

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL

INSTALLER:

Leave this manual with the appliance.

CONSUMER:

Retain this manual for future reference.

⚠ WARNING

FIRE OR EXPLOSION HAZARD

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

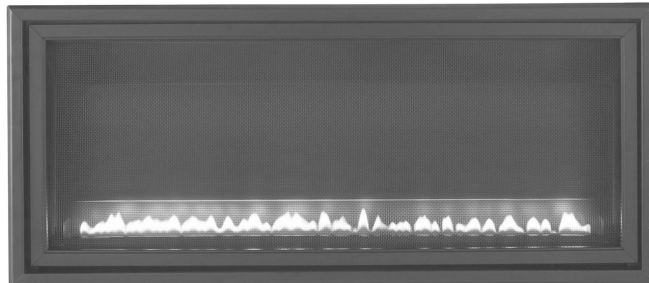
- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- **WHAT TO DO IF YOU SMELL GAS**
 - Do not try to light any appliance.
 - Do not touch any electrical switch; do not use any phone in your building.
 - Leave the building immediately.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

⚠ DANGER

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

CONTEMPORARY LINEAR VENT-FREE GAS FIREPLACE MODELS:

VFSL30FP7010(N,P)-2
VFSL30FP70(N,P)-2



VFMH46389 VFSL30FP70 SHOWN

This is an unvented gas-fired heater. It uses air (oxygen) from the room in which it is installed. Provisions for adequate combustion and ventilation air must be provided. Refer to page 13.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour. Refer to page 13.

This appliance may be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases.

**NATIONAL
FIREPLACE
INSTITUTE®**



CERTIFIED
www.nficertified.org

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 NFI Gas Specialists.

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BEFORE YOU START

1. Record serial number, model number, etc. on the next page and page 56.
2. Read the soot-prevention information on page 6.
3. Read the safety information on pages 9 - 11.
4. Determine type of installation. See illustrations on this page.
5. Verify clearances to combustibles. See pages 43 - 44.
6. Determine type of gas shutoff valve to use.
7. Frame the opening.
 - Surface Mounted Installation: No opening required.
 - Partially Recessed Installation: See page 27.
 - Recessed Installation: See page 37.
8. Install the gas line basics. See page 42 - 43.
9. Install the Fireplace.
 - Surface Mounted Installation: See pages 15 - 21.
 - Partially Recessed Installation: See pages 23 - 31.
 - Recessed Installation: See page 33 - 41.
10. Install the wiring. See page 49.
11. Perform a Leak Test. See page 42.
12. Light the fireplace. See pages 46.
13. Show the homeowner how to operate the fireplace.
14. Show the homeowner how to do the basic maintenance.

INSTALLATION CONSIDERATIONS - FIREPLACE INSTALLATION GUIDELINES

No part of the fireplace, gas line, or wiring may be installed in a wall cavity serving as a cold air return.

In planning the installation for the fireplace, determine where the unit is to be installed. The fireplace can be mounted three ways:

1. Surface mounted on a wall.
2. Partially recessed in a 2 x 4 or 2 x 6 wall.
3. Recessed in a 2 x 6 wall.

Fireplace must only be permanently installed on or in a wall.

This unit is designed to be installed in a zero-clearance enclosure. This means the combustible material can come in contact with the top standoff (recessed in a 2 x 6 wall installation only) or fireplace top (partially recessed), bottom, and secured to combustible framing using the nailing flange provided.

Determine the following before installation:

- Installation type
- Any desired accessories
- Gas supply piping (left side access).
- Electrical supply requirements for power adaptor. (120V, 60Hz, 1 Amp) (right side access)

A selection of a shutoff valve containing a flange and key is recommended.

OPERATING THE FIREPLACE FOR THE FIRST TIME

During manufacture, this fireplace is treated with oils, films and bonding agents. These are not harmful but may produce smoke and odor as they burn off during initial operation of the fireplace. This is normal. Open a window during the initial bake out period. The following procedure will cure the materials used to manufacture the fireplace.

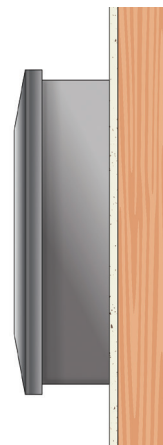
- The fireplace should be run three to four hours continuously.
- Turn the fireplace off and allow it to completely cool.
- Clean the glass.

NOTICE: Open windows for air circulation during fireplace break-in.

- Some people may be sensitive to smoke and odors.
- Smoke detectors may activate.

INSTALLATION TYPE

SURFACE MOUNTED INSTALLATION Pages 15 - 21



PARTIALLY RECESSED INSTALLATION Pages 23 - 31



RECESSED INSTALLATION Pages 33 - 41



HOMEOWNER REFERENCE INFORMATION

We recommend that you record the following information about your fireplace.

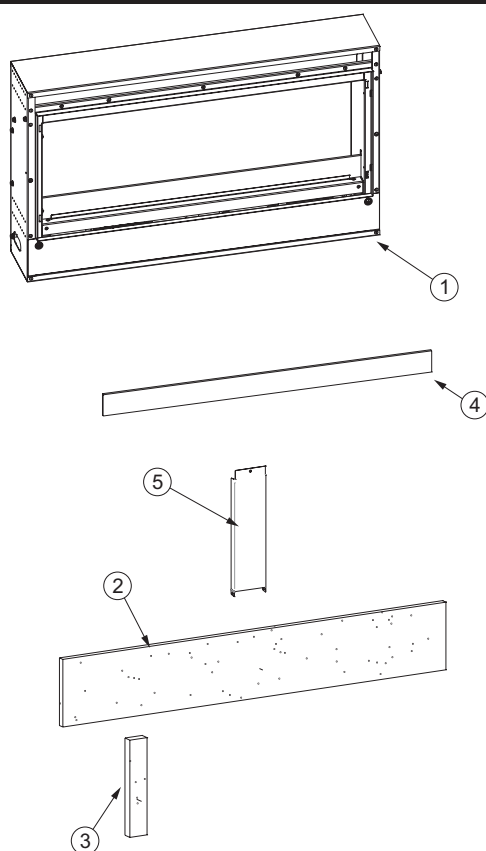
Model Number: _____ Date purchased: _____

Serial Number: _____ Location of fireplace: _____

Dealer Name: _____ Dealer Phone: _____

Notes: _____

CARTON CONTENTS



Items not shown to scale.

Index No.	Description	Quantity	Used On Installation Type:		
			Surface Mounted	Partially Recessed	Recessed
1	Fireplace	1	YES	YES	YES
2	Non-combustible board - Top	1	NO	YES	YES
3	Non-combustible board - Side	2	NO	NO	YES
4	Glass Panel	1	YES	YES	YES
5	Standoff	1	NO	NO	YES
Not Shown	Hardware Pack	1	YES	YES	YES

See Parts Lists on page 54 for ordering replacement parts. Do not order batteries, bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

HARDWARE PACK CONTENTS



SWITCH EXTENSION WIRE KIT



SWITCH AND COVER



BATTERY PACK EXTENSION WIRE KIT



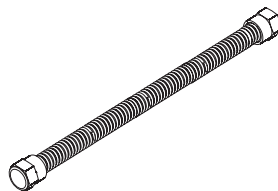
CORD GRIP



WIRE NUT



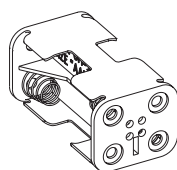
SNAP-IN RECEPTACLE



FLEX LINE



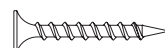
POWER ADAPTER



BATTERY PACK



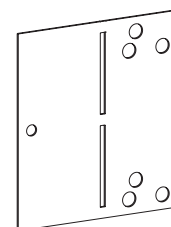
AA BATTERY



1-1/4" PHILLIPS DRYWALL SCREW



#10-32 X 1/2" HEX HEAD SCREW



NAILING FLANGES

Items not shown to scale.

Index Number	Description	Quantity Supplied	Used On Installation Type:		
			Surface Mounted	Partially Recessed	Recessed
1	Switch Extension Wire Kit	1	YES	YES	YES
2	Switch and Cover	1	YES	YES	YES
3	Battery Pack Extension Wire Kit	1	YES	YES	YES
4	Cord Grip	2	YES	YES	YES
5	Wire Nut	2	YES	YES	YES
6	Snap-In Receptacle	1	YES	YES	YES
7	Flex Line	1	YES	YES	YES
8	AC Power Adaptor	1	YES	YES	YES
9	Battery Pack	1	YES	YES	YES
10	AA Battery	4	YES	YES	YES
11	#10-32 x 1/2 inch Hex Head Screw*	10	NO	YES	YES
12	1-1/4 inch Phillips Drywall Screw*	16	NO	YES	YES
13	Nailing Flange	4	NO	YES	YES

* Not all of the screws will be used on each installation.

See Parts Lists on page 54 for ordering replacement parts. Do not order batteries, bolts, screws, washers or nuts. They are standard hardware items and can be purchased at any local hardware store.

IMPORTANT SOOT PREVENTION STEPS

IMPORTANT NOTICE

INSTALLER - SERVICE PERSON - HOMEOWNER

SOOT MAY BE CREATED IF THE FOLLOWING DIRECTIONS ARE NOT FOLLOWED.

⚠ CAUTION

Failure to keep the primary air openings of the burner clean may result in sooting and property damage.

⚠ CAUTION

Do not allow fans to blow directly into or at the fireplace. Avoid any drafts that alter burner flame patterns. Pay particular attention to ceiling fans and exhaust fans.

- Ensure burner and primary air holes are free of dust, lint, animal hair (i.e. cat and dog) or anything that may block the needed air flow. See Cleaning and Servicing, page 45.
- Do not place anything on the burner including logs, rock wool, decorative glass, etc.
- Do not use scented air fresheners or candles while the fireplace is in operation. They can cause soot.
- Have your dealer or qualified service technician perform an annual inspection and cleaning to prevent malfunction or sooting.
- Verify the burner tube is not bent or distorted. The main burner orifice must be centered in the burner tube for proper combustion to prevent sooting.

PRODUCT SPECIFICATIONS

		VFSL30FP(70,7010)N Natural Gas (inches w.c.)	VFSL30FP(70,7010)P Propane Gas (inches w.c.)
Manifold pressure setting		3.5	10.0
Gas inlet pressure	Max.	10.5	13.0
	Min.	5.0	11.0

Model	Gas Type	Valve Type	Orifice	Recommended Manifold Pressure (inches w.c.)	BTUH Max. Rate
VFSL30FP70P	Propane	IP	#60	10.0	12,000
VFSL30FP70N	Natural	IP	#50	3.5	14,000
VFSL30FP7010P	Propane	IP	#64	10.0	10,000
VFSL30FP7010N	Natural	IP	1.50mm	3.5	10,000

INTRODUCTION

Sample Warnings and Definitions:

DANGER

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

WARNING

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

CAUTION

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

NOTICE: Addresses practices not related to personal injury.

Instructions to Installer

1. Leave instruction manual with owner after installation.
2. Have owner fill out product registration card supplied with the vent-free fireplace.
3. Show owner how to start and operate the fireplace.

Consult your local Building Department regarding regulations, codes or ordinances which apply to the installation of an unvented fireplace.

This fireplace may be installed in an aftermarket* manufactured (mobile) home, where not prohibited by state or local codes.

*Aftermarket: Completion of sale, not for purpose of resale, from the manufacturer.

Well Head Gas Installations

Some Natural Gas utilities use "well head" gas. This may affect the Btu output of the unit and promote sooting. Units shall not be converted to use well head gas.

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.

WARNING

Any change to this fireplace or its controls can be dangerous. Improper installation or use of the fireplace can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

This fireplace series is design certified in accordance with American National Standard Institute (ANSI) Z21.11.2 by the Canadian Standards Association Laboratories (CSA) as an Unvented Room Heater and should be installed according to these instructions.

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

WARNING

This appliance is equipped for Natural or Propane Gas. Field conversion is not permitted.

Important

All correspondence should refer to complete Model Number and Serial Number.

NOTICE: During initial firing of this fireplace, its paint will bake out, and smoke will occur. To prevent triggering of smoke alarms, ventilate the room in which the unit is installed.

Qualified Installing Agency

Installation and replacement of gas piping, gas utilization equipment or accessories and repair and servicing of equipment shall be performed only by a qualified agency. The term "qualified agency" means any individual, firm, corporation or company which either in person or through a representative is engaged in and is responsible for (a) the installation or replacement of gas piping or (b) the connection, installation, repair or servicing of equipment, who is experienced in such work, familiar with all precautions required and has complied with all the requirements of the authority having jurisdiction.

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

Sellers of unvented Propane or Natural Gas-fired supplemental fireplaces shall provide to each purchaser a copy of 527 CMR 30 upon sale of the unit.

In the Commonwealth of Massachusetts, unvented Propane and Natural Gas-fired space heaters shall be prohibited in bedrooms and bathrooms.

The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1.*

*Available from the American National Standards Institute, Inc.

1430 Broadway, New York, N.Y. 10018.

ACCESSORIES

Required Accessories for Surface Mounted Installation

Decorative Front (One Required)

Part Number	Description
DFSL30MBL	Decorative Front - Mitered, Black

Decorative Wrap (One Required)

DCSL30LBL	Decorative Wrap - Black
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Required Accessories for Partially Recessed Installation

Decorative Front (One Required)

Part Number	Description
DFSL30MBL	Decorative Front - Mitered, Black

Optional Accessory for Recessed Installation

Part Number	Description
DFSL30PBL	Decorative Trim - Black

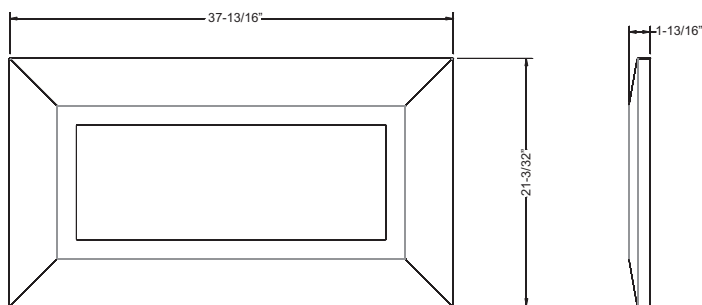
Optional Control Accessories - All Installation Types

Part Number	Description
FRBC*	Battery Remote, ON/OFF
FRBTC*	Battery Remote, Thermostat
FRBTP*	Programmable Remote
TRW*	Wireless Wall Thermostat
TMV	Wall Thermostat - Reed Switch

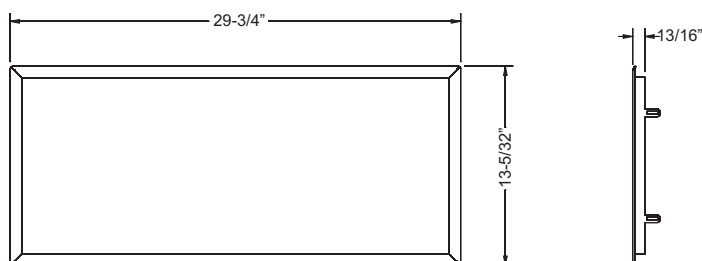
* Requires junction box outside of the fireplace.

Attention: Certain accessories are required, but sold separately.

Mitered Front Dimensions



Wall Trim Dimensions



IMPORTANT SAFETY INFORMATION

WARNING

When used without adequate combustion and ventilation air, appliance may give off CARBON MONOXIDE, an odorless, poisonous gas.

Do not install appliance until all necessary provisions are made for combustion and ventilation air. Consult the written instructions provided with the appliance for information concerning combustion and ventilation air. In the absence of instructions, refer to the National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation, or applicable local codes.

This appliance is equipped with a PILOT LIGHT SAFETY SYSTEM designed to turn off the appliance if not enough fresh air is available.

Do not tamper with pilot light safety system!

If fireplace shuts off, do not relight until you provide fresh air.

If fireplace keeps shutting off, have it serviced. Keep burner and control compartment clean. See installation and operating instructions accompanying heater.

Carbon monoxide poisoning may lead to death.

Early signs of carbon monoxide poisoning resemble the flu, with headache, dizziness and/or nausea. If you have these signs, fireplace may not be working properly. Get fresh air at once! Have fireplace serviced.

Some people — pregnant women, persons with heart or lung disease, anemia, those under the influence of alcohol, those at high altitudes — are more affected by carbon monoxide than others.

DANGER

The installer of this product is responsible for testing all connections for gas leaks. A gas leak will create a situation where a fire, explosion, or production of carbon monoxide may result causing property damage, personal injury or loss of life.

WARNING

Do not use a blower insert, heat exchanger insert or other accessory not approved for use with this heater.

WARNING

This fireplace needs fresh air for ventilation to run properly. This fireplace has an Pilot Light Safety System (Oxygen Depletion Sensor - ODS) which will shut down the fireplace if adequate fresh air is not available. See troubleshooting section in the instructions.

WARNING

Do not allow fans to blow directly into or at the fireplace. Avoid any drafts that alter burner flame patterns.

WARNING

DO NOT operate this fireplace unless all components including burners and controls are in good working condition.

Replacement components are available through your local dealer as indicated in the How to Order Repair Parts section of the fireplace manual.

WARNING

Failure to keep the primary air opening(s) of the burner(s) clean may result in sooting and property damage.

IMPORTANT SAFETY INFORMATION

- Do not use scented air fresheners (plug in type air fresheners, etc.) while the fireplace is in operation. Air fresheners produce a residue in the air similar to candles and may produce soot.
- Do not use scented or decorative candles while the fireplace is in operation. Candles produce a residue in the air that creates soot. Burning candles while the fireplace is operating magnifies the problem. It should be noted that candles, in general, produce soot. The amount of time burned and the quantity of candles burned will determine the amount of soot produced and deposited.
- Installation and repair should be done by a QUALIFIED SERVICE PERSON. This fireplace should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that control compartments, burners and circulating air passageways of the fireplace be kept clean.
- Do not place debris, logs or other articles on the burner during operation.
- Do not install an unvented room fireplace with an input rating of more than 6,000 Btu per hour in a bathroom.
- Do not install an unvented room fireplace with an input rating of more than 10,000 Btu per hour in a bedroom or bathroom.
- Due to high temperatures, the fireplace should be located out of traffic and away from furniture and draperies.
- Alert children and adults to the hazard of high surface temperatures. High surface temperatures can cause burns or ignite clothing.
- Young children should be carefully supervised when they are in the same room with the fireplace.
- Do not place clothing or other flammable material on or near the fireplace.
- DO NOT use this room heater if any part has been under water. Immediately call a qualified service technician to inspect the room heater and to replace any part of the control system and any gas control which has been under water.
- You must operate fireplace with glass panel in place.
- During manufacture, this fireplace is treated with certain oils, films and bonding agents. These bonding agents are not harmful but may produce annoying smoke and odors as they are burned off during initial operation of the fireplace. This is a normal temporary occurrence. A window should be opened during the initial bake out period.
- Keep fireplace area clear and free from combustible materials, gasoline and other flammable vapors and liquids.
- **Sooting:** A vent-free fireplace or burner draws room air to support combustion. Lightweight particles suspended in the air – including dust, carpet fibers, candle or tobacco smoke, and pet hair – will be drawn toward the fireplace. These can lead to soot build up on fireplace walls and even walls of the room. To prevent malfunctions and sooting, have your dealer perform an inspection and cleaning each year – before the heating season. If you have pets or excessive dust, more frequent cleaning may be necessary. See cleaning and service section in this manual.
- Use Non-Combustible Materials where indicated for the fireplace installation. Non-combustible material do not ignite or burn as a result of using the fireplace. These include metal, brick, ceramic, concrete, slate, glass, and plaster. Adhesives must be rated for high temperatures. Any mechanical fasteners used to install material must also be non-combustible, including wall anchors and tile spacers. Materials that pass the ASTM E 136 test (Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750C) are considered non-combustible.
- Combustible materials include wood, compressed paper, plant fibers, or other materials that will burn. These materials are considered combustible even when treated with fire-retardant chemicals. See "Clearances to Combustibles" for your installation.
- Do not place embers (rock wool) or lava rocks in this fireplace.
- Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into or at the fireplace. Do not place a blower inside the burner area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.
- Installing a television above a fireplace has become a desirable feature; however, the following information should be considered.

All fireplaces, whether decorative or heater rated, create heat. Most television manufacturers recommend not placing a television near a heat source. Because there is a large variety of television manufacturers, styles and sizes, it is impractical to test every potential installation. If you install a television above this fireplace, Empire Comfort Systems accepts no responsibility for damage or injuries. Follow the television manufacturer's installation instructions, including any recommendations regarding proximity to heat sources. If you have a TV above your fireplace, turn off the fireplace and let it cool completely before servicing or touching any buttons on the TV. In all cases, the television manufacturer's instructions and warnings should be followed.

SAFETY INFORMATION FOR USERS OF PROPANE GAS

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

PROPANE GAS WARNING ODOR

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

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

NO ODOR DETECTED - ODOR FADE

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

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

The odorant in escaped gas can adsorb or absorb onto or into walls, masonry and other materials and fabrics in a room. That will take some of the odorant out of the gas, reducing its odor intensity.

Propane Gas may stratify in a closed area, and the odor intensity could vary at different levels. Since it is heavier than air, there may be more odor at lower levels. Always be sensitive to the slightest gas odor. If you detect any odor, treat it as a serious leak. Immediately go into action as instructed earlier.

SOME POINTS TO REMEMBER

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

IMPORTANT INSTALLATION GUIDELINES

Fans and Cold Air Returns Near the Fireplace

Any draft created around a vent-free fireplace can cause the flame to create soot. Upon installation, be aware of any cold air returns or vents in the proximity of the fireplace. Ceiling fans and floor type fans need to be monitored during the operation of this vent-free fireplace. If the air flow disrupts the flame, the source of air flow should be turned off or redirected. Reversing the blade direction ceiling fans may possibly eliminate flame impingement. Floor fans should be redirected.

