SP-41-L

INSTALLATION AND OPERATION MANUAL

Model #SP-41-L **Direct Vent Gas Fireplace**



English and French installation manuals are available through your local dealer. Visit our website www.kozyheat.com.

Les manuels d'installation en français et en anglais sont disponibles chez votre détaillant local. Visitez www.kozyheat.com.





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

A 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.

This appliance may be installed in an aftermarket, permanently 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.



HOT GLASS WILL CAUSE BURNS

DO NOT TOUCH GLASS UNTIL COOLED

NEVER ALLOW CHILDREN TO TOUCH GLASS

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

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

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 over 40 years. We offer a complete line of gas, wood, and electric 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:	

TABLE OF CONTENTS

НОИ	MEOWNER REFERENCE INFORMATION	.3
TAB	LE OF CONTENTS	.5
1.0	INTRODUCTION	.7
1.1	Appliance Certification	.7
	California Proposition 65 Warning	
1.3	Requirements for the Commonwealth of Massachusetts	.7
2.0	SPECIFICATIONS	.8
	Heating Specifications	
2.2	Electrical Specifications	.8
	Appliance Dimensions	
2.4	Safety Barrier Dimensions	. 10
3.0	FRAMING	.11
	Installation Planning	
	Stand-off Assembly and Installation	
	Nailing Tabs Installation	
	Clearances to Combustibles	
	Rough Framing	
	Rough-in Vent Termination	
	Outdoor Covered Fireplace Installation	
	FACING AND FINISHING	
	Facing and Finishing Requirements	
	Safety Barrier Installation	
5.0	GAS LINE CONNECTION	. 22
	Gas Conversion	
5.2	Gas Line Installation	. 22
6.0	TERMINATION LOCATIONS	. 23
	Vertical Vent Termination	
6.2	Minimum Vent Termination Clearances	. 24
	VENTING	
7.1	Approved Vent Systems	. 25
	Venting Requirements	
	Restrictor Assembly and Installation	
	Vent Installation	
	Class A Chimney/Masonry Chimney Conversion	
	Coaxial to Co-Linear Chimney Conversion	
77	#700-2 Sorios Direct Vent Termination Kit(s)	22

8.0 F	TREPLACE SETUP	33
8.1 (Glass Frame Assembly	33
8.2	#SP41-50A Log Set Installation	34
8.3 (Control Board Removal and Installation	35
9.0 E	ELECTRICAL INFORMATION	36
9.1 I	Electrical Specifications	36
9.2 \	Wiring Requirements	36
10.0	OPERATING INSTRUCTIONS	37
10.1	Setup Komfort 8K1 Control Module	38
10.2	Initialize the Komfort 8K1 Control System	38
10.3	Automatic Safety Turn-off	38
10.4	Backup Battery Operation	38
	Control System 7 Day Time-out	
10.6	Komfort 8K1 Control System Ignition Sequence	38
10.7	Additional Diagnostic Information	38
10.8	Remote Control Operation	39
11.0	ADJUSTMENT	43
11.1	Pressure Testing	43
11.2	Burner Flame Adjustments	44
12.0	TROUBLESHOOTING	46
13.0	MAINTENANCE	49
13.1	Firebox	49
13.2	Fan	49
13.3	Vent System	49
13.4	Glass Assembly	49
13.5	Burner and Pilot System	50
14.0	REPLACEMENT PARTS LIST	51
LIMIT	FED LIFETIME WARRANTY	53

1.1 Appliance Certification

Laboratory: PFS in Cottage Grove, Wisconsin Standards:

ANSI Z21.88-2017/CSA 2.33-2017, Vented Gas Fireplace Heaters CSA 2.17 2017, 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 California Proposition 65 Warning

WARNING: This product can expose you to chemicals including Carbon Monoxide, that is an externally vented by-product of fuel combustion, which is [are] known to the State of California to cause birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

1.3 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:

1.3.1 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.

1.3.2 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.

1.3.3 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".

1.3.4 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.

1.3.5 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.

1.3.6 Manufacturer Requirements

1.3.6.1 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.

1.3.7 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 Heating Specifications

	Natural Gas	Propane
Maximum	28,000 Btu/h	28,000 Btu/h
Input Rating	(8.2 kW)	(8.2 kW)
Minimum	14,000 Btu/h	14,000 Btu/h
Input Rating	(4.1 kW)	(4.1 kW)
Manifold Pressure	3.5"WC	10″WC
(High)	(0.87 kPa)	(2.49 kPa)
Manifold Pressure	1″WC	2.7"WC
(Low)	(0.24 kPa)	(0.67 kPa)
Orifice Size (DMS)	#40	1.55mm

2.1.1 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.

2.1.1.1 US Installations

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

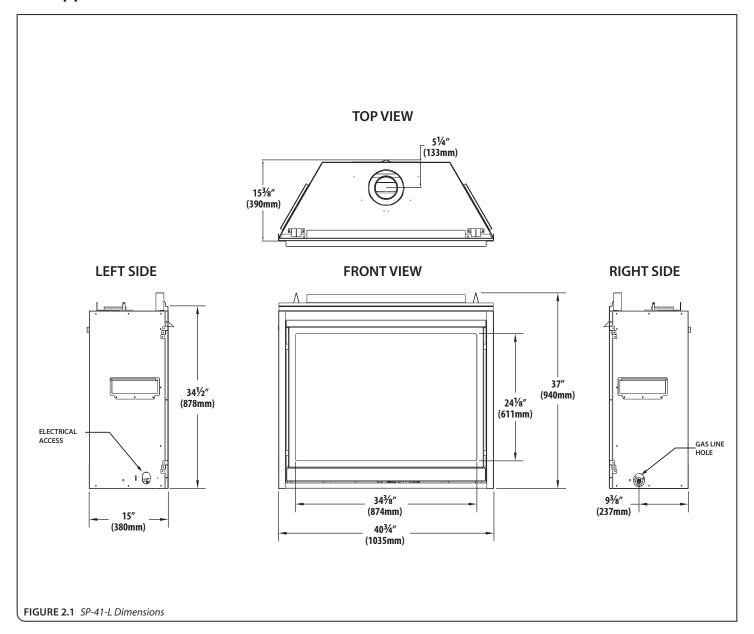
2.1.1.2 Canadian Installations

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

2.2 Electrical Specifications

- The junction box in this appliance requires 120VAC, 60Hz, and 6 Amps.
- Verify the household breaker is shut off prior to working on any electrical lines.
- The AC power supply to this appliance must be hot at all times and shall not have a switch installed in it.

2.3 Appliance Dimensions



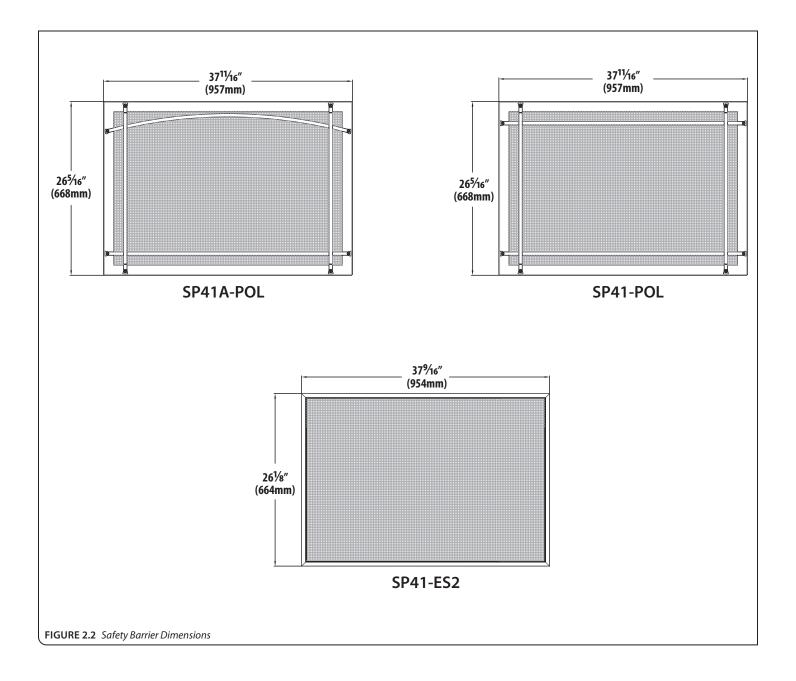
2.4 Safety Barrier Dimensions

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.

IMPORTANT: Consider the height of hearth finish material when building a fireplace platform. Proper installation of overlays require the bottom of the fireplace to be level with finished hearth.

Please refer to section **4.2**, **SAFETY BARRIER INSTALLATION** on page 21 for installation instructions.



R.6 February 2022

3.0 FRAMING

SECTION 3 FRAMING
Installation Planning

3.1 Installation Planning

If planning to convert to propane, it is easier to complete the gas
conversion before framing in the fireplace. See the #LCK-SP41L-D
manual for complete conversion instructions. If you convert the
fireplace to propane after fireplace installation, you will have to
remove the control board. See section 8.3, CONTROL BOARD
REMOVAL AND INSTALLATION on page 35 for access to the
control board before and after installation.

3.1.1 Appliance Placement Considerations

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

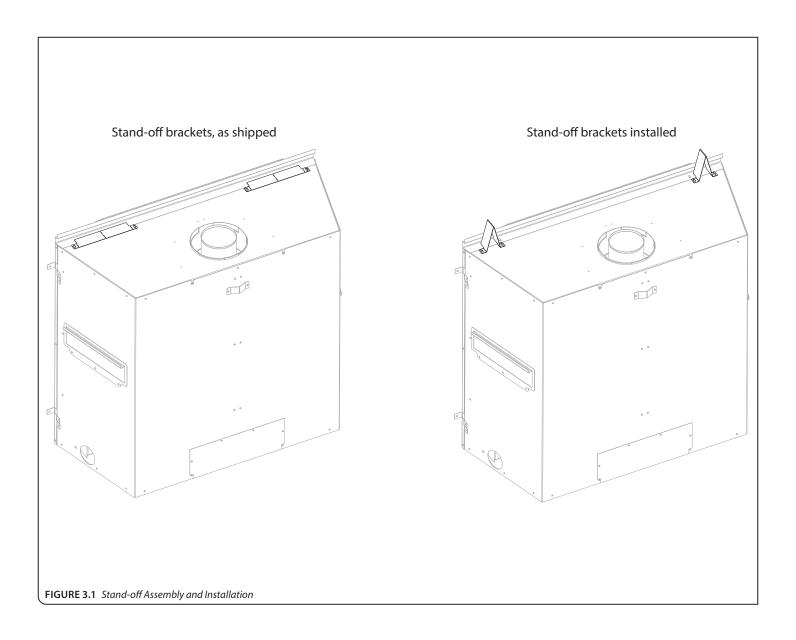
- This appliance must be installed on a level surface capable of supporting the fireplace and venting.
- Determine the exact position of your fireplace. Consider the hearth width, height, and depth (if applicable) for your installation.
- If possible, place the fireplace in a position where the vent terminates between two studs, eliminating the need for any additional framing.
- 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" (25mm) top stand-off flange accommodates 1/2" (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 (4) screws securing the stand-off brackets on top of the fireplace.
- Form each stand-off bracket by bending at perforations, as shown.
- Align the holes in the formed stand-off brackets with the holes on top of the fireplace. Secure with (4) screws previously removed.

