**

**INDEX LETTER** | **DISTANCE FROM FIREPLACE OPENING** (In Inches) | **DISTANCE FROM FINISHED WALL** (In Inches)
---|---|---
A | 34 | 12
B | 34 | 10
C | 32 | 8-3/8
D | 30 | 6-5/8
E | 28 | 5
F | 26 | 3-3/8
G | 24 | 1-3/4
H | 22 | 0

**TELEVISION CONSIDERATIONS**

Installing a television above a fireplace has become increasingly popular; however, the area above any fireplace gets hot and most TV manufacturers recommend against placing their products near a heat source.

If you install a television above this fireplace, Empire Comfort Systems accepts no responsibility for damage or injuries. Follow the television manufacturer’s installation instructions, including any recommendations regarding proximity to heat sources.

If you have a TV above your fireplace, turn off the fireplace and let it cool completely before servicing or touching any buttons on the TV.
NOTE: Island and Room Divider installation is possible as long as the horizontal portion of the vent system does not exceed 20 feet with a minimum vertical run of 8 feet. See details in Venting Section.

NOTE: When installing this fireplace against an exterior wall, insulate to applicable insulation codes.

When you install your Direct Vent Fireplace in Room divider or Flat on wall corner positions, a minimum of 8 inches clearance must be maintained from the perpendicular wall and the front opening of the fireplace.

Figure 13
VENT TERMINATION CLEARANCES

Termination clearance for buildings with combustible and noncombustible exteriors.

VERTICAL SIDEWALL INSTALLATIONS

Important! Minimum clearance between vent pipes and combustible materials is 3 inch (76 mm) on top, and 1 inch (25 mm) on bottom and sides.

Important! When vent termination exits through foundation less than 20 inch (508 mm) below siding outcrop, the vent pipe must extend outward so that the horizontal vent termination is located flush to, or beyond the outcrop siding.

Information on Various Venting Routes and Components

Important: It is always best to locate the fireplace in such a way that minimizes the number of offsets and horizontal vent length.

Since it is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust, certain limitations as to vent configurations apply and must be strictly adhered to.

The graph showing the relationship between vertical and horizontal side wall venting will help to determine the various vent lengths allowable.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace to the face of the outer wall.

Venting termination shall not be recessed into wall or siding.

ATTENTION: Vinyl Soffit, Vinyl Ceiling, Vinyl Overhang

Disclaimer

Clearances are to heat resistant material (i.e. wood, metal). This does not include vinyl. Empire Comfort Systems Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings or vinyl ventilated/unventilated soffits.
### VENT TERMINATION CLEARANCES (CONT’D)

<table>
<thead>
<tr>
<th>A= Clearance above grade, veranda, porch, deck, or balcony</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 in (30 cm)</td>
<td>12 in (30 cm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B= Clearance to window or door that may be open</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
</table>
| 6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 12 in (30 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 100,000 Btuh (30 kW), 36 in (91 cm) for appliances > 100,000 Btuh (30 kW) | 6 in (15 cm) for appliances ≤ 10,000 Btuh (3 kW), 9 in (23 cm) for appliances > 10,000 Btuh (3 kW) and ≤ 50,000 Btuh (15 kW) | 6 ft

<table>
<thead>
<tr>
<th>C= Clearance to permanently closed window</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 in (30 cm)</td>
<td>12 in (30 cm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>D= Vertical clearance ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
<tbody>
<tr>
<td>24 in (61 cm)</td>
<td>24 in (61 cm)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>E= Clearance to unventilated soffit</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 in (30 cm)</td>
<td>12 in (30 cm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F= Clearance to outside corner</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 in (15 cm)</td>
<td>6 in (15 cm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G= Clearance inside corner</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 in (23 cm)</td>
<td>9 in (23 cm)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H= Clearance to each side of center line extended above meter/regulator assembly</th>
<th>Canadian Installations1</th>
<th>US Installations2</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly</td>
<td>3 ft (91 cm)</td>
<td></td>
</tr>
</tbody>
</table>

### ATTENTION: Vinyl Soffit, Vinyl Ceiling, Vinyl Overhang

Clearances are to heat resistant material (i.e. wood, metal). This does not include vinyl. Empire Comfort Systems Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings or vinyl ventilated/unventilated soffits.

### Disclaimer

Clearances are to heat resistant material (i.e. wood, metal). This does not include vinyl. Empire Comfort Systems Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings or vinyl ventilated/unventilated soffits.

**In accordance with the current CSA B149.1, Natural Gas and Propane Installation Code**

**In accordance with the current ANSI Z223.1/NFPA 54, National Fuel Gas Code**

† A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single family dwellings and serves both dwellings

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

* For clearances not specified in ANSI Z223.1/NFPA 54 or CSA B149.1, one of the following shall be indicated:

Clearance in accordance with local installation codes and the requirements of the gas supplier.
GAS SUPPLY

The gas pipeline can be brought in through the right side of the fireplace. Consult the current National Fuel Gas Code, ANSI Z223.1 CAN/CGA-B149 (.1 or .2) installation code.

**NOTICE:** Never use plastic pipe. Check to confirm whether your local codes allow copper tubing or galvanized.

**NOTICE:** Since some municipalities have additional local codes, it is always best to consult your local authority and installation code.

The use of the following gas connectors is recommended:
- ANSI Z21.45 Assembled Flexible Appliance Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction. The Commonwealth of Massachusetts requires that a flexible appliance connector cannot exceed three feet in length.

**FLEXIBLE GAS LINE CONNECTION**

---

**Figure 15**

| **GAS SUPPLY PRESSURE (Inches w.c.)** |
|-----------------|-----------------|-----------------|
| Minimum         | Normal          | Maximum         |
| Natural Gas     | 4.5             | 7.0             | 14.0            |
| Propane Gas     | 10.8            | 11.0            | 14.0            |

| **MANIFOLD PRESSURE (Inches w.c.)** |
|-----------------|-----------------|
| Normal (HI)     |
| Natural Gas     | 3.5             |
| Propane Gas     | 10.0            |

A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip leg be installed near the gas inlet. See Figure 16. This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.

---

**INSTALLING A NEW MAIN GAS SHUT-OFF VALVE (CHECK LOCAL CODE)**

Each fireplace should have its own manual gas shut-off valve. A manual main gas shut-off valve should be located in the vicinity of the fireplace. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation.

Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. This should be done with a soap solution watching for bubbles on all exposed connections, and if unexposed, a pressure test should be made.

Never use an exposed flame to check for leaks. Fireplace must be disconnected from piping at inlet of control valve and pipe capped or plugged for pressure test. Never pressure test with fireplace connected; control valve will sustain damage!

**NOTICE:** The gas control is equipped with a captured screw type pressure test point, therefore it is not necessary to provide a 1/8 inch test point upstream of the control. See Figure 17.

When using copper or flex connector use only approved fittings. The fireplace and its individual shut-off valve must be disconnected from supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.5 kPa).

The fireplace must be isolated from the gas supply piping system by closing its individual manual shut-off valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.5 kPa).

**Attention!** If one of the procedures results in pressures in excess of 1/2 psig (14-in w.c.) (3.5 kPa) on the fireplace gas valve, it will result in a hazardous condition.
GAS SUPPLY (CONT’D)

CHECKING MANIFOLD PRESSURES
Both Propane and Natural Gas valves have a built-in pressure regulator in the gas valve. Natural Gas models will have a manifold pressure of approximately 3.5-in w.c. (0.871 kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 4.5-in w.c. (1.120 kPa) for the purpose of input adjustment to a maximum of 14.0-in w.c. (3.484 kPa). Propane Gas models will have a manifold pressure approximately 10.0-in w.c. (2.49 kPa) at the valve outlet with the inlet pressure to the valve from a minimum of 10.8-in w.c. (2.68 kPa) for the purpose of input adjustment to a maximum of 14.0-in w.c. (3.484 kPa).

CAUTION
If one of the procedures results in pressures in excess of 1/2 psig (14-in w.c.) (3.5 kPa) on the fireplace gas valve, it will result in a hazardous condition.

GAS VALVE
INLET PRESSURE TAP
OUTLET PRESSURE TAP

Figure 17

GAS SUPPLY (CONT’D)

GAS LINE CONNECTION
Remove the access panel from the right side of the fireplace shown in Figure 18 to access the gas valve, gas flex line, junction box, and system wiring. Attach the gas flex line to the pre-installed gas line. Refer to the Gas Supply section in this manual for details on the installation requirements for the gas supply line.

Figure 18
CAUTION

All wiring should be done by a qualified electrician and shall be in compliance with all local, city and state building codes. Before making the electrical connection, make sure that the main power supply is disconnected. The fireplace, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70 (Latest Edition).

A factory installed junction box is located on the lower right side of the fireplace. Wiring must be fed to the junction box and attached to the receptacle that is provided. Leave approximately 6in of wire in the junction box for connection. Attach black wire to one side of the receptacle and white wire to opposite side of receptacle. The ground wire should be attached to the green (ground) screw. See Figure 19.

**JUNCTION BOX CONNECTIONS**

![Figure 19](image)

Install the receptacle into the junction box. Attach cover plate. After the wiring is completed to the junction box and receptacle, install the junction box to the lower right side of the fireplace as shown in Figure 20. Insert the top flange of the retainer bracket into the slot on the fireplace. Rotate the junction box assembly downward, and secure with a screw below the junction box. See Figure 20.

**CONTROL MODULE ACCESS:**

To access the control module for servicing, remove the barrier screen and glass door assemblies. The control module is located in the bottom right side opening. Remove (1) #10 x 1/2 hex head screws that secures the control cover, then shift the cover to the left and upward to remove. The control module is located to the fireplace bottom with Velcro ®, adn can be lifted up to access the module wiring connections.
Once the Junction box has been installed with the receptacle outlets facing inward towards the fireplace, locate the 3-prong power cord from the control module and plug into the receptical.

The fireplace is supplied with a User Interface wall box that must be installed in a standard plastic outlet box (not provided). A low voltage orange or blue box is recommended. The user interface wall box must be placed in the wall within ten feet from the right side of the fireplace. A 10 feet long battery and user interface extension wire harness is supplied. See Figure 21.

The red and black battery extension harness is connected to the red and black mating connector pre-installed on the control module. The mating connector can be located inside the fireplace near the gas valve. See Figure 22.

Locate and install the 5/8 inch diameter plastic snap-in grommet over the low-voltage battery and interface extension harnesses at the right side of the fireplace. Snap the grommet into the hole in the side of the fireplace just under the access panel opening. See Figure 22.

Run the extension wiring to the user interface wall box and connect the white connector to the remote receiver battery box. Install the battery box into the wall outlet box, then install the white remote cover supplied with the provided screws.

- Place batteries in remote receiver and in the remote control using instructions provided. Set the remote switch in wall box to remote. (center position)
INSTALLATION

FRAMING
This fireplace can be elevated off the floor provided that the fireplace is properly supported by framing materials and the ceiling clearances are maintained. Fireplace framing can be built before or after the fireplace is set in place. Framing should be positioned to accommodate wall covering and fireplace facing material. The fireplace framing should be constructed of 2 x 4 lumber. Refer to Figure 23 for minimum framing dimensions.

⚠️ CAUTION
Measure fireplace dimensions and verify framing methods, and wall covering details before framing construction begins.

Framing dimension A includes a 16 inch clearance for framing standoffs on fireplace. After installing fireplace into framing, the non-combustible board must cover the 16 inch opening above the fireplace.

NOTICE: For finishing to top of fireplace, refer to Figures 32 and 33.

INDEX NO. | DVLL36 | DVLL48
--- | --- | ---
A | 49-1/2 inch | 49-1/2 inch
B | 55-5/8 inch | 67-5/8 inch
C | 21-1/2 inch | 21-1/2 inch

CONSTRUCTION OF A FIREPLACE CHASE
A chase is a vertical box-like structure built to enclose the gas fireplace and/or its vent system. In cooler climates the vent should be enclosed inside the chase. 

NOTICE: Treatment of ceiling firestops and wall shield firestops and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Therefore, you MUST check local building codes to determine the requirements to these steps. 

A chase should be constructed in the manner of all outside walls of the home to prevent cold air drafting problems. The chase should not break the outside building envelope in any manner. Walls, ceiling, base plate and cantilever floor of the chase should be insulated. Vapor and air infiltration barriers should be installed in the chase as per regional codes for the rest of the home.

Additionally, in regions where cold air infiltration may be an issue, the inside surfaces may be sheet rocked and taped (or an equivalent method may be used) to achieve maximum air tightness.

To further prevent drafts, the wall shield and ceiling firestops should be caulked with caulk rated for a minimum of 300°F continuous exposure rating to seal gaps. Gas line holes and other openings should be caulked or stuffed with unfaced insulation. If the fireplace is being installed on a cement surface, a layer of plywood may be placed underneath to prevent conducting cold up into the room.

