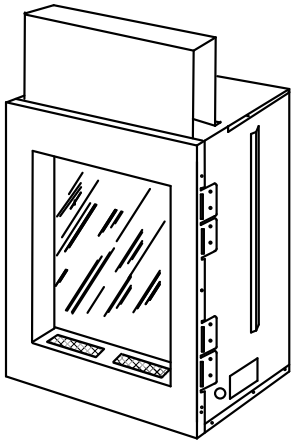
Woodbridge Fireplace Inc.

DIRECT VENT GAS FIREPLACE WITH
ELECTRONIC IGNITION SYSTEM

MODELS: DV2500(N,P)-E

INSTALLATION AND OPERATING INSTRUCTIONS



WARNING: This fireplace requires one foot of vertical venting before any horizontal runs

Report # 401-F-08-5

⚠ WARNING: FIRE OR EXPLOSION HAZARD

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

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

WARNING: Improper installation, adjustment, alteration, services 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.

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.

⚠ 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.

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.

YOUNG CHILDREN SHOULD BE SUPERVISED WHEN THEY ARE IN THE SAME ROOM AS THE APPLIANCE.

CLOTHING OR OTHER FLAMMABLE MATERIAL SHOULD NOT BE PLACED ON OR NEAR THE APPLIANCE.

KEEP THE ROOM AREA CLEAR AND FREE FROM COMBUSTIBLE MATERIALS, GASO- LINE, AND OTHER FLAMMABLE VAPORS AND LIQUIDS.

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

Version française de ce manuel est disponible à partir du site WEB : www.woodbridgefp.com

French version of this Owners Manual is available at www.woodbridgefp.com

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INSTALLER
Please leave these instructions with the owner.

OWNER
Please retain these instructions for future reference.

WARNING

- **Read this owner's manual carefully and completely before trying to assemble, operate, or service this fireplace.**
- **Any change to this fireplace or its controls can be dangerous.**
- **Improper installation or use of this fireplace can cause serious injury or death from fire, burns, explosions, electrical shock and carbon monoxide poisoning.**

This fireplace is a vented product. This fireplace must be properly installed by a qualified service person. The glass door must be properly seated and sealed. If this unit is not properly installed by a qualified service person with glass door properly seated and sealed, combustion leakage can occur.

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, the fireplace may not have been installed properly. Get fresh air at once! Have the fireplace inspected and serviced by a qualified service person. Some people are more affected by carbon monoxide than others. These include pregnant women, people with heart or lung disease or anemia, those under the influence of alcohol, and those at high altitudes.

Propane/LP gas and natural gas are both odorless. An odor-making agent is added to each of these gases. The odor helps you detect a gas leak. However, the odor added to these gases can fade. Gas may be present even though no odor exists.

Make certain you read and understand all warnings. Keep this manual for reference. It is your guide to safe and proper operation of this fireplace.

1. 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.
2. For propane/LP fireplace, do not place propane/LP supply tank(s) inside any structure. Locate propane/LP supply tank(s) outdoors. To prevent performance problems, do not use propane/LP fuel tank of less than 100 lbs. capacity.
3. If you smell gas
   - shut off gas supply.
   - do not try to light any appliance.
   - do not touch any electrical switch; do not use any phone in your building .
   - immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
4. Never install the fireplace
   - in a recreational vehicle
   - where curtains, furniture, clothing, or other flammable objects are less than 42" from the front, top, or sides of the fireplace
   - in high traffic areas
   - in windy or drafty areas
5. This fireplace reaches high temperatures. Keep children and adults away from hot surfaces to avoid burns or clothing ignition. Fireplace will remain hot for a time after shutdown. Allow surfaces to cool before touching.
6. Carefully supervise young children when they are in the room with fireplace.
7. Do not modify fireplace under any circumstances. Any parts removed for servicing must be replaced prior to operating fireplace.
8. Turn fireplace off and let cool before servicing, installing, or repairing. Only a qualified service person should install, service, or repair the fireplace. Have burner system inspected annually by a qualified service person.
9. You must keep control compartments, burners, and circulating air passages clean. More frequent cleaning may be needed due to excessive lint and dust from carpeting, bedding material, pet hair, etc. Turn off the gas valve and pilot light before cleaning fireplace.
10. Have venting system inspected annually by a qualified service person. If needed, have venting system cleaned or repaired. See *Cleaning and Maintenance*, page 39.
11. Keep the area around your fireplace clear of combustible materials, gasoline, and other flammable vapor and liquids. Do not run fireplace where these are used or stored. Do not place items such as clothing or decorations on or around fireplace.

Continued on page 4

IMPORTANT SAFETY INFORMATION

Continued from page 3

12. Do not use this fireplace to cook food or burn paper or other objects.
13. Never place anything on top of fireplace.
14. Do not use any solid fuels (wood, coal, paper, cardboard, etc.) in this fireplace. Use only the gas type indicated on rating plate.
15. This appliance, when installed, must be electrically grounded in accordance with local codes or in the absence of local codes, with the *National Electrical Code, ANSI/ NFPA 70*, or the *Canadian Electrical Code, CSA C22.1.*
16. Do not obstruct the flow of combustion and ventilation air in any way. Provide adequate clearances around air openings into the combustion chamber along with adequate accessibility clearance for servicing and proper operation.
17. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, you must set appliance on a metal or wood panel or hearth pad extending the full width and depth of the appliance.
18. Do not use fireplace if any part has been exposed to or has been under water. Immediately call a qualified service person to arrange for replacement of the unit.
19. Do not operate fireplace if any log is broken.
20. Do not use a blower insert, heat exchanger insert, or any other accessory not approved for use with this fireplace.

IMPORTANT:
PLEASE READ THE FOLLOWING CAREFULLY

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

IMPORTANT:
PLEASE READ THE FOLLOWING CAREFULLY

It is not unusual for gas fireplace to give off some odor the first time it is burned. This is due to the manufacturing process.

Please ensure that your room is well ventilated during burn off — open all windows.

It is recommended that you burn your fireplace for at least ten (10) hours the first time you use it. Place the fan switch in the "OFF" position during this time.