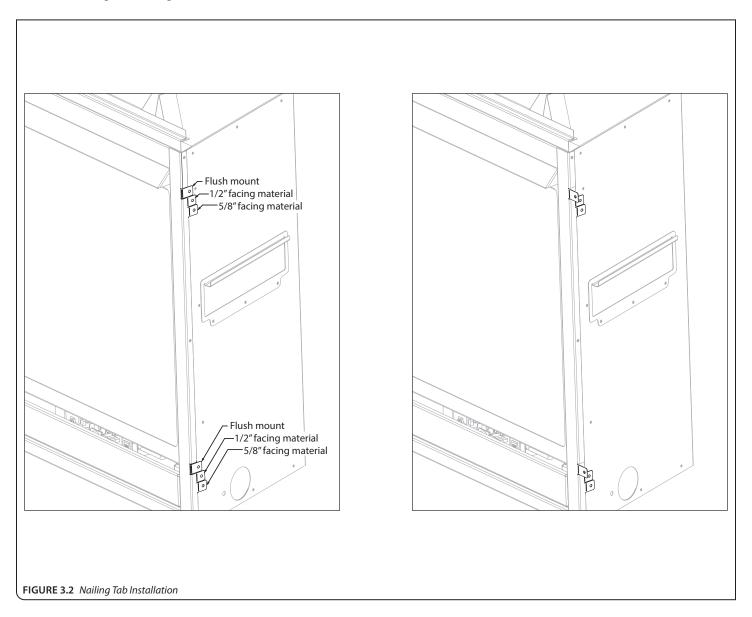


3.3 Nailing Tabs Installation

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

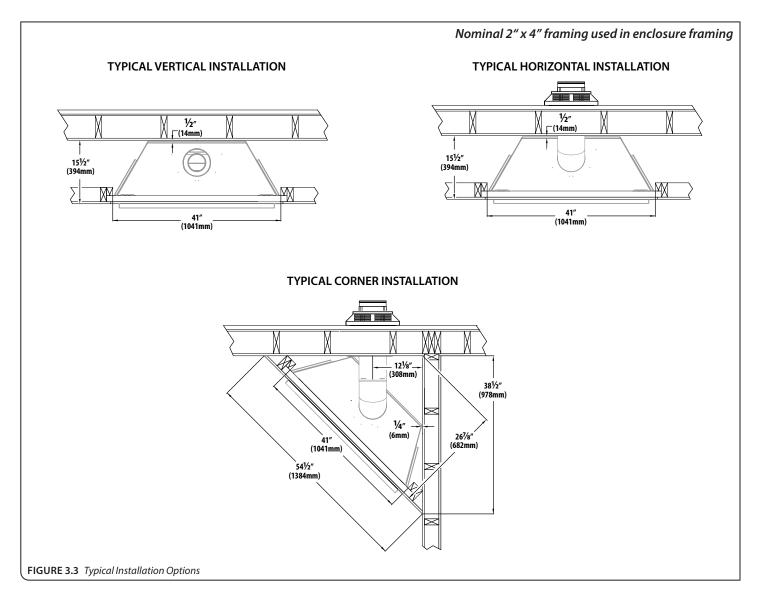
CAUTION: Never permanently remove these assemblies from the fireplace—they must be secured regardless of finish material used.

- Locate the nailing tabs on the right and left sides of the fireplace necessary to accommodate the thickness of your facing material.
- Bend out the (4) nailing tabs until parallel with fireplace face. Do not bend toward fireplace face.
- 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.



3.4 Clearances to Combustibles

Table 3.1, Minimum Appliance Clearances to Combustible Material		
From appliance top stand-offs	0"	0mm
From facing material 1" (25mm) stand-off flange	0"	0mm
From appliance back stand-offs	0"	0mm
From appliance corners	1/4"	6mm
From appliance front	36"	914mm
From appliance top to ceiling	25"	653mm
A 45° projection from appliance sides	0"	0mm
Appliance sides to adjacent sidewall	4-1/2"	114mm
Fireplace enclosure floor to 3/4" (19mm) trim	37-1/8"	943mm
Mantel 6" (152mm) deep from fireplace enclosure floor	40-1/2"	1030mm
Base of the fireplace to ceiling	76"	1930mm
Rigid pipe venting to enclosure top for minimum horizontal terminations	5"	126mm



3.5 Rough Framing

3.5.1 Rough-in Wall Enclosure

WARNING: Provide adequate clearance in front of the fireplace for barrier removal, component access, gas line installation, service access, etc.

CAUTION: Cold air transfer area. The fireplace enclosure 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.

- 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 barriers.
- The bottom of the fireplace must be placed directly on a wood or non-combustible surface (not linoleum or carpet). 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.

- This fireplace may be elevated off the floor, provided it is properly supported by framing materials and maintains ceiling clearances. If installed above floor level, a solid, continuous platform must be constructed below the fireplace.
- If masonry (optional) is to be used, prepare the foundation necessary for the full masonry load.

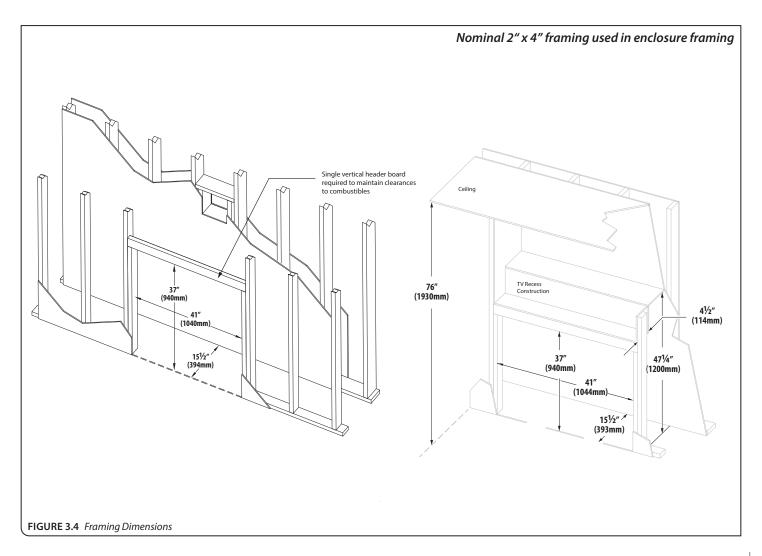
3.5.1.1 TV Recess Construction

WARNING: All clearances to venting must be maintained.

Mounting a television above a fireplace is a common practice. Mantel depth, ceiling heights, and wall and mantel construction material all affect television surface temperatures. 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 home owner'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 $4\frac{1}{4}$ " (108mm) deep recess is constructed above the fireplace.



3.6 Rough-in Vent Termination

This is a cold air transfer area. The fireplace enclosure 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.

Exterior vent termination location must be in compliance with section 6.2, MINIMUM VENT TERMINATION CLEARANCES on page 24.

IMPORTANT - METAL FAB VENT SYSTEM: When installing Metal Fab vent pipe, adapter #4DDA must be used off the top of the appliance. This will increase the minimum height for the center of the vent pipe by 3-3/4" (95mm) when framing the wall pass through. DO NOT RECESS THE VENT CAP INTO WALL OR SIDING.

3.6.1.1 Clearances

- A minimum of 1" (25mm) clearance on all sides of the vertical vent pipe must be maintained.
- A minimum of 1" (25mm) clearance from the top surface on the horizontal pipe at the wall pass through must be maintained.
- A minimum of 1" (25mm) clearance on the sides and bottom surfaces on the horizontal pipe must be maintained.
- A minimum of 5" (1279mm) clearance from venting to the enclosure top is required in minimum horizontal vent termination installations. The horizontal pipe after the wall passthrough must maintain a 1" (25mm) clearance to combustibles on all surfaces of the pipe.

3.6.1.2 Vertical Terminations

- Follow vent pipe manufacturer's installation instructions for vertical terminations.
- Attic insulation shields may be insulated using unfaced insulation products listed as non-combustible per ASTM E 136.

3.6.1.3 Horizontal Terminations

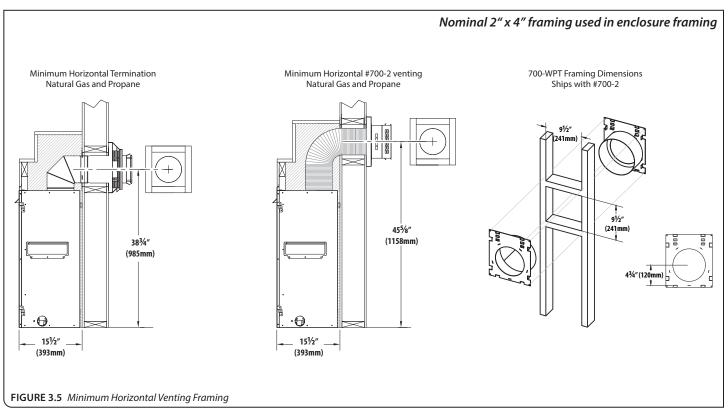
IMPORTANT: Horizontal vent sections require 1/4" (6mm) rise for every 12" (305mm) of travel.

Kozy Heat's #700-WPT, or wall thimble products that comply with the required 1" (25mm) top clearance to combustibles, must be installed for all horizontal vent runs that pass through interior or exterior walls. #700-WPT has a wall thickness of 4" (101mm) to 6-1/2" (165mm). These wall thimble products may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.

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 as necessary to maintain clearance requirements.

3.6.1.4 Wall Pass Through Information and Framing

- Measure from floor level of the fireplace to the center of where the vent pipe will penetrate the wall. The dimensions in FIGURE 3.5 are used with a Simpson DuraVent elbow.
- Cut and frame an opening in the wall to allow the vent system to run level through the wall pass-through.
- Follow the vent pipe manufacturer's installation instructions for vent installation.
- Rigid pipe dimensions FIGURE 3.5 reflect Simpson Duravent 4" x 6-5/8" coaxial pipe. Other manufacturers product dimensions may vary.
- Flexible pipe framing dimensions in FIGURE 3.5 reflect Kozy Heat #700-2 Series Flexible Vent System.



3.7 Outdoor Covered Fireplace Installation

A outdoor covered fireplace installation allows a fireplace to be installed in an outdoor covered area, where the appliance is protected from direct precipitation.

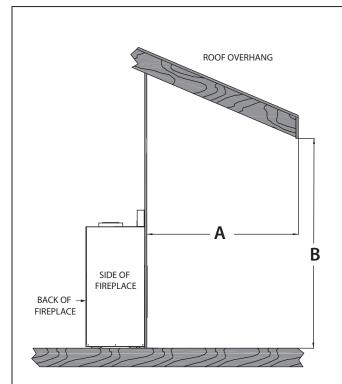
Follow the instructions and illustrations in this section for installation procedures.

3.7.1 Safety Screen Barriers

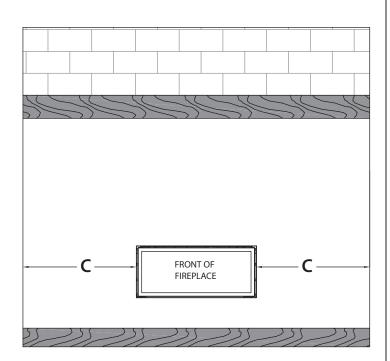
Hussong Mfg. highly recommends to use black painted safety barriers in outdoor installations. Other screen barriers that incorporate a plated or patina finish are highly susceptible to oxidation and discoloration.

3.7.2 Requirements

- The continuous insulated building envelope and weatherproof membrane are not to be interrupted by fireplace installation. See FIGURE 3.7 on the following page.
- Fireplace operation is approved from 40°F to 110°F.
- All wiring connections shall be in accordance with outdoor requirements of NECA NFPA 70.
- All clearances and requirements in your appliance manual must be adhered to.