WARNING

Do not allow fans to blow directly into or at the fireplace. Avoid any drafts that alter burner flame patterns.

NOTICE: No part of the fireplace, gas line, or wiring may be installed in a wall cavity serving as a cold air return.

Candles

Avoid the use of scented or decorative candles while the fireplace is in operation. Candles produce a residue in the air that creates soot. Burning candles while the fireplace is operating magnifies the problem. It should be noted that candles, in general, produce soot. The amount of time burned and the quantity of candles burned will determine the amount of soot produced and deposited.

Plug-In Air Fresheners

Avoid the use of scented air fresheners while the fireplace is in operation. Air fresheners produce a residue in the air similar to candles and may produce soot.

Television Considerations

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

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

If you have a TV above your fireplace, turn off the fireplace and let it cool completely before servicing or touching any buttons on the TV.

WATER VAPOR: A BY-PRODUCT OF UNVENTED ROOM HEATERS

Water vapor is a by-product of gas combustion. An unvented room heater produces approximately one (1) ounce (30ml) of water for every 1,000 BTU's (.3KW's) of gas input per hour.

Unvented room fireplace are recommended as supplemental heat (a room) rather than a primary heat source (an entire house). In most supplemental heat applications, the water vapor does not create a problem. In most applications, the water vapor enhances the low humidity atmosphere experienced during cold weather.

The following steps will help insure that water vapor does not become a problem.

1. Be sure the fireplace is sized properly for the application, including ample combustion air and circulation air.
2. If high humidity is experienced, a dehumidifier may be used to help lower the water vapor content of the air.
3. Do not use an unvented room heater or fireplace as the primary heat source.

PROVISIONS FOR ADEQUATE COMBUSTION & VENTILATION AIR

This fireplace shall not be installed in a room or space unless the required volume of indoor combustion air is provided by the method described in the *National Fuel Gas Code, ANSI Z23.1/ NFPA 54, the International Fuel Gas Code*, or applicable local codes.

Installation in a Confined Space

A confined space is an area with volume less than 50 cubic feet per 1,000 Btuh of the combined input rates of all fireplaces drawing combustion air from that space. Small areas such as equipment rooms are confined spaces. Furnaces installed in a confined space which supply heated air to areas outside the space must draw return air from outside the space through tightly sealed return air ducts. A confined space must have 2 openings into the space for combustion air. One opening must be within 12 inches of the ceiling and the other must be within 12 inches of the floor. The required sizing of these openings is determined by whether inside or outside air is used to support combustion, the method by which the air is brought to the space (vertical or horizontal duct) and by the total input rate of all fireplaces in the space.

Unusually Tight Construction

The air that leaks around doors and windows may provide enough fresh air for combustion and ventilation. However, in buildings of unusually tight construction, you must provide additional fresh air.

Unusually tight construction is defined as construction where:

- a. Walls and ceilings exposed to the outside atmosphere have a continuous water vapor retarder with a rating of one perm or less with openings gasketed or sealed, and
- b. Weather-stripping has been added on openable windows and doors, and
- c. Caulking or sealants are applied to areas such as joints around window and door frames, between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical, and gas lines, and at other openings.

If your home meets all of the three criteria above, you must provide additional fresh air. See "**Ventilation Air From Outdoors**," page 14.

Determining if You Have a Confined or Unconfined Space

Use this worksheet to determine if you have a confined or unconfined space.

Space: Includes the room in which you will install fireplace plus any adjoining rooms with doorless passageways or ventilation grills between the rooms.

1. Determine the volume of the space (length x width x height).
Length x Width x Height = _____ cu. ft. (volume of space)

Example: Space size 16 ft. (length) x 10 ft. (width) x 8 ft. (ceiling height) = 1,280 cu. ft. (volume of space)

If additional ventilation to adjoining room is supplied with grills or openings, add the volume of these rooms to the total volume of the space.

2. Divide the space volume by 50 cu. ft. to determine the maximum BTU/hr the space can support.

_____ (volume of space) ÷ 50 cu. ft. = (maximum BTU/hr the space can support)

Example: 1,280 cu. ft. (volume of space) ÷ 50 cu. ft. = 25.6 or 25,600 (maximum BTU/hr the space can support)

3. Add the BTU/hr of all fuel burning fireplaces in the space.

Vent-free fireplace	_____	BTU/hr
Gas water heater	_____	BTU/hr
Gas furnace	_____	BTU/hr
Vented gas fireplace	_____	BTU/hr
Gas fireplace logs	_____	BTU/hr
Other gas fireplaces*	+	_____ BTU/hr
Total	=	_____ BTU/hr

Example: Vented gas fireplace 20,000 BTU/hr
Vent-free fireplace + 18,000 BTU/hr
Total = 38,000 BTU/hr

*Do not include direct-vent gas fireplaces. Direct vent draws combustion air from the outdoors and vents to the outdoors.

4. Compare the maximum BTU/hr the space can support with the actual amount of BTU/hr used.

_____ BTU/hr (maximum the space can support)
_____ BTU/hr (actual amount of BTU/hr used)

Example:

25,600 BTU/hr (maximum the space can support)
38,000 BTU/hr (actual amount of BTU/hr used)

WARNING

If the area in which the fireplace may be operated is smaller than that defined as an unconfined space or if the building is of unusually tight construction, provide adequate combustion and ventilation air by one of the methods described in the *National Fuel Gas Code, ANSI Z223.1/NFPA 54, Air for Combustion and Ventilation*, or applicable local codes.

PROVISIONS FOR ADEQUATE COMBUSTION & VENTILATION AIR (CONT'D)

The space in the example on page 12 is a confined space because the actual BTU/hr used is more than the maximum BTU/hr the space can support. You must provide additional fresh air. Your options are as follows:

- Rework worksheet, adding the space of an adjoining room. If the extra space provides an unconfined space, remove door to adjoining room or add ventilation grills between rooms. See **Ventilation Air From Inside Building**.
- Vent room directly to the outdoors. See **Ventilation Air From Outdoors**.
- Install a lower BTU/hr fireplace, if lower BTU/hr size makes room unconfined.

If the actual BTU/hr used is less than the maximum BTU/hr the space can support, the space is an unconfined space. You will need no additional fresh air ventilation.

Ventilation Air

Ventilation Air From Inside Building

This fresh air would come from an adjoining unconfined space. When ventilating to an adjoining unconfined space, you must provide two permanent openings: one within 12 inches of the ceiling and one within 12 inches of the floor on the wall connecting the two spaces (see options 1 and 2, Figure 1). You can also remove door into adjoining room (see option 3, Figure 1). Each ventilation grill or opening shall have a minimum free area of one square inch per 1,000 BTUH of the total input rating of the gas equipment in the confined space.

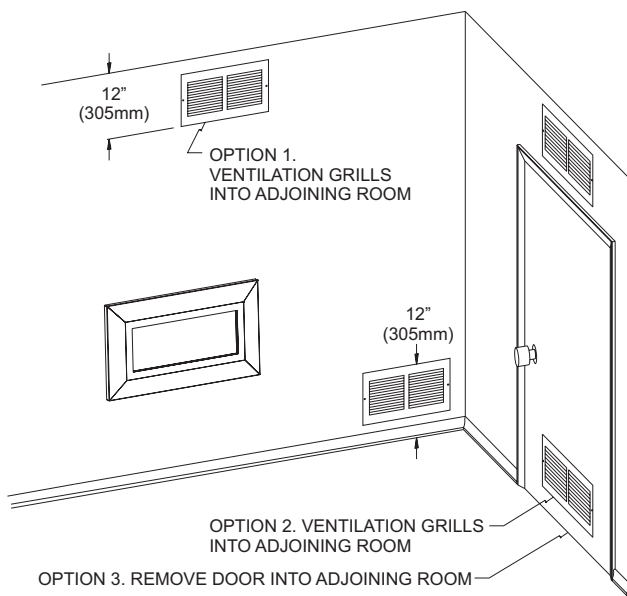


Figure 1

Rework worksheet on page 13, adding the space of the adjoining unconfined space. The combined spaces must have enough fresh air to supply all appliances in both spaces.

Ventilation Air From Outdoors

Provide extra fresh air by using ventilation grills or ducts. You must provide two permanent openings: one within 12 inches of the ceiling and one with 12 inches of the floor. Connect these items directly to the outdoors or spaces open to the outdoors. These spaces include attics and crawl spaces. In most cases for direct communication with the outdoors or direct communication through a vertical duct a free area opening of one square inch per 4,000 BTU/hr of fireplace input rating for each grill. If a horizontal duct is used, a grill free area or duct opening shall have a free area opening of one square inch per 2,000 BTU/hr for each grill. Follow the *National Fuel Code ANSI Z223.1/NFPA54, Air for Combustion and Ventilation* for required size of ventilation grills or ducts.

IMPORTANT: Do not provide openings for inlet or outlet air into attic if attic has a thermostat-controlled power vent. Heated air entering the attic will activate the power vent.

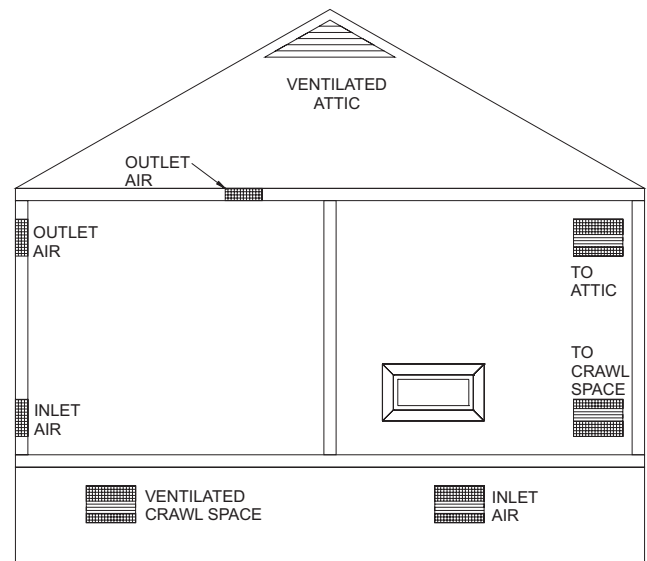


Figure 2

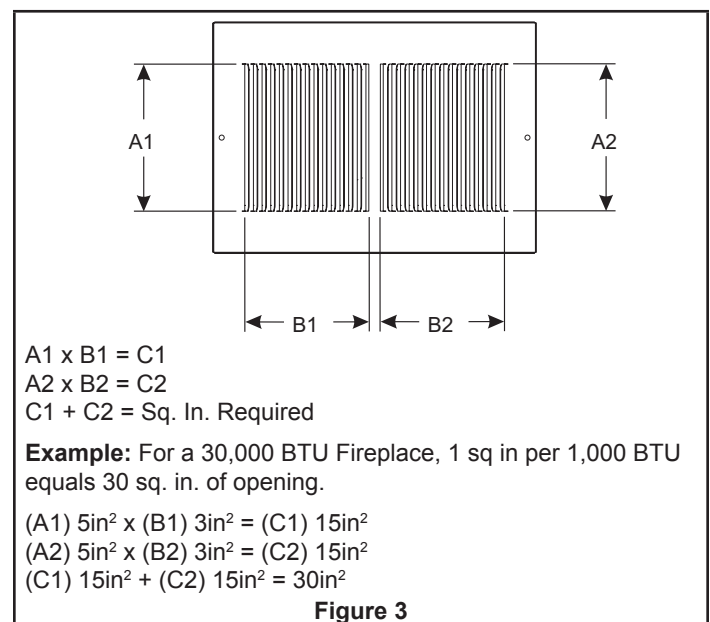
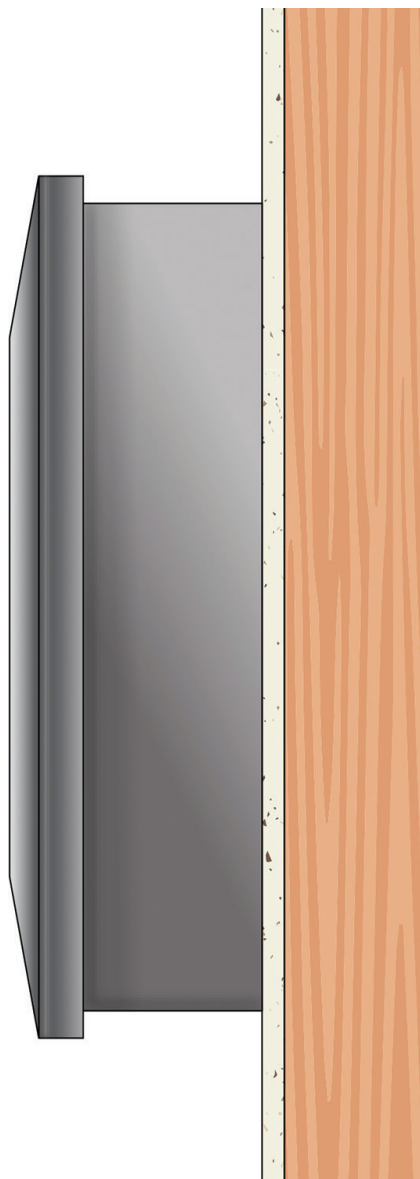


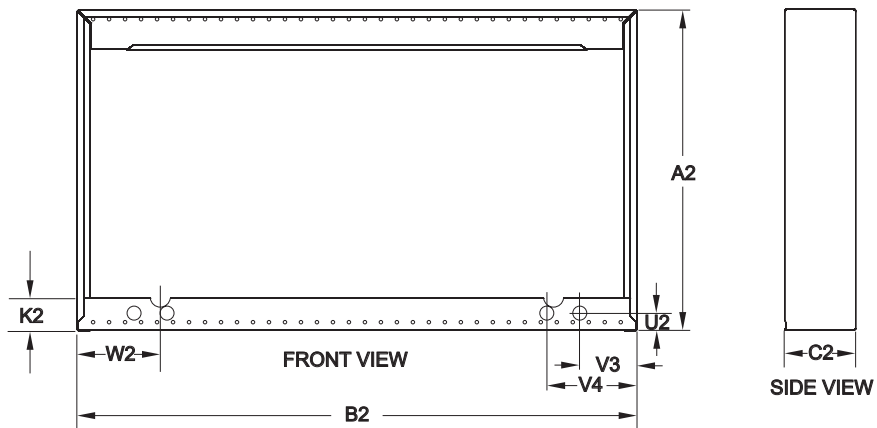
Figure 3

SURFACE MOUNTED FIREPLACE

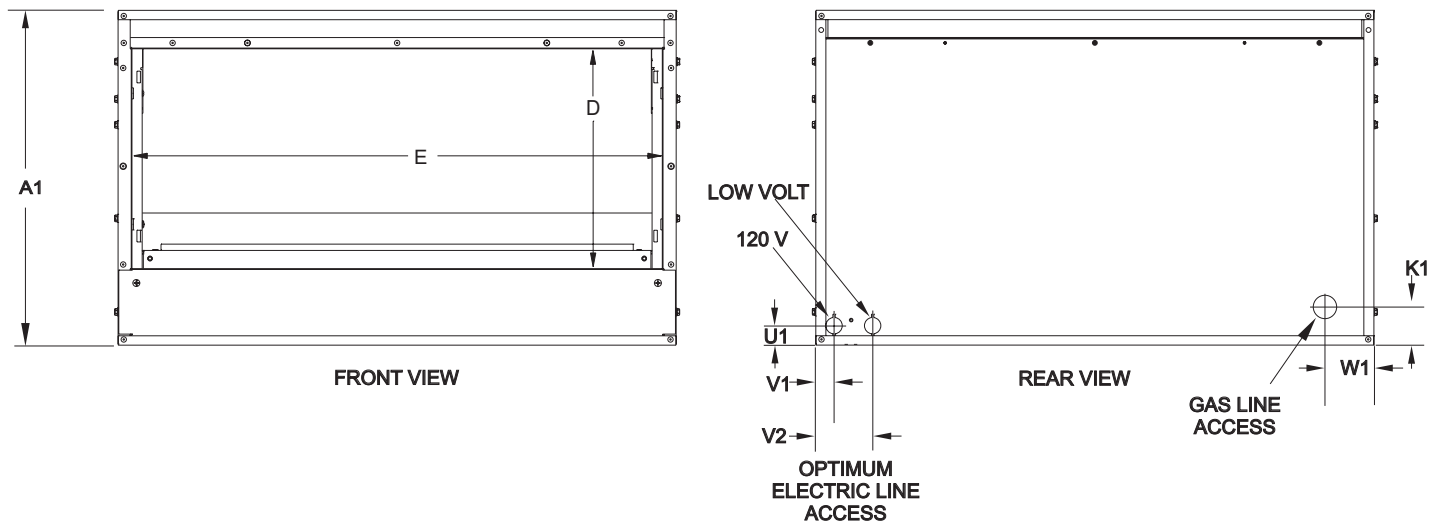
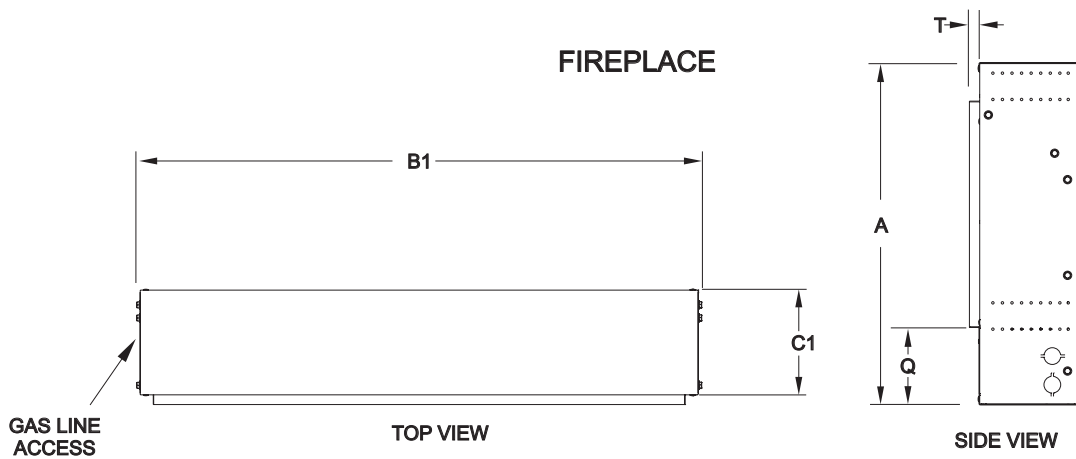


SURFACE MOUNTED FIREPLACE DIMENSIONS

DECORATIVE WRAP



FIREPLACE



SURFACE MOUNTED FIREPLACE DIMENSIONS

INDEX LETTER	DIMENSION DESCRIPTION	VFSL30FP Dimensions in Inches
A1	The maximum height of fireplace face	17-7/8
A2	The maximum height of decorative wrap	20
B1	The maximum width of the fireplace face	30-1/4
B2	The maximum width of decorative wrap	35
C1	The maximum depth of the fireplace	5-1/2
C2	The maximum depth decorative wrap	4-1/2
D	The height of the fireplace opening	11-3/4
E	The width of the fireplace opening	28-3/8
F	The interior depth of the fireplace (not shown)	4-3/16
K1	Height from the bottom of the fireplace to the gas line access	2-1/16
K2	Height from the bottom of the decorative wrap to the gas line access	2-1/16
N	Glass panel height (not shown) in fireplace	2
O	Glass panel width (not shown) in fireplace	27-1/2
Q	Distance from floor to fireplace opening	4-1/16
T	Opening lip of fireplace	9/16
U1	Height to electrical access of fireplace	1-1/16
U2	Height to electrical access of decorative wrap	1-1/16
V1	Distance from right side of fireplace to 120V access	1
V2	Distance from right side of fireplace to low-voltage access	3-1/16
V3	Distance from right side of decorative wrap to 120V access	3-9/16
V4	Distance from right side of decorative wrap to low voltage access	5-5/8
W1	Distance from left side of fireplace to gas access	2-5/8
W2	Distance from left side of decorative wrap to gas access	5-1/4

SURFACE MOUNTED FIREPLACE INSTALLATION

Provided Materials:

- Fireplace
- Battery Pack with 10-ft extension wire
- (4) AA Batteries
- AC Power Adaptor
- Gas Flexline
- Glass Panel
- (2) Cord Grip
- (2) Wire Nut
- Snap-in Receptacle
- ON/OFF Switch with 10-ft extension wire and cover (or other control accessory - sold separately)

Required Materials - Not Provided:

- Decorative Front (Sold Separately, contact your Empire Dealer)
- Decorative Wrap (Sold Separately, contact your Empire Dealer)
- Shut-Off Valve
- (2) Electrical Junction Boxes (external)
- Junction Box Cover (external)
- 120V Wire
- Gas Piping
- (4) 2-inch Cabinet Drywall Screw

Tools Needed:

- Level
- Drill/Phillips Screwdriver
- Wrenches
- Leak Detection Liquid
- Tape Measure

DANGER

This fireplace must be installed by a dealer or certified National Fireplace Institute technician. A professional will understand the requirements for gas, electrical, and framing needs for this installation.

Step 1: Find location for fireplace and install decorative wrap.

1. Surface-mounted installation means that the fireplace will be completely outside of the wall. In selecting a location, be cautious of electrical wires, air ducts, water pipes, cold air returns, etc. that may make gas line or electric installation difficult.
2. See Clearances to Combustibles, pages 43 - 44.
3. Once the location has been found, arrange for gas lines to run to the fireplace. All gas lines must be installed by a qualified installer. A shut-off valve must be included in the gas line installation. Follow local codes for installing the gas line and shutoff valve.
4. Arrange for a 120V line to run to the right of the fireplace.
5. To ensure the proper location of the gas line and electrical line, install the decorative wrap. **See Figure 4.**
 - a. Locate two studs behind the decorative wrap.
 - b. Start one cabinet screw into a stud on the top set of holes, but leave screw loose. Place the level under the hook and level the wrap. Insert the second cabinet screw into the other stud on the top set of holes. Tighten both screws.
 - c. Place the level on the side of the wrap along the rear wall. When the side is plumb, insert two cabinet screws into studs in the bottom set of mounting holes.
 - d. Test the squareness of the wrap by measuring the diagonals. The diagonal distances must match.

