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# **Installation and Operation Instructions**

Montebello® See-Through Direct-Vent Gas Fireplaces

Models

MontebelloSTTEN

MontebelloSTTEP

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

Installateur : Laissez cette notice avec l'appareil. Consommateur : Conservez cette notice pour consultation ultérieure.

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

Cet appareil peut installé dans une maison préfabriquée (mobile) déjà installée à demeure, si les réglements locaux le permettent. Ce appareil doit être utilisé uniquement avec le type de gaz indiqué sure la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz, sauf si une trousse de conversion est utilsée.



# 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.

# A

# AVERTISSEMENT:

# RISQUED'INDENDIE OU D'EXPLOSION

Le non-respect Des avertissements de sécurité pourrait d'entraîner des blessures graves, la mort ou des dommages matériels.

- Ne pas entreposer ni utilizer d'essence ni d'autres vapeurs ou liquides inflammables dans le voisinage de cet appareil ou de tout autre appareil.
- QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ:
  - Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucan interrupteur. Ne pas vous servir des téléphones se trouvant dans le bâtiment où vous trouvez.
- Sortez immédiatement de bâtiment.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur de gaz, appelez le service des incindies.
- L'installation et l'entretien doivent être assurés par un installateur ou un service d'entretien qualifié ou par le fournisseur de gaz.

# SAFETY AND YOUR FIREPLACE

See attached color flyer for proper color representation





HOT GLASS WILL CAUSE BURNS.

**DO NOT TOUCH** GLASS UNTIL COOLED.

**NEVER** ALLOW CHILDREN TO TOUCH GLASS.

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

Voir ci-joint tract pour une bonne représentation de la couleur





**VITRE CHAUDE** RISQUE DE BRÛLURES.

NE TOUCHEZ PAS UNE VITRE NON REFROIDIE.

**NE LAISSEZ JAMAIS** UN ENFANT DE TOUCHER LA VITRE.

L'écran pare-étincelles fourni avec ce foyer réduit le risque de brûlure en cas de contact accidentel avec la vitre chaude et doit être installé pour la protection Des enfants et Des personnes à risques.

Vea el volante adjunto para la representación de color adecuado





EL VIDRIO CALIENTE CAUSARÁ QUEMADURAS. USTED DEBE NUNCA TOCAR EL VIDRIO CALIENTE. LOS NIÑOS DEBEN NUNCA TOCAR EL VIDRIO.

Una barrera diseñada para reducir el riesgo de quemaduras desde la mirilla (vidrio) caliente es proveida con este aparato y deberá instalarse para la protección de los niños y otros individuos en riesgo.

# Safety and Your Fireplace

# La sécurité et votre foyer

# Seguridad y su chimenea

# All parts of your IHP fireplace get EXTREMELY HOT!

Toutes les parties de votre foyer IHP deviennent EXTRÊMEMENT CHAUDES!

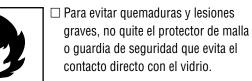
# ¡Todas las partes de la chimenea IHP se ponen MUY CALIENTES!

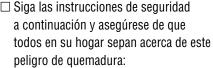
☐ To prevent severe burns and injuries, do Not remove the barrier on the appliance which prevents direct contact with the glass.



- ☐ Follow the safety instructions below and be sure everyone in your household understands this burn hazard:
- The surfaces on your fireplace get EXTREMELY HOT!
- The glass on the front of the fireplace reaches EXTREMELY HIGH temperatures and can cause severe burns if touched.
- Keep children away from an operating fireplace. Closely supervise children in any room where a fireplace is operating to prevent contact with glass.
- Keep clothing, furniture, gasoline, and other flammable liquids away from the fireplace.
- Even after the gas is turned off, fireplace surfaces remain extremely hot.
- □ Be sure to attach the enclosed Safetyin-Operation Warnings where you turn on your fireplace, to help remind everyone of the dangers associated with high temperatures (*Page 44*).
- □ Read Important Safety Information (*Page 5*).

- Afin d'éviter les brûlures graves ou les blessures, ne pas retirer l'écran de protection de la foyer qui empêche tout contact direct avec la vitre.
- Suivez les instructions de sécurité ci-dessous et veillez à ce que tous les membres de votre famille soient conscients du danger de brûlure encouru :
- Les surfaces de votre foyer deviennent EXTRÊMEMENT CHAUDES!
- La vitre située à l'avant du foyer atteint des températures EXTRÊMEMENT ÉLEVÉES et peut causer de graves blessures en cas de contact.
- Tenez les enfants à l'écart du foyer lorsqu'il fonctionne. Surveillez attentivement les enfants dans les pièces où un foyer est utilisé afin d'éviter qu'ils ne soient en contact avec la vitre.
- Tenez tous les vêtements, les meubles, l'essence et tout autre liquide inflammable à l'écart du foyer.
- Même après fermeture du gaz, les surfaces du foyer restent extrêmement chaudes.
- □ Veillez à coller les Étiquettes de mise en garde relatives à la sécurité d'utilisation à l'endroit où vous utilisez le foyer, pour rappeler à tous les utilisateurs les dangers liés aux températures élevées (*Page 44*).
- ☐ Lisez L'information de sûreté importante (*Page 5*).





- ¡Las superficies de la chimenea se ponen MUY CALIENTES!
- El vidrio delante de la chimenea alcanza temperaturas EXTREMADAMENTE ALTAS y puede causar quemaduras graves si se toca.
- Mantenga a los niños alejados de la chimenea en funcionamiento.
   Supervise en forma cercana a los niños en cualquier cuarto donde haya una chimenea funcionando para impedir el contacto con el vidrio.
- Mantenga la ropa, mobiliario, gasolina y otros líquidos inflamables alejados de la chimenea.
- Aún después de haber apagado el gas, las superficies de la chimenea permanecen extremadamente calientes.
- □ Asegúrese de colocar las Etiquetas de advertencia de seguridad de operación en el lugar donde enciende la chimenea, para que todos recuerden los peligros asociados con las altas temperaturas (Página 44).
- □ Lea Información importante de seguridad (*Página 5*).

[SPANISH]

[ENGLISH] [FRENCH]



Traditional Fireplace

# THANK YOU FOR YOUR PURCHASE. WE APPRECIATE YOUR BUSINESS!

Please carefully read and follow all instructions in this manual. Pay special attention to all warnings and safety information. Following these safety, care, and operation instructions will help ensure many years of dependable and enjoyable service from your fireplace.

Please read and understand these instructions before installing, operating, or servicing this product.



We recommend 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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# **IMPORTANT SAFETY INFORMATION**

# Important Safety Information

- WARNING: Do not operate appliance with the glass front removed, cracked or broken.
- 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.
- 3. Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies.
- Children and adults should be alerted to the hazards of high surface temperature and should stay away to avoid burns or clothing ignition.
- Clothing or other flammable material should not be placed on or near the appliance.
- 6. Young children should be carefully supervised when they are in the same room as the appliance. Toddlers, young children, and others may be susceptible to accidental contact burns. A physical barrier is recommended if there are at-risk individuals in the house. To restrict access to a fireplace or stove, install an adjustable safety gate to keep toddlers, young children, and other at-risk individuals out of the room and away from hot surfaces.
- Any safety screen, guard or barrier removed for servicing an appliance must be replaced prior to operating the appliance.
- 8. Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a professional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, et cetera. It is imperative that control compartments, burners, and circulating air passageways of the appliance be kept clean. See maintenance instructions on Page 47.

# L'information de sûreté importante

- AVERTISSEMENT. Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.
- Ne pas se servir de cet appareil s'il a été plongé dans l'eau, même partiellement. Faire inspecter l'appareil par un technicien qualifié et remplacer toute partie du systéme de contrôle et toute commande qui ont été plongées dans l'eau.
- En raison des températures élevées, l'appareil devrait être installé dans un endroit où il y a peu de circulation et loin du mobilier et des tentures.
- 4. Les enfants et les adultes devraient être informés des dangers que posent les températures de surface élevées et se tenir à distance afin d'éviter des brûlures ou que leurs vêtements ne s'enflamment.
- On ne devrait pas placer de vêtements ni d'autres matières inflammables sur l'appareil ni à proximité.
- 6. Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.
- Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.
- 8. L'installation et la réparation devrait être confiées à un technicien qualifié. L'appareil devrait faire l'objet d'une inspection par un technicien professionnel avant d'être utilisé et au moins une fois l'an par la suite. Des nettoyages plus fréquents peuvent être nécessaires si les tapis, la literie, et cetera produisent une quantité importante de poussière. Il est essentiel que les compartiments abritant les commandes, les brûleurs et les conduits de circulation d'air de l'appareil soient tenus propres. Voyez les instructions d'entretien à la Page 47.

# Información importante de seguridad

- ADVERTENCIA: No opere el artefacto con el frente de vidrio quitado, agrietado o roto.
- No use este artefacto si alguna de sus partes ha estado bajo agua. Llame de inmediato a un técnico de servicio calificado para que inspeccione el artefacto y reemplace cualquier parte del sistema de control y cualquier control de gas que haya estado bajo agua.
- Debido a las altas temperaturas, el artefacto debe situarse fuera de las áreas de tráfico y lejos del mobiliario y cortinas.
- Se debe alertar a los niños y adultos sobre los peligros de las altas temperaturas en la superficie y que se mantengan alejados para evitar quemaduras o ignición de la ropa.
- No debe colocarse ropa u otros materiales inflamables sobre y cerca del artefacto.
- 6. Se debe supervisar de cerca a los niños cuando estén en el mismo cuarto que el artefacto. Los niños pequeños, los jóvenes y otras personas pueden ser susceptibles a quemaduras por contacto accidental. Se recomienda instalar una barrera física si hay personas en riesgo en la casa. Para restringir el acceso a una chimenea o estufa, instale una puerta de seguridad ajustable para mantener a los niños pequeños, jóvenes y otras personas en riesgo fuera del cuarto y lejos de las superficies calientes.
- Cualquier malla o resguardo de seguridad quitado para dar servicio a un artefacto, debe reinstalarse antes de operar el artefacto.
- 8. Una persona de servicio competente debe realizar la instalación y reparación. Una persona de servicio profesional debe inspeccionar el artefacto antes de usar al menos una vez por año. Se puede requerir limpieza más frecuente debido a la pelusa excesiva del alfombrado, del material de cobijas, etc. Es imprescindible mantener limpios los compartimientos de control, los quemadores y los pasajes de circulación del aire del artefacto. Ver las instrucciones de mantenimiento en la página 47.

# APPLIANCE INSTALLATION, SERVICE, AND MAINTENANCE NOTICES

# **A** WARNING

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

# **A** AVERTISSEMENT

Une installation, un réglage, une modification, une réparation ou un entretien mal effectué peut causer des dommages matériels ou des blessures. Voir la notice de l'utilisateur qui accompagne l'appareil. Pour de l'aide ou des renseignements supplémentaires, consultez un installateur, un technicien agréé ou le fournisseur de gaz.

Only trim kit(s) supplied by the manufacturer shall be used in the installation of this fireplace. Seules des portes certifiées pour cet appareil doivent être utilisées.

These appliances must not be connected to a chimney or flue serving a separate solid fuel burning appliance.

Any change to this appliance and/or its operating controls is dangerous. Improper installation or use of this appliance can cause serious injury or death from fire, burns, explosion or carbon monoxide poisoning.

CARBON MONOXIDE POISONING: Early signs of carbon monoxide poisoning are similar to the flu with headaches, dizziness and/or nausea. If you have these signs, obtain fresh air immediately. Turn off the gas supply to the appliance and have it serviced by a qualified professional, as it may not be operating correctly. Some people are more affected by carbon monoxide than others, including pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Turn off gas and electrical power to the appliance and allow it to cool before cleaning or servicing the appliance.

If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

Si l'écran est endommagé, il doit être remplacé par celui fournit par le fabricant de cet appareil.

For use with barrier Part No. J7422. Follow installation instructions.

Reinstall any barrier removed before operating the appliance. The barrier is designed to reduce the risk of burns from hot glass. Do not operate the appliance without the barrier installed.

### APPLIANCE OPERATION NOTICES

These fireplaces are vented gas appliances. Do not burn wood or other material in these appliances.

These appliances are designed to operate on natural gas or propane gas only. The use of other fuels or combinations of fuels will degrade the performance of this system and may be dangerous.

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front openings of the appliance.

These appliances are designed as supplemental heaters. Therefore, it is advisable to have an alternate primary heat source when installed in a dwelling.

# WARRANTY INFORMATION

Your gas appliance is covered by a limited lifetime warranty. You will find a copy of the warranty accompanying this manual. Please read the warranty to be familiar with its coverage.

Retain this manual. File it with your other documents for future reference.

Failure to comply with the installation and operating instructions provided will result in an improperly installed and operating appliance, voiding its warranty.

Do not attempt to alter or modify the construction of the appliance or its components. Any modification or alteration may void the warranty, certification, and listings of this unit.

# **IMPORTANT SAFETY AND WARNING INFORMATION**

# **A** CAUTION

Hot while in operation. Do not touch. Severe Burns may result. Keep children, clothing furniture, gasoline and other liquids having flammable vapors away.

# **A** ATTENTION

L'appareil est chaud lorsqu'il fonctionne. Ne pas toucher l'appareil. Risque de brûlures graves. Surveiller les enfants. Garder les vêtements, les meubles, l'essence ou autres liquides produisant des vapeur inflammables loin de l'appareil.

# **PACKAGING**

The assembled vented gas fireplace is packaged with the following items:

- Fireplace Components:
  - (1) Literature Kit (in envelope in firebox; contains *Installation and Operation Instructions* manual, Safety Flyer, Glass and Barrier Flyer and Safety-In-Operation Warning Labels)
  - Remote Control Kit (in plastic bag in firebox; contains remote control, and receiver)
  - (3) AAA Batteries
  - (1) Log Set
  - (1) Vent Restrictor Assembly
  - (1) Bag of Platinum Glowing Embers
  - (4) Bags Volcanic Stone
  - (1) Door Modesty Shield
- Panel Kit (sold separately; REQUIRED for all fireplace models) - one of the following kits:
  - Buff Rustic Ceramic
  - Buff Herringbone Ceramic
  - Architectural Stone Ceramic
  - Venetian Tile Ceramic
  - Black Rustic Ceramic
  - Black Porcelain

NOTE: If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance.

FOR USE WITH BARRIER(S) PART NO(S). J7422 (40" MODELS).

# INTRODUCTION

These See-Through appliances are direct-vent, sealed combustion gas fireplaces designed for either **indoor/indoor** or **indoor/outdoor** residential applications (including screened porches and lanais). See "Minimum Clearances to Combustibles" on *Page 11*.

# NOTE: INDOOR/OUTDOOR INSTALLATIONS REQUIRE AN OUTDOOR INSTALLATION KIT (SOLD SEPARATELY).

These appliances are designed to operate on natural or propane gas. The system is switchable between standing and intermittent pilot modes.

External electrical power is required to operate these units. In the event of a power outage, four "AA" batteries (in receiver) can be used as a backup.

# **GENERAL INFORMATION**

# **Approved Vent Components**

These fireplaces are designed, tested, and listed for operation and installation with the following vent components (8" inner and 11" outer) only:

 Secure Vent® SV8 direct-vent system components manufactured by Innovative Hearth Products.

These approved vent system components are labeled for identification. Do NOT use any other manufacturer's vent components with these appliances.

DO NOT ATTEMPT TO ALTER OR MODIFY THE CONSTRUCTION OF THE APPLIANCE OR ITS COMPONENTS. ANY MODIFICATION OR ALTERATION MAY VOID THE WARRANTY, CERTIFICATION AND LISTINGS OF THIS UNIT.

These appliances comply with National Safety Standards and are tested and listed by PFS Corporation (Report No. F14-107) to ANSI Z21.88 (in Canada, CSA-2.33), and CAN/CGA-2.17-M91 (CSA P4.1) in both USA and Canada, as vented gas fireplace.

These appliances are listed by PFS Corporation for installation in bedrooms, aftermarket mobile homes, and manufactured homes.

# Misc. Codes/Standards

Installation must conform to local codes or, in the absence of local codes, with the *National Fuel Gas Code*, *ANSI Z223.1/NFPA 54 - latest edition* (in Canada, the current CAN/CGA-B149.1 installation code).

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

Provide adequate clearances around air openings and adequate accessibility clearance for service and proper operation. Never obstruct the front or back openings of the appliance.

These appliances are designed to operate on natural or propane gas only. The use of other fuels or combination of fuels will degrade the performance of this system and may be dangerous.

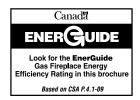
These models come standard with a remotely modulated gas valve. The included transmitter remotely controls flame appearance and heat output (manual gas valve adjustment is not possible).

# **Inputs and Efficiencies**

Appliance BTU inputs are listed in *Table 1A*. Appliance efficiencies are listed in *Table 1B*.

INPUTS		
Gas Type	Inputs (BTU/hr)	
Natural Gas	40,000 to 60,000	
Liquid Propane	43,500 to 56,000	
Table 1A	-	

EFFICIENCIES					
Gas Type AFUE EnerGuide					
Natural Gas	68%	67%			
Liquid Propane	70%	67%			
Table 1B					



# **Gas Supply Pressure Requirements**

Inlet and manifold gas supply pressure requirements for these appliances are listed in *Tables 2 and 3*.

Inlet Gas Supply Pressure (all models)				
Fuel # Minimum Maximum				
Natural Gas	5.0" WC (1.25 kPa)	10.5" WC (2.61 kPa)		
Propane	11.0" WC (2.74 kPa)	13.0" WC (3.23 kPa)		
Table 2				

Manifold Gas Supply Pressure (all models)				
Fuel# Low High				
Natural Gas	1.6" WC (0.4 kPa)	3.5" WC (0.87 kPa)		
Propane	6.3" WC (1.57 kPa)	10.0" WC (2.49 kPa)		
Table 3				

Test gauge connections are provided on the front of the electronic gas control valve (identified **IN** for the inlet and **OUT** for the manifold side).

The control valves have a 3/8" (10 mm) NPT thread inlet and outlet side of the valve. Refer to *Figure 1*.

Propane tanks are at pressures that will cause damage to valve components. Verify that the tanks have step-down regulators to reduce the pressure to safe levels.

The appliance and its appliance main gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in **excess of** 1/2 psi (3.5 kPa).

The appliance must be isolated from the gas supply piping system by closing its equipment shutoff valve during any pressure testing of the gas supply piping system at test pressures **equal to or less than** 1/2 psi (3.5 kPa).

# Orifice Sizes Sea Level To High Altitude (All Models)

These appliances are tested and approved for installation at elevations of 0–4500 feet (0–1372 meters) above sea level using the standard burner orifice sizes (marked with an asterisk [\*] in *Table 4*). For elevations above 4500 feet, contact your gas supplier or qualified service technician.

### Deration

At higher elevations, the amount of BTU fuel value delivered must be reduced by either:

- Using gas that has been derated by the gas company; or
- Changing the burner orifice to a smaller size as regulated by the local authorities having jurisdiction and by the (USA) National Fuel Gas Code NFPA 54/ANSI Z223.1 - latest edition or, in Canada, the CAN/CGA-B149.1 codes - latest edition.

Install the appliance according to the regulations of the local authorities having jurisdiction and, in the USA, the National Fuel Gas Code NFPA 54 / ANSI Z223.1 - latest edition or , in Canada, the CAN/CGA-B149.1- latest edition.

NOTE: Flame appearance will diminish 4% per thousand feet.

Burner Orifice Sizes Elevation 0–4500 feet (0–1372 meters)			
Natural Gas Propane Drill size (inches) Drill size (inches)			
#32 (0.116")* #52 (0.0635")* H8002 • H8003 •			
* Standard size installed at factory.			

\* Standard size installed at factor **Table 4** • Part/Catalog Number.

In Canada - CAN/CGA-2.17-M91 (R2009) (high altitude):

THE CONVERSION SHALL BE CARRIED OUT BY A MANUFACTURER'S AUTHORIZED REPRESENTATIVE, IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER, PROVINCIAL OR TERRITORIAL AUTHORITIES HAVING JURISDICTION AND IN ACCORDANCE WITH THE REQUIREMENTS OF THE CAN/CGA-B149.2 INSTALLATION CODES.

# **Green Wire** (From DFC Wire Harness) **Connect GTMS** Wire Harness Manifold (Out) Pressure Test Port Regulator Tower Inlet (In) Test Port Outlet 3/8" NPT **Orange Wire** (from DFC Wire **Yellow Ground Wire** Harness) (From DFC Wire Harness) Main Gas Inlet 3/8" NPT Figure 1 - SIT Proflame Valve

# **Gas Valve Diagram**

See valve diagram (Figure 1).

# Requirements for the Commonwealth of Massachusetts

These fireplaces are approved for installation in the US state of Massachusetts if the following additional requirements are met:

- Install this appliance in accordance with Massachusetts Rules and Regulations 248 C.M.R. Sections 4.00 through 8.00.
- Installation and repair must be done by a plumber or gas fitter licensed in the Commonwealth of Massachusetts.
- The flexible gas line connector used shall not exceed 36 inches (92 centimeters) in length.
- The individual manual shut-off must be a T-handle type valve.

# Massachusetts Horizontal Vent Requirements

In the Commonwealth of Massachusetts, horizontal terminations installed less than seven (7) feet above the finished grade must comply with the following additional requirements:

- A hard-wired carbon monoxide detector with an alarm and battery back-up must be installed on the floor level where the gas fireplace is installed. The carbon monoxide detector must comply with NFPA 720, be ANSI/UL 2034 listed and be ISA certified.
- A metal or plastic identification plate must be permanently mounted to the exterior of the building at a minimum height of eight (8) feet above grade and be directly in line with the horizontal termination. The sign must read, in print size no less than one-half (1/2) inch in size, GAS VENT DIRECTLY BELOW. KEEP CLEAR OF ALL OBSTRUCTIONS.

# **COLD CLIMATE INSULATION**

For cold climate installations, seal all cracks around the appliance with noncombustible material and wherever cold air could enter the room. If the floor is above ground level, it is especially important to insulate outside chase cavity between studs and under the floor on which the appliance rests. Gas line holes and other openings should be caulked or stuffed with unfaced fiberglass insulation.

If the fireplace is being installed on a cement slab in cold climates, a sheet of plywood or other raised platform can be placed underneath to prevent cold transfer to the fireplace and into the room. It also helps to sheetrock inside surfaces and tape for maximum air tightness and caulk firestops.

# MANUFACTURED HOME REQUIREMENTS

This appliance may be installed in an aftermarket, permanently located, manufactured home and must be installed in accordance with the manufacturer's instructions.

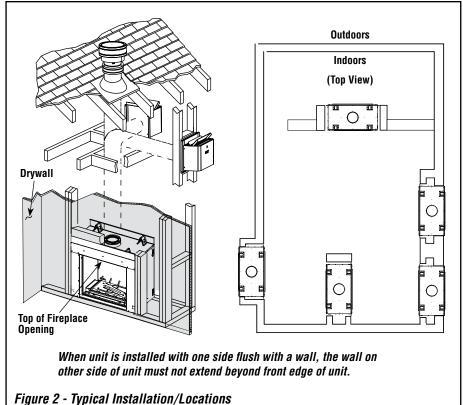
Cet appareil peut être installé cómme du matéri-el d'origine dans une maison préfabriquée (É.U. seulement) ou mobile et doit être installé selon les instructions du fabricant.

This appliance is only for use with the type of gas indicated on the rating plate. This appliance is not convertible for use with other gases, unless a certified kit is used.

Cet appareil doit être utilisé uniquement avec le type de gaz indiqué sur la plaque signalétique. Cet appareil ne peut être converti à d'autres gaz, sauf si une trousse de conversion est utilisée.

CAUTION: Ensure that the cross members are not cut or weakened during installation. The structural integrity of the manufactured home floor, wall, and ceiling / roof must be maintained.

CAUTION: This appliance must be grounded to the chassis of the manufactured home in accordance with local codes or in the absence of local codes, with the National Electrical Code ANSI / NFPA 70 - latest edition or the Canadian Electrical Code CSA C22.1 - latest edition.



riyure 2 - Typicai mistanation/Locatio

# **LOCATION**

In selecting the location, the aesthetic and functional use of the appliance are primary concerns; however, vent system routing to the exterior and access to the fuel supply are also important.

Due to high temperatures, the appliance should be located out of traffic and away from furniture and draperies (Figure 2).

En raison des températures élevées, l'appareil devrait être installé dans un endroit où il y a peu de circulation et loin du mobilier et des tentures (Figure 2).

The location also should be free of electrical, plumbing, or other heating/air conditioning ducting.

Be aware that this is a heat-producing appliance. Objects placed above the unit are exposed to elevated temperatures.

Do not insulate the space between the appliance and the area above it.

The appliance must be mounted on a fully supported base extending the full width and depth of the unit. The appliance may be located on or near conventional construction materials. However, if installed on combustible materials, such as carpeting, vinyl tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance.