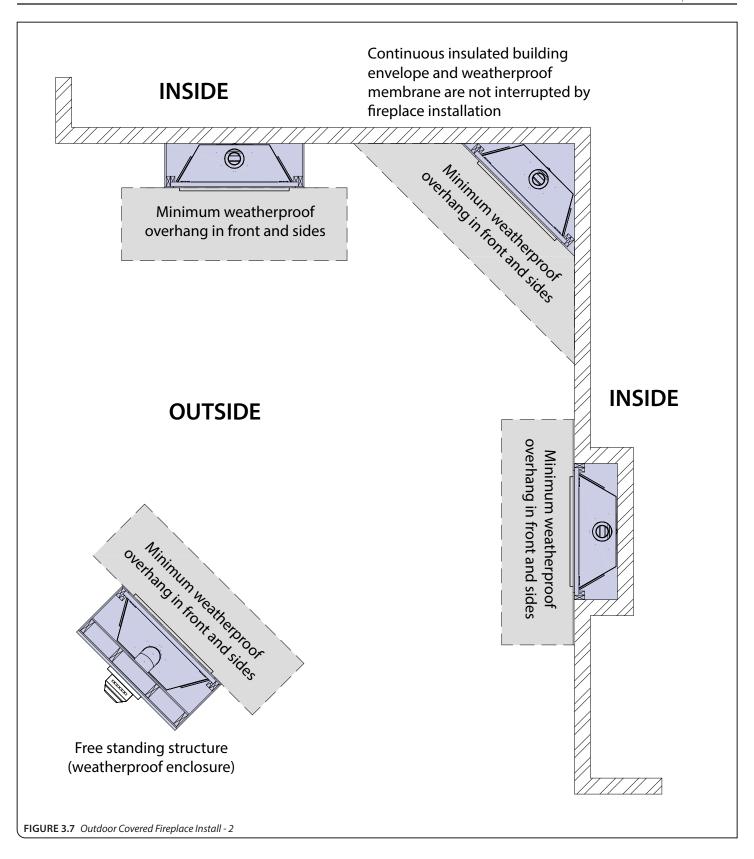
The overhang (A) must be a minimum of 1/2 or greater of the roofline elevation (B) above the base of the fireplace.



The width of the overhang to each side of the appliance (C) must be a minimum of 1/2 or greater of the roofline elevation (B) above the base of the fireplace.

EXAMPLE: If roofline (B) is 10' above the base of fireplace, the overhang (A) must be 5' or greater. The width of the overhang to EACH side of the fireplace (C) must be 5' or greater.

FIGURE 3.6 Outdoor Covered Fireplace Install - 1



4.0 FACING AND FINISHING

4.1 Facing and Finishing Requirements

4.1.1 Mantel Requirements

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

Combustible Mantel Projections: As referenced in FIGURE 4.1, the 3/4" (19mm) trim can start at 37-1/8" (943mm) above the fireplace enclosure floor with a 6" (152mm) mantel starting at 40-1/2" (1030mm) above the fireplace enclosure floor. Mantel projections can increase 1" (25mm) of depth for every 1" (25mm) of height starting at the 6" (152mm) mantel.

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

4.1.2 Adjacent Sidewall Requirements

 The adjacent sidewall must be 4-1/2" (114mm) from the appliance sides.

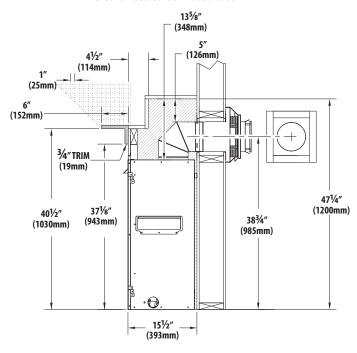
4.1.3 Finishing Recommendations

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.

Nominal 2" x 4" framing used in enclosure framing

Clearances to combustibles



Clearances to combustibles - #700-2 venting

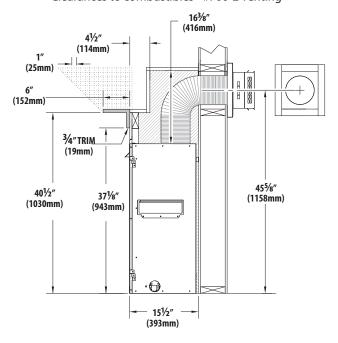


FIGURE 4.1 Clearances to Combustibles

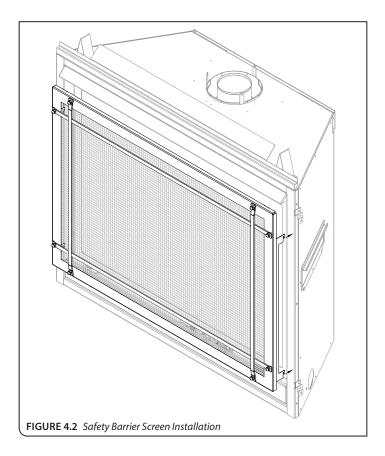
4.2 Safety Barrier Installation

4.2.1 Safety Barrier Screen (#SP41-ES2)

- 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.

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

- 1. If installed, remove the safety barrier screen.
- 2. Center the overlay over the safety screen.
- 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.



5.0 GAS LINE CONNECTION

5.1 Gas Conversion

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.

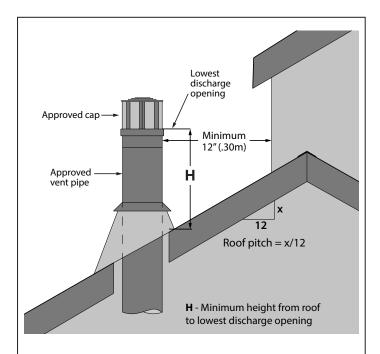
- A listed (and Commonwealth of Massachusetts approved)
 ½" (13mm) tee handle manual shut-off valve and flexible gas connector are to be connected to the ½" (13mm) control valve inlet. If substituting for these components, please consult local codes for compliance.
- This fireplace is equipped with a %" (10mm) x 18" (457mm) long flexible gas connector and manual shut-off valve.
- Run gas line into fireplace into the access hole(s) provided on either side of this fireplace. See FIGURE 2.1, SP-41-L DIMENSIONS on page 9 for gas line access. 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 optional fan operation.
- For high altitude installations, consult the local gas distributor or the authority having jurisdiction for proper rating methods.

Table 5.1, Inlet Pressure Requirements			
Gas Pressure	Natural Gas Propane		
Minimum Inlet Pressure	5" WC (1.25 kPa)	12"WC (2.99 kPa)	
Maximum Inlet Pressure	10" WC (2.49 kPa)	13"WC (3.24 kPa)	

6.0 TERMINATION LOCATIONS

6.1 Vertical Vent Termination

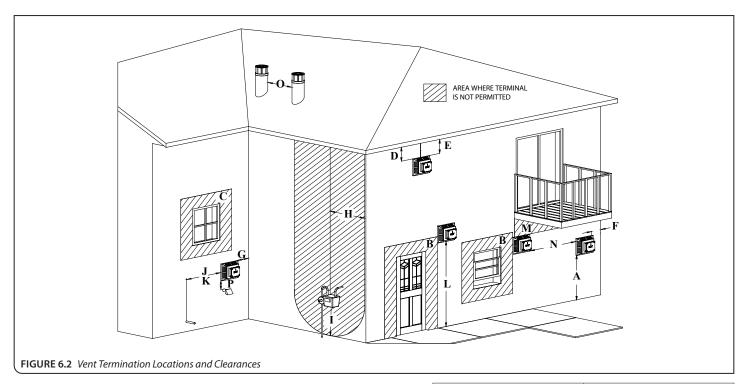
WARNING: This appliance must not share or be connected to a chimney flue serving a separate solid-fuel burning appliance.



	Minimum heigh	t (H) from roof
Roof Pitch	Feet	Meters
Flat to 6/12	1.0	0.30
Over 6/12 to 7/12	1.25	0.38
Over 7/12 to 8/12	1.5	0.46
Over 8/12 to 9/12	2.0	0.61
Over 9/12 to 10/12	2.5	0.76
Over 10/12 to 11/12	3.25	0.99
Over 11/12 to 12/12	4.0	1.22
Over 12/12 to 14/12	5.0	1.52
Over 14/12 to 16/12	6.0	1.83
Over 16/12 to 18/12	7.0	2.13
Over 18/12 to 20/12	7.5	2.27
Over 20/12 to 21/12	8.0	2.44

FIGURE 6.1 Vertical Vent Cap Clearance

6.2 Minimum Vent Termination Clearances



		Canadian installations	US installations
Α	Clearance above grade, veranda, porch, deck, or balcony	12" (30cm)	12" (30cm)
В	Clearance to window or door that may be opened	12" (30cm)	9" (23cm)
С	Clearance to permanently closed window (recommended to prevent condensation on window)	12" (30cm)*	12" (30cm)*
D	Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (61 cm) from the edge of the terminal	24" (61cm)*	24" (61cm)*
E	Clearance to unventilated soffit	12" (30cm)*	12" (30cm)*
F	Clearance to outside corner	0" (0cm)*	0" (0cm)*
G	Clearance to inside corner	12" (30cm)*	12" (30cm)
Н	Clearance to each side of center line extended above meter/regulator assembly	3' (91cm) within a height 15' (4.5m) above the meter/ regulator assembly	*
I	Clearance to service regulator vent outlet	3'(91cm)	*
J	Clearance to non mechanical air supply inlet to building or the combustion air inlet to any other appliance	12"(30cm)	9" (23cm)
K	Clearance to mechanical air supply inlet	6' (1.83m)	3' (91cm) above if within 10' (3m) horizontally Massachusetts: 10' (3m)
L	Clearance above paved sidewalk or paved driveway located on public property	7'(2.13m)†	*
M	Clearance under veranda, porch deck, or balcony	12" (30cm)‡	12" (30cm)
N	Clearance between two horizontal terminations	12" (30cm)	12" (30cm)
0	Clearance between two vertical terminations (may be same height)	12" (30cm)	12" (30cm)
P	Above furnace exhaust or inlet	12" (30cm)	12" (30cm)

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

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/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventilated/unventila lated soffits.

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

 $[\]ddagger$ Permitted only if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

7.0 VENTING

7.1 Approved Vent Systems

This appliance is equipped for use with a 4" exhaust by 6-5/8" air intake co-axial vent pipe system.

Vertical 4" x 6-5/8" co-axial flexible vent pipe with vertical terminations are not approved for use with this fireplace.

This appliance is approved for use with Kozy Heat 4"x 7" #700 Series Flexible Direct Vent system (horizontal terminations only). Refer to section 7.7, #700-2 SERIES DIRECT VENT TERMINATION KIT(S) on page 32 for venting components and installation instructions.

This appliance is approved for use with manufacturers (horizontal and vertical terminations): American Metal Products (Ameri-Vent), BDM, ICC, Metal Fab*, Olympia Chimney Supply, Inc., Selkirk, and Simpson DuraVent.

***WHEN INSTALLING METAL FAB VENT SYSTEM** with this appliance an adapter must be used. Use adapter part number 4DDA.

This appliance can be adapted to use 4" diameter aluminum flexible pipe when used in combination with an existing minimum 7" ID Class A metal chimney. See section 7.5, CLASS A CHIMNEY/MASONRY CHIMNEY CONVERSION on page 30.

This appliance can be adapter 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. See section **7.6, COAXIAL TO CO-LINEAR CHIMNEY CONVERSION** on page 31.

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.