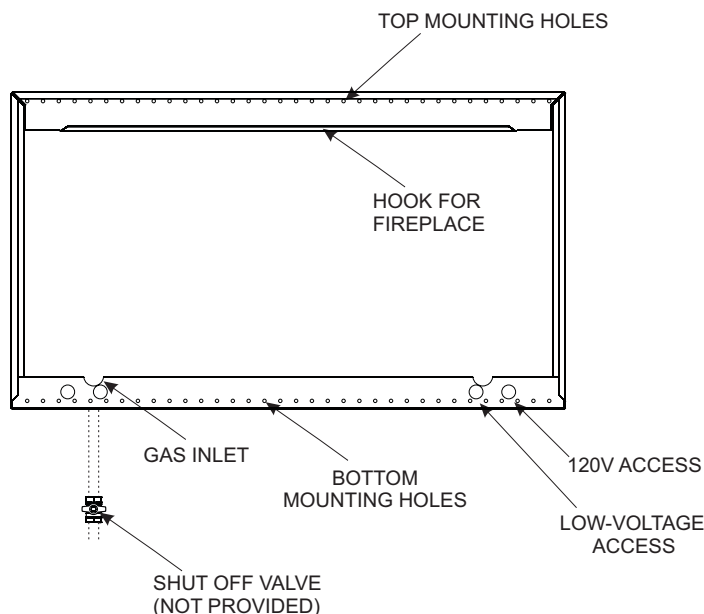


Figure 4

6. The decorative wrap can be used as a template for locating the gas inlet and wiring locations.
7. Bring gas line with shutoff valve located outside of fireplace and 120V power to the locations indicated above. Gas line must be installed by a qualified installer.

NOTICE for this application only: The battery back-up may be placed inside the decorative wrap outside of the fireplace's right side. For this type of installation, only one junction box and switch extension wire harness is required.

SURFACE MOUNTED FIREPLACE INSTALLATION

8. Run extension wire harness(es) from opening to junction box(es) (not provided) outside of the fireplace. One junction box is for the switch (or other control). The other junction box is for the battery pack and will require a cover. Extension wires are 10-ft in length and must connect to battery pack using the connector end with side walls. Do not extend wires beyond the 10 feet provided as this will cause the controls to malfunction. **See Figure 5.**

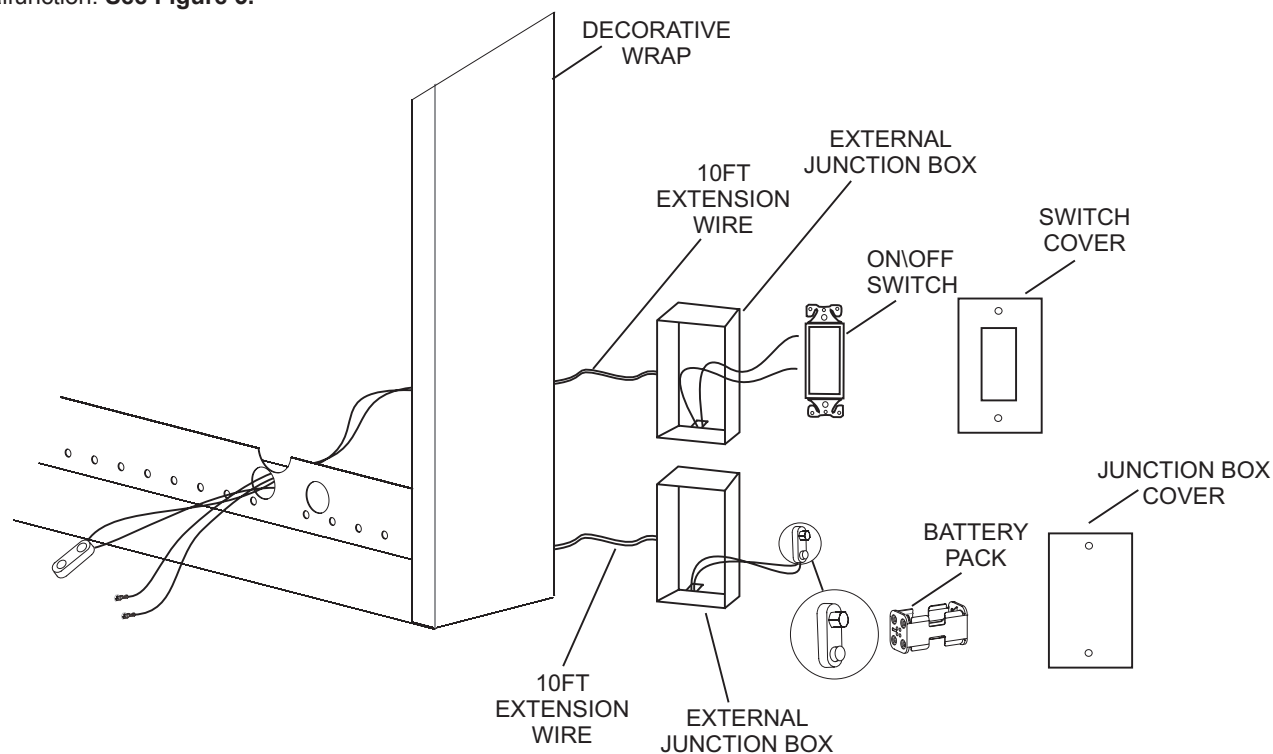


Figure 5

SURFACE MOUNTED FIREPLACE INSTALLATION

Step 2: Prepare Fireplace

1. Remove the screw securing the standoff on top of the fireplace. Discard both the screw and the standoff; they are not used in this installation.
2. The glass panel is wrapped in cardboard and shipped in the space above the fireplace opening. Locate glass panel, and set aside in a safe location.
3. Remove screen by lifting slightly and pulling out. Remove contents above burner assembly. **See Figure 6.**

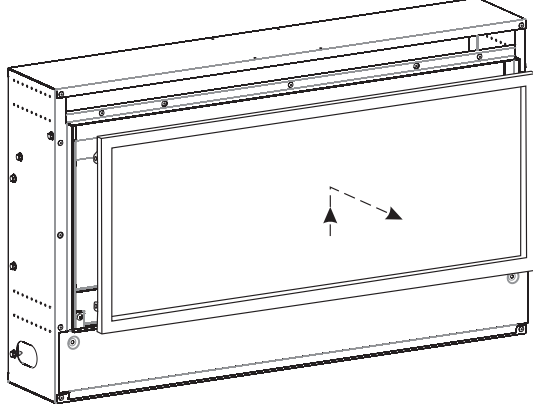


Figure 6

4. Remove screws at "E". Remove the bottom panel by lifting and set aside in a safe location. **See Figure 7.**
5. Remove screws at "F". Remove burner assembly and set aside in a safe location. **See Figure 7.**

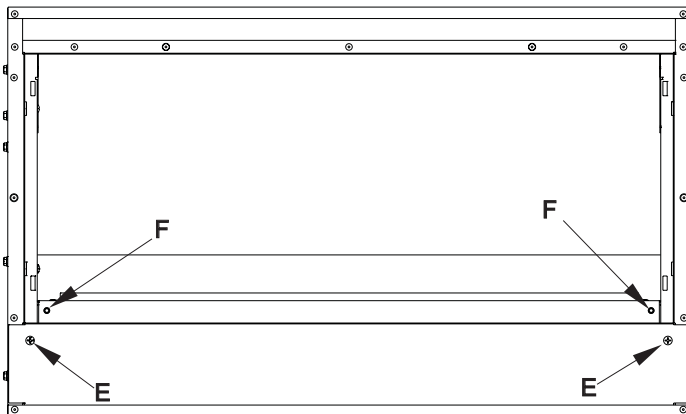


Figure 7

6. Remove junction box on right by removing the screw securing it to the fireplace. **See Figure 8.**

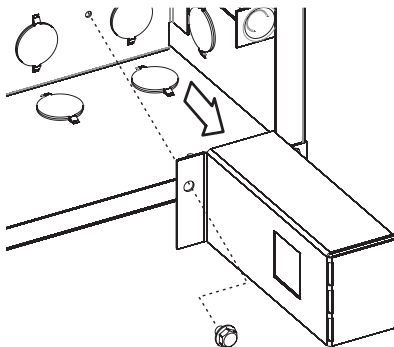


Figure 8

7. Remove the knockouts in the back of the fireplace only. If using battery pack inside of decorative wrapper, open top knockout on the side of the fireplace. **See Figure 9.**

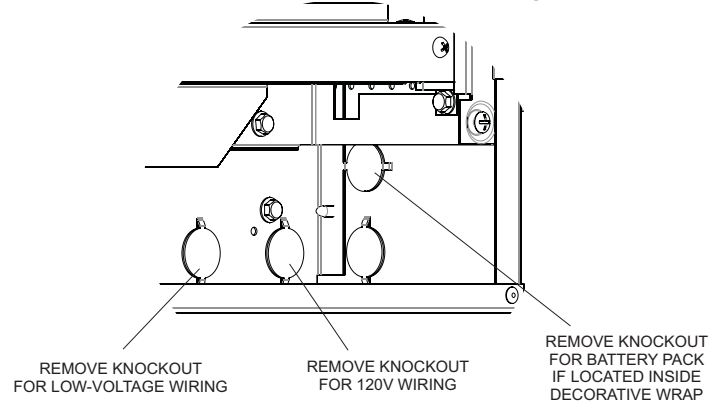


Figure 9

8. Locate snap-in receptacle and snap into junction box.
9. Wire the junction box. **See Figure 66, page 50.**

Step 3: Install the Fireplace

1. Lift fireplace and hook top lip onto wrapper hook. Let fireplace bottom swing into wrap. Carefully adjust any wiring that may get into the path of the fireplace through the corresponding hole. **See Figure 10.**

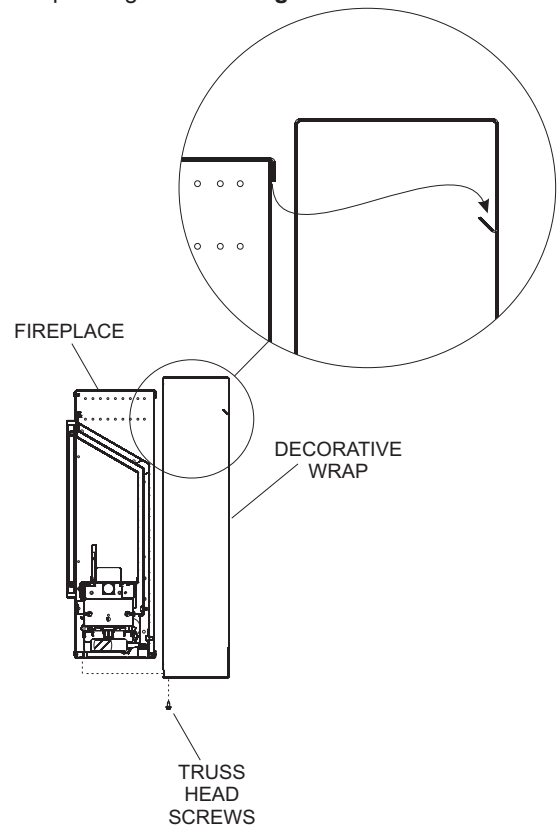


Figure 10

2. Insert two truss-head screws (provided with the decorative wrap kit) through the bottom of the decorative wrap and into the bottom of the fireplace.
3. Connect the flexline to the gas line.

SURFACE MOUNTED FIREPLACE INSTALLATION

4. Connect battery pack extension wire to connection inside fireplace.
5. Connect the green and white wires in fireplace to the control extension wires. Snap cord grip inside of fireplace.
6. Place cord grip around both extension wire harnesses.
7. Run control extension wire to external junction box.
8. Run battery pack wiring to either external junction box or to location inside decorative wrap.
9. Run 120V power line to fireplace. Place a snap-in cord grip over the 120V power line to receptacle in internal junction box. Snap cord grip inside of fireplace. Use wire nuts to join 120V power line. **See Figure 66**, page 50. Re-attach internal junction box inside fireplace that was removed earlier in the installation.
10. Plug power adaptor into receptacle in internal junction box. Connect Power Adaptor terminal into its receiver on the right of the burner assembly. **See Figure 11**.

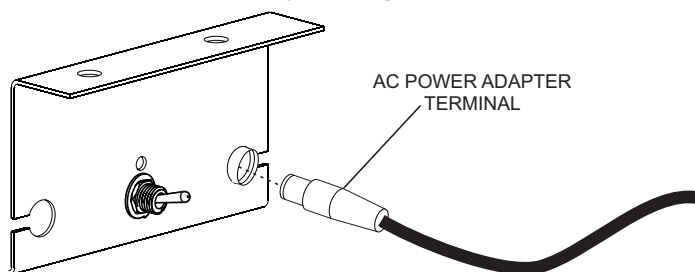


Figure 11

11. Insert four AA batteries to the battery pack. Place battery pack inside external junction box (or inside the decorative wrap) and attach cover.
12. Connect On/Off switch (or optional control) to wiring, connect extension wire harness and battery pack in external junction box and attach switch (or optional control) to junction box. See IP Wiring on page 49 for wiring optional control to green and white wires in fireplace.
13. Connect gas flexline to burner assembly. **See Figures 12 and 13** for routing the flexline.

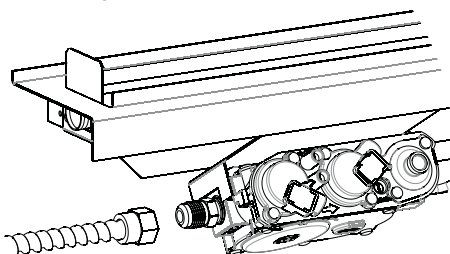
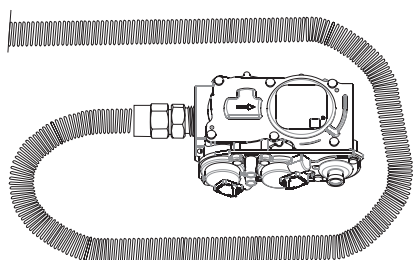


Figure 12



TOP VIEW

Figure 13

14. Turn gas on and test for leaks at gas inlet.
15. Place burner assembly inside fireplace and replace the two truss-head screws ("F" in **Figure 7**).
16. Verify desired pilot selector switch position. See page 48.
17. Install glass panel in front of burner as shown in **Figures 14 and 15**. Place one end into slot inside the fireplace as shown in **Figure 14**. Move other end of glass into fireplace opening and into slot on other side of fireplace. Move glass panel from side to side until it falls in place.

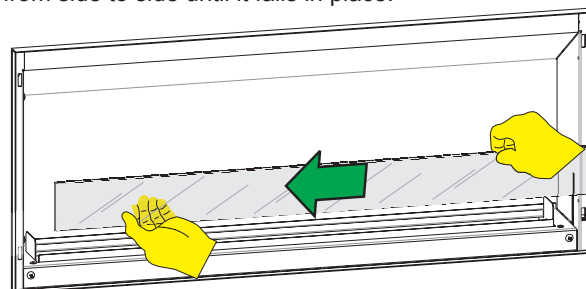


Figure 14

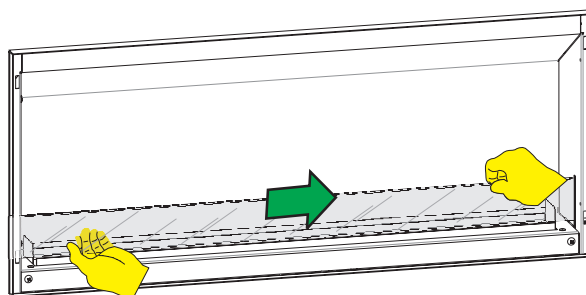


Figure 15

18. If using optional remote, follow the procedures in the remote instructions to enable receiver and remote to communicate.
19. Turn on the burner. See Lighting Instructions, Page 46.
20. Test for leaks. Turn fireplace off. Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. Testing for leaks on all exposed connections should be done with leak test solution or a soap solution. After testing is complete, all solution should be cleaned off. On unexposed connections, a pressure test should be made.

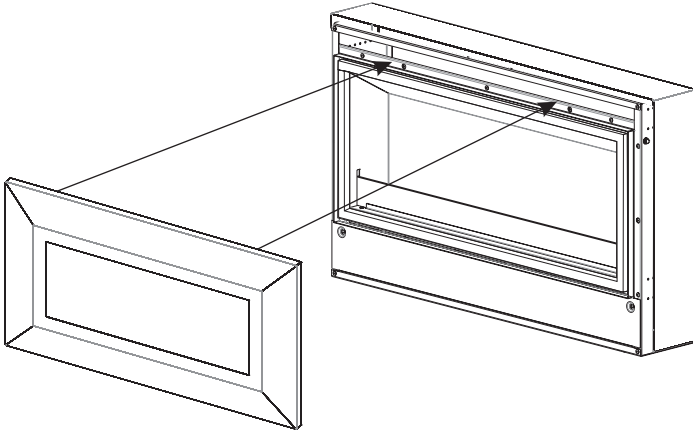
⚠ WARNING

Never use an exposed flame to check for leaks. See Gas Supply on page 42.

21. Ensure the wire harness is away from the front of the fireplace and not in contact with screws or sharp edges.
22. Replace bottom panel and re-insert two black, truss-head screws ("E" in **Figure 7**).
23. Replace screen making certain all four clips catch in fireplace slots.

SURFACE MOUNTED FIREPLACE INSTALLATION

24. Install decorative front by inserting hook on the front above the top opening in the fireplace. Verify that the decorative front is level and fully seated. **See Figure 16.**

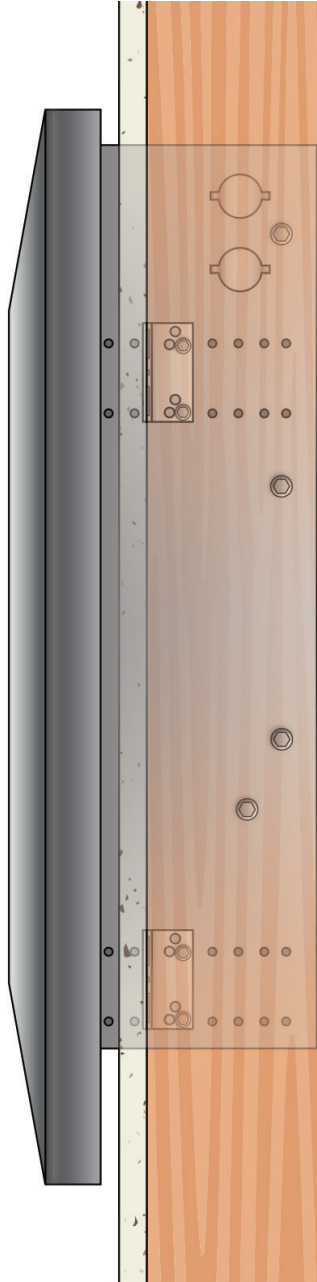


Note: Miter Decorative Front Shown
Figure 16

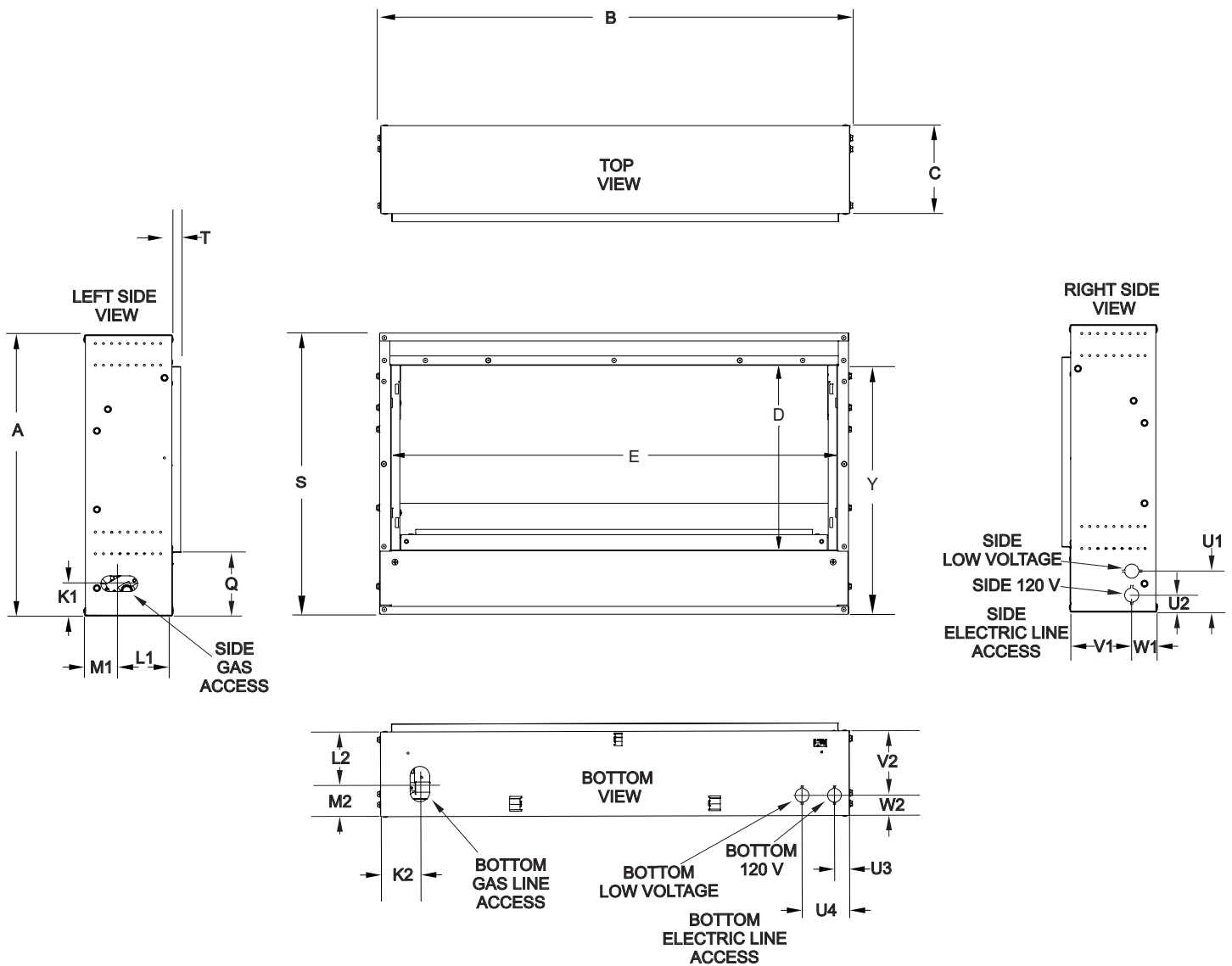
Notice for Finishing with Paint

Use a coating designed for 300°F environments and follow the manufacturer's instructions for surface preparation, application and curing. Heat from the fireplace may cause incorrectly applied coatings to fail or discolor. Light colors may show some discoloration. Contact paint manufacturer for application questions.