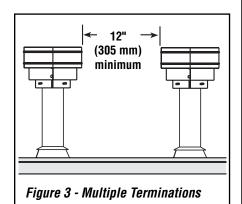
# VENT TERMINATION CLEARANCES

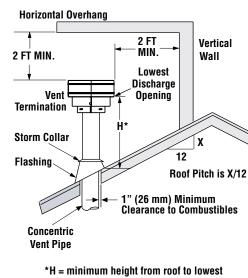
These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, the current National Fuel Gas Code (ANSI-Z223.1) in the USA or the current standards of CAN/CGA-B149.1 in Canada.

# **Vertical Vent Termination Clearances**

Terminate multiple vent terminations according to the installation codes listed above. Also see *Figure 3*.

Terminate single vent caps relative to building components as shown in *Figure 4*.





discharge opening of vent.

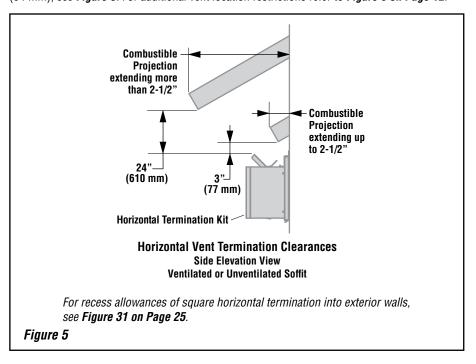
Vent/air intake termination clearances above the high side of an angled roof are listed in the table below.

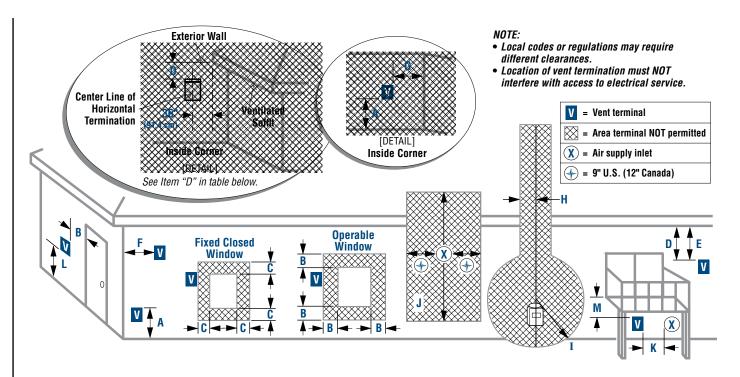
Termination Heights for Vents Above Flat or Sloped Roofs (Ref. NFPA 54 / ANSI Z223.1)					
Roof Pitch *Feet *Meters					
Flat to 6/12	1.0	0.3			
6/12 to 7/12	1.25	0.38			
7/12 to 8/12	1.5	0.46			
8/12 to 9/12	2.0	0.61			
9/12 to 10/12	2.5	0.76			
10/12 to 11/12	3.25	0.99			
11/12 to 12/12	4.0	1.22			
12/12 to 14/12	5.0	1.52			
14/12 to 16/12	6.0	1.83			
16/12 to 18/12	7.0	2.13			
18/12 to 20/12	7.5	2.29			
20/12 to 21/12	8.0	2.44			

Figure 4 - Vertical Vent Termination Clearances

# **Horizontal Vent Termination Clearances**

The horizontal vent termination must have a minimum of 3" (77 mm) clearance to any overhead combustible projection of 2-1/2" (64 mm) or less (see *Figure 5*). For projections exceeding 2-1/2" (64 mm), see *Figure 5*. For additional vent location restrictions refer to *Figure 6 on Page 12*.





MINIMUM CLEARANCES				
Clearance Description US Installation ① Canadian Installation ②				
A = Clearance above grade, veranda, porch, deck, or balcony.	18" (46 cm) ①	18" (46 cm) ②		
B = Clearance to window or door that may be opened.	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW),	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW),		
	9" (23 cm) for appliances > 10,000 BTU/hr (3kW) and < 50,000 BTU/hr (15kW),	12" (30 cm) for appliances > 10,000 BTU/hr (3kW) and < 100,000 BTU/hr (30kW),		
	12" (30 cm) for appliances > 50,000 BTU/hr (15kW). ①	36" (91 cm) for appliances > 100,000 BTU/hr (30kW). ②		
C = Clearance to permanently closed window.	9" (229 mm) recommended to prevent window condensation.	12" (305 mm) recommended to prevent window condensation.		
D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 36" (91.4 cm) from center line of terminal.	24" (61 cm)	24" (61 cm)		
E = Clearance to unventilated soffit.	24" (61 cm)	24" (61 cm)		
F = Clearance to outside corner.	5" (12.7 cm)	5" (12.7 cm)		
G = Clearance to inside corner.	24" (61 cm)	36" (91.4 cm)		
H = Clearance to each inside of center line extended above meter/regulator assembly.	3 ft (91.4 cm) within a height of 15 ft above the meter/regulator assembly. ①	3 ft (91.4 cm) within a height of 15 ft above the meter/regulator assembly. ②		
I = Clearance to service regulator vent outlet.	3 ft (91.4 cm) ①	3 ft (91.4 cm) ②		
J = Clearance to non-mechanical air supply	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW);	6" (15.2 cm) for appliances < 10,000 BTU/hr (3kW);		
inlet to building or combustion air inlet to any other appliance.	9" (23 cm) for appliances > 10,000 BTU/hr (3kW) and < 50,000 BTU/hr (15kW);	12" (30 cm) for appliances > 10,000 BTU/hr (3kW) and < 100,000 BTU/hr (30kW);		
	12" (30 cm) for appliances > 50,000 BTU/hr (15kW). ①	36" (91.4 cm) for appliances > 100,000 BTU/hr (30kW). ②		
K = Clearance to mechanical air supply inlet.	3 ft (91.4 cm) above, if within 10 ft (3 m) horizontally. ①	6 ft (1.83 m) ②		
L = Clearance above paved sidewalk or paved driveway located on public property.	7 ft (2.13 m) ③	7 ft (2.13 m) ③		
M = Clearance under veranda, porch, deck, or balcony.	18" (46.0 cm) ① ③	18" (46.0 cm) ④		

- ① In accordance with the current ANSI Z223.1 / NFPA 54 National Fuel Codes (latest editions).
- ② In accordance with the current CAN/CGA-B149.1 Installation Code (latest editions).
- 3 A vent shall not terminate directly above a sidewalk or paved driveway that is located between two single-family dwellings and serves both dwellings.
- Only permitted if veranda, porch, deck, or balcony is fully open on a minimum of two sides beneath the floor.

Figure 6 - Horizontal vent termination clearances for buildings with combustible and noncumbustible exteriors

# **HEARTH EXTENSIONS (OPTIONAL)**

NOTE: Hearth extensions are not required with this appliance.

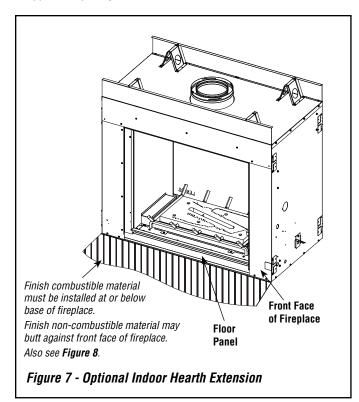
# **Optional Indoor Hearth Extension**

Combustible indoor hearth material may only be installed at or below the base of the fireplace (see Figures 7 and 8).

Non-combustible indoor hearth material may be installed above the base of the fireplace and may butt against the front face of the fireplace (see Figures 7 and 8).

Also note the following:

- Combustible material may project beyond the sides of the fireplace opening, as long as it is within the shaded area shown in *Figure 11* on Page 14.
- Vertical installation clearances to combustible mantels vary according to the depth of the mantel (see Figure 10 on Page 14).
- Non-combustible mantels may be installed at any height above the appliance opening.

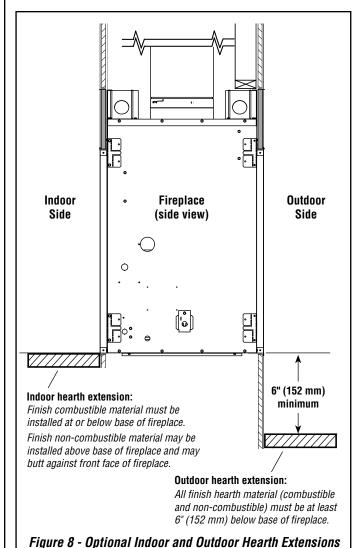


### **Optional Outdoor Hearth Extension**

All outdoor hearth material (combustible and non-combustible) must be installed a **minimum of 6" (152 mm) below** the base of the fireplace (see *Figure 8*).

Also note the following:

- For vertical installation clearances to combustible outdoor mantels and overhangs, see *Page 33* and the instructions provided in the Outdoor Installation Kit (required for all outdoor installations; see *Page 56*).
- Non-combustible outdoor mantels and overhangs may be installed at any height above the appliance opening.



# MINIMUM CLEARANCES TO COMBUSTIBLES

# **Appliance and Vent Clearances**

The appliance is approved with zero clearance to combustible materials on both sides (as detailed in *Table 5*), with the following exceptions:

- When the unit is installed with one side flush with a wall, the wall on the other side of the unit must not extend beyond the front edge of the unit.
- In addition, when the unit is recessed, the side walls surrounding the unit must not extend beyond the front edge of the unit (see Figure 10).

MINIMUM CLEARANCES TO COMBUSTIBLES ①		
Back / Sides	0" (0 mm) Spacers ②	
Top Spacers	0" (0 mm)	
Floor	0" (0 mm)	
Unit Bottom to Ceiling	72" (1829 mm)	
Vertical Vent Pipe	1" (26 mm)	
Horizontal Vent Pipe	Top: 4" (102 mm) ① Sides: 1" (26 mm) Bottom: 1" (26 mm)	
SERVICE CLEARANCES		
Front	3 ft (0.9 m)	
Table 5		

- ① 4" (102 mm) above any horizontal/inclined vent component.
- ② See Step 1 ("FRAMING") on Page 15 for clearance requirements to nailing flanges on each side of unit and any adjacent screw heads.

# Min. Height of Combustible Enclosure

To provide for the lowest possible combustible enclosure (or shelf) surface, the venting should be routed in a way to minimize obstructions to the space above the appliance. Do not insulate the space between the appliance and the area above it (see *Figure 9*).

# Wall Finishes / Surrounds / Mantels

**NOTE:** Combustible wall finish materials and/or surround materials must not be allowed to encroach the area defined by the appliance front faces (black sheet metal). Never allow combustible materials to be positioned in front of or overlapping the appliance face. See **Pages 32 and 33**.

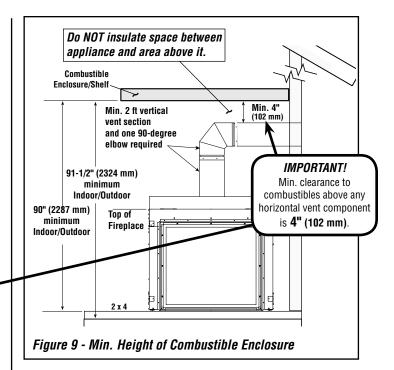
Non-combustible materials, such as surrounds and other appliance trim, may be installed on the appliance front face with these exceptions: they must not cover any portion of the removable glass panel.

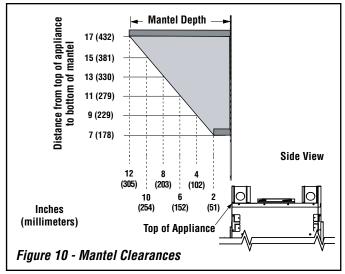
Vertical installation clearances to combustible mantels vary according to the depth of the mantel (see *Figure 10*). Mantels constructed of non-combustible materials may be installed at any height above the appliance opening.

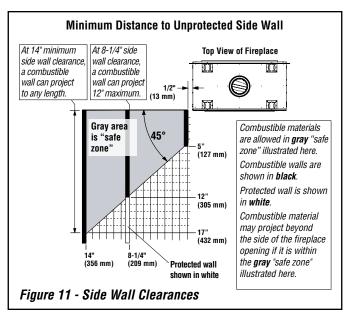
**NOTE:** To avoid heat-related finish damage, we recommend the use of high-temperature paint (rated 175°F or higher) on the underside of the mantel.

Minimum clearance requirements include any projections such as shelves, window sills, mantels, etc. above the appliance.

**NOTE:** Attic insulation shield (H3908, see **Page 42**) must be installed when blown or loose-fill insulation is used, and is required for all attic installations.







# PRE-INSTALLATION STEPS

The appliance is shipped with all gas controls and components installed and pre-wired.

- 1. Remove the shipping carton, exposing the front glass door on the control side.
- Using a Phillips screwdriver, unfasten two
   (2) screws located at the top of the glass frame (see Figure 71 on Page 48). Tilt the top of the glass frame away from the unit. Lift it carefully off the bottom door track and set the door aside, protecting it from inadvertent damage.

# **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.

# **A** AVERTISSEMENT

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

# Barrier (see Notice, Page 30)

This fireplace comes with a barrier to reduce the likelihood of burns from touching hot glass. If the barrier is damaged, the fireplace should be turned off immediately and the fireplace must not be operated until a new, approved factory barrier for this unit is installed.

To remove barrier follow these steps.

- 1. Lift barrier up by the frame at the top.
- Remove lower filler piece by pulling down off of the barrier.
- 3. Lower barrier and push barrier to left to release right side.
- 4. Pull the right side out of fireplace.
- 5. Remove screen.
- 6. Install the new, approved factory barrier with flat side of screen toward firebox.

# TYPICAL INSTALLATION SE-OUENCE

The typical sequence of installation is outlined below.

NOTE: Each installation is unique and may result in variations to the steps described herein.

See the page numbers referenced in the following steps for detailed procedures.

- Step 1. FRAMING (*Page 15*): Construct appliance framing. Position appliance within framing; and secure with nailing brackets.
- Step 2. ROUTE GAS LINE (Page 18):

  Route gas supply line to right side (when viewed from control side of appliance).
- Step 3. INSTALL VENT SYSTEM (*Page 19*): install vent system and exterior termination.
- **Step 4. FIELD WIRING** (*Page 28*): Connect 120 Vac electrical power to the appliance receptacle.
- Step 5. REMOVE GLASS DOOR ASSEMBLY (Page 29).
- Step 6. CONNECT GAS LINE (Page 29):

  Make connection to gas supply.
- Step 7. INSTALL FIREBOX LINER PANEL KIT (Page 30).
- Step 8. INITIALIZE THE REMOTE CONTROL SYSTEM (Page 30).
- Step 9. VERIFY APPLIANCE OPERATION (Page 30).
- Step 10. INSTALL VOLCANIC STONE, GLOWING EMBERS, AND LOGS (Page 30).
- Step 11. INSTALL GLASS DOORS AND MODESTY PANEL (Page 30).
- Step 12. BURNER ADJUSTMENTS (*Page* 31): Adjust burner air shutter to ensure proper flame appearance.

FINISHING REQUIREMENTS (Page 32).

Step 13. ATTACHING SAFETY-IN-OPERATION WARNINGS (Page 41).

# **DETAILED INSTALLATION STEPS**

# Step 1. FRAMING

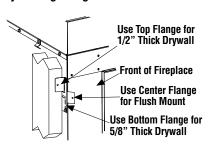
Frame these appliances as illustrated in *Figure* 13 on *Page* 16. All framing details must allow for a minimum clearance to combustible framing members as shown in *Table* 5 and *Figures* 9–11 on *Page* 14.

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

Headers may be in direct contact with the appliance top spacers but must not be supported by them or notched to fit around them. All construction above the appliance must be self-supporting, **DO NOT** use the appliance for structural support.

Secure the fireplace to the side framing members using the unit's nailing flanges - one top and bottom on each side of the fireplace front (see *Figure 12*). Use 8d nails or their equivalent.

# Securing Unit to Framing by Nailing Flanges



Left Side Front Corner of Fireplace Shown (Same requirements for right side)

**NOTE:** The nailing flanges, combustible members and screw heads in areas directly adjacent to the nailing flanges are EXEMPT from the 1/2" clearance to combustible requirements for the firebox outer wrapper. Combustible framing may be in direct contact with the nailing flanges and may be located closer than 1/2" from screw heads and the firebox wrapper in areas adjacent to the nailing flanges. Frame the opening to the exact dimensions specified in the framing details in these **Installation Instructions**.

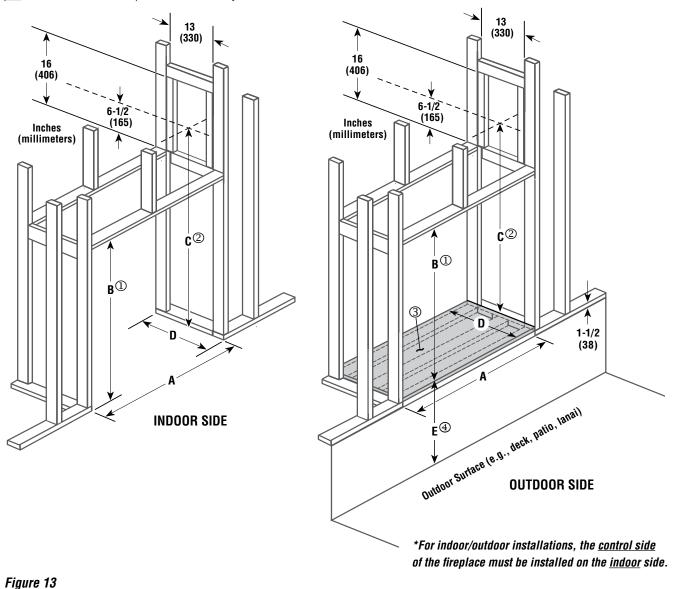
Figure 12

# FRAMING SPECIFICATIONS

Framing should be constructions of 2x4 or larger lumber.

	A	B ①	<b>C</b> ②	D	<b>E</b> ④
in	52-1/8	47-3/8	75-1/2	26-3/8	6
(mm)	(1324)	(1203)	(1918)	(670)	(152)

- ① Dimension **B** is from <u>fireplace base</u> to top framing member.
- ② Dimension C is from <u>fireplace base</u> to centerline of horizontal vent pipe. Minimum vent framing: 2 ft vertical vent and one 90° elbow. For other venting configurations, see **Step 3**, **INSTALL VENTING SYSTEM**.
- ③ 1/2" board for platform (shown in gray).
- ④ Dimension **E** is a 6" clearance from fireplace base to outdoor surface (e.g., deck, patio, lanai) that is required as a moisture barrier (<u>not</u> a combustible clearance) on outdoor side only.



# FIREPLACE DIMENSIONS (shown with Outdoor Kit installed) **NOTE:** All venting/termination systems (vertical and horizontal) require installation of the provided Vent Restrictor. See Page 19 for details. **Fireplace Vent Collar** 25-3/8 8" Inner / 11" Outer (645)inches (millimeters) 13-1/8 (333)7-3/8 5-1/2 (187)(140)**Top View** 27-1/2 (699) inches 34-3/4 26-1/4 (millimeters) (883)inches 5-1/8 (millimeters) 3-1/2 (130) (89) 12-3/8 (314) 41-1/2 (1054)29-5/8 46-5/8 7 (178) (752)(1184) 33-3/4 (857) **Gas Inlet Control Switch** Wires Knock-Out J-Box 19-5/8 (499)50-1/2 (1283) Front View (opposite valve access side) **Left Side View** Figure 14

# Step 2. ROUTE GAS LINE

# A

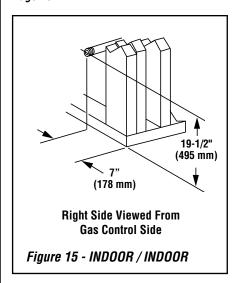
# **NOTICE**

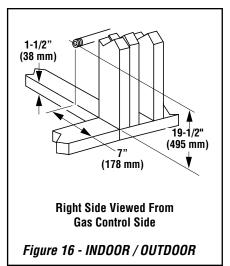
For indoor/outdoor installations, the <u>CONTROL SIDE</u> of the fireplace must be installed on the INDOOR side.

Route a 1/2" (13 mm) gas line along the inside of the right side framing as shown in *Figures 15* and 16. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations.

All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve (see Step 6 on *Page 29*).

The incoming gas line should be piped into the valve compartment and connected in one of the two methods as shown in *Figure 37* on *Page 29*.





### **Proper Sizing of Gas Line**

Properly size and route the gas supply line from the supply regulator to the area where the appliance is to be installed per requirements outlined in the National Fuel Gas Code, NFPA 54 - latest edition (USA) or CAN/CGA-B149.1 - latest edition (Canada).

Never use galvanized or plastic pipe. Refer to *Table 6* for proper sizing of the gas supply line, if black iron pipe is being used. Gas lines must be routed, constructed and made of materials that are in strict accordance with local codes and regulations.

# IMPORTANT: It is critical that a licensed installer perform this step strictly per NFPA.

We recommend that a qualified, licensed plumber or gas fitter be hired to correctly size and route the gas supply line to the appliance. Installing a gas supply line from the fuel supply to the appliance involves numerous considerations of materials, protection, sizing, locations, controls, pressure, sediment, and more. Certainly no one unfamiliar and unqualified should attempt sizing or installing gas piping.

Schedule 40, Black Iron Pipe Inside Diameter (Inches)				
Schedule 40 Pipe Length (feet)	Natural Gas	Propane Gas		
0-10	1/2	3/8		
10-40	1/2	1/2		
40-100 1/2 1/2				
100-150	3/4	1/2		
150-200 3/4 1/2				
Table 6				

### NOTES:

- All appliances are factory-equipped with a flexible gas line connector and 1/2" shutoff valve (see *Figure 37*, *Page 29*).
- See Massachusetts Requirements on Page 6 for additional requirements for installations in the state of Massachusetts in the USA.
- The gas supply line should not be connected to the appliance until Step 6 (Page 29).
- A pipe joint compound rated for gas should be used on the threaded joints. Ensure propane-resistant compounds are used in propane applications. Be very careful that the pipe compound does not get inside the pipe.
- Sediment Trap: It is recommended to install a sediment trap in the supply line as close as possible to the appliance (see *Figure 37 on Page 29*). Appliances using propane should have a sediment trap at the base of the tank.
- Check with local building official for local code requirements (such as whether belowgrade penetrations of the gas line allowed, etc.).

# IMPORTANT NOTE REGARDING PROPANE INSTALLATIONS

Using a propane tank smaller than 100 lbs may create pressure loss and insufficient fuel delivery, which can cause sooting, severe delayed ignition, or other malfunctions (ref. NPFA 58).

Any damage as a result of insufficient tank size or other improper installation is NOT covered under the limited warranty.

# Step 3. INSTALL VENT SYSTEM

# **General Information**

These instructions should be used as a guideline and do not supersede local codes in any way. Install venting according to local codes, these instructions, the current National Fuel Gas Code (ANSI-Z223.1) in the USA or the current standards of CAN/CGA-B149.1 in Canada.

Ensure clearances are in accordance with local installation codes and the requirements of the gas supplier.

Dégagement conforme aux codes d'installation locaux et aux exigences du foumisseunde gaz.

Use only approved venting components. See "Approved Vent Components" on *Page 8*.

These fireplaces must be vented directly to the outside.

The vent system may not service multiple appliances and must never be connected to a flue serving a solid fuel burning appliance.

The vent pipe is tested to be run inside an enclosed wall (such as a chase). There is no requirement for inspection openings in the enclosing wall at any of the joints in the vent pipe.

# Vent Restrictor Assembly and Installation

All vent systems require installation of a vent restrictor. A vent restrictor kit is provided with the fireplace (packaged inside the firebox) and includes one base, two wings, and four screws (see *Figure 17A*).

- Assemble the vent restrictor components according to the type of termination and length of vent run, as shown in *Figures 17B* and 17C.
- Install the vent restrictor in the appliance top flue outlet, as shown in Figure 17D. The vent restrictor is held in place by friction only.

**NOTE:** When possible, install the vent restrictor through the top of the appliance vent outlet BEFORE installing the vent system. (It is possible to install the vent restrictor from inside the firebox after vent system installation; however, doing so requires removing the firebox baffle).

# Vent Termination (Vertical or Horizontal)

**Vent Restrictor Assembly for Vertical Termination Systems** 

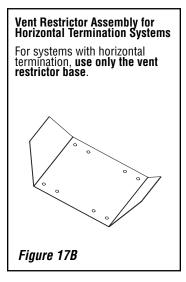
For systems with vertical termination, use the four provided

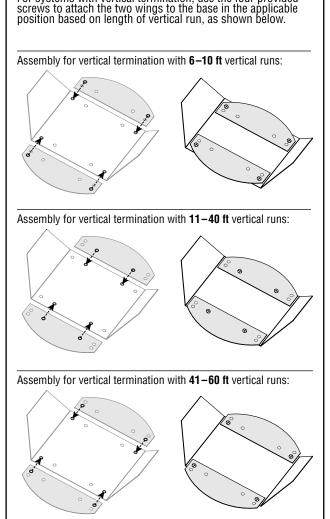
With the appliance secured in framing, determine whether to terminate the venting vertically (through the roof) or horizontally (through the wall).