Table 7.1, Approved Vent Systems		
Vent Manufacturer	Vent Cap Part Number	
American Metal Products (Ameri-Vent)	4DHCS 4DHC 4DVC 4D14S 4D36S DVCC33	
вом	940033HWS 940033 DVR6-HCP DVR6-HC DVR6-VCLP DVR6-VCH DVR6-SNK14 DVR6-SNK36	
Simpson DuraVent	46DVA-CL33H 46DVA-CL33P 46DVA-HSCH 46DVA-VCH 46DVA-VC 46DVA-VCE 46DVA-HTC	
ICC	CT3 IVT TM-4VTA TM-4HT TM-4RHT TM-4DHT TM-4SVT TM-4ST14 TM-4ST36	
Kozy Heat	745-2 718-2	

Table 7.1, Approved Vent Systems	
Vent Manufacturer	Vent Cap Part Number
Metal Fab (Adapter 4DDA must be used)	4DVT33F 4DHT 4DVT 4DVTHW 4DST14 4DST36
Olympia Chimney Supply, Inc.	VDV-VC04 VDV-VCH04 VDV-SNC0414 VDV-SNC0436 VDV-RCL33 VDV-CC33 VDV-VCCH33
Selkirk	4DT-HC 4DT-HCR 4DT-VC 4DT-VT 4DT-ST14 4DT-ST36 4DT-CC33

7.2 Venting Requirements

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.

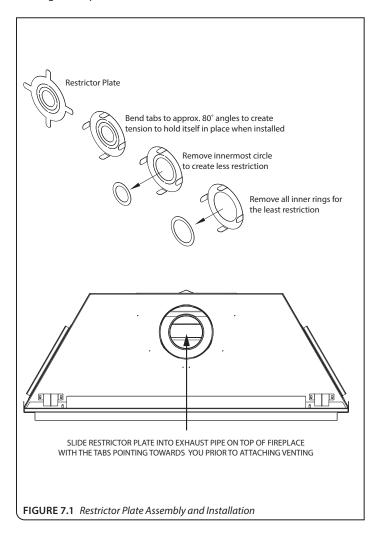
- Flame height and appearance will vary depending upon venting configuration and the type of fuel used.
- Refer to the vent manufacturer's installation manual for complete installation instructions. Vent installation must conform with venting requirements and restrictions as outlined in this manual.
- Provide a means for visually checking the vent connection to the appliance after the fireplace is installed.
- A minimum of 1" (25mm) 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.
- A minimum of 1" (25mm) clearance on the top, sides, and bottom of the horizontal vent pipe must be maintained.
 Wall thimble products that comply with the required clearances to combustibles must be installed for all horizontal vent runs that pass through interior or exterior walls. These wall thimble products may be insulated using unfaced insulation products listed as noncombustible per ASTM E 136.

7.3 Restrictor Assembly and Installation

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).

The restrictor plate is shipped with all inner rings intact, and when installed, provides the most vent restriction. There are (2) inner rings that can be knocked out. The innermost ring knocked out will create less restriction, and the outer most ring knocked out will create the least amount of restriction.

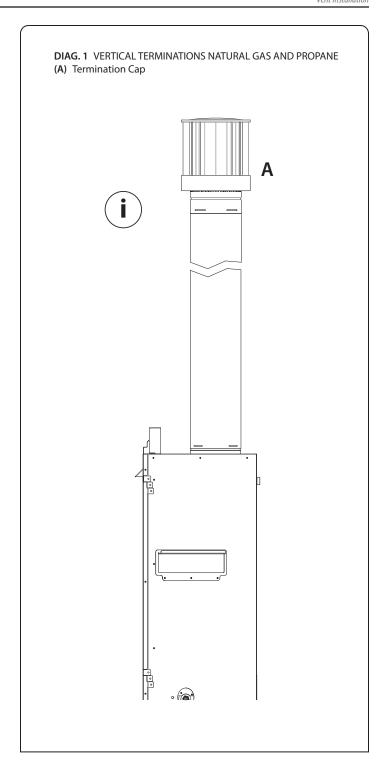
Refer to section 11.2.2, VENT RESTRICTION (AFTER INSTALLATION) on page 45 outlines restriction recommendations depending on burner flame appearance, and instructions on installation after venting is completed.



7.4 Vent Installation

7.4.1 Vertical Terminations

(i) Minimum / Maximum Vertical Venting: 3' (914mm) minimum vertical length / 50' (15.24m) maximum vertical length + termination cap



7.4.2 Combination Venting

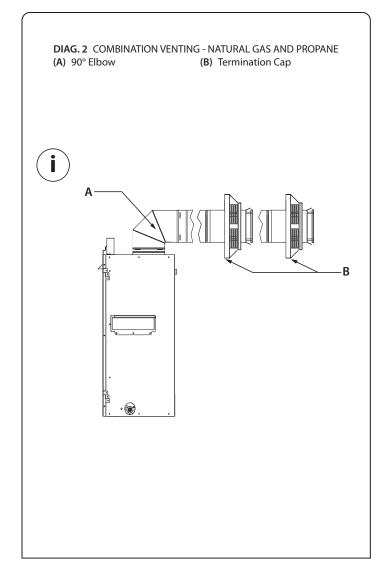
IMPORTANT: Horizontal vent sections require at least ¼" (6mm) rise for every 12" (305mm) of travel.

(i) 90° elbow / Minimum Horizontal Run / Maximum Horizontal Run: 90° horizontal elbow + 6" (152mm) minimum horizontal run / 2' (609mm) maximum horizontal run + termination cap

Minimum 9" (228mm) Vertical Rise / Maximum Horizontal Run:
9" (228mm) minimum vertical rise + 90° horizontal elbow + 8'
(2.4m) maximum horizontal run + termination cap
(See FIGURE 7.2on the following page)

Minimum 12" (305mm) Vertical Rise / Maximum Horizontal Run: 12" (305mm) minimum vertical rise + 90° horizontal elbow + 10' (3m) maximum horizontal run + termination cap (See FIGURE 7.2 on the following page)

Minimum 24" (609mm) Vertical Rise / Maximum Horizontal Run: 24" (609mm) minimum vertical rise + 16' (4.8m) maximum horizontal run + termination cap (See FIGURE 7.2 on the following page)

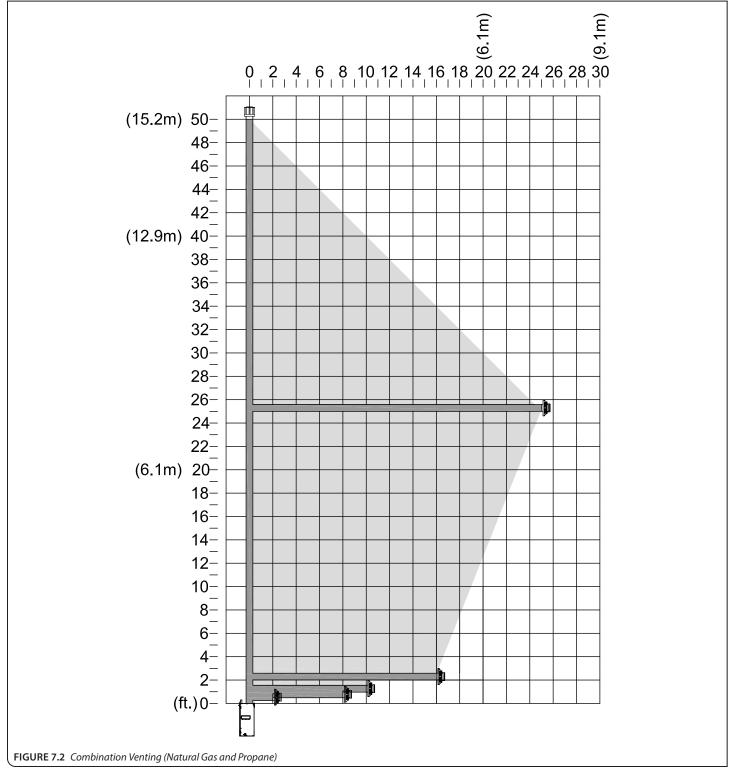


7.4.3 Maximum Combination Venting

For maximum vertical and maximum horizontal combination venting, the vent terminations must be within the shaded area in FIGURE 7.2.

- 25' (7.6m) maximum vertical rise + 25' (7.6m) maximum horizontal run = 50' (15.2m) of total length
- Maximum of (5) 90° elbows.

- For each additional 90° elbow used after the first elbow, 3' (914mm) must be subtracted from maximum venting allowed.
- For each 45° elbow used, 18" (457mm) must be subtracted from maximum venting allowed.
- (2) 45° degree elbows may be used in place of (1) 90° elbow.



7.5 Class A Chimney/Masonry Chimney Conversion

This appliance is approved to be adapted for Class A/masonry chimney conversion kits utilizing a 4" (102mm) flexible exhaust by any vent manufacturers listed in section 7.1, APPROVED VENT SYSTEMS on page 25.

Before conversion, have the existing installation inspected by a qualified chimney sweep or professional installer. The existing chimney system must be in serviceable condition, and functionally sound. Before proceeding with following installations, check with local building jurisdiction to verify this type of installation is allowed in your area.

Follow **DIAG. 3** for allowable venting configurations for installation in existing through-the-ceiling, Class A chimney or masonry chimney. Route the exhaust gases and intake air through the existing Class A chimney/masonry chimney.

7.5.1 4" Flex Pipe Venting Configurations

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

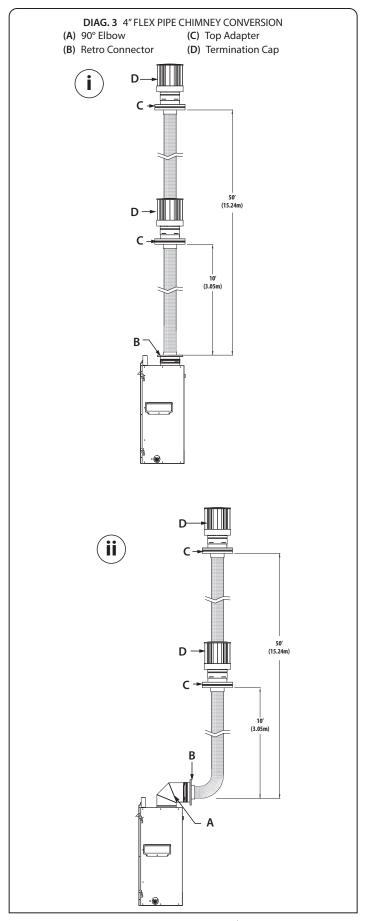
IMPORTANT: Care should be taken when installing flexible pipe to avoid a tight bend that may cause abrasion or damage to the flexible pipe.

Vent options listed below (i, ii) allows for a minimum of 0" (0mm) to a maximum of 24" (610mm) horizontal run using rigid or flexible pipe.

- (i) Minimum / Maximum Vertical Terminations:

 Retro Connector + 10' (3.05m) minimum length of 4" aluminum flexible pipe / 50' (15.24m) maximum length of 4" aluminum flexible pipe + top adapter + termination cap
- (ii) Minimum / Maximum with Rigid Pipe Vertical Terminations:

 90° horizontal elbow + Retro Connector + 10′ (3.05m) minimum length of 4″ aluminum flexible pipe / 50′ (15.24m) maximum length of 4″ aluminum flexible pipe + top adapter + termination cap



7.6 Coaxial to Co-Linear Chimney Conversion

Before conversion, have the existing installation inspected by a qualified chimney sweep or professional installer. The existing chimney system must be in serviceable condition, and functionally sound. Before proceeding with following installations, check with local building jurisdiction to verify this type of installation is allowed in your area.

Follow **DIAG. 4** for allowable venting configurations for installation in existing masonry chimney. Route the exhaust gases and intake air through the existing masonry chimney.