FRAMING AND FINISHING
2. Frame in fireplace with a header across the top. It is important to allow for finished face when setting the depth of the fireplace.
3. Secure the four framing brackets and hand bend them into a V shape as shown in Figure 24. Secure with #10 x 1/2 inch hex-head screws.
4. Locate the nailing flanges on the sides of the fireplace (two each side). See Figure 24.
5. Secure fireplace to framing with nailing flanges. Preset depth to suit facing material (flush or 1/2 inch set back depths). See Figure 25.
INSTALLATION (CONT’D)

HEADER SHIELD/TOP STANDOFF ASSEMBLY
1. The Header Shield and (3) Top Standoffs are shipped with the fireplace. Pre-assemble the Header Shield to the Top Standoff brackets, before installing to the top of the fireplace and framing header. See Figures 26, 27 and 28.

![Figure 26](image)

- BEND SUPPORT TAB DOWN AND SECURE TO THE HEAT SHIELD WITH (1) SCREW THROUGH EACH BRACKET
- INTERLOCK HEADER SHIELD TO STANDOFF BRACKETS
- BEND TABS OVER AND INSTALL(2) SCREWS TO EACH STANDOFF BRACKET

![Figure 27](image)

2. Install the first Top Standoff and Header Shield assembly to the top of the fireplace and framing header. See Figure 27. Install the second Top Standoff and Header Shield assembly to the top of the fireplace and framing header. See Figure 28. Next, connect the overlapped ends of the two header shields, and secure them together using the provided (3) #10 x 1/2 Hex Head screws.

![Figure 28](image)

- HAND BEND TOP FLANGE OF EACH STANDOFF, THEN SECURE TO HEAT SHIELD WITH #10 X 1/2 SCREWS

![Figure 29](image)

3. Attach three middle mount framing brackets to the top front edge of the fireplace. These brackets support the supplied non-combustible board above the fireplace. Preset depth to suit facing material (flush or 1/2 inch set back depths). See Figure 27.
**VENT PIPE CLEARANCE**

**NOTICE:** Maintain one inch of clearance around vertical vent pipe. See Figure 31.

For horizontal vent, maintain a minimum 1 inch clearance to the bottom and sides of the vent, and 3 inch clearance to combustibles above the vent pipe. See Figure 31.

**FLUSH WALL INSTALLATION**

**FINISHING METHODS**

- **2" X 4" HEADER**
- **FINISHED WALL**
- **TOP HEADER SHIELD**
- **NON-COMBUSTIBLE BOARD** (supplied with the fireplace)
- **TOP FRAMING Ledge**

Figure 30

![Diagram of vent pipe clearance](image1.png)

Figure 31

![Diagram of flush wall installation](image2.png)

Figure 32

![Diagram of finishing methods](image3.png)

Figure 33

![Diagram of finishing methods](image4.png)

Figure 34

![Diagram of finishing methods](image5.png)

Figure 35
INSTALLATION (CONT’D)

**Attention:** Cold climate installation recommendation: When installing this fireplace against a non-insulated exterior wall, it is recommended that the outer walls be insulated to conform to applicable insulation codes.

**VENT RUNS**

In planning the installation for the fireplace, it is necessary to install certain components before the fireplace is completely positioned and installed. These include the direct vent system, gas piping and electrical wiring.

The fireplace can be mounted on any of the following surfaces:
1. A flat, hard combustible or non-combustible surface.
2. A raised wooden platform.

**VERTICAL, 90-DEGREE ELBOW WITH HORIZONTAL TERMINATION**

![Diagram of vertical, 90-degree elbow with horizontal termination]

**FINISHING OPTIONS**

- Non-Combustible board installed over the fireplace face (framing bracket flush). See Figure 33.
- Non-Combustible board installed flush to face (framing brackets at 1/2 inch set back). See Figure 34.
- Figure 35 shows both finishing options.
- Use Non-Combustible materials where indicated for the fireplace installation. Non-combustible materials do not ignite or burn as a result of using the fireplace. These include metal, brick, ceramic, concrete, slate, glass and plaster. Adhesives must be rated for high temperatures. Any mechanical fasteners used to install material must also be non-combustible, including wall anchors and tile spacers. Materials that pass the ASTM E 136 test (Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C) are considered non-combustible.

**Figure 36**

**Figure 37**

**CORNER INSTALLATION - VERTICAL, 90-DEGREE ELBOW TO HORIZONTAL OUT THE WALL**

(12 inch minimum rise before elbow)

**Figure 38**

**NOTE:** Corner installation will require more vertical vent pipe than just the minimum required depending on wall thickness and horizontal dimension. Refer to Figure 44, page 27.
Begin the vent system installation by selecting the type of venting to be installed and the path it will take. Verify clearances are met throughout the path of the venting system.

Determine how the vent system will be terminated out the side of the house or through the roof. Verify clearances for the termination.

When selecting a vent system for use with the fireplace, refer to the “Special Vent Systems” section in this manual to determine what systems are acceptable.

Check all clearances and venting components. Identify if any problems exist in the vent system. Use Figure 47 on page 27 for top venting to eliminate issues after installation. Check pipe diameter on vent system and fireplace to verify the size is the same.

**NOTICE:** All outer connection joints must be sealed with aluminum tape, screws or silicone sealant rated above 300°F/149°C. The inner flue joints do not require any sealant.

---

**VENT SYSTEMS**

The following vent systems are acceptable for use with the DVLL36BP and DVLL48BP series fireplaces:

- Simpson Duravent® GS 4" - 6 ⅞"
- American Metal Products 4" - 6 ⅞"
- Selkirk Direct-Temp® 4" - 6 ⅞"
- Security Secure Vent® 4" - 6 ⅞"
- Excel DV Venting 4" - 6 ⅞"
- MetalFab SureSea® 4" - 6 ⅞"
- BDM Manufacturing
- Olympia Vents®
- Empire Flexvent Kit DVVK-4F
- Empire Flexvent Kit DVVK-4FV Vertical Flex Vent Kit

---

**SPECIAL VENTING COMPONENTS (DURAVENT)**

See Empire Comfort Systems Retail Price List for Duravent part numbers and pricing.

**SPECIAL DV VENT KITS**

<table>
<thead>
<tr>
<th>Available from Empire Comfort Systems, Inc. Dealers&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>DVVK-4VP (DVVK-4V) Direct-Vent Fireplace Vent Kit - Vertical, includes 46DVA-VCH, 46DVA-F6 and 46DVA-SC</td>
</tr>
<tr>
<td>DVVK-4TP (DVVK-4T) Direct-Vent Fireplace Vent Kit - For top vent, thru-the-wall, 8 to 11 inch wall thickness, includes 46DVA-HC, 46DVA-E90, 46DVA-09, 46DVA-08A and 46DVA-WT</td>
</tr>
<tr>
<td>DVVK-4RP (DVVK-4R) Direct-Vent Fireplace Vent Kit - For rear vent, 5 to 7 inch wall thickness, (standard thru-the-wall venting) includes 46DVA-06, 46DVA-HC and 46DVA-WT</td>
</tr>
<tr>
<td>DVVK-4RE Direct-Vent Fireplace Vent Kit - For rear vent, thru-the-wall for 5 to 13-3/4 inch wall thickness.</td>
</tr>
<tr>
<td>DVVK-4TS (DVVK-4TS) Direct-Vent Fireplace Vent Kit - For top vent, thru-the-wall, 5 to 7 inch wall thickness, includes 46DVA-HC, 46DVA-E90, 46DVA-06 and 46DVA-WT</td>
</tr>
<tr>
<td>DVVK-4FV Vertical Flex Vent Kit - 4 inch x 7 inch</td>
</tr>
<tr>
<td>VIB6A Vertical Inlet Baffle Kit - For 6-5/8 inch Diameter.</td>
</tr>
<tr>
<td>VIB7A Vertical Inlet Baffle Kit - For 7 inch Diameter.</td>
</tr>
</tbody>
</table>
VENTING FIREPLACE - TOP

WARNING

Use Restrictor for vertically terminated fireplace systems that are a minimum of 10 feet vertical, and do not include offsets or horizontal vent runs. Do not use with horizontally terminated fireplaces.

Figures 40 to 43 show the location and recommended opening for the flue restrictor. Installation of restrictor before venting is attached. See Figure 40.

NOTICE: When installing flue restrictor, install with screw pointing downward.

For installation of the restrictor after the venting is installed, remove (2) screws from each end of the flue baffle and set aside. Insert the restrictor up into the flue collar and position it as shown in Figures 41 and 42. Then, re-install the flue baffle.

Fireplace Series | HARD ELBOW DIMENSIONS
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DVLL36,48</td>
<td>A1 52-3/8-in</td>
<td>B 4-1/2-in</td>
<td>C 6-1/2-in</td>
<td>D 9-1/8-in</td>
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Fireplace Series | FLEX PIPE 90 DEGREE BEND
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DVLL36,48</td>
<td>A2 54-in</td>
<td>B 5-1/4-in</td>
<td>C 7-1/4-in</td>
</tr>
</tbody>
</table>

MINIMUM HOLE LOCATION DIMENSIONS FOR THROUGH-THE-WALL HORIZONTAL INSTALLATIONS WITH 90-DEGREE ELBOW AND 12-in RISE OFF TOP OF FIREPLACE

SEE FIGURE 44 ON PAGE 27 FOR PERMISSIBLE HORIZONTAL AND VERTICAL RUN DIMENSIONS.
POSITIONING THE FIREPLACE
Determine the exact position of the fireplace so the direct-vent termination will be centered (if possible) between two studs. This will avoid any extra framing. All vent kit pipes should be assembled on the fireplace after the fireplace is moved into the final position.

CUTTING THE HOLE
After the fireplace has been positioned in its permanent location, the hole through the exterior wall can be cut. This hole must be 11 inch high x 9-1/8 inch wide with its center line determined by the amount of vertical rise and horizontal run of the termination. See Figures 42 and 43. When locating the hole it must be noted that the bottom of the cap must be minimum of 12 inch (305mm) above the ground level, and top of the cap must be no less than 18 inch (457mm) below a combustible projection, and no closer than 9 inch (229mm) to any wall running parallel to vent termination.

BELOW GRADE INSTALLATION
When it is not possible to meet the required vent termination clearances of 12 inch (305 mm) above grade level, a snorkel kit is recommended. It allows installation depth down to 7 inch (178 mm) below grade level. The 7 inch (178 mm) is measured from the center of the horizontal vent pipe as it penetrates through the wall.

Ensure the sidewall venting clearances are observed. If venting system is installed below ground, we recommend a window well with adequate and proper drainage to be installed around the termination area.

TYPICAL BASEMENT INSTALLATION

Figure 45

Figure 46

ATTENTION: Vinyl Soffit, Vinyl Ceiling, Vinyl Overhang
Disclaimer
Clearances are to heat resistant material (i.e. wood, metal). This does not include vinyl. Empire Comfort Systems Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings or vinyl ventilated/unventilated soffits.
TO USE THE VENT GRAPH

1. Determine the height of the center of the horizontal vent pipe. Using this dimension on the Sidewall Vent Graph, locate the point it intersects with the slanted graph line.
2. From the point of this intersection, draw a vertical line to the bottom of the graph.
3. Select the indicated dimension, and position the fireplace in accordance with same.

EXAMPLE A:
If the vertical dimension from the floor of the fireplace is 32 feet, the horizontal run to the outer wall flange must not exceed 5 feet.

EXAMPLE B:
If the vertical dimension from the floor of the fireplace is 24 feet, the horizontal run to the outer wall flange must not exceed 10 feet.

EXAMPLE C:
If the horizontal run to the outer wall flange is 17 feet, the vertical dimension from the floor of the fireplace to the center of the termination must not be less than 7 feet 6 inches.

SPECIAL NOTE: For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18 inches. Reduce by 3 feet for every 90° elbow. This does not apply if the 45° elbows are installed on the vertical part of the vent system.

Example: According to the chart the maximum horizontal vent length is 20 feet and if two 45° elbows are required in the horizontal vent it must be reduced to 17 feet.

The maximum number of 45° elbows permitted per side wall installation is two. These elbows can be installed in either the vertical or horizontal run.

The maximum number of 90° elbows in a vent run is three.
### TOP VENT - HORIZONTAL TERMINATION

#### ONE 90° ELBOW

![Diagram of one 90° elbow installation](image)

**NOTE:**

Subtract 3 feet from the total horizontal measurement for each 90° elbow installed horizontally. Subtract 1-1/2 feet from the total horizontal measurement for each 45° elbow installed horizontally.