PARTIALLY RECESSED FIREPLACE



PARTIALLY RECESSED FIREPLACE DIMENSIONS



PARTIALLY RECESSED FIREPLACE DIMENSIONS

INDEX LETTER	DIMENSION DESCRIPTION	DIMENSIONS IN INCHES
A	The maximum height of the fireplace face	17-7/8
B	The maximum width of the fireplace face (excluding nailing flanges)	30-1/4
C	The maximum depth of the fireplace	5-1/2
D	The height of the fireplace opening	11-3/4
E	The width of the fireplace opening	28-3/8
F	The interior depth of the fireplace (not shown)	4-3/16
K1	Height from bottom of the fireplace to the side gas line access	2-1/16
K2	Distance from side of fireplace to bottom gas line access	2-11/16
L1	Depth from front of the fireplace to side gas line access	3-5/16
L2	Depth from front of the fireplace to bottom gas line access	3-5/16
M1	Depth from rear of fireplace to side gas line access	2-3/16
M2	Depth from rear of fireplace to bottom gas line access	2-3/16
N	Glass panel height (not shown) in fireplace	2
O	Glass panel width (not shown) in fireplace	27-1/2
Q	Distance from fireplace bottom to fireplace access	4-1/16
S	Overall height to top plate	17-7/8
T	Opening lip of fireplace	9/16
U1	Height to side low voltage electrical line access	2-1/2
U2	Height to side 120V electrical line access	1-1/16
U3	Distance from side of fireplace to 120V access on bottom	1-1/8
U4	Distance from side of fireplace to low voltage access on bottom	3-3/16
V1	Depth from front of fireplace to side electrical line access	3-7/8
V2	Depth from front of fireplace to bottom electrical line access	4-3/16
W1	Depth from rear of fireplace to side electrical line access	1-5/8
W2	Depth from rear of fireplace to bottom electrical line access	1-1/4
Y	Distance from bottom of fireplace to top of opening	15-7/8

PARTIALLY RECESSED FIREPLACE INSTALLATION

Provided Materials:

- Fireplace
- Glass Panel
- Battery Pack with 10-ft extension wire
- Top Non-Combustible Board
- Gas Flexline
- ON/OFF Switch with 10-ft extension wire and cover (or other control accessory - sold separately, contact your Empire Dealer)
- Snap-in Receptacle
- (4) AA Batteries
- AC Power Adaptor
- (2) Cord Grip
- (2) Wire Nut
- (12) 1-1/4 Drywall Screws for non-combustible board and nailing flanges
- (8) #10 Hex Screws
- (4) Nailing Flange

Required Materials - Not Provided:

- Decorative Front (Sold Separately, contact your Empire Dealer)
- Shut-off valve
- (2) Electrical junction boxes (external)
- 120V wire
- Gas piping
- Junction Box Cover (for battery pack)
- Paper Drywall Tape
- Fast-set Drywall Joint Compound Finish Mud

Tools Needed:

- Level
- Drill/Phillips Screwdriver
- Wrenches
- Leak Detection Liquid
- Tape Measure

⚠ DANGER

This fireplace must be installed by a dealer or certified National Fireplace Institute technician. A professional will understand the requirements for gas, electrical, and framing needs for this installation.

Partially Recessed installation of this fireplace involves installing the fireplace into a framed-in enclosure. **A framed-in enclosure is an enclosure that does not allow drafts through the firebox from the top, bottom, sides or rear. These drafts could cause the flame to roll back producing soot or a poor flame pattern. Follow the framing information in Figure 18.**

The fireplace should be installed by your dealer or by a certified National Fireplace Institute technician. A professional installer will understand the structural requirements and have access to local building codes. Because installing the fireplace requires cutting out one or more studs inside the wall, your installer must first determine whether the wall is load bearing. Installing this fireplace in a load-bearing wall will require opening the wall beyond the width of the fireplace to add structural framing and to route the gas line and wiring.

Attention: Directions are for non-load bearing walls. For load bearing walls, consult local codes.

STEP 1: Determine location for fireplace and prepare wall.

1. Partially recessed installation means that the fireplace will be both inside the wall and extend from the wall at least 2 inches. An application would be a 2 x 4 framed wall. For a 2 x 4 wall, the fireplace will be able to go back to the wall board behind the fireplace. Before opening a wall, make sure there are no electrical wires, air ducts, water pipes, cold air returns, etc. inside the wall. This fireplace will fit between two 16-inch stud spans. **See Figure 18.**

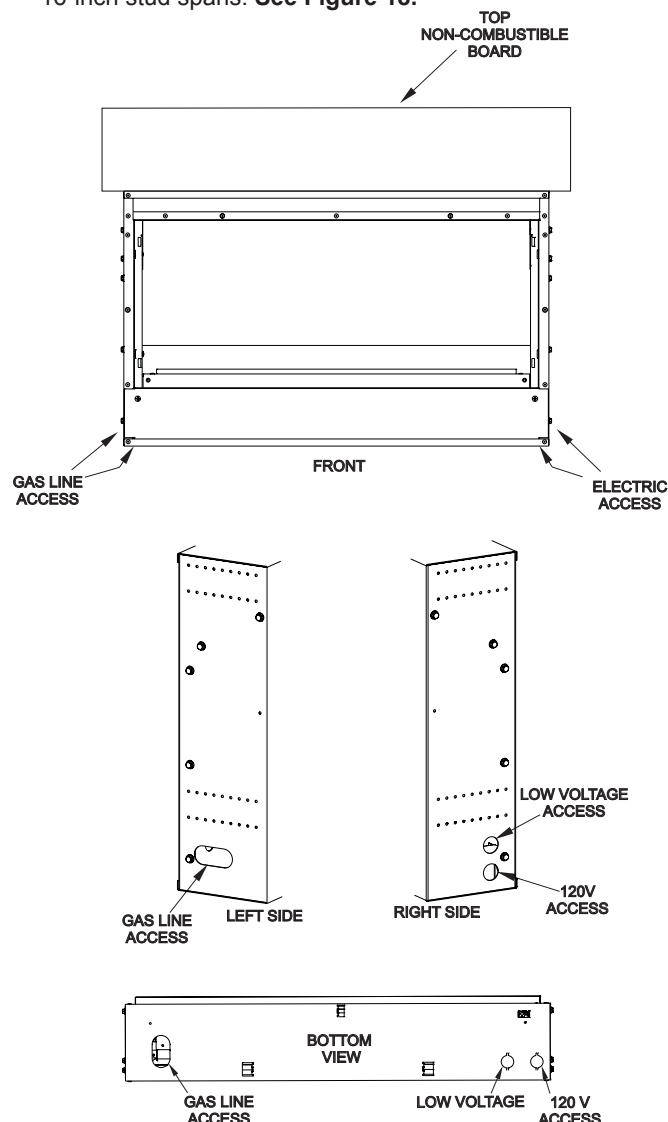
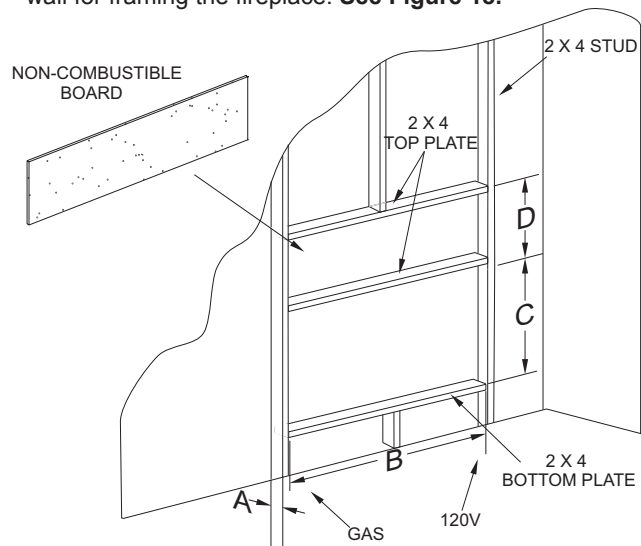


Figure 17

2. See Clearances to Combustibles on pages 43 - 44.

PARTIALLY RECESSED FIREPLACE INSTALLATION

- Once you determine the location, and have verified the wall cavity is free of ducts, pipes, and wires, cut an opening in the wall for framing the fireplace. **See Figure 18.**



Dimensions (in inches)
A = 3-1/2
B = 30-3/4"
C = 18
D = 14

Figure 18

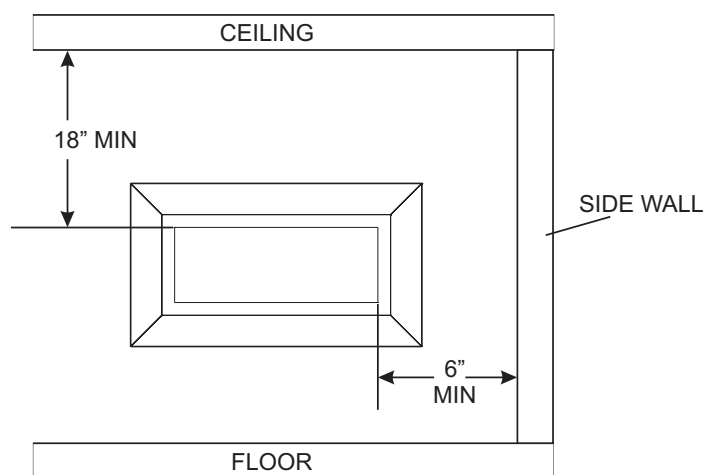


Figure 19 - Ceiling Clearance Illustration

⚠ WARNING

Do not build alcoves or other inset features into the wall above the framed-in fireplace.

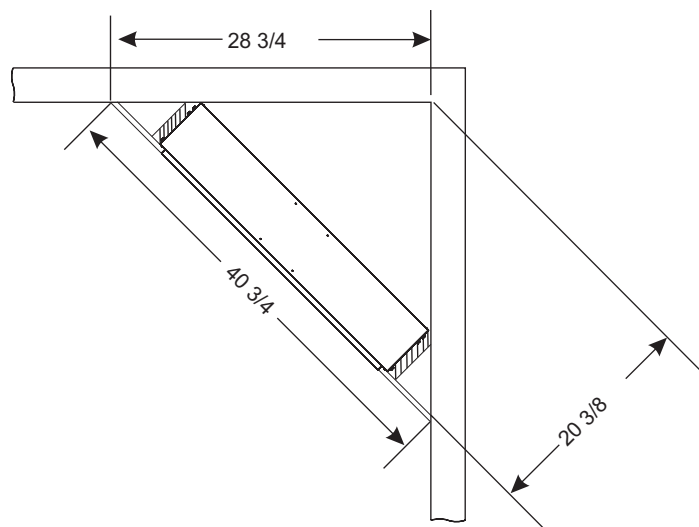


Figure 20 - Corner Clearances Illustration

- Place a 2 x 4 top plate over where the fireplace will sit and a 2 x 4 bottom plate under that will support the fireplace. Verify plates are level.
- Place a 2 x 4 to support top of non-combustible board.

STEP 2: Prepare the fireplace

- Remove the screw securing the standoff on top of the fireplace. Discard both the screw and the standoff; they are not used in this installation type.
- The glass panel is wrapped in cardboard and shipped in the space above the fireplace opening. Locate glass panel and set aside in a safe location.
- Remove screen by lifting slightly. Pull screen out. Remove contents above burner. **See Figure 21.**

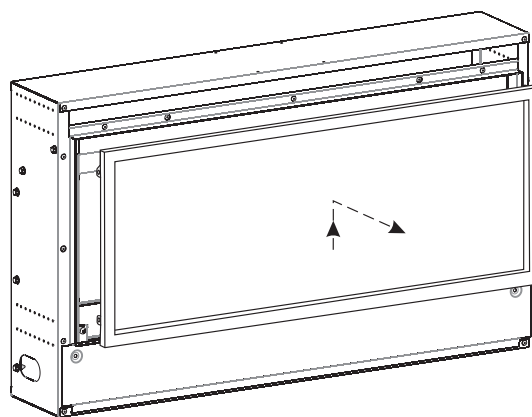


Figure 21

PARTIALLY RECESSED FIREPLACE INSTALLATION

- Nailing flanges are provided. Bend nailing flanges to form right angles. Locate the pairs of holes on the side of the fireplace that will allow the face to be 1-1/2 inches plus the thickness of the finishing material. For example, if using a 1/2-inch board without tile or other facing material covering the board, the distance from the front of the fireplace will be 2 inches. If a covering goes over the board, then add 2 inches to the covering's thickness. Attach nailing flanges to fireplace using hex screws. **See Figures 22 and 23.**

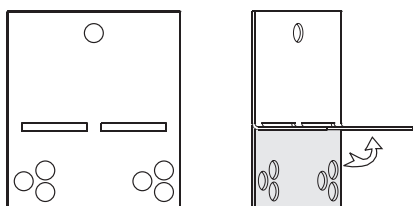


Figure 22

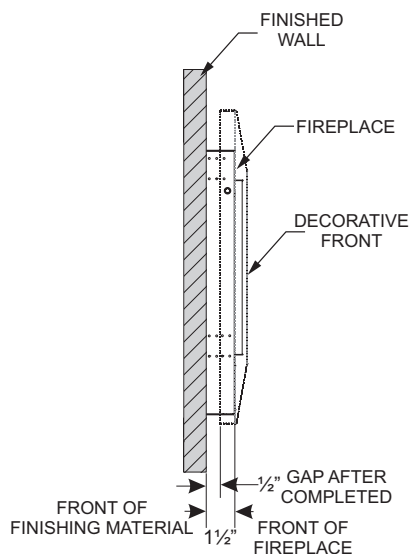


Figure 23

- Remove screws at "E". Remove the bottom panel by lifting and set aside in a safe location. **See Figure 24.**
- Remove screws at "F". Remove burner assembly and set aside in a safe location. **See Figure 24.**

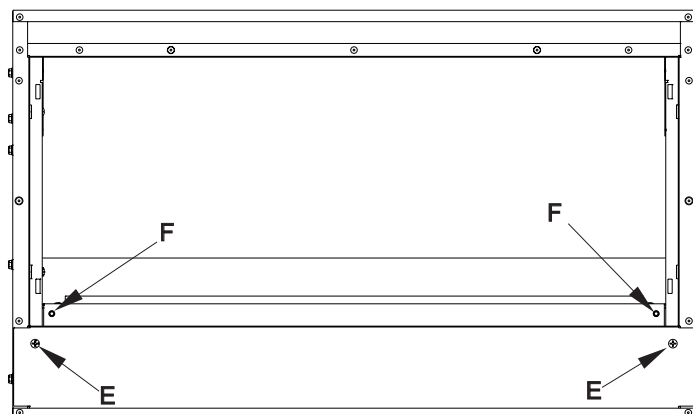


Figure 24

- Remove internal junction box by removing single screw. **See Figure 25.**

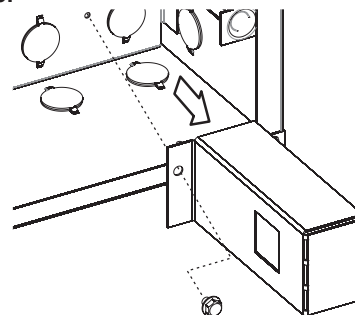


Figure 25

- Remove the knockout required for electrical installation. **See Figure 17, 26 and 27** to determine which knockout that best meets your needs. Leave other knockouts closed. **See Figures 26 and 27.**

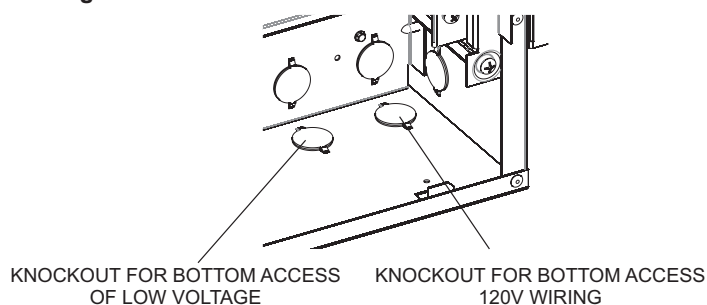


Figure 26

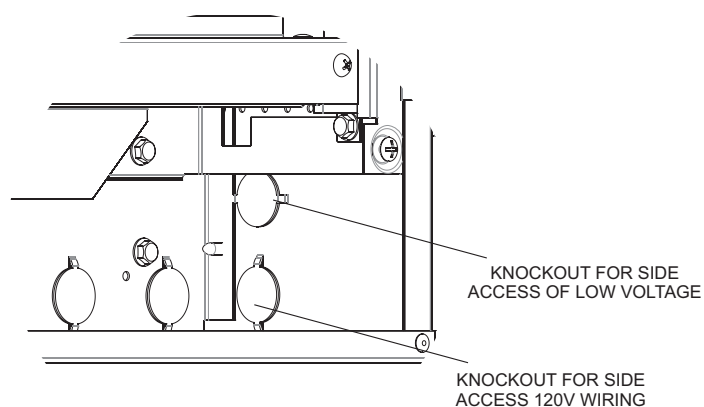


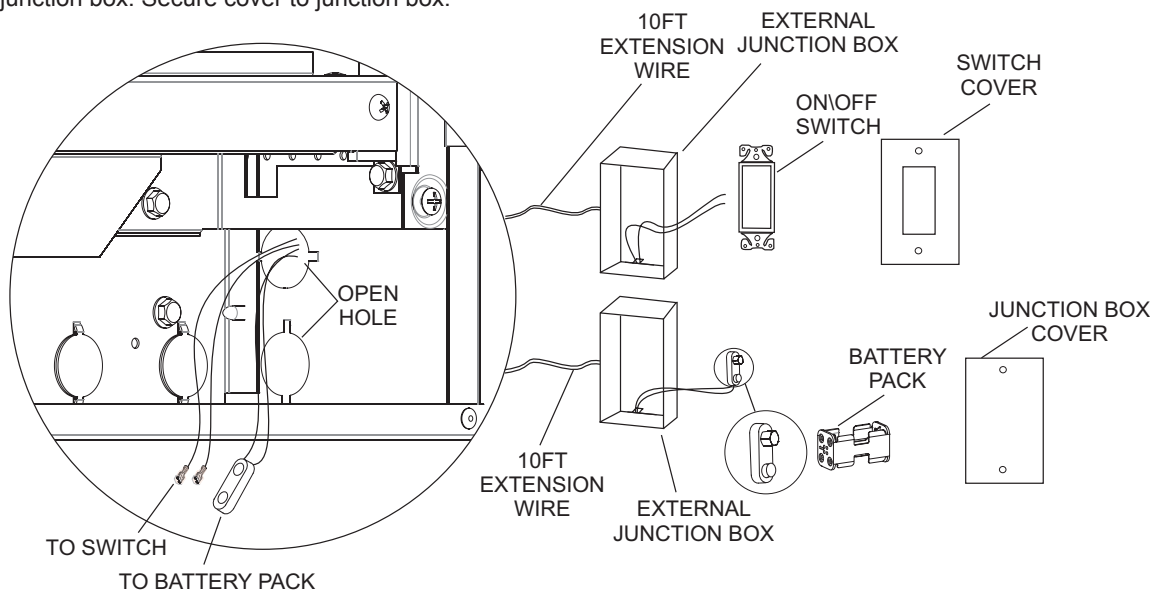
Figure 27

- Locate snap-in receptacle and snap into internal junction box. See Electrical Considerations, **Figure 66**, page 50.

PARTIALLY RECESSED FIREPLACE INSTALLATION

STEP 3: Install the fireplace

1. Install fireplace into wall. Secure to studs with four drywall screws.
2. Have the gas tech run gas supply to the desired gas access location. **See Figure 17**, Page 26.
3. Have the electrician run the 120V wiring to the 120V access location. **See Figure 17**, Page 26.
4. Snap cord grip in place.
5. Wire junction box. **See Figure 66**, Page 50.
6. Re-attach junction box inside fireplace that was removed earlier in the installation.
7. Connect flexline to gas supply line.
8. Run the 10-ft extension wire harness from ON/OFF switch to the external junction box through low-voltage access in fireplace. Connect extension wires to the green and white terminals inside the fireplace.
9. Run the 10-ft extension wire from battery pack to the external junction box through low-voltage access in fireplace. **See Figure 28**. Connect battery pack extension wire to terminals inside fireplace. Snap cord grips in place around both extension wire harnesses.
10. Connect switch extension wires in external junction box to On/Off switch (or optional control). See IP Wiring on page 49 for wiring optional control to green and white wires in fireplace. Secure switch and cover to junction box.
11. Place batteries inside battery pack.
12. Connect battery pack to battery pack extension wire in external junction box. Secure cover to junction box.