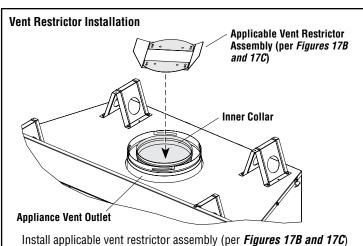
- For Vertical (Roof) Termination Systems, see Pages 20–23.
- For Horizontal (Wall) Termination Systems, see *Pages 24–27*.

See Page 42 for a list of approved venting components.

# Vent Restrictor Kit (1) Vent Restrictor Base (2) Wings (4) Screws Figure 17A







NOTE: The vent restrictor is held in place by friction only.

into inner collar of appliance vent outlet.

Figure 17D

Figure 17C

# **Vertical (Roof) Termination Systems**

This section includes configurations for vertical (roof) termination systems with either straight vertical venting (see *below* and *Page 23*) and offset vertical venting (see *Page 23*). Secure Vent® rigid vent pipe and termination components are shown in the figures.

The tables on *Page 23* summarize each system's minimum and maximum vertical and horizontal length values.

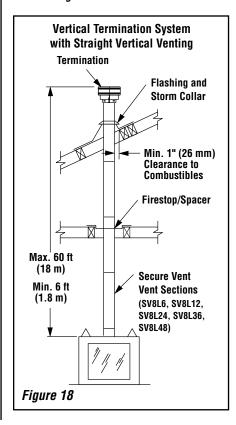
For vertical (roof) termination, the minimum vent height above the roof and/or adjacent walls is specified in ANSI Z223.1, latest edition (in Canada, the current CAN/CGA-B149.1 installation code) and by major building codes. Always consult your local codes for specific requirements. A general guide to follow is the Gas Vent Rule (see *Figure 4 on Page 11*).

# Vertical Termination System with Straight Vertical Venting

NOTE: If not already done, install the provided vent restrictor before proceeding (see Page 19).

Determine the number of straight vent sections required. Available straight vent sections (and their effective lengths) are listed in *Table 7*, below. See *Page 42* for all venting components.

Plan the vent lengths so a joint does not occur at the intersection of ceiling or roof joists. Refer to the "VENT SECTION LENGTHS" charts at right.



VENT SECTION LENGTH CHART							
Nom Section (incl	Length	6	12	24	36	48	Į Q Į
Net S Length	ection (inches)	4-1/2	10-1/2	22-1/2	34-1/2	46-1/2	Ā
Height	,		Number	of Vent	Section	18	Q
inches	ft						Ť
4.5	0.375	1	0	0	0	0	1
9	0.75	2	0	0	0	0	2
10.5	0.875	0	1	0	0	0	1
15	1.25	1	1	0	0	0	2
22.5	1.875	0	0	1	0	0	1
31.5	2.625	0	3	0	0	0	3
34.5	2.875	0	0	0	1	0	1
37.5	3.125	1	1	1	0	0	3
43.5	3.625	0	2	1	0	0	3
45	3.75	0	0	2	0	0	2
46.5	3.875	0	0	0	0	1	1
51	4.25	1	0	0	0	1	2
55.5	4.625	0	1	2	0	0	3
57	4.75	0	0	1	1	0	2
67.5	5.625	0	0	3	0	0	3
69	5.75	0	0	0	2	0	2
73.5	6.125	1	0	0	2	0	3
79.5	6.625	0	1	0	2	0	3
81	6.75	0	0	0	1	1	2
91.5	7.625	0	0	2	0	1	3
93	7.75	0	0	0	0	2	2
97.5	8.125	1	0	0	0	2	3
103.5	8.625	0	0	0	3	0	3
108	9	1	0	0	3	0	4
117	9.75	1	0	5	0	0	6
118.5	9.875	1	1	0	3	0	5
126	10.5	0	0	1	3	0	4
130.5	10.875	1	0	1	3	0	5
135	11.25	0	0	6	0	0	6
139.5	11.625	0	0	0	0	3	3
142.5	11.875	1	0	0	4	0	5
144	12	1	0	0	0	3	4
154.5	12.875	1	1	0	0	3	5
160.5	13.375	0	2	0	0	3	5
172.5	14.375	0	0	0	5	0	5
177	14.75	1	0	0	5	0	6
186	15.5	0	0	0	0	4	4
196.5	16.375	0	1	0	0	4	5
207	17.25	0	0	0	6	0	6
211.5	17.625	1	0	0	6	0	7
217.5	18.125	0	1	0	6	0	7
229.5	19.125	0	0	1	6	0	7
232.5	19.375	0	0	0	0	5	5
241.5	20.125	0	0	0	7	0	7
246	20.5	1	0	0	7	0	8
252	21	0	1	0	7	0	8
							_

Section Length         Ical (Incluses)         Ical (Incl	VENT SECTION LENGTH CHART							
Length Vert linches         4-1/2         10-1/2         22-1/2         34-1/2         46-1/2         Number Vert Vert Vert Vert Vert Vert Vert Ve	Section	Length	6	12	24	36	48	T O
inches         ft         U         O         O         S         O         S           279         23.25         O         O         O         O         6         6           280.5         23.375         1         O         O         8         O         9           289.5         24.125         O         1         O         O         6         7           301.5         25.125         O         O         1         O         6         7           310.5         25.875         O         O         O         O         O         7         7           330.5         27.125         O         O         O         O         O         7         7           330.27.5         1         O         O         O         O         T         1           349.5         28.75         O         O         O         O         T         1           349.5         29.125         1         O         O         O         D         1         1           349.5         29.125         1         O         O         O         D         1         1 <th></th> <th colspan="2"></th> <th>10-1/2</th> <th>22-1/2</th> <th>34-1/2</th> <th>46-1/2</th> <th>Α</th>				10-1/2	22-1/2	34-1/2	46-1/2	Α
276         23         0         0         0         8         0         8           279         23.25         0         0         0         0         6         6           289.5         24.125         0         1         0         0         6         7           301.5         25.125         0         0         1         0         6         7           310.5         25.875         0         0         0         9         0         9           325.5         27.125         0         0         0         0         7         7           330         27.5         1         0         0         0         7         8           345         28.75         0         0         0         10         0         10           349.5         29.125         1         0         0         10         0         10           349.5         29.125         1         0         0         0         1         1           349.5         29.125         1         0         0         0         1         1           449.5         31         0	Height	of Vent	N	lumber	of Vent	Section	ns	Q
279         23.25         0         0         0         0         6         6           280.5         23.375         1         0         0         8         0         9           289.5         24.125         0         1         0         0         6         7           301.5         25.125         0         0         0         9         0         9           310.5         25.875         0         0         0         0         7         7           330         27.5         1         0         0         0         7         8           345         28.75         0         0         0         10         0         11           349.5         29.125         1         0         0         10         0         11           379.5         31.625         0         0         0         11         0         11           481.5         38.75         0         0         0         1         1         0         1         1         1           492.         41         1         0         0         0         1         1         1	inches	ft						Ϋ́
280.5         23.375         1         0         0         8         0         9           289.5         24.125         0         1         0         0         6         7           301.5         25.125         0         0         1         0         6         7           310.5         25.875         0         0         0         0         7         7           330         27.5         1         0         0         0         7         8           345         28.75         0         0         0         10         0         10           349.5         29.125         1         0         0         10         0         11           379.5         31.625         0         0         0         1         0         11           48.5         38.75         0         0         0         0         9         9           465         38.75         0         0         0         0         10         1           475.5         39.625         0         1         0         0         10         1         1           499.5         41.625	276	23	0	0	0	8	0	8
289.5         24.125         0         1         0         6         7           301.5         25.125         0         0         1         0         6         7           310.5         25.875         0         0         0         9         0         9           325.5         27.125         0         0         0         0         7         7           330         27.5         1         0         0         10         0         10           349.5         28.75         0         0         0         10         0         11           349.5         29.125         1         0         0         10         0         11           379.5         31.625         0         0         0         0         9         9           465         38.75         0         0         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         11           499.5         41.625         0 <t< td=""><td>279</td><td>23.25</td><td>0</td><td>0</td><td>0</td><td>0</td><td>6</td><td>6</td></t<>	279	23.25	0	0	0	0	6	6
301.5         25.125         0         0         1         0         6         7           310.5         25.875         0         0         0         9         0         9           325.5         27.125         0         0         0         0         7         7           330         27.5         1         0         0         10         0         10           349.5         28.75         0         0         0         10         0         11           379.5         31.625         0         0         0         0         8         8           379.5         31.625         0         0         0         0         10         11           488.5         34.875         0         0         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         11           499.5         41.625         0         0         0         1         10         11           499.5         41.625	280.5	23.375	1	0	0	8	0	9
310.5         25.875         0         0         0         9         0         9           325.5         27.125         0         0         0         0         7         7           330         27.5         1         0         0         0         7         8           345         28.75         0         0         0         10         0         11           349.5         29.125         1         0         0         10         0         11           379.5         31.625         0         0         0         0         9         9           465         38.75         0         0         0         0         10         10           475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         11           499.5         41.625         0         0         0         1         10         12           51.5         42.625 <td< td=""><td>289.5</td><td>24.125</td><td>0</td><td>1</td><td>0</td><td>0</td><td>6</td><td>7</td></td<>	289.5	24.125	0	1	0	0	6	7
325.5         27.125         0         0         0         7         7           330         27.5         1         0         0         0         7         8           345         28.75         0         0         0         10         0         10           349.5         29.125         1         0         0         10         0         11           379.5         31.625         0         0         0         0         9         9           465         38.75         0         0         0         0         10         10           475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         11           499.5         41.625         0         0         0         1         10         11           499.5         41.625         0         0         0         1         10         12           50.4         42.025         0         <	301.5	25.125	0	0	1	0	6	7
330         27.5         1         0         0         0         7         8           345         28.75         0         0         0         10         0         10           349.5         29.125         1         0         0         10         0         11           372         31         0         0         0         0         11         0         11           418.5         34.875         0         0         0         0         9         9           465         38.75         0         0         0         0         10         11           475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           504         42         1         0         0         1         11         11           504         42.625	310.5	25.875	0	0	0	9	0	9
345         28.75         0         0         0         10         0         10           349.5         29.125         1         0         0         10         0         11           372         31         0         0         0         0         8         8           379.5         31.625         0         0         0         0         9         9           465         38.75         0         0         0         0         10         10           475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           511.5         42.625         0         0         0         11         11         11           520.5         43.375	325.5	27.125	0	0	0	0	7	7
349.5         29.125         1         0         0         10         0         11           372         31         0         0         0         0         8         8           379.5         31.625         0         0         0         11         0         11           418.5         34.875         0         0         0         0         10         10           455.5         38.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         11         11         11           504.4         1         0         0         0         11         11         11           520.5         43.375         <	330	27.5	1	0	0	0	7	8
372         31         0         0         0         0         8         8           379.5         31.625         0         0         0         11         0         11           418.5         34.875         0         0         0         0         9         9           465         38.75         0         0         0         0         10         10           475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           504         42         1         0         0         1         10         12           511.5         42.625         0         2         0         1         1         1           531.5         44.875         1	345	28.75	0	0	0	10	0	10
379.5         31.625         0         0         0         11         0         11           418.5         34.875         0         0         0         0         9         9           465         38.75         0         0         0         0         10         10           475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         12           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           504         42         1         0         0         1         10         12           511.5         42.625         0         0         0         1         11         14           531.4         44.25         0         2         2         0         11         15           538.5         44.875	349.5	29.125	1	0	0	10	0	11
418.5         34.875         0         0         0         0         9         9           465         38.75         0         0         0         0         10         10           475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           492         41         1         0         1         0         10         12           499.5         41.625         0         0         0         1         10         12           499.5         41.625         0         0         0         1         10         12           504         42         1         0         0         1         10         12           511.5         42.625         0         0         0         1         11         14           531.4         44.25         0         2         0         1         1         1           538.5         44.875         1         0         0         2         1         11         15           562.5         46.87	372	31	0	0	0	0	8	8
465         38.75         0         0         0         0         10         10         10         10         10         10         10         11         475.5         39.625         0         1         0         0         10         11         11         11         11         11         11         11         11         11         11         11         12         14         12         14         12         14         14         14         14         14         14         14         14         14         15         14         14         15         14         19         14         15         14         19         14         12         14         15         14         19         12         11         11         14         14         14         14         14         14         14         14         15         14	379.5	31.625	0	0	0	11	0	11
475.5         39.625         0         1         0         0         10         11           480         40         1         1         0         0         10         11           492         41         1         0         1         0         10         12           499.5         41.625         0         0         0         1         10         11           504         42         1         0         0         1         10         12           511.5         42.625         0         0         0         0         11         11         14           520.5         43.375         0         2         0         1         11         14           531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           562.5         46.875         1         0         0         0         12         13           562.5         47	418.5	34.875	0	0	0	0	9	9
480         40         1         1         0         0         10         11           492         41         1         0         1         0         10         12           499.5         41.625         0         0         0         1         10         11           504         42         1         0         0         1         10         12           511.5         42.625         0         0         0         0         11         11         14           520.5         43.375         0         2         0         1         11         14           531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375	465	38.75	0	0	0	0	10	10
492         41         1         0         1         0         10         12           499.5         41.625         0         0         0         1         10         11           504         42         1         0         0         1         10         12           511.5         42.625         0         0         0         0         11         11         14           520.5         43.375         0         2         0         1         11         14           531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           589.5	475.5	39.625	0	1	0	0	10	11
499.5         41.625         0         0         0         1         10         11           504         42         1         0         0         1         10         12           511.5         42.625         0         0         0         0         11         11           520.5         43.375         0         2         0         1         11         14           531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           580.5         48.375         0         0         1         0         12         13           589.5         49.125	480	40	1	1	0	0	10	11
504         42         1         0         0         1         10         12           511.5         42.625         0         0         0         0         11         11           520.5         43.375         0         2         0         1         11         14           531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625	492	41	1	0	1	0	10	12
511.5         42.625         0         0         0         0         11         11           520.5         43.375         0         2         0         1         11         14           531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           580.5         48.375         0         1         0         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375 </td <td>499.5</td> <td>41.625</td> <td>0</td> <td>0</td> <td>0</td> <td>1</td> <td>10</td> <td>11</td>	499.5	41.625	0	0	0	1	10	11
520.5         43.375         0         2         0         1         11         14           531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           573         47.75         1         1         0         0         12         13           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375	504	42	1	0	0	1	10	12
531         44.25         0         2         2         0         11         15           538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           573         47.75         1         1         0         0         12         14           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         13           615         51.25	511.5	42.625	0	0	0	0	11	11
538.5         44.875         1         0         0         2         11         14           549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           573         47.75         1         1         0         0         12         14           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625 </td <td>520.5</td> <td>43.375</td> <td>0</td> <td>2</td> <td>0</td> <td>1</td> <td>11</td> <td>14</td>	520.5	43.375	0	2	0	1	11	14
549         45.75         1         0         2         1         11         15           558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         14           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         13           615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125 </td <td>531</td> <td>44.25</td> <td>0</td> <td>2</td> <td>2</td> <td>0</td> <td>11</td> <td>15</td>	531	44.25	0	2	2	0	11	15
558         46.5         0         0         0         0         12         12           562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           573         47.75         1         1         0         0         12         14           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25 </td <td>538.5</td> <td>44.875</td> <td>1</td> <td>0</td> <td>0</td> <td>2</td> <td>11</td> <td>14</td>	538.5	44.875	1	0	0	2	11	14
562.5         46.875         1         0         0         0         12         13           568.5         47.375         0         1         0         0         12         13           573         47.75         1         1         0         0         12         14           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         13           615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.625	549	45.75	1	0	2	1	11	15
568.5         47.375         0         1         0         0         12         13           573         47.75         1         1         0         0         12         14           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         13           615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         16           655.5         54.625<	558	46.5	0	0	0	0	12	12
573         47.75         1         1         0         0         12         14           580.5         48.375         0         0         1         0         12         13           589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         13           615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         16           672         56	562.5	46.875	1	0	0	0	12	13
580.5       48.375       0       0       1       0       12       13         589.5       49.125       0       1       2       2       10       15         595.5       49.625       1       1       1       0       12       15         604.5       50.375       0       0       0       0       13       13         615       51.25       0       1       0       0       13       15         631.5       52.625       1       0       1       0       13       15         637.5       53.125       0       1       1       0       13       15         651       54.25       0       0       0       0       14       14         655.5       54.625       1       0       0       0       14       15         672       56       0       2       0       0       14       16         678       56.5       1       0       1       0       14       16         688.5       57.375       1       1       1       0       14       17         697.5       58.125	568.5	47.375	0	1	0	0	12	13
589.5         49.125         0         1         2         2         10         15           595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         13           615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         16           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         16           688.5         57.375	573	47.75	1	1	0	0	12	14
595.5         49.625         1         1         1         0         12         15           604.5         50.375         0         0         0         0         13         13           615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         15           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         16           688.5         57.375         1         1         1         0         14         17           697.5         58.125	580.5	48.375	0	0	1	0	12	13
604.5         50.375         0         0         0         0         13         13           615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         15           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         16           688.5         57.375         1         1         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5	589.5	49.125	0	1	2	2	10	15
615         51.25         0         1         0         0         13         14           625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         15           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         16           688.5         57.375         1         1         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5         1         0         0         0         15         16           712.5         59.375	595.5	49.625	1	1	1	0	12	15
625.5         52.125         0         2         0         0         13         15           631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         15           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5         1         0         0         0         15         16           712.5         59.375         1         1         0         0         15         17	604.5		0	0	0	0		
631.5         52.625         1         0         1         0         13         15           637.5         53.125         0         1         1         0         13         15           651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         15           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         17           688.5         57.375         1         1         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5         1         0         0         0         15         16           712.5         59.375         1         1         0         0         15         17	615	51.25	0	1	0	0	13	14
637.5     53.125     0     1     1     0     13     15       651     54.25     0     0     0     0     14     14       655.5     54.625     1     0     0     0     14     15       672     56     0     2     0     0     14     16       678     56.5     1     0     1     0     14     16       688.5     57.375     1     1     1     0     14     17       697.5     58.125     0     0     0     0     15     15       702     58.5     1     0     0     0     15     16       712.5     59.375     1     1     0     0     15     17	625.5	52.125	0	2	0	0	13	15
651         54.25         0         0         0         0         14         14           655.5         54.625         1         0         0         0         14         15           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         16           688.5         57.375         1         1         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5         1         0         0         0         15         16           712.5         59.375         1         1         0         0         15         17	631.5	52.625	1	0	1	0	13	15
655.5         54.625         1         0         0         0         14         15           672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         16           688.5         57.375         1         1         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5         1         0         0         0         15         16           712.5         59.375         1         1         0         0         15         17	637.5	53.125	0	1	1	0	13	15
672         56         0         2         0         0         14         16           678         56.5         1         0         1         0         14         16           688.5         57.375         1         1         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5         1         0         0         0         15         16           712.5         59.375         1         1         0         0         15         17	651	54.25	0	0	0	0	14	14
678         56.5         1         0         1         0         14         16           688.5         57.375         1         1         1         0         14         17           697.5         58.125         0         0         0         0         15         15           702         58.5         1         0         0         0         15         16           712.5         59.375         1         1         0         0         15         17	655.5	54.625	1	0	0	0	14	15
688.5     57.375     1     1     1     0     14     17       697.5     58.125     0     0     0     0     15     15       702     58.5     1     0     0     0     15     16       712.5     59.375     1     1     0     0     15     17	672	56	0	2	0	0	14	16
697.5     58.125     0     0     0     0     15     15       702     58.5     1     0     0     0     15     16       712.5     59.375     1     1     0     0     15     17	678	56.5	1	0	1	0	14	16
702         58.5         1         0         0         0         15         16           712.5         59.375         1         1         0         0         15         17	688.5	57.375	1	1	1	0	14	17
712.5 59.375 1 1 0 0 15 17	697.5	58.125	0	0	0	0	15	15
	702	58.5	1	0	0	0	15	16
720 60 0 0 1 0 15 16	712.5	59.375	1	1	0	0	15	17
<u> </u>	720	60	0	0	1	0	15	16

	Available Straight Vent Sections				
Cat. No.   Model No.   Description   Effective Length					
H2250	SV8L6	6" (152 mm) Vent Section	4-1/2" (114 mm)		
H2251	SV8L12	12" (305 mm) Vent Section	10-1/2" (267 mm)		
H2252	SV8L24	24" (610 mm) Vent Section	22-1/2" (572 mm)		
H2253	H2253 SV8L36 36" (914 mm) Vent Section 34-1/2" (876 mm)				
H2254   SV8L48   48" (1219 mm) Vent Section   46-1/2" (1181 mm)					
Table 7	Table 7         See Page 42 for a list of all approved venting components.				

Metric Conversion Inches x 25.4 = mm. Inches x 2.54 = cm. Inches x 0.0254 = m.

# Vertical Termination System with Offset Vertical Venting

NOTE: If not already done, install the provided vent restrictor before proceeding (see Page 19).

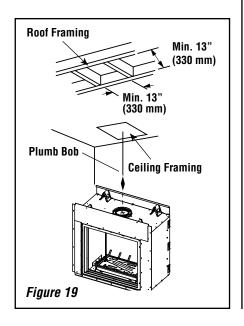
Analyze the vent routing and determine the quantities of vent sections and number of elbows required. Refer to **Vertical Termination System Figures and Tables** on *Page 23* to select the type of vertical installation desired. Vent sections are available in net lengths of 4-1/2" (114 mm), 10-1/2" (267 mm), 22-1/2" (572 mm), 34-1/2" (876 mm) and 46-1/2" (1181 mm). Refer to the **Vent Section Length Chart** on *Page 20* for an aid in selecting length combinations. Elbows are available in 90° and 45° configurations. See *Figure 22* on *Page 22* for the SV8E45 and SV8E90 elbow dimensional specifications.

Where required, a **telescopic vent section** (**SV8LA**) may be used to provide the installer with an option in installing in tight and confined spaces or where the vent run made up of fixed length pieces develops a joint in a undesirable location, or will not build up to the required length. The SV8LA Telescopic Vent Section has an effective length of from 1-1/2" (38 mm) to 6-3/4" (171 mm). The SV8LA is fitted with a dimpled end (identical to a normal vent section component) and a plain end with 3 pilot holes. Slip the dimpled end over the locking channel end of a standard SV8 vent component the required distance and secure with three screws.

Maintain a minimum 1" (26 mm) clearance to combustible materials for all vertical elements. Clearances for all horizontal elements are 4" (102 mm) on top, 1" (26 mm) on sides and 1" (26 mm) on the bottom.

# A. Frame ceiling opening.

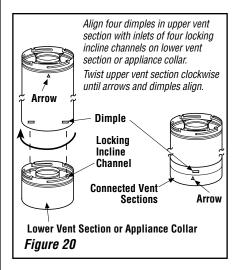
Use a plumb line from the ceiling above the appliance to locate center of the vertical run. Cut and/or frame an opening,  $13" \times 13"$  (330 mm x 330 mm) inside dimensions, about this center mark (*Figure 19*).



### B. Attach vent components to appliance.

**Secure Vent**® SV8 direct-vent system components are unitized concentric pipe components featuring positive twist lock connections (see *Figure 20*).

All of the appliances covered in this document are fitted with collars having locking inclined channels. The dimpled end of the vent components fit over the appliance collar to create the positive twist-lock connection.



To attach a vent component to the appliance collar, align the dimpled end over the collar, adjusting the radial alignment until the four locking dimples are aligned with the inlet of the four inclined channels on the collar (*refer to Figure 20*). Push the vent component against the collar until it fully engages, then twist the component clockwise, running the dimples down and along the incline channels until they seat at the end of the channels.

The unitized design of the **Secure Vent** components will engage and seal both the inner and outer pipe without the need for sealant or screws. If desired, a #6 x 1/2" screw may be used at the joint, but it is not required, as the pipe will securely lock when twisted.

### C. Attach vent components to each other.

Other vent sections may be added to the previously installed section in accordance with the requirements of the vertical vent figures and tables.

To add another vent component to a length of vent run, align the dimpled end over the inclined channel end of the previously installed section, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels of the previous section.

Push the vent component against the previous section until it fully engages, then twist the component clockwise, running the dimples down and along the incline channels until they seat at the end of the channels. This seating position is indicated by the alignment of the arrow and dimple as shown in *Figure 20*.

### D. Install firestop/spacer at ceiling.

When using Secure Vent, use SV8BF firestop/ spacer at ceiling joists. If there is living space above the ceiling level, the firestop/spacer must be installed on the bottom side of the ceiling. If attic space is above the ceiling, the firestop/spacer must be installed on the top side of the joist.