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical)</th>
<th>B (Horizontal) Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>55</td>
<td>Natural - 24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Propane - 12</td>
</tr>
<tr>
<td>24</td>
<td>67</td>
<td>42</td>
</tr>
<tr>
<td>36</td>
<td>79</td>
<td>108 (9ft)</td>
</tr>
<tr>
<td>48</td>
<td>91</td>
<td>168 (14ft)</td>
</tr>
</tbody>
</table>

**Figure 48**

**NOTE:** Pipe straps must be used every 2 feet to secure venting.

#### TWO 45° ELBOWS

Installation requirements to replace the first 90° elbow with two 45° elbows:

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical)</th>
<th>B (Horizontal) Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>55</td>
<td>0’</td>
</tr>
<tr>
<td>24</td>
<td>67</td>
<td>6</td>
</tr>
<tr>
<td>36</td>
<td>79</td>
<td>72 (6ft)</td>
</tr>
<tr>
<td>48</td>
<td>91</td>
<td>132 (11ft)</td>
</tr>
</tbody>
</table>

**Figure 50**

#### THREE 90° ELBOWS

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical)</th>
<th>B (Horizontal) Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>66</td>
<td>72</td>
</tr>
<tr>
<td>24</td>
<td>80</td>
<td>132 (11ft)</td>
</tr>
<tr>
<td>36</td>
<td>91</td>
<td>204 (17ft)</td>
</tr>
<tr>
<td>48</td>
<td>103</td>
<td>240 (20ft)</td>
</tr>
</tbody>
</table>

**Figure 49**

#### EXAMPLE VENT RUNS

**Initial Pipe Length**

**A (Vertical)**

**B (Horizontal) Maximum**

(Dimensions In Inches)

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical)</th>
<th>B (Horizontal) Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>55</td>
<td>0’</td>
</tr>
<tr>
<td>24</td>
<td>67</td>
<td>6</td>
</tr>
<tr>
<td>36</td>
<td>79</td>
<td>72 (6ft)</td>
</tr>
<tr>
<td>48</td>
<td>91</td>
<td>132 (11ft)</td>
</tr>
</tbody>
</table>

**Figure 51**
TOP VENT - VERTICAL TERMINATION

**NO ELBOWS**

![Diagram of NO ELBOWS](image1)

<table>
<thead>
<tr>
<th>Dimensions (In Inches)</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120 (10ft)</td>
<td>480 (40ft)</td>
</tr>
</tbody>
</table>

Figure 52

**TWO 90° ELBOWS**

![Diagram of TWO 90° ELBOWS](image2)

**EXAMPLE VENT RUNS**

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical) Minimum</th>
<th>B (Horizontal) Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Dimensions in Inches)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
<tr>
<td>24</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
<tr>
<td>36</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
<tr>
<td>48</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
</tbody>
</table>

*Maximum horizontal run is 100% of vertical, but cannot exceed 17 feet.

Figure 53

**THREE 90° ELBOWS**

![Diagram of THREE 90° ELBOWS](image3)

**NOTE:** Subtract 3 feet from the total horizontal measurement for each 90° elbow installed horizontally. Subtract 1-1/2 feet from the total horizontal measurement for each 45° elbow installed horizontally.

**EXAMPLE VENT RUNS**

<table>
<thead>
<tr>
<th>Initial Pipe Length</th>
<th>A (Vertical) Minimum</th>
<th>B (Horizontal) Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Dimensions in Inches)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
<tr>
<td>24</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
<tr>
<td>36</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
<tr>
<td>48</td>
<td>120 (10ft)</td>
<td>186 (15ft, 6in)</td>
</tr>
</tbody>
</table>

*Maximum horizontal run is 100% of vertical, but cannot exceed 20 feet.

Figure 54
**VERTICAL TERMINATION**

Locate and mark the center point of the vent pipe using a nail on the underside of the roof. Drive the nail through the center point. Mark the outline of the roof hole around this center point.

**NOTICE:** Size of the roof hole dimensions depend on the pitch of the roof. There must be a 1 inch (25 mm) clearance to the vertical pipe sections. This clearance is to all combustible material.

Cover the opening of the vent pipe and cut and frame the roof hole. Use framing lumber the same size as the roof rafters and install the frame securely. Flashing anchored to frame must withstand high winds. The storm collar is placed over this joint to make a water-tight seal. Non-hardening sealant should be used to completely seal this flashing installation.

**DETERMINING MINIMUM VENT HEIGHT ABOVE THE ROOF.**

| **WARNING** |
| Major U.S. building codes specify minimum chimney and/or vent height above the roof top. These minimum heights are necessary in the interest of safety. These specifications are summarized in Figure 55. |

![Figure 55](image)

Note that for steep roof pitches, the vent height must be increased. In high wind conditions, nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors can result in poor draft, or down-drafting. In these cases, increasing the vent height may solve this problem.

**INSTALLING THE VENT SYSTEM IN A CHASE**

A chase is a vertical box-like structure built to enclose the gas fireplace and/or its vent system. Vertical vent runs on the outside of a building may be, but are not required to be installed inside a chase.

**CAUTION**

Treatment of firestop spacers and construction of the chase may vary with the type of building. These instructions are not substitutes for the requirements of local building codes. Check local building codes to determine the requirements for these steps.

**NOTICE:** Build the chase large enough to maintain the minimum clearance of combustible materials (including insulation) to the vent system. When installing the vent system in a chase, insulate the chase as you would the outside walls of your home. This is especially important in cold climates. Upon completion of chase framing, install the vent system by following the instructions in this manual. The vertical termination cap for this fireplace must not be any closer than 24-in. to combustible materials. See Figure 56.

![Figure 56](image)

If two vertical terminations are run near each other, they may be placed a minimum of 12 inches between them if they are at the same height. See Figure 54. If two vent terminations are not at the same height, they must be positioned at least 24 inches apart to minimize draft issues between them.

![Figure 57](image)
VERTICAL THROUGH-THE-ROOF APPLICATIONS
Your Gas Fireplace has been approved for:

a) Vertical installations up to 40 feet in height.

b) Two sets of 45-degree elbow offsets within these vertical installations. From 0 to a maximum of 8 feet, a vent pipe can be used between elbows.

c) Wall straps must be used to support offset pipe every 4 feet. This application will require that you first determine the roof pitch and use the appropriate venting components.

OFFSET CHART

<table>
<thead>
<tr>
<th>SIZE</th>
<th>Chimney Section</th>
<th>Offset Inches</th>
<th>Rise Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>45°</td>
<td>0</td>
<td>5-5/8</td>
<td>15-3/8</td>
</tr>
<tr>
<td>45°</td>
<td>6</td>
<td>8-7/8</td>
<td>18-3/8</td>
</tr>
<tr>
<td>45°</td>
<td>9</td>
<td>10-7/8</td>
<td>20-5/8</td>
</tr>
<tr>
<td>45°</td>
<td>12</td>
<td>13</td>
<td>22-5/8</td>
</tr>
<tr>
<td>45°</td>
<td>24</td>
<td>21-3/8</td>
<td>31-1/8</td>
</tr>
<tr>
<td>45°</td>
<td>36</td>
<td>29-7/8</td>
<td>39-3/8</td>
</tr>
<tr>
<td>45°</td>
<td>36</td>
<td>28-7/8</td>
<td>39-3/8</td>
</tr>
<tr>
<td>45°</td>
<td>48</td>
<td>38-1/4</td>
<td>47-7/8</td>
</tr>
</tbody>
</table>

Figure 58

GENERAL MAINTENANCE
Inspect venting system semi-annually as follows:

1. Check for corrosion areas of the venting system exposed to the elements. These will appear as rust spots or streaks and, in extreme cases, holes. Replace damaged components should immediately.

2. Remove the cap and shine a flashlight down the vent. Remove any bird nests or other foreign material.

3. Check for evidence of excessive condensate, such as water droplets forming in the inner liner and subsequently dripping out at joints. Condensate can cause corrosion of caps, pipe and fittings. It may be caused by having excessive lateral runs, too many elbows and exterior portions of the system being exposed to cold weather.

4. Inspect joints to verify that no pipe sections or fittings have been disturbed and, consequently, loosened. Also, check mechanical supports, such as wall straps or plumbers’ tape for rigidity.

Venting termination shall not be recessed into a wall or siding. A removable panel or other means must be provided in the enclosure for visual inspection of the flue connection.

NOTICE: This also pertains to vertical vent systems installed on the outside of the building. Slide the vertical vent cap over the ends of the vent pipe and secure. See Figure 59.
The DVVK-4F FLEX VENT KIT includes the following components:

- Horizontal Termination Cap
- 4 feet section of Flex vent with spacers (4 inch flue/7 inch outer pipe)
- 4 inch diameter Flue adapter collar
- 7 inch diameter Outer Vent adapter collar
- Wall Firestop/Thimble Assembly
- Hardware pack that includes band clamps and screws

Flex venting can be installed either vertically or horizontally off of the fireplace. When installing a horizontal vent run from top connections, maintain at least 1/2 inch rise for every 12 inches of vent run. When venting horizontal off the rear vent connections, allow a minimum rise of 2 inch. Refer to Page 14 when mounting termination near vinyl siding.

**CAUTION**

- Always stretch and secure venting with wire or metal strapping to ensure that the horizontal runs do not sag.
- If space permits, it is generally easier to attach venting in the top vent configuration.
- Because of sharp edges, always use gloves when handling the flex vent components.
- Vent connections should overlap a minimum of 1” for proper sealing.
- Always follow the general venting requirements for vent terminal location, vent lengths, and clearance to combustible materials.

**STEP-BY-STEP INSTALLATION**

1. Unpack vent components and check that all items are included.
2. Check to see that the vent spacer springs are located around the flue vent at 8 inch and 12 inch intervals along its length. See Figure A. If not, stretch the spacer springs to about 15 inches long and wrap them around the flue, then interlock the ends of each spring about 2 inches. See Figure B. Maintain equal distance between spring spacers.
3. Remove the 6-5/8 inch diameter Vent collar from the fireplace. Replace this collar with the 7 inch diameter Flex Vent adapter collar provided with the vent kit.
4. Slide the Flex Vent flue pipe into the Outer Flex Vent pipe.
5. Install the Wall Firestop/Thimble assembly as required through the wall. Refer to the venting charts in the fireplace manual to determine the proper height and size of the vent opening. The minimum opening should be 9 inch wide by 11 inch high. The minimum combustible clearance from the horizontal vent is 1 inch from sides and bottom, and 3 inch above the vent pipe. See Figure C.
6. In most cases, after determining the length of the vent that is needed, it may be easier to install the flue and outer vent pipes to the Termination Cap first, then from the outside, feed the venting through the wall to the fireplace.
7. If the venting is too long, trim off any excess vent before attaching the vent end connectors.
8. Attach the Termination Cap to the outside of the house.
9. Prior to making the vent connections, apply high temperature sealant (600 degree F min.) to the vent connections before securing with the band clamps provided. **NOTICE:** the flue pipe end **without the adapter** is to be installed to the Termination Cap.
10. Apply sealant to the outside of the flue pipe adapter and connect to the flex flue pipe. Then insert the adapter into the fireplace flue. Secure flue adapter to the fireplace flue with a minimum of two screws provided. See Figure D.
11. Attach the Outer Vent pipe to the 7 inch diameter Collar on the fireplace with a large band clamp provided. Sealant may also be used on the outer vent connections.
12. Check all vent connections for tightness. Make sure horizontal venting has the proper rise and combustible clearances required. Refer to venting charts in fireplace instruction manual.
This termination kit can only be used with Empire Comfort Systems direct vent fireplaces listed for use with DVVK-4FV Vertical Flex Vent Kit. Please review the instructions packaged with your fireplace and verify the fireplace model number. Check that this flex vent system is listed for use with your fireplace model prior to starting the installation.

This vent kit may be installed as an OEM installation in a manufactured home (USA 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 or Standard for Installation in Mobile Homes, CAN/CSA Z240 MH.

**CAUTION**

All Fireplaces listed for use with the DVVK-4FV will operate safely when installed in accordance with this instruction manual. Read all instructions before starting installation, then follow these instructions carefully to maximize fireplace performance and safety. Report damaged parts to your dealer.

**WARNING**

Any common venting of the gas appliance using the DV vent kit with other gas appliances is not allowed. Do not connect this appliance to a chimney flue servicing a separate solid fuel-burning appliance.

**WARNING**

Failure to follow these instructions may create a possible fire hazard and will void the warranty.

**WARNING**

Always maintain minimum clearances around vent systems. The minimum clearance to combustibles for horizontal runs of vent pipe is 3 inches from the top, and 1 inch from the sides and bottom of the vent system. Do not pack the open air spaces around the fireplace or flue with insulation or other materials. Any horizontal run must have a 1/4 inch rise for every one foot of run towards the vent termination. The vent above the roof must terminate vertically.

**WARNING**

Contact your Local Building and Fire Officials about restrictions and installation inspections in your area.