Cord grips removed for clarity.

Figure 28

PARTIALLY RECESSED FIREPLACE INSTALLATION

13. Plug power adaptor into plug in junction box on right of fireplace. Connect other end of power adaptor terminal into its receiver on the right of the burner assembly. **See Figure 29.**

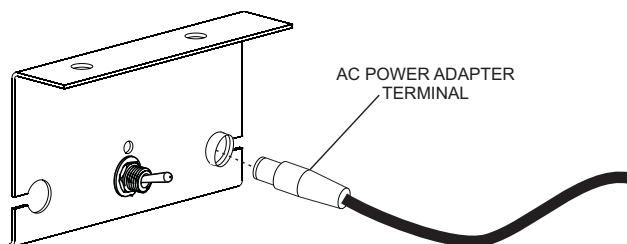


Figure 29

14. Connect gas flexline to burner assembly. When installing the burner assembly. See **Figures 30 and 31** for routing the flexline. Flexline should loop around valve to the right, to the front and back to the valve inlet.

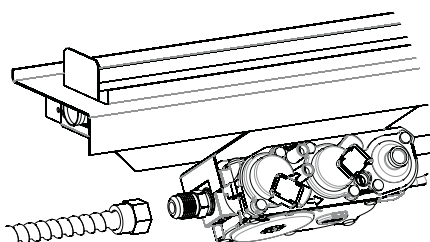
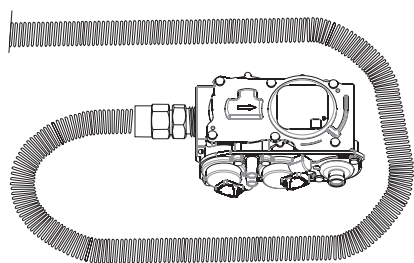


Figure 30



TOP VIEW
Figure 31

15. Turn gas on and test for leaks at gas inlet. Tighten any that leak.
16. Place burner assembly inside fireplace and replace screws removed earlier ("F" in **Figure 24**).
17. Verify desired pilot selector switch position. See page 48.

18. Install glass panel in front of burner as shown in **Figures 32 and 33**. Place one end into slot inside the fireplace as shown in **Figure 32**. Move other end of glass into fireplace opening and into slot on other side of fireplace. Move glass panel from side to side until it falls in place.

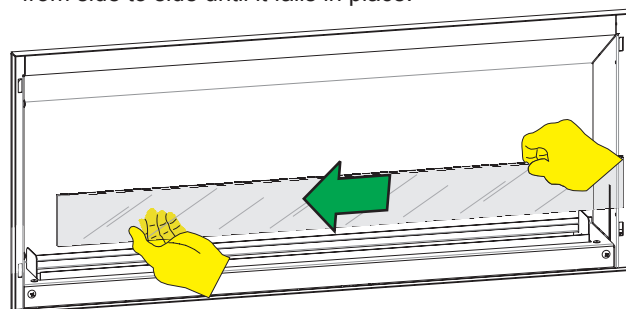


Figure 32

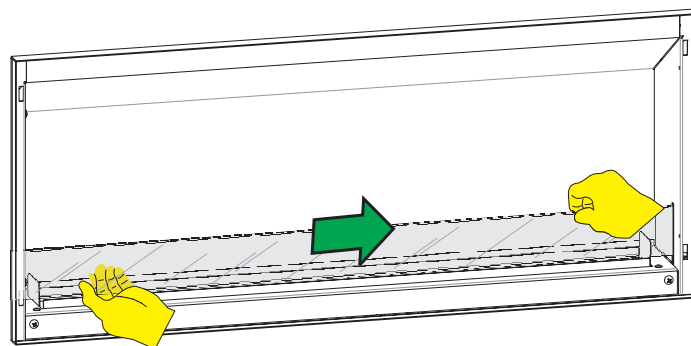


Figure 33

19. If using optional control, follow procedures in remote instructions to enable receiver and remote to communicate.
20. Use the switch (or optional remote) to turn on the burner. See Lighting Instructions, Page 46.
21. Test for leaks. Turn fireplace off. Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. Testing for leaks on all exposed connections should be done with leak test solution or a soap solution. After testing is complete, all solution should be cleaned off. On unexposed connections, a pressure test should be made.

⚠ WARNING

Never use an exposed flame to check for leaks. See Gas Supply on page 42.

22. Ensure the wire harness is away from the front of the fireplace and not in contact with screws or sharp edges.
 23. Replace bottom panel and re-insert two black, truss-head screws ("E" in **Figure 24**).
 24. Attach top non-combustible board above the fireplace with drywall screws.
- Attention: Allow recommended cure times for mud, tile, paint, etc. Do not burn fireplace during this cure time.
25. Replace screen making certain all four clips catch in the fireplace.

PARTIALLY RECESSED FIREPLACE INSTALLATION

26. Install decorative front by inserting hook on the front above the top opening in the fireplace. Verify that the decorative front is level and fully seated. **See Figure 34.**

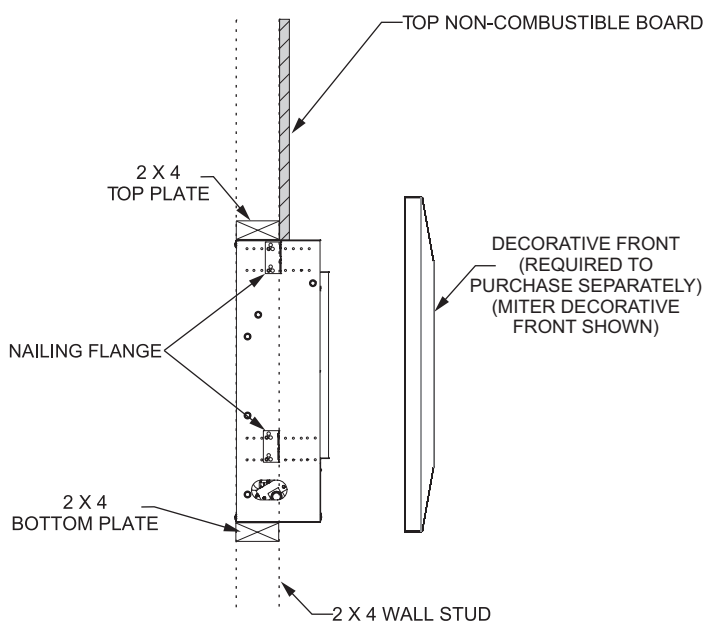


Figure 34

Notice for Finishing Materials

The wall above the fireplace will become hot. Install the non-combustible board supplied with the fireplace before adding paint, tile or stone. Attach tile or other non-combustible products to the fireplace face and to the non-combustible area (Figures 18a and 18b) using adhesives designed for high-temperature applications. Follow the manufacturer's instructions for application and curing times. Heat from the fireplace may cause incorrectly installed materials to fail. If you are painting above the fireplace, use a coating designed for high temperature environments and follow the manufacturer's instructions for surface prep, application and curing. Heat from the fireplace may cause incorrectly applied coatings to fail or discolor.

Notice for Finishing with Tile or Stone

The wall above the fireplace will become hot. Install the non-combustible board supplied with the fireplace. Tile or other non-combustible materials can be applied to the board surrounding the fireplace. All adhesives must be designed for high-temperature applications (minimum rating of 300°F). Follow the manufacturer's instructions for application and curing times. See step 2, # 4 (page 28) for correct placement of the nailing flanges. Heat from the fireplace may cause incorrectly installed materials to fail.

Notice for Finishing with Paint

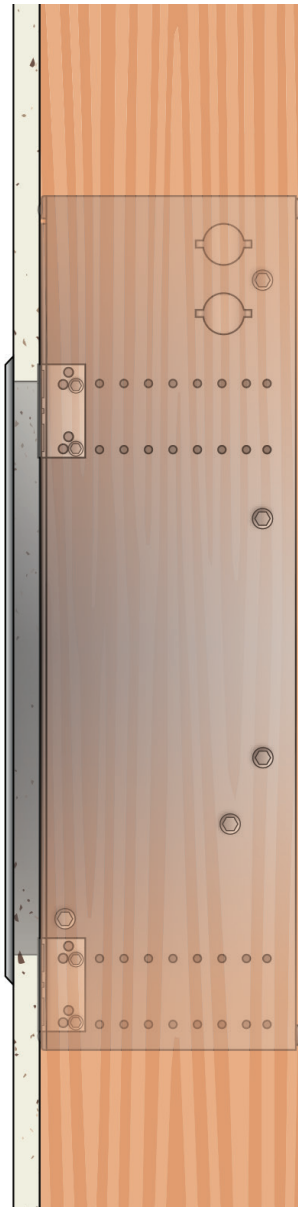
Use a coating designed for 300°F environments and follow the manufacturer's instructions for surface preparation, application and curing. Heat from the fireplace may cause incorrectly applied coatings to fail or discolor. Light colors may show some discoloration. Contact paint manufacturer for application questions.

Non-combustible Board Requirements

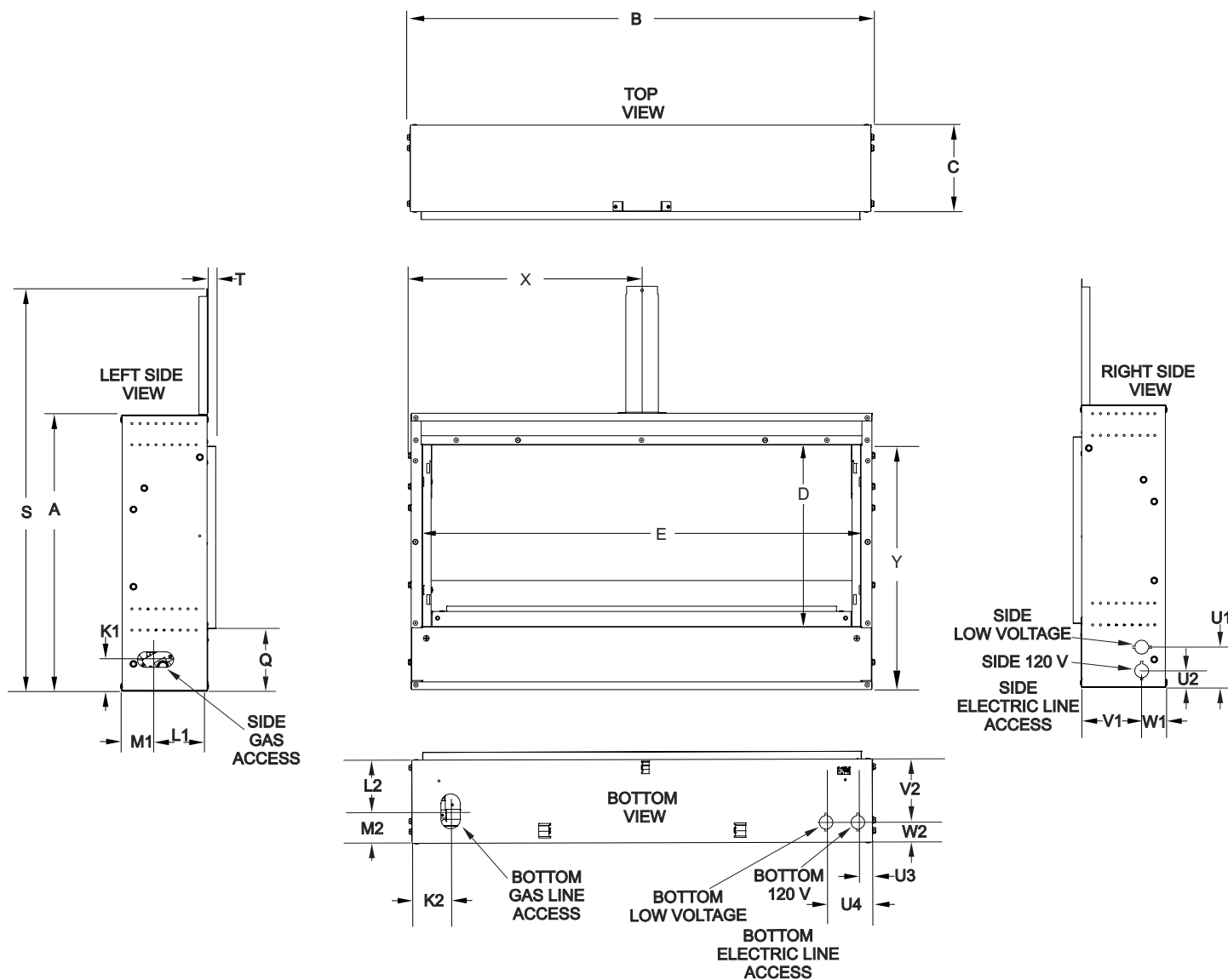
1. Do not attach non-combustible board to the fireplace. Attach non-combustible board only to studs and top plate board.
2. Predrill holes into non-combustible board and counter-sink before installing screws.
3. Use only high-temperature adhesive and high-temperature paints with the non-combustible board (rating of 300°F or higher).

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RECESSED FIREPLACE



RECESSED FIREPLACE DIMENSIONS



RECESSED FIREPLACE DIMENSIONS

INDEX LETTER	DIMENSION DESCRIPTION	DIMENSIONS (IN INCHES)
A	The maximum height of fireplace face (excluding standoffs)	17-7/8
B	The maximum width of the fireplace face (excluding nailing flanges)	30-1/4
C	The maximum depth of the fireplace	5-1/2
D	The height of the fireplace opening	11-3/4
E	The width of the fireplace opening	28-3/8
F	The interior depth of the fireplace (not shown)	4-3/16
K1	Height from bottom of the fireplace to the side gas line access	2-1/16
K2	Distance from side of fireplace to bottom gas line access	2-11/16
L1	Depth from front of the fireplace to side gas line access	3-5/16
L2	Depth from front of the fireplace to bottom gas line access	3-5/16
M1	Depth from rear of fireplace to side gas line access	2-3/16
M2	Depth from rear of fireplace to bottom gas line access	2-3/16
N	Glass panel height in fireplace (not shown)	2
O	Glass panel width in fireplace (not shown)	27-1/2
Q	Distance from fireplace bottom to fireplace opening	4-1/16
S	Overall height to top plate	29-1/8
T	Opening lip of fireplace	9/16
U1	Height to side low voltage electrical line access	2-1/2
U2	Height to side 120V electrical line access	1-1/16
U3	Distance from bottom of fireplace to 120V access	1-1/8
U4	Distance from bottom of fireplace to low voltage access	3-3/16
V1	Depth from front of fireplace to side electrical line access	3-7/8
V2	Depth from front of fireplace to power access	4-3/16
W1	Depth from rear of fireplace to side electrical line access	1-5/8
W2	Depth from rear of fireplace to power access	1-1/4
X	Side of fireplace to center of fireplace	15-1/8
Y	Distance from bottom of fireplace to top of opening	15-7/8

RECESSED FIREPLACE INSTALLATION

Provided Materials:

- Fireplace
- Glass Panel
- (2) Side Non-Combustible Board
- Top Non-Combustible Board
- (4) AA Batteries
- (2) Cord Grip
- Gas Flexline
- Snap-in Receptacle
- (16) 1-1/4 Drywall Screws (for non-combustible board and nailing flanges)
- AC Power Adaptor
- (4) Nailing Flanges
- (2) Wire Nut
- Battery Pack with 10-ft extension wire
- (10) #10 screws
- ON/OFF Switch with 10-ft extension wire (or other control accessory - (Sold Separately, contact your Empire Dealer))

Not Provided Required Materials:

- Shut-Off valve
- (2) Single electrical junction boxes
- Junction box cover
- 120V wire
- Gas piping

Optional Materials:

Decorative Trim (sold separately)

NOTICE: Noncombustible finishing material is limited to 1/2 inch to 1 inch when using optional trim.

Tools Needed:

- Level
- Drill/Phillips Screwdriver
- Wrenches
- Leak Detection Liquid
- Tape Measure
- Paper Drywall Tape
- Fast-set Drywall Joint Compound
- Finish Mud

DANGER

This fireplace must be installed by a dealer or certified National Fireplace Institute technician. A professional will understand the requirements for gas, electrical, and framing needs for this installation.

Built-in installation of this fireplace involves installing the fireplace into a framed-in enclosure. This makes the fireplace window flush with a wall. **A framed-in enclosure is an enclosure that does not allow drafts through the firebox from the top, bottom, sides, or rear. These drafts could cause the flame to roll back producing soot or a poor flame pattern.**

For partially and fully recessed applications, the fireplace should be installed by your dealer or by a certified National Fireplace Institute technician. A professional installer will understand the structural requirements and have access to local building codes. Because installing the fireplace requires cutting out one or more studs inside the wall, your installer must first determine whether the wall is load bearing. Installing this fireplace in a load-bearing wall will require opening the wall beyond the width of the fireplace to add structural framing and to route the gas line and wiring.

Attention: Directions are for non-load bearing walls. For load bearing walls, consult local codes.

STEP 1: Find location for fireplace and prepare wall.

1. Recessed installation means that the fireplace will be inside the wall. An application would be a 2 x 6 wall studs. For a 2 x 6 wall, the fireplace will be able to go back to the wall board behind the fireplace. In selecting a location be cautious of electrical wires, air ducts, water pipes, cold air returns, etc. that may also be inside the wall. This fireplace will fit between two 16-inch stud spans. **See Figure 36.**

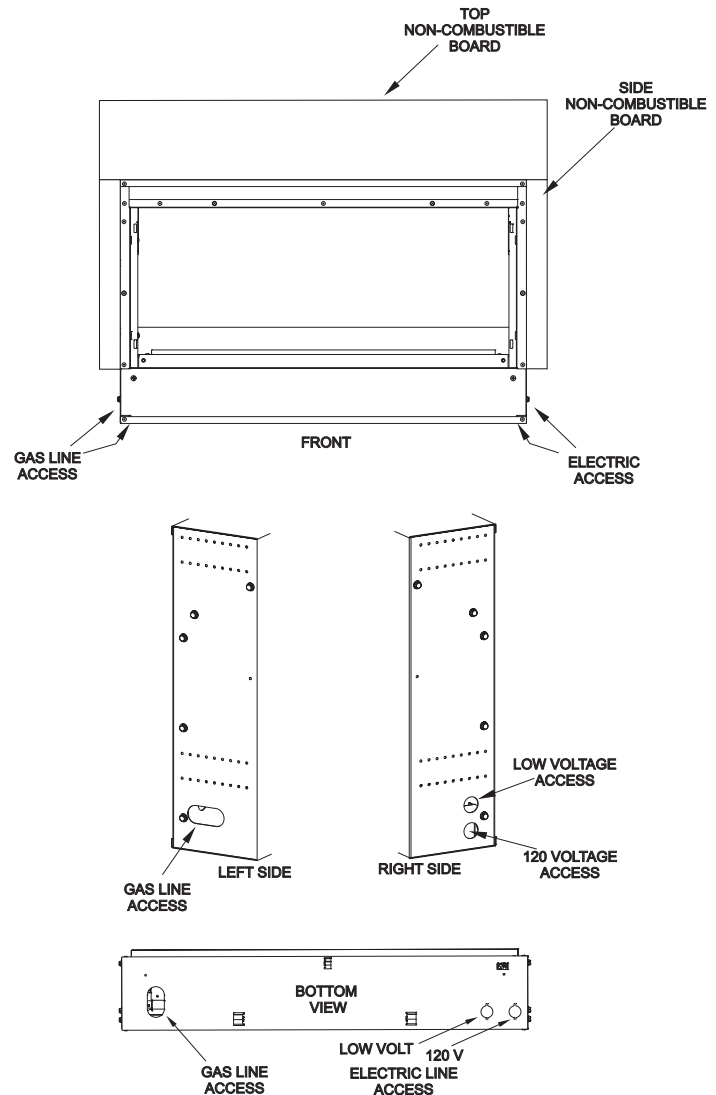
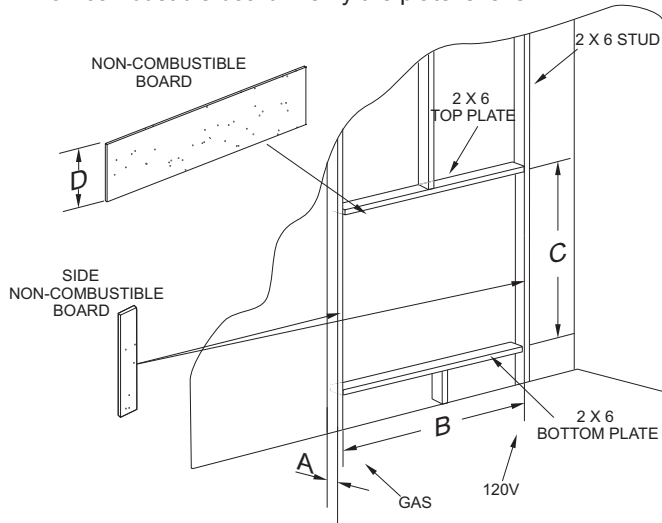


Figure 35

RECESSED FIREPLACE INSTALLATION

2. See Clearances to Combustibles on pages 43 - 44.
3. Once you determine the location, and have verified the wall cavity is free of ducts, pipes, and wires, cut an opening in the wall for framing the fireplace. **See Figure 36.**
4. The framing must support the fireplace. Place a 2 x 6 bottom plate that will support the fireplace. Verify the plate is level.
5. Place a 2 x 6 top plate that will support the top of the non-combustible board. Verify the plate is level.