Route the vent sections through the framed opening and secure the firestop/spacer with 8d nails or other appropriate fasteners at each corner. When running vertical chimney sections, remember to maintain 1" (26 mm) clearance to combustibles, framing members, and attic or ceiling insulation. Attic insulation shield (H3908) is required and may be used to help maintain the clearances indicated here. See installation accessories on *Page 42*. The gap between the vent pipe and a vertical firestop can be sealed with non-combustible caulking.

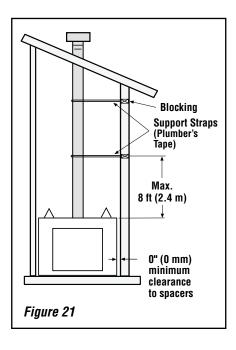
# E. Support vertical vent run sections.

Note: Proper venting support is very important. The weight of the vent must not be supported by the fireplace in any degree.

Support the vertical portion of the venting system every 8 feet (2.4 m) above the fireplace vent outlet.

One method of support is conventional plumber's tape (not provided). Secure the plumber's tape to the framing members with nails or screws.

Loop the plumber's tape around the vent, securing the ends of the tape to the framing. If desired, use #6 x 1/2" sheet metal screws to secure the support straps to the vent pipe. See *Figure 21*.

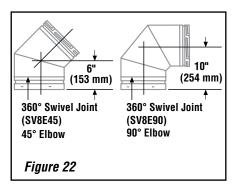


# Vertical Termination System with Offset Vertical Venting (continued)

# F. Change vent direction to horizontal/inclined run.

At any transition to or from a horizontal/inclined run, install the elbows (**SV8E45**, **SV8E90**; see *Figure 22*) in the same manner as the straight vent sections.

The elbows feature a twist section to allow them to be routed about the center axis of their initial collar section, to align with the required direction of the next vent run element. Twist elbow sections in a clockwise direction only, to avoid the possibility of unlocking any previously connected vent section (see *Figures 20 and 22*).



# G. Continue installation of horizontal/ inclined sections.

Continue with installation of the straight vent sections in horizontal/inclined run as described in **Step C**. Install support straps every 3 ft (914 mm) along horizontal/inclined vent runs using conventional plumber's tape (see *Page 24*, *Figure 29*).

# A

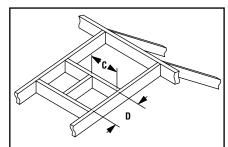
# NOTICE

It is important to install horizontal runs on a steady, (i.e., no "dips"), slightly positive incline of approximately 1/4" riseper-foot (20 millimeters rise-per-meter) horizontal, in a direction away from the fireplace. (Slightly smaller rise-per-foot run ratios are acceptable.) Use a carpenter's level to measure from a constant surface, and adjust support straps as necessary.

NOTE: It is important to maintain the required clearances to combustibles: 1" (26 mm) at all sides for all vertical runs; and 4" (102 mm) at the top, 1" (26 mm) at sides, and 1" (26 mm) at the bottom for all horizontal/inclined runs.

### H. Frame roof opening.

Identify location for vent at the roof. Cut and/ or frame opening per Roof Framing Chart (see *Figure 23*).



Fram	Framing Dimensions for Roof			
Pitch	C	D		
0/12	13" (330 mm)	13" (330 mm)		
6/12	13" (330 mm)	15-1/2" (394 mm)		
12/12	13" (330 mm)	20-1/2" (541 mm)		

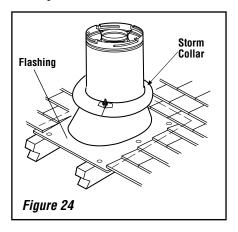
Figure 23 - Roof Framing

### I. Install roof flashing.

Extend the vent sections through the roof structure. Install the roof flashing over the vent section and position such that the vent column rises vertically (use carpenters level) (*Figure 24*). Nail along perimeter to secure flashing or adjust roofing to overlap the flashing edges at top and sides only and trim where necessary. Seal the top and both sides of the flashing with waterproof caulking.

### J. Install storm collar.

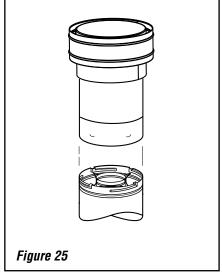
Install the storm collar, supplied with the flashing, over the vent/flashing joint (see *Figure 24*). Loosen the storm collar screw. Slide collar down until it meets the top of the flashing. Tighten the adjusting screw. Apply non-combustible caulking or mastic around the circumference of the joint to provide a water tight seal.



### K. Install vertical termination.

The final step involves installation of the vertical termination. Extend the vent sections to the height as shown in "Vertical Vent Termination Clearances" on *Page 11*.

The vertical termination (*Figure 25*) installs in the same manner as other **Secure Vent®** sections. Align the termination over the end of the previously installed section, adjusting the radial alignment until the four locking dimples of the termination are aligned with the inlets of the four incline channels of the last vent section. Push the termination down until it fully engages, then twist the termination clockwise, running the dimples down and along the incline channels until they seat at the end of the channels.



If the vent system extends more than 5 ft (1.5 m) above the roof flashing, stabilizers may be necessary.

Additional screws may be used at section joints for added stability.

Guide wires may be attached to the joint for additional support on multiple joint configurations.

# VERTICAL TERMINATION SYSTEM FIGURES AND TABLES

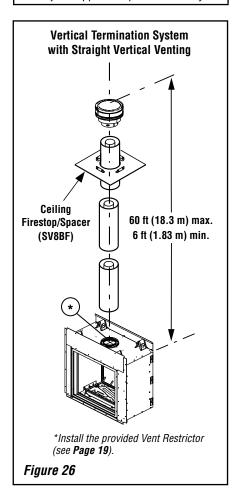
**Secure Vent**® rigid vent pipe and termination components are shown in the figures.

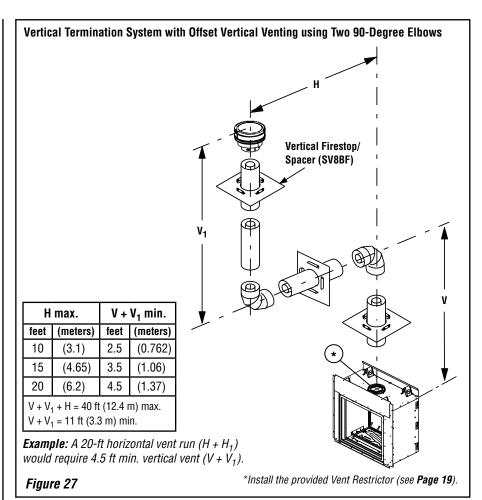
**NOTE**: Two 45-degree elbows may be used in place of one 90-degree elbow. If using 45-degree elbows, follow the same rise-to-run ratios as shown for 90-degree elbows.

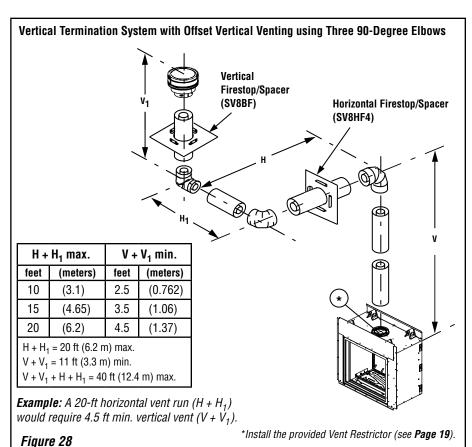
# **NOTICE**

Secure Vent Vertical Firestop/Spacer (SV8BF) must be used anywhere vent pipe passes through a combustible floor or ceiling. Secure Vent Horizontal Firestop/Spacer (SV8HF4) must be used anywhere vent pipe passes through a combustible wall.

It is important to install horizontal runs on a steady, (i.e., no "dips"), slightly positive incline of approximately 1/4" riseper-foot (20 millimeters rise-per-meter) horizontal, in a direction away from the fireplace. (Slightly smaller rise-per-foot run ratios are acceptable.) Use a carpenter's level to measure from a constant surface, and adjust support straps as necessary.







# Horizontal (Wall) Termination Systems

This section includes configurations for horizontal venting systems with horizonal termination (terminates through an outside wall) (see *Figures 32–34 on Pages 26–27*).

The tables on *Pages 26 and 27* summarize each system's minimum and maximum vertical and horizontal length values.

**NOTE:** Building codes limit or prohibit horizontal termination in specific areas. For location guidelines, see **Figure 6** on **Page 12**.

Secure Vent® pipe applications are shown in the illustrations. Secure Vent SV8 direct-vent system components are unitized concentric pipe components featuring positive twist-lock connection (see *Figure 20 on Page 21*). The appliances covered in this document are fitted with collars having locking inclined channels. The dimpled end of the vent components fit over the appliance collar to create the positive twist-lock connection.

### A. Plan the vent run.

Analyze the vent routing and determine the types and quantities of sections required. See *Page 20* for a list of available straight vent sections and their effective lengths (*Table 7*), as well as "VENT SECTION LENGTHS" charts. See *Page 42* for a list of all approved venting components.

Plan the vent lengths so that a joint does not occur at the intersection of ceiling or roof joists. Make allowances for elbows as indicated in *Figure 22 on Page 22*.

Maintain a minimum 1" (26 mm) clearance to combustibles on the vertical sections. Clearances for horizontal runs are 4" (102 mm) on top, 1" (26 mm) on sides, and 1" (26 mm) at the bottom.

### B. Frame exterior wall opening.

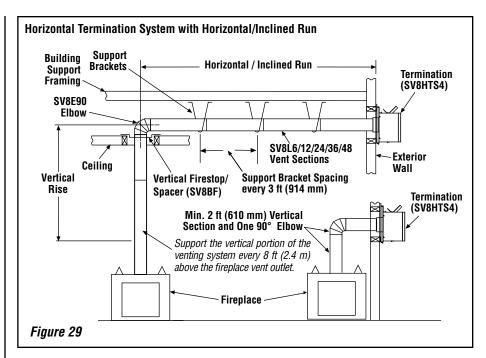
Locate the center of the vent outlet on the exterior wall according to the dimensions shown in *Figure 13 on Page 16*. Cut and/or frame an opening 16" x 13" (406 mm x 330 mm) inside dimensions, with 10" above center and 7" below center.

### C. Frame ceiling opening.

If the vertical route is to penetrate a ceiling, use plumb line to locate the center above the appliance. Cut and/or frame an opening, 13" x 13" (330 mm x 330 mm) inside dimensions, about this center (see *Figure 19* on *Page 21*).

### D. Attach vent components to appliance.

To attach a vent component to the appliance collar, align the dimpled end over the collar, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels on the collar (see *Figure 20* on *Page 21*).



Push the vent component against the collar until it fully engages, then twist the component clockwise, running the dimples down and along the incline channels until they seat at the end of the channels. The unitized design of the **Secure Vent** components will engage and seal both the inner and outer pipe elements with the same procedure. Sealant and securing screws are not required.

### E. Attach vent components to each other.

Other vent sections may be added to the previously installed section in accordance with the requirements of the vent tables. To add another vent component to a length of vent run, align the dimpled end of the component over the inclined channel end of the previously installed section, adjusting the radial alignment until the four locking dimples are aligned with the inlets of the four incline channels of the previous section. Push the vent component against the previous section until it fully engages, then twist the component clockwise running the dimples down and along the incline channels until they seat at the end of the channels. This seating position is indicated by the alignment of the arrow and dimple as shown in Figure 20 on Page 21.

# F. Install firestop/spacer at ceiling.

When using Secure Vent, use SV8BF vertical firestop/spacer at ceiling joists. If there is living space above the ceiling level, the firestop/spacer must be installed on the bottom side of the ceiling. If attic space is above the ceiling, the firestop/spacer must be installed on the top side of the joist. Route the vent sections through the framed opening and secure the firestop/spacer with 8d nails or other appropriate fasteners at each corner.

Remember to maintain 1" (26mm) clearance to combustibles, framing members, and attic or ceiling insulation when running vertical chimney sections.

# G. Support the vertical run sections.

# See Step E on Page 21.

On the vertical run, support the venting system every 8 ft (2.4 m) above the fireplace vent outlet with field provided support straps (Plumber's tape). Attach the straps to the vent pipe and secure to the framing members with nails or screws (see *Figure 21 on Page 21*).

### H. Change vent direction.

At transition from or to a horizontal/inclined run, install the SV8E45 and SV8E90 elbows in the same manner as the straight vent sections. The elbows feature a twist section to allow them to be routed about the center axis of their initial collar section to align with the required direction of the next vent run element. Twist elbow sections in a clockwise direction only so as to avoid the possibility of unlocking any of the previously connected vent sections (see Figure 20 on Page 21).

# I. Continue installation of horizontal/inclined sections.

Continue with the installation of the straight vent sections in horizontal/inclined run as described in **Step E**. Install support straps every 3 feet (1914 mm) along horizontal/inclined vent runs using conventional plumber's tape.

See Figure 29.

NOTICE: It is important to install horizontal runs on a steady, (i.e., no "dips"), slightly positive incline of approximately 1/4" rise-per-foot (20 millimeters rise-per-meter) horizontal, in a direction away from the fireplace. (Slightly smaller rise-per-foot run ratios are acceptable.) Use a carpenter's level to measure from a constant surface, and adjust support straps as necessary.

It is important to maintain the required clearances to combustibles: 1"(26 mm) at all sides for all vertical runs; and 4" (102 mm) at the top, 1" (26 mm) at sides, and 1" (26 mm) at the bottom for all horizontal/inclined runs.

Use a carpenter's level to measure from a constant surface and adjust the support straps as necessary.

### J. Assemble vent run to exterior wall.

If not previously measured, locate the center of the vent at the exterior wall. Prepare an opening as described in **Step B** (**previous page**). Assemble the vent system to point where the terminus of the last section is within 5" (127 mm) to 8-1/2" (216 mm) inboard of the exterior surface to which the termination is to be attached, see **Figure 31** (**below**) and **Table 8** (**Page 26**).

If the terminus of the last section is not within this distance, use the **telescopic vent section** (**SV8LA**) as the last vent section. For wall thicknesses greater than that shown in *Figure 31*, refer to *Table 8 on Page 26*. This table lists the additional venting components needed (in addition to the termination and adaptor) for a particular range of wall thicknesses.

### K. Attach termination adaptor.

Attach the adaptor (adaptor - SV8RCH - provided with the termination) to the vent section or telescoping vent section), or elbow as shown in *Figure 30* in the same manner as any SV vent component (refer to *Step E*, *previous page*).

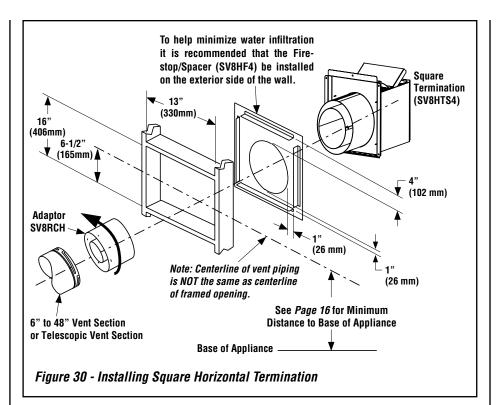
# L. Install Firestop/Spacer at exterior wall.

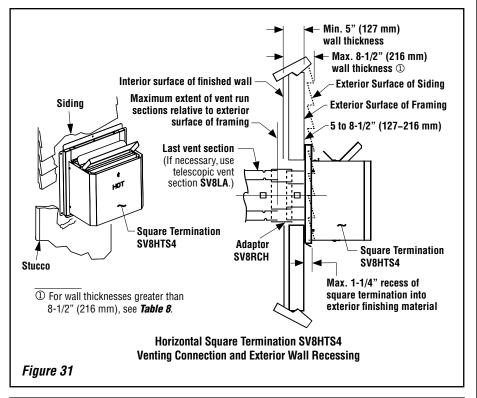
When using the square termination, install Secure Vent® **Firestop/Spacer** (**SV8HF4**) over the opening at the exterior side of the framing, long side up, with the 4" spacer clearance at the top as shown in *Figure 30*, and nail into place.

# M. Install the Square Termination (SV8HTS4).

For the last step, from outside the exterior wall, slide the collars of the termination onto the adaptor (the outer over the outer and the inner inside the inner) until the termination seats against the exterior wall surface to which it will be attached. Orient the housing of the termination with the arrow pointed upwards. Secure the termination to the exterior wall. The horizontal termination must not be recessed into the exterior wall or siding by more than the 1-1/4" (32 mm) as shown in Figure 31.

IMPORTANT: The vent termination is hot while in operation and for a period of time following the use of the fireplace. Young children should be carefully supervised when they are in the same area as a hot termination.





Horizontal terminations have been designed to perform in a wide range of weather conditions. Our terminations meet or exceed industry standards.

When selecting the locations of your horizontal terminations, do not place the termination where water from eaves and adjoining rooflines may create a heavy flow of cascading water onto the termination cap. If the cap must be placed where the possibility of cascading water exists, it is the responsibility of the builder to direct the water away from the termination cap by using gutters or other means.

Take care to carefully follow these installation instructions for the termination, including the use of silicone caulking where required.

# See Table 8 as an aid in venting component selection for a particular range of exterior wall thicknesses.

Required Venting Components (based on Exterior Wall Thickness) when using Horizontal Square Termination Kit (SV8HTS4)			
Exterior Wall Thickness Required Components			
5 to 8-1/2" (127 to 216 mm)	Termination Kit (SV8HTS4)		
9-3/4 to 14" (248 to 356 mm)	• Termination Kit (SV8HTS4) • 6" Vent Section (SV8L6)		
6-3/4 to 15-1/4" (171 to 387 mm)	• Termination Kit (SV8HTS4) • Telescopic Section (SV8LA)		
11-1/4 to 19-3/4" (286 to 502 mm)  • Termination Kit (SV8HTS4) • Telescopic Section (SV8LA) • 6" Vent Section (SV8L6)			
Table 8			

# HORIZONTAL TERMINATION SYSTEM FIGURES/TABLES

### Note:

- Secure Vent® rigid vent pipe and termination components are shown in the figures.
- Two 45-degree elbows may be used in place of one 90-degree elbow. If using 45-degree elbows, follow the same rise-to-run ratios as shown for 90-degree elbows.

# **NOTICE**

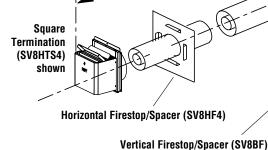
- Secure Vent® Vertical Firestop/Spacer (SV8BF) must be used anywhere vent pipe passes through a combustible floor or ceiling. Secure Vent Horizontal Firestop/Spacer (SV8HF4) must be used anywhere vent pipe passes through a combustible wall.
- It is important to install horizontal runs on a steady, (i.e., no "dips"), slightly positive incline of approximately 1/4" rise-perfoot (20 millimeters rise-per-meter) horizontal, in a direction away from the fireplace. (Slightly smaller rise-per-foot run ratios are acceptable.) Use a carpenter's level to measure from a constant surface, and adjust support straps as necessary.

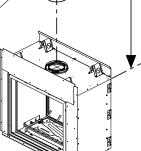
# HORIZONTAL TERMINATION SYSTEM WITH HORIZONTAL/INCLINED RUN USING ONE 90-DEGREE ELBOW (elbow connection not directly at appliance)

**NOTE:** The provided vent restrictor is required in all venting systems. See Page 19 for settings.

	Table C			
н Ма	aximum	VI	Vinimum	
feet	(meters)	feet	(meters)	
3.5	(1.07)	2.5	(0.762)	
6.5	(1.98)	3.5	(1.07)	
8.5	(2.6)	4.5	(1.37)	
10.5	(3.2)	5.5	(1.68)	
12.5	(3.8)	6.5	(1.98)	
14.5	(4.4)	7.5	(2.3)	
16.5	(5.0)	8.5	(2.6)	
18.5	(5.6)	9.5	(2.9)	
20 (6.0) 10 (3.0)				
V + H = 40 ft (12.4 m) max. H = 20 ft (6.2 m) max.				

Example: 20 feet of horizontal vent run (H) requires a minimum 10 feet of vertical vent (V).





See Table 8 as an aid in selecting venting components for a particular range of exterior wall thicknesses.

Figure 32

# HORIZONTAL VENT FIGURES/TABLES (continued)

# HORIZONTAL TERMINATION SYSTEM WITH HORIZONTAL/INCLINED RUN USING TWO 90-DEGREE ELBOWS (Elbow connection not directly at appliance)

**NOTE:** The provided vent restrictor is required in all venting systems. See **Page 16** for settings.

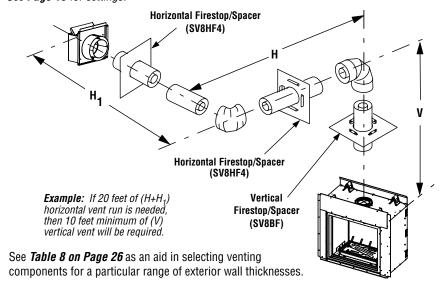


	Table D			
H +	H <sub>1</sub> max.	V	min.	
feet	(meters)	feet	(meters)	
3.5	(1.07)	2.5	(0.762)	
6.5	(1.98)	3.5	(1.07)	
8.5	(2.6)	4.5	(1.37)	
10.5	(3.2)	5.5	(1.68)	
12.5	(3.8)	6.5	(1.98)	
14.5	(4.4)	7.5	(2.3)	
16.5	(5.0)	8.5	(2.6)	
18.5	(5.6)	9.5	(2.9)	
20	(6.0)	10	(3.0)	
v . u	V . H . H = 40 ft (12 4 m) may			

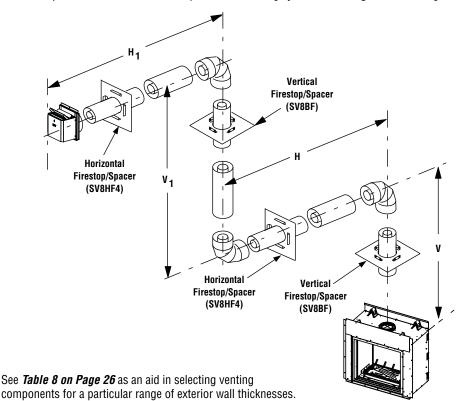
 $V + H + H_1 = 40 \text{ ft } (12.4 \text{ m}) \text{ max.}$ 

 $H + H_1 = 20 \text{ ft } (6.2 \text{ m}) \text{ max.}$ 

Figure 33 - Horizontal Termination with Two 90-Degree Elbows

# HORIZONTAL TERMINATION SYSTEM WITH HORIZONTAL/INCLINED RUN USING THREE 90-DEGREE ELBOWS (Elbow connection not directly at appliance)

**NOTE:** The provided vent restrictor is required in all venting systems. See **Page 19** for settings.



 $H + H_1 = 20 \text{ ft } (6.2 \text{ m}) \text{ max.}$   $V + V_1 + H + H_1 = 40 \text{ ft } (12.4 \text{ m}) \text{ max.}$  V = 2.5 ft (0.762 m) min.

 $V + V_1 = 11 \text{ ft } (3.35 \text{ m}) \text{ min.}$ 

Table E

Figure 34 - Horizontal Termination with Three 90-Degree Elbows

# Step 4. FIELD WIRING

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

ATTENTION: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de cáblage peu-vent entraîner un fonctionnement inadéquat et dangereux.

Verify proper operation after servicing. S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.

# **A** CAUTION

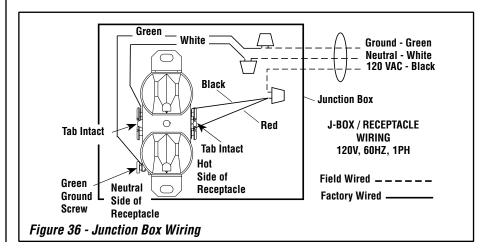
Ground supply lead must be connected to the wire attached to the green ground screw located on the outlet box. See *Figures 35 and 36*. Failure to do so will result in a potential safety hazard. The appliance must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70-latest edition.

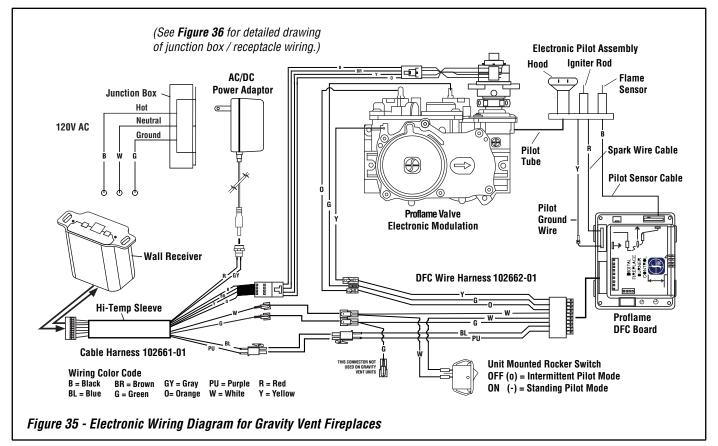
# Electronic Wiring

(See Figures 35 and 36)

Note: The electronic appliance must be connected to the main power supply.