**IMPORTANT SAFETY INFORMATION**

- The vertical termination cap MUST be vented directly to the outside. The termination kit MUST NEVER be connected to a chimney flue(s) servicing a separate solid-fuel burning appliance or any other appliances.
- Vertical termination cap MUST NOT be mounted horizontally.
- The flexible vent pipe cannot be intermingled with any of the rigid vent pipe section(s). DO NOT connect two sections of flexible vent pipe together to achieve a longer length without the use of approved connectors.
- The installation must conform with local codes or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1 (in the United States) or with the current installation code CAN/CGA B149 (in Canada).
- Only Direct Vent fireplaces approved for use with Empire Comfort Systems, Inc. DVVK-4FV termination kit shall be used. See PARTS LIST/ILLUSTRATIONS section for vent component identification.
- Horizontal vent runs must be supported every 2 feet using wall straps. Vertical runs must be supported every 3 feet using wall straps. Slip wall straps loosely on to pipe. Attach installer provided straps to framing members using nails or screws.
- The fireplace and venting system should be inspected before initial use and at least annually by a qualified field service person. Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the airflow. Inspect entire venting system to ensure proper function.
- Please refer to the fireplace instructions for information on Termination Cap clearances.
**DVVK-4FV DIRECT VENT TERMINATION KIT (CONT’D)**

**PRE-INSTALLATION INFORMATION**

Items Required For Installation:

<table>
<thead>
<tr>
<th>Tools</th>
<th>Building Supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Phillips Screwdriver</td>
<td>• Framing Materials</td>
</tr>
<tr>
<td>• Hammer</td>
<td>• Wall Finishing Materials</td>
</tr>
<tr>
<td>• Saw and/or Saber Saw</td>
<td>• Caulking Material (Noncombustible)</td>
</tr>
<tr>
<td>• Level</td>
<td>• Support Strap Supplies</td>
</tr>
<tr>
<td>• Measuring Tape</td>
<td></td>
</tr>
<tr>
<td>• Electric Drill and Bits</td>
<td></td>
</tr>
<tr>
<td>• Pliers</td>
<td></td>
</tr>
<tr>
<td>• Square</td>
<td></td>
</tr>
<tr>
<td>• Tin Snips</td>
<td></td>
</tr>
<tr>
<td>• Framing Materials</td>
<td></td>
</tr>
<tr>
<td>• Wall Finishing Materials</td>
<td></td>
</tr>
<tr>
<td>• Caulking Material (Noncombustible)</td>
<td></td>
</tr>
<tr>
<td>• Support Strap Supplies</td>
<td></td>
</tr>
</tbody>
</table>

**BEFORE YOU START:**

Plan your installation. Read these instructions and the fireplace installation manual before installing unit and vent system. Set unit in place and survey how best to vent the unit. After the vent configuration has been decided, stretch the flex pipe components out, then trim off what will not be needed.

Refer to the fireplace installation manual for information on vertical venting requirements. The maximum length of vent when using flex venting is 35 feet total. Contact your dealer or distributor for information on flex vent extension kits that may be added to the DVVK-4FV kit, in order to terminate up to 35 feet. Available extension kits include the DVEK-10 (10’ Flex) or the DVEK-25 (25’ Flex) extension kits. The extension kits include connection hardware.

**INSTALLATION OF THE VERTICAL FLEX TERMINATION KIT**

- **WARNING**
  Ensure that the venting system exits the structure through the roof and does not terminate less than 12 inches (305 mm) above the roof.

- **WARNING**
  Refer to your fireplace homeowner’s manual for the minimum and maximum venting requirement of your fireplace prior to installation. Failure to do so may cause a fire hazard.

- **WARNING**
  This flexible pipe termination kit is ONLY for vertical terminations.

- **WARNING**
  Any horizontal run section must have a 1/4 inch rise for every one foot of run towards the vent termination. Never allow the vent pipe to run downward. This could cause high temperatures and may present a fire hazard. This vertical kit may incorporate two 90 degree bends, but must terminate vertically.

- **CAUTION**
  This flex vent kit can only be installed vertically off of the unit and must terminate vertically.

- **WARNING**
  Because of sharp edges, always use gloves when handling the flex vent components.

- **CAUTION**
  Vent connections should overlap a minimum of 1 inch for proper sealing.

- **CAUTION**
  Always stretch and secure venting with metal strapping secured with nails (nails and strapping not supplied) to ensure that the flex vent runs remain true.
**DVVK-4FV DIRECT VENT TERMINATION KIT (CONT’D)**

**STEP-BY-STEP INSTALLATION**

1. Unpack vent components and check all items for shipping damage.

2. For this venting system to operate as designed it is dependent on the use of all parts and procedures detailed in these instructions. Failure to follow these instructions may potentially affect the performance of this vent system and the attached appliance.

3. As per the fireplace manufacturer’s instructions, replace the existing 6-5/8 inch diameter fireplace vent adapter with the 7 inch diameter flex vent fireplace adapter included in the vent kit. Install the adapter collar with the screws removed from the standard fireplace collar. Refer to the fireplace manual for additional information on the vent collar removal and installation.

4. Once the fireplace location has been determined, mark the ceiling where the flex vent will pass through. Cut an opening for installation of the firestop thimble assembly. The opening must measure a minimum of 9-1/2 inch x 9-1/2 inch square. See Figure 60.

5. Next, determine the location for the cutout in the roof opening. This opening must be large enough to provide a minimum 1 inch air space clearance from the vertical vent pipe to any combustible framing.

6. Install the Firestop/Thimble assembly to the framed opening in the ceiling using common nails or screws. **NOTICE:** The thimble assembly is adjustable up or down as needed within the firestop. It is also designed with a pivoting firestop for use with 0 - 3/12 pitch cathedral ceilings.

7. To begin vent system assembly, first layout all the vent components on the floor in the order in which they will be assembled.

8. Stretch the 4 inch diameter inner flex flue and 7 inch diameter outer flex vent to the maximum length of 6 feet.

9. Install the spring spacers provided around the 4 inch diameter flex flue at 1 foot intervals, then slide the flue pipe with spacers into the 7 inch diameter outer flex vent pipe. Make sure the springs are spaced evenly starting at 12 inches from the fireplace collar. See Figure 61.

---

**Figure 60**

**Figure 61**
10. With the flex vent assembly and the 48 inch long hard pipe components laid out on the floor, begin securing these parts together. First, apply a generous bead of silicone sealant to the inside of the 4 inch diameter flex flue (not the end with the pre-installed connector), then slide the flex flue over the 4 inch diameter hard pipe flue. Be sure to overlap at least 1-1/4 inch. Secure this connection with a 4 inch diameter band clamp provided. Be careful not to damage or tear the flex flue when tightening clamp.

11. Repeat the connection process for the outer 7 inch diameter flex vent to hard pipe connection. Use silicone sealant at this joint also, overlap at least 1-1/4 inch, then secure the joint with the 7 inch diameter band clamp provided. Be careful not to damage or tear the flex vent pipe when tightening the clamp.

12. While the venting is still on the floor, assemble the roof jack components as shown in Figure 62 and pre-install the roof jack assembly to the hard pipe approximately 18 inches from the top end of the hard pipe.

13. Now the pre-assembled vent system may be carried to the roof, then lowered through the roof cutout opening (see step 5). Feed the flex vent end down through the roof opening and firestop/thimble assembly installed in steps 4 through 6.

14. Secure the roof support assembly to the roof sheathing with at least four nails/screws through each support bracket. Check that the combustible clearances through the roof framing will maintain at least a 1" clearance from the vent pipe.

15. Determine how high the vent terminal should be located above the roof line based on the roof pitch information shown in Figure 63. Adjust the vent system height by loosening the pre-installed roof support pipe clamp and sliding the vent pipe up or down as pre-determined, then re-tighten the pipe clamp. Install a couple of sheet metal screws through the pipe clamp into the outer hard vent pipe to lock in place.

16. Check to make sure that the bottom end of the flex vent is long enough to reach the fireplace adapter collars. If too long, trim off the extra flex vent not needed.

<table>
<thead>
<tr>
<th>ROOF PITCH</th>
<th>H (Min.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat to 6/12</td>
<td>12&quot; (305 mm)</td>
</tr>
<tr>
<td>6/12 to 7/12</td>
<td>15&quot; (381 mm)</td>
</tr>
<tr>
<td>Over 7/12 to 8/12</td>
<td>18&quot; (457 mm)</td>
</tr>
<tr>
<td>Over 8/12 to 16/12</td>
<td>24&quot; (610 mm)</td>
</tr>
<tr>
<td>Over 16/12 to 21/12</td>
<td>36&quot; (914 mm)</td>
</tr>
</tbody>
</table>

Figure 62

Figure 63
17. To attach the vent connections at the fireplace, be sure the 7 inch diameter adapter collar has been installed per step 3. Apply a bead of silicone sealant to the 4 inch diameter flex connector, then slide the flex pipe adapter collar into the fireplace flue collar and secure by installing a minimum of two screws through the flue collar and into the adapter. See Figure 64.

18. Apply sealant to the 7 inch diameter adapter collar, slide outer flex vent over the collar, then secure with a 7 inch diameter band clamp. See Figure 64.

19. Once the lower connections are made and the flex pipe is secured with support bands as required (3 feet minimum between supports) then the roof flashing can be installed. See Figure 65.

20. Install the roof flashing, and seal using common constructions practices.

21. An additional storm collar band is provided in kit that may be used as an attic insulation shield. The collar can be installed around the flex pipe (or hard pipe) just above the firestop thimble. This collar will act as a shield to prevent blown insulation from entering the thimble.

22. To complete the vent installation, install the vent termination cap to the top of the hard vent pipe assembly. Mate up the flue and outer telescopes with the hard pipe assembly, then secure by installing a minimum of two sheet metal screws into the overlapped flanges of the cap and pipe.

23. Figure 65 shows a completed installation with components identified and other installation information such as heights and clearance to combustibles.
NOTE: DVVK-4VF KIT MAXIMUM HEIGHT (INCLUDING FIREPLACE) IS 13'. TO EXTEND VENT RUN, AN ADDITIONAL VENT EXTENSION KIT IS NECESSARY.
### VERTICAL FLEX TERMINATION KIT

<table>
<thead>
<tr>
<th>ITEM NUMBER</th>
<th>ITEM DESCRIPTION</th>
<th>REPAIR PART NUMBER</th>
<th>QUANTITY SUPPLIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4&quot; / 7&quot; Vertical Termination Cap</td>
<td>MF100038</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Roof Support Kit</td>
<td>MF100503</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>2 Ply Alum Flex 4&quot; Diameter by 6 ft.</td>
<td>MF04ALA2F006</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2 Ply Alum Flex 7&quot; Diameter by 6 ft.</td>
<td>MF07ALA2F006</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>4&quot; / 7&quot; x 48&quot; Rigid Pipe Assembly</td>
<td>MF100554</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Firestop Thimble Assembly</td>
<td>MF100124</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Roof Flashing (0/12 to 6/12)</td>
<td>MF100091</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>7&quot; Flex Adapter Collar with Gasket</td>
<td>MF100524</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>7&quot; Storm Collar</td>
<td>MF100147</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>Spring Spacers</td>
<td>MF100548</td>
<td>5</td>
</tr>
<tr>
<td>N/S</td>
<td>Clamp 4&quot; Diameter</td>
<td>MF100330</td>
<td>2</td>
</tr>
<tr>
<td>N/S</td>
<td>Clamp 7&quot; Diameter</td>
<td>MF100534</td>
<td>2</td>
</tr>
<tr>
<td>N/S</td>
<td>#8 x 1/2&quot; Self Drilling Screws</td>
<td>N/A</td>
<td>20</td>
</tr>
<tr>
<td>N/S</td>
<td>HT Silicone</td>
<td>N/A</td>
<td>1</td>
</tr>
<tr>
<td>N/S</td>
<td>#8 x 5/8&quot; Self Drilling Screws</td>
<td>N/A</td>
<td>10</td>
</tr>
</tbody>
</table>
INSTALLING SUPPORT BRACKETS
Install a horizontal pipe support used for each 3 feet of horizontal run to framing members. Allow 3 inch clearance to combustibles above 8 inch diameter pipe and elbows, and 1 inch clearance to both sides and bottom.

Support vertical runs of this vent systems every 4 feet using wall brackets attached to the vent pipe, then secured with nails or screws to structural framing.

INSTALLING FIRESTOPS
Firestops are required for safety whenever the vent system passes through an interior wall, an exterior wall, or a ceiling. These firestops act as a firebreak heat shield and as a means to insure that minimum clearances are maintained to the vent system.

HORIZONTAL FIRESTOPS
Horizontal runs in the vent system which pass through either interior or exterior walls, require the use of wall firestops on both sides of the wall through which the vent passes.