7.6.1 Coaxial to Co-Linear Venting Configurations

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

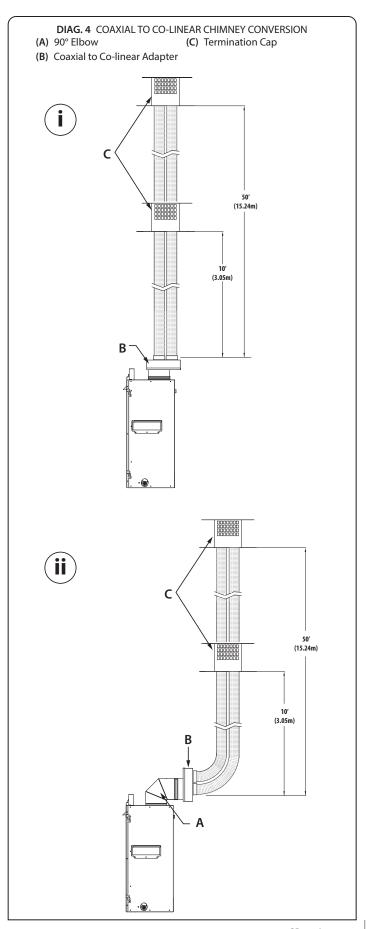
IMPORTANT: Care should be taken when installing flexible pipe to avoid a tight bend that may cause abrasion or damage to the flexible pipe.

Vent options listed below (i, ii) allows for a minimum of 0" (0mm) to a maximum of 24" (610mm) horizontal run using rigid or flexible pipe.

- (i) Minimum / Maximum Vertical Terminations:

 Coaxial to Co-linear Adapter + 10' (3.05m) minimum length of 3" x 3" aluminum flexible pipe / 50' (15.24m) maximum length of 3" x 3" aluminum flexible pipe + termination cap
- (ii) Minimum / Maximum with Rigid Pipe Vertical Terminations:

 90° horizontal elbow + coaxial to co-linear adapter + 10′ (3.05m) minimum length of 3″ x 3″ aluminum flexible pipe / 50′ (15.24m) maximum length of 3″ x 3″ aluminum flexible pipe + termination cap



7.7 #700-2 Series Direct Vent Termination Kit(s)

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.

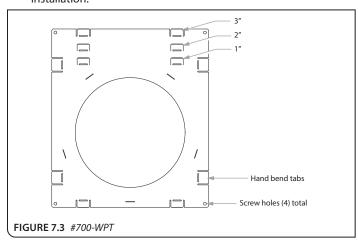
IMPORTANT: The minimum bend radius to center is 6" (152mm) required for installation of the flexible vent pipe. Care should be taken when installing to avoid a tight bend that may cause abrasion or damage to the flexible pipe.

- 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' (1.83m).

7.7.1 700-WPT Installation Instructions

IMPORTANT: The heat shield within the wall thimble must overlap a minimum of 1-1/2" (38mm). An extension will be needed if going through a thicker wall than 6-1/2" (165mm). Refer to BDM vent manufacturer if wall extension is necessary.

- Hand bend the (2) tabs on the top of the wall pass through at the 1" (25mm) top required clearance. Hand bend the (6) tabs on the sides and bottom of the wall pass through. Repeat for the other section.
- From the interior, install one section of the wall pass through. Secure with (4) screws (not provided).
- From the exterior, install the other section of the wall pass through, overlapping the heat shields as necessary to accommodate wall thickness. The sections must overlap a minimum of 1-1/2" (38mm). Secure to exterior wall with (4) screws (not provided).
- Follow vent manufacturer installation instructions for vent installation.



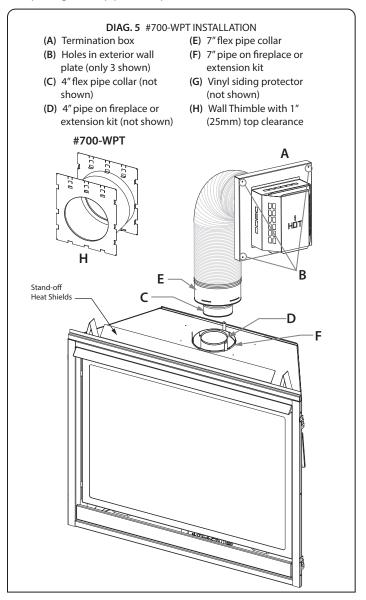
7.7.2 Assembly and Installation

- Attach vinyl siding protector (G) (not shown).
- Mount the required wall thimble (H) with 1" (25mm) top clearance and 1" (25mm) side clearance to the exterior wall,
 - (OPTIONAL) Insulate the wall thimble with any unfaced insulation products listed as non-combustible per ASTM E 136.

- Apply a liberal bead of exterior sealant around outer edge of termination box (A). Place assembly through the wall-pass through in exterior wall, and secure with (4) screws through the four holes (B).
- Form the 4" & 7" flexible aluminum pipes on termination kit (#745-2 or #718-2), and if applicable, on each extension kit.
- 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' (1.83m); DO NOT stretch beyond what is required. It is very difficult to decompress flex pipes once stretched.

- 10. Place a bead of sealant outside 4" flex pipe collar (C) (end with EXTERNAL LIP) and sliding the collar into 4" pipe on extension kit or top of fireplace (D). Secure with 3 evenly spaced screws.
- 11. Place a bead of sealant inside 7" flex pipe collar (E) (end with the INTERNAL lip), sliding the collar over 7" pipe on top of fireplace (F). Secure with 3 evenly spaced screws.
- 12. If additional extension kits are required, repeat Steps 4 and 5, placing 4" & 7" pipes onto previous extension kit.



8.0 FIREPLACE SETUP

8.1 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.

8.1.1 Remove Glass Frame Assembly

WARNING: Do not remove the glass assembly when hot.

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

8.1.2 Install Glass Frame Assembly

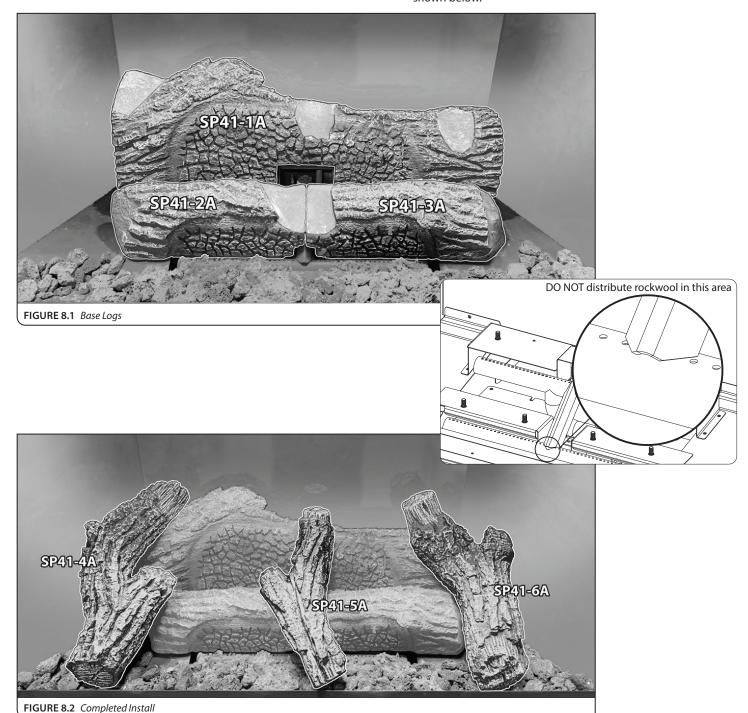
- 1. Align the slots on top of the glass assembly over the tabs at the top of the firebox while lowering the bottom of the glass assembly into position.
- Pull the spring-loaded latches out and up to secure the bottom of glass to the bottom of the fireplace.
- Set the control compartment access panel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

8.2 #SP41-50A Log Set Installation

CAUTION: Do not place logs 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. Place log SP41-1A on the back log plate.
- 2. Place log SP41-2A on the left front log plate.

- 3. Place log SP41-3A on the right front log plate.
- Distribute lava rock in front of the burner. Do not block burner ports or airspaces.
- 5. Align log SP41-4A with the notches on logs SP41-1A and SP41-2A, as shown.
- Align log SP41-5A with the notches on logs SP41-1A, SP41-2A, and SP41-3A, as shown.
- 7. Align log SP41-6A with the notches on logs SP41-1A and SP41-3A, as shown.
- Use a steel or stiff bristle nylon brush to distribute rock wool embers onto logs and burner. DO NOT block the area as shown below.



8.3 Control Board Removal and Installation

WARNING: If burner and/or pilot have been burning, use appropriate protection to avoid burns or damage to personal property before removing any components. DO NOT OPERATE THIS APPLIANCE WITHOUT THE SEALING GASKET (LOCATED UNDER THE CONTROL BOARD) IN PLACE. IF GASKETING IS DAMAGED, IT MUST BE REPLACED.

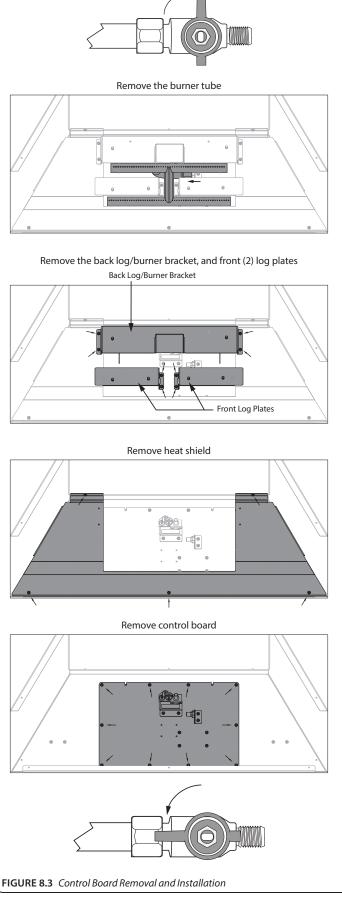
CAUTION: Check all connections for leaks with soapy water, whether field or factory made.

8.3.1 Control Board Removal

- 1. Disconnect electrical power.
- Locate the manual valve installed by your qualified service technician. Turn the manual valve clockwise to the OFF position.
- 3. Open the control compartment access panel.
- 4. Remove log set, lava rock, and panels (if installed).
- Remove the burner tube by sliding it to the left off of the burner orifice.
- Remove and save (4) screws securing the back log/ burner bracket.
- Remove and save (4) screws securing the left and right front log plates.
- 8. Remove and save (5) screws securing the heat shield.
- Remove and save (10) screws securing control board to firebox floor.
- Lift the control board out of the firebox, being careful not to damage the sealing gasket underneath.

8.3.2 Control Board Installation

- Place control board in the firebox, aligning the holes in the control board with the holes in the firebox bottom.
 - **VERIFY SEALING GASKET IS IN PLACE.**
- 2. Secure the control board with screws previously removed.
- 3. Reinstall the heat shield using (5) screws previously removed.
- 4. Reinstall the front log plates. There is 'L' etched into the left log plate and 'R' etched into the right plate. Position the plates correctly into the firebox and secure with (4) screws previously removed.
- 5. Reinstall back log/burner bracket (4) screws previously removed.
- 6. Reinstall the burner tube by sliding it to the right and positioning the burner tube venturi over the burner orifice.
- 7. Reinstall log set, lava rock, and panels (if installed).
- 8. Reinstall the glass frame assembly and safety barrier.
- 9. Set control compartment access cover panel back into position.
- 10. Turn the manual valve counterclockwise to the ON position.
- 11. Reconnect electrical power.
- Verify proper log placement, operation of fireplace, and any electrical components.



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.

