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.

DANGER
HOT GLASS WILL CAUSE BURNS
DO NOT TOUCH GLASS UNTIL COOLED
NEVER ALLOW CHILDREN TO TOUCH GLASS
A barrier designed to reduce the risk of burns from the hot viewing glass is provided with this appliance and shall be installed for the protection of children and other at-risk individuals.

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.
CONGRATULATIONS!

We welcome you as a new owner of a Kozy Heat gas fireplace. Kozy Heat products are designed with superior components and materials, and assembled by trained craftsmen who take pride in their work. To ensure you receive a quality product, the burner and valve assembly are 100 percent test-fired, and the complete fireplace is thoroughly inspected before packaging. Our commitment to quality and customer satisfaction has remained the same for 40 years. We offer a complete line of gas and wood fireplaces, along with stylish accessories to complement any decor. Adding a fireplace is one of the best ways to increase the value of your home, and we are proud to offer a network of dealers throughout the country to help make your experience everything you imagine. We pride ourselves in being dedicated not only to functionality and reliability, but also customer safety. We offer our continual support and guidance to help you achieve the maximum benefit and enjoyment from your Kozy Heat gas fireplace.

Jim Hussong  
President

Dudley Hussong  
Board Chairman

Homeowner Reference Information

We recommend you record the following information:

Model Name: ____________________  Date purchased/installed: ____________________
Serial Number: ____________________  Location of fireplace: ____________________
Dealership Purchased from: ____________________  Dealer phone: ____________________
Notes: ________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Read this manual before installation or operating this appliance.
Please retain this owner’s manual for future reference.
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1.0 INTRODUCTION

1.1 Appliance Certification
Laboratory: OMNI-Test Laboratories in Portland, Oregon
Standards:
CGA 2.17-M91 (R2014), Gas-Fired Appliances for Use at High Altitudes
This installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/
NFPA 54, or the Natural Gas and Propane Installation Code, CSA B149.1.

1.2 Requirements for the Commonwealth of Massachusetts
The following requirements reference various Massachusetts and national codes not contained in this manual.

For all sidewall 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 (7) feet above finished grade in the area of the venting, including but not limited to decks and porches, the following requirements shall be satisfied:

1.2.1 Installation of Carbon Monoxide Detectors
At time of installation of side wall horizontally vented gas fueled equipment, the installing plumber or gas-fitter 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 gas-fitter shall observe that a battery operated or hard wired carbon monoxide detector 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.

In the event that the side wall horizontally vented gas fueled equipment is installed in a crawl space or attic, the hard wired carbon monoxide detector with alarm and battery back-up may be installed on the next adjacent floor level. 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 (30) days to comply with the above requirements; provided, however, that during said thirty (30) day period, a battery operated carbon monoxide detector with an alarm shall be installed.

1.2.2 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.

1.2.3 Signage
A metal or plastic identification plate shall be permanently mounted to the exterior of the building at a minimum of eight (8) feet above grade directly in line with the exhaust vent terminal for the horizontally vented gas fueled heating appliance or equipment. The sign shall read, in print no less the one-half inch (½) in size, “GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS”.

1.2.4 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.

1.2.5 Exemptions
The following equipment is exempt from 248 CMR 5.08 (2) (a) 1 through 4: 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 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.

1.2.6 Manufacturer Requirements
1.2.6.1 Gas Equipment Venting System Provided
When the manufacturer of Product Approved side wall horizontally vented gas equipment provides a venting system design or venting system components with the equipment, the instructions provided by the manufacturer for installation of the equipment and the venting system shall include:

• Detailed instructions for the installation of the venting system design or the venting system components; and

• A complete parts list for the venting system design or venting system.

1.2.7 Gas Equipment Venting System NOT Provided
When the manufacturer of Product Approved side wall horizontally vented gas 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:

• The referenced “special venting systems” instructions shall be included with the appliance or equipment installation instructions and;

• 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 instructions.

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.
2.0 SPECIFICATIONS

2.1 Appliance Packaging Components

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP41-150</td>
<td>Control Board Assembly</td>
</tr>
<tr>
<td>700-203</td>
<td>Manual Gas Shut-off Valve</td>
</tr>
<tr>
<td>SP41-500</td>
<td>Log Package</td>
</tr>
<tr>
<td>SP41-057T</td>
<td>Glass Frame Assembly</td>
</tr>
<tr>
<td>900-085</td>
<td>4 in (102 mm) Restrictor Plate</td>
</tr>
<tr>
<td>700-408</td>
<td>Remote Control</td>
</tr>
<tr>
<td>SP41-HHS</td>
<td>Vent Heat Shield Assembly</td>
</tr>
</tbody>
</table>

2.1.1 Additional Components Required
Refer to 7.0 Venting on page 22 for approved vent systems.

2.2 Heating Specifications

<table>
<thead>
<tr>
<th></th>
<th>Natural Gas</th>
<th>Propane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Input Rating</td>
<td>28,000 Btu/h (8.2 kW)</td>
<td>28,000 Btu/h (8.2 kW)</td>
</tr>
<tr>
<td>Minimum Input Rating</td>
<td>14,000 Btu/h (4.1 kW)</td>
<td>14,000 Btu/h (4.1 kW)</td>
</tr>
<tr>
<td>Manifold Pressure (High)</td>
<td>3.8&quot; WC (0.95 kPa)</td>
<td>11&quot; WC (2.74 kPa)</td>
</tr>
<tr>
<td>Manifold Pressure (Low)</td>
<td>1.1&quot; WC (0.27 kPa)</td>
<td>2.9&quot; WC (0.72 kPa)</td>
</tr>
<tr>
<td>Orifice Size (DMS)</td>
<td>#41</td>
<td>#53</td>
</tr>
</tbody>
</table>

2.2.1 Altitude Adjustment

This appliance may be installed at higher altitudes. Please refer to National Fuel Gas Code ANSI Z223.1/NFPA 54, CSA-B149.1 Natural Gas and Propane Installation Code, local authorities, or codes having jurisdiction in your area regarding derate guidelines.

2.2.1.1 US Installations
Refer to the American Gas Association guidelines for the gas designed appliances derating method. For elevations above 2,000 ft (610 m), input ratings are to be reduced by 4% for each 1,000 ft (305 m) above sea level.

2.2.1.2 Canadian Installations
When the appliance is installed at elevations above 4,500 ft (1,372 m), the certified high altitude rating shall be reduced at the rate of 4% for each additional 1,000 ft (305 m).
2.3 Appliance Dimensions

Figure 2.1, Appliance Dimensions
2.4 Safety Barrier Dimensions

**WARNING:** 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.

If the barrier becomes damaged, the barrier shall be replaced with Hussong Mfg.'s barriers for this appliance. Only doors certified with the appliance shall be used.

**IMPORTANT:** Consider the height of hearth finish material when building a fireplace platform. Proper installation of safety barriers with an overlap fit design require the bottom of the fireplace to be level with finished hearth.

Please refer to 8.1 Safety Barrier Installation on page 27 for installation instructions.
3.0 FRAMING

3.1 Appliance Placement
Considerations

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

- This appliance must be installed on a level surface capable of supporting the fireplace and venting. If possible, place the fireplace in a position where the vent terminates between two studs, eliminating the need for any additional framing.
- This fireplace may be installed in a bedroom.
- Please be aware of the large amount of heat this fireplace will produce when determining a location.

3.2 Stand-off Assembly and Installation

WARNING: The top stand-offs brackets provide the required minimum clearance to the header. The 1 in (25mm) top stand-off flange accommodates 1/2 in (12mm) combustible facing material (sheetrock). The clearance to header must be maintained.

Top stand-off brackets must be formed and attached prior to positioning fireplace into framed opening.

1. Remove and save (2) screws securing the stand-off brackets on top of the fireplace.
2. Form each stand-off bracket by bending at perforations, as shown.
3. Align the holes in the formed stand-off brackets with the holes on top of the fireplace. Secure with (2) screws previously removed.

Figure 3.1, Stand-off Assembly and Installation
### 3.3 Clearances to Combustibles

<table>
<thead>
<tr>
<th>Table 3.1, Minimum Appliance Clearances to Combustible Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>From appliance top stand-off brackets</td>
</tr>
<tr>
<td>From facing material 1” (25 mm) stand-off flange</td>
</tr>
<tr>
<td>From appliance back stand-offs</td>
</tr>
<tr>
<td>From appliance corners</td>
</tr>
<tr>
<td>From appliance front</td>
</tr>
<tr>
<td>From appliance top to ceiling</td>
</tr>
<tr>
<td>A 45° projection from appliance sides</td>
</tr>
<tr>
<td>Appliance sides to adjacent sidewall</td>
</tr>
<tr>
<td>Fireplace enclosure floor to 3/4 in (19 mm) trim</td>
</tr>
<tr>
<td>Mantel 6 in (152 mm) deep from fireplace enclosure floor</td>
</tr>
<tr>
<td>Minimum height of fireplace enclosure</td>
</tr>
</tbody>
</table>

**Figure 3.2, Clearance to Combustibles**
3.3.1 Typical Installation Options

TYPICAL VERTICAL INSTALLATION

TYPICAL HORIZONTAL INSTALLATION

TYPICAL CORNER INSTALLATION
3.4 Fireplace Wall Enclosure

WARNING: Provide adequate clearances around air openings into the combustion chamber. Provide adequate clearance in front of the fireplace for barrier removal, component access, gas line installation, service access, etc.

NOTE: The construction of the fireplace wall enclosure must comply with local building codes and all clearances as outlined in this manual.

NOTE: Cold air transfer area. The fireplace wall enclosure should be constructed in a manner to prevent cold air from entering the room and outside walls should be insulated.

FIRE HAZARD: Do NOT install this appliance directly on carpeting, vinyl, or any other combustible material other than wood.