Position the firestops on both sides of the framed hole, previously cut. See Figure 68. Secure firestop with nails or screws. Continue the vent run through the firestops.
VERTICAL FIRESTOPs
Vertical runs of this system which pass through ceilings require the use of ONE ceiling firestop at the hole in each ceiling through which the vent passes.

Position a plumb bob directly over the center of the vertical vent component and mark the ceiling to establish the center point of the vent. Drill a hole or drive a nail through this center point and check the floor above for any obstructions such as wiring or plumbing runs. Reposition the fireplace and vent system, if necessary, to accommodate ceiling joists and/or obstructions.

Cut a 9-1/2 inch x 9-1/2 inch hole through the ceiling, using the center point previously marked. Frame the hole with framing lumber the same size as the ceiling joists. See Figure 69. If the area above the ceiling is NOT an attic, position and secure the ceiling firestop on the ceiling side of the previously cut and framed hole. See Figure 70.

If the area above the ceiling is an attic, position and secure the firestop on top of the previously framed hole. See Figure 71.

NOTE: Remove insulation from the framed area in the attic before installing the firestop and/or vent pipes.

FINISHING
Finish the walls with the material of your choice. Figure 14 on Page 14 shows the minimum vertical and corresponding maximum horizontal dimensions of mantels or other combustible projections above the top front edge of the fireplace.

Only non-combustible materials may be used to cover the black fireplace front.

⚠️ WARNING

When finishing the fireplace never obstruct or modify the air inlet/outlet louvers in any manner. Provide adequate clearances around air openings into the combustion chamber.

⚠️ CAUTION

If the joints between the finished wall and the fireplace surround (top and sides) are sealed, a 300 Degree F minimum sealant material must be used. These joints are not required to be sealed. Only non-combustible material (using 300 Degree F minimum adhesive if needed), can be applied as facing to the fireplace surround.
GLASS PLACEMENT

PREPARATION OF FIREPLACE PRIOR TO DECORATIVE MEDIA PLACEMENT
1. The optional accent light is available. If used, follow instructions included with the light kit for proper installation.

[CAUTION]
Turn off all power to the fireplace prior to changing bulbs or servicing the controls.

2. If a liner kit has been removed, STOP and install one before proceeding with media placement.
3. If applicable, install Logs and Rock kit.

CRUSHED GLASS PLACEMENT
1. Add the decorative crushed glass media of your choice at this time. Crushed glass may cover the complete burner screen.
2. Place crushed glass media over the burner screen in a single layer. Use just enough crushed glass media to mask the burner screen. See Figure 72.

[NOTICE]: 1/4-inch crushed glass media is required on the burner screen.

Glass Quantity:
- DVLL36BP: Use up to 4 Sq. Ft. of 1/4 inch crushed glass.
- DVLL48BP: Use up to 5 Sq. Ft. of 1/4 inch crushed glass.

[CAUTION]: DO NOT PLACE CRUSHED GLASS MEDIA IN THE RECESSED AREA AROUND THE PILOT, PILOT SENSOR, OR IGNITOR PROBE.
MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS

TECHNICAL DATA

<table>
<thead>
<tr>
<th>Remote Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply voltage</td>
<td>4.5 V (three 1.5 V AAA batteries)</td>
</tr>
<tr>
<td>Ambient temperature ratings</td>
<td>0-50°C (32 - 122°F)</td>
</tr>
<tr>
<td>Radio frequency</td>
<td>315 MHz</td>
</tr>
</tbody>
</table>

**WARNING**

The transmitter and receiver are radio frequency devices. Placing the receiver in or near metal may severely reduce the signal range.

**WARNING**

Turn off the main gas supply and electrical supply to the fireplace during installation and/or maintenance of the receiver device.

**WARNING**

FIRE HAZARD

Can cause severe injury or death. The Receiver causes ignition of the FIREPLACE. The FIREPLACE can turn on suddenly. Keep away from the FIREPLACE burner when operating the remote system or activating manual bypass of the remote system.

**WARNING**

PROPERTY DAMAGE HAZARD.

Excessive heat can cause property damage. The FIREPLACE can stay lit for many hours. Turn off the FIREPLACE if it is not going to be attended for any length of time. Always place the Transmitter where children can not reach it.

**CAUTION**

FIRE OR EXPLOSION HAZARD.

Can cause property damage, severe injury or death. Do not attempt to take apart the gas control or to clean it. Improper assembly and cleaning can cause unreliable operation.

**NOTICE:** This control system includes a Battery Back-up pack that allows the Fireplace to operate in the event of a power outage.

**NOTICE:** The Accent Light and/or Blower features will not operate during a power outage.

**NOTICE:** Replace all Batteries at least once each year, preferably before at the beginning of the season.

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**Figure 73**

**Figure 74**

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MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS

INITIALIZING THE SYSTEM FOR THE FIRST TIME

1. Remove the wall cover. Remove cover on the wall mounted battery back-up holder. See Figure 75. Install the four AA batteries into the wall mounted battery back-up holder then reinstall the cover. See Figure 76.

2. Install three AAA batteries into the battery bay located on the base of the transmitter. See Figure 77.

3. Set the wall remote slide switch to the REMOTE position. See Figure 76.

4. Press and release the SWI button on the wall control with a paper clip and the IFC module will beep three times to indicate the IFC module is ready to synchronize with the transmitter within ten seconds. See Figure 76.

5. With the batteries already installed in the Transmitter, push the On button. The Receiver will beep four times to indicate the Transmitter’s command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

Temperature Indication Display °C or °F

With the system in the OFF position, press the Thermostat Button and the Mode Button at the same time. Look at the LCD screen on the Transmitter to verify that a °C or °F is visible to the right of the Room Temperature display. See Figures 78 and 79.
TURN ON THE FIREPLACE
With the system OFF, press the ON/OFF Button on the Transmitter. The Transmitter display will show some other active icons on the screen. At the same time the Receiver will activate the fireplace. A single beep from the Receiver will confirm reception of the command.

TURN OFF THE FIREPLACE
With the system ON, press the ON/OFF Button on the Transmitter. The Transmitter LCD display will only show the room temperature. See Figure 80. At the same time the Receiver will turn off the fireplace. A single beep from the Receiver confirms reception of the command.

REMOTE FLAME CONTROL
The Proflame has six flame levels. With the system on, and the flame level at the maximum in the fireplace, pressing the Down Arrow Button once will reduce the flame height by one step until the flame is turned off.

The Up Arrow Button will increase the flame height each time it is pressed. If the Up Arrow Button is pressed while the system is on but the flame is off, the flame will come on in the high position. See Figures 81 through 84. A single beep will confirm reception of the command.
THE THERMOSTAT FEATURE MAY BE DISABLED IF DESIRED.
With all the (3) AAA type batteries installed:
1. Take out one AAA battery.
2. While re-inserting the AAA battery, Push and hold down the thermostat button. This will disable the thermostat feature on the transmitter.

ROOM THERMOSTAT (TRANSMITTER OPERATION)
The Remote Control can operate as a room thermostat. The thermostat can be set to a desired temperature to control the comfort level in a room. To activate this function, press the Thermostat Button Figure 74. The LCD display on the Transmitter will change to show that the room thermostat is ON and the set temperature is now displayed. See Figure 85. To adjust the set temperature, press the Up or Down Arrow Buttons until the desired set temperature is displayed on the LCD screen of the Transmitter. See Figure 86.

SMART THERMOSTAT (TRANSMITTER OPERATION)
The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperatures. As the room temperature gets closer to the set point the Smart Function will modulate the flame down. To activate this function, press the Thermostat Button until the word SMART appears to the right of the temperature bulb graphic. See Figure 87. To adjust the set temperature, press the Up or Down Arrow Buttons until the desired set temperature is displayed on the LCD screen of the Transmitter. See Figure 88.

NOTE: When Smart Thermostat is activated, manual flame height adjustment is disabled.
BLOWER CONTROL (FAN)

If the fireplace is equipped with a hot air circulating fan, the speed of the fan can be controlled by the Profame system. The fan speed can be adjusted through six speeds. To activate this function, use the Mode Button Figure 74 to index the fan control icon. See Figure 89. Use the Up/Down Arrow Buttons Figure 70 to turn on or adjust the fan speed. See Figure 90. A single beep will confirm reception of the command.

REMOTE LIGHT CONTROL (ACCENT LIGHT)

If the fireplace is equipped with accent lights below the hearth, the intensity of the lights can be controlled by the Profame system. The light has five levels of intensity, plus off. To activate this function, use the Mode Button Figure 74 to index the light control icon. See Figure 91. Use the Up/Down Arrow Buttons Figure 74 to turn On/Off, or adjust the light intensity level. See Figure 92. A single beep will confirm reception of the command.
MULTIFUNCTION REMOTE OPERATING INSTRUCTIONS

SPLIT FLOW CONTROL (OPTION NOT AVAILABLE FOR THE DVLL(36,48)BP SERIES FIREPLACES)

REMOTE AUXILIARY RELAY CONTROL (OPTIONAL WITH THIS FIREPLACE)

The auxiliary function controls the AUX relay outlet. To activate this function use the Mode Button Figure 74 to index to the AUX icon Figures 93 and 94. Pressing the Up Arrow Button will activate the outlet. Pressing the Down Arrow Button will turn the outlet off. A single beep will confirm the reception of the command.

![Figure 93](image1.png)

![Figure 94](image2.png)
CONTINUOUS PILOT/INTERMITTENT PILOT (CPI/IPI) SELECTION
With the system in OFF position press the Mode Button Figure 74 to index to the CPI mode icon. See Figures 95 and 96. Pressing the Up Arrow Button will activate the CPI. Pressing the Down Arrow Button will return to IPI. A single beep will confirm the reception of the command.

BUTTON LOCK
This function will lock the Buttons to avoid unsupervised operation. To activate this function, press the MODE and UP Buttons at the same time. See Figure 97. To deactivate this function, press the MODE and UP Buttons at the same time.

LOW BATTERY POWER DETECTION - TRANSMITTER
The life span of the remote control batteries depends on various factors: quality of the batteries used, the number of ignitions of the fireplace, the number of changes to the room thermostat set point, etc.

When the transmitter batteries are low, an Icon will appear on the LCD display of the transmitter. See Figure 98 before all battery power is lost. When the batteries are replaced this Icon will disappear.
LOCKOUT STATE DEFINITION
A lockout state is reached when an ignition error occurs. The lockout state will remain set in memory as long as the power supplies are applied. This could mean both an anomalous flame detection and/or too many unsuccessful ignition tries. This state is a safe condition for the fireplace and is entered automatically by the IFC board.

WHEN THE IFC BOARD GETS INTO LOCKOUT STATE:
1. both the Pilot and the Main Burner solenoids in the gas valve are de-energized;
2. a diagnostic code is sent through the diagnostic red LED.
3. the IFC board will ignore any burner ignition command and remain in the OFF state unless the unlock command sequence is met.

The causes of lockout must be investigated under safe conditions by the user and/or service personnel.

TO RESET THE IFC FROM A LOCKOUT STATE, PERFORM THE FOLLOWING PROCEDURE:
• Turning the system power supplies (to the wall control or remote control) OFF for two or three seconds and then restoring a power supply back on.

The return of the system to normal operation must be checked under safe conditions by the user and/or service personnel.
INTERMITTENT PILOT LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

⚠️ WARNING

If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

A. This appliance has a pilot which can be lit with the manual on/off switch, a remote control, or by switching the remote receiver switch to the “ON” position. When lighting the pilot, follow these instructions exactly.

B. Before lighting smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.

What To Do If You Smell Gas
• Do not try to light any appliance.
• Do not touch any electrical switch;
• Do not use any phone in your building.
• Immediately call your gas supplier from a neighbor’s phone. Follow the gas supplier’s instructions.
• If you cannot reach your gas supplier, call the fire department.

C. Use only the remote control or manual remote receiver switch to operate the gas valve. Never use tools. If valve does not operate, don’t try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.

D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

1. STOP! Read the safety information above.
2. Turn OFF electric power to the appliance.
3. Remove front surround panel assembly or bottom louver if included.
4. Turn gas shut-off valve counterclockwise to “On” position.
5. Wait ten minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow “B” in the safety information above on this page. If you do not smell gas, go to the next step.
6. Turn ON electric power to the appliance.
7. Find pilot - Follow metal tube from gas control. The pilot is behind the burner on the right side.
8. Turn main flame to on. If the pilot does not light within 60 seconds, stop and go to Step 5.
9. If the burner or pilot does not operate properly after several tries, turn the gas shut-off valve clockwise to “Off” and call your service technician or gas supplier.
10. Replace the front surround assembly or close bottom louver assembly (if applicable).
11. Operation of the gas valve is controlled by a manual on/off switch or a hand held remote control. Refer to remote instructions for detailed operation information.