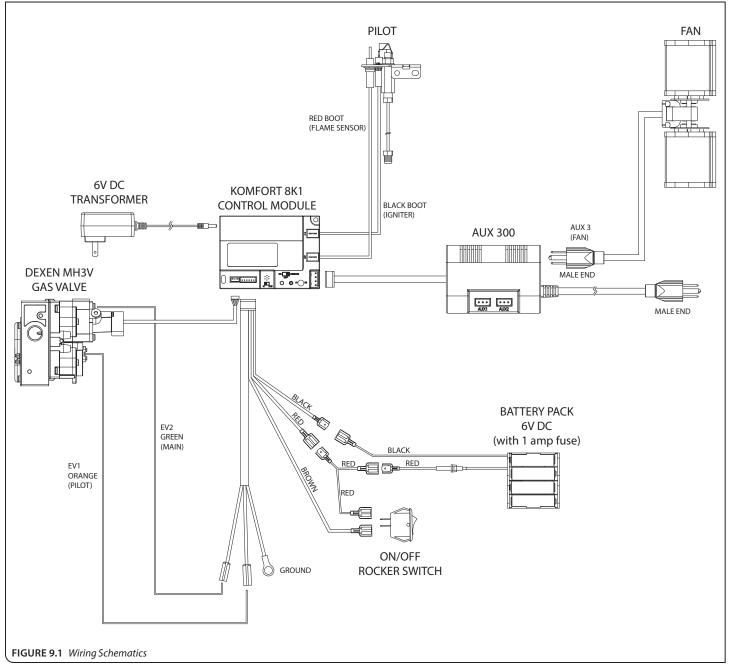
9.1 Electrical Specifications

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 wiring diagram for this appliance is shown in FIGURE 9.1 below.

- The Komfort 8K1 system requires 120 VAC of electricity and/or batteries to operate.
- Using the battery backup will operate flame modulation of the burner.
- Optional fan component will not function on battery backup power.



10.0 OPERATING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE OPERATING

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 <u>not</u> 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.

WARNING

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

Under no circumstances should any solid fuel (wood, coal, paper, cardboard, etc.) be used in this appliance.

Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.

CAUTION

Clothing or other flammable material should not be placed on or near the appliance.

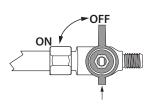
Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children and other at risk individuals out of the room and away from hot surfaces.

OPERATING INSTRUCTIONS

- 1. STOP! Read all the safety information above on this page.
- 2. Press the wireless remote POWER button.
- 3. Turn off all electric power to the appliance.
- This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- Locate the manual valve installed by your qualified service technician.
- 6. Turn the manual valve clockwise \circ 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 C to the ON position.

- 9. Turn on all electric power to the appliance.
- 10. Press the wireless remote POWER button.
- 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 POWER button.
- 2. Turn off all electric power to the appliance if service is to be performed.
- Locate the manual valve installed by your qualified service technician.
- 4. Turn the manual valve clockwise 7 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 Komfort 8K1 Control Module

- Set the main ON/OFF rocker switch in the OFF position.
- Remove the remote control components from packaging.
- Install (3) AAA batteries (included in the components packet) in the remote control battery bay.
- Connect the transformer to an AC power supply.
- Connect the fan to the AUX 300 control module (FIGURE 8.1, page 31).

10.2 Initialize the Komfort **8K1 Control System**

- Verify the ON/OFF/REMOTE switch is in the REMOTE position. A green LED will illuminate and blink three times.
- Using a small item, such as a paper clip, press and release the LEARN button located near the ON/OFF/REMOTE switch.
- The control module will beep once and illuminate a green LED for 10 seconds.
- While the green LED is blinking, press the POWER button on the remote control. The control module will emit a double beep to indicate that the remote is initialized to the control system.

10.3 Automatic Safety Turn-off

This system will execute an automatic turn OFF command after 8 hours of continuous main burner operation.

10.4 Backup Battery Operation

This appliance will operate on the backup battery pack in a power outage. The lifespan of the backup batteries depends on various factors, such as the quality of the batteries, number of ignitions, etc.

Only install backup batteries in power outages only. Do not leave batteries installed in the backup battery pack.

10.5 Control System 7 Day Time-out

If your Komfort 8K1 control system is set to pilot-on-demand ignition with 7 consecutive days without ignition of the main burner, the pilot will turn off. This is a standard safety feature of the Komfort 8K1 control system.

Once you turn the pilot-on-demand on, the 7 day timer will start. If at any time during the following 7 days your main burner ignites, it will reset the timer back to 7 days.

See section 10.8.7 on page 40 for more information about pilot ignition selection.

How to check if your system is set to pilot-on-demand:

The remote control screen will display the snowflake with text PILOT icon.

To select the preferred pilot ignition:

- Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the PILOT icon and press SELECT.
- Use the UP and DOWN arrows to turn the pilot-on-demand ON or OFF, then press SELECT.
- A single beep will be emitted from the control module indicating pilot-on-demand feature has been activated.
- A double beep will be emitted from the control module indicating the pilot-on-demand feature has been deactivated.

10.6 Komfort 8K1 Control System **Ignition Sequence**

The Komfort 8K1 control module will attempt (1) time for ignition, for approximately 60 seconds.

If there is no flame ignition (rectification) within the (60) second time frame, the Komfort 8K1 system will go into a lockout. The control module will display an error code (see section 10.7), followed by a blinking red/green LED, indicating a system lockout.

10.6.1 Reset Control Module after Lockout

10.6.1.1 Disconnect Power Supply

Disconnect the power supply to the control module. After approximately (5) second, reconnect power supply.

10.6.1.2 ON/OFF/REMOTE Switch

- Turn the ON/OFF/REMOTE switch on the control module to OFF. Wait approximately (5) seconds, and turn the ON/OFF/REMOTE switch to REMOTE. The control module will illuminate a green LED (2) times and emit a beep.
- Turn the ON/OFF/REMOTE switch on the control module to OFF. Wait approximately (5) seconds, and turn the ON/OFF/REMOTE switch to ON. The control module will illuminate a green LED (2) times and emit a beep. The ignition sequence will start again.

10.7 Additional Diagnostic Information

Diagnostic codes are outlined below and should be used as an additional troubleshooting tool.

Red LED will blink (1) time, then a red/green LED blink (lockout)

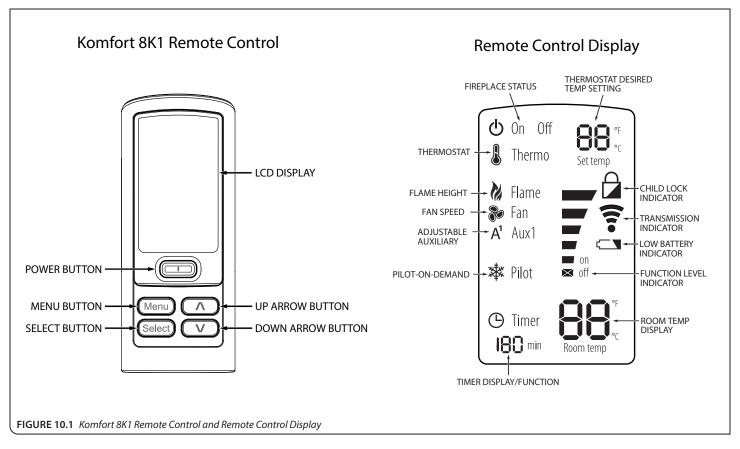
Error caused by fuel-type selector switch is in incorrect position or fuel-type selector switch is damaged. Verify selector is in correct position. If condition persists, replace the control module.

Red LED will blink (2) times, then a red/green LED blink (lockout)

Error caused by Insufficient voltage from ignition coil to pilot flame igniter. Clear the lockout (see section 10.6.1 above) and attempt ignition. If condition persists, replace the control module.

Red LED will blink (3) times, then a red/green LED blink (lockout)

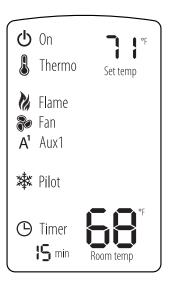
- Error caused by inadequate gas supply. Verify proper inlet pressure to the gas line.
- Error caused by detection of false flame or short in sensor lead. Verify that pilot leads are correctly terminated to the control module, and that no shorted wires exist.
- Error caused by sense and/or igniter lead disconnected. Verify that the pilot sensor rod, igniter rod, and hood are clean.



10.8 Remote Control Operation

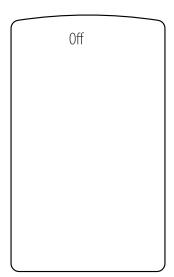
10.8.1 Idle Mode

The remote control will go into an idle mode when the remote is ON if no buttons are pressed within (5) seconds. Press any button to resume full functionality. In idle mode, only active functions will show on the screen.



10.8.2 Standby Mode

The remote control will go into a standby mode if no buttons are pressed within (5) minutes. Press the POWER button to reactivate the remote control to ON mode. Active functions will be displayed once in ON mode.



10.8.3 Temperature Display

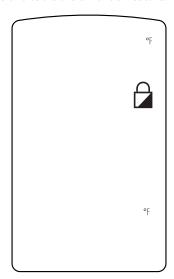
To change the temperature display between Celsius and Fahrenheit, Remove the battery cover from the back of the control. Slide the switch to desired temperature scale. Reinstall batteries and battery cover.



10.8.4 Child Lock

To lock the remote to avoid unsupervised operation,

Press and hold the MENU and UP arrow buttons simultaneous for 4 seconds to enable or disable the child lock feature.



10.8.5 Turn ON the Appliance

With the system in the OFF position, press the remote control POWER button to turn ON the appliance.

- The appliance will attempt to ignite the pilot (if Pilot-on-Demand function is OFF). Once the pilot flame is rectified, the main burner will ignite.
- Whenever the appliance is cycled from OFF to ON, the main burner will light on high for 10 seconds before returning to the previous user setting.
- All functions can be accessed when the remote control is ON. Only active functions will be displayed when the remote control is ON.
- The transmission indicator icon will flash and a single beep will confirm the reception of the command.

10.8.6 Turn OFF the Appliance

With the system in the ON position, press the remote control POWER button to turn OFF the appliance.

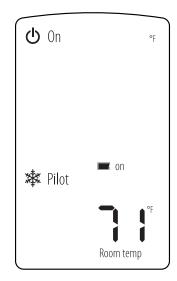
- Functions AUX1, AUX2, and Pilot-on-Demand can be accessed when the remote control is OFF. Only active functions will be displayed when the remote control is OFF.
- The transmission indicator icon will flash and a single beep will confirm the reception of the command.

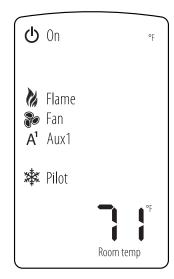
10.8.7 Pilot Ignition Selection (Intermittent or Pilot-on-Demand)

This system has the option of a pilot-on-demand, allowing the system to change from a spark-to-pilot system to the pilot-on-demand option. The pilot-on-demand will keep the firebox warm and establish a draft in the vent, which allows the main burner to ignite with less air-flow disruption.

To select the preferred

- 1. Press the MENU button to activate the menu.
- 2. Using the UP and DOWN arrows, highlight the PILOT icon and press SELECT.
- 3. Use the UP and DOWN arrows to turn the pilot-on-demand ON or OFF, then press SELECT.
- The transmission indicator icon will flash and a single beep will be emitted from the control module indicating pilot-on-demand feature has been activated. The remote control screen will display the snowflake with text PILOT icon.
- The transmission indicator icon will flash and a double beep will be emitted from the control module indicating the pilot-ondemand feature has been deactivated. The remote control will not display the snowflake with text PILOT icon.



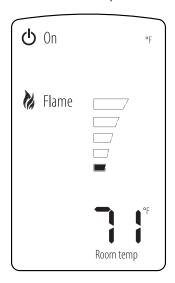


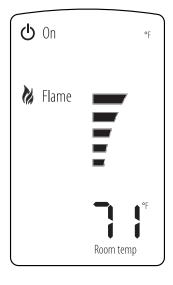
10.8.8 Flame Adjustment

This control system has (5) flame levels. Flame height will not be adjustable for the first (10) seconds when the appliance is turned ON. The control system will remember the previous flame level setting and will automatically adjust after (10) seconds.