- Framing dimensions should allow for wall covering thickness and fireplace facing materials. Adjust rough opening size as necessary to maintain minimum clearance requirements.
- The bottom of the fireplace must be placed directly on a wood or non-combustible surface (not linoleum or carpet). If the fireplace is to be installed above floor level, a solid, continuous platform must be constructed below the fireplace.
- Build the hearth to desired size and height.
- If masonry is to be used (optional), prepare the necessary foundation for the masonry load. A lintel must be used over the top of the appliance to support the additional weight of masonry construction.
- If installing optional fan assembly, it is easier to install before unit installation. Please refer to Section 9.3 on page 33.

Figure 3.3, Framing Dimensions
3.5 Floor Support and Protection

- Floor protection in front of the fireplace is not required. Combustible material may be used if installing a hearth extension. Consider the thickness of the hearth extension finishing material if building a fireplace platform. The bottom of the fireplace must be level with finished hearth extension for proper fit of the safety barrier.

- If this appliance is to be installed directly on carpeting, tile, or other combustible material other than wood flooring, this appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

- If the appliance is to be installed above floor level, a solid, continuous platform must be constructed below the appliance.

3.6 Recess Construction

**WARNING: All clearances to venting must be maintained.**

Mounting a television above a fireplace has become a common practice. Television surface temperatures are affected by mantel depth, ceiling heights, and wall and mantel construction material. Most television manufacturers specify in their instructions that a television should not be installed on, near, or above a heat source. Television location rests solely on the homeowner. It is the homeowner’s responsibility that the preferred TV mounting and mantel design will not exceed the listed maximum operation temperature of their electronic goods.

Tests performed determined that surface temperatures did not exceed 150°F (66°C) when a 4-1/2 in (113mm) deep recess is constructed above the fireplace. See illustrations below.
3.7 Vent Termination Framing

IMPORTANT: Vent cap location must be in compliance with 6.2 Minimum Termination Clearances on page 21.

WARNING: DO NOT RECEESS THE VENT CAP INTO WALL OR SIDING.

3.7.1 Vertical Terminations

CAUTION: Cold air transfer area. The surround fireplace chase must comply with all clearances as outlined in this manual, and be constructed in compliance with local building codes. Outside walls should be insulated to prevent cold air from entering room.

- Follow vent pipe manufacturer’s installation instructions for vertical terminations.
- A minimum of 1 in (25 mm) clearance on all sides of the vertical vent pipe must be maintained.
- Attic insulation shields may be insulated using unfaced insulation products listed as non-combustible per ASTM E 136.

3.7.2 Horizontal Terminations

IMPORTANT: Horizontal vent sections require 1/4 in (6 mm) rise for every 12 in (305 mm) of travel.

NOTE: Elbows listed with approved vent systems for this appliance vary in vertical length. Please consult the vent manufacturer’s instructions to determine the elbow dimension used for installation. Adjust the wall pass-through rough opening dimensions to maintain clearance requirements.

IMPORTANT: This fireplace horizontal vent installation requires wall pass-through products to be fully lined with insulation products listed as noncombustible per ASTM E 136. Failure to line wall pass through products for all horizontal vent runs may cause overheating and fire.

1. Measure from floor level of the fireplace to the center of where the vent pipe will penetrate the wall.
2. Cut and frame an opening in the wall to allow the vent system to run level through the wall pass-through. This wall pass-through must be fully lined with insulation products listed as noncombustible per ASTM E 136. A minimum clearance of 1 in (25 mm) on all sides of the horizontal vent pipe at the insulated wall pass-through must be maintained.
3. Follow the vent pipe manufacturer’s installation instructions for vent installation.

Figure 3.6, Vent Termination Locations
4.0 FACING AND FINISHING

4.1 Secure the Appliance

**NOTE:** The nailing tabs on both sides of the appliance allow installations for a flush mount, 1/2 in (13 mm) facing material, or 5/8 in (16 mm) facing material.

**CAUTION:** The fireplace must be secured to framing regardless of finishing material used.

1. Locate the nailing tabs on the right and left sides of the fireplace necessary to accommodate the thickness of your facing material.
2. Bend out the (4) nailing tabs until parallel with fireplace face. Do not bend toward fireplace face.
3. When installing, center the fireplace in the rough opening to allow for the minimum 1/4" (6mm) clearance from the appliance corners.
4. Secure the appliance to the framing studs by using nails or screws through the nailing tabs.

*Figure 4.1, Nailing Flange Installation*
4.2 Mantel and Finishing Requirements

4.2.1 Mantel Projections

WARNING: All minimum clearances to combustible material MUST be maintained.

Combustible Mantel Projections - Minimum Vertical and Maximum Horizontal: 40-1/2 in (1030 mm) is the minimum vertical clearance from fireplace enclosure floor to 6 in (152 mm) maximum depth of a combustible mantel. Combustible mantels at the minimum vertical clearance may be 0 in (0 mm) to 6 in (152mm) depth with minimum vertical clearance 40-1/2 in (1030 mm).

Non-combustible Mantel Projections - Minimum Vertical and Maximum Horizontal: A minimum vertical clearance of 6 in (152 mm) above the appliance to a maximum 6 in (152 mm) depth of a non-combustible mantel. Follow projection 1 in (25 mm) up for every 1 in (25 mm) deeper.

4.2.2 Finishing Recommendations

NOTE: The surface area above the appliance may be affected by high temperatures emitted from this appliance. To help avoid or reduce the possibility of the sheetrock to crack, Hussong Mfg. recommends the following methods:

- Ensure the non-combustible material and sheetrock is dry and dust free.
- For taping and mudding seams, we recommend heat resilient tape, mesh and joint compounds, such as Durabond. Mud must be cured as per manufacturer’s recommendations.
- For a painted surface, use a high quality acrylic latex primer and finish coat. Avoid flat or light-colored paints to prevent discoloring.

Figure 4.2, Mantel Requirements
5.0 GAS LINE CONNECTION

5.1 Gas Conversion (sold separately)

ATTENTION: The conversion shall be carried out in accordance with the requirements of the provincial authorities having jurisdiction and in accordance with the requirements of the ANSI Z223.1 installation code.

This fireplace is manufactured for use with natural gas. Follow the instructions included with the conversion kit if converting to propane.

5.2 Gas Line Installation

CAUTION: Installation of the gas line must only be done by a qualified person in accordance with local building codes, if any. If not, follow ANSI 223.1. Commonwealth of Massachusetts installations must be done by a licensed plumber or gas fitter.

NOTE: The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at pressures in excess of ½ psi (3.5 kPa). For test pressures equal to or less than ½ psi (3.5 kPa), the appliance must be isolated from the gas supply piping system by closing its individual manual shut-off valve.

- A listed (and Commonwealth of Massachusetts approved) ½ in. (13 mm) tee handle manual shut-off valve and flexible gas connector are to be connected to the ½ in. (13 mm) control valve inlet. If substituting for these components, please consult local codes for compliance.
- This fireplace is equipped with a 3/8” (10 mm) x 18” (457 mm) long flexible gas connector and manual shut-off valve.
- Run gas line into fireplace. The gas line should be run to the point of connection where the shut-off valve and flexible gas line will connect.
- Do not run gas line in a manner that would obstruct fan operation.
- For high altitude installations, consult the local gas distributor or the authority having jurisdiction for proper rating methods.

<table>
<thead>
<tr>
<th>Table 5.1, Inlet Gas Supply Pressures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel</strong></td>
</tr>
<tr>
<td>Natural Gas</td>
</tr>
<tr>
<td>Propane</td>
</tr>
</tbody>
</table>
6.0 TERMINATION LOCATIONS

6.1 Vertical Vent Cap Termination

WARNING: This appliance must not share or be connected to a chimney flue serving a separate solid-fuel burning appliance.

![Diagram showing vertical vent cap termination](image)

<table>
<thead>
<tr>
<th>Roof Pitch</th>
<th>Minimum Height (H) from roof</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat to 6/12</td>
<td>1.0</td>
</tr>
<tr>
<td>Over 6/12 to 7/12</td>
<td>1.25</td>
</tr>
<tr>
<td>Over 7/12 to 8/12</td>
<td>1.5</td>
</tr>
<tr>
<td>Over 8/12 to 9/12</td>
<td>2.0</td>
</tr>
<tr>
<td>Over 9/12 to 10/12</td>
<td>2.5</td>
</tr>
<tr>
<td>Over 10/12 to 11/12</td>
<td>3.25</td>
</tr>
<tr>
<td>Over 11/12 to 12/12</td>
<td>4.0</td>
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<tr>
<td>Over 12/12 to 14/12</td>
<td>5.0</td>
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<tr>
<td>Over 14/12 to 16/12</td>
<td>6.0</td>
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<tr>
<td>Over 16/12 to 18/12</td>
<td>7.0</td>
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<tr>
<td>Over 18/12 to 20/12</td>
<td>7.5</td>
</tr>
<tr>
<td>Over 20/12 to 21/12</td>
<td>8.0</td>
</tr>
</tbody>
</table>

**Table:** Minimum height (H) from roof

<table>
<thead>
<tr>
<th>Roof Pitch</th>
<th>Feet</th>
<th>Meters</th>
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<tbody>
<tr>
<td>Flat to 6/12</td>
<td>1.0</td>
<td>0.30</td>
</tr>
<tr>
<td>Over 6/12 to 7/12</td>
<td>1.25</td>
<td>0.38</td>
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<td>Over 7/12 to 8/12</td>
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<td>0.46</td>
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<td>Over 8/12 to 9/12</td>
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<td>Over 9/12 to 10/12</td>
<td>2.5</td>
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<td>Over 10/12 to 11/12</td>
<td>3.25</td>
<td>0.99</td>
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<tr>
<td>Over 11/12 to 12/12</td>
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<td>1.22</td>
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<tr>
<td>Over 12/12 to 14/12</td>
<td>5.0</td>
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<td>Over 14/12 to 16/12</td>
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</tr>
<tr>
<td>Over 20/12 to 21/12</td>
<td>8.0</td>
<td>2.44</td>
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</table>
## 6.2 Minimum Termination Clearances