TO TURN OFF GAS TO FIREPLACE

1. Turn off all electric power to the appliance if service is to be performed (if applicable).
2. Turn gas shut-off valve to “Off” position.
## CONTROL SYSTEM TROUBLESHOOTING

<table>
<thead>
<tr>
<th>PROBLEM OBSERVED</th>
<th>POSSIBLE CAUSE</th>
<th>CORRECTIVE MEASURE</th>
</tr>
</thead>
</table>
| Gas odor during setup                                 | Gas Leak                         | WHAT TO DO IF YOU SMELL GAS
Do not try to light any appliance.
Do not touch any electrical switch; do
not use any phone in your building.
Leave the building immediately.
Immediately call your gas supplier from
a neighbor’s phone. Follow the gas
supplier’s instructions.
If you cannot reach your gas supplier,
call the fire department. |
<p>| Gas odor before first ignition                         | Gas Leak                         |                                                                                    |
| Fireplace is “on” but no flame and pilot is not trying to light | Gas Line Valve turned “off”       | Turn shutoff valve to “open” position                                             |
|                                                       | Control module in &quot;lockout&quot;      | Turn fireplace &quot;off&quot; and then back &quot;on&quot;                                          |
| Pilot continues to spark when pilot is lit            | Not enough gas to pilot           | Wait for pilot flame to strengthen                                                |
|                                                       | Low Gas Pressure                  | Check pressures. See page 12.                                                    |
|                                                       | Pilot igniter/sensor is dirty     | Clean pilot. See maintenance page 79.                                             |
|                                                       | Pilot not grounded well           | Check ground connections                                                          |
|                                                       | Draft in firebox                  | Vent restrictor not installed                                                     |
|                                                       | Pilot sensor has been bent        | Replace pilot                                                                      |
| Pilot will not ignite, or will not stay lit           | Pilot igniter/sensor is dirty     | Clean flame sensor and pilot igniter. See maintenance page 79.                   |
|                                                       | Pilot not grounded well           | Check ground connections                                                          |
|                                                       | Sensor Wire loose                 | Check sensor wire terminals                                                       |
|                                                       | Gas pressure incorrect            | Adjust gas pressure                                                                |
|                                                       | Pilot Gas Line Bent or kinked     | Replace pilot tube                                                                 |
|                                                       | Faulty Pilot, Sensor Bent         | Replace Pilot                                                                      |
|                                                       | Faulty Valve                      | Replace Valve                                                                      |
| Burner takes too long to fully light                  | Low gas pressure                  | Check gas supply pressure                                                         |
|                                                       | Clogged or dirty carryover/burner ports | Clean ports                                                                        |
|                                                       | Blocked orifice                   | Check orifice opening                                                              |
|                                                       | Faulty Valve                      | Replace valve                                                                      |
| Burner does not light but pilot remains on            | Low gas pressure                  | Check gas supply pressure                                                         |
|                                                       | Clogged or dirty burner ports     | Clean burner ports                                                                |
|                                                       | Blocked orifice                   | Check orifice opening                                                              |
|                                                       | Loose wire connections            | Check valve/control module connections                                            |
|                                                       | Faulty pilot                      | Replace pilot                                                                      |
|                                                       | Faulty Valve                      | Replace valve                                                                      |
| Burner lights but does not stay lit while pilot remains on | Low gas pressure                  | Check gas supply pressure                                                         |
|                                                       | Loose sensor wire                 | Check wire connection                                                              |
|                                                       | Faulty valve                      | Replace valve                                                                      |
|                                                       | Faulty pilot or thermocouple      | Replace Safety pilot                                                               |
|                                                       | Clogged or dirty burner ports     | Clean burner ports                                                                |
|                                                       | (For fireplace equipped with optional thermostat or thermostat remote) Room temperature is higher than thermostat setting | Move (optional) remote away from fireplace                                        |
|                                                       | (Optional) Remote control batteries failing | Set higher temperature on (Optional) remote/thermostat                        |
|                                                       | (Optional) Remote control batteries failing | Replace batteries in remote transmitter and receiver                              |</p>
<table>
<thead>
<tr>
<th>PROBLEM OBSERVED</th>
<th>POSSIBLE CAUSE</th>
<th>CORRECTIVE MEASURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burner &amp; pilot light but will not stay lit</td>
<td>Flame sensor dirty</td>
<td>Clean pilot sensor</td>
</tr>
<tr>
<td></td>
<td>Low gas pressure</td>
<td>Check gas supply pressure</td>
</tr>
<tr>
<td></td>
<td>Not enough fresh air for pilot</td>
<td>Open door or window - ventilate</td>
</tr>
<tr>
<td></td>
<td>Clogged or dirty burner ports</td>
<td>Clean burner ports</td>
</tr>
<tr>
<td></td>
<td>(For fireplace equipped with optional thermostat or thermostat remote) Room temperature is higher than thermostat setting</td>
<td>Move (optional) remote away from fireplace</td>
</tr>
<tr>
<td></td>
<td>(Optional) Remote control batteries failing</td>
<td>Replace batteries in remote transmitter and receiver</td>
</tr>
<tr>
<td></td>
<td>Faulty pilot or thermocouple</td>
<td>Replace pilot</td>
</tr>
<tr>
<td>Incorrect burner flame</td>
<td>Incorrect gas supply or pressure</td>
<td>Check gas supply pressure</td>
</tr>
<tr>
<td></td>
<td>Blocked orifice</td>
<td>Check orifice opening</td>
</tr>
<tr>
<td></td>
<td>Clogged or dirty burner ports</td>
<td>Clean burner ports</td>
</tr>
<tr>
<td></td>
<td>Faulty valve</td>
<td>Replace valve</td>
</tr>
<tr>
<td></td>
<td>High altitude</td>
<td>Adjust orifice size for altitude</td>
</tr>
<tr>
<td>Backfire of burner</td>
<td>Blocked orifice</td>
<td>Check orifice opening</td>
</tr>
<tr>
<td></td>
<td>Clogged or dirty burner ports</td>
<td>Clean burner ports</td>
</tr>
<tr>
<td></td>
<td>Low gas pressure</td>
<td>Check gas supply pressure</td>
</tr>
<tr>
<td>Fireplace produces unwanted odors</td>
<td>Vapors from paint, hairspray, glue, etc.</td>
<td>Ventilate room until odor stops. Do not use paint, hairspray, glue, etc around fireplace</td>
</tr>
<tr>
<td></td>
<td>Initial burn-off of manufacturing chemicals</td>
<td>Ventilate room until odor stops</td>
</tr>
<tr>
<td>Whistle noise from fireplace</td>
<td>Check gas pressure</td>
<td>Adjust gas pressure to recommended setting.</td>
</tr>
<tr>
<td></td>
<td>Air in gas line</td>
<td>Bleed lines</td>
</tr>
<tr>
<td></td>
<td>Control knob not in fully open position</td>
<td>Open control knob to full position</td>
</tr>
<tr>
<td></td>
<td>Spiral gas flex line pinched or too small diameter line</td>
<td>Straighten flex line where pinched or replace gas feed line with larger diameter</td>
</tr>
</tbody>
</table>
Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this fireplace may result in property damage or personal injury.
<table>
<thead>
<tr>
<th>INDEX NO.</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40539-3-0220</td>
<td>Top Header Shield</td>
</tr>
<tr>
<td>2</td>
<td>37090-3-0220</td>
<td>Rear Liner Panel Assembly</td>
</tr>
<tr>
<td>3</td>
<td>37091-3-0220</td>
<td>Left Side Panel Assembly</td>
</tr>
<tr>
<td>4</td>
<td>40485-3-0220</td>
<td>Right Side Panel Assembly</td>
</tr>
<tr>
<td>5</td>
<td>R7566-3-0220</td>
<td>Rear Access Plate</td>
</tr>
<tr>
<td>6</td>
<td>R7573-3-0220</td>
<td>Inlet Vent Adaptor - 6-5/8 inch</td>
</tr>
<tr>
<td>7</td>
<td>32260-3-0220</td>
<td>Gasket - Inlet Vent</td>
</tr>
<tr>
<td>8</td>
<td>28450-3-0220</td>
<td>Handle (Qty. 2)</td>
</tr>
<tr>
<td>9</td>
<td>28450-3-0220</td>
<td>Nailing Flange (Qty. 4)</td>
</tr>
<tr>
<td>10</td>
<td>34431-3-0220</td>
<td>Pilot - Natural</td>
</tr>
<tr>
<td>11</td>
<td>34431-3-0220</td>
<td>Pilot - Propane</td>
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<tr>
<td>12</td>
<td>R11963-3-0220</td>
<td>Insulation, Top</td>
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<td>13</td>
<td>R11963-3-0220</td>
<td>Burner Assembly Weldment</td>
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<td>14</td>
<td>R11977-3-0220</td>
<td>Burner Support Bracket (Qty. 2)</td>
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<td>15</td>
<td>R11978-3-0220</td>
<td>Venturi Tube - 90 Degree</td>
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<td>16</td>
<td>R7624-3-0220</td>
<td>Air Shutter</td>
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<td>17a</td>
<td>R12283-3-0220</td>
<td>Pilot - Natural</td>
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<tr>
<td>17b</td>
<td>R12283-3-0220</td>
<td>Pilot - Propane</td>
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<tr>
<td>18</td>
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<td>R3490-3-0220</td>
<td>Junction Box Mount Bracket</td>
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<td>35530-3-0220</td>
<td>Bracket - Gas Line Seal</td>
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<td>33</td>
<td>*R12383-3-0220</td>
<td>Control Module, Profame II</td>
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<td>34</td>
<td>40485-3-0220</td>
<td>Glass Door Assembly</td>
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<td>40517-3-0220</td>
<td>Screen Frame (Only)</td>
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<td>Screen Frame (Only)</td>
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<td>35530-3-0220</td>
<td>Bracket - Gas Line Seal</td>
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<tr>
<td>36</td>
<td>40519-3-0220</td>
<td>Board, Non-Combustible (Top)</td>
</tr>
</tbody>
</table>

*Also order a R12270 Jumper Wire. **Note:** The Jumper Wire must be connected to the “X4” terminal pins on the Profame II Control Module.
If any of the original wire as supplied with this fireplace must be replaced, it must be replaced with equivalent gauge and temperature rated wire.

This fireplace is only for use with the type of gas indicated on the rating plate and may be installed in an aftermarket, permanently located, manufactured (mobile) home where not prohibited by local codes. This fireplace is not convertible for use with other gases, unless a certified kit is used.

**WARNING**

ELECTRICAL GROUNDING INSTRUCTIONS
This fireplace is equipped with a three-prong grounding plug for your protection against shock hazard and should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug.

**CAUTION**

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

**CAUTION**

Do not operate the fireplace with glass panel removed, cracked or broken. Replacement of the panel should be done by a licensed qualified service person.

**WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier. Verify proper operation after servicing.
MAINTENANCE AND SERVICE

Removing the Barrier Screen
Lift the barrier up approximately 1/4 inch with one hand under the lower barrier frame edge to disengage the lower flange. Grasp the top of the barrier and pull forward to disengage it. Remove the barrier by pulling straight forward.

REMOVE DOOR LIMITER BRACKET
Before the Glass Door can be removed, a Door Limiter Bracket must be removed. Using a 5/16 inch hex nut driver, remove (3) #10-24 x 3/8 inch screws that retain the Limiter Bracket to the bottom flange of the Glass Door frame, and set the bracket aside. See Figures 99 and 100.

NOTICE: The Door Limiter Bracket must be re-installed to the Glass Door frame prior to operation of the fireplace.

NOTICE: The glass door is secured to the top of the firebox with tabs that allow it to pivot outward at the bottom. The bottom of the door frame engages into the four bullet type retainers.

Pivot the glass door out until the bottom of the door is about 6 to 8 inches from the firebox face, then lift upward on the door assembly to disengage the top of the door from the tab retainers on top of the firebox. See Figures 101 and 102.

CAUTION
The glass door is wide and heavy and can be difficult to install or remove by a single person. It is recommended that two people remove the glass door.

REMOVING THE GLASS DOOR ASSEMBLY
Locate the glass door tool (secured to the top of the fireplace for shipping). Use the tool as a lever to release the bottom of the glass door as shown in Figure 101.

Figure 99

Figure 100

Figure 101

Figure 102
MAINTENANCE AND SERVICE (CONT’D)

WIRING
If any of the original wire supplied with this unit must be replaced, it must be replace with 18 GA. 150°C wire or its equivalent.

GAS VALVE AND CONTROL ACCESS INSTRUCTIONS

<table>
<thead>
<tr>
<th>CAUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharp Edges! Use gloves and eye protection when servicing the fireplace controls.</td>
</tr>
</tbody>
</table>

**NOTICE**: To service or inspect the gas valve and control system after the fireplace has been installed, or if there is no right side outer accessibility, follow these steps for servicing the fireplace gas control valve.