- 1. Route a 3-wire, 120 Vac, 60 Hz, 1ph power supply to the appliance junction box.
- Remove the electrical inlet cover plate from the side of the unit by removing the plate's securing screws (see Figure 14, Page 17).
- Remove the cover plate's knockout and then feed the power supply wire through the knockout opening and into the unit junction box.
- Connect the black power supply wire to the power outlet's red pigtail lead and the white power supply wire to the common terminal of the outlet as shown in Figures 35 and 36.
- Connect the ground supply wire to the pigtail lead attached to outlet's green ground screw.
- **6.** Appliance-mounted ON/OFF burner control switch (rocker switch) is factory installed.
- 7. After wiring is complete, replace the cover plate.





# Step 5. REMOVE BARRIER AND GLASS DOOR ASSEMBLY (ON CONTROL SIDE)

### Barrier (see Notice, Page 30)

This fireplace comes with a barrier to reduce the likelihood of burns from touching hot glass. If the barrier is damaged, the fireplace should be turned off immediately and the fireplace must not be operated until a new, approved factory barrier for this unit is installed.

**NOTE:** It will be necessary to remove the barrier filler trim piece. Upon reinstall, ensure that the tabs on the barrier filler are engaged with the slots in the base of the fireplace.

To remove barrier follow these steps.

- 1. Lift barrier up by the frame at the top.
- 2. Remove lower filler piece by pulling down off of the barrier.
- 3. Lower barrier and push barrier to left to release right side.
- 4. Pull the right side out of fireplace.
- 5. Remove barrier.

# **Glass Door Assembly**

If not already done, remove the glass door assembly on the control side of the fireplace (see **Page 48**).

# Step 6. CONNECT GAS LINE

All codes require a shut-off valve mounted in the supply line. The orientation of the shut-off valve should face the front. *Figure 37* illustrates two methods for connecting the gas supply. A Sediment Trap is recommended to prevent moisture and debris in gas line from damaging the valve.

The flex-line method is acceptable in the U.S.A where local codes permit; however, Canadian requirements vary depending on local codes. See *Figure 37* for flex-line description. The flex-line is rated for both natural and propane gas. A manual shut off valve is also provided with the flex-line.

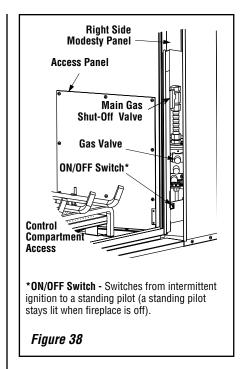
The gas control valve is located on the right side of the unit.

When using solid gas line connector, access the valve by removing the glass door assembly on the control side (see *Page 31*) and the access plate (see *Figure 38*).

The electronic control valve has a 3/8" (10 mm) NPT thread gas supply inlet.

Bring the shutoff valve on the end of the flex-line over to the hard pipe and tighten with wrenches from above through the firebox opening.

Secure all joints tightly using appropriate tools and sealing compounds (ensure propaneresistant compounds are used in propane applications). Seal around gas line to prevent cold air leakage. Use sealants approved by local codes for the application.



# Test All Connections for Gas Leaks (Factory and Field)

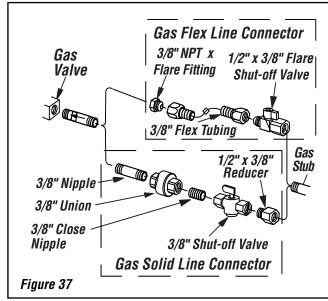


Never use an open flame to check for leaks.

Turn on gas supply and test for gas leaks using a gas leak test solution (also referred to as bubble leak solution).

**NOTE:** Using a soapy water solution is an effective leak test solution but it is not recommended, because the soap residue that is left on the pipes/fittings can result in corrosion over time.

- A. Light the appliance. See the lighting instructions label in the fireplace control compartment or *Care and Operation Instructions*.
- B. Brush all joints and connections with the gas leak test solution to check for leaks. If bubbles are formed, or gas odor is detected, turn the receiver or remote control to the OFF position. Either tighten or refasten the leaking connection; then retest as described above.
- C. When the gas lines are tested and leak-free, be sure to rinse off the leak testing solution.
- D. Reinstall the access plate, making certain the gasket has not been damaged.



# **GAS CONNECTION**

NOTE: The gas supply line must be installed in accordance with building codes by a qualified installer approved and/or licensed as required by the locality. In the Commonwealth of Massachusetts, installation must be performed by a licensed plumber or gas fitter.

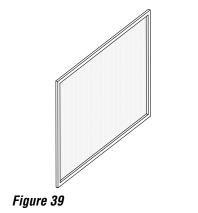
# Step 7. INSTALL FIREBOX LINER PANELS

Install the ceramic or porcelain firebox liner panels per the instructions provided in the kit.

NOTICE: Liner panels must be installed before operating fireplace.

NOTICE: All Montebello® ST model fireplaces include a barrier to reduce the risk of burns from hot viewing glass. This barrier in the fireplace is a screen shown here.





# Step 8. INITIALIZE THE REMOTE CONTROL SYSTEM

See *Initializing the System for the First Time* on **Page 45**.

# Step 9. VERIFY APPLIANCE OPERATION

Turn on the burner, then observe the individual tongues of flame on the burner.

Make sure all ports are open and producing flame evenly across the burner.

If any ports are blocked (or partially blocked), clean out the ports.

With the gas line installed, run initial system checkout before closing up the front of the unit. Follow the pilot lighting instructions provided in the *Care and Operation Instructions*.

NOTE: Lighting instructions also can be found on the lighting label tied to the bracket above the gas valve. To access the tag, reach into the right side opening (see Figure 38 on Page 29).

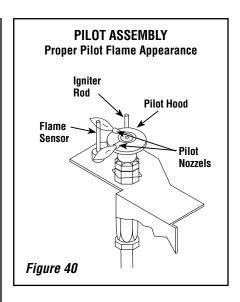
When first lighting the appliance, it will take a few minutes for the line to purge itself of air. Once purging is complete, the pilot and burner will light and operate as indicated on *Page 31*. Subsequent lighting of the appliance will not require such purging.

Inspect the pilot flame (remove logs, if necessary, handling carefully).

# **Appliance Checkout**

To light the burner, refer to the lighting instructions in the *Care and Operation Instructions* or the lighting label tied to the bracket above the gas valve (behind the right panel).

Make sure the igniter lights the pilot. The pilot flame should engulf the flame sensor, as shown in *Figure 40*.



# Step 10. INSTALL VOLCANIC STONE, GLOWING EMBERS, AND LOGS

See log placement instructions on *Pages 49 through 51*.

# Step 11. INSTALL GLASS DOORS, AND MODESTY PANEL

See instructions on Page 48.

# Step 12. BURNER ADJUSTMENTS

# Flame Appearance and Sooting

Proper flame appearance is a flame that is blue at the base and becomes yellowish-orange in the body of the flame. When the appliance is first lit, the entire flame may be blue and will gradually turn yellowish-orange during the first 30 minutes of operation. After 30 minutes of operation, if the flame is blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter opening is closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination.

Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellowish-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes.

# Air Shutter Adjustment Guidelines

- If there is smoke or soot present, first check
  the log set positioning to ensure that the
  flames are not impinging on any of the logs.
  If the log set is properly positioned and a
  sooting condition still exists, then the air
  shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.
- An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.
- Propane models may exhibit flames which candle or appear stringy. If this is present and persists, adjust the air shutter to a more OPEN position, then operate the appliance for a few more minutes to ensure that the flame normalizes and the flames do not appear sooty.

The following chart is provided to aid you in achieving the correct air shutter adjustment for your installation.

Air Shutter A	djustment G	uidelines:
Amount of Primary Air	Flame Color	Air Shutter Adjustment
If air shutter is closed too far	Flame will be orange	Air shutter gap should be increased
If air shutter is open too far	Flame will be blue	Air shutter gap should be decreased

# Burner Air Shutter Adjustment Procedure

# **A** WARNING

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

- Fireplace surfaces get EXTREMELY HOT!
- The glass on the front of the fireplace reaches EXTREMELY HIGH temperatures and can cause severe burns if touched. Even after the gas is turned off, fireplace surfaces remain extremely hot.

# **A** CAUTION

### **RISK OF PERSONAL INJURY**

### OR PROPERTY DAMAGE.

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Soot will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is not covered under the warranty.

- Light the appliance (follow lighting procedure in Care and Operation Instructions or on lighting label in control compartment).
- 2. Allow the burner to operate for at least 30 minutes while continuously observing the flame to ensure that the proper flame appearance has been achieved (see *Figures* 41 and 42).
- **3.** Adjust the air shutter using the lever on the lower right side of the firebox (*Figure 41*).
  - For more OPEN air shutter, slide lever to the RIGHT.
  - For more CLOSED air shutter, slide lever to the LEFT.

A minimum shutter setting is designed into the venturi by four 1/16" tabs.

- If the flame appears weak or sooty (as described on the previous page), adjust the air shutter until proper flame appearance is achieved.
- If flame stays lowered blue, incrementally adjust the air shutter to a more CLOSED position until proper flame appearance is achieved.

**NOTE:** See **Figures 41 and 42** for proper burner flame appearance.



Figure 41 - Burner Flame Appearance (Control Side)



**Volcanic Stone** 

Figure 42 - Burner Flame Appearance (Opposite Control Side)

# FINISHING REQUIREMENTS

# Wall Details - INDOOR SIDE(S)

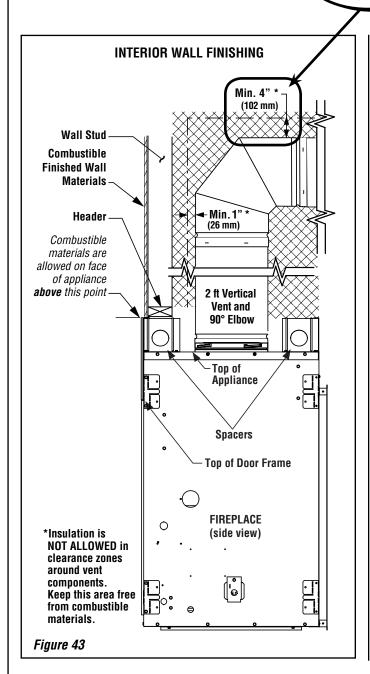
Complete the finished interior wall. To install the appliance facing flush with the finished wall, position framework to accommodate the thickness of the finished wall (Figure 43).

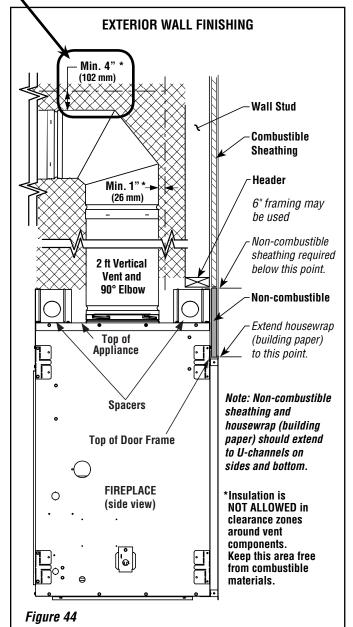
# IMPORTANT! Complete in the Out

Min. clearance above any horizontal vent component is **4" (102 mm)**.

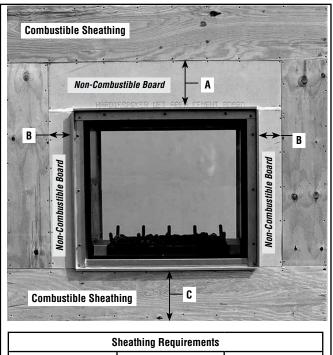
# Wall Details - OUTDOOR SIDE

Complete finished exterior wall per the instructions provided in the Outdoor Installation Kit and the instructions provided here. To install the appliance facing flush with the finished exterior wall, position framework to accommodate the thickness of the exterior finished wall (*Figure 44*).





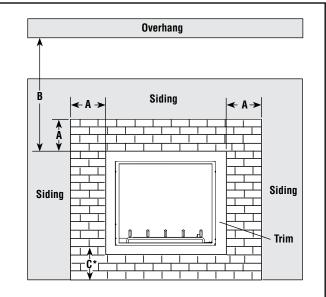
See Page 10 for Cold Climate Insulation and Page 14 for Clearances.



A	В	C*	
12" (305 mm) 7" (178 mm) 6" (152		6" (152 mm)	
+D:			

\*Dimension "C" is clearance required from fireplace base to surface (e.g., deck, patio, lanai) as a moisture barrier (<u>not</u> a combustible clearance) on outdoor side only.

Figure 45 - Sheathing



Exterior Minimum Clearances				
Material A B C*				
Vinyl	12" (305 mm)	35-1/2" (902 mm)	6" (305 mm)	
Non-Vinyl	7" (178 mm)	35-1/2" (902 mm)	6" (305 mm)	

\*Dimension "C" is clearance required from fireplace base to surface (e.g., deck, patio, lanai) as a moisture barrier (<u>not</u> a combustible clearance) on outdoor side only.

Figure 46 - Exterior Clearances

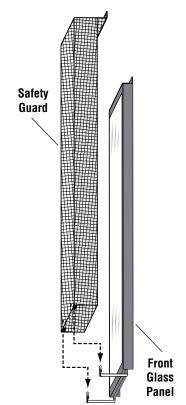
NOTE: A barrier is supplied with the outdoor kit and is required to be installed.

In units installed outdoors this barrier is constituted by a safety guard.

Barrier: H8249

See kit instructions 506019-70 for further information.

Figure 47



### SAFETY GUARD INSTALLATION INSTRUCTIONS

Note: This procedure requires two people.

- Step 1. If the fireplace is on, turn it OFF. Allow it to cool completely.

  BEFORE CONTINUING, FIREPLACE MUST BE OFF AND COLD!
- Step 2. Remove the two existing screws from the top of the Front Glass Panel.
  - Note: After removing screws, one person must hold the glass panel in place (to prevent it from falling forward and breaking), while another person completes the installation.
- Step 3. Insert the back lip of each Mounting Bracket (without the hole) under the bottom edge of the Glass Panel.
- Step 4. Attach one Spring Nut Clip (with straight edge facing front and down) to the front lip of each Mounting Bracket, and then align the holes.
- Step 5. Slide the openings in the bottom edge of the Safety Guard over the Spring Nut Clips.
- Step 6. Align the holes in the top of the Safety Guard with the holes in the top of the Front Glass Panel. Use a Phillips screwdriver to replace the two screws previously removed.

Align the holes in the lower front of the Safety Guard with the holes in the Clips and Brackets. Use a Phillips screwdriver to install the two supplied Washer Screws.

# THE STEPS ON *PAGES 34-40* ARE INSTALLATION INSTRUCTIONS FOR OUTDOOR WINDOW KIT<sup>[1]</sup> for use on Montebello® and DRT63ST See-Through GAS Fireplaces

[FIREPLACE MODELS: Montebello STTEN, Montebello STTEP, Montebello STTYN, DRT63STTEN, DRT63STTEP and DRT63STTYN]

### KIT CONTENTS

Note: Item numbers correspond to Figure 48.

ITEM #1: (1) ea. Window[2] Assembly

ITEM #2: (1) ea. Top U-Channel

ITEM #3: (2) ea. Side U-Channels ITEM #4: (1) ea. Window Support

ITEM #5: (1) ea. Bottom Channel

ITEM #6: (2) ea. Side Trim Pieces ITEM #7: (2) ea. Top/Bottom Trim I

ITEM #7: (2) ea. Top/Bottom Trim Pieces ITEM #8: (3) ea. Screws, #10-16 x 3/8" SMS

ITEM #9: (9) ea. Screws,  $1/4-20 \times .625$ " Phillips Pan Head

ITEM #10: (13) ea. Screws, #8-15 x 1/2" Phillips Pan Head

Safety Guard Kit (Not Shown)

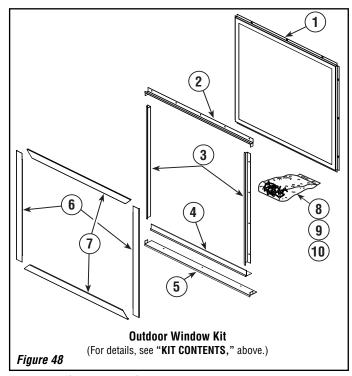
# **REQUIRED TOOLS/SUPPLIES**

- · Silicone Caulking (rated for outdoor use)
- Phillips Screwdriver

See-Through Fireplace Outdoor Window Kit <i>with Barrier</i> <sup>[1]</sup>				
Cat. No.	. Model Description			
F2231	F2231 LSM40ST-ODKSG Outdoor Window Kit (Light-Tinted Glass			
F2232	LSM40ST-ODKTSF	Outdoor Window Kit (Dark-Tinted Glass)		

# **GENERAL INFORMATION**

This Outdoor Window Kit is required when installing a Montebello<sup>®</sup> and DRT63ST See-Through fireplace in an indoor/outdoor application.



- [1] The terms "Outdoor Kit" and "Outdoor Window Kit" are used interchangeably in this and other related documents.
- [2] The terms "window," "glass door," and "glass enclosure panel" may be used interchangeably in this and other related documents.

# INSTALLATION INSTRUCTIONS

# **NOTICE**

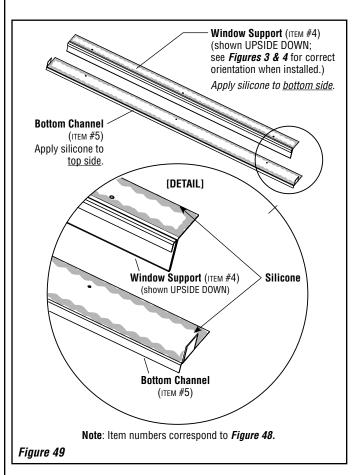
- Read all steps before starting installation.
- These instructions must be left with the appliance.
- All warnings, precautions, and instructions in the Installation and Operation Instructions provided with the appliance also apply to these instructions.
- If you encounter any problems, need clarification of these instructions, or are not qualified to properly install this kit, contact your local distributor or dealer.

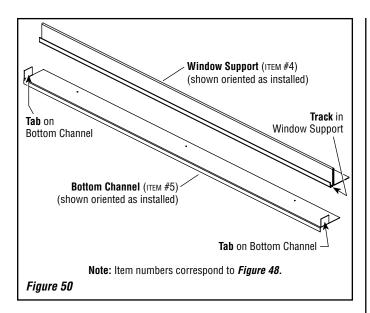
# IMPORTANT NOTE: Before installing the outdoor window kit and barrier, the standard barrier and filler must first be removed.

1. Complete the framing per the instructions in the fireplace Installation and Operation Instructions.

IMPORTANT NOTE: The <u>control side</u> of the fireplace must be installed on the <u>indoor</u> side.

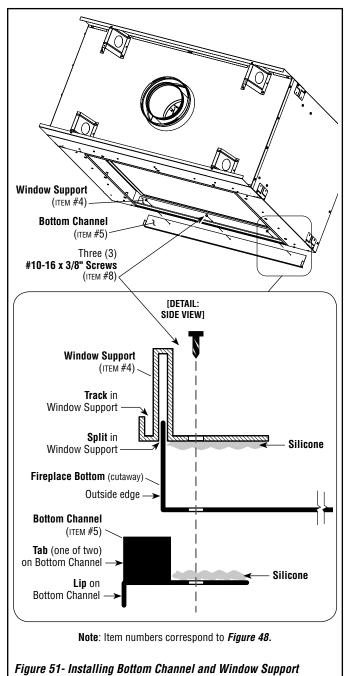
2. Apply silicone to <u>bottom side</u> of **Window Support** (ITEM #4) and <u>top</u> <u>side</u> of **Bottom Channel** (ITEM #5), as shown in *Figures 49 and 52.* 





# 3. See Figure 51.

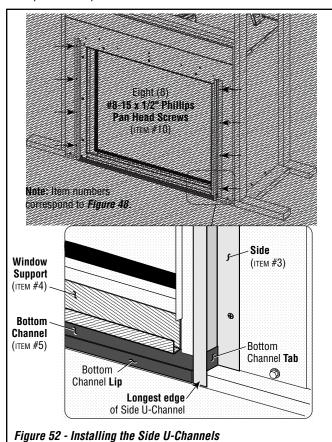
- a) Hold the **Bottom Channel** (ITEM #5) with the **Tabs** facing UP and **Lip** facing OUT and DOWN, and then slide it UNDER the **Fireplace Bottom**. Align the holes.
- b) Hold the **Window Support** (ITEM #4) with the **Track** facing OUT and the **Split** facing DOWN.
  - Place the **Split** over the outside edge of the **Fireplace Bottom**, and then push the **Window Support** DOWN until completely seated on the **Fireplace Bottom**. Align the holes.
- c) Install the three (3) provided #10-16 x 3/8" Screws (ITEM #8) through all three layers.



4. See *Figure 52*. Hold one of the **Side U-Channels** (ITEM #3) with the **longest edge** facing OUT and the channel turned away from the window. Hook the end of the Side U-Channel over the **Tab** on the Bottom Channel. The **longest edge** of the Side U-Channel should hang down flush with the **Lip** on the Bottom Channel.

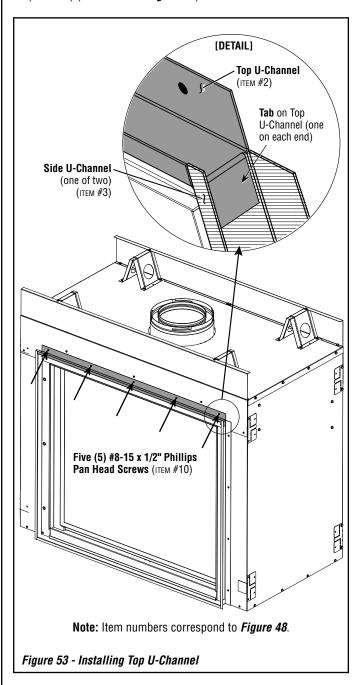
Attach four (4) of the **#8-15 x 1/2" Phillips Pan Head Screws** (ITEM #10) (see arrows in *Figure 52*).

Repeat this step for the other Side U-Channel.

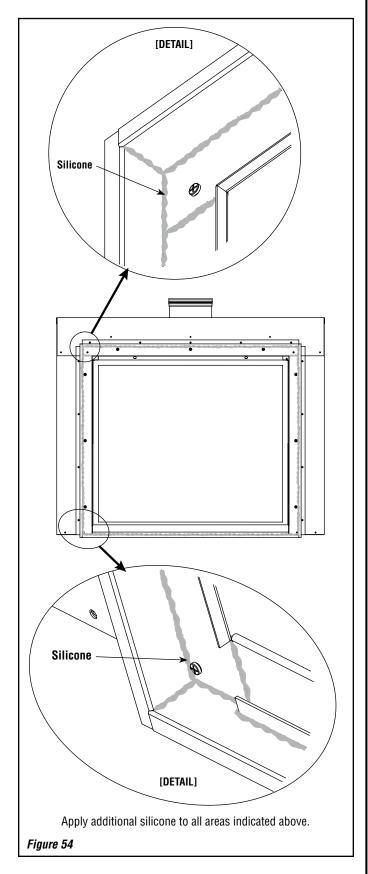


5. See *Figure 53*. Hook the **Tabs** on the **Top U-Channel** (ITEM #2) OVER the top edge of each Side U-Channel. Align the holes.

Attach five (5) of the provided #8-15 x 1/2" Phillips Pan Head Screws (ITEM #10) (see arrows in *Figure 53*).

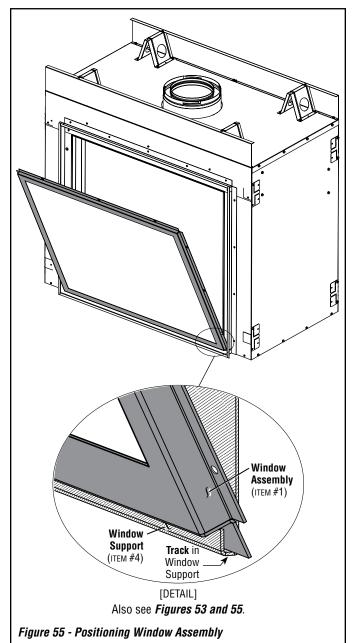


6. Apply silicone to all areas indicated in Figure 54.

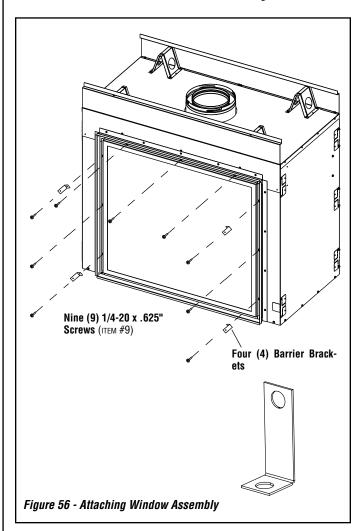


Note: Window Assembly installation (Steps 7-8) can be done <u>either before or after</u> completing the finished exterior wall (Steps 9-10).