### Canadian installations

<table>
<thead>
<tr>
<th>Area Where Terminus is Not Permitted</th>
<th>US installations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Clearance above grade, veranda, porch, deck, or balcony</td>
<td>12 in (30 cm)</td>
</tr>
<tr>
<td><strong>B</strong> Clearance to window or door that may be opened</td>
<td>12 in (30 cm)</td>
</tr>
<tr>
<td><strong>C</strong> Clearance to permanently closed window (recommended to prevent condensation on window)</td>
<td>12 in (30 cm)*</td>
</tr>
<tr>
<td><strong>D</strong> Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the center line of the terminal</td>
<td>24 in (61 cm)*</td>
</tr>
<tr>
<td><strong>E</strong> Clearance to unventilated soffit</td>
<td>12 in (30 cm)*</td>
</tr>
<tr>
<td><strong>F</strong> Clearance to outside corner</td>
<td>0 in (0 cm)*</td>
</tr>
<tr>
<td><strong>G</strong> Clearance to inside corner</td>
<td>12 in (30 cm)*</td>
</tr>
<tr>
<td><strong>H</strong> Clearance to each side of center line extended above meter/regulator assembly</td>
<td>3 ft (91 cm) within a height 15 ft (4.5 m) above the meter/regulator assembly</td>
</tr>
<tr>
<td><strong>I</strong> Clearance to service regulator vent outlet</td>
<td>3 ft (91 cm)</td>
</tr>
<tr>
<td><strong>J</strong> Clearance to non mechanical air supply inlet to building or the combustion air inlet to any other appliance</td>
<td>12 in (30 cm)</td>
</tr>
<tr>
<td><strong>K</strong> Clearance to mechanical air supply inlet</td>
<td>6 ft (1.83 m)</td>
</tr>
<tr>
<td><strong>L</strong> Clearance above paved sidewalk or paved driveway located on public property</td>
<td>7 ft (2.13 m)†</td>
</tr>
<tr>
<td><strong>M</strong> Clearance under veranda, porch deck, or balcony</td>
<td>12 in (30 cm)‡</td>
</tr>
<tr>
<td><strong>N</strong> Clearance between two horizontal terminations</td>
<td>12 in (30 cm)</td>
</tr>
<tr>
<td><strong>O</strong> Clearance between two vertical terminations (may be same height)</td>
<td>12 in (30 cm)</td>
</tr>
<tr>
<td><strong>P</strong> Above furnace exhaust or inlet</td>
<td>12 in (30 cm)</td>
</tr>
</tbody>
</table>

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

† 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.

**VINYL SOFFIT, VINYL CEILING, AND VINYL OVERHANG DISCLAIMER:** Clearances to heat resistant material (i.e. wood, metal). This does not include vinyl. Hussong Manufacturing Co., Inc. will not be held responsible for heat damage caused from terminating under vinyl overhangs, vinyl ceilings, or vinyl ventilated/unventilated soffits.
7.0 VENTING

7.1 Approved Vent Systems

This appliance is equipped for use with a 4" (102mm) exhaust by 6-5/8" (168mm) air intake co-axial vent pipe system. This appliance is approved for use with Kozy Heat 4" (102mm) x 7" (177mm) #700 Series Flexible Direct Vent System (horizontal terminations only). Refer to Section 7.6 on page 25 for venting components and installation instructions.

Other approved vent manufacturers (horizontal and vertical terminations): American Metal Products (Ameri-Vent), BDM, ICC, Metal Fab, Olympia Chimney Supply, Inc., Security, Selkirk, and Simpson DuraVent. Refer to the vent manufacturer’s installation manual for complete installation instructions. Vent installation must conform with venting requirements and restrictions as outlined in this manual.

This appliance can be adapted to use 3" x 3" flexible co-linear vent pipes when used in combination with an existing minimum 6" x 8" ID masonry or 7" ID class A metal chimney. Refer to the vent manufacturer’s instructions.

7.2 Venting Requirements

NOTE: Consult the local and national installation codes to assure adequate combustion and ventilation air is available. Venting requirements apply to both natural gas and propane.

IMPORTANT: This fireplace horizontal vent installation requires wall pass-through products to be fully lined with unfaced insulation products listed as noncombustible per ASTM E 136. Failure to line wall pass through products for all horizontal vent runs may cause overheating and fire.

• Flame height and appearance will vary depending upon venting configuration and the type of fuel used.

• Provide a means for visually checking the vent connection to the appliance after the fireplace is installed.

• A minimum of 1 in (25 mm) clearance on all sides of the vertical vent pipe must be maintained. Attic insulation shields may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.

• Wall pass-through vent products that comply with the required insulation must be installed for all horizontal vent runs that pass through interior or exterior walls. A minimum of 1 in (25 mm) clearance on all sides of the horizontal vent pipe at the insulated wall pass-through must be maintained.

7.3 Use of Elbows

• MAXIMUM NUMBER OF 90° ELBOWS: 5

• For each additional 90° elbow used after the first elbow, 3 ft (91.4 cm) must be subtracted from maximum venting allowed.

• For each 45° elbow used, 1½ ft (457 mm) must be subtracted from maximum venting allowed.

• (2) 45° degree elbows may be used in place of (1) 90° elbow.

7.4 Vent Restriction

Burner flame appearance and characteristics are affected by altitude, fuel quality, venting configuration, and other factors. To achieve desirable flame appearance, the vent exhaust may be restricted by the restrictor plate (included in components packet). Follow Figure 7.1 for restrictor plate installation before attaching venting. For vent restriction plate recommendations and adjustments, see 11.2.2 Vent Restriction (after installation) on page 40.

---

Figure 7.1, Restrictor Assembly and Installation
7.5 Vent Installation

7.5.1 Vertical Terminations

**IMPORTANT:** The vertical vent heat shield must be installed for all venting applications. Refer to Section 7.7 on page 26.

<p>| Table 7.1, Natural Gas and Propane Coaxial (4” x 6-5/8”) Vertical Terminations - Min. Vertical / Max. Vertical |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|</p>
<table>
<thead>
<tr>
<th>Minimum Vertical Length</th>
<th>Maximum Vertical Length</th>
<th>Minimum Vertical Length</th>
<th>Maximum Vertical Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ft</td>
<td>914 mm</td>
<td>50 ft</td>
<td>15.2 m</td>
</tr>
</tbody>
</table>

<p>| Table 7.2, Natural Gas and Propane Co-linear (3” x 3”) Vertical Terminations - Min. Vertical / Max. Vertical |
|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------------------------------|</p>
<table>
<thead>
<tr>
<th>Minimum Vertical Length</th>
<th>Maximum Vertical Length</th>
<th>Minimum Vertical Length</th>
<th>Maximum Vertical Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 ft</td>
<td>3 m</td>
<td>50 ft</td>
<td>15.2 m</td>
</tr>
</tbody>
</table>

**Figure:**
- (A) Stand-off Heat Shields
- (B) 90° Elbow (not applicable)
- (C) Vertical Vent Heat Shield
- (D) Horizontal Vent Heat Shield (not applicable)
- (E) Termination Cap

3 ft (914mm) MIN / 50ft (15.2m) MAX
7.5.2 Combination Venting

**IMPORTANT:** The horizontal vent heat shield must be installed when using a 90° elbow off the top of the appliance. Refer to Section 7.7 on page 26.

**IMPORTANT:** Horizontal vent sections require ¼ in (6 mm) rise for every 12 in (305 mm) of travel.

**IMPORTANT:** This fireplace horizontal vent installation requires wall pass-through products to be fully lined with unfaced insulation products listed as noncombustible per ASTM E 136.

<table>
<thead>
<tr>
<th>Table 7.3, Natural Gas Coaxial Horizontal Vent Terminations Min. Vertical and Min. Horizontal and Max. Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Vertical Venting</td>
</tr>
<tr>
<td>90° elbow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 7.4, Propane Coaxial Horizontal Vent Terminations Min. Vertical and Min. Horizontal and Max. Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Vertical Venting</td>
</tr>
<tr>
<td>90° elbow</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 7.5, Natural Gas and Propane Coaxial Horizontal Vent Terminations Min. Vertical/Max. Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Vertical Rise</td>
</tr>
<tr>
<td>9 in</td>
</tr>
<tr>
<td>12 in</td>
</tr>
<tr>
<td>24 in</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 7.6, Natural Gas and Propane Combination Coaxial Terminations Max. Vertical/Max. Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Vertical Rise</td>
</tr>
<tr>
<td>25 ft</td>
</tr>
</tbody>
</table>

Maximum number of 90° elbows: 5

---

**NATURAL GAS AND PROPANE COAXIAL HORIZONTAL VENTING DIAGRAM**

- (A) Stand-off Heat Shields
- (B) 90° Elbow
- (C) Vertical Vent Heat Shield
- (D) Horizontal Vent Heat Shield
- (E) Termination Cap

**NATURAL GAS:** 90° ELBOW + 6” (152mm) HMIN / 4’ (1219mm) HMAX

**PROPANE:** 90° ELBOW + 6” (152mm) HMIN / 3’ (914mm) HMAX
7.6 #700-2 Series Direct Vent Termination Kit(s)

**IMPORTANT:** The vertical vent heat shield included with this fireplace must be installed for every type of venting application.

**IMPORTANT:** Wall pass-through products (G) with the required minimum 1 in (25 mm) clearance on all sides of the horizontal vent pipe must be fully lined with unfaced insulation products listed as noncombustible per ASTM E 136.