Dimensions (in inches)
A = 5-1/2
B = 30-3/4
C = 29-1/2
D = 14

Figure 36

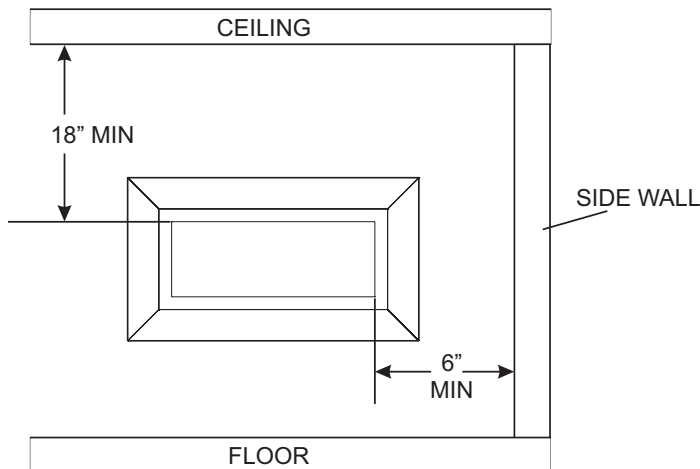


Figure 37 - Ceiling Clearance Illustration

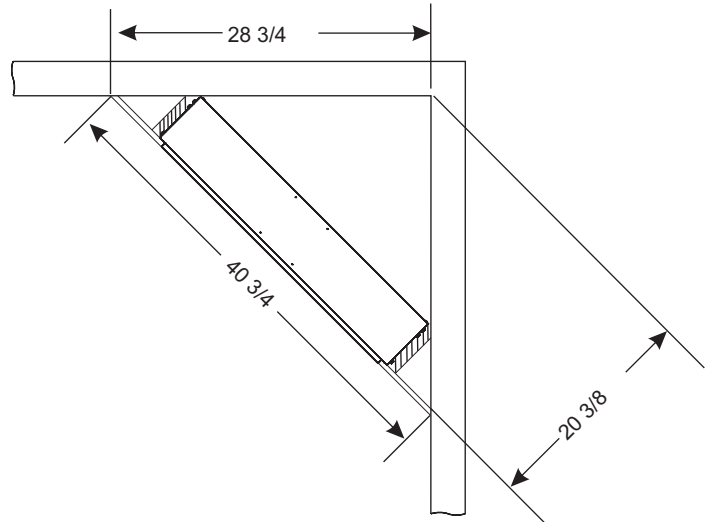


Figure 38 - Corner Clearances Illustration

STEP 2: Prepare fireplace

1. Remove the screw securing the standoff on top of the fireplace. Set the screw and standoff aside in a safe location.
2. The glass panel is wrapped in cardboard and shipped in the space above the fireplace opening. Locate glass panel and set aside in a safe location.
3. Remove screen by lifting slightly. Pull screen out. Remove contents above burner. **See Figure 39.**

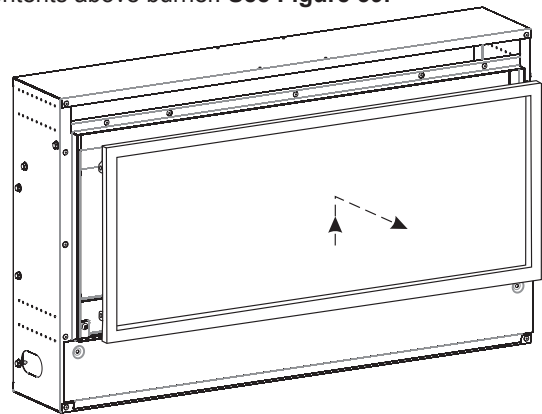


Figure 39

⚠ WARNING

Do not build alcoves or other inset features into the wall above the framed-in fireplace.

RECESSED FIREPLACE INSTALLATION

4. Nailing flanges are provided. The flanges included are flat but easily bend to form a right angle. Locate the pairs of holes on the side of the fireplace that will place the outside of the wall covering at the 1/16-inch past the fireplace opening. See Figure 40.

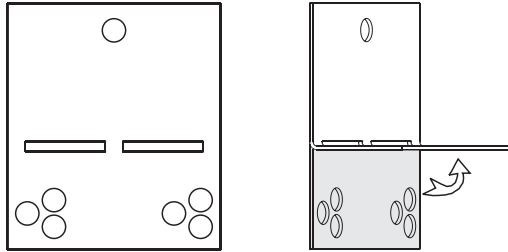


Figure 40

5. Screw nailing flanges into the fireplace with hex screws provided in hardware pack. See Figure 41.

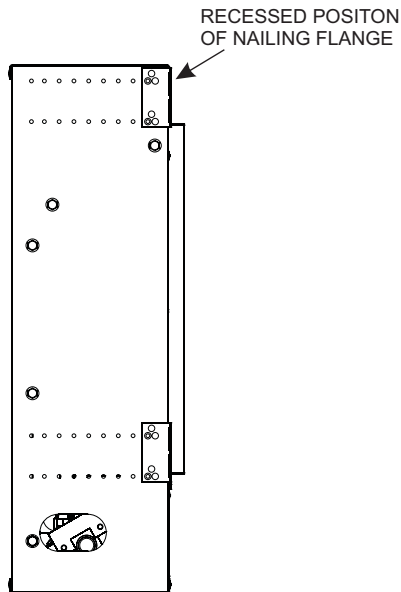


Figure 41

6. Remove screws at "E". Remove bottom of face by lifting and set aside in a safe location. See Figure 42.
7. Remove screws at "F". Remove burner assembly and set aside in a safe location. See Figure 42.

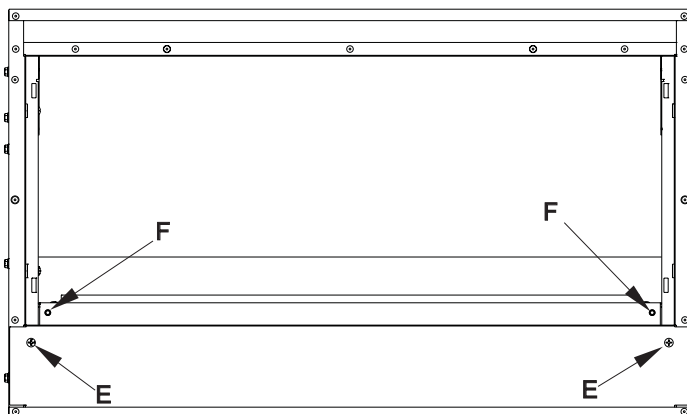


Figure 42

8. Remove junction box on right by removing single screw. See Figure 43.

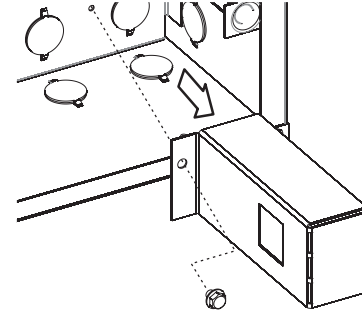


Figure 43

9. Using back and forth action, open the knockouts required for installation. Leave other knockouts closed. See Figures 44 and 45.

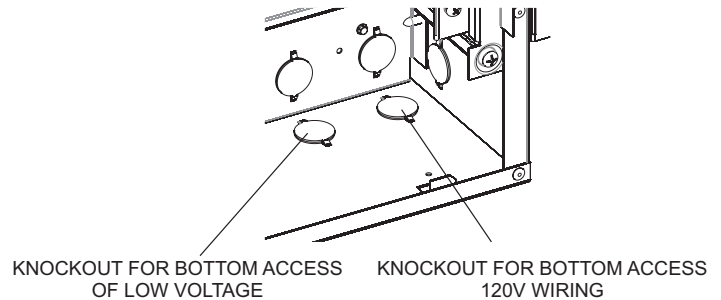


Figure 44

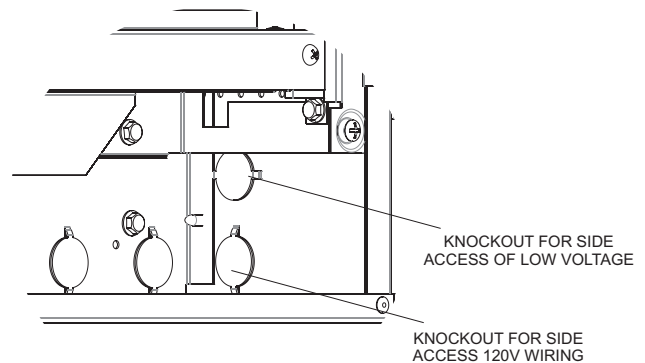


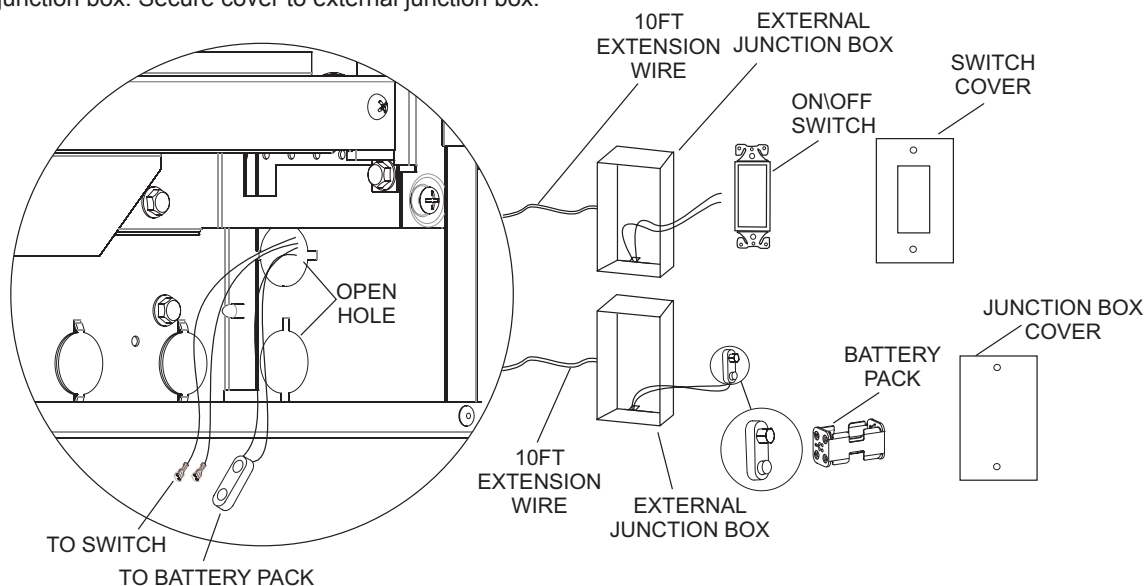
Figure 45

10. Locate snap-in receptacle and snap into junction box. Set aside. See Electrical Considerations - See Figure 66, page 50.
11. Retrieve standoff and install onto top of fireplace by bending bottom tabs and attach with #10 hex screws.

RECESSED FIREPLACE INSTALLATION

STEP 3: Install the fireplace

1. Install the fireplace into the cutout in the wall. Attach to side studs with drywall screws. Attach the top standoff to the top plate with a drywall screw.
2. Have the gas technician run gas supply to the desired gas access location. See **Figure 36**, Page 36.
3. Have the electrician run the 120V wiring to the 120V access location. See **Figure 36**, Page 36.
4. Connect flexline to gas supply line.
5. Run the extension wire harnesses from low-voltage access to the electrical junction boxes (not provided). Extension wires are 10-feet lengths and must connect to the battery pack with the connector having side walls. See **Figure 46**.
6. Run the 10-ft switch extension wires from ON/OFF switch through low-voltage access to external junction box. Connect extension wires to the green and white terminals inside the fireplace. Place cord grip around low-voltage wires and snap into fireplace.
7. Secure battery pack connection wire inside fireplace.
8. Connect extension switch wires in external junction box to On/Off switch (or optional controls). See IP Wiring on page 49 for wiring optional control to green and white wires in fireplace. Secure switch and cover to external junction box.
9. Place batteries inside battery pack.
10. Connect battery pack to battery pack extension wires in external junction box. Secure cover to external junction box.



Cord grips removed for clarity.

Figure 46

RECESSED FIREPLACE INSTALLATION

11. Connect the 120V power line to receptacle in internal junction box. **See Figure 66**, page 50. Re-attach junction box inside of fireplace.
12. Plug power adaptor into receptacle in junction box inside fireplace. Connect power adaptor terminal into its receiver on the right of the burner assembly. **See Figure 47**.

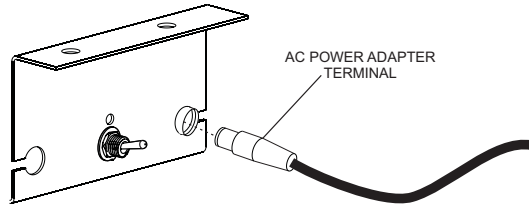


Figure 47

13. Connect gas flexline to burner assembly. When installing the burner assembly, loop the flexline around valve to the right, to the front and back to the valve inlet. **See Figures 48 and 49** for routing the flexline.

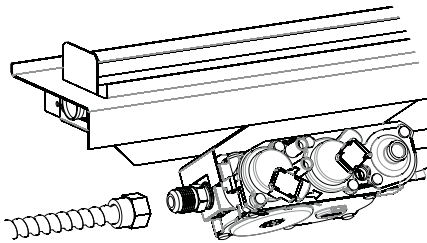
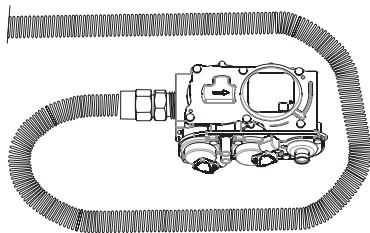


Figure 48



TOP VIEW
Figure 49

14. Turn gas on and test for leaks. Tighten any connection that leak.
15. Place burner assembly inside fireplace and replace screws removed earlier ("F" in **Figure 42**).
16. Verify desired pilot selector switch position. See page 48.

17. Install glass panel in front of burner as shown in **Figures 50 and 51**. Place one end into slot inside the fireplace as shown in **Figure 50**. Move other end of glass into fireplace opening and into slot on other side of fireplace. Move glass panel from side to side until it falls in place.

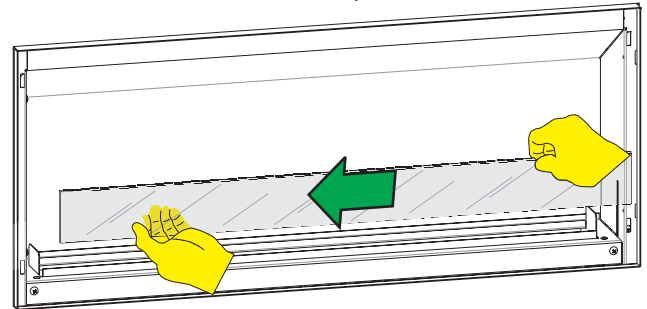


Figure 50

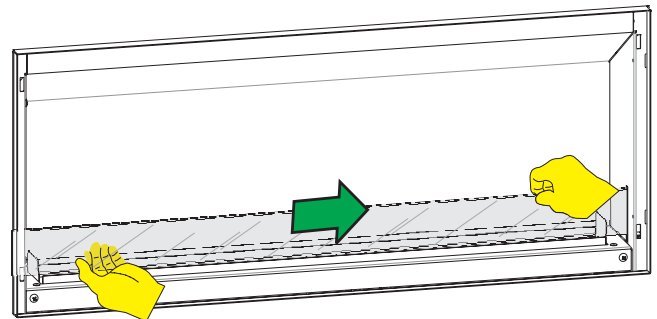


Figure 51

18. If using optional control, follow procedures in remote instructions to enable receiver and remote to communicate.
19. Use the switch (or optional remote) to turn on the burner.
20. See Lighting Instructions, Page 46. Test for leaks. Turn fireplace off. Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. Testing for leaks on all exposed connections should be done with leak test solution or a soap solution. After testing is complete, all solution should be cleaned off. On unexposed connections, a pressure test should be made.

WARNING

Never use an exposed flame to check for leaks. See Gas Supply on page 42.

21. Ensure the wire harness is away from the front of the fireplace and not in contact with screws or sharp edges.
 22. Replace bottom panel and re-insert two black, truss-head screws ("E" in **Figure 42**).
 23. Use drywall screws to attach top non-combustible board above fireplace. **See Figure 36**.
 24. Use drywall screws to attach side non-combustible board on each side of the fireplace. **See Figure 36**.
- Attention: Allow recommended cure times for mud, tile, paint, etc. Do not operate fireplace during this cure time.

RECESSED FIREPLACE INSTALLATION

25. Install optional decorative trim by inserting tabs into the small slots to the left and right of the opening in the fireplace. Insert screw from decorative trim kit into sides of fireplace. Screws will go through slots in the decorative trim tabs.
26. Replace screen making certain all four clips catch in the fireplace.

Optional Drywall Trim for Non-Combustible Surface Installation

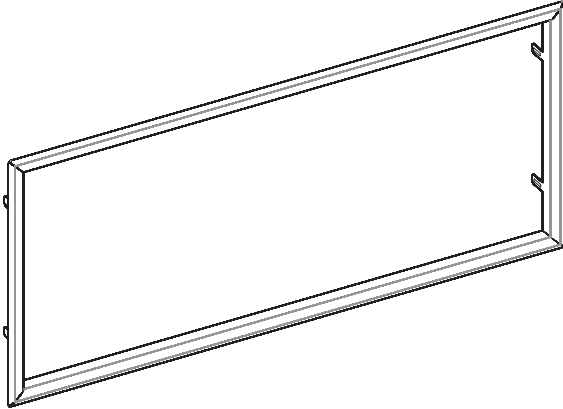


Figure 52

Notice for Finishing Materials

The wall above the fireplace will become hot. Install the non-combustible board supplied with the fireplace before adding paint, tile or stone. Attach tile or other non-combustible products to the fireplace face and to the non-combustible area (Figures 18a and 18b) using adhesives designed for high-temperature applications. Follow the manufacturer's instructions for application and curing times. Heat from the fireplace may cause incorrectly installed materials to fail. If you are painting above the fireplace, use a coating designed for high temperature environments and follow the manufacturer's instructions for surface prep, application and curing. Heat from the fireplace may cause incorrectly applied coatings to fail or discolor.

Notice for Finishing with Tile or Stone

The wall above the fireplace will become hot. Install the non-combustible board supplied with the fireplace. Tile or other non-combustible materials can be applied to the board or face of the fireplace. All adhesives must be designed for high-temperature applications (minimum rating of 300°F). Follow the manufacturer's instructions for application and curing times. See step 2, # 4 (page 28) for correct placement of the nailing flanges. Heat from the fireplace may cause incorrectly installed materials to fail.

Notice for Finishing with Paint

Use a coating designed for 300°F environments and follow the manufacturer's instructions for surface preparation, application and curing. Heat from the fireplace may cause incorrectly applied coatings to fail or discolor. Light colors may show some discoloration. Contact paint manufacturer for application questions.

Non-combustible Board Requirements

1. Do not attach non-combustible board to the fireplace. Attach non-combustible board only to studs and top plate board.
2. Predrill holes into non-combustible board and counter-sink before installing screws.
3. Use only high-temperature adhesive and high-temperature paints with the non-combustible board (adhesive and paints must have a minimum temperature rating of 300°F).

GAS SUPPLY

⚠ CAUTION

Two gas line installations at the same time are prohibited. The access plate to the switching means shall not be opened while the heater is in operation.

The gas pipeline can be brought in through the left side or bottom of the fireplace. A flexline is provided connected to the valve on the left side of the fireplace. **See Figure 4, 17, & 35** for inlet locations. Consult the current National Fuel Gas Code, ANSI Z223.1 CAN/CGA-B149 (.1 or .2) installation code.

RECOMMENDED GAS PIPE DIAMETER

Pipe Length (in feet)	Schedule 40 Pipe Inside Diameter		Tubing, Type L Outside Diameter	
	(in inches)			
	Natural	Propane	Natural	Propane
0 - 10	1/2	3/8	1/2	3/8
11 - 40	1/2	1/2	5/8	1/2
41 - 100	1/2	1/2	3/4	1/2
101 - 150	3/4	1/2	7/8	3/4

⚠ WARNING

Never use plastic pipe for gas line. Check to confirm whether your local codes allow copper tubing or galvanized.

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

The use of the following gas connectors is recommended:

- ANSI Z21.24 Fireplace Connectors of Corrugated Metal Tubing and Fittings.
- ANSI Z21.45 Assembled Flexible Fireplace Connectors of Other Than All-Metal Construction

The above connectors may be used if acceptable by the authority having jurisdiction. The Commonwealth of Massachusetts requires that a flexible fireplace connector cannot exceed 3 feet in length.

FLEXIBLE GAS LINE CONNECTION

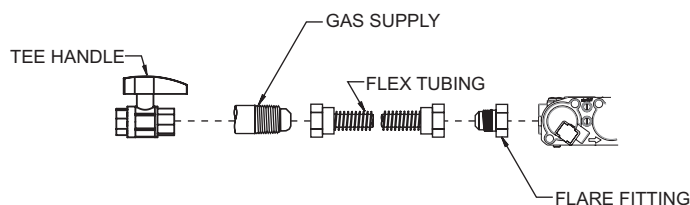


Figure 53

A gas valve and ground joint union should be installed in the gas line upstream of the gas control to aid in servicing. It is required by the National Fuel Gas Code that a drip leg be installed near the gas inlet. **See Figure 54.** This should consist of a vertical length of pipe tee connected into the gas line that is capped on the bottom in which condensation and foreign particles may collect.

Empire recommends a shut-off valve containing a flange and key.