To adjust the flame level,

- 1. Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the FLAME icon and press SELECT.
- Use the UP and DOWN arrows to adjust the flame level to desired setting, then press SELECT.
- The transmission indicator icon will flash and a single beep will confirm the reception of the command.





10.8.9 Thermostat Operation

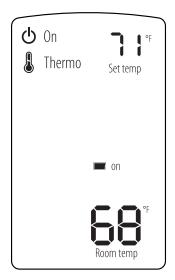
The remote control can operate as a room thermostat. The thermostat can be set to a desired temperature to control a room's comfort level.

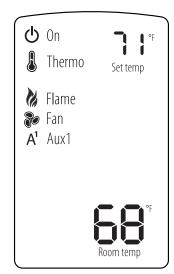
This control system requires a two degree Fahrenheit or higher temperature difference between the room temperature and set temperature for the fireplace to turn on.

The system will remember the previous temperature setting when thermostat mode is cycled ON or OFF.

To activate this function.

- 1. Press the MENU button to activate the menu.
- 2. Using the UP and DOWN arrows, highlight the THERMO icon and press SELECT.
- Use the UP and DOWN arrows to turn the THERMO ON or OFF, then press SELECT. The SET TEMP will start blinking. Using the UP and DOWN arrows, select the desired temperature and press SELECT.
- If the thermostat function is on, the set temperature can be adjusted at any time by pressing the UP and DOWN arrows.
- As the room temperature approaches the set temperature, the remote system will automatically adjust the flame height.
- If the room temperature rises above the set temperature, the fireplace will shut down the main burner. The fireplace will turn back on after the room temperature drops below the set temperature.





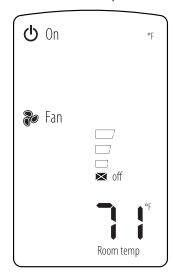
10.8.10 Fan Speed Control (optional)

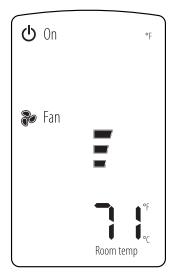
The fan speed can be adjust through (3) speeds: HIGH, MEDIUM, LOW.

The fan is controlled by a timer built into the control module. After the fireplace is turned ON, the timer will wait for (3) minutes before turning on the fan. After the fireplace is turned OFF, the fan will remain on for (12) minutes.

To activate this function,

- 1. Press the MENU button to activate the menu.
- Using the UP and DOWN arrows, highlight the FAN icon and press SELECT.
- 3. Use the UP and DOWN arrows to adjust to desired fan speed, then press SELECT.
- The transmission indicator icon will flash and a single beep will confirm the reception of the command.



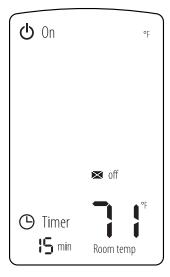


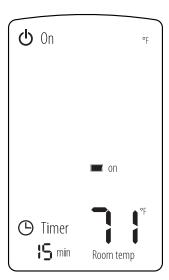
10.8.11 Timer Adjustment

This control system has the option to set a timer function to turn OFF the main burner operation. The timer operates in increments of 15, 30, 45, 60, 90, 120, and 180 minutes.

To activate this function,

- 1. Press the MENU button to activate the menu.
- 2. Using the UP and DOWN arrows, highlight the TIMER icon and press SELECT.
- Use the UP and DOWN arrows to turn the TIMER ON or OFF, then press select.
- 4. Using the UP and DOWN arrows, select the desired set time and press SELECT.
- The transmission indicator icon will flash to confirm the reception of the command.





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 $\frac{1}{2}$ 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.

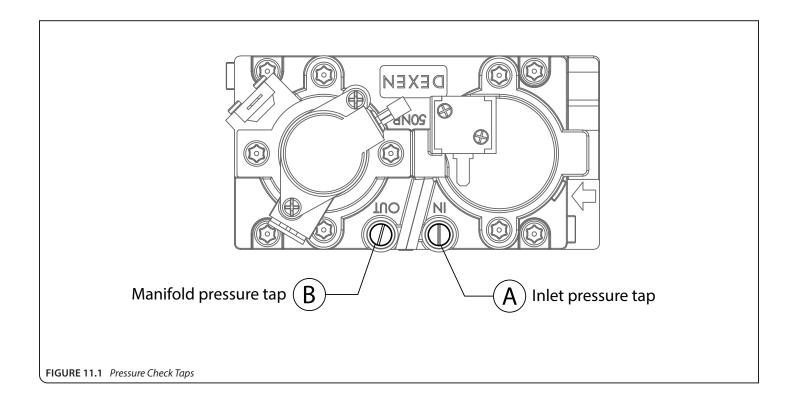
- Loosen the inlet (IN) pressure tap by turning screw counterclockwise. See (A) in FIGURE 11.1.
- 2. Attach manometer using a ¼" (6mm) I.D. hose.
- Light pilot and burner. Check pressure to ensure it is between the minimum and maximum recommended pressure settings.
- 4. Turn off burner and pilot.
- Disconnect hose and tighten the inlet (IN) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
- 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 counterclockwise. See (B) in **FIGURE 11.1**.
- 3. Attach manometer to pressure tap using a ¼" (6mm) I.D. hose.
- 4. Light burner. Check manometer reading.
- 5. Turn burner and pilot off.
- Disconnect manometer hose and tighten the manifold (OUT) pressure tap by turning screw clockwise. Screw should be snug. Do not over tighten.
- 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 11.1, Inlet Pressures		;
Fuel	Natural Gas	Propane
Gas Supply	Min - Max	Min - Max
Inlet Pressure Tap (A)	5" - 10"WC (1.25 - 2.49 kPa)	12" - 13"WC (2.99 - 3.24 kPa)

Table 11.2, Manifold Pressure		
Fuel	Natural Gas	Propane
Gas Supply	Low - High	Low - High
Manifold Pressure Tap (B)	1.0" - 3.5"WC (0.24 - 0.87 kPa)	2.7" - 10"WC (0.67 - 2.49 kPa)



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 OUALIFIED 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.

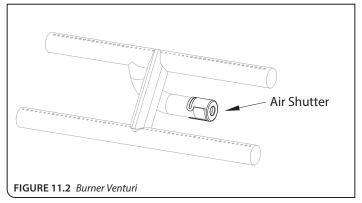
Regardless of venturi orientation, closing the air shutter will achieve a desired yellow flame, but may produce soot on the glass. Opening the air shutter will cause a short, blue flame that may lift off the burner.

Table 11.3, Factory Set Venturi Opening	
Fuel	Venturi Opening
Natural Gas	3/16" (4.7mm) OPEN
Propane	1/2" (13 mm) OPEN

11.2.1.1 Venturi Adjustment

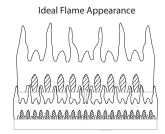
NOTE: If soot is present on the glass, check log placement before adjusting the venturi.

- Open control compartment access panel. 1.
- Remove the safety barrier and glass frame assembly. 2.
- Remove the log set and lava rock. 3.
- 4. Remove rear log plate (3) screws.
- 5. Remove the pilot shield.
- Remove (2) screws securing burner. Release the burner tube venturi off the burner orifice.
- Loosen screw on venturi and adjust as necessary. Retighten screw.
- 8. Reinstall all components previously removed.
- Set control compartment access panel back into position.

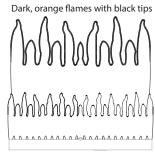


IMPORTANT: Slight adjustments to the venturi opening will create dramatic results. Adjust at slight increments until desired look is achieved. Always burn the fireplace insert for at least 15 minutes, and allow the appliance ample time to cool before making any further adjustments.

Table 11.4, Venturi Adjustment Guidelines		uidelines
Flame Characteristic	Cause	Solution
Dark, orange flame with black tips	Venturi closed too far	Open venturi slightly
Short, blue flames	Venturi open too far	Close setting slightly
Lifting (ghosting) flames	Gas pressure too high Venturi closed too far	Check manometer settings Open venturi setting slightly



Lazy, yellow flames - no adjustment necessary



Venturi(s) settings closed too far. Open venturi(s) slightly.

Short, blue flames mmann

Venturi(s) open too far. Close venturi settings(s) slightly.

Lifting (ghosting) flames

Venturi settings(s) closed too far. Open venturi(s) slightly OR gas pressure too high - check manometer settings

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 restrictor plate adjustment to ensure proper performance.

Vertical terminations may display an active, compact flame. If this appearance is not desirable, a restrictor plate 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 11.5, Restrictor Plate Adjustment Guidelines		
Flame Appearance	Draft Problem	Solution
Short, flickering	Excessive draft Not enough restriction	Add restrictor plate
Lifting or ghosting*	Insufficient draft	Remove inner ring(s) on restrictor plate, or Remove restrictor plate

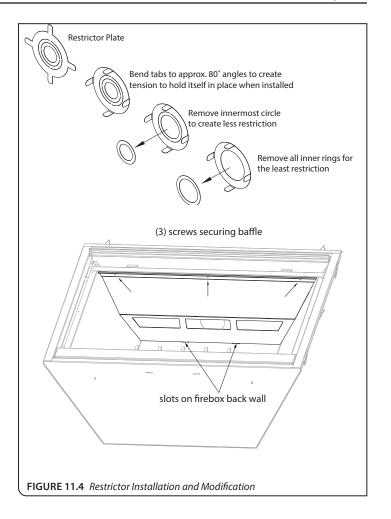
*If flames continue to lift or ghost after opening the restrictor plate and verifying correct vent installation, shut off the gas supply and call a qualified service technician.

11.2.2.1 Restrictor Plate Installation

- 1. Open the control compartment access panel
- 2. Remove the safety barrier and glass frame assembly.
- Remove (3) screws at the firebox ceiling securing the baffle. Lift the baffle out of slots on the firebox back wall.
- 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.
- 5. Insert restrictor plate into the 4" (102mm) exhaust pipe with the tabs pointing towards you.
- 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.
- 7. Reinstall all other components previously removed.
- 8. Set control compartment back into position.

11.2.2.2 Restrictor Plate Modification

- 1. Open the control compartment access panel.
- 2. Remove the safety barrier and glass frame assembly.
- 3. Remove (3) screws at the firebox ceiling securing the baffle. Lift the baffle out of slots on the firebox back wall.
- Remove the restrictor plate by pulling it down and out of the 4" (102mm) exhaust pipe. Make necessary modifications to achieve desired flame appearance.
- Insert restrictor plate into the 4" (102mm) exhaust pipe with the tabs pointing towards you.
- 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.
- 7. Reinstall all other components previously removed.
- 8. Set control compartment back into position.



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 6V DC transformer.
- Verify the control module back-up 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 Komfort 8K1 control module.
- Verify inlet pressure meets the recommended inlet pressure. If necessary, adjust line pressure regulator.
- To isolate remote functionality from the control system when troubleshooting, turn the ON/OFF/REMOTE selector switch on the control module to ON.

Issue	Cause	Solution
Pilot will not light	Electrical power interrupted or disconnected	Restore electrical power to appliance or use battery back-up.
	Wiring disconnection	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.
	Control module selector switch not set properly	Verify the ON/OFF/REMOTE selector switch is ON mode or REMOTE mode.
	Gas supply turned off	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.
	LP/NG switch on control system not engaged	Verify the switch on the control module is set to the correct gas fuel type.
Pilot will not stay lit	No propane in tank	Check propane tank. Refill if necessary.
	Low gas pressure	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.
	Pilot flame not making contact with the flame rectification sensor on the pilot assembly	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.
	Pilot adjustment screw not sealed	Seal pilot adjustment screw. Do not over-tighten.
Pilot flame always on, or will not extinguish	Control system set to Pilot-on- Demand ignition mode	Set control system to intermittent pilot ignition mode. Refer to section 10.8.7, PILOT IGNITION SELECTION on page 40.