**IMPORTANT:** The minimum bend radius to center is 6 in (152 mm) required for installation of the flexible vent pipe. Care should be taken when installing the flexible vent pipe to avoid a tight bend that may cause abrasion or damage to the flexible pipe.

**IMPORTANT:** The flex pipe is permanently attached to the exterior plate. DO NOT ATTACH either #745-2 or #718-2 termination kit to fireplace (or extension kit) until it has passed through the wall. Install termination plates to the outside wall exterior.

- If terminating against vinyl siding, a vinyl siding protector must be used (included with the #745-2 and #718-2 direct vent kits). Follow instructions included.
- Each #746-2 extension kit contains enough 4" & 7" flexible aluminum pipe to extend chimney an additional 6 ft (1.83 m).

### 7.6.1 Assembly and Installation

1. Fully line the wall pass-through with any unfaced insulation products listed as non-combustible per ASTM E 136. Do not proceed with installation until wall pass-through is insulated.
2. Mount the required wall pass-through (G) to the exterior wall, and seal.
3. Apply a liberal bead of exterior sealant around outer edge of termination box (A), placing assembly through the wall pass-through in exterior wall. Place screws through the four holes (B), securing it in place.
4. Form the 4" & 7" flexible aluminum pipes on termination kit (#745-2 or #718-2), and if applicable, on each extension kit.
5. Gently pull 4" & 7" pipes down to the top of the fireplace, or if applicable, the extension kit. **IMPORTANT:** DO NOT stretch extension kit beyond 6 ft. (1.83 m); DO NOT stretch beyond what is required. It is very difficult to decompress flex pipes once stretched.
6. Place a bead of sealant outside 4" flex pipe collar (C) (end with EXTERNAL LIP) and sliding it into 4" pipe on extension kit or top of fireplace (D). Secure with 3 evenly spaced screws.
7. Place a bead of sealant inside 7" flex pipe collar (E) (end with the INTERNAL lip), sliding it over 7" pipe on top of fireplace (F). Secure with 3 evenly spaced screws.
8. If additional extension kits are required, repeat Steps 4 and 5, placing 4" & 7" pipes onto previous extension kit.

---

**LEGEND**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Termination box</td>
</tr>
<tr>
<td>B</td>
<td>Holes in exterior wall plate (only shown)</td>
</tr>
<tr>
<td>C</td>
<td>4&quot; flex pipe collar</td>
</tr>
<tr>
<td>D</td>
<td>4&quot; pipe on fireplace or extension kit</td>
</tr>
<tr>
<td>E</td>
<td>7&quot; flex pipe collar</td>
</tr>
<tr>
<td>F</td>
<td>7&quot; pipe on fireplace or extension kit</td>
</tr>
<tr>
<td>G</td>
<td>Wall Pass-Through</td>
</tr>
</tbody>
</table>

---

*Figure 7.3, Installation and Assembly of #700-2 Series (Vent Heat Shield Assembly not shown for clarity purposes only)*
7.7 Vent Heat Shield Assembly Installation

**IMPORTANT:** The vertical vent heat shield MUST be installed for every type of venting application. The horizontal vent heat shield must be installed when using a 90° elbow off the top of the appliance.

**NOTE:** There are (6) screw holes located in front of the flue outlet to offset the vent heat shield assembly in front of the vent pipe. Align the heat shield as necessary for your venting installation.

### 7.7.1 Vertical Vent Heat Shield Installation

1. Position the vertical vent heat shield in front of the vent pipe, with the flanges facing towards the fireplace face as necessary for the type of installation.

2. Align the (2) slots on the vertical heat shield flanges with corresponding screw holes located in front of the flue outlet on the top of the fireplace.

3. Secure the vertical vent heat shield to the fireplace with (2) attachment screws (provided in the components package).

### 7.7.2 Minimum Horizontal Venting

1. Bend perforation on the (3) hand-tabs down on the horizontal vent heat shield.

2. Locate (3) screw holes on the vertical vent heat shield.

3. Align the (3) slots on horizontal vent heat shield tabs to the corresponding (3) screws holes on the vertical vent heat shield.

4. Attach the horizontal vent heat shield with screws (provided) through the screw holes on the vertical vent heat shield. The 1 in (25 mm) vent stand-off tab will rest on top of the vent pipe.

---

**Figure 7.4**, Installed Heat Shield Assembly

**Figure 7.5**, Installed Horizontal Heat Shield

**Figure 7.6**, Vent Heat Shield Corner Install
8.0 FIREPLACE SETUP

8.1 Safety Barrier Installation

8.1.1 Safety Barrier Screen (#SP41-SCR)

1. Locate the (4) slots located on each side of the fireplace frame.
2. Align the notched tabs located on the back of the safety screen with the slots on the fireplace frame.
3. Raise the safety screen front slightly into slots and allow the tabs to lower into position.
   • To remove safety screen: lift the screen up and out of slots.

8.1.2 Overlay Designs (#SP41-POL & #SP41A-POL)

1. If installed, remove the safety barrier screen.
2. Center the overlay over the safety screen.
3. Locate the (4) tabs on the overlay. Hand bend tabs to secure the overlay to the safety screen front.
4. Locate the (4) slots located on each side of the fireplace frame.
5. Align the notched tabs located on the back of the safety screen with the slots on the fireplace frame.
6. Raise the safety barrier slightly into slots and allow the tabs to lower into position.
   • To remove safety barrier: lift the screen up and out of slots.

8.2 Glass Frame Assembly

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

8.2.1 Remove Glass Frame Assembly

WARNING: Do not remove the glass assembly when hot.

1. Remove the safety barrier and open the control compartment access panel.
2. Locate (2) spring-loaded latches securing the glass assembly at the bottom of the fireplace.
3. Pull the spring-loaded latches out and down to release the bottom of the glass assembly.
4. Lift glass assembly up and off of the (2) tabs located at the top of the firebox.

8.2.2 Install Glass Frame Assembly

1. Align the slots on top of the glass assembly over the tabs at the top of the firebox while lowering the bottom of the assembly into position.
2. Pull the spring-loaded latches out and up to secure assembly bottom of the fireplace.
3. Set the control compartment back into position and reinstall safety barrier.

Figure 8.1, Safety Barrier Installation
### 8.3 #SP41-500 Log Set Installation

**CAUTION:** Do not place logs or lava rock directly over burner port holes. Improper log placement may affect flame appearance and cause excessive soot to build upon the logs and glass.

- If converting to propane, complete the conversion before installing the log set. Follow the conversion instructions included with the kit.
- Log numbers are located on the bottom of each log. Refer to the following instructions and illustrations for proper log placement.

1. Align the holes in the bottom of log SP41-1 with the mounting pins on the log plates at the back of the firebox. Push log down to seat.
2. Align log SP41-2 with the notch in log SP41-1 as shown.
3. Align log SP41-3 as shown.
4. Align SP41-4 and SP41-5 logs with the notches in log SP41-3 as shown.
5. Distribute lava rock onto burner cover in front of the burner. Do not block burner ports or airspaces.
6. Use a steel or stiff bristle nylon brush to distribute rock wool embers onto logs and burner.
8.4 Control Board Removal and Installation

**WARNING:** Avoid burns or personal property damage by using appropriate protection to remove any components if the burner and/or pilot have been burning.

**WARNING:** DO NOT operate this appliance without the sealing gasket (located under the control board) in place. If the sealing gasket is damaged, it must be replaced.

**CAUTION:** Check all connections for leaks with soapy water, whether field or factory made.

8.4.1 Control Board Removal

1. Disconnect electrical power.
2. Locate the manual valve installed by your qualified service technician. Turn the manual valve clockwise to the OFF position.
3. Remove the safety barrier and glass frame assembly.
4. Remove logs and lava rock.
5. Remove the rear log plate (3) screws.
6. Remove pilot shield.
7. Remove the burner (2) screws. Release the burner tube venturi off of the burner orifice and remove from firebox.
8. Remove burner cover. There are (3) screws in the front of the firebox and (2) screws at the back firebox wall.
9. Remove and save (10) screws securing control board to firebox floor.
10. Lift the control board out of the firebox, being careful not to damage the sealing gasket underneath.

8.4.2 Control Board Installation

1. Place the control board in the firebox, aligning the holes in control board with the holes and alignment screws in firebox bottom. **VERIFY SEALING GASKET IS IN PLACE.**
2. Secure the control board with screws previously removed.
3. Align the holes in the burner cover with the holes in the back of the firebox and the firebox floor. Secure burner cover with (5) screws previously removed.
4. Position the burner tube venturi over the burner orifice and secure the burner to the firebox with (2) screws previously removed.
5. Reinstall the rear log plate with (3) screws previously removed.
6. Reinstall the pilot shield.
7. Reinstall log set and lava rock.
8. Reinstall the glass frame assembly and safety barrier.
9. Turn the manual valve counterclockwise to the ON position.
10. Reconnect electrical power.
11. Verify proper log placement, operation of fireplace, and any electrical components.

---

**Figure 8.3, Control Board Removal and Installation**
### 9.0 ELECTRICAL INFORMATION

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

**WARNING - Electrical Grounding Instructions:** This appliance 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.

### 9.1 Electrical Specifications

This appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the National Electrical Code, ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.1.

### 9.2 Wiring Requirements

- The IFC System Module requires 120V of electricity and/or batteries to operate.
- Using the battery back-up will operate the burner only.
- Optional fan component will not function on battery back up power.