 Seat the lower edge of the Window Assembly (ITEM #1) in the Track in the Window Support (see Figure 55), and then swing it up into position, as shown in Figure 56.



8. Insert the nine (9) provided 1/4-20 x .625" Screws (ITEM #10) around three sides of the Window Assembly, as shown in *Figure 56*. Install 4 Barrier Brackets under screws as shown in *Figure 56*.



 Complete the finished exterior wall as instructed in "FINISHING RE-QUIREMENTS" in the fireplace Installation and Operation Instructions (also see *Figures 57–60*).

For clearances to finishing materials, see Figure 60.

Sheathing Requirements (see Figures 5 and 6)			
A	В	C*	
12" (305mm) 7" (178mm) 6" (152mm)			

\*Dimension "C" is clearance from fireplace base to surface (e.g., deck, patio, lanai) required as a moisture barrier (<u>not</u> a combustible clearance) on outdoor side only.

#### Table 9

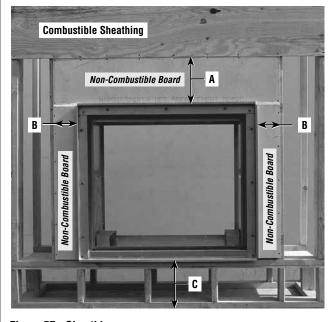


Figure 57 - Sheathing

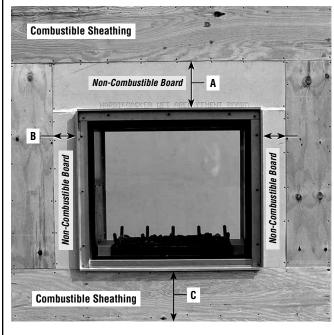
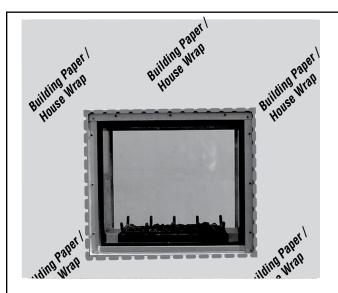


Figure 58 - Sheathing

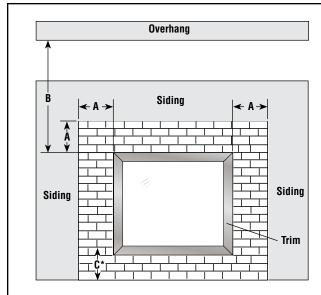
Install the building paper (house wrap) to overlap the U-Channels on all sides.

Apply silicone around the perimeter, ensuring a complete seal on all sides. See *Figure 59*.



- 1. Install building paper / house wrap to U-channels on sides and bottom.
- 2. Apply silicone around perimeter (dashed line in figure).

Figure 59 - Sheathing



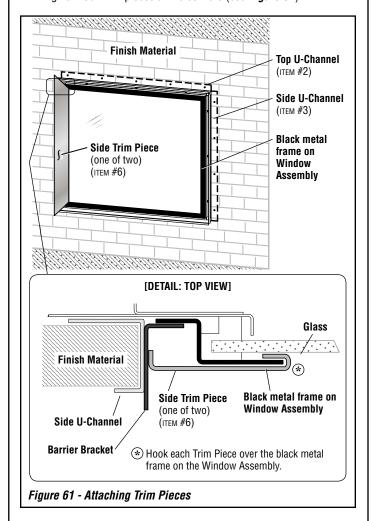
Exterior Minimum Clearances			
Material	A	В	C*
Vinyl	12" (305mm)	35-1/2" (902mm)	6" (305mm)
Non-Vinyl	7" (178mm)	35-1/2" (902mm)	6" (305mm)

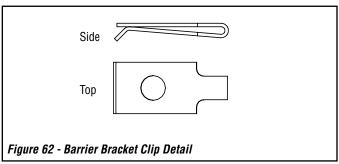
<sup>\*</sup>Dimension "C" is clearance from fireplace base to surface (e.g., deck, patio, lanai) required as a moisture barrier (<u>not</u> a combustible clearance) on outdoor side only.

Figure 60 - Clearances to Finishing Materials

- 11. Install the two identical **Side Trim Pieces** (ITEM #6) as follows:
  - a) Hook the inner edge of each trim piece over the black metal frame on the Window Assembly (see *Figure 61*), and then snap the piece into place.
  - b) Center the side trim pieces vertically between the top and bottom of the window frame. If necessary, slightly squeeze the bracket flange inward to improve tightness.
  - c) Peel off protective covering from trim pieces.
- 12. Install the identical **Top/Bottom Trim Pieces** (ITEM #7) in same manner as the Side Trim Pieces (see **Step 11**).

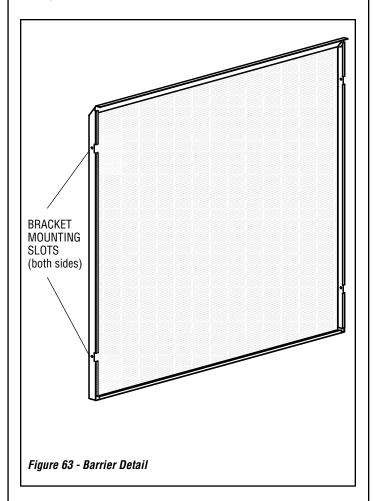
Align all four trim pieces at the corners (see Figure 62).

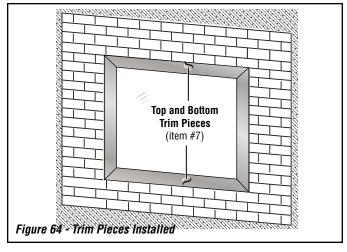




13. Install the barrier bracket clips for additional screw thread.

Slide the barrier in on the bracket mounting slots illustrated in *Figure 63*. Secure with screw through the holes in the Barrier bracket and clip.





#### STEP 13. INSTALLER INSTRUCTIONS - ATTACHING SAFETY IN OPERATION WARNINGS

It is the installer's responsibility to ensure these warnings are properly affixed during installation. These warning labels are a critical step in informing consumers of safe operation of this appliance.

## ATTACHING SAFETY IN OPERATION WARNINGS

It is required that the set of safety instruction labels that have been furnished with the fireplace be affixed to the operation and control points of the fireplace. A safety instruction label must be affixed to the receiver wall switch plate where the fireplace is turned on and off (See Figure A) and on the remote control handheld transmitter (See Figure B). To properly complete the installation of this fireplace, locate the multi-lingual adhesive labels provided with the Care and Operation Instructions and proceed as follows:

- Locate the wall receiver that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall receiver plate thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall receiver that controls the fireplace (*Figure A*). Choose the language primarily spoken in the home. If unknown, affix the English language label
- Locate the remote control transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (*Figure B*). Choose the language primarily spoken in the home. If unknown, affix the English language label.
- 3. If you are unable to locate the labels, please call Innovative Hearth Products or your nearest Innovative Hearth Products dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

## INNOVATIVE HEARTH PRODUCTS Astria.us.com

Note: English is red text on clear label. French and Spanish are white text on black label.

## SAFETY LABEL DIAGRAMS



EXTREMELY HOT glass and fireplace Risk of Severe Burns AWAYS KEEP CHILDREN AWAY FROM FIREPLACE

#### APPOSITION DES MISES EN GARDE RELATIVES À la sécurité d'utilisation

Il est impératif que le jeu d'étiquettes de sécurité qui ont été fournies avec le foyer soient collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité doit être collée sur la plaque du récepteur mural contrôlant l'allumage du foyer (voir Figure A) et sur le boîtier de la télécommande (Figure B). Pour achever l'installation correcte de ce foyer, procédez comme suit avec les étiquettes adhésives en langues étrangères fournies avec les instructions d'utilisation et d'entretien:

- Repérez le récepteur mural qui contrôle le foyer (vérifiez que l'interrupteur contrôle le fonctionnement du foyer en le faisant basculer de Marche à Arrêt, et vice-versa). Nettoyez soigneusement la plaque du récepteur mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque du récepteur mural qui contrôle le foyer (Figure A). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
- Repérez la télécommande et nettoyez-la soigneusement pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur le boîtier de la télécommande (*Figure B*). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire. En cas de doute, collez l'étiquette en anglais.
- Si vous ne trouvez pas les étiquettes, veuillez appeler Innovative Hearth Products ou votre distributeur Innovative Hearth Products local pour recevoir gratuitement des étiquettes supplémentaires.

Étiquettes de remplacement, n° cat. H8024

## INNOVATIVE HEARTH PRODUCTS Astria.us.com

Remarque : Le texte anglais est rouge sur un support transparent. Le texte français et espagnol est blanc sur un support noir.

#### DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



#### COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD EN OPERACIÓN

Se requiere que el juego de etiquetas de instrucciones de seguridad que se incluyeron con la chimenea se coloque en los puntos de operación y control de la misma. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared del receptor desde el cual se enciende y se apaga la chimenea (ver la Figura A) y en el transmisor de control remoto (ver la Figura B). Para completar correctamente la instalación de esta chimenea, encuentre las etiquetas adhesivas multilingües incluidas con las instrucciones de cuidado y operación y haga lo siguiente:

- Identifique el receptor de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del receptor de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del receptor de pared que controla la chimenea (Figura A). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
- Identifique el transmisor de control remoto y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (*Figura B*). Seleccione el idioma que más se habla en la casa. Si no sabe cuál es, use la etiqueta en inglés.
- Si no puede encontrar las etiquetas, sírvase llamar a Innovative Hearth Products o al distribuidor de Innovative Hearth Products más cercano para recibir etiquetas de instrucciones de seguridad adicionales gratuitas.

Juego de etiquetas de repuesto - Nº de cat. H8024

## INNOVATIVE HEARTH PRODUCTS Astria.us.com

Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto blanco.

#### DIAGRAMAS DE ETIQUETAS DE SEGURIDAD



Illustrations are for example only. Your accessories may be different.

Les illustrations sont par exemple uniquement. Vos accessoires peuvent être différents.

Las ilustraciones son sólo ejemplos. Tu accesorios pueden ser diferentes.

Figure A



Figure B



#### **INSTALLATION ACCESSORIES**

Listed Secure Vent® Components			
	Cat. No.	Model No.	Description
	Н8323	SV8HTS4	Horizontal Square Termination with Firestop/Spacer (H8322) and Adaptor (H2267)
	H2265	SV8VTR	Vertical Termination
	H2250	SV8L6	6" (152 mm) Vent Section
	H2251	SV8L12	12" (305 mm) Vent Section
	H2252	SV8L24	24" (610 mm) Vent Section
	H2253	SV8L36	36" (914 mm) Vent Section
	H2254	SV8L48	48" (1219 mm) Vent Section
	H2255	SV8LA	Telescopic Section
	H2256	SV8E45	45 Degree Elbow
	H2257	SV8E90	90 Degree Elbow
	The follo a storm (		gs come packaged with
	H3236	SV8F	Flat Roof Flashing
	H2258	SV8FA	Adjustable Flashing, 1/12 to 7/12
	H2259	SV8FB	Adjustable Flashing, 7/12 to 12/12
129	Н3237	SV8SC6	Storm Collar (pkg of 6)
	H8322	SV8HF4	Firestop/Spacer, Horizontal (4-1-1 spacing)
	H2261	SV8BF	Firestop/Spacer, Vertical (1-1-1 spacing)

Cat. No.	Model No.	Description
H2262	SV8SU	Support Strap
H2263	SV8SP	Support Plate
H3908	SV8ARSA	Attic Insulation Shield (adjustable 12" to 22")

#### **OPERATION AND CARE OF YOUR APPLIANCE**

## A

#### WARNING

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

## **A** AVERTISSEMENT

Les jeunes enfants devraient être surveillés étroitement lorsqu'ils se trouvent dans la même pièce que l'appareil. Les tout petits, les jeunes enfants ou les adultes peuvent subir des brûlures s'ils viennent en contact avec la surface chaude. Il est recommandé d'installer une barrière physique si des personnes à risques habitent la maison. Pour empêcher l'accès à un foyer ou à un poêle, installez une barrière de sécurité; cette mesure empêchera les tout petits, les jeunes enfants et toute autre personne à risque d'avoir accès à la pièce et aux surfaces chaudes.

#### **Burn-in Period**

During the first few fires of this appliance there will be some odor due to the curing of the paint and burning off of lubricants used in the manufacturing process. Depending on your use, the burn-in period may take a few hours or a few days.

KEEP YOUR HOUSE WELL VENTILATED DURING THE CURING PROCESS. THE ODOR AND HAZE EMITTED DURING THE CURING PROCESS CAN BE QUITE NOTICEABLE AND MAY SET OFF A SMOKE DETECTOR.

#### **NOTICE:**

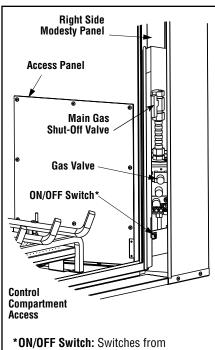
A white film may develop on the glass enclosure panel during the first few fires as part of the burn-in process.

The first few times you use the fireplace, clean the glass after each use (AFTER THE GLASS HAS COMPLETELY COOLED); otherwise, the white film will bake onto the glass and become difficult to remove.

See glass cleaning instructions on **Page 47**.

#### Gas Controls / Control Compartment Access

The gas controls can be found on the right hand side of the appliance as shown in *Figure 65*.



\*ON/OFF Switch: Switches from intermittent ignition to a standing pilot (a standing pilot stays lit when fireplace is OFF).

Figure 65

Familiarize yourself with the gas control valve that your appliance uses. See *Pages 8 and 9* for gas valve infromation and specifications.

To light the appliance refer to the detailed lighting instructions (see *Pages 57 and 21*). The appliance lighting instructions may also be found on the pull out lighting instruction labels attached to the gas control valve.

These appliances are fitted with an ON/OFF rocker switch that, when toggled, switches from intermittent ignition to a standing pilot (see *Figure 65*).

#### HOMEOWNER'S INSTRUCTIONS - ATTACHING SAFETY IN OPERATION WARNINGS

#### ATTACHING SAFETY IN OPERATION WARN-INGS

Your fireplace has been furnished with safety instruction labels that are to be affixed to the operation and control points of the fireplace. A safety instruction label should be affixed to the receiver wall switch plate where the fireplace is turned on and off (See Figure A) and the remote control handheld transmitter (Figure B). The warnings should already have been put in place when the fireplace initial set-up was completed. If they are not affixed at these spots, locate the multi-lingual adhesive labels provided with these instructions and proceed as follows:

- Locate the wall receiver that controls the fireplace (verify the switch operates the fireplace by turning it on and off). Clean the wall receiver plate thoroughly to remove any dust and oils. Affix the label to the surface of the plate of the wall receiver that controls the fireplace (*Figure A*). Choose the language primarily spoken in the home.
- Locate the remote control transmitter and clean it thoroughly to remove any dust and oils. Affix the label to the surface of handheld transmitter (Figure B). Choose the language primarily spoken in the home.
- If you are unable to locate the labels, please call Innovative Hearth Products or your nearest Innovative Hearth Products dealer to receive additional safety instruction labels free of charge.

Cat. No. H8024 Replacement Label Kit

## INNOVATIVE HEARTH PRODUCTS Astria.us.com

Note: English is red text on clear label. French and Spanish are white text on black label.

#### **SAFETY LABEL DIAGRAMS**



EXTREMELY HOT glass and fireplace Risk of Severe Burns ALWAYS KEEP CHILDREN AWAY FROM FIREPLACE

## APPOSITION DES MISES EN GARDE RELATIVES À LA SÉCURITÉ D'UTILISATION

Votre foyer a été livré avec des étiquettes de sécurité qui doivent être collées à côté des dispositifs de contrôle du foyer. Une étiquette de sécurité devrait être collée sur la plaque du récepteur mural contrôlant l'allumage du foyer (voir Figure A) et sur le boîtier de la télécommande (Figure B). Les mises en garde auraient dû être collées au moment de l'installation initiale du foyer. Si ce n'est pas le cas, prenez les étiquettes adhésives multilingues fournies avec ces instructions et procédez comme suit:

- Repérez le récepteur mural qui contrôle le foyer (vérifiez que l'interrupteur contrôle le fonctionnement du foyer en le faisant basculer de Marche à Arrêt, et vice-versa). Nettoyez soigneusement la plaque du récepteur mural pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur la surface de la plaque du récepteur mural qui contrôle le foyer (Figure A). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
- Repérez la télécommande et nettoyez-la soigneusement pour éliminer la poussière et les traces de graisse ou d'huile. Collez l'étiquette sur le boîtier de la télécommande (*Figure B*). Choisissez la langue qui est principalement parlée dans la résidence du propriétaire.
- Si vous ne trouvez pas les étiquettes, veuillez appeler Innovative Hearth Products ou votre distributeur Innovative Hearth Products local pour recevoir gratuitement des étiquettes supplémentaires.

Étiquettes de remplacement, n° cat. H8024

## INNOVATIVE HEARTH PRODUCTS Astria.us.com

Remarque : Le texte anglais est rouge sur un support transparent. Le texte français et espagnol est blanc sur un support noir.

#### DIAGRAMMES DES ÉTIQUETTES DE SÉCURITÉ



#### COLOCACIÓN DE ADVERTENCIAS DE SEGURIDAD EN OPERACIÓN

Su chimenea incluye etiquetas de instrucciones de seguridad que deben colocarse en los puntos de operación y control de la chimenea. Se debe colocar una etiqueta de instrucciones de seguridad en la placa del interruptor de pared del receptor desde el cual se enciende y se apaga la chimenea (ver la Figura A) y en el transmisor de control remoto (Figura B). Las advertencias ya deben haberse colocado cuando se completó la instalación inicial de la chimenea. Si no están colocadas en estos lugares, encuentre las etiquetas adhesivas multilingües proporcionadas con estas instrucciones y prosiga de la siguiente manera:

- Identifique el receptor de pared que controla la chimenea (verifique que el interruptor opera la chimenea encendiéndola y apagándola). Limpie bien la placa del receptor de pared para quitar el polvo y aceite. Pegue la etiqueta en la superficie de la placa del receptor de pared que controla la chimenea (Figura A). Seleccione el idioma que más se habla en la casa.
- Identifique el transmisor de control remoto y límpielo bien para quitar el polvo y aceite. Pegue la etiqueta en la superficie del transmisor (*Figura B*). Seleccione el idioma que más se habla en la casa.
- Si no puede encontrar las etiquetas, sírvase llamar a Innovative Hearth Products o al distribuidor de Innovative Hearth Products más cercano para recibir etiquetas de instrucciones de seguridad adicionales gratuitas.

Juego de etiquetas de repuesto - Nº de cat. H8024

## INNOVATIVE HEARTH PRODUCTS Astria.us.com

Nota: La etiqueta en inglés es transparente con texto rojo. Las etiquetas en francés y español son negras con texto hlanco

#### DIAGRAMAS DE ETIQUETAS DE SEGURIDAD



Illustrations are for example only. Your accessories may be different.

Les illustrations sont par exemple uniquement. Vos accessoires peuvent être différents.

Las ilustraciones son sólo ejemplos. Tu accesorios pueden ser diferentes.

Figure A



Figure B



#### Remote Control System

The Remote and Receiver allows you to command the functions of your fireplace from the comfort of your chair. It is configured to control the On/Off primary burner operation and flame levels (through six levels) and provide On/Off and Smart control of this appliance.

The receiver connects directly to the gas valve, stepper motor with and umbilical cord wiring harness (see wiring diagram on *Page 28*).

The Receiver is powered by 4 AA type batteries. located within.

The Receiver accepts commands via radio frequency from the Transmitter and does not require line-of-sight operation.

The Receiver three position slider switch can be set to one of three positions: ON (Manual Override), REMOTE (Remote Control), or OFF.

#### Initializing the System for the First Time

Install the 4 AA batteries into the receiver battery bay (behind the wall switch plate).

**NOTE:** Install the batteries into the battery bay as indicated on the battery cover. Ensure that batteries are installed with proper polarity (+/-).

Place the three position slider switch in the "Remote" position (see Figure 66, next page). Using the end of a paper clip, or other similar object, insert the end of the paper clip into the hole marked "PRG" on the Receiver front cover. The Receiver will "beep" three (3) times to indicate that it is ready to synchronize with a Transmitter.

Install the 3 AAA type batteries in the Transmitter battery bay, located on the base of the Transmitter. With the batteries already installed in the Transmitter, push the ON button. The Receiver will "beep" four times to indicate the Transmitter's command is accepted and sets to the particular code of that Transmitter. The system is now initialized.

#### **Low Battery Power Detection**

The life span of the Receiver batteries depends on various factors: quality of the batteries used, the number of ignitions of the appliance, the number of changes to the room temperature set point, etc.

When the Receiver batteries are low, no "beep" will be emitted from the Receiver when it receives an ON/OFF command from the Transmitter. This is an alert for a low battery condition for the Receiver. When the batteries are replaced the "beep" will be emitted from the Receiver when the ON/OFF key is pressed (See "Initializing the System for the First Time," at left).

When the transmitter batteries are low, a battery icon will appear on the LCD display of the transmitter before all battery power is lost. When the batteries are replaced this icon will disappear.

## WARNING

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

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

#### **Temperature Indicator Display**

With the system in the "OFF" position, press the Room Temperature Key and the Mode Key at the same time (see Figure 67, next page). Look at the LCD screen on the Transmitter to verify that a C or F is visible to the right of the Room Temperature display (see Figure 68, next page).

#### Turn On The Appliance

With the receiver switch in the "Remote" position, press the ON/OFF Key on the Transmitter. The Transmitter display will show all active Icons on the screen. At the same time, the Receiver connects to the gas valve coil and the appliance main burner turns on. A single "beep" from the Receiver will confirm reception of the command.

#### **Turn Off The Appliance**

Press the ON/OFF Key on the Transmitter. The Transmitter LCD display will only show the room temperature and Icon. At the same time. the Receiver disconnects the gas valve coil and the appliance burner turns off. A single "beep" from the Receiver confirms reception of the command.

#### **Remote Flame Control**

The system has six (6) flame levels. See Figure 69 (next page) for an example. With the system on, and the flame level at the maximum in the appliance, pressing the Down Arrow Key once will reduce the flame height by one step until the flame is turned off.

The Up Arrow Key will increase the flame height each time it is pressed. If the Up Arrow Key is pressed while the system is on but the flame is off, the flame will come on in the high position (see Figure 70, next page). A single "beep will confirm reception of the command.

#### **Key Lock**

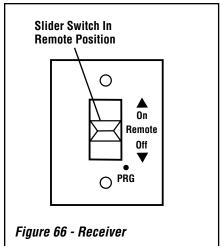
This function will lock the keys to avoid unsupervised operation To activate this function, press the MODE and UP keys at the same time. To de-activate this function, press MODE and UP Keys at the same time.

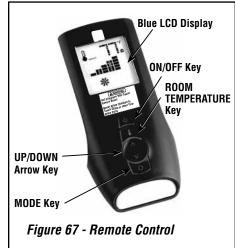
#### Intermittent/Standing Pilot Mode

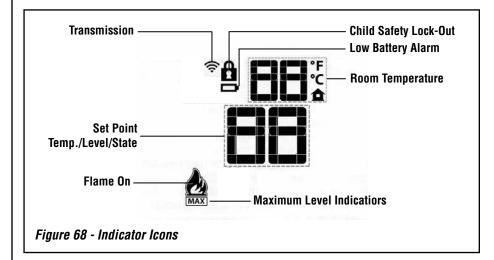
This fireplace can be switched from intermittent ignition to a standing pilot simply by toggling the switch located in the control compartment (refer to Figure 65 on Page 43). To save energy, switch to intermittent mode. To have a standing pilot which will help startup in the winter by warming the flue and the glass, switch to standing pilot. The standing pilot mode is indicated by a pilot that comes on and remains lit when the fireplace is off.

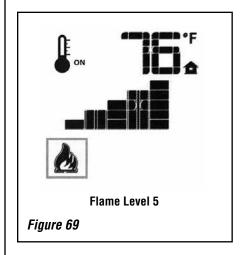
#### **Manual Bypass Of The Remote System**

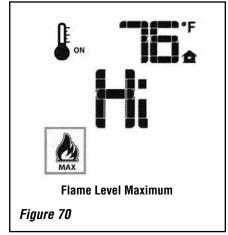
If the batteries of the Receiver or Transmitter are low or depleted, the appliance can be turned on manually by sliding the three position slider switch to the ON position. This will bypass the remote control feature of the system and the appliance main burner will come on if the gas valve is in the "On" position.