Accessing the Gas Valve
Always turn off gas and electrical supply to the fireplace before servicing the controls.
1. Remove the barrier screen and glass door assemblies and set them aside in a safe location.
2. It is not necessary to remove decorative glass media from the burner to gain access to the valve compartment.
3. Removal of crushed glass away from the access door and liners is recommended prior to the removal of the liner or liner panels.
4. Remove logs and rock kit if applicable.
5. Remove liner panel(s) if installed, to gain access to the valve compartment.
6. Refer to the instructions included with the accessory kits for removal and installation.
7. Remove the twelve 5/16 inch hex-head screws that secure the access cover plate on the right side of the firebox. See Figure 103.

8. The gas valve is now accessible for checking inlet and outlet gas pressures, flex line connections, and wiring to the valve. See Figure 104. Figure 105 shows the inlet and outlet gas test ports.

9. Replace the gas valve by removing the two 5/16 inch hex-head screws on top of the gas control bracket. The gas valve and bracket can be lifted up to gain access to the flex line connections.
MAINTENANCE AND SERVICE
The only recommended maintenance for the homeowner is periodically cleaning the glass. Before cleaning the glass read the warnings below.

This fireplace has no user-serviceable mechanical components. Contact your dealer or a qualified gas appliance service technician for all service and repair.

ACCESSING THE CONTROL MODULE

**WARNING**
Always turn off gas and electrical supply to the fireplace before servicing.

1. Remove the barrier screen and glass door assemblies, and set them aside in a safe location.
2. It is not necessary to remove decorative glass media from the burner cover or accent glass panels to gain access to the control module.
3. The control module is in the lower front corner of the fireplace bottom. It is secured to the fireplace with Velcro. The gas control and LED light wiring is routed through the lower right side opening to the gas valve wire connections. The 120V power cords are routed through the lower right side opening and plugged into the Junction Box receptacle. Refer to the electrical connections section for additional information.

MAINTENANCE
Maintenance frequency must be determined individually for each application. Some considerations are:

- Cycling frequency. Fireplaces that may cycle 20,000 times annually should be checked monthly.
- Intermittent use. Fireplaces that are used seasonally should be checked before shutdown and again before the next use.
- Dusty, wet or corrosive environment. Because these environments can cause the gas control to deteriorate more rapidly, the system should be checked more often.
- Any control should be replaced if it does not perform properly on checkout or service. In addition, replace any module if it is wet or looks like it has been wet.

SERVICE
Do not disassemble the gas control; it contains non-replaceable components. Attempted disassembly or repair can damage the control.

Exactly follow the warnings and the lighting instructions.

1. Before lighting, smell around the fireplace area for gas. If the fireplace uses Propane (bottled) gas, be sure to smell next to the floor because Propane gas is heavier than air. If you smell gas, immediately shut off the manual valve in the gas piping to the fireplace or on Propane at the tank. Do not try to light any appliance. Do not touch any electrical switch or use the phone. Leave the building and call your gas supplier. If your gas supplier cannot be reached, call the fire department.
2. The gas control must be replaced if it has been flooded with water. Call a qualified service technician.
3. The gas control is a safety device. It must be replaced in case of any physical damage such as bent terminals, missing parts, stripped threads, or evidence of exposure to excessive heat.

Follow the operating instructions provided by the manufacturer of your appliance.

**NOTICE:** It is normal for fireplaces fabricated of steel to give off some expansion and/or contraction noise during the start up or cool down cycle. Similar noises are found with your furnace heat exchanger or car engine.

It is normal for your gas fireplace to give off some odor the first time it is burned. This is due to the curing of the paint and oil from the manufacturing process.

Please ensure that your room is well ventilated - open a window.

Burn your fireplace for at least one hour the first time you use it. If optional fan kit has been installed, place fan in the OFF position during this time.

**IMPORTANT:** Turn off gas before servicing fireplace. Have a qualified service person perform these check-ups once a year preferably before the using of the fireplace.

- **Clean Burner and Control Compartment**
  Keep the control compartment and burner area clean by vacuuming or brushing at least twice a year.

**CLEANING PROCEDURE**
1. Turn off fireplace.
2. Remove the barrier screen and glass door assembly. See Glass Door Removal.
3. Remove decorative media (a clean portable shop-vac is recommended).
4. Vacuum burner cover and burner screen areas. The control module located in the bottom front corner can also be vacuumed off.
5. Replace decorative media.
6. Reinstall the glass door and barrier screen.
7. Ignite fireplace. See Lighting Instructions.
8. If flame appears abnormal, call a service person.

**WARNING**
Handle the glass with care to avoid breaking it. Never strike the glass. To prevent etching or discoloring, clean the glass with Fireplace Glass Cleaner (available from your dealer). Never use cleansers that contain ammonia or abrasives. Never clean the glass while it is hot or even warm. Touching hot glass can cause severe burns. Using liquids or aerosols on hot glass will cause it to shatter. Never operate the fireplace with the glass removed or cracked. Have your dealer replace damaged glass only with glass and gasket material from Empire Comfort Systems. Using substitute glass will void the warranty.
• **CHECK VENT SYSTEM**
  The fireplace and venting system should be inspected before initial use and at least annually by a qualified service person. Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the air flow.

**GLASS CLEANING**
Clean the glass before use and two or three times each heating season. During start-up condensation (which is normal) forms on the inside of the glass and causes lint, dust and other airborne particles to cling to the glass surface. Also initial paint curing may deposit a slight film on the glass. Use a non-abrasive household cleaner and warm water (we recommend gas fireplace glass cleaner).

**WARNING**
Do not use Ammonia based or abrasive cleaners on glass. Do not attempt to clean glass when glass is hot.

**GENERAL GLASS INFORMATION**

**WARNING**
Do not operate fireplace with the glass front removed, cracked or broken.

Only glass approved for use by the manufacturer in fireplace may be used for replacement. The glass replacement should be done by a licensed or qualified service person.

**WARNING**
1. The use of substitute glass will void all product warranties.
2. Care must be taken to avoid breakage of the glass.
3. Under no circumstances should this fireplace be operated without the glass front or with a broken glass front. Replacement of the glass (with gasket) as supplied by the manufacturer should be done by a qualified service person.
4. Do not abuse the glass by striking or hitting it.

**GLASS DOOR AND BARRIER SCREEN REMOVAL AND REPLACEMENT**
Refer to page 53 for removal of the barrier screen and glass door assemblies.

**GLASS DOOR INSTALLATION**
Refer to Figures 99 and 100 to install the glass door assembly. Because of the width of the door assembly, it is recommended that two people install it. Hold the door at an angle so the bottom is about 8 inches from the fireplace face. Engage the top slots in to door frame with the tabs located at the top of the firebox. Gently pivot the door inward to align the four bullet catches across the bottom of the door frame. Once the bullet pins are aligned with the spring catches on the door frame, push the bottom of the door inward to engage the spring catches with the bullet pins.

**DOOR LIMITER BRACKET INSTALLATION**
After the Glass Door is installed, the Door Limiter Bracket must be attached. Using a 5/16 inch hex nut driver, install (3) #10-24 x 3/8 inch screws to retain the Limiter Bracket to the bottom flange of the Glass Door frame.

**NOTICE:** The Door Limiter Bracket must be re-installed to the Glass Door frame prior to operation of the fireplace.

**BARRIER INSTALLATION**
The barrier screen assembly simply installs onto the glass door assembly without fasteners. The barrier frame engages onto (4) pins located on the outer flanges of the door frame.
FOR THE HOMEOWNER

Annual Inspection

• Have the fireplace inspected annually before use.
• More frequent inspection and cleaning may be required if the fireplace is installed in an area exposed to pet hair or dust, or to excessive lint from new carpeting or bedding materials.

During The Annual Checkup, The Technician Will:

• Inspect the pilot (flame safety system) and burner(s) for proper operation and replace any damaged parts.
• Check the glass and gasket for proper seal.
• Vacuum and clean any foreign debris in the firebox that is not supposed to be there.
• Clean Glass with a suitable fireplace glass cleaner. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
• Check all latches or other door retention components for proper operation, tension, and relief mechanisms are free from obstructions. See Figure 57.
• Check the barrier screen for fit and structural integrity. See Figure 60.
• Inspect the log set (if applicable) and decorative media (if applicable) for debris or damage.
• Freshen up the glowing embers if applicable.
• Replace batteries in the remote transmitter and receiver if applicable.
• Inspect the venting and vent termination cap for damage, corrosion, sooting, or obstruction and correct if present.

• In addition, clean and inspect the fireplace following any remodeling work in your home.

FOR THE INSTALLER

Annual Inspection

• Have the fireplace inspected annually before use.
• More frequent inspection and cleaning may be required if the fireplace is installed in an area exposed to pet hair or dust, or to excessive lint from new carpeting or bedding materials.

During The Annual Checkup, The Technician Will:

• Inspect the pilot (flame safety system) and burner(s) for proper operation and replace any damaged parts.
• Test and measure the flame failure response time of the flame safety system. It must de-energize the safety shut-off in no more than 30 seconds.
• Vacuum and clean any foreign debris in the firebox that is not supposed to be there.
• Inspect and ensure that the lighting of the main burner occurs within 4 seconds of the gas valve opening. Visual inspection should match the information illustrated in the manual. Inspect primary air openings for blockage.
• Check the glass and gasket for proper seal.
• Clean Glass with a suitable fireplace glass cleaner. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
• Check all latches or other door retention components for proper operation, tension, and relief mechanisms are free from obstructions. See Figure 57.
• Check the barrier screen for fit and structural integrity. See Figure 60.
• Inspect the log set (if applicable) and decorative media (if applicable) for debris or damage.
• Freshen up the glowing embers if applicable.
• Replace batteries in the remote transmitter and receiver if applicable.
• Inspect the venting and vent termination cap for damage, corrosion, sooting, or obstruction and correct if present.
• Check all accessible gas-carrying tubes, connections, pipes and other components for leaks.

• In addition, clean and inspect the fireplace following any remodeling work in your home.
IMPORTANT SAFETY INFORMATION

WARNING

1. “Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.”
2. “Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.”
3. “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 a fireplace or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.”
4. For appliances requiring a barrier, as determined under Clause 5.15.4: “A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.”
5. “If the barrier becomes damaged, the barrier shall be replaced with the manufacturer’s barrier for this appliance.”

WARNING

CARBON MONOXIDE POISONING HAZARD

Failure to follow the steps outlined below for each appliance connected to the venting system being placed into operation could result in carbon monoxide poisoning or death. The following steps shall be followed for each appliance connected to the venting system being placed into operation, while all other appliances connected to the venting system are not in operation:

1. Seal any unused openings in the venting system.
2. Inspect the venting system for proper size and horizontal pitch, as required in the National Fuel Gas Code ANSI Z223.1/NFPA 54 or the National Gas and Propane Installation Code CSA B149.1 and these instructions. Determine that there is no blockage or restriction, leakage, corrosion and other deficiencies which could cause an unsafe condition.
3. As far as practical, close all building doors and windows and all doors between the space in which the appliance(s) connected to the venting system are located and other spaces of the building.
5. Turn on clothes dryers and any appliance not connected to the venting system. Turn on any exhaust fans, such as range hoods and bathroom exhausts, so they are operating at maximum speed. Do not operate a summer exhaust fan.
6. Follow the lighting instructions. Place the appliance being inspected into operation. Adjust the thermostat so appliance is operating continuously.
7. Test for spillage from draft hood equipped appliances at the draft hood relief opening after 5 minutes of main burner operation. Use the flame of a match or candle.
8. If improper venting is observed during any of the above tests, the venting system must be corrected in accordance with National Fuel Gas Code, ANSI Z223.1/NFPA and National Gas and Propane Installation Code, CSA B149.1.
9. After it has been determined that each appliance connected to the venting system properly vents when tested as outlined above, return doors, windows, exhaust fans, fireplace dampers and any other gas-fired burning appliance to their previous conditions of use.
IMPORTANT SAFETY INFORMATION (CONT'D)

⚠️ WARNING

Read and follow these safety precautions prior to operating this fireplace. Failure to follow these precautions may result in death, injury, or property damage.

Before enclosing the vent pipe assembly, operate the fireplace to ensure it is venting properly.

⚠️ WARNING

DO NOT operate this fireplace without the glass panel installed.