---

![Figure 9.1, Wiring Schematics](image-url)

---

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main On/Off Switch</td>
<td>Controls the main power supply</td>
</tr>
<tr>
<td>Pilot</td>
<td>Acts as a safety feature</td>
</tr>
<tr>
<td>Burner</td>
<td>Produces the flame</td>
</tr>
<tr>
<td>Flame Sensor</td>
<td>Detects the flame</td>
</tr>
<tr>
<td>Igniter</td>
<td>Initiates the ignition</td>
</tr>
</tbody>
</table>

---

*Figure 9.1, Wiring Schematics*
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 is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.

B. BEFORE OPERATING smell 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 electric 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 your hand to turn the gas control manual valve. Never use tools. If the valve will not turn by hand, do not 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 that has been under water.

FOR YOUR SAFETY READ BEFORE OPERATING

OPERATING INSTRUCTIONS

1. STOP! Read all the safety information above on this page.

2. Press the wireless remote OFF button.

3. Turn off all electric power to the appliance.

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

5. Locate the manual valve installed by your qualified service technician.

6. Turn the manual valve clockwise \( \downarrow \) to the OFF position.

7. Wait five (5) 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. If you do not smell gas, go to the next step.

8. Turn the manual valve counterclockwise \( \uparrow \) to the ON position.

9. Turn on all electric power to the appliance.

10. Press the wireless remote ON button.

11. If the appliance will not operate, follow the instructions, “To Turn Off Gas To Appliance” and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

1. Press the wireless remote OFF button.

2. Turn off all electric power to the appliance if service is to be performed.

3. Locate the manual valve installed by your qualified service technician.

4. Turn the manual valve clockwise \( \downarrow \) to OFF position.

NOTE

When this fireplace is initially lit, condensation will appear on the glass. This is normal in all gas fireplaces and will disappear after several minutes. A paint smell will occur during the first few hours of burning. It is recommended to leave the fan off during this period to help speed the paint curing process. This fireplace may produce noises of varying degree as it heats and cools due to metal expansion and contraction. This is normal, and does not affect the performance or longevity of the fireplace.
10.1 Setup Proflame 2 IFC Module
1. Set the main ON/OFF rocker switch in the OFF position.
2. Install (4) AA batteries (included in the components packet) into backup battery holder on the control module.
3. Install (3) AAA batteries (included in the components packet) in the remote control battery bay, located at the base of the remote.
4. Connect the IFC Module to an AC power supply.

10.2 Initialize the Control System
IMPORTANT: Remove all packaging and combustible material from the firebox before initializing the control system.

NOTE: Performing the next steps will initiate pilot start-up in manual mode, where the pilot igniter will spark repeatedly. The pilot will ignite if gas is supplied to the fireplace.
1. Locate the red SW1 button the IFC module.
2. Press the button. The IFC module will BEEP (3) times and illuminate an amber LED. This indicates the receiver is ready to synchronize with the transmitter.
3. Within (5) seconds, push the ON/OFF button on the remote control. The receiver will BEEP (4) times to indicate the transmitter’s command is accepted, and is set to the transmitter’s particular code. The pilot will automatically ignite.
4. Press the remote control ON/OFF button again. The pilot will extinguish, confirming the remote control command. The control system is now initialized.
5. Set the main ON/OFF rocker switch to ON position for remote control operation of the main burner and fireplace features.

10.3 Reset the System for Manual Operation
1. Set the ON/OFF rocker switch to OFF position.
2. Press the red SW1 button on the IFC module until it emits (3) beeps and an amber LED is illuminated.
3. Within (5) seconds, press the red SW1 button again. This will close synchronization with the remote control. The pilot will automatically light.
   - Turn the main burner ON by setting the ON/OFF switch in the OFF position. The pilot will remain lit even if burner is turned off, provided CPI mode is turned on.

10.4 Automatic Safety Restart
   - This system will execute an automatic turn OFF command within (24) hours of a continued pilot flame ignition. This allows the system to verify correct safety functions.
   - After the turn OFF sequence is completed, the IFC module will re-execute the latest command.

10.5 Backup Battery Operation
This appliance will operate on the backup battery pack when electric power is interrupted, or in a power outage. The lifespan of the backup batteries depend on various factors, such as the quality of the batteries, number of ignitions, et cetera.
   - When the backup battery pack is low, the IFC module will emit a double-beep while receiving an ON/OFF command.
   - No commands will be accepted after this alert until the backup batteries are replaced.
   - Once replaced, the IFC module will emit a ‘beep’ as soon as it is powered.
10.6 IFC Module Ignition Sequence
The IFC module will try (2) times for ignition, each lasting approximately (60) seconds, with approximately (35) seconds between each attempt.

1. With the system in OFF position, press the remote control ON/OFF key. Approximately (4) seconds after this key is depressed, the IFC module will generate sparks to the pilot hood.
2. First ignition attempt will generate sparks for (60) seconds.
3. If there is no flame ignition (rectification) within the (60) second time frame, the IFC module will stop generating sparks for approximately (35) seconds.
4. After (35) seconds of wait time, the IFC module will generate sparks for another (60) seconds for the second ignition attempt.
5. If there is no positive rectification after (60) seconds, the IFC module will go into a lock out. The red LED will blink (3) times, in intervals, until the system is reset.

10.6.1 Reset IFC Module after Lockout

10.6.1.1 ON/OFF Rocker Switch
1. Set the ON/OFF rocker switch to the OFF position.
2. After approximately (2) seconds, move the switch to the ON position. The ignition sequence will start again.

10.6.1.2 Remote Control ON/OFF Key
1. Press the remote control ON/OFF key to turn the system OFF.
2. After approximately (2) seconds, press the ON/OFF key again. The ignition sequence will start again.

10.6.1.3 Cycling Flame
1. Press the remote control down arrow key during flame adjustment mode to reduce the flame to OFF (indicated by OFF displayed on the LCD screen).
2. After approximately (2) seconds, press the up arrow key. The ignition sequence will start again.

10.7 Additional Diagnostic Information

Low Battery Condition (<4V) Remote Control:
• Battery Icon will appear on LCD remote control display.
• Replace batteries.

Low Battery Condition (<4V) Battery Backup:
• The red LED Indicator will blink (1) time in intervals.
• A low double-beep emits from the IFC control module when it receives an ON/OFF command from the remote control.
• Replace Batteries.

Pilot Flame Error Condition:
• Red LED Indicator will blink (2) times in intervals. Contact your dealer if this occurs.

System Lock Out Condition:
• Red LED Indicator will blink (3) times in intervals.
• Verify gas is turned on.
• Verify sensor is not shorted.
• Follow “10.2 Initialize the Control System”.

Hussong Mfg. Co., Inc. • Kozy Heat Fireplaces
10.8 Remote Control Operation

10.8.1 Temperature Display
1. With the system in the OFF position, simultaneously press the thermostat key and the mode key to change degrees from °F to °C.
2. Visually check the LCD screen to verify either °F or °C is displayed on the right side of the room temperature display.

10.8.2 Key Lock
This function locks the keys to avoid unsupervised operation. Once activated, a lock icon will appear on the LCD screen.
1. Simultaneously press the mode key and the up arrow key to activate or deactivate this function.

10.8.3 Pilot Ignition Selection (IPI/CPI)
This system has the option of a continuous (standing) pilot. This features allows the system to change from a spark-to-pilot system to the standing pilot option. The standing pilot will keep the firebox warm and establish a draft in the vent, which allows the main burner to ignite with less air-flow disruption.

When the system is OFF, the LCD screen will display the snowflake icon during the setup of either IPI or CPI mode. To select the preferred pilot ignition feature,
1. With the system in the OFF position, press the mode key to index the CPI mode icon.
2. Press the up arrow key to activate CPI.
3. Press the down arrow key to return to IPI. A single ‘beep’ will confirm reception of the command.

When the system is ON,
IPI mode: LCD screen will not display the snowflake icon
CPI mode: LCD screen will display the snowflake icon
10.8.4 Turn ON the Appliance
1. With the system in the OFF position, press the remote control ON/OFF key to turn ON the appliance.
   A single ‘beep’ will emit from the IFC module to confirm reception of the command.
   The LCD screen will display all active icons, and the IFC module will start the ignition sequence.

10.8.5 Turn OFF the appliance
1. With the system in the OFF position, press the remote control ON/OFF key to turn ON the appliance.
   A single ‘beep’ will emit from the IFC module to confirm reception of the command.
   The LCD screen will only display the room temperature and its icon, and the IFC module will turn off the main burner.

10.8.6 Remote Control Flame Adjustment
This control system has (6) flame levels. If the smart thermostat operation is activated, then the manual adjustment of the flame height will be disabled.
1. Verify the system is in the ON position and the flame level is set at maximum.
2. Press the down arrow key once to reduce flame height by one level until the flame is turned off.
3. Press the up arrow key once to increase flame height by one step. If the up arrow key is pressed while the system is on, but the flame is off, the flame will ignite on HI.
4. A single ‘beep’ will confirm reception of the command.

10.8.7 Remote Control Thermostat Operation
10.8.7.1 Room Thermostat
The remote control can operate as a room thermostat. The thermostat can be set to a desired temperature to control a room’s comfort level. To activate this function,
1. Press the thermostat key. The LCD screen will display a temperature bulb graphic, the room temperature and set temperature.
2. To adjust the set temperature, press the up or down arrow keys until the desired temperature is displayed on the LCD screen.

10.8.7.2 Smart Thermostat
The smart thermostat function will adjust the flame height based on the set temperature and the actual room temperature. The smart thermostat function automatically adjusts the flame down when the room temperature reaches the set point. To activate this function,
1. Press the thermostat key until the ‘SMART’ appears on LCD screen on the right side of the temperature bulb graphic.
2. To adjust the set temperature, press the up or down arrow keys until the desired temperature is displayed on the LCD screen.