Issue	Cause	Solution
Main burner flame will not light	ON/OFF rocker switch in ON position	Switch rocker switch to OFF position.
	Gas supply turned off	Check for multiple shut-offs in the supply line. Verify gas supply is turned on.
	Low gas supply	Consult with plumber or gas supplier. Check propane tank. Refill if necessary.
	Wiring disconnection or improper wiring	Check for faulty or incorrect wiring. Refer to FIGURE 9.1, WIRING SCHEMATICS (page 36).
	Plugged main burner orifice	Remove blockage.
	Pilot flame	Verify the pilot flame is properly directed to ignite burner. See pilot flame troubleshooting in this section.
	Remote control not working properly	Replace batteries.
	No call for heat	Verify remote control is powered ON and thermostat operation is turned OFF.
Pilot and burner extinguish while in operation	No propane in tank	Check propane tank. Refill if necessary.
	Incorrect glass assembly installation	Refer to section 8.1, GLASS FRAME ASSEMBLY on page 46.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.
	Improper pitch on horizontal venting	1/4" (6mm) rise for every 12" (305mm) of travel is required on horizontal venting
	Exhaust vent pipe leaking exhaust gases back into firebox	Check for leaks and repair if necessary.
	Excessive draft	A restrictor may need to be installed or modified. Refer to section 11.2.2, VENT RESTRICTION (AFTER INSTALLATION) on page 45.
Soot appears on glass	Improper log placement	Refer to section 8.2 , #SP41-50A LOG SET INSTALLATION on page 34.
	Improper venturi setting	Venturi air shutter may need to be opened slightly to allow more air into the gas mix. Refer to section 11.2.1, BURNER VENTURI on page 44.
	Incorrect vent cap installation	Adjust if necessary.
	Vent cap blockage	Remove debris if necessary.

Issue	Cause	Solution
Flame burns blue and lifts off burner	Improper venturi setting	The venturi air shutter may need to be closed slightly to allow less air into the gas mix. Refer to section 11.2.1, BURNER VENTURI on page 44
	Incorrect vent cap installation	Adjust if necessary.
	Blockage or leakage of the vent system	Check the vent pipes for leaks, and the vent cap for debris. Repair the vent pipes or remove debris from vent cap, if necessary.
No reaction to command	Battery back batteries or remote control batteries low	Replace batteries.
	No communication between remote control and control module	Reprogram remote control to Komfort 8K1 module. Refer to section 10.2, INITIALIZE THE KOMFORT 8K1 CONTROL SYSTEM on page 38.
	A maximum number of failed ignitions or flame restorations has been reached	Reset Komfort 8K1 control module. Refer to section 10.2, INITIALIZE THE KOMFORT 8K1 CONTROL SYSTEM on page 38.

13.0 MAINTENANCE

ATTENTION: Installation and repair should only 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, et cetera. 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

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. Refer to section 7.0, VENTING on page 25.

Performed by: Qualified Service Person

Frequency: Annually

Action:

- Examination of the vent system is required.
- Inspect the condition of vent and vent terminal for sooting or obstruction and correct if present.
- 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 #700-017T 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. Refer to section **8.3, CONTROL BOARD REMOVAL AND INSTALLATION** on page 35. Verify gas supply is turned on and filled. Consult with plumber or gas supplier as necessary.

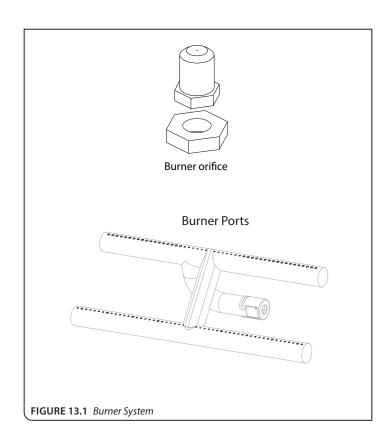
Performed by: Qualified Service Person

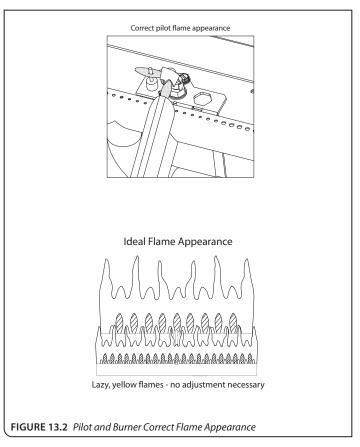
Frequency: Annually

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.





14.0 REPLACEMENT PARTS LIST

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

The following warning is for replacement parts for this appliance.

?

WARNING: This product can expose you to chemicals including Lead, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information, visit www.P65Warnings.ca.gov.

SP-41-L SP41-D350 Dexen Control Board - Natural Gas SP41-D351 Dexen Control Board - Propane DEX-3VN Dexen MH3V Gas Valve - Natural Gas	
SP41-D351 Dexen Control Board - Propane DEX-3VN Dexen MH3V Gas Valve - Natural Gas	CONTROL
DEX-3VN Dexen MH3V Gas Valve - Natural Gas	
DEX-3VLP Dexen MH3V Gas Valve - Propane	
DEX-8K1 Komfort 8K1 Control Module	
DEX-AUX3 AUX 300 Control Module	
DEX-MWH Main Wire Harness	
DEX-A1WH AUX 1 Wire Harness	
DEX-191 NG Dexen PSE IPI Pilot Assembly (700-191)	
DEX-191-1 Propane Dexen PSE IPI Pilot Assembly (700	-191-1)
DEX-RC3 Dexen Transmitter (Remote Control)	
700-094-P Pilot Orifice - Natural Gas #.018 NG	

L	L BOARD AND PARTS		
		700-095-P	Pilot Orifice - Propane #.012 LP
		DEX-SMN	Dexen Valve Step Motor - Natural Gas
		DEX-SMLP	Dexen Valve Step Motor - Propane
1		700-213B	18" Black Flex Tube (Gas Line to Valve)
		700-226F	Flexible Gas Line - Valve to Burner Connection
		700-240	Natural Gas Burner Orifice #40
1		700-155M	Propane Burner Orifice 1.55mm
		NCK-SP41L-D	Dexen Conversion Kit - Natural Gas
		LCK-SP41L-D	Dexen Conversion Kit - Propane
1		SP41-351A	Burner Tube
		SP41-043A	Pilot Shield

GLASS AND GLASS GASKET	
701-017T	36-1/2" x 26-1/8" Glass with Gasket
900-006	1-1/8" Glass Gasket
SP41-005	Valance

SAFETY BARRIERS	
SP41-ES2	37.56" x 26.13" Safety Screen with Brackets
SP41-POL	Prairie Design Overlay
SP41A-POL	Arched Prairie Design Overlay

FAN KIT				
SP-028-IPI	Fan Assembly			

TRADITIONAL LOG SET				
SP41-50A	6 Piece Log Set			
SP41-1A	#SP41 1A Log			
SP41-2A	#SP41 2A Log			
SP41-3A	#SP41 3A Log			
SP41-4A	#SP41 4A Log			
SP41-5A	#SP41 5A Log			
SP41-6A	#SP41 6A Log			
600-702	1/2" Lava Rock			
900-REMB	Rock Wool Embers			

ADDITIONAL COMPONENTS				
900-086	5" (127mm) Restrictor Plate			
700-203	Manual Gas Shut-off Valve			
SP41-201	Lower Access Cover			

Hussong Manufacturing Co., Inc. 204 Industrial Park Drive PO Box 577 Lakefield, MN 56150-0577, USA **SP-41-L**

LIMITED LIFETIME WARRANTY

Warranty Coverage

Hussong Manufacturing Company, Inc. (Hussong Mfg.) warrants this Kozy Heat gas appliance from the date of purchase to the original purchaser, that it is free of defects in materials and workmanship at the time of manufacture. Registering your fireplace warranty does not require any documents to be sent in to Hussong Mfg. Please retain your proof of purchase reflecting the date of purchase along with the serial number and model of your fireplace for any future warranty claims

If a defect is noted within the warranty period, the customer should contact their authorized dealer for service within 30 days.

30 Days: Parts & Labor*

- Paint
- Light bulbs
- · Gasket material
- · Glass media and media dam

Year 1: Parts & Labor*

 All parts and material except the items listed in the 30 day warranty and any exclusions or limitations that may apply.

*Hussong Mfg. will issue labor reimbursement to an authorized dealer only. Hussong Mfg. will not be liable for charges occurred as a result of any service performed by a non-authorized service provider, without pre-authorization.

Years 2 through Lifetime: Parts Only

- Firebox
- Heat Exchanger
- Logs
- Burner tube or pan
- Outer shell
- Heat shield(s)
- Front Viewing Glass (thermal shock only)
- Refractory Firebox liner (excluding enamel and glass panels)

EXCLUSIONS AND LIMITATIONS

- 1. This appliance must be installed by a licensed, authorized service technician or contractor. It must be installed, operated and maintained at all times in accordance with the instructions in the owner's manual or the warranty is void.
- 2. This warranty is nontransferable and is made to the original purchaser only.
- 3. This warranty excludes standard wear and tear of the appliance which is considered normal usage over time.
- 4. Discoloration and some minor expansion, contraction or movement of certain parts, resulting in noise, is normal and not a defect.
- 5. Warranty is automatically voided if the appliance's serial number and/or testing label is removed or if the appliance is altered or tampered with in any way.
- 6. Warranty is void if the appliance is subject to submersion in water or prolonged periods of dampness or condensation. Any damage to any part of the appliance due to water or weather damage which is the result of, but not limited to, improper chimney/venting installation will also render this warranty void.
- 7. This warranty does not cover installation and operational related problems such as environmental conditions, nearby trees, buildings, hilltops, mountains, inadequate venting or ventilation, excessive offsets, negative air pressures caused by any mechanical systems.
- 8. Chimney components and other Non-Hussong Mfg. accessories used in conjunction with the installation of this appliance are not covered under this warranty.
- 9. Damage to plated surfaces or accessories, if applicable, caused by scratches, fingerprints, melted items or other external sources left on the surfaces from the use of cleaners is not covered under this warranty.
- 10. It is expressly agreed and understood that this warranty is Hussong Mfg.'s sole obligation and purchaser's exclusive remedy for defective fireplace equipment. Hussong Mfg. is free of liability for any damages caused by this appliance, as well as inconvenience expenses and materials. Incidental or consequential damages are not covered by this warranty. In some states, the exclusion of incidental or consequential damage may not apply. Hussong Mfg. shall not be held to implied warranties and this warranty shall replace all previous warranties.
- 11. This limited lifetime warranty is the only warranty supplied by Hussong Mfg. Any warranties extended to the purchaser by the dealer/distributor, whether expressed or implied, are hereby disclaimed and the purchaser's recourse is expressly limited to the warranties set forth herein.
- 12. Any part repaired or replaced during the limited warranty period will be warranted under the terms of the limited warranty for a period not to exceed the remaining term of the original limited warranty.
- 13. Any replacement part repaired after the warranty period will include a 90 day parts coverage
- 14. Hussong Mfg. may require the defective part to be returned using a pre-authorized RGA number or a photo of the defective component. Failure to provide either can result in a denied claim.
- 15. This warranty does not cover the appliances ability to heat a desired space, as there are many factors that can impact the heating performance in each home. Consideration should be implied to the appliance's location, room size, home design, environmental conditions, insulation, and tightness of the home.
- 16. Hussong Mfg. reserves the right to make changes at any time, without notice, in design, material, specifications, and prices. Hussong Mfg. reserves the right to discontinue models and products.

July 2018