GAS SUPPLY PIPING

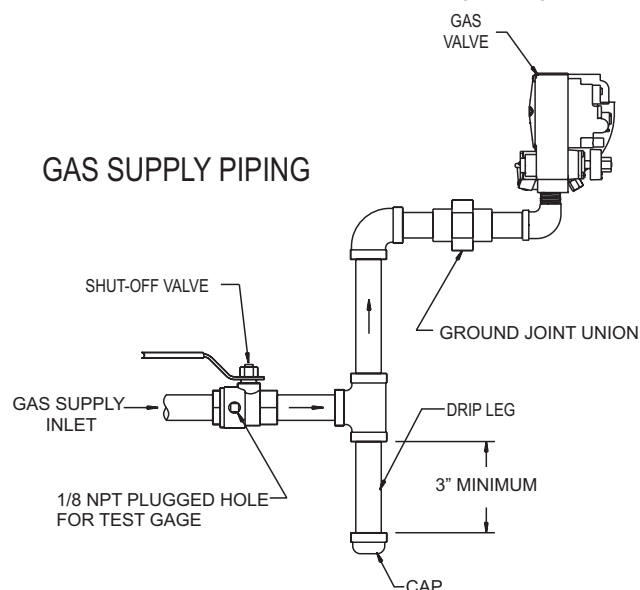


Figure 54

Installing the Main Gas Valve

Each fireplace should have its own manual gas valve located in the vicinity of the unit that can be easily accessed after assembly. Where none exists, or where its size or location is not adequate, contact your local authorized installer for installation or relocation. Compounds used on threaded joints of gas piping shall be resistant to the action of liquefied petroleum gases. The gas lines must be checked for leaks by the installer. Testing for leaks on all exposed connections should be done with leak test solution or a soap solution. After testing is complete, all solution should be cleaned off. On unexposed connections, a pressure test should be made.

⚠ WARNING

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

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

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

⚠ WARNING

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

Shut off valve must be accessible after installation.

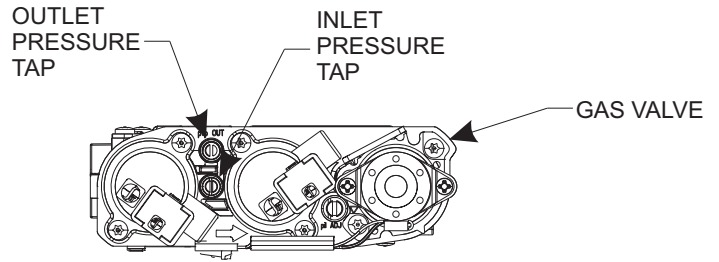
GAS SUPPLY

Checking Manifold Pressure

Natural Gas will have a manifold pressure of approximately 3.5 inches w.c. at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 5.0 inches w.c. for the purpose of input adjustment to a maximum of 10.5 inches w.c.

Propane Gas will have a manifold pressure approximately 10.0 inches w.c. at the pressure regulator outlet with the inlet pressure to the pressure regulator from a minimum of 11.0 inches w.c. for the purpose of input adjustment to a maximum of 13.0 inches w.c.

A test gage connection is located downstream of the gas fireplace pressure regulator for measuring gas pressure. The connection is a 1/8 inch N.P.T. plugged tapping.



COMBUSTIBLE MATERIALS

Combustible Material

Do not attach combustible material to the mantel of your fireplace. This is a fire hazard.

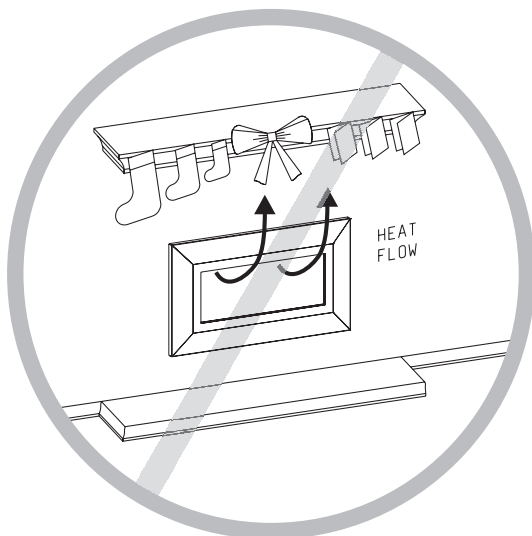


Figure 55

Use non-combustible materials where indicated for the fireplace installation. Non-combustible materials do not ignite or burn as a result of using the fireplace. These include metal, brick, ceramic, concrete, slate, glass, and plaster. Adhesives must be rated for fireplace high temperature applications. Any mechanical fasteners used to install materials must also be non-combustible, including wall anchors and tile spacers. Materials that pass the ASTM E-136 test (Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750C) are considered non-combustible.

Do not allow combustible materials adjacent to or in contact with the fireplace. Combustible materials include wood, compressed paper, plant fibers, or other materials that will burn. These materials are considered combustible even when treated with fire-retardant chemicals.

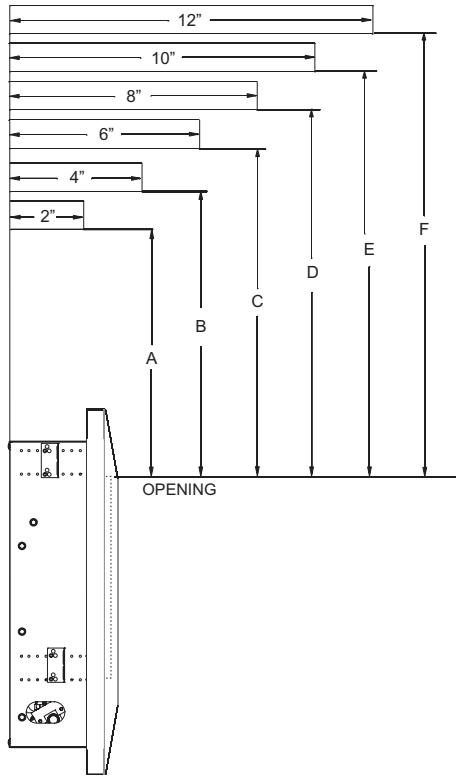
Television Considerations

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

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

If you have a TV above your fireplace, turn off the fireplace and let it cool completely before servicing or touching any buttons on the TV.

MANTEL CLEARANCES



Index Letter	Dimension (in inches)
A	18
B	20
C	22
D	24
E	26
F	28

Attention: Surface mounted installation shown. Mantel clearances are the same for recessed, partially recessed, and surface mounted installations.

Figure 56

The minimum clearance from fireplace opening to combustible materials is 18 inches above the fireplace opening and 6 inches to the side walls.

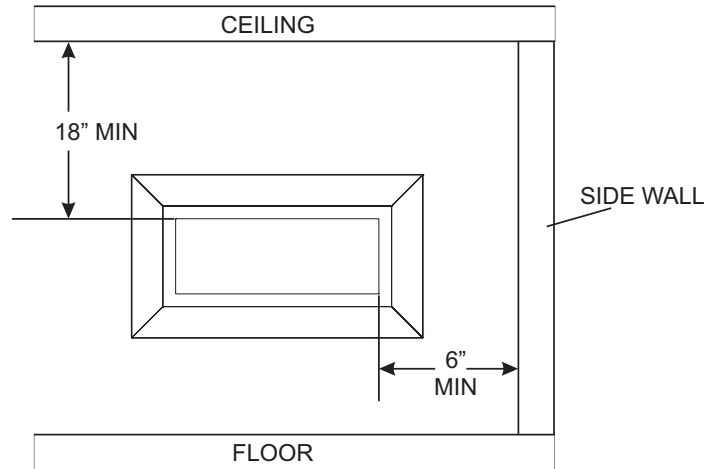


Figure 57 - Ceiling Clearance Illustration

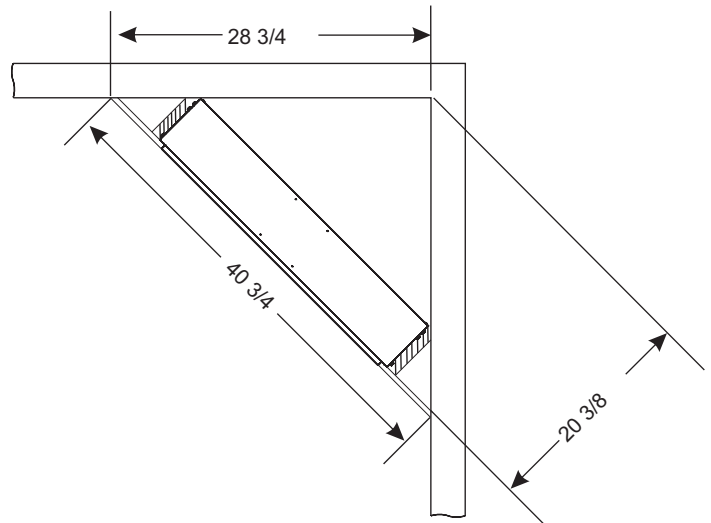


Figure 58 - Corner Clearances Illustration

CLEANING AND SERVICING

Annual inspection and cleaning by your dealer or qualified service technician is recommended to prevent malfunction and/or sooting.

⚠ WARNING

To avoid burns, turn off fireplace and allow to cool before cleaning.

PERIODIC CLEANING - Refer to parts diagram for location of items discussed below.

Always turn off gas to the pilot before cleaning. For relighting, refer to lighting instructions located on the rating plate of the fireplace.

- Do not use cleaning fluid to clean any part of fireplace.
- Clean the glass with ammonia-free cleaner. Ammonia will etch or stain glass when heated.
- Remove loose particles and dust from the burner, controls and air shutter.
- Inspect and clean burner air intake hole. Remove lint or particles with brush. Failure to keep air intake hole clean will result in sooting and poor combustion.

ANNUAL CLEANING/INSPECTION - Refer to parts diagram for location of items discussed below.

Always turn off gas to the pilot before cleaning. For relighting, refer to lighting instructions located on the rating plate of the fireplace.

- Inspect and clean burner air intake hole. Remove lint or particles with vacuum or brush. Failure to keep air intake hole clean will result in sooting and poor combustion.
- Inspect and clean all burner ports.
- Inspect ODS pilot for operation and accumulation of lint at air intake holes.
- Verify flame pattern for proper operation.
- Verify smooth and responsive ignition of main burner.

CLEANING AND MAINTAINING PILOT

Oxygen Depletion Sensor Pilot

Always turn off gas to the pilot before cleaning. For relighting, refer to lighting instructions located on the rating plate of the fireplace.

When the pilot has a large yellow tip flame, clean the Oxygen Depletion Sensor as follows:

1. Clean the ODS pilot by loosening nut B from the pilot tubing. When this procedure is required, grasp nut A with an open end wrench.
2. Use canned air to blow through the holes indicated by the arrows. This will blow out foreign materials such as dust, lint and spider webs. Use a wrench to hold Nut A as you tighten Nut B.

⚠ WARNING

To avoid damaging the pilot that controls the gas flow, never use needles, wires, or similar cylindrical objects to clean the pilot.

3. If intermittent pilot unit stops working, clean flame sensor C (Figure 59) with a damp cloth.
4. If intermittent pilot ignitor does not spark, clean ignitor D (Figure 59) with a damp cloth.

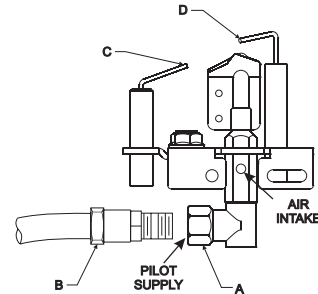


Figure 59

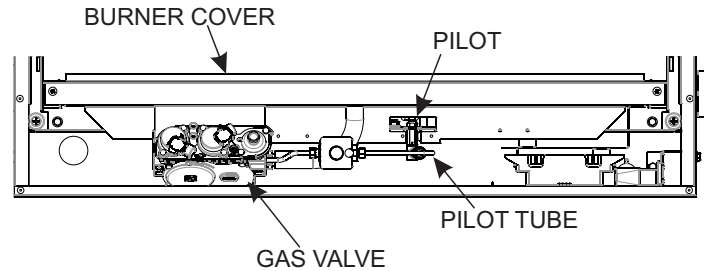


Figure 60 (Note: Burner may vary)

CONTROL COMPARTMENT AND BURNER MAINTENANCE

Keep the control compartment and burner area clean by vacuuming or brushing area at least twice a year.

⚠ WARNING

The fireplace can get very hot. To avoid burns, handle only when cool.

Always turn off gas to the pilot before cleaning. For relighting, refer to lighting instructions located on the rating plate of the fireplace.

Never obstruct the flow of the combustion and ventilation air.

Keep the front of the fireplace clear of all obstacles and materials. An intermittent pilot may require battery changes. To replace the batteries in an intermittent unit find a battery pack and/or receiver location outside of the fireplace:

1. Replace the four AA batteries in battery pack (and optional remote receiver). The receiver has a sliding door that will reveal the AA batteries.

OPTIONAL REMOTE RECEIVER

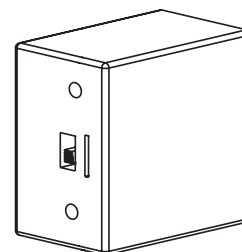


Figure 61

BATTERY PACK FOR BATTERY BACK-UP

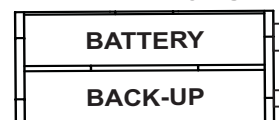


Figure 62

LIGHTING INSTRUCTIONS

FOR YOUR SAFETY READ BEFORE LIGHTING

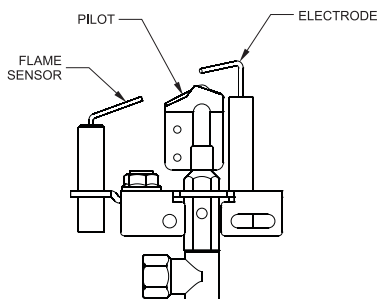
WARNING

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

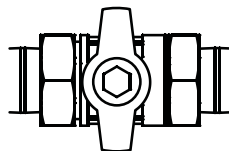
- A. This appliance has a pilot which can be lighted with the manual on/off switch, a remote control, or by switching the remote receiver switch to the "ON" position. When lighting the pilot, follow these instructions exactly.
- B. Before lighting smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.
- What To Do If You Smell Gas**
- Do not try to light any appliance.
 - Do not touch any electrical switch.
 - Do not use any phone in your building.
 - Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
 - If you cannot reach your gas supplier, call the fire department.
- C. Use only the remote control or manual remote receiver switch to operate the gas valve. Never use tools. If valve does not operate, don't try to repair it, call a qualified service technician. Force or attempted repair may result in a fire or explosion.
- D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.

LIGHTING INSTRUCTIONS

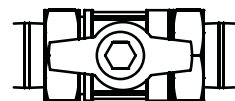
1. STOP! Read the safety information above.
2. Turn OFF electric power to the appliance.
3. Remove the front surround panel assembly, or bottom louver if included.
4. Turn gas shut-off valve counterclockwise  to "ON" position.
5. Wait ten minutes to clear out any gas. Then smell for gas, including near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



GAS SHUT-OFF VALVE



OFF



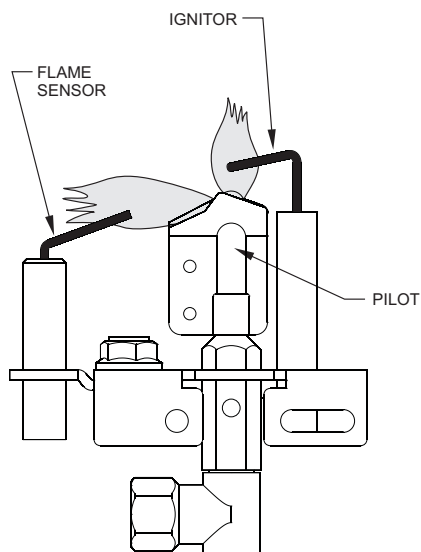
ON

TO TURN OFF GAS TO FIREPLACE

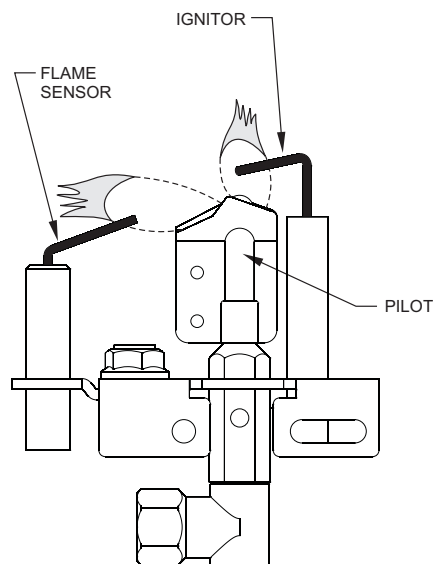
1. If applicable, turn off all electric power to the appliance if service is to be performed.
2. If applicable, remove the surround panel assembly to gain access to the control compartment.
3. Locate On/Off gas shut-off valve and turn clockwise  to "OFF". Do not force.
4. If applicable, close the bottom louver assembly.

PILOT FLAME CHARACTERISTICS

Figure 63 shows a correct pilot flame pattern. The correct flame will be blue and will extend beyond the flame sensor. The flame will surround the flame sensor just below the tip. A slight yellow flame may occur where the pilot flame and main burner flame meet. **Figure 64** shows an incorrect pilot flame pattern. The incorrect pilot flame is not touching the flame sensor. This will cause the flame sensor to cool. When the flame sensor cools, the fireplace will shut down.



Correct Pilot Flame Pattern - Figure 63



Incorrect Pilot Flame Pattern - Figure 64

If pilot flame pattern is incorrect, as shown in **Figure 64**:

- See IP Troubleshooting, pages 51 - 53.

OPERATING INSTRUCTIONS/FLAME APPEARANCE

Flames from the pilot as well as the main flame should be visually checked after the fireplace is installed.

In normal operation at full rate after 10 to 15 minutes, the flame appearance should be sets of yellow flames.

Notice: All flames will be random by design, flame height will go up and down.

Avoid any drafts that alter burner flame patterns. Do not allow fans to blow directly into or at the fireplace. Do not place a blower inside the burner area of the firebox. Ceiling fans may create drafts that alter flame patterns. Sooting and improper burning will result.

During manufacturing, fabricating and shipping, various components of this fireplace are treated with certain oils, films or bonding agents. These chemicals are not harmful, but may produce annoying smoke and smells as they are burned off during the initial operation of the fireplace, possibly causing headaches or eye or lung irritation. This is a normal and temporary occurrence.

The initial break-in operation should last 2-3 hours. Provide maximum ventilation by opening windows or doors to allow odors to dissipate. Any odors remaining after this initial break-in will be slight and will disappear with continued use.

IP OPERATING INSTRUCTIONS

5.25 VDC ELECTRONIC CONTROL VALVE

The electronic control valve system includes the ability to switch the pilot from a standing pilot mode to an intermittent pilot mode.

- **IP Mode** - In the Intermittent Pilot mode, when the unit is turned ON, it will cause spark to the pilot, light the pilot, then allow the burner to light. When the unit is turned OFF, both the burner and pilot will be OFF.
- **CPI Mode** - In the Continuous Pilot mode, the pilot remains ON continuously even when the burner is turned OFF.
- The pilot will shut off after 7 days if there is no activity or call for heat.

NOTICE: A small toggle switch is located on a bracket beneath the burner that is used to switch from IP (upward position) to the CPI (downward position). See **Figure 65**.

When the unit is turned to ON, the electrical current will energize a spark to the pilot igniter. Once the pilot sensor heats up (after a few seconds), the valve will be energized, allowing gas to flow to the burner.