10.8.7.3 Deactivate Remote Control Thermostat Operation
The thermostat operation function can be deactivated. The remote control will still operate the main burner on and off, and function flame, fan, and light modulation. To deactivate this function,
1. Verify all (3) AAA batteries are installed in the remote control.
2. Remove (1) AAA battery.
3. While reinserting the battery, push and hold the thermostat key. The temperature bulb graphic will not be displayed on the LCD screen.
4. To reactivate remote thermostat operation, follow the same key sequence procedure above. The temperature bulb graphic will reappear on the LCD screen.
10.8.8 Fan Speed Control (optional)

Fan speed can be adjusted through (6) speeds. To activate this function,
1. Press the mode key to index to the fan control icon.
2. Press the up or down arrow keys to turn on, off, or to adjust fan speed.

**Thermostat mode:** Fan(s) have a (5) minute delay time when the fireplace is let. This allows time for heat to build in fireplace before fan operation. The fan will continue to operate for approximately (12) minutes after the fireplace has been turned off.

**Manual mode:** Fan(s) will operate at previous setting. There is no delay in start up or stop time.

10.8.9 Accent Light Kit (if applicable)

The light intensity can be adjusted through (6) levels.
1. Press the mode key to index to the light icon.
2. Press the up or down arrow keys to adjust the intensity level.
3. A single ‘beep’ will confirm receipt of the command.

10.8.10 Remote Control Low Battery Detection

Remote control battery lifespan depends on various factors including battery quality, number of ignitions, changes to room thermostat set point, etcetera.

- When the remote control battery are low, a battery icon will appear on the LCD display before all battery power is lost.
- When the batteries are replaced, this icon will disappear.
11.0 ADJUSTMENT

11.1 Pressure Testing

NOTE: The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of the system at test pressures in excess of ½ psi (3.5 kPa).

IMPORTANT: Pressure check taps for manifold (outgoing) and inlet (incoming) pressure have been incorporated into the valve. The pressure tap marked OUT measures outgoing pressure. The pressure tap marked IN measures incoming pressure.

11.1.1 Inlet Pressure Test

NOTE: Make sure to apply these incoming pressure test with all other gas appliances on, or at full capacity in the house for proper pressure reading.

IMPORTANT: If the inlet pressure reading is too high or too low, contact the gas company. Only a qualified gas service technician should adjust incoming gas pressure.

1. Loosen the inlet (IN) pressure tap by turning screw counterclockwise. See (A) in Figure 11.1.
2. Attach manometer using a ¼ in (6 mm) I.D. hose.
3. Light pilot and burner. Check pressure to ensure it is between the minimum and maximum recommended pressure settings.
4. Turn off burner and pilot.
5. Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
6. Relight pilot and burner. Then reattach manometer to the inlet pressure tap (A) to verify the tap is completely sealed. Manometer should read no pressure.

11.1.2 Manifold Pressure Test

1. Light pilot.
2. Loosen manifold (OUT) pressure tap by turning screw counter-clockwise. See (B) in Figure 11.1.
3. Attach manometer to pressure tap using a ¼ in (6 mm) I.D. hose.
4. Light burner. Check manometer reading.
5. Turn burner and pilot off.
6. Disconnect manometer hose and tighten the manifold (OUT) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
7. Attach the manometer to the manifold pressure tap (B) to verify it is completely sealed. The manometer should read no pressure when pilot and burner are on.

<table>
<thead>
<tr>
<th>Table 11.1, Inlet Pressures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel</strong></td>
</tr>
<tr>
<td>Gas Supply</td>
</tr>
<tr>
<td>Inlet Pressure Tap (A)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 11.2, Manifold Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fuel</strong></td>
</tr>
<tr>
<td>Gas Supply</td>
</tr>
<tr>
<td>Manifold Pressure Tap (B)</td>
</tr>
</tbody>
</table>

Figure 11.1, Pressure Check Taps
11.2 Burner Flame Adjustments

**WARNING:** To avoid property damage or personal injury, allow the fireplace ample time to cool before making any adjustments.

Burner flame appearance and characteristics are affected by altitude, fuel quality, venting configuration, and other factors. After installation, this appliance may need additional adjustments to achieve optimum flame appearance and visual aesthetics.

11.2.1 Burner Venturi

**WARNING:** VENTURI ADJUSTMENT MUST BE DONE BY A QUALIFIED SERVICE TECHNICIAN.

**NOTE:** Burner venturi air shutter settings have been factory set. Refer to Table 11.3.

When this appliance is first lit, the burner flames will appear blue. During the first 15 minutes of operation, flame appearance will gradually turn to the desired yellow appearance. If the flames remain blue, or become dark orange with evidence of sooting (black tips), adjustment of the air shutter opening may be necessary.

Regardless of venturi orientation, closing the air shutter will achieve a desired yellow flame, but may produce soot on the glass. Opening the air shutter will cause a short, blue flame that may lift off the burner.

### Table 11.3, Factory Set Venturi Openings

<table>
<thead>
<tr>
<th>Fuel</th>
<th>Air Shutter Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas</td>
<td>1/8&quot; (3 mm) OPEN</td>
</tr>
<tr>
<td>Propane</td>
<td>1/2&quot; (13 mm) OPEN</td>
</tr>
</tbody>
</table>

11.2.1.1 Venturi Adjustment

**NOTE:** If soot is present on the glass, check log positioning before adjusting the venturi. Logs must not block burner ports.

1. Remove the safety barrier and glass frame assembly.
2. Remove the log set and lava rock.
3. Remove rear log plate (3) screws.
4. Remove the pilot shield.
5. Remove (2) screws securing burner. Release the burner tube venturi off the burner orifice.
6. Loosen screw on venturi and adjust as necessary. Re-tighten screw.
7. Reinstall all components previously removed.

**IMPORTANT:** Slight adjustments to the venturi opening will create dramatic results. Adjust at slight increments until desired look is achieved. Always burn the fireplace insert for at least 15 minutes, and allow the appliance ample time to cool before making any further adjustments.

### Table 11.4, Venturi Adjustment Guidelines

<table>
<thead>
<tr>
<th>Flame Characteristic</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark, orange flame</td>
<td>Venturi closed too far</td>
<td>Open venturi slightly</td>
</tr>
<tr>
<td>with black tips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short, blue flames</td>
<td>Venturi open too far</td>
<td>Close setting slightly</td>
</tr>
<tr>
<td>Lifting (ghosting)</td>
<td>Gas pressure too high</td>
<td>Check manometer</td>
</tr>
<tr>
<td>flames</td>
<td>Venturi closed too far</td>
<td>settings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open venturi setting slightly</td>
</tr>
</tbody>
</table>

Figure 11.2, Burner Venturi

Figure 11.3, Flame Appearance and Characteristics
11.2.2 Vent Restriction (after installation)

**WARNING:** To avoid property damage or personal injury, allow the fireplace ample time to cool before making any adjustments.

**WARNING:** Improper vent installation may cause the burner flames to lift or “ghost.” Perform a visual check on flame appearance after restriction adjustment to ensure proper performance.

Vertical terminations may display an active, compact flame. If this appearance is not desirable, a restrictor may need to be installed or modified after vent termination installation. Access to the vent exit for restriction can be reached through the fireplace baffle. Allow the fireplace to burn for 15 minutes before making any adjustments.

<table>
<thead>
<tr>
<th>Flame Appearance</th>
<th>Draft Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short, flickering</td>
<td>Excessive draft</td>
<td>Add restrictor</td>
</tr>
<tr>
<td></td>
<td>Not enough restriction</td>
<td></td>
</tr>
<tr>
<td>Lifting or ghosting*</td>
<td>Insufficient draft</td>
<td>Remove inner ring(s) on restrictor, or Remove restrictor</td>
</tr>
</tbody>
</table>

*If flames continue to lift or ghost after opening the restrictor and verifying correct vent installation, shut off the gas supply and call a qualified service technician.

### 11.2.2.1 Restrictor Plate Installation

1. Remove the safety barrier and the glass frame assembly.
2. Remove (3) screws at the firebox ceiling securing the baffle. Lift the baffle out of slots on the firebox back wall.
3. Bend the tabs on the restrictor plate (included in components packet) to approximately 80° angles. This will create tension when the restrictor plate is inserted into the exhaust pipe.
4. Insert restrictor plate into the 4 in (102 mm) exhaust pipe with the tabs pointing towards you.
5. Reinstall baffle by inserting the tabs on the baffle into the slots on the firebox back wall. Secure the baffle to the firebox ceiling with (3) screws.
6. Reinstall all components previously removed.