#### MAINTENANCE

#### (See Maintenance Schedule, Page 59)

Refer to the maintenance schedule for maintenance tasks, procedures, frequency and by whom they should be performed. Always verify proper operation of the appliance after servicina.

## **WARNING**

Turn off gas and electrical power to the fireplace and allow it to cool before cleaning or servicing the appliance.

CAUTION: Wear gloves and safety glasses for protection while doing required maintenance.

Verify proper operation after servicing.

S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.

Always turn off gas to the pilot before cleaning. Before relighting, refer to the lighting instructions in this manual. Instructions are also found on a pull-out panel located in the control compartment.

Before relighting the fireplace, refer to the lighting instructions in this manual. Instructions are also found on pull-out panels located in the control compartment.

#### **Inspect Venting System**

The appliance and venting system should be thoroughly inspected before initial use and at least annually by a qualified service technician (inspection should include ensuring that exhaust or intake passages are unobstructed and vent components are properly assembled and not damaged). Homeowner must contact a qualified service technician at once if any abnormal condition is observed.

If the venting system is disassembled for any reason, a qualified service technician should follow vent installation instructions for proper reassembly and proper sealing of the venting system components. However, more frequent periodic inspections and cleanings should be performed by the homeowner.

#### **Glass Cleaning**

(For detailed glass door assembly removal/ installation instructions, see Page 48.)

NOTE: Clean glass after first two weeks of

operation (after burn-in period is over) and then only when necessary and ONLY WHEN THE APPLIANCE IS COOL. Wipe surface with clean, dampened, soft cloth. Follow with dry, soft towel as desired. Take care not to scratch the glass surface.

#### IMPORTANT: Do not use abrasive cleaners on glass. Never clean the glass when it is hot.

Clean the glass periodically, to remove any buildup caused by the following:

- Filmy coating (during initial use after installation). Initial curing of the high temperature paint and burning off of lubricants used in the manufacturing process may result in a filmy coating on the glass.
- Dusty or dirty buildup. It is normal for condensation and fog to form on the inside of the glass when first starting the appliance. This condensation and fog will usually disappear within a few minutes; however, over time the moisture can cause lint, dust, and other airborne particles to cling to the glass surface.
- White coating. A white coating may form on the glass as a result of impurities and minerals in the fuel.

It is recommended that the glass be cleaned two or three times during each heating season. depending on the circumstances. The following cleaning solutions are approved for use to clean the glass:

- Non-ammonia based household cleaner
- 50% white vinegar and 50% water
- · Gas fireplace/stove glass cleaner

#### Barrier (see Notice, Page 30)

NOTE: Make sure fireplace is OFF and unit is COLD before removing barrier

To remove barrier follow these steps.

- 1. Lift barrier up by the frame at the top.
- 2. Remove lower filler piece by pulling down off of the barrier.
- 3. Lower barrier and push barrier to left to release right side.
- 4. Pull the right side out of fireplace.
- 5. Remove screen.
- 6. Install the new, approved factory barrier with flat side of screen toward firebox.

#### **Inspect Glass Gasket**

Visually inspect the gasket on the backside of the glass enclosure panels. The gasket surface must be clean, free of irregularities and seated firmly.

#### **Clean Control Compartment**

Keep control compartment clean by vacuuming or brushing at least twice a year. More frequent cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is important that control compartments, burners and circulating air passageways of the appliance be kept clean.

#### Clean Logs and Burner

Carefully remove the logs (use care when handling the fiber logs, as they become quite fragile after curing). Vacuum out any foreign matter (lint, carbon, etc.) on the burner. Ensure the burner ports are "open." Remove any carbon deposits from the under side of the logs using a vacuum cleaner, or a soft bristled brush (i.e. paint brush).

**NOTE:** Improper positioning of logs can create carbon build-up and will alter the performance of the appliance.

#### Replacing Logs

If the logs become damaged by accident or improper handling and need replacement, use only the proper replacement logs from manufacturer (see *Page 61* for ordering information).

#### Reinstall Embers, Volcanic Stone, and Logs

Carefully follow placement instructions on Pages 49-51). All logs should fit onto corresponding pins and/or log stoppers. This will ensure a proper flame and safe combustion.

#### **Inspect Wiring**

Refer to wiring diagram on Page 28.

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

ATTENTION: Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de cáblage peuvent entraîner un fonctionnement inadéquat et dangereux.

Inspect and clean all wire connections. Ensure that there is no melting or damage. Inspection should include:

- Terminals at the valve
- OFF/ON Switch

#### **Inspect Burner Flame and Pilot Flame Appearance**

Periodically do a visual check of the burner flame and the pilot flame. Ensure that the burner flame appearance resembles the flame shown in *Figures 83 and 84* and as described in Flame Appearance and Sooting on Page 52. Refer to Figure 85 on Page 53 for more information about the pilot flame apprearance. Contact a qualified service technician at once if any abnormal condition is observed.

#### **Small Area Paint Touch-up**

Only use a factory supplied paint kit for touchups. Paint is available at your local Innovative Hearth Products dealer. Never attempt to paint a hot fireplace.

If the surface later becomes stained or marred. it may be lightly sanded and touched up with spray paint.

#### REMOVAL AND INSTALLATION OF GLASS DOORS, BARRIERS AND MOD-ESTY PANEL

### **A** WARNING

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

- Install only when fireplace is OFF and COLD.
- Fireplace surfaces get EXTREMELY HOT!
- The glass on the front of the fireplace reaches EXTREMELY HIGH temperatures and can cause severe burns if touched. Even after the gas is turned off, fireplace surfaces remain extremely hot.

### **A** CAUTION

## RISK OF PERSONAL INJURY OR PROPERTY DAMAGE.

- Do NOT abuse glass doors by striking or slamming shut
- Never operate fireplace with glass door assemblies removed.

These direct-vent appliances are designed to operate only when both glass door assemblies are installed. Generally, the glass door assemblies should not be removed, except when access to components within the firebox is required.

- Securely tighten door latch screws when reinstalling glass door assemblies to prevent doors from falling out.
- Handle glass door assemblies with extreme care. Replace damaged glass door assemblies with approved replacement assemblies only.

The door assemblies on this fireplace contain ceramic glass. Handle with care to prevent damage. If the door frame or glass on either assembly becomes damaged, replace the entire glass door assembly with a manufacturer-approved replacement assembly only. Do not attempt to substitute any materials used on door assemblies or replace cracked or broken glass with any other materials.

## **A** WARNING

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

## **A** AVERTISSEMENT

Tout écran ou protecteur retiré pour permettre l'entretien de l'appareil doit être remis en place avant de mettre l'appareil en marche.

## **A** WARNING

Do not operate appliance with the glass front removed, cracked or broken.

## **A** AVERTISSEMENT

Ne pas utiliser l'appareil si le panneau frontal en verre n'est pas en place, est craqué ou brisé.

## Installing Glass Doors, Barrier, and Modesty Panel (see Figure 71)

NOTE: These instructions do NOT apply to the Outer Glass Door provided in the Outdoor Kit (for indoor/outdoor installations).

Only doors certified with the appliance shall be used.

Seules des portes certifiées pour cet appareil doivent être utilisées.

Only barriers certified with the appliance shall be used.

- 1) Install one of the glass doors, as follows:
  - a) Retrieve the glass door. Visually inspect the gasket on the back of the frame. Gasket surface must be clean, free of irregularities, and seated firmly.
  - b) Position the door in front of the firebox opening, with the top of the door held away from the fireplace (see *Figure 71*).
  - c) Lower the bottom of the door assembly onto the bottom door track, engaging and centering it in the base channel, and then gently swing the door up.
  - d) Using a #3 Phillips screwdriver, fasten the door frame to the door latches with the two (2) latch screws. The latches should pull forward to engage the door frame.

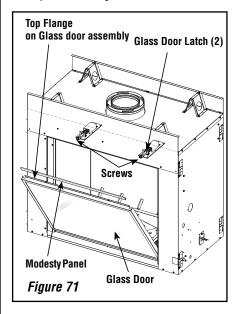
NOTE: Securely tighten latch screws when reinstalling glass door assembly.

- 2) Install the modesty panel on the top flange of the glass door, as follows (*Figure 71*):
  - a) Grasp the modesty panel with both hands (with the open hem facing down).
  - Engage it with the top flange of the glass door frame by pushing it all the way down. Make sure the installed modesty panel is firmly in place.

#### Removing Glass Doors, Barrier and Modesty Panel (see *Figure 71*)

Barrier (see Notice, Page 30) - This fireplace comes with a barrier to reduce the likelihood of burns from touching hot glass. If the barrier is damaged, the fireplace should be turned off immediately and the fireplace must not be operated until a new, approved factory barrier for this unit is installed. To remove barrier follow these steps.

- 1. Lift barrier up by the frame at the top.
- 2. Remove lower filler piece by pulling down off of the barrier.
- 3. Lower barrier and push barrier to left to release right side.
- 4. Pull the right side out of fireplace.
- 5. Remove screen.
- 6. Install the new, approved factory barrier with flat side of screen toward firebox.
- Remove the modesty panel from the top flange of the glass door by firmly pulling up on it with both hands until it is disengaged.
- 2) Remove one of the glass doors, as follows:
  - a) See Figure 71. While holding the top of the glass door frame in place, use a #3 Phillips screwdriver to remove the two (2) screws securing the door frame to the two (2) door latches.
  - b) Carefully tilt the top of the glass door frame away from the unit (as shown in *Figure 71*), and then lift the door assembly up and out of the lower track.
  - c) Carefully place the glass door assembly on a padded surface in a safe location to prevent damage.



# PLACEMENT OF VOLCANIC STONE, GLOWING EMBERS, AND LOGS

- Remove modesty panel, and glass door assembly from one side of fireplace (see Page 48).
- Locate materials (log set, bag of glowing embers, and bags of volcanic stone).

**NOTE:** LOGS ARE FRAGILE! Handle with care to prevent breakage.

Install volcanic stone. Place some of the volcanic stone on the firebox floor around the grate (the entire bag of volcanic stone will NOT be used).

**NOTE:** Do NOT place volcanic stone on burner.

4. Prepare and install glowing embers.

**NOTE:** This appliance is provided with enough glowing ember material for <u>several</u> applications. Do NOT use the entire contents of a new bag at one time.

a) Separate some of the glowing ember material into pieces about the size and thickness of a dime (see *Figure 72*). Keep the pieces fluffed up, not matted.

IMPORTANT! Ember pieces must be as SMALL and THIN as a dime.

 b) Distribute the dime-sized pieces over the surface of the burner, in the areas shown in *Figures 72 and 73*.

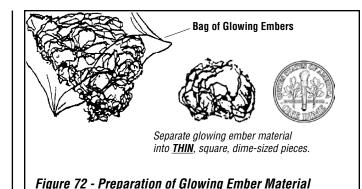
**NOTE:** To prevent flame impingement and soot, do not use more ember material than necessary.

c) For best glowing effect, replace ember material annually.

**NOTE:** Use only catalog number H8312 Glowing Embers with this fireplace.

## **A** WARNING

- DO NOT attempt to install the logs until the appliance installation has been completed, the gas line connected and tested for leaks, and the initial burner operation has been checked out.
- Logs get very hot and will remain hot up to one hour after gas supply is turned off. Handle only when logs are cool. Turn off all electricity to the appliance before you install volcanic stone, embers and logs.
- The size and position of the log set was engineered to give the appliance a safe, reliable and attractive flame pattern. Any attempt to use a different log set in the fireplace will void the warranty and will result in incomplete combustion, sooting, and poor flame quality.
- This appliance is not designed to burn wood. Any attempt to do so could cause irreparable damage to the appliance and prove hazardous to your safety.
- If logs are not installed according to the log installation instructions, flame impingement and improper combustion could occur and result in soot and/or excessive production of carbon monoxide (CO), a colorless, odorless, toxic gas.



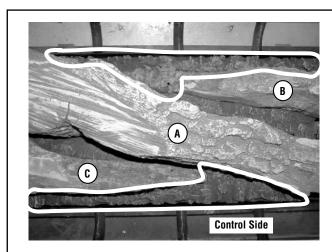
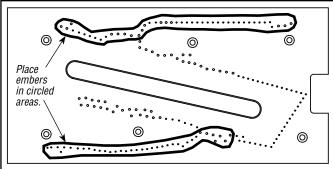


Figure 73 - Placement of Glowing Ember Pieces

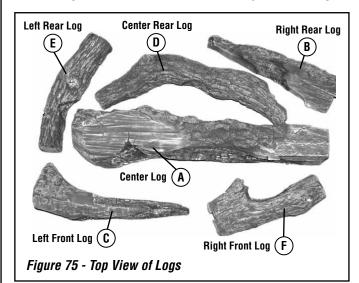


Control Side (top view of burner shown)

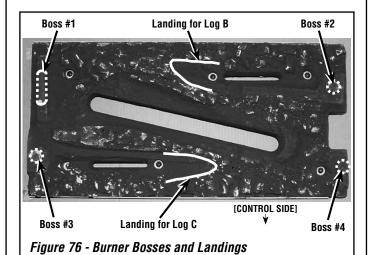
- Place glowing ember material in circled areas ONLY.
- Do NOT place glowing ember material over main flame gas ports.
- To prevent flame impingement and soot, do not use more ember material than necessary.

Figure 74 - Placement of Glowing Embers

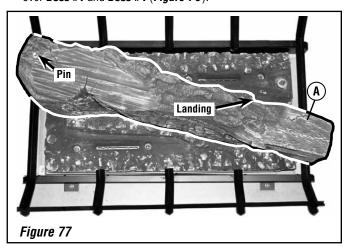
Install logs (reference Figure 75 and Table 10).
 Note: Logs are FRAGILE! Handle with care to prevent breakage.



		L	OG SET	
ltem*		Description	ltem*	Description
Α	Lo	g, Center	D	Log, Top Right
В	Lo	g, Right Rear	E	Log, Top Left
С	Lo	g, Left Front	F	Log, Top Front
*Item letters correspond to photos.				
FIREBOX ACCESSORIES/PARTS				
Cat. N	D.	Model	Description	
H831	2	PGE	Bag of Glowing Embers	
80L42	2	FDVS	Bag of Volcanic Stone	
Table 1	0			

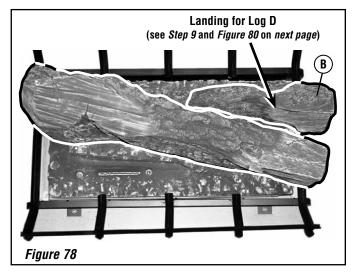


 Place rectangular notches on underside of Center Log A (Figure 77) over Boss #1 and Boss #4 (Figure 76).



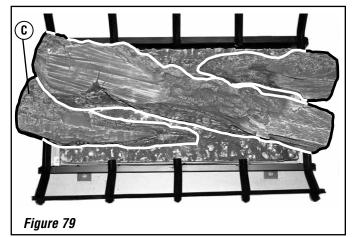
 Place notch on underside of Right Rear Log B (Figure 78) over Boss #2 (Figure 76).

Place opposite end of **Right Rear Log B** (*Figure 78*) on **Landing for Log B** (see *Figure 76*).



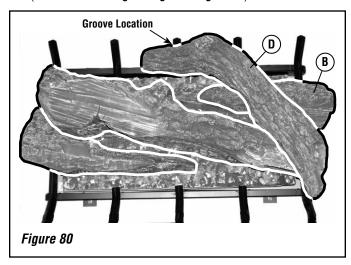
 See Figures 76 and 79. Place notch on underside of Left Front Log C over Boss #3.

Place opposite end of Left Front Log C on Landing for Log C (see Figure 76).

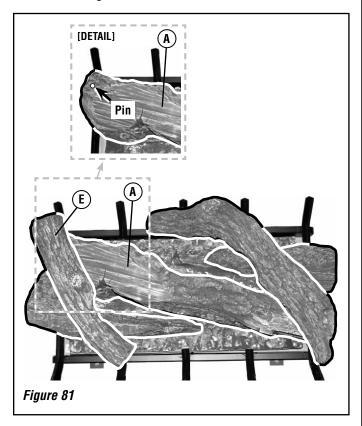


**9.** Place groove on underside of **Top Right Log D** over the grate as shown in *Figure 80*.

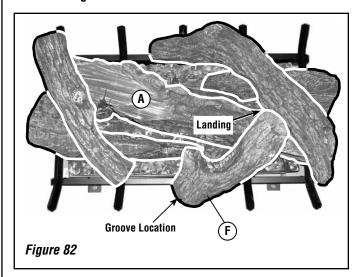
The middle section of **Log D** will rest on the landing on **Log B** (labeled as "**Landing for Log D**" in *Figure 78*).



10. See *Figure 81*. Place hole on underside of **Top Left Log E** over pin on **Center Log A**.



11. See Figure 82. Place groove on underside of Top Front Log F over the grate finger. Rest the other end of the log on the Landing on Center Log A.



## BURNER ADJUSTMENTS (QUALIFIED TECHNICIANS ONLY)

#### Flame Appearance and Sooting

Proper flame appearance is a flame that is blue at the base and becomes yellowish-orange in the body of the flame. When the appliance is first lit, the entire flame may be blue and will gradually turn yellowish-orange during the first 30 minutes of operation. After 30 minutes of operation, if the flame is blue, or if the flame is orange with evidence of sooting (black tip), the air shutter opening may need to be adjusted.

If the air shutter opening is closed too far, sooting may develop. Sooting is indicated by black puffs developing at the tips of very long orange flames. Sooting results in black deposits forming on the logs, appliance inside surfaces and on exterior surfaces adjacent to the vent termination.

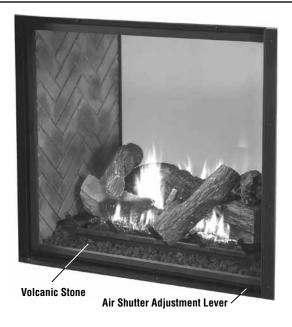
Sooting is caused by incomplete combustion in the flames and lack of combustion air entering the air shutter opening. To achieve a warm yellowish-orange flame with an orange body that does not soot, the shutter opening must be adjusted between these two extremes.

#### Burner Air Shutter Adjustment Guidelines

- If there is smoke or soot present, first check the log set positioning to ensure that the flames are not impinging on any of the logs.
   If the log set is properly positioned and a sooting condition still exists, then the air shutter opening should be increased.
- The more offsets in the vent system, the larger the air shutter opening will need to be.
- An appliance operated with the air shutter opened too far, may have flames that appear blue and transparent. These weak, blue and transparent flames are termed anemic.
- Propane models may exhibit flames which candle or appear stringy. If this is present and persists, adjust the air shutter to a more OPEN position, then operate the appliance for a few more minutes to ensure that the flame normalizes and the flames do not appear sooty.

The following chart is provided to aid you in achieving the correct air shutter adjustment for your installation.

Air Shutter Adjustment Guidelines:			
Amount of Primary Air	Flame Color	Air Shutter Adjustment	
If air shutter is closed too far	Flame will be orange	Air shutter gap should be increased	
If air shutter is open too far	Flame will be blue	Air shutter gap should be decreased	



Burner Flame Appearance (Control Side)

Figure 83



Volcanic Stone

Burner Flame Appearance (Opposite Control Side)

Figure 84

#### **Burner Air Shutter Adjustment Procedure**

## **A** WARNING

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

- Fireplace surfaces get EXTREMELY HOT!
- The glass on the front of the fireplace reaches EXTREMELY HIGH temperatures and can cause severe burns if touched. Even after the gas is turned off, fireplace surfaces remain extremely hot.

### **A** CAUTION

#### **RISK OF PERSONAL INJURY**

#### OR PROPERTY DAMAGE.

- Air shutter adjustment should only be performed by a qualified professional service technician.
- Soot will be produced if the air shutter is closed too much. Any damage due to carboning resulting from improperly setting the air shutter is <u>not covered</u> under the warranty.

- Light the appliance (follow lighting procedure in Care and Operation Instructions or on lighting label in control compartment).
- 2. Allow the burner to operate for at least 30 minutes while continuously observing the flame to ensure that the proper flame appearance has been achieved (see *Figures* 83 and 84).
- Adjust the air shutter using the Air Shutter Adjustment Lever on the lower right side of the firebox (see *Figure 83*).
  - For more OPEN air shutter, slide lever to the RIGHT.
  - For more CLOSED air shutter, slide lever to the LEFT.

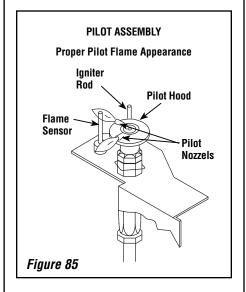
A minimum shutter setting is designed into the venturi by four 1/16"-inch tabs.

- If the flame appears weak or sooty (as described on the previous page), adjust the air shutter until proper flame appearance is achieved.
- If flame stays lowered blue, incrementally adjust the air shutter to a more CLOSED position until proper flame appearance is achieved.

**NOTE:** See **Figures 83 and 84** for proper burner flame appearance.

#### **Electronic Appliance Checkout**

To light the burner, refer to the lighting instructions on *Page 57*. Ensure the igniter lights the pilot. The pilot flame should engulf the flame sensor as shown in *Figure 85*.



#### ORDERING REPLACEMENT PARTS

A complete parts list is found at the end of this manual. Use only parts supplied from the manufacturer.

With proper care and maintenance, your appliance will provide many years of enjoyment. If you should experience any problem, first refer to the troubleshooting guide in this manual. If the problem persists, contact your Innovative Hearth Products dealer or distributor.

Order parts through your Innovative Hearth Products distributor or dealer. Parts will be shipped at prevailing prices at time of order.

When ordering parts, provide the following information:

- 1. Appliance model number.
- 2. Appliance serial number.
- 3. Part number.
- 4. Part description.
- 5. Quantity required.
- **6.** Appliance installation date.

If you encounter any problems or have any questions concerning the installation or application of this system, please contact your dealer or distributor.

#### PRODUCT REFERENCE

#### INFORMATION

We recommend that you record the important reference information about your fireplace in the space provided below. Please call Innovative Hearth Products for the phone number of your nearest IHP dealer, who will answer your questions or address your concerns.

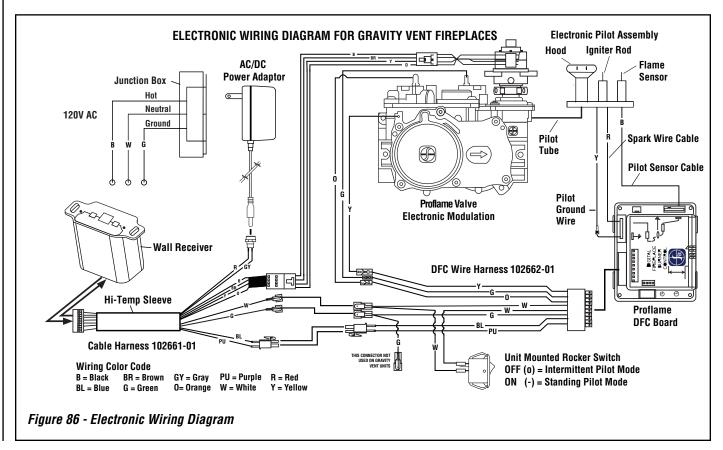
INNOVATIVE HEARTH PRODUCTS 1508 Elm Hill Pike, Suite 108 Nashville. TN 37210

Visit us at Astria.US.com

PRODUCT REFERENCE INFORMATION		
Model Number		
Serial Number		
Date Installed		
Gas Type Used		
Dealer Name		

#### WIRING DIAGRAM

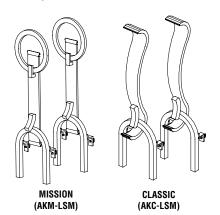
A wiring diagram is provided here for reference purposes only. This information is also provided on schematics attached directly to a pullout panel in the appliance control compartment. CAUTION: LABEL ALL WIRES PRIOR TO DISCONNECTION WHEN SERVIC-ING CONTROLS. WIRING ERRORS CAN CAUSE IMPROPER AND DAN-GEROUS APPLIANCE OPERATION. ATTENTION: AU MOMENT DE L'ENTRETIEN DES COMMANDES, ÉTIQUETEZ TOUS LES FILS AVANT DE LES DÉBRANCHER. DES ERREURS DE CÁBLAGE PEU-VENT ENTRAÎNER UN FONCTIONNEMENT INADÉQUAT ET DANGEREUX.



#### ACCESSORY COMPONENTS

#### **Andiron Kits**

The andiron kits include two andirons for one side. If andirons are desired for both sides, order two kits. The andirons attach to the grate assembly without the use of hardware.