21. 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.
22. **Any safety screen or guard removed for servicing an appliance must be replaced prior to operating the appliance.**
23. **Handle glass door with care to avoid striking or scratching it on hard objects. WARNING: Do not operate appliance with the glass front removed, cracked or broken. Replacement of the glass should be done by a licensed or qualified service person.**
24. **Installation and repair should be done by a qualified service person. The appliance should be inspected before use and at least annually by a profesional service person. More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageway of the appliance be kept clean.**

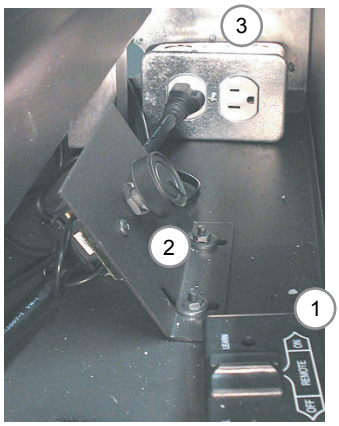
PRODUCT SPECIFICATIONS

- This appliance has been certified for use with either natural or propane gas. See appropriate data plates.
- This appliance is not for use with solid fuels.
- The appliance is approved for bedroom or bedsitting room installations.
- The installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1/ NFPA54 in U.S.A., or the Natural Gas and Propane Installation Code, CSA B149.1 in Canada.
- The appliance must be properly connected to a venting system.
- The appliance is not approved for closet or recessed installations.

FIREPLACE CONTROLS *(see Figure 1)*

1- Remote Control Receiver
2- Blower Speed Control with Manual On/Off Switch
3- Power Outlet to Connect Blower
4- Gas Manual Shut-Off Valve
5- Main Gas Control Valve
6- Electronic Control DFC Board
7- Thermostat Blower

For complete parts list see pages 43-45.



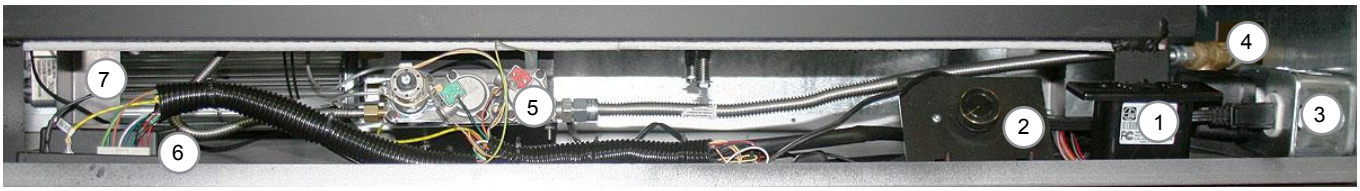


Figure 1 - Fireplace controls

CODE APPROVAL

Direct Vent type appliances draw all combustion air from outside of the dwelling through the vent pipe.
These appliances have been listed by OMNI and found to comply with the established standards for DIRECT VENT GAS FIREPLACE HEATERS in the USA and Canada as follows:

LISTED VENTED GAS FIREPLACE HEATER

TESTED TO: ANSI Z21.88-2014/CSA 2.33-2014, CGA 2.17-M91 (R2009), CSA P.4.1-15 STANDARDS

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.

PRE-INSTALLATION INFORMATION

INSTALLING ABOVE 2000 FEET

- In the USA, the appliance must be derated 4% for every 1,000 ft above 2,000 ft elevations.
- In Canada, these appliances are certified for altitudes of 0 – 4,500 ft.

ORIFICE SIZES, PRESSURES AND BTUs

NATURAL GAS		PROPANE GAS	
Manifold Press: (W.C.)	3.5"	Manifold Press: (W.C.)	10"
Maximum Supply Pressure	10.5"	Maximum Supply Pressure	13"
Minimum Supply Pressure	4.5"	Minimum Supply Pressure	11"

Model Number	Gas Type	Orifice Size As Shipped	Input Max Btu/hr	Input Min Btu/hr
DV2500-NE	**Natural**	**#41**	**26,000**	**18,000**
DV2500-PE	**Propane**	**#53**	**26,000**	**20,000**

BEFORE YOU START

Read this homeowner manual thoroughly and follow all instructions carefully. Inspect all contents for shipping damage and immediately inform your dealer if any damage is found. Do not install any unit with damaged, incomplete, or substitute parts. Check your packing list to verify that all listed parts have been received. You should have the following:

- Fireplace (Firebox and Burner System)
- Rock Wool
- Log Set

ITEMS REQUIRED FOR INSTALLATION

Tools:

- Phillips Screwdriver
- Hammer
- Saw and/or saber saw
- Level
- Measuring Tape
- Electric Drill and Bits
- Pliers
- Square
- Pipe Wrench

Building Supplies:

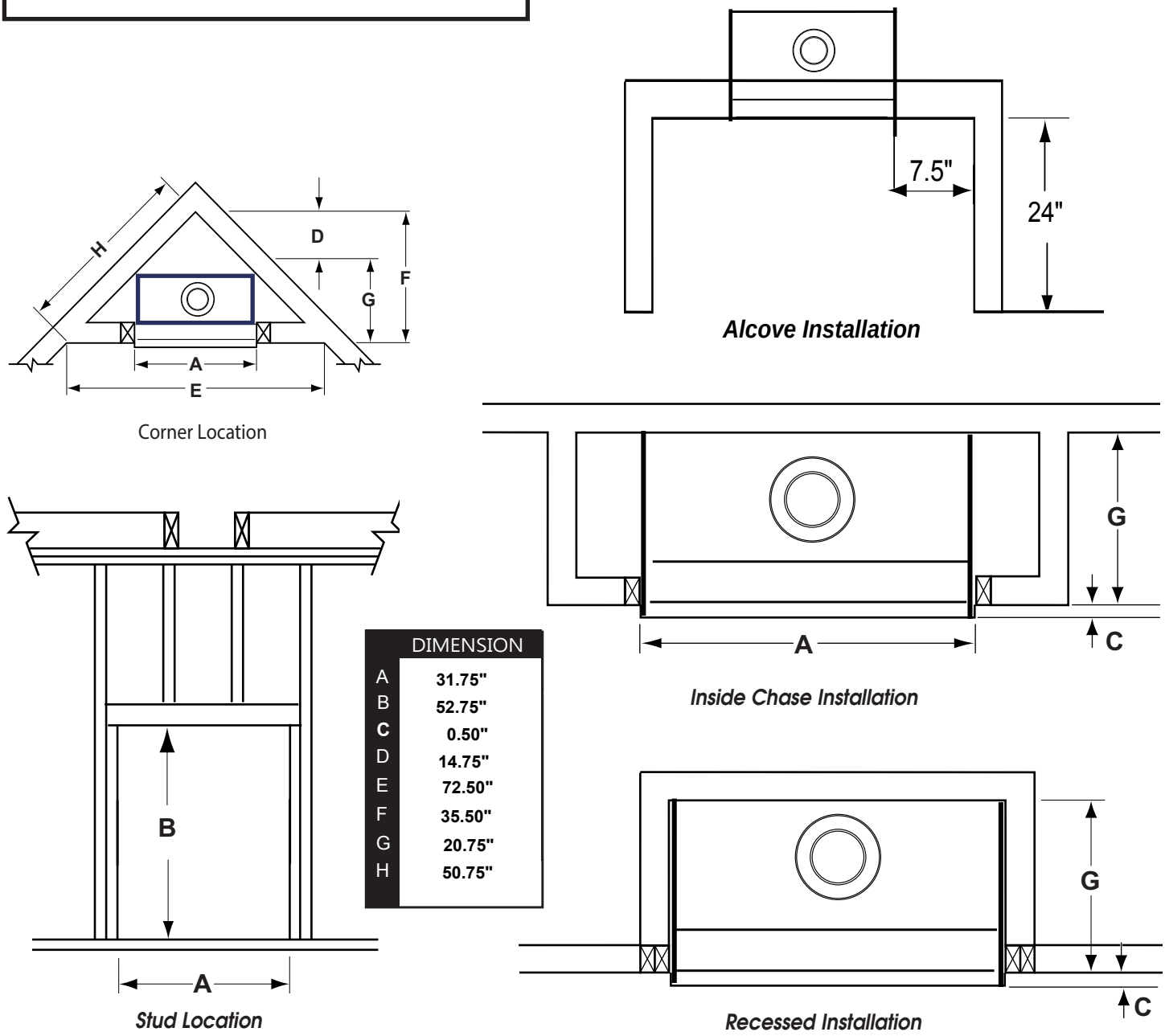
- Framing Materials
- Wall Finishing Materials
- Caulking Material (Noncombustible)
- Fireplace Surround Material (Noncombustible)
- Piping Complying with Local Codes
- Tee Joint
- Pipe Sealant Approved for use with Propane/LPG (Resistant to Sulfur Compounds)