### 11.2.2.2 Restrictor Plate Modification

1. Remove the safety barrier and the glass frame assembly.
2. Remove (3) screws at the firebox ceiling securing the baffle. Lift the baffle out of slots on the firebox back wall.
3. Remove the restrictor plate by pulling it down and out of the 4 in (102 mm) exhaust pipe. Make necessary modifications to achieve desired flame appearance.
4. Insert restrictor plate into the 4 in (102 mm) exhaust pipe with the tabs pointing towards you.
5. Reinstall baffle by inserting the tabs on the baffle into the slots on the firebox back wall. Secure the baffle to the firebox ceiling with (3) screws.
6. Reinstall all components previously removed.
**12.0 TROUBLESHOOTING**

**ATTENTION:** Troubleshooting must be performed by a qualified technician.

Before proceeding with the steps in the following troubleshooting guide,

- Verify proper 120VAC power supply to the control module.
- Verify the control module battery pack and the remote control batteries are fresh and installed with correct polarity.
- Verify all connections between the wire harnesses and the system components are proper and positive.
- Verify the communication link is established between the remote control and the IFC module.
- Verify inlet pressure meets the recommended inlet pressure. If necessary, adjust line pressure regulator.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pilot will not light</td>
<td>Electrical power interrupted or disconnected</td>
<td>Restore electrical power to appliance or use battery back-up.</td>
</tr>
<tr>
<td></td>
<td>Wiring disconnection</td>
<td>Ensure batteries are fully charged if using battery back-up as power source. Use wiring schematic in this manual to determine that all wiring connections are secure and correct.</td>
</tr>
<tr>
<td></td>
<td>Gas supply turned off</td>
<td>Check remote shut-off valves from the appliance. Usually there is a valve near the main gas line. There may be more than (1) valve between the appliance and main gas line.</td>
</tr>
<tr>
<td>Pilot will not stay lit</td>
<td>No propane in tank</td>
<td>Check propane tank. Refill if necessary.</td>
</tr>
<tr>
<td></td>
<td>Low gas pressure</td>
<td>Consult a plumber or a gas supplier. Can be caused by situations such as a bent line, too narrow diameter or pipe, or a low line pressure.</td>
</tr>
<tr>
<td></td>
<td>Pilot flame not making contact with the flame rectification sensor on the pilot assembly</td>
<td>Verify the pilot flame envelopes the top of the flame sensor and extends far enough onto burner for ignition. To adjust pilot flame, turn pilot adjustment screw on the gas valve clockwise to decrease flame, and counterclockwise to increase flame.</td>
</tr>
<tr>
<td></td>
<td>Pilot adjustment screw not sealed</td>
<td>Seal pilot adjustment screw. Do not over-tighten.</td>
</tr>
<tr>
<td>Pilot flame always on, or will not extinguish</td>
<td>Control system set to CPI mode</td>
<td>Set control system to IPI mode.</td>
</tr>
<tr>
<td>Main burner flame will not light</td>
<td>ON/OFF rocker switch in OFF position</td>
<td>Switch rocker switch to ON position.</td>
</tr>
<tr>
<td></td>
<td>Gas supply turned off</td>
<td>Check for multiple shut-offs in the supply line. Verify gas supply is turned on.</td>
</tr>
<tr>
<td></td>
<td>Low gas supply</td>
<td>Consult with plumber or gas supplier. Check propane tank. Refill if necessary.</td>
</tr>
<tr>
<td></td>
<td>Wiring disconnection or improper wiring</td>
<td>Check for faulty or incorrect wiring.</td>
</tr>
<tr>
<td></td>
<td>Plugged main burner orifice</td>
<td>Remove blockage.</td>
</tr>
<tr>
<td></td>
<td>Pilot flame</td>
<td>Verify the pilot flame is properly directed to ignite burner. See pilot flame troubleshooting above.</td>
</tr>
<tr>
<td></td>
<td>Remote control not working properly</td>
<td>Replace batteries.</td>
</tr>
<tr>
<td></td>
<td>No call for heat</td>
<td>Verify remote control is powered ON and thermostat operation is turned OFF.</td>
</tr>
<tr>
<td>Issue</td>
<td>Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pilot and burner extinguish while in operation</td>
<td>No propane in tank</td>
<td>Check propane tank. Refill if necessary.</td>
</tr>
<tr>
<td></td>
<td>Incorrect glass assembly installation</td>
<td>Refer to Section 8.1 Glass Frame Assembly on page 45.</td>
</tr>
<tr>
<td></td>
<td>Incorrect vent cap installation</td>
<td>Adjust if necessary.</td>
</tr>
<tr>
<td></td>
<td>Vent cap blockage</td>
<td>Remove debris if necessary.</td>
</tr>
<tr>
<td></td>
<td>Improper pitch on horizontal venting</td>
<td>¼ in. (6 mm) rise per foot (30 cm) is required on horizontal venting</td>
</tr>
<tr>
<td></td>
<td>Exhaust vent pipe leaking exhaust gases back</td>
<td>Check for leaks and repair if necessary.</td>
</tr>
<tr>
<td></td>
<td>into firebox</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Excessive draft</td>
<td>A restrictor may need to be installed or modified. 11.2.2 Vent</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Restriction (after installation) on page 39</td>
</tr>
<tr>
<td>Soot appears on glass</td>
<td>Improper log placement</td>
<td>8.2 Glass Frame Assembly on page 27</td>
</tr>
<tr>
<td></td>
<td>Improper venturi setting</td>
<td>Venturi air shutter may need to be opened slightly to allow more air</td>
</tr>
<tr>
<td></td>
<td></td>
<td>into the gas mix. 11.2.1 Burner Venturi on page 38</td>
</tr>
<tr>
<td></td>
<td>Incorrect vent cap installation</td>
<td>Adjust if necessary.</td>
</tr>
<tr>
<td></td>
<td>Vent cap blockage</td>
<td>Remove debris if necessary.</td>
</tr>
<tr>
<td>Flame burns blue and lifts off burner</td>
<td>Improper venturi setting</td>
<td>Venturi air shutter may need to be opened slightly to allow more air</td>
</tr>
<tr>
<td></td>
<td></td>
<td>into the gas mix. 11.2.1 Burner Venturi on page 38</td>
</tr>
<tr>
<td></td>
<td>Incorrect vent cap installation</td>
<td>Adjust if necessary.</td>
</tr>
<tr>
<td></td>
<td>Blockage or leakage of the vent system</td>
<td>Check the vent pipes for leaks, and the vent cap for debris. Repair</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the vent pipes or remove debris from vent cap, if necessary.</td>
</tr>
<tr>
<td>No reaction to command</td>
<td>Battery back batteries or remote control</td>
<td>Replace batteries.</td>
</tr>
<tr>
<td></td>
<td>batteries low</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No communication between remote control and</td>
<td>Reprogram remote control to IFC module.</td>
</tr>
<tr>
<td></td>
<td>IFC module</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A maximum number of failed ignitions or flame</td>
<td>Reset IFC module.</td>
</tr>
<tr>
<td></td>
<td>restorations has been reached</td>
<td></td>
</tr>
</tbody>
</table>
13.0 MAINTENANCE

ATTENTION: Installation and repair should only be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning might be required due to excessive lint from carpeting, bedding material, etcetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. Use a vacuum to clean all components.

WARNING: The appliance area must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

13.1 Firebox

Performed by: Qualified Service Person
Frequency: Annually
Action:
• Vacuum and clean any debris in the firebox that is not supposed to be there.
• Inspect and operate the bottom latch assembly. Verify the assembly is free from obstruction to operate. The handles must have spring tension but be able to move forward freely.

13.2 Fan (optional)

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

Performed by: Qualified Service Person
Frequency: Every 6 months
Action:
• Disconnect the fan from electrical current and vacuum.
• The bearings are sealed and require no oiling.

13.3 Vent System

NOTE: If the vent-air intake system is disassembled for any reason, reinstall per instructions provided with installation. 7.0 Venting on page 22.

Performed by: Qualified Service Person
Frequency: Annually
Action:
• Examination of the vent system is required.
• The flow of combustion and ventilation air must not be obstructed.

13.4 Glass Assembly

CAUTION: Do not operate appliance with the glass assembly removed, cracked, or broken. Use protective gloves to handle any broken or damaged glass assembly components.

WARNING: Do not use substitute materials.

WARNING: Avoid striking or slamming glass assembly. Avoid abrasive cleaner. DO NOT clean glass while it is hot.

IMPORTANT: Any safety screen, guard, or barrier removed for servicing the appliance must be replaced prior to operating the appliance.

Performed by: Homeowner
Frequency: Annually
Action:
• Prepare a work area large enough to accommodate the glass assembly on a flat, stable surface.
• Remove safety screen and glass frame assembly.
• Clean glass window with a suitable fireplace glass cleaner using a soft cloth. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
• Reinstall glass assembly and safety screen. Do not operate fireplace without safety screen.

Performed by: Qualified Service Person
Frequency: Annually
Action:
• Clean glass window with a suitable fireplace glass cleaner using a soft cloth. Abrasive cleaners must not be used. Be careful not to scratch the glass when cleaning.
• Inspect the glass for cracks, scratches, and nicks.
• Verify the glass assembly is properly intact and not damaged.
• Replace the glass and the assembly #SP41-057T as necessary.
• Only Hussong Mfg. Co., Inc. will supply the replacement of glass assembly as a complete unit.
13.5 Burner and Pilot System

The burner assembly may be removed for easier access to the control compartment. 8.4 Control Board Removal and Installation on page 29. Verify gas supply is turned on and filled. Consult with plumber or gas supplier as necessary.

**Performed by:** Qualified Service Person

**Frequency:** Annually

**Action:**
- Vacuum all components of the burner system.
- Check all accessible gas-carrying tubes, connections, pipes and other components for leaks.
- Inspect the operation of the flame safety system Pilot or Flame rectification device. Visually check pilot light when in operation.
- Inspect and ensure the lighting of the main burner occurs within (4) seconds of the main gas valve opening. Check for faulty or incorrect wiring and correct or replace as necessary. Inspect primary air openings (burner ports) for blockage, especially near the pilot.
- Visually check burner flame pattern when in operation. Flames should be steady, not lifting or floating.
- Test and measure the flame failure response time of the flame safety system. It must de-energize the safety shutoff in no more than (30) seconds.

---

**Figure 13.1, Burner System**

**Figure 13.2, Pilot and Burner Correct Flame Appearance**

**Figure 13.2, Pilot System Pilot Flame**

**ELECTRONIC IGNITION SYSTEM PILOT FLAME**

**IDEAL**

**LAZY, YELLOW FLAMES**
## 14.0 REPLACEMENT PARTS LIST

Replacement parts are available through your local dealer. Contact your local dealer for availability and pricing.