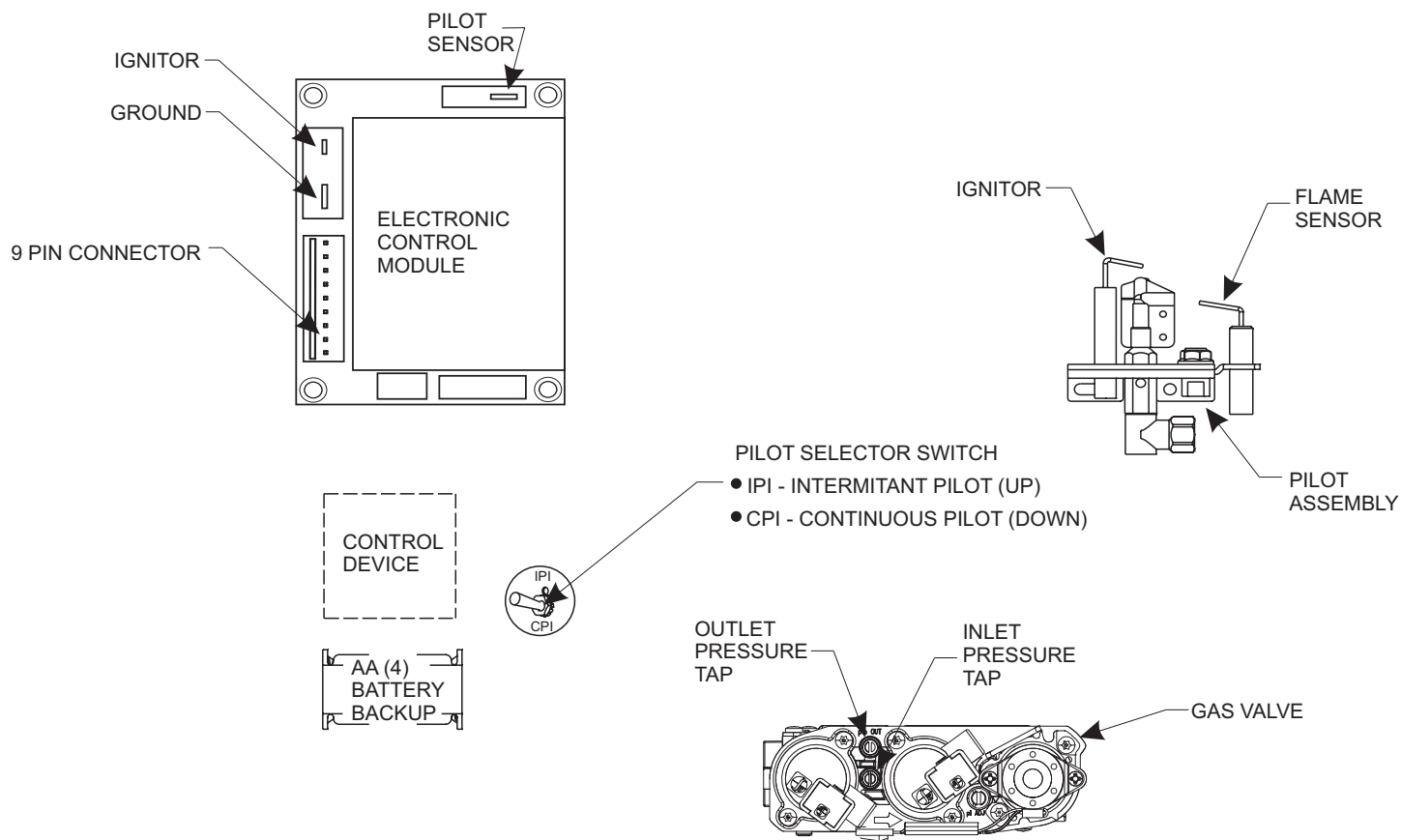
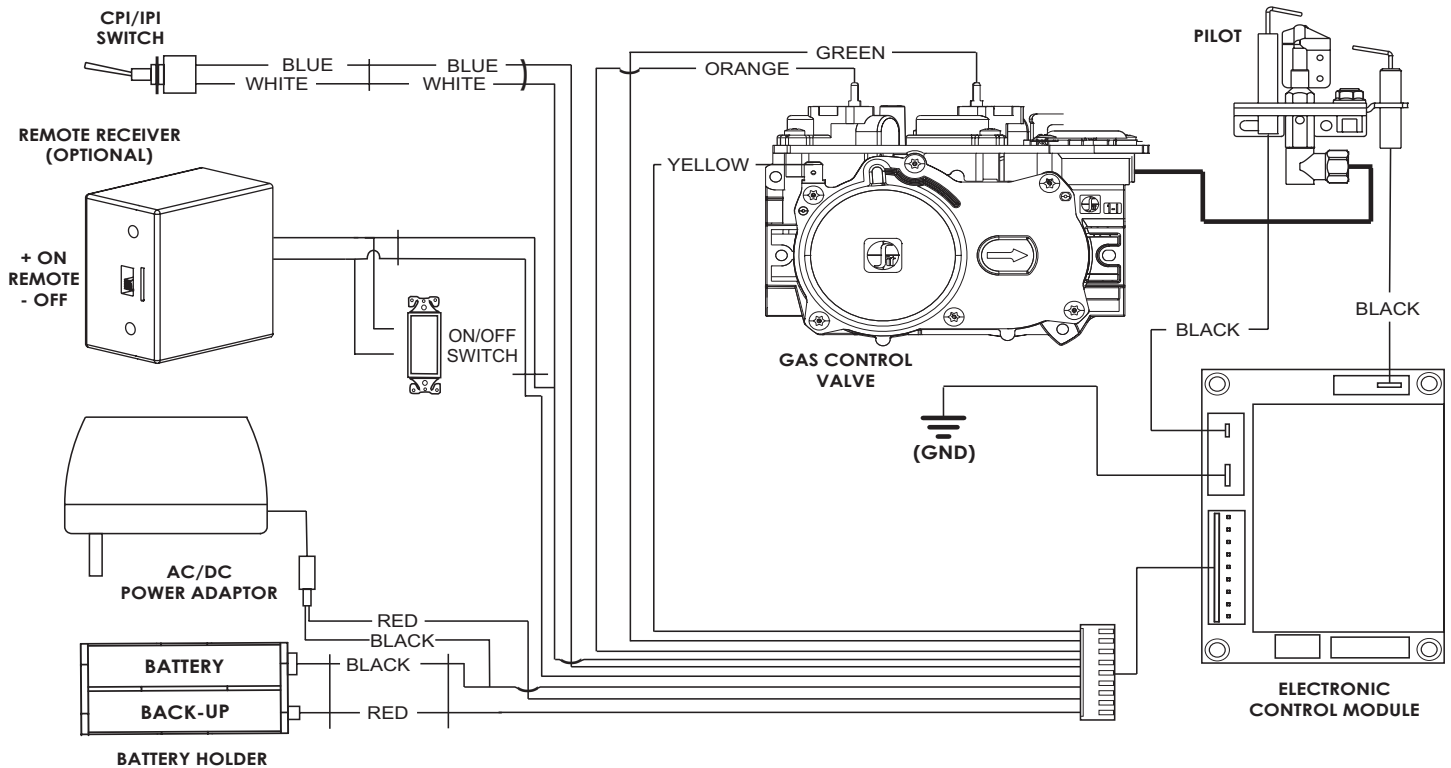


Figure 65

1. Follow the **SAFETY** and **LIGHTING INSTRUCTIONS** for Intermittent Pilot controls found in this manual, and on labels found in the control compartment located in the lower cavity of the fireplace.
2. During the operating season (or in power outage periods), it is recommended that the pilot remain in the CPI (continuous pilot mode) to conserve battery backup power during a power outage.
3. The gas valve has inlet and outlet pressure taps as shown in **Figure 65**. Refer to page 42 for gas pressure requirements.

IP WIRING

WIRING DIAGRAM



If any of the original wire as supplied with this unit must be replaced, it must be replaced with equivalent gauge and temperature rated wire.

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

⚠ WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer, service agency or the gas supplier.

ELECTRICAL CONSIDERATIONS

⚠ CAUTION

All wiring should be done by a qualified electrician and shall be in compliance with all local, city and state building codes. Before making the electrical connection, make sure that the main power supply is disconnected. The 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 (Latest Edition).

A factory-installed junction box is located on the lower right side of the fireplace. Wiring must be fed to the junction box and attached to the receptacle that is provided. Leave approximately 6 inches of wire in the junction box for connection.

Use wire nuts to attach black wire to black wire of the receptacle and white wire to white wire of receptacle. The ground wires should be attached to the ground screw from the receptacle and the 120V line.

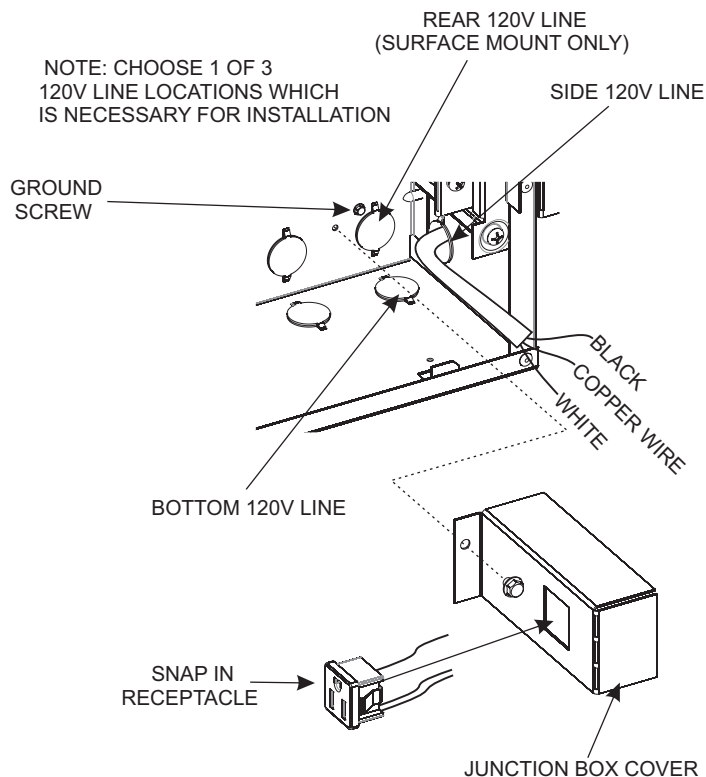


Figure 66

IP TROUBLESHOOTING

- The control module is an automatic gas ignition system based on a single micro-controller core. This control manages all functions related to ignition, flame sensing.
- The control module can be set to provide continuous or intermittent ignition control sequences and flame monitoring with safety shutdown in case of failure.
- The control module is set up as a stand alone (AC powered system with battery back up. See IP Lighting Instructions on page 46 and Wiring Diagram on page 49.

Troubleshooting

Before proceeding to the troubleshooting table, verify that the power supply (AC/DC adapter) is present and that the batteries inside the optional receiver and/or battery pack are fresh and installed with correct polarity.

Make sure all the connections between the wire harnesses and system components are proper and positive.

If the recommended actions for the following troubleshooting chart do not help to address the problem consider replacing the wiring harnesses.

WARNING

Any actions performed on the gas valve must be performed in accordance with this instruction manual. Likewise, any actions performed on the control module or other system components must be done in accordance with the individual component instructions.

Replacement of components must be performed in accordance with this instruction manual.

INTERMITTENT PILOT CONTROL SYSTEM TROUBLESHOOTING

PROBLEM OBSERVED	POSSIBLE CAUSE	CORRECTIVE MEASURE
Gas odor during setup	Gas Leak	See "What to do if you smell gas" Pages 1 and 46.
		Check all gas connections. Tighten all loose connections.
Gas odor before first ignition	Gas Leak	See "What to do if you smell gas" Pages 1 and 46.
		Check all gas connections. Tighten all loose connections.
Fireplace is "on" but no flame and pilot is not trying to light	Gas Line Valve turned "off"	Turn shutoff valve to "open" position
	Control module in "lockout"	Turn fireplace "off" and then back "on"
Pilot continues to spark when pilot is lit.	Not enough gas to pilot	Wait for pilot flame to strengthen
	Low Gas Pressure	Check pressures. See page 6.
	Pilot igniter/sensor is dirty	Clean pilot. See maintenance page 45.
	Pilot not grounded well	Check ground connections
	Draft in firebox	Redirect draft from room or wall
	Pilot sensor has been bent	Replace pilot
Pilot will not ignite, or will not stay lit	Pilot igniter/sensor is dirty	Clean flame sensor and pilot igniter. See maintenance page 45.
	Pilot not grounded well	Check ground connections
	Sensor Wire loose	Check sensor wire terminals
	Gas pressure incorrect	Adjust gas pressure
	Pilot Gas Line bent or kinked	Replace pilot tube
	Faulty pilot, Sensor bent	Replace Pilot
	Faulty valve	Replace Valve
Burner takes too long to fully light	Low gas pressure	Check gas supply pressure
	Clogged or dirty carryover/burner ports	Clean ports
	Blocked orifice	Check orifice opening
	Faulty valve	Replace valve
Burner does not light but pilot remains on	Low gas pressure	Check gas supply pressure
	Clogged or dirty burner ports	Clean burner ports
	Blocked orifice	Check orifice opening
	Loose wire connections	Check valve/control module connections
	Faulty pilot	Replace pilot
	Faulty valve	Replace valve

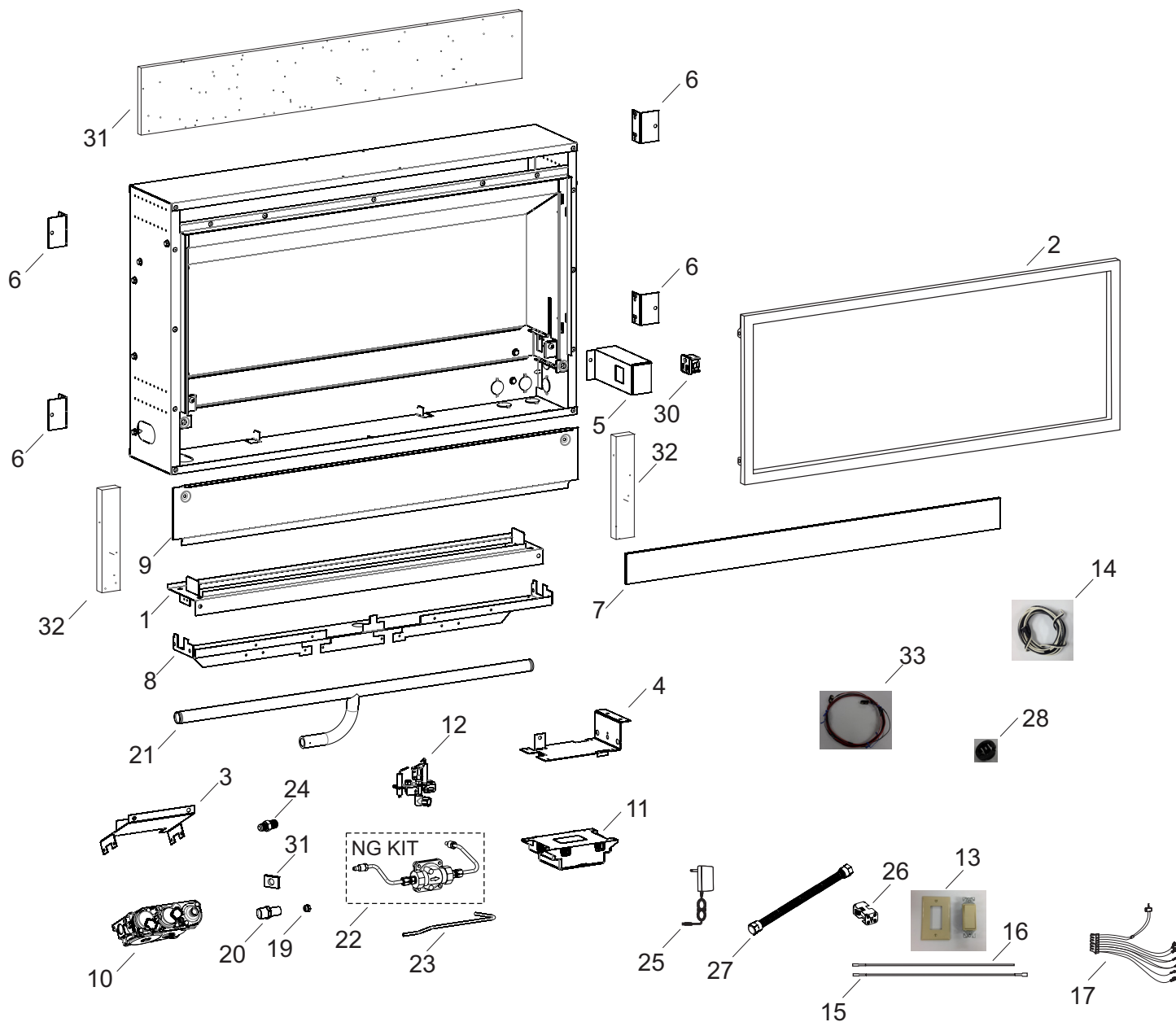
INTERMITTENT PILOT CONTROL SYSTEM TROUBLESHOOTING

PROBLEM OBSERVED	POSSIBLE CAUSE	CORRECTIVE MEASURE
Burner lights but does not stay lit while pilot remains on	Low gas pressure	Check gas supply pressure
	Loose sensor wire	Check wire connection
	Faulty valve	Replace valve
	Faulty pilot or thermocouple	Replace Safety pilot
	Clogged or dirty burner ports	Clean burner ports
	(For fireplace equipped with optional thermostat or thermostat remote) Room temperature is higher than thermostat setting	Move (optional) remote away from fireplace
		Set higher temperature on (Optional) remote/thermostat
Burner & pilot light but will not stay lit	Flame sensor dirty	Clean pilot sensor
	Low gas pressure	Check gas supply pressure
	Not enough fresh air for pilot	Open door or window - ventilate
	Clogged or dirty burner ports	Clean burner ports
	(For fireplace equipped with optional thermostat or thermostat remote) Room temperature is higher than thermostat setting	Move (optional) remote away from fireplace
		Set higher temperature on (Optional) remote/thermostat
	Faulty pilot or thermocouple	Replace pilot
Incorrect burner flame	Incorrect gas supply or pressure	Check gas supply pressure
	Blocked orifice	Check orifice opening
	Clogged or dirty burner ports	Clean burner ports
	Faulty valve	Replace valve
	High altitude	Adjust orifice size for altitude
Backfire of burner	Blocked orifice	Check orifice opening
	Clogged or dirty burner ports	Clean burner ports
	Low gas pressure	Check gas supply pressure
Appliance produces unwanted odors	Vapors from paint, hairspray, glue, etc.	Ventilate room until odor stops. Do not use paint, hairspray, glue, etc around fireplace
	Initial burn-off of manufacturing chemicals	Ventilate room until odor stops
Whistle noise from appliance	Check gas pressure	Adjust gas pressure to recommended setting.
	Air in gas line	Bleed lines
	Control knob not in fully open position	Open control knob to full position
	Spiral gas flex line pinched or too small diameter line	Straighten flex line where pinched or replace gas feed line with larger diameter

PARTS LIST

INDEX NUMBER	PART NUMBER		DESCRIPTION
	VFSL30FP70(N,P)	VFSL30FP7010(N,P)	
1	35700	35351	Burner Plate Assembly, Black
2	35699	35699	Screen Assembly, Black
3	35551	35551	Valve Bracket
4	35552	35552	Control Module Bracket
5	35547	35547	Junction Box
6	35555	35555	Nailing Flange (4 supplied)
7	R11232	R11232	Glass Panel
8	35548	35348	Burner Assembly Bracket
9	35539	35539	Outer Wrapper Front
10	R11210	R11210	Valve - Natural
10	R11211	R11211	Valve - Propane
11	R12907	R12907	Control Module
12	R11328 - 2019	R11328 - 2019	Pilot - Natural
12	R11327 - 2019	R11327 - 2019	Pilot - Propane
13	FWS1	FWS1	Switch and Cover
14	R12144	R12144	Switch Extension Harness
15	R11332	R11332	Wire Sensor
16	R11333	R11333	Wire Ignitor
17	R11123	R11123	Wire Harness - Valve
19	P245	P293	Orifice - Natural
19	P315	P193	Orifice - Propane
20	P313	P313	Orifice Holder
21	R12092	R12249	Burner - Natural
21	R12093	R12250	Burner - Propane
22	44547 (NG Only)	44547 (NG Only)	Regulator Replacement Kit
23	35765	35765	Tubing, Valve to Pilot - Propane
24	B100100	B100100	Brass 3/8-inch Flare Fitting
25	R11128	R11128	Power Adaptor
26	R11122	R11122	Battery Pack
27	R9987	R9987	Flexline
28	R12091	R12091	Cord Grip
29	R12097	R12097	Orifice Gasket - Natural
30	R11441	R11441	Snap-In Receptacle
31	35754	35754	Non-Combustible Board - Top
32	35755	35755	Non-Combustible Board - Side (2 supplied)
33	WXB10	WXB10	Backup Battery Extension Wire

EXPLODED VIEW



⚠ WARNING

Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

MASTER PARTS DISTRIBUTOR LIST

To Order Parts Under Warranty, please contact your local Empire dealer. See the dealer locator at www.empirecomfort.com. To provide warranty service, your dealer will need your name and address, purchase date and serial number, and the nature of the problem with the unit.

To Order Parts After the Warranty Period, please contact your dealer or one of the Master Parts Distributors listed below. This list changes from time to time. For the current list, please click on the Master Parts button at www.empirecomfort.com. Please note: Master Parts Distributors are independent businesses that stock the most commonly ordered Original Equipment repair parts for Heaters, Grills, and Fireplaces manufactured by Empire Comfort Systems Inc.

Dey Distributing

1401 Willow Lake Boulevard
Vadnais Heights, MN 55101

Phone: 651-490-9191

Toll Free: 800-397-1339

Website: www.deydistributing.com

Parts: Heater, Hearth and Grills

F. W. Webb Company

200 Locust Street
Hartford, CT 06114

Phone: 860-722-2433

Toll Free: 800-243-9360

Fax: 860-293-0479

Toll Free Fax: 800-274-2004

Websites: www.fwwebb.com & www.victormfg.com

Parts: Heater, Hearth and Grills

East Coast Energy Products

10 East Route 36
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Website: www.eastcoastenergy.com

Parts: Heater, Hearth and Grills

HOW TO ORDER REPAIR PARTS

Parts Not Under Warranty

Parts can be ordered through your Service Person, Dealer, or a Master Parts Distributor. See this page for the Master Parts Distributors list. For best results, the **service person or dealer** should order parts through the distributor. Parts can be shipped directly to the **service person/dealer**.

Warranty Parts

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

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

Fireplace Model Number _____ Part Description _____

Fireplace Serial Number _____ Part Number _____

Type of Gas (Propane or Natural) _____

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

Shipments contingent upon strikes, fires and all causes beyond our control.

APPLIANCE SERVICE HISTORY

Date	Dealer Name	Service Technician Name	Service Performed/Notes

APPLIANCE SERVICE HISTORY

[illegible]

WARRANTY

Empire Comfort Systems Inc. warrants this hearth product to be free from defects at the time of purchase and for the periods specified below. Hearth products must be installed by a qualified technician and must be maintained and operated safely, in accordance with the instructions in the owner's manual. Empire will not warranty any Boulevard fireplace that is not installed by the selling dealer or that dealer's direct contract agents.

This warranty applies to the original purchaser only and is not transferable. All warranty repairs must be accomplished by a qualified gas appliance technician.

Limited Lifetime Parts Warranty with a Five-Year Limited Labor Warranty – Combustion Chamber and Heat Exchanger

- If the combustion chamber or heat exchanger (see parts list) fails because of defective workmanship or material, Empire will repair or replace at Empire's option.
- Within five years from the date of purchase, Empire will pay reasonable labor to have the defective part repaired or replaced at Empire's option.

Limited Five-Year Parts & Labor Warranty – All Other Components (Except Remote Controls, Thermostats, Accessories and Replacement Parts)

- Should any part fail because of defective workmanship or material within five years from the date of purchase, Empire will repair or replace at Empire's option.
- Within five years from the date of purchase, Empire will pay reasonable labor to have that defect repaired at Empire's option.

Limited One-Year Parts Warranty – Remote Controls, Thermostats, Accessories, and Parts

- Should any remote control, thermostat, accessory, or other part fail because of defective workmanship within one year from the date of purchase, Empire will repair or replace at Empire's option.

Duties Of The Owner

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

What Is Not Covered

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

How To Get Service

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

Your Rights Under State Law

- This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.



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Empire Comfort Systems Inc.
Belleville, IL

If you have a general question
about our products, please e-mail
us at info@empirecomfort.com.

If you have a service or repair
question, please contact your dealer.

www.empirecomfort.com