Firebox framing can be built before or after the appliance is set in place. Construct firebox framing following *Figure 2* and the chart below for your specific installation requirements. *See Figure 3 on Page 8* for firebox dimensions. The framing headers may rest on the top of the firebox standoffs.

The firebox may be installed directly on a combustible floor or raised on a platform of an appropriate height. When the firebox is installed directly on carpeting, tile, or other combustible material, other than wood flooring, the firebox shall be installed on a metal or wood panel extending the full width and depth of the enclosure.

WARNING

Do not fill spaces around firebox with insulation or other materials. This could cause a fire.



	DIMENSION
A	31.75"
B	52.75"
C	0.50"
D	14.75"
E	72.50"
F	35.50"
G	20.75"
H	50.75"

Figure 2 - Framing Dimensions

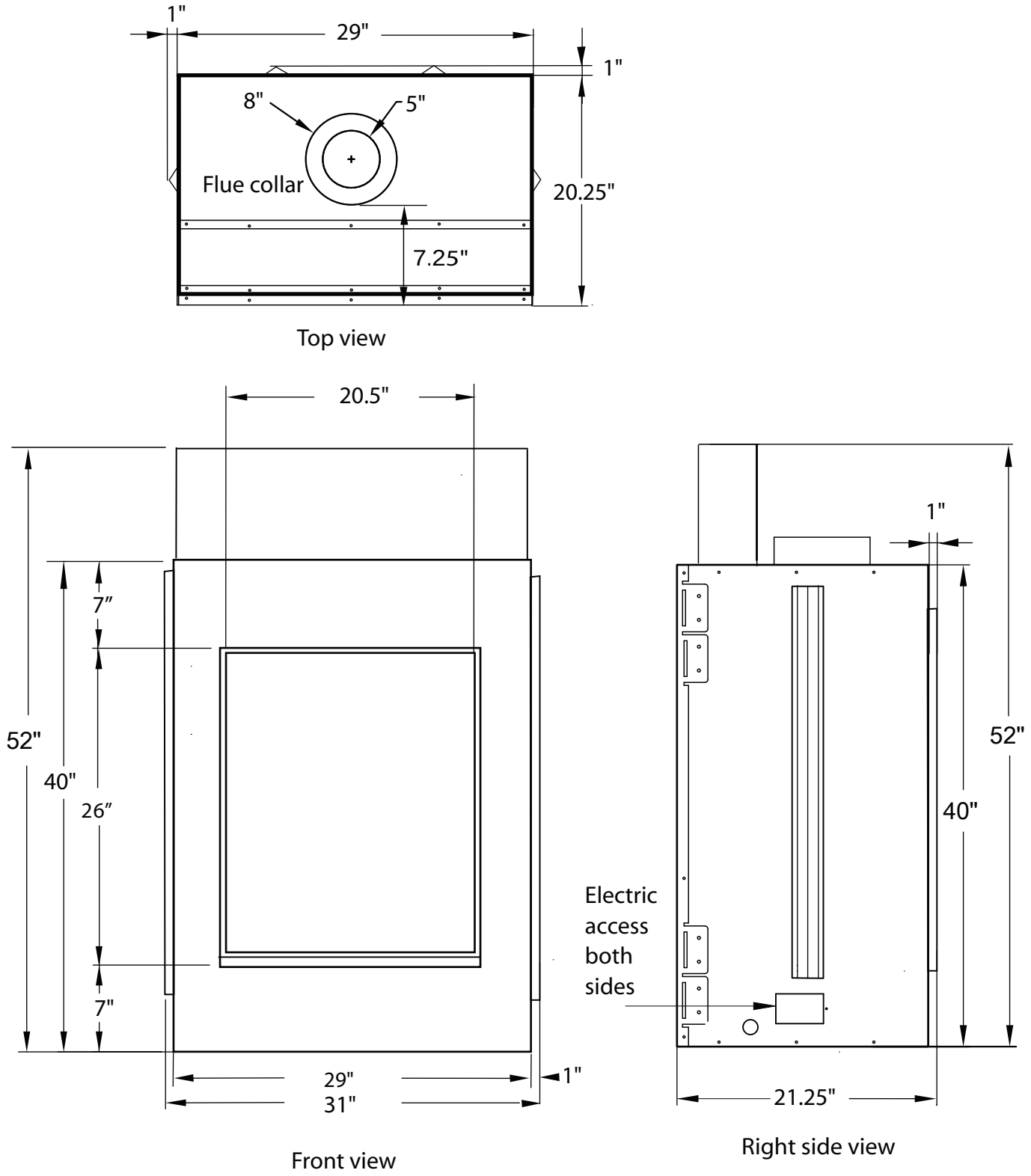


Figure 3 - Fireplace Dimensions

FIREPLACE LOCATION

Plan for the installation of your appliance. This includes determining where the unit is to be installed, the vent configuration to be used, framing and finishing details, and whether any optional accessories (i.e. wall switch, or remote control) are desired. Consult your local building code agency to ensure compliance with local codes, including permits and inspections.