### SP-41-L CONTROL BOARD AND PARTS

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Part Code</th>
<th>Part Code Additional Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Board - Natural Gas</td>
<td>SP41-150</td>
<td></td>
</tr>
<tr>
<td>Control Board - Propane</td>
<td>SP41-151</td>
<td></td>
</tr>
<tr>
<td>S.I.T. IPI Gas Valve - Natural Gas</td>
<td>700-567</td>
<td>18 in. Flexible Gas Line - Black</td>
</tr>
<tr>
<td>S.I.T. IPI Gas Valve - Propane</td>
<td>700-567-1</td>
<td>Flexible Gas Line - Valve to Burner Connection</td>
</tr>
<tr>
<td>Proflame 2 IFC Board</td>
<td>700-652</td>
<td>Natural Gas Burner Orifice #41</td>
</tr>
<tr>
<td>IFC Wire Harness Assembly</td>
<td>700-653</td>
<td>Propane Burner Orifice #53</td>
</tr>
<tr>
<td>Pilot Assembly - Natural Gas</td>
<td>700-551</td>
<td>Conversion Kit - Natural Gas</td>
</tr>
<tr>
<td>Pilot Assembly - Propane</td>
<td>700-551-1</td>
<td>Conversion Kit - Propane</td>
</tr>
<tr>
<td>Transmitter (Remote Control)</td>
<td>700-408</td>
<td>Burner Cover</td>
</tr>
<tr>
<td>Pilot Orifice - Natural Gas #62</td>
<td>700-166</td>
<td>Burner</td>
</tr>
<tr>
<td>Pilot Orifice - Propane #35</td>
<td>700-168</td>
<td>Rear Log Plate</td>
</tr>
<tr>
<td>S.I.T. IPI Pilot Hood</td>
<td>700-598</td>
<td>Pilot Shield</td>
</tr>
</tbody>
</table>

### GLASS AND GLASS PARTS

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Part Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>36-1/2” x 26-1/8” Glass with Gasket</td>
<td>701-017T</td>
</tr>
<tr>
<td>1-1/8” Glass Gasket</td>
<td>900-006</td>
</tr>
<tr>
<td>Replacement Valance</td>
<td>SP41-005</td>
</tr>
</tbody>
</table>

### SAFETY BARRIERS

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Part Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Barrier Screen (only)</td>
<td>SP41-SCR</td>
</tr>
<tr>
<td>Prairie Design Overlay</td>
<td>SP41-POL</td>
</tr>
<tr>
<td>Arched Prairie Design Overlay</td>
<td>SP41A-POL</td>
</tr>
</tbody>
</table>

### LOG SET

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Part Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Piece Log Set</td>
<td>SP41-500</td>
</tr>
<tr>
<td>#1 Log</td>
<td>SP41-1</td>
</tr>
<tr>
<td>#2 Log</td>
<td>SP41-2</td>
</tr>
<tr>
<td>#3 Log</td>
<td>SP41-3</td>
</tr>
<tr>
<td>#4 Log</td>
<td>SP41-4</td>
</tr>
<tr>
<td>#5 Log</td>
<td>SP41-5</td>
</tr>
<tr>
<td>Lava Rock ½” (12 mm)</td>
<td>600-702</td>
</tr>
</tbody>
</table>

### FAN ASSEMBLY

<table>
<thead>
<tr>
<th>Part Description</th>
<th>Part Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan Assembly</td>
<td>SP-028IPI</td>
</tr>
</tbody>
</table>

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Hussong Manufacturing Co., Inc.
P.O. Box 577
204 Industrial Park Drive
Lakefield, MN 56150-0577
USA

SP-41-L
Kozy Heat Limited 10 Year Warranty

This limited 10 Year Warranty will not become effective until the Warranty Registration Form has been completed and mailed to Hussong Manufacturing Co., Inc., P.O. Box 577, Lakefield, MN 56150. This registration form must be received within 30 days of installation. Failure to do so may result in delayed warranty coverage and submission of proof of purchase will be required.

Hussong Manufacturing Co., Inc. warranties to the original purchaser of this Kozy Heat Fireplace, that it is free of defects in materials and workmanship at the time of manufacture.

Subject to the following conditions & requirements, Hussong Manufacturing Co., Inc. extends the following limited warranty under normal use and service, with respect to the Kozy Heat line of gas burning fireplaces.

Year 1

Subject to the conditions & requirements listed below, within the first year from date of purchase, Hussong Manufacturing Co., Inc. shall, at its discretion, replace or repair any such defect in material or workmanship, at Hussong Manufacturing Co., Inc.'s expense, including reasonable labor costs to repair or replace the defective component, if a factory pre-authorization is given for the repair.

Years 2 through 10

Subject to the conditions & requirements listed below, beginning with the first day of the second year and continuing through the tenth year, Hussong Manufacturing Co., Inc., will at its discretion, provide repair or replacement parts at current list prices for any defect in material or workmanship of components, including optional components and accessories (if available). Hussong Manufacturing Co., Inc. shall not be responsible for any installation, labor, transportation of other indirect costs.

Limitation of Liability

To make a claim under this warranty, the purchaser must first contact the dealer/installer from whom the fireplace was purchased.

This limited warranty will be void if the fireplace is not installed by a qualified installer and according to the installation instructions. Use of unauthorized components will make this warranty null and void.

This limited warranty also is void if the fireplace is not operated, at all times, according to the operating instructions furnished.

This warranty is limited to defects in material and workmanship. It does not apply to any product that has been subject to negligence, misapplication, improper installation.

No person is authorized to extend the time of this warranty or to accept on Hussong Manufacturing Co., Inc.'s behalf any additional obligation of liability connected with the unit.

It is expressly agreed and understood that this warranty is Hussong Manufacturing Co., Inc.'s sole obligation and purchaser's exclusive remedy for defective fireplace equipment. Hussong Manufacturing Co., Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever. The foregoing warranty is exclusive and in lieu of all other expressed warranties. Hussong Manufacturing Co., Inc. shall not be held to implied warranties or merchantability and fitness for a particular purpose. This warranty replaces all previous warranty policies.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Hussong Manufacturing Co., Inc. reserves the right to make changes at any time, without notice, in design, material, specifications and prices. Hussong Manufacturing Co., Inc. reserves the right to discontinue models and products.

December 2014

Warranty Conditions and Requirements

1. You are the original purchaser. This warranty is not transferable.
2. Installation of the fireplace is performed by a qualified installer.
3. Installation and operation must comply with installation and operation instructions.
4. Paint and glass gaskets are covered for 30 days from date of purchase.
5. Remote controls and all optional accessories are covered for 1 year from date of purchase.
6. This warranty does not offer coverage for Light Bulbs, Batteries or Fuses (whether factory, dealer or installer supplied). This includes any damage stemming from either component’s nonuse.
7. Components broken, (including glass panels), during shipping, careless handling of components, or defects resulting from improper installation, misuse of the fireplace and components are not covered under this warranty.
8. This warranty does not cover any part of the fireplace or any components which have been exposed to or submerged underwater.
9. Hussong Manufacturing Co., Inc. must be notified by the dealer the fireplace was purchased from or a qualified installer/service technician of the defect.
10. Annual service of the fireplace as required in the installation manual, is performed by a qualified installer/service technician. (Copies of such service records may be required to claim a warranty).
11. All previous warranty/service has been performed by a qualified installer or service technician. (Copies of such service records may be required to claim a warranty).
LIFETIME WARRANTY

LIFETIME WARRANTY COVERAGE WILL BE EXTENDED AS DESCRIBED BELOW PROVIDED ALL WARRANTY CONDITIONS AND REQUIREMENTS ARE MET AS OUTLINED IN THE 10 YEAR LIMITED WARRANTY POLICY.

Lifetime Warranty Coverage

LIFETIME WARRANTY IS EXTENDED AS FOLLOWS:
Hussong Manufacturing Co., Inc. warranties to the original purchaser that the firebox, heat exchanger, fiber logs, burner tube and glass panel of this Kozy Heat Fireplace will not be defective in material or workmanship under normal use and service for as long as you own this product. If any of these components fail due to defects in material and workmanship under normal use and service, Hussong Manufacturing, Co., Inc. will, at its sole discretion, repair or replace the defective component. This LIFETIME WARRANTY does not cover any installation, labor, transportation or other indirect cost arising from defective components.

Limitation of Liability

This Lifetime Warranty will be void if the fireplace is not installed by a qualified installer and according to the installation instructions. Use of unauthorized components will make this warranty null and void. This Lifetime Warranty also is void if the fireplace is not operated, at all times, according to the operating instructions furnished. This warranty is limited to defects in material and workmanship of components specified. It does not apply to any product that has been subject to negligence, misapplication, improper installation.

No person is authorized to extend the time of this Lifetime Warranty or to accept on Hussong Manufacturing Co., Inc.’s behalf any additional obligation of liability connected with the unit. Hussong Manufacturing Co., Inc. may fully discharge all obligations with respect to this Lifetime Warranty by refunding the wholesale price of the defective component(s).

It is expressly agreed and understood that this Lifetime Warranty is Hussong Manufacturing Co., Inc.’s sole obligation and original purchaser’s exclusive remedy for defective fireplace equipment. Hussong Manufacturing Co., Inc. shall not be liable for any consequential, incidental or contingent damages whatsoever other than those incurred by Hussong Manufacturing Co., Inc. to repair or replace the defective component. The foregoing warranty is exclusive and in lieu of all other expressed warranties. Hussong Manufacturing Co., Inc. shall not be held to implied warranties, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. This lifetime warranty replace all previous lifetime warranty policies.

Hussong Manufacturing Co., Inc. reserves the right to make changes at any time, without notice, in design,! material, specifications and prices. Hussong Manufacturing Co., Inc. reserves the right to discontinue models and products.

To activate this Lifetime Warranty coverage, this registration card must be completed and mailed with your completed 10 Year Limited Warranty form within 30 days of installation to the following address:

Hussong Manufacturing Co., Inc.
P.O. Box 577
204 Industrial Park Drive
Lakefield, MN 56150-0577

September 2011