Andiron Kits				
Cat. No.	Model	Description		
H2227	AKM-LSM	Andirons, Mission		
H2228	AKC-LSM	Andirons, Classic		

#### **Ceramic and Porcelain Panel Kits**

The panel kits include ceramic and porcelain panels for the side walls. The ceramic panels have brick-like features in relief.



**Architectural Stone** 



Ceramic: **Buff Herringbone** 



Ceramic: **Black Rustic** 



Ceramic: **Buff Rustic** 



Ceramic: Venetian Tile



Porcelain: **Black** 

Cat. No.	Model	Description
H7946	BLK-ARCH-LSM40ST	Ceramic, Architectural Stone
H8291	BLK-B-LSM40ST	Ceramic, Black Rustic
H7943	BLK-H-LSM40ST	Ceramic, Buff Herringbone
H7942	BLK-R-LSM40ST	Ceramic, Buff Rustic
H7947	BLK-VT-LSM40ST	Ceramic, Venetian Tile
H7948	BLK-BP-LSM40ST	Porcelain, Black

#### **Bag of Glowing Embers Bag of Volcanic Stone**

Replacement ember material and volcanic stone are available for use with these appliances. Order them to replace materials as part of the periodic maintenance of the appliance.



Firebox Accessories		
Cat. No.	Model	Description
H8312	PGE	Bag of Glowing Embers
80L42	FDVS	Bag of Volcanic Stone

#### **Touch-Up Paint Kit**

Repair of minor scratches and discoloration of the appliances black painted surfaces may be accomplished with the touch-up paint kit.

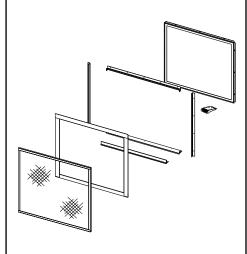


Touch-Up Paint (Black) Kit			
Cat. No.	Model	Description	
F1881	SCITPSAB	Black Touch-up Paint, Firebox Interior	
F1882	SCTPSAB	Black Touch-up Paint, Powder Coat Exterior	

# ACCESSORY COMPONENTS (continued)

#### **Outdoor Kit**

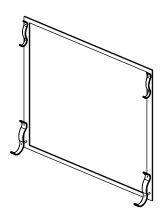
When installing this appliance in an indoor/out-door configuration, this outdoor kit is required to be installed on the outdoor side.



Outdoor Kit		
Cat. No.	Model	Description
F2231	LSM40ST-ODKSG	Outdoor Window Kit (Light-tinted Glass) With Outdoor Barrier
F2232	LSM40ST-ODKTSF	Outdoor Window Kit (Dark-tinted Glass) With Outdoor Barrier

#### **Classic Screen Kits**

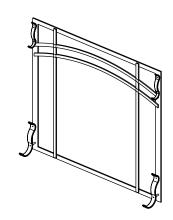
These decorative freestanding firescreen panels are designed to enhance the beauty of the fireplace and create a barrier to prevent direct contact with the hot glass.



Classic Screen Kits			en Kits
	Cat. No.	Model	Description
	H5052	SK-LSM40-2	Classic Screen Kit

#### **Dual Arch Screen Kits**

These decorative freestanding firescreen panels are designed to enhance the beauty of the fireplace and create a barrier to prevent direct contact with the hot glass.



Dual Arch Screen Kits		
Cat. No. Model		Description
H5051	DASK-LSM40-2	Dual Arch Screen



#### FOR YOUR SAFETY READ BEFORE OPERATING

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

- A. This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- B. BEFORE OPERATING 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 electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.
- C. If any portion of this appliance does not operate as the instructions indicate, do not try to repair it, call a qualified service technician. Do not use tools. 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.

#### **OPERATING INSTRUCTIONS**

- 1. STOP! Read the safety information above on this label.
- 2. Read the Care and Operation manual including the section on "Remote Control System."
- 3. Slide the switch on the receiver to "OFF."
- 4. Press ON/OFF button on remote control transmitter to "OFF."
- 5. Turn "OFF" all electric power to the appliance.
- This appliance is equipped with an ignition device which automatically lights the pilot. Do not try to light the pilot by hand.
- Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information above on this label. If you don't smell gas, go to the next step.
- 8. Turn on all electric power to the appliance.
- 9. Slide the switch on the receiver to REMOTE.
- 10. Press ON/OFF button on remote control transmitter to "ON."
- 11. Set thermostat on remote control to desired setting.
- If the appliance will not operate, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

#### Electronic Gas Control Valve - SIT Proflame



**Remote Control Transmitter** 

**Electronic Pilot Assembly** 





#### TO TURN OFF GAS TO APPLIANCE

- 1. Slide the switch on the receiver to "OFF."
- Press ON/OFF button on remote control transmitter to "OFF."
- 3. Turn off all electric power to the appliance if service is to be performed.
- 4. Close the main line gas shut-off valve.

Off

# DANGER



HOT GLASS WILL Cause Burns. Do not touch glass

UNTIL COOLED.

NEVER ALLOW CHILDREN TO TOUCH GLASS.

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

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#### POUR PLUS DE SÉCURITÉ LIRE AVANT DE METTRE EN MARCHE

AVERTISSEMENT. Quiconque ne respecte pas à la lettre les instructions dans la présente notice risque de déclencher un incendie ou une explosion entraînant des dommages, des blessures ou la mort.

- A. Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
- B. AVANT DE FAIRE FONCTIONNER, reniflez tout autour de l'appareil pour déceler une odeur de gaz. Reniflez près du plancher, car certains gaz sont plus lourds que l'air et peuvent s'accumuler au niveau du sol.

#### QUE FAIRE SI VOUS SENTEZ UNE ODEUR DE GAZ :

- Ne pas tenter d'allumer d'appareil.
- Ne touchez à aucun interrupteur; ne pas vous servir des téléphones se trouvant dans le bâtiment.
- Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur.
- Si vous ne pouvez rejoindre le fournisseur, appelez le service des incendies.
- C. Si un élément de cette unité ne fonctionne pas tel que décrit dans les instructions, n'essayez pas de le réparer, appelez un technicien qualifié. N'utilisez-pas d'outils. Le fait de forcer la manette ou de la réparer peut déclencher une explosion ou un incendie.
- D. N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

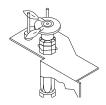
#### **INSTRUCTIONS DE MISE EN MARCHE**

- 1. ARRÊTEZ! Lisez les avertissements de sécurité à l'endos de cette étiquette.
- 2. Lisez le manuel d'utilisation et d'entretien incluant la section
  - « Système de télécommande ».
- 3. Placez l'interrupteur du récepteur en position "OFF".
- 4. Appuyez sur le bouton "ON/OFF" pour sélectionner "OFF".
- 5. Coupez l'alimentation électrique de l'appareil.
- Cet appareil est muni d'un dispositif d'allumage qui allume automatiquement la veilleuse. Ne tentez pas d'allumer la veilleuse manuellement.
- 7. Attendre cinq (5) minutes pour laisser échapper tout le gaz. Reniflez tout autour de l'appareil, y compris près du plancher, pour déceler une odeur de gaz. Si vous sentez une odeur de gaz, ARRÊTEZ! Passez à l'étape B des instructions de sécurité sur la portion supérieure de cette étiquette. S'il n'y a pas d'odeur de gaz, passez à l'étape suivante.
- 8. Mettez l'appareil sous tension.
- 9. Placez l'interrupteur du récepteur en position "REMOTE".
- 10. Appuyez sur le bouton "ON/OFF" pour sélectionner "ON".
- 11. Ajustez le thermostat sur la télécommande à l'ajustement désiré.
- 12. Si l'appareil ne se met pas en marche, suivez les instructions intitulées
  - « Comment couper l'admission de gaz de l'appareil » et appelez un technicien qualifié ou le fournisseur de gaz.

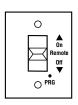
#### Valve électronique -SIT Proflame



Module de veilleuse électronique



Récepteur



Télécommande



#### COMMENT COUPER L'ADMISSION DE GAZ DE L'APPAREIL

- Coupez l'alimentation électrique de l'appareil s'il faut procéder à l'entretien.
- 2. Sélectionnez OFF sur le récepteur.

- 3. Appuyez sur le bouton ON/OFF et sélectionnez OFF.
- 4. Fermer la valve de gaz principale.

# DANGER



**VITRE CHAUDE** RISQUE DE BRÛLURES.

**NE TOUCHEZ PAS** UNE VITRE NON REFROIDIE.

NE LAISSEZ JAMAIS UN ENFANT DE TOUCHER LA VITRE.

L'écran pare-étincelles fourni avec ce foyer réduit le risque de brûlure en cas de contact accidentel avec la vitre chaude et doit être installé pour la protection Des enfants et Des personnes à risques.

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#### **MAINTENANCE SCHEDULE**



Turn OFF gas and electrical power to the fireplace, and allow it to cool before cleaning or servicing the appliance.

#### Annually (before onset of burning season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Inspect/Clean Burner, Logs, and Controls	Qualified Service Technician	Inspect valve and ensure it is properly operating. Check piping for leaks. Vacuum the control compartment, fireplace logs and burner area.
Check Flame Patterns and Flame Height	Qualified Service Technician	Refer to <i>Figures 83 and 84 on Page 52</i> and verify the flame pattern and height displayed by the appliance conform to the illustration. Flames must not impinge on the logs. Ensure flames are steady (not lifting or floating).
Inspect/Clean Pilot and Burner	Qualified Service Technician	Refer to <i>Figure 85 on Page 53</i> . Remove any surface build-up on pilot and burner assembly. Wipe the pilot nozzles, igniter/flame rod and hood. Ensure the pilot flame engulfs the flame sensor as shown.
Check Vent System	Qualified Service Technician	Inspect the vent system at the top and at the base (within the firebox) for signs of blockage or obstruction. Look for any signs of dislocation or deterioration of the vent components (reconnect or replace as necessary).
Appliance Checkout	Qualified Service Technician	Perform the appropriate appliance checkout procedure detailed in this manual.
Replace Glowing Embers (rockwool)	Homeowner/Qualified Service Technician	Remove old ember materials and vacuum the ember placement area. Place new embers per instructions on <i>Page 13.</i>

#### Periodically (after burning season)

MAINTENANCE TASK	ACCOMPLISHING PERSON	PROCEDURE
Clean Firebox Interior	Homeowner	Carefully remove logs, glowing embers (rockwool) and volcanic stone. Vacuum out interior of the firebox. Clean firebox walls and log grate. Replace logs, glowing embers and volcanic stone as detailed in this manual.
Check Flame Patterns and Flame Height	Homeowner	Refer to <i>Figures 83 and 84 on Page 52</i> and verify the flame pattern and height displayed by the appliance conforms to the picture. Flames must not impinge on the logs.
Clean Front Glass Enclosure Panel	Homeowner	Clean as necessary following the directions provided in this manual.  DO NOT TOUCH OR ATTEMPT TO CLEAN GLASS WHILE HOT.

#### TROUBLESHOOTING THE FIREPLACE

**NOTE**: Before troubleshooting the gas control system, make sure the external gas shutoff valve (located at gas supply inlet) is in the "ON" position.

Important: Valve system troubleshooting should only be accomplished by a qualified service technician.

SYMPTOM	POSSIBLE CAUSES	CORRECTIVE ACTION		
1. Nothing happens when fireplace is turned On/Off.	A. Remote is not functioning properly.	<ul> <li>Check that the wall switch plate is set to remote (if remote was used).</li> <li>Operate the fireplace from the wall plate switch.</li> <li>Replace remote and/or receiver batteries.</li> </ul>		
	<b>B.</b> Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves.		
	C. Unit is not receiving power.	<ul> <li>Check/replace backup batteries behind wall plate.</li> <li>Check building circuit breakers to ensure power is on to the fireplace.</li> </ul>		
2. The main burner does not light,	A. Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves.		
and the igniter is sparking.	<b>B.</b> Loose wires to the valve.	Check control compartment for any obvious loose wiring (call a service technician if required).		
	C. Loose wires to ignition module.	Check control compartment for any obvious loose wiring (call a service technician if required).		
	<b>D.</b> Air in the gas line.	Call a service technician.		
3. The main Burner comes on,	A. Gas is not reaching the fireplace.	Check the gas supply and gas shutoff valves.		
but then goes out.	<b>B.</b> Loose wires to valve or ignition module.	Check control compartment for any obvious loose wiring (call a service technician, if required).		
	C. Pilot flame is not engulfing the sensor.	Call a service technician.		
	D. Obstructed vent system.	Call a service technician.		
4. Soot is present on logs and glass.	A. Excessive flame impingement on logs.	Check for proper log placement.		
	B. Improper air shutter opening.	Open the air shutter by pulling on the air shutter adjustment lever.		

#### **GAS CONVERSION KITS**

Gas conversion kits are available to adapt your appliance from the use of one type of gas to another. These kits contain all the necessary components needed to complete the task, including labeling that must be affixed to ensure safe operation.

Kit part numbers are listed at right.

Refer to the instructions provided with the conversion kit when performing any gas conversion.

Gas Conversion Kits				
Kit Model No. Kit Cat. No. Description				
GCK-NP-LSM40ST H7951 Natural Gas to Liquid Propane Conversion Kit				
GCK-PN-LSM40ST H7952 Liquid Propane to Natural Gas Convers		Liquid Propane to Natural Gas Conversion Kit		
Table 11				

#### REPLACEMENT PARTS LIST

Contact an Innovative Hearth Products dealer to obtain any of these parts.

Never use substitute materials. Use of non-approved parts can result in poor performance and safety hazards.

Item No.*	Description	Cat. No.	Qty.
1	a. Ceramic Panel Kit, Architectural Stone	H7946	1
	b. Ceramic Panel Kit, Black Rustic c. Ceramic Panel Kit, Buff Herringbone	H8291 H7943	1
	d. Ceramic Panel Kit, Buff Rustic	H7942	1
	e. Ceramic Panel Kit, Venetian Tile f. Porcelain Panel Kit, Black	H7947 H7948	1 1
2	Modesty Panel (603936-01)	H8324	3
3	Log Set	H7994	1
4	Enclosure, Glass Door	H2281	2
5	Spring Latch Assembly	H2274	2
6	Burner Assembly	H7996	1
9	Access Plate	H8013	1
10	Gasket, Access Plate	H8012	1
11	Gas Line Tubing	H8001	2
13	Orifice, Natural Gas, #32	H8002	2
13	Orifice, Propane Gas, #52	H8003	2
14	Bag of Embers (rockwool)	H8312	1
15	Grate Assembly	H7998	1
16	On/Off Rocker Switch	80L41	1
17	Gas Line, Flexible Connection	93L32	1
18	Modesty Panel, Right Side	H3371	1
19	Bag of Volcanic Stone (lava rock)	80L42	1
21	Gas Line (from valve to T-fitting)	H7997	1
22	Barrier Kit (Indoor)	J7422	2
	Barrier Kit (Outdoor)	H8249	1
	Barrier Filler	H7543	2
	Springs	J7542	1
	Access Door	J7541	1
	Insulation	J7544	1
	Top Channel	J7545	1

*Item numbers correspond to "Replacement Parts Illustration," <i>next page</i> .
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Gas Controls - SIT Electronic					
Item	Description	Natural Gas		Propane Gas	
No.		Part No.	Qty.	Part No.	Qty.
31	Gas Valve	H7270	1	H7271	1
32	Pilot Assembly	H7268	1	H7269	1
33	DFC Ignition Board	H7272	1	H7272	1
34	DFC Wire Harness	H8330	1	H8330	1
35	Receiver Kit	H7277	1	H7277	1
36	Receiver Cable Harness	H8008	1	H8008	1
37	AC/DC Power Adaptor	H8006	1	H8006	1
38	Transmitter Kit	H7275	1	H7275	1
39	Ground Wire	H7278	1	H7278	1

## **A** WARNING

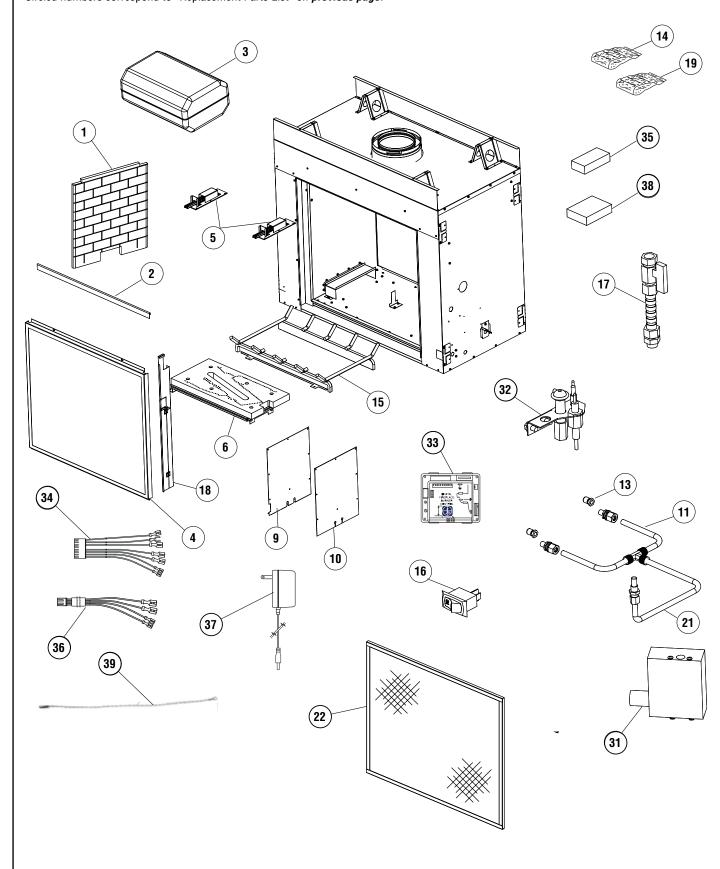
Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

## **A** AVERTISSEMENT

Risque de dommages ou de blessures si les pièces ne sont pas installées conformément à ces schémas et ou si des pièces autres que celles spécifiquement approuvées avec cet appareil sont utilisées.

#### REPLACEMENT PARTS ILLUSTRATION

Circled numbers correspond to "Replacement Parts List" on *previous page*.



## Innovative Hearth Products Astria® Brand Gas Fireplace Limited Lifetime Warranty

#### THE WARRANTY

Innovative Hearth Products ("IHP") Limited Lifetime Warranty warrants your Astria® brand gas fireplace ("Product") to be free from defects in materials and workmanship at the time of manufacture. The Product body and firebox carry the Limited Lifetime Warranty. Ceramic glass carries the Limited Lifetime Warranty against thermal breakage only. After installation, if covered components manufactured by IHP are found to be defective in materials or workmanship during the Limited Lifetime Warranty period and while the Product remains at the site of the original installation, IHP will, at its option, repair or replace the covered components. If repair or replacement is not commercially practical, IHP will, at its option, refund the purchase price or wholesale price of the IHP product, whichever is applicable. IHP will also pay IHP prevailing labor rates, as determined in its sole discretion, incurred in repairing or replacing such components for up to five years. THERE ARE EXCLUSIONS AND LIMITATIONS to this Limited Lifetime Warranty as described herein.

#### **COVERAGE COMMENCEMENT DATE**

Warranty coverage begins on the date of purchase. In the case of new home construction, warranty coverage begins on the date of first occupancy of the dwelling or six months after the sale of the Product by an independent IHP dealer/distributor, whichever occurs earlier. The warranty shall commence no later than 24 months following the date of product shipment from IHP, regardless of the installation or occupancy date.

#### **EXCLUSIONS AND LIMITATIONS**

This Limited Lifetime Warranty applies only if the Product is installed in the United States or Canada and only if operated and maintained in accordance with the printed instructions accompanying the Product and in compliance with all applicable installation and building codes and good trade practices.

This warranty is non-transferable and extends to the original owner only. The Product must be purchased through a listed supplier of IHP and proof of purchase must be provided. The Product body and firebox carry the Limited Lifetime Warranty from the date of installation. Vent components, trim components and paint are excluded from this Limited Lifetime Warranty. The following do not carry the Limited Lifetime Warranty but are warranted as follows:

Burner - Repair or replacement for five years from the date of installation

Gas components & electrical components - Repair or replacement for one year from the date of installation

Gaskets - Repair or replacement for one year from the date of installation

Gold & nickel plating - Replacement for two years from date of installation. Excludes tarnishing

Labor coverage - Prevailing IHP labor rates apply for the warranty period of the component

Light bulbs & batteries - Replacement for 90 days from the date of installation

Logs – Replacement for five years from the date of installation against thermal breakage only

Optional blowers & remote controls — Repair or replacement for one year from the date of installation
Optional glass doors & optional glass accessories — Repair or replacement for 90 days from the date of installation

Optional surrounds - Stone/Natural Materials: Replacement for one year against cracking or breakage due to thermal stress. Other Materials: Replacement for one

year. Excludes surface and hairline cracks and scratches or slight color changes that do not affect the operation or safety of the unit

Tempered Glass -Replacement for one year from the date of installation

Parts not otherwise listed carry a 90 day warranty from the date of installation.

Whenever practicable, IHP will provide replacement parts, if available, for a period of 10 years from the last date of manufacture of the Product.

IHP will not be responsible for: (a) damages caused by normal wear and tear, accident, riot, fire, flood or acts of God; (b) damages caused by abuse, negligence, misuse, or unauthorized alteration or repair of the Product affecting its stability or performance (The Product must be subjected to normal use. The Product is designed to burn either natural or propane gas only. Burning conventional fuels such as wood, coal or any other solid fuel will cause damage to the Product, will produce excessive temperatures and could result in a fire hazard.); (c) damages caused by failing to provide proper maintenance and service in accordance with the instructions provided with the Product; (d) damages, repairs or inefficiency resulting from faulty installation or application of the Product.

IHP is not responsible for inadequate fireplace system draft caused by air conditioning and heating systems, mechanical ventilation systems, or general construction conditions which may generate negative pressure in the room in which the appliance is installed. Additionally IHP assumes no responsibility for drafting conditions caused by venting configurations, adjoining trees or buildings, adverse wind conditions or unusual environmental factors and conditions that affect the operation of the unit.

This Limited Lifetime Warranty covers only parts and labor as provided herein. In no case shall IHP be responsible for materials, components or construction, which are not manufactured or supplied by IHP or for the labor necessary to install, repair or remove such materials, components or construction. Additional utility bills incurred due to any malfunction or defect in equipment are not covered by this warranty. All replacement or repair components will be shipped F.O.B. from the nearest stocking IHP factory.

#### LIMITATION ON LIABILITY

It is expressly agreed and understood that IHP's sole obligation and the purchaser's exclusive remedy under this warranty, under any other warranty, expressed or implied, or in contract, tort or otherwise, shall be limited to replacement, repair, or refund, as specified herein.

In no event shall IHP be liable for any incidental or consequential damages caused by defects in the Product, whether such damage occurs or is discovered before or after repair or replacement, and whether such damage is caused by IHP's negligence. IHP has not made and does not make any representation or warranty of fitness for a particular use or purpose, and there is no implied condition of fitness for a particular use or purpose.

IHP makes no expressed warranties except as stated in this Limited Lifetime Warranty. The duration of any implied warranty is limited to the duration of this expressed warranty.

No one is authorized to change this Limited Lifetime Warranty or to create for IHP any other obligation or liability in connection with the Product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. The provisions of this Limited Lifetime Warranty are in addition to and not a modification of or subtraction from any statutory warranties and other rights and remedies provided by law.

#### INVESTIGATION OF CLAIMS AGAINST WARRANTY

IHP reserves the right to investigate any and all claims against this Limited Lifetime Warranty and to decide, in its sole discretion, upon the method of settlement.

To receive the benefits and advantages described in this Limited Lifetime Warranty, the appliance must be installed and repaired by a licensed contractor approved by IHP.

Contact IHP at the address provided herein to obtain a listing of approved dealers/distributors. IHP shall in no event be responsible for any warranty work done by a contractor that is not approved without first obtaining IHP's prior written consent.

#### **HOW TO REGISTER A CLAIM AGAINST WARRANTY**

In order for any claim under this warranty to be valid, you must contact the IHP dealer/distributor from which you purchased the product. If you cannot locate the dealer/distributor, then you must notify IHP in writing. IHP must be notified of the claimed defect in writing within 90 days of the date of failure. Notices should be directed to the IHP Warranty Department at 1508 EIm Hill Pike, Suite 108, Nashville, TN 37210 or visit our website at WWW.ASTRIA.US.COM.

Contact an IHP dealer to obtain any of these parts. Please contact IHP for the phone number of your nearest IHP dealer. Astria.us.com

Record the following important information about your fireplace:

Fireplace model number	
Fireplace serial number	
Date fireplace was Installed	
Type of gas fireplace uses	
Dealer name	

Innovative Hearth Products reserves the right to make changes at any time, without notice, in design, materials, specifications, prices and also to discontinue colors, styles and products. Consult your local distributor for fireplace code information.