The following factors should be taken into consideration:

- Clearance to side-wall, ceiling, woodwork, and windows. Minimum clearances to combustibles **must be maintained.**
- This fireplace may be installed along a wall, across a corner, or use an exterior chase. *See Figure 4* for suggested locations.
- Location should be out of high traffic areas and away from furniture and draperies due to heat from appliance.
- Never obstruct the front opening of the fireplace.
- Do **not** install in the vicinity where gasoline or other flammable liquids may be stored.
- Vent pipe routing. See *Venting* section found in this manual for allowable venting configurations.
- These units can be installed in a bedroom or bathroom. See National Fuel Gas Code ANSI Z233.1/NFPA 54 (current edition), the Uniform Mechanical Code — (current edition), and Local Building Codes for specific installation requirements.

A	Flat on Wall
B	Cross Corner
C	Island**
D	Room Divider*
E	Flat on Wall Corner*
F	Chase Installation
Y	7" Minimum to opening

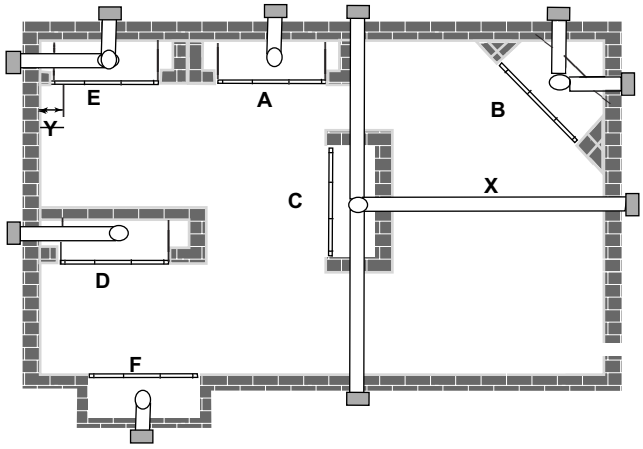


Figure 4 - Locating Gas Fireplace

** Island (C) and room divider (D) installation is possible as long as the horizontal portion of vent system (X) does not exceed 20'. See *Installing Horizontal Termination Configuration* on pages 18 and 19.

* When you install your fireplace in (D) room divider or (E) flat on wall corner positions (Y), a minimum of 7" clearance must be maintained from perpendicular wall and front of fireplace.

COVERING FACE

Firebox framing can be built before or after the appliance is set in place. Construct firebox framing following *Figure 2* and the chart below for your specific installation requirements. *See Figure 3 on Page 8* for firebox dimensions. The framing headers may rest on the top of the firebox standoff.

The firebox may be installed directly on a combustible floor or raised on a platform of an appropriate height. When the firebox is installed directly on carpeting, tile, or other combustible material, other than wood flooring, the firebox shall be installed on a metal or wood panel extending the full width and depth of the enclosure.

WARNING

Do not fill spaces around firebox with insulation or other materials. This could cause a fire.

IMPORTANT: **The following must be taken into consideration if you decide to cover over the fireplace face:**

1. **The covering material must be non combustible, maximum 3/4" thick.**
2. **Minimum outside dimensions of the material over the facing are 31.75" x 52.75" (see Figure 5).**

SECURING FIREPLACE TO FLOOR OR FRAMING

3. The inner opening in covering material must be minimum 21" wide, 26" tall and centered over the fireplace opening to allow for or glass door removal. A 1/4" reveal must be provided all the way around the fireplace opening.

4. The cover should maintain an air gap of at least 1/8" between covering material and fireplace to allow for metal fireplace front to expand and contract during operation.

5. PLEASE NOTE: Natural stone products may react to heat by discoloring or cracking. Woodbridge Foreplace is not responsible for any damages due to covering materials used. If tiles are to be applied covering the fireplace face, a layer of cement board must be used as a substrate.

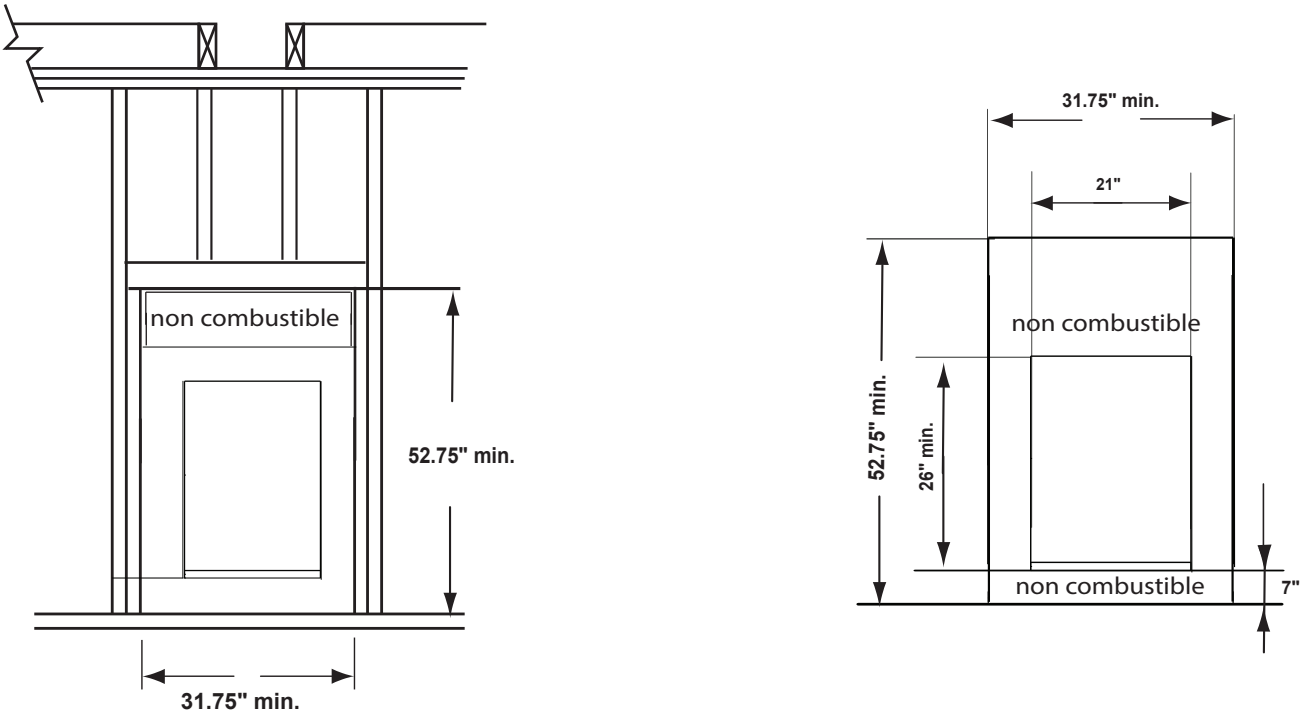
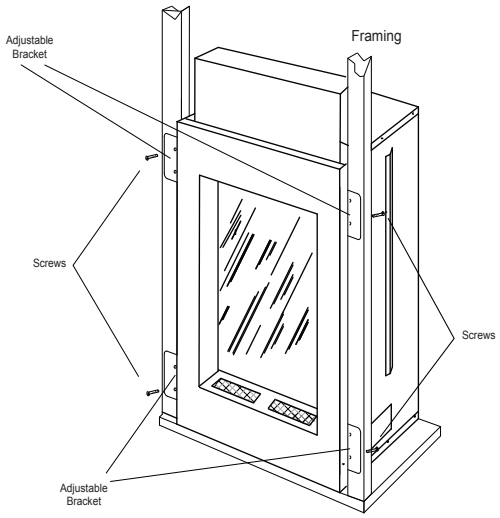