- Alert children and adults to the hazards of high surface temperatures and warn them to stay away to avoid burns or clothing ignition.
- Carefully supervise young children when they are in the same room as the fireplace.
- Do not place clothing or other flammable material on or near the fireplace.
- Keep the area around your fireplace clear of combustible materials, gasoline and other flammable vapor and liquids.
- Never burn solid fuels (wood, coal, paper or cardboard etc.) in this fireplace.
- Do not restrict the flow of combustion and ventilation air around the fireplace.
- Due to high temperatures, keep furniture and draperies away from the fireplace.
- Replace the glass front or any part removed for servicing prior to operating the fireplace.
- Vent cap is hot while fireplace is in operation and some time afterward.
- Installation and repair should be done by a QUALIFIED SERVICE PERSON. The fireplace 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 materials, etc. Keep the control compartments, burners and circulating air passageways clean.

⚠️ CAUTION

If the glass is cracked or damaged in any way, it should be replaced only with a complete glass frame assembly from Empire. See parts list on pages 54 and 55 for ordering.

- Do not use this fireplace if any part has been under water. Immediately call a qualified service technician to inspect the fireplace and to replace any part of the control system and any gas control which has been under water.
- Have a qualified technician examine the venting system each year and replace damaged parts.
- Make a periodic visual check of pilot and burners. Clean and replace damaged parts.
- A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this fireplace and shall be installed for the protection of children and other at-risk individuals.
- If the barrier becomes damaged, the barrier shall be replaced with the manufacturer’s barrier for this fireplace.

COMBUSTIBLE MATERIAL

Do not attach combustible material to the mantel of your fireplace. This is a fire hazard. No greeting card, stockings or ornamentation of any type should be placed on or attached to the fireplace. This is a heating appliance. The heat can ignite combustibles.

Figure 106
SAFETY INFORMATION FOR USERS OF PROPANE GAS

Propane is a flammable gas which can cause fires and explosions. In its natural state, propane is odorless and colorless. You may not know all the following safety precautions which can protect both you and your family from an accident. Read them carefully now, then review them point by point with the members of your household. Someday when there may not be a minute to lose, everyone’s safety will depend on knowing exactly what to do. If, after reading the following information, you feel you still need more information, please contact your gas supplier.

PROpane GAS WARNING OdOR

If a gas leak happens, you should be able to smell the gas because of the odorant put in the Propane Gas. That’s your signal to go into immediate action!

• Do not operate electric switches, light matches, use your phone. Do not do anything that could ignite the gas.
• Get everyone out of the building, vehicle, trailer, or area. Do that IMMEDIATELY.
• Close all gas tank or cylinder supply valves.
• Propane Gas is heavier than air and may settle in low areas such as basements. When you have reason to suspect a gas leak, keep out of basements and other low areas. Stay out until firefighters declare them to be safe.
• Use your neighbor’s phone and call a trained Propane Gas service person and the fire department. Even though you may not continue to smell gas, do not turn on the gas again. Do not re-enter the building, vehicle, trailer, or area.
• Finally, let the service man and firefighters check for escaped gas. Have them air out the area before you return. Properly trained Propane Gas service people should repair the leak, then check and relight the gas fireplace for you.

NO ODOR DETECTED - OdOR FADE

Some people cannot smell well. Some people cannot smell the odor of the chemical put into the gas. You must find out if you can smell the odorant in propane. Smoking can decrease your ability to smell. Being around an odor for a time can affect your sensitivity or ability to detect that odor. Sometimes other odors in the area mask the gas odor. People may not smell the gas odor or their minds are on something else. Thinking about smelling a gas odor can make it easier to smell.

The odorant in Propane Gas is colorless, and it can fade under some circumstances. For example, if there is an underground leak, the movement of the gas through soil can filter the odorant. Odorants in Propane Gas also are subject to oxidation. This fading can occur if there is rust inside the storage tank or in iron gas pipes.

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity. Propane Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

• Learn to recognize the odor of Propane Gas. Your local Propane Gas Dealer can give you a “Scratch and Sniff” pamphlet. Use it to find out what the propane odor smells like. If you suspect that your Propane Gas has a weak or abnormal odor, call your Propane Gas Dealer.
• If you are not qualified, do not light pilot lights, perform service, or make adjustments to appliances on the Propane Gas system. If you are qualified, consciously think about the odor of Propane Gas prior to and while lighting pilot lights or performing service or making adjustments.
• Sometimes a basement or a closed-up house has a musty smell that can cover up the Propane Gas odor. Do not try to light pilot lights, perform service, or make adjustments in an area where the conditions are such that you may not detect the odor if there has been a leak of Propane Gas.
• Odor fade, due to oxidation by rust or adsorption on walls of new cylinders and tanks, is possible. Therefore, people should be particularly alert and careful when new tanks or cylinders are placed in service. Odor fade can occur in new tanks, or reinstalled old tanks, if they are filled and allowed to set too long before refilling. Cylinders and tanks which have been out of service for a time may develop internal rust which will cause odor fade. If such conditions are suspected to exist, a periodic sniff test of the gas is advisable. If you have any question about the gas odor, call your Propane Gas Dealer. A periodic sniff test of the Propane Gas is a good safety measure under any condition.
• If, at any time, you do not smell the Propane Gas odorant and you think you should, assume you have a leak. Then take the same immediate action recommended above for the occasion when you do detect the odorized Propane Gas.
• If you experience a complete “gas out,” (the container is under no vapor pressure), turn the tank valve off immediately. If the container valve is left on, the container may draw in some air through openings such as pilot light orifices. If this occurs, some new internal rusting could occur. If the valve is left open, then treat the container as a new tank. Always be sure your container is under vapor pressure by turning it off at the container before it goes completely empty or having it refilled before it is completely empty.
REQUIREMENTS FOR MASSACHUSETTS

For all side wall horizontally vented gas fueled equipment installed in every dwelling, building or structure used in whole or in part for residential purposes, including those owned or operated by the Commonwealth and where the side wall exhaust vent termination is less than seven feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1. INSTALLATION OF CARBON MONOXIDE DETECTORS. At the time of installation of the side wall horizontal vented gas fueled equipment, the installing plumber or gasfitter shall observe that a hard wired carbon monoxide detector with an alarm and battery back-up is installed on the floor level where the gas equipment is to be installed. In addition, the installing plumber or gasfitter shall observe that a battery operated or hard wired carbon monoxide detector with an alarm is installed on each additional level of the dwelling, building or structure served by the side wall horizontal vented gas fueled equipment. It shall be the responsibility of the property owner to secure the services of qualified licensed professionals for the installation of hard wired carbon monoxide detectors
   a. In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or an attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level.
   b. In the event that the requirements of this subdivision can not be met at the time of completion of installation, the owner shall have a period of thirty days to comply with the above requirements; provided, however, that during said thirty day period, a battery operated carbon monoxide detector with an alarm shall be installed.

2. APPROVED CARBON MONOXIDE DETECTORS. Each carbon monoxide detector as required in accordance with the above provisions shall comply with NFPA 720 and be ANSI/UL 2034 listed and IAS certified.

3. SIGNAGE. A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum height of eight feet above grade directly in line with the exhaust vent termination for the horizontally vented gas fueled appliance or equipment. The sign shall read, in print size no less than 1/2 inch in size, “GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”.

4. INSPECTION. The state or local gas inspector of the side wall horizontally vented gas fueled equipment shall not approve the installation unless, upon inspection, the inspector observes carbon monoxide detectors and signage installed in accordance with the provisions of 248 CMR 5.08(2)(a) 1 through 4.

   (b) EXEMPTIONS: The following equipment is exempt from 248 CMR 5.08(2)(a)1 through 4:
      1. The equipment listed in Chapter 10 entitled “Equipment Not Required To Be Vented” in the most current edition of NFPA 54 as adopted by the Board; and
      2. Product Approved side wall horizontally vented gas fueled equipment installed in a room or structure separate from the dwelling, building or structure used in whole or in part for residential purposes.

   (d) MANUFACTURER REQUIREMENTS - GAS EQUIPMENT VENTING SYSTEM NOT PROVIDED. When the manufacturer of a Product Approved side wall horizontally vented gas fueled equipment does not provide the parts for venting the flue gases, but identifies “special venting systems”, the following requirements shall be satisfied by the manufacturer:
      1. The referenced “special venting system” instructions shall be included with the appliance or equipment installation instructions; and
      2. The “special venting systems” shall be Product Approved by the Board, and the instructions for that system shall include a parts list and detailed installation instruction.

   (e) A copy of all installation instructions for all Product Approved side wall horizontally vented gas fueled equipment, all venting instructions, all parts lists for venting instructions, and/or all venting design instructions shall remain with the appliance or equipment at the completion of the installation.
To Order Parts Under Warranty, please contact your local Empire dealer. See the dealer locator at www.empirecomfort.com.
To provide warranty service, your dealer will need your name and address, purchase date and serial number, and the nature of the problem with the unit.
To Order Parts After the Warranty Period, please contact your dealer or one of the Master Parts Distributors listed below. This list changes from time to time. For the current list, please click on the Master Parts button at www.empirecomfort.com.
Please note: Master Parts Distributors are independent businesses that stock the most commonly ordered Original Equipment repair parts for Heaters, Grills, and Fireplaces manufactured by Empire Comfort Systems Inc.

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>Toll Free</th>
<th>Fax</th>
<th>Website</th>
<th>Parts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dey Distributing</td>
<td>1401 Willow Lake Boulevard, Vadnais Heights, MN 55101</td>
<td>651-490-9191</td>
<td>800-397-1339</td>
<td></td>
<td><a href="http://www.deydistributing.com">www.deydistributing.com</a></td>
<td>Heater, Hearth and Grills</td>
</tr>
</tbody>
</table>

How to Order Repair Parts

Parts Not Under Warranty
Parts can be ordered through your Service Person, Dealer, or a Master Parts Distributor. See this page for the Master Parts Distributors list. For best results, the service person or dealer should order parts through the distributor. Parts can be shipped directly to the service person/dealer.

Warranty Parts
Warranty parts will need a proof of purchase and can be ordered by your Service Person or Dealer. Proof of purchase is required for warranty parts.

All parts listed in the Parts List have a Part Number. When ordering parts, first obtain the Model Number and Serial Number from the name plate on your equipment. Then determine the Part Number (not the Index Number) and the Description of each part from the following illustration and part list. Be sure to give all this information . . .

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Part Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fireplace Model Number</td>
<td>Part Description</td>
</tr>
<tr>
<td>Fireplace Serial Number</td>
<td>Part Number</td>
</tr>
<tr>
<td>Type of Gas (Propane or Natural)</td>
<td>Part Number</td>
</tr>
</tbody>
</table>

Do not order bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

Shipments contingent upon strikes, fires and all causes beyond our control.
Empire Comfort Systems Inc. warranties this hearth product to be free from defects at the time of purchase and for the periods specified below. Hearth products must be installed by a qualified technician and must be maintained and operated safely, in accordance with the instructions in the owner’s manual. Empire will not warranty any Château, Boulevard, or Mantis fireplace that is not installed by the selling dealer or that dealer’s direct contract agents. This warranty applies to the original purchaser only and is not transferable. All warranty repairs must be accomplished by a qualified gas appliance technician.

**Limited Lifetime Parts Warranty – Combustion Chamber, Heat Exchanger, and Factory-Installed Glass**
If the combustion chamber, heat exchanger (see parts list) or factory-installed glass fails because of defective workmanship or material, Empire will repair or replace at Empire’s option.

**Limited Three-Year Parts Warranty – All Other Components**
(Except Remote Controls, Thermostats, Accessories and Replacement Parts)
Should any part fail because of defective workmanship or material within three years from the date of purchase, Empire will repair or replace at Empire’s option.

**Limited One-Year Parts Warranty – Remote Controls, Thermostats, Accessories, and Parts**
Should any remote control, thermostat, accessory, or other part fail because of defective workmanship within one year from the date of purchase, Empire will repair or replace at Empire’s option.

**Duties of the Owner**
The appliance must be installed by a qualified installer and operated in accordance with the instructions furnished with the appliance. A bill of sale, cancelled check, or payment record should be kept to verify purchase date and establish warranty period. Ready access to the appliance for service.

**What Is Not Covered**
Damages that might result from the use, misuse, or improper installation of this appliance.
Travel, diagnostic costs and freight charges on warranted parts to and from the factory.
Claims that do not involve defective workmanship or materials.
Unauthorized service or parts replacements.
Removal and reinstallation cost.
Inoperable due to improper or lack of maintenance.

**How To Get Service**
To make a claim under this warranty, please have your receipt available and contact your installing dealer. Provide the dealer with the model number, serial number, type of gas, and purchase verification. The installing dealer is responsible for providing service and will contact the factory to initiate any warranted parts replacements. Empire will make replacement parts available at the factory. Shipping expenses are not covered. If, after contacting your Empire dealer, service received has not been satisfactory, contact: Consumer Relations Department, Empire Comfort Systems Inc., PO Box 529, Belleville, Illinois 62222, or send an e-mail to info@empirecomfort.com with “Consumer Relations” in the subject line.

**Your Rights Under State Law**
This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.