Figure 5 - Covering Fireplace face

SECURING FIREPLACE TO FLOOR OR FRAMING

The fireplace must be secured to the floor and/or to framing studs as shown.

Use two (2) wood screws or masonry/concrete screws to secure fireplace to the floor. Use Four (4) screws to attach fireplace to the framing. The side brackets are adjustable from 1/2" to 5/8" to accommodate different thickness of material.

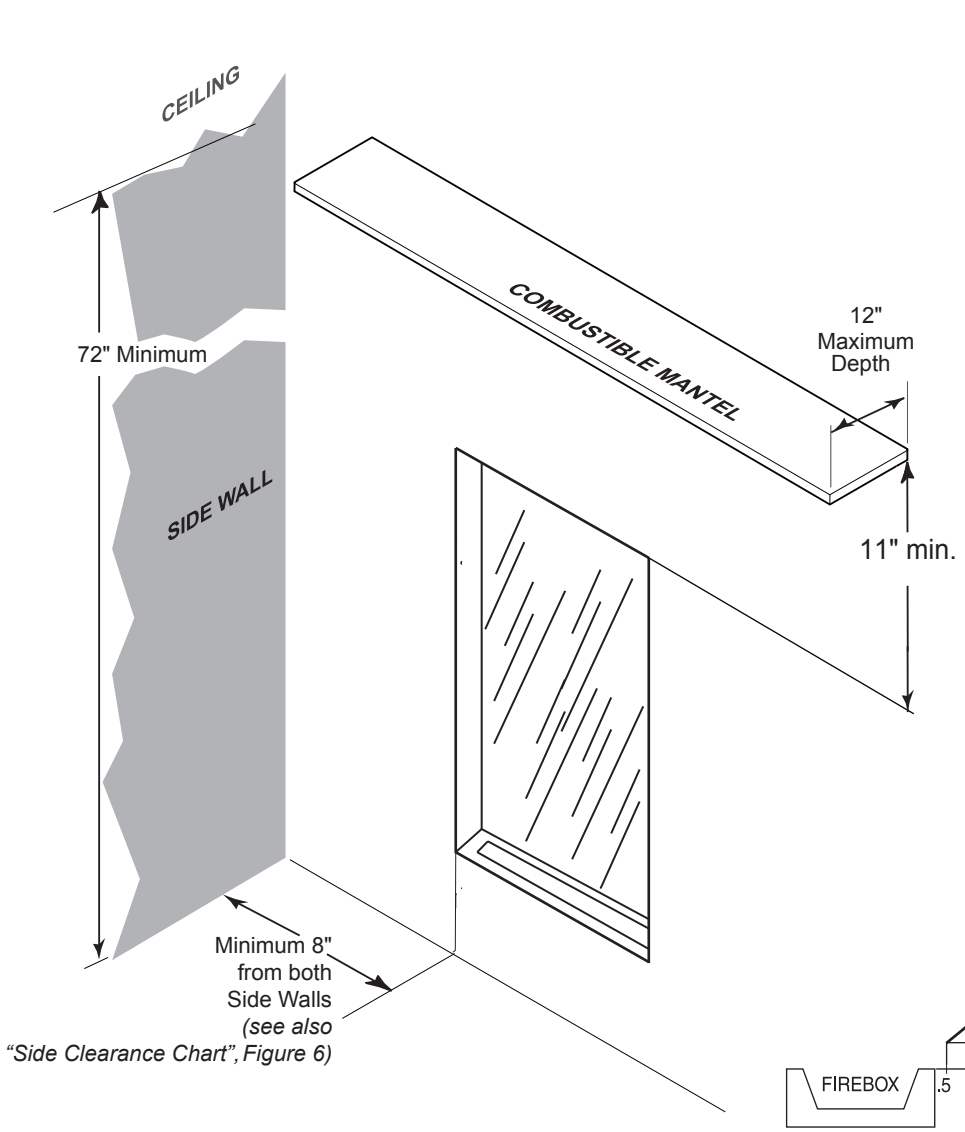


CLEARANCES TO COMBUSTIBLES

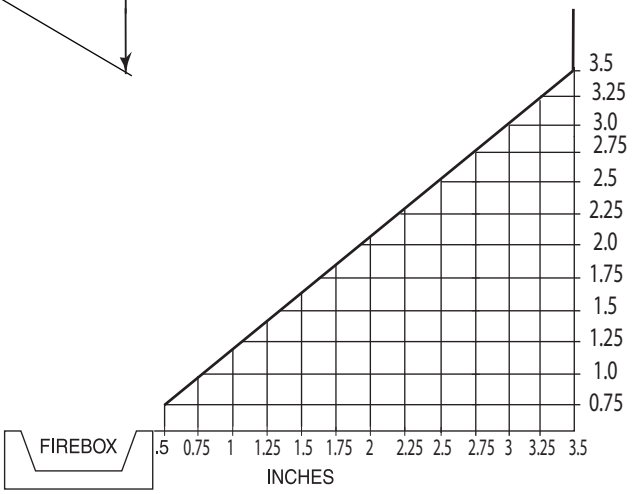
WARNING

Follow these instructions carefully to ensure safe installation. Failure to follow instructions exactly can create a fire hazard.

The appliance cannot be installed on a carpet, tile or other combustible material other than wood flooring. If installed on carpet or vinyl flooring, the appliance shall be installed on a metal, wood or noncombustible material panel extending full width and depth of the appliance.



Clearance to Combustibles	
Top	12" (305 mm)
To top standoff	0" (0 mm)
Sides	1" (26 mm)
To side standoffs	0" (0 mm)
Back	1.5" (38 mm)
To back standoffs	0" (0 mm)
Floor	0" (0 mm)
Front	36" (915 mm)



*Minimum 8 inches from Side Wall to Fireplace opening

Figure 6 - Side Clearance Chart

MANTEL CLEARANCES

NOTE: The combustible area above the facing must not protrude more than 3/4" from the facing. If it does, it is considered a mantel and must meet the mantel requirements listed in this manual.

INSTALLATION INFORMATION

FINISHING MATERIAL

NOTE: Any remote wiring (i.e. remote control, wall switch, and optional fan) must be done prior to final finishing to avoid costly reconstruction.

WARNING **Never obstruct or modify the air inlet or outlet grills (louvers). This may create a fire hazard.**

Only noncombustible materials (i.e. brick, tile, slate, steel, or other materials with a UL fire rating of Zero) may be used to cover the black surface of the appliance. A 300°F minimum adhesive may be used to attach facing materials to the black surface. If joints between the finished wall and the fireplace surround are sealed, a 300°F minimum sealant material (General Electric RTV103 or equivalent) must be used.

VENT INSTALLATION

WARNING **Read all instructions completely and thoroughly before attempting installation. Failure to do so could result in serious injury, property damage or loss of life. Operation of improperly installed and maintained venting system could result in serious injury, property damage or loss of life.**

NOTICE

Failure to follow these instructions will void the warranty.

INSTALLATION PRECAUTIONS

Consult local building codes before beginning the installation. The installer must make sure to select the proper vent system for installation. Before installing vent kit, the installer must read this fireplace manual and vent kit instructions.

Only a qualified installer/service person should install venting system. The installer must follow these safety rules:

- Wear gloves and safety glasses for protection.
- Use extreme caution when using ladders or when on rooftops.
- Be aware of electrical wiring locations in walls and ceilings.

The following actions will void the warranty on your venting system:

- Installation of any damaged venting component.
- Unauthorized modification of the venting system.
- Installation of any component part not manufactured or approved by Woodbridge Fireplace, Inc.
- Installation other than permitted by these instructions.

WARNING This fireplace must be vented to the outside. The venting system must NEVER be attached to a chimney serving a separate solid fuel burning appliance. Each gas appliance must use a separate vent system. Do not use common vent systems.

WARNING

Horizontal sections of this vent system require a minimum clearance of 3" from the top of the pipe and 1" minimum to the sides and bottom. Vertical sections of this system require a minimum of 1" clearance to combustible materials on all sides of the pipe.

A Minimum of 3" Clearance to the Top Is Required Along Horizontal Length of Pipe until Flue Pipe Goes Through Nearest Wall.

1" Clearance Is Acceptable at the Outside Wall.

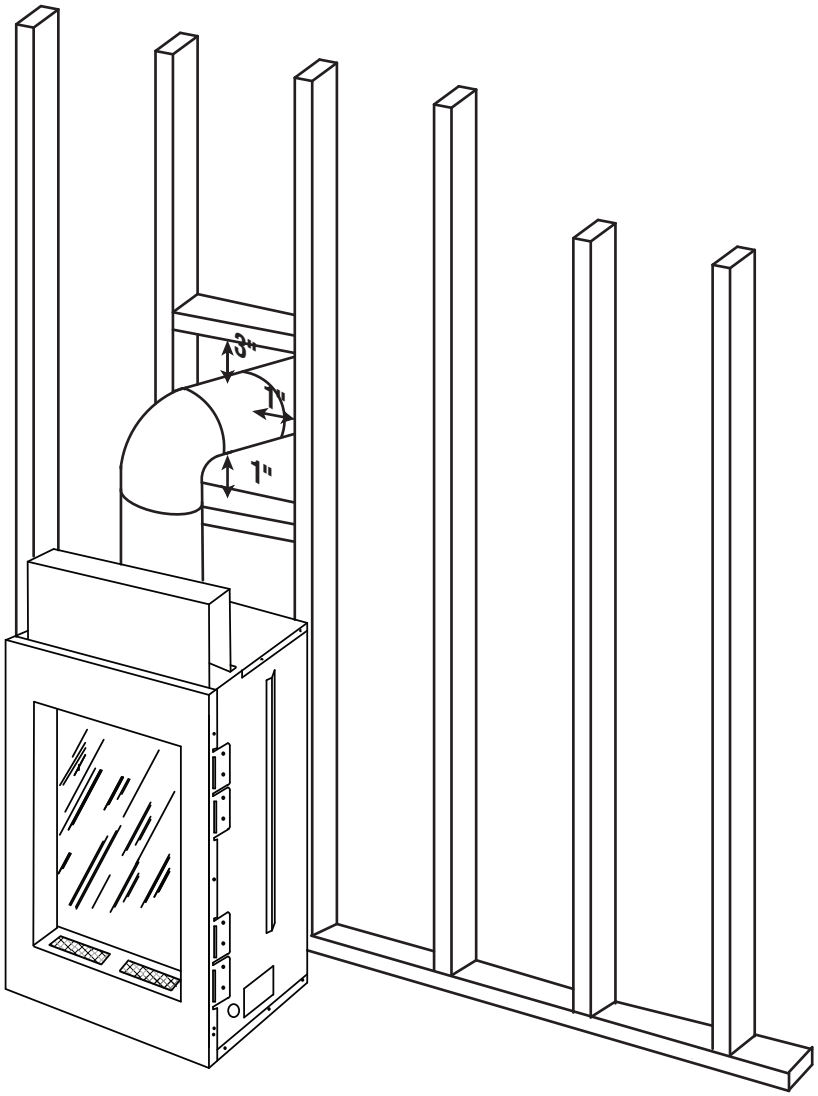


Figure 7 - Combustible Clearances for Vent Pipe

VENT INSTALLATION

INSTALLATION PLANNING

There are two basic types of direct-vent installation:

- Horizontal Termination
- Vertical Termination

It is important to select the proper length of vent pipe for the type of termination you choose. It is also important to note the wall thickness.

FOR HORIZONTAL TERMINATION

Select the amount of vertical rise desired. All horizontal run of venting must have 1/4" rise for every 12" of run towards the termination.

You may use up to three 90° elbows in this vent configuration. See *Horizontal Termination Configurations* on pages 19 and 20.

WARNING

Never run the vent pipe level or downward. This may cause excessive temperatures which could cause a fire.

FOR VERTICAL TERMINATION

Measure the distance from the fireplace floor to the ceiling. Add the ceiling thickness, the vertical rise in an attic or second story, and allow for sufficient vent height above the roof line.

NOTE: You may use two 45° elbows in place of a 90° elbow. You must follow rise to run ratios when using 45° elbows. The appliance is approved for use with three 90° elbows maximum or a combination of 90° and 45° elbows up to a maximum of 270°.

For two-story applications, firestops are required at each floor level. If an offset is needed in the attic, additional pipe and elbows will be required.

You may use a chase with a vent termination with exposed pipe on the exterior of the house. See *Installing Vent System in a Chase* below. If pipe is enclosed in chase, it is not exposed.

It is very important that the venting system maintain its balance between the combustion air intake and the flue gas exhaust. Certain limitations apply to vent configurations and must be strictly followed.

INSTALLING A VENT SYSTEM IN AN OUTSIDE CHASE

A chase is a vertical boxlike structure built to enclose venting that runs along the outside of a building. A chase is required for such venting.

NOTICE

Treatment of firestops and construction of the chase may vary from building type to building type. These instructions are not substitutes for the requirements of local building codes. You must follow all local building codes.

NOTICE

When installing in a chase, you should insulate the chase as you would the outside walls of your home. This is especially important in cold climates. Insulation should be considered a combustible material. Maintain proper clearances to all combustible materials.

FOR HORIZONTAL TERMINATION

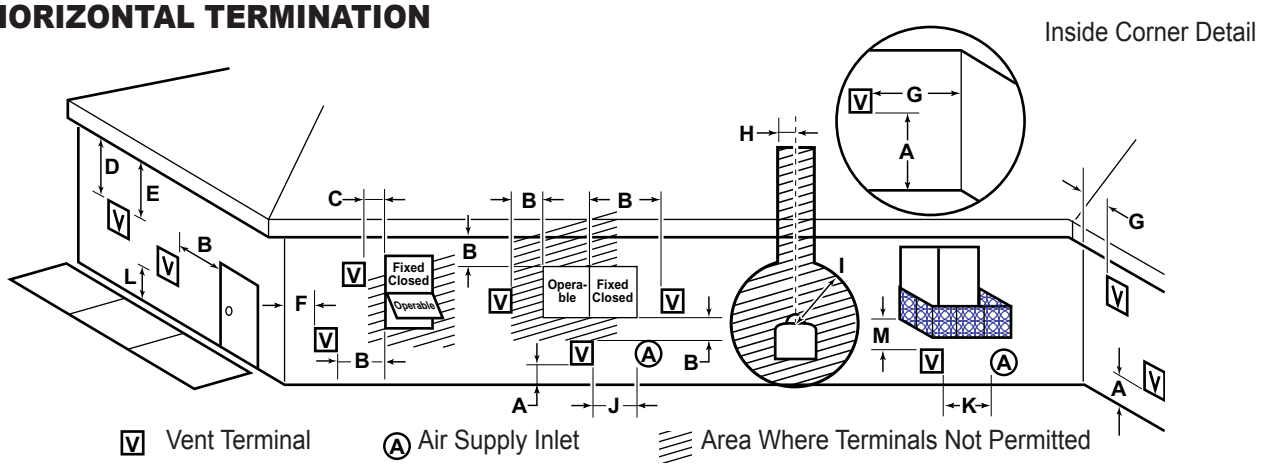


Figure 8 - Horizontal Vent Termination Location

MINIMUM DISTANCES

A = Clearance above the grade, a veranda, porch, deck, or balcony [*12" (305mm) minimum].
B = Clearance to window or door that may be opened [*12" (305mm) minimum].
C = Clearance to permanently closed window [*minimum 12" (305mm) recommended to prevent condensation on window]

D = Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of two (2) feet (610mm) from the centerline of the terminal [18" (457mm) minimum].
E = Clearance to unventilated soffits [12" (305mm) minimum]. **Clearance to vinyl soffit [30" (762mm)].**
F = Clearance to an outside corner [*6" (152mm) minimum].
G = Clearance to an inside corner [*6" (152mm) minimum].
H = *Not to be installed above a gas meter/regulator assembly within three (3) feet (914mm) horizontally from the centerline of the regulator.
I = Clearance to service regulator vent outlet [*3' (914mm) minimum].
J = Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance [*12" (305mm)minimum].
K = Clearance to a mechanical air supply inlet [*6' (1829mm) minimum].
L = Clearance above a paved sidewalk or paved driveway located on public property [**7' (2133mm) minimum].
M = Clearance under veranda, porch, deck, or balcony [*12" (305mm) minimum***].
N = Clearance above a roof shall extend a minimum of 24" (610mm) above the highest point when it passes through the roof surface and any other obstruction within a horizontal distance of 18" (457mm).

* As specified in CAN/CGA B149 Installation Codes. Note: Local codes or regulations may require different clearances.
** A vent must not terminate directly above a sidewalk or paved driveway, which 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.

WARNING

Always maintain minimum clearances around vent systems. The minimum clearances to combustibles for horizontal vent pipe are 3" at the top and 1" at the sides and bottom of the vent system until the pipe penetrates the nearest vertical wall. A 1" minimum clearance all around the pipe must be maintained. Do not pack the open air spaces with insulation or other materials. This could cause high temperatures and may present a fire hazard.

TERMINATION CLEARANCES FOR BUILDINGS WITH COMBUSTIBLE AND NONCOMBUSTIBLE EXTERIORS

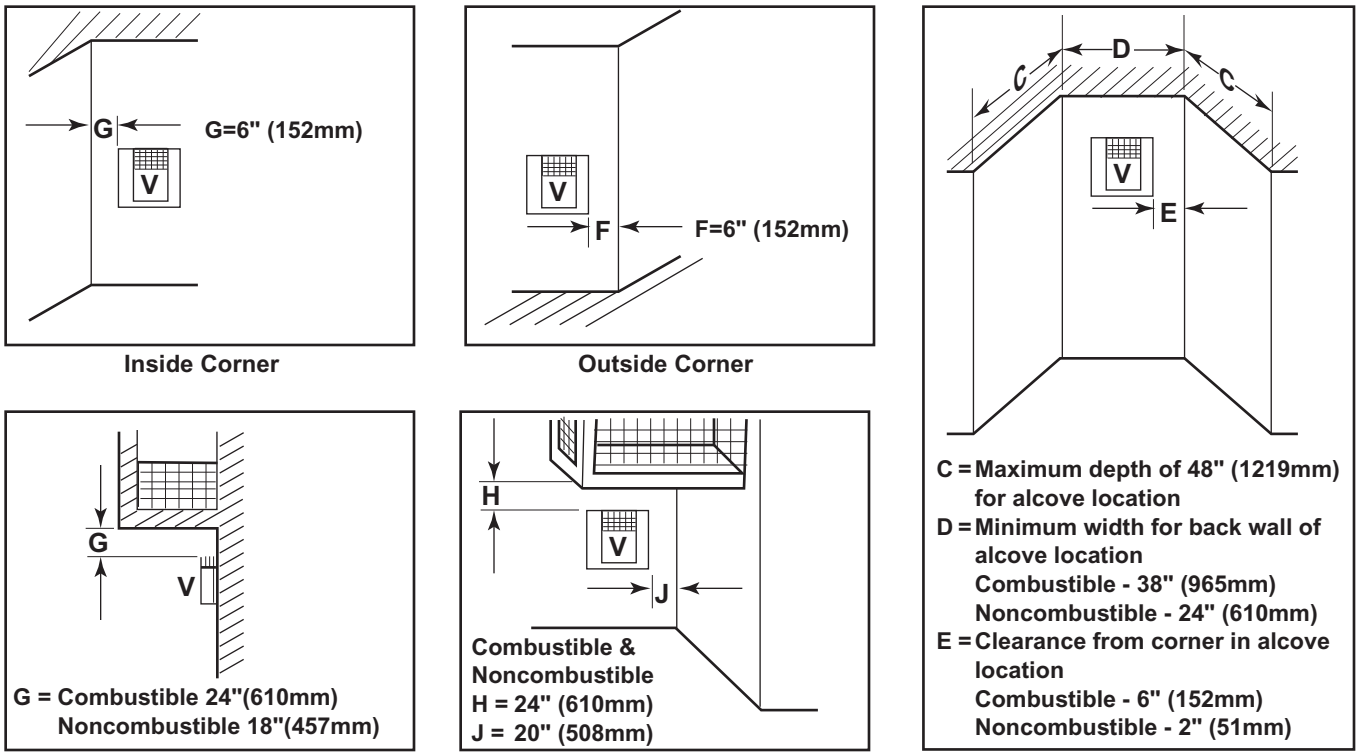


Figure 9 - Allowable Venting Chart

HOW TO USE THE VENT GRAPH

The Vent Graph should be read in conjunction with the following vent installation instructions to determine the relationship between the vertical and horizontal dimensions of the vent system.

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

   Example: If the vertical dimension from the floor of the fireplace is 11' (3.4m) the horizontal run to the face of the outer wall must not exceed 14' (4.3m).

   Example: If the vertical dimension from the floor of the unit is 7' (2.14m), the horizontal run to the face of the outer wall must not exceed 8 1/2' (2.6m).

Sidewall Vent Graph showing the relationship between vertical and horizontal dimensions for a Direct Vent flue system.

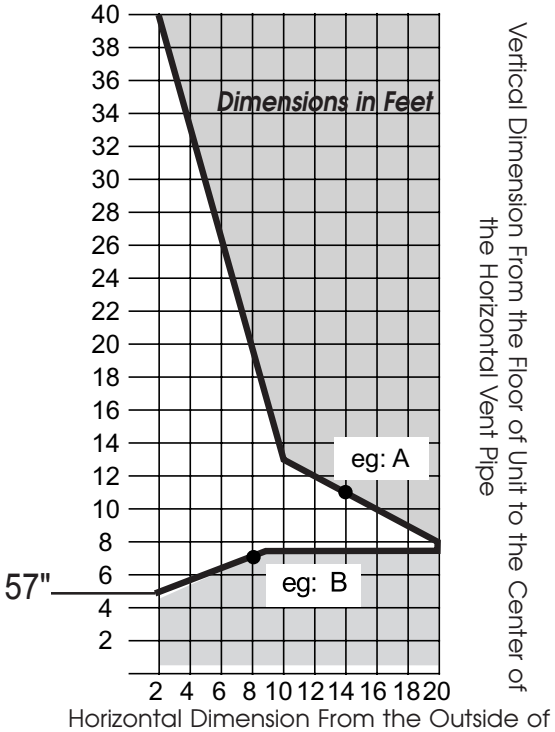


Figure 10 - Rear Wall Venting Graph

REAR WALL VENT INSTALLATION

When installed as a rear vent unit this appliance may be vented directly to a termination located on the rear wall behind the appliance with 1' of vertical rise minimum.

The maximum horizontal distance between the rear of the appliance and the outside of termination is 20" (508 m). *See Figure 11.*

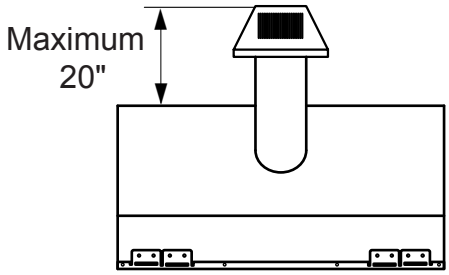


Figure 11 - Rear Vent Application, Maximum Horizontal Distance

1. Locate and cut the vent opening in the wall. For combustible walls first frame in opening. *See Figure 11.*

   Combustible Walls: Cut a 10½"H x 10½" W (267mm x 267mm) hole through the exterior wall and frame as shown. *See Figure 12.*

   Noncombustible Walls: Hole opening should be 8½" (216mm) in diameter.

2. Rigid vent pipes and fittings have special twist-lock connections. Assemble the desired combination of pipe and elbows to the appliance adaptor with pipe seams oriented towards the wall or floor.

   Twist-lock Procedure: The female ends of the pipes and fittings have three locking lugs (indentations). These lugs will slide straight into matching slots on the male end of adjacent pipes and fittings. Push the pipe sections together and twist one section clockwise approximately one-quarter turn until the sections are fully locked. *See Figure 13.*

3. Attach vent pipe assembly to the fireplace. Set fireplace in front of its permanent location to insure minimum clearances. Mark the wall for a 10½"H x 10½"W (241mm x 241mm) square hole (for noncombustible material such as masonry block or concrete, a 8 1/2" [216mm] diameter hole is acceptable). *See Figure 11.* The center of the hole should line up with the center line of the horizontal rigid vent pipe end. Be sure to allow for minimum rise. Cut a 10-1/2"x10-1/2" (267mm X 267mm) square hole through combustible exterior wall (8 1/2" [216mm] diameter hole if noncombustible). Frame as necessary. Allow 1/4" minimum rise per foot. *See Figure 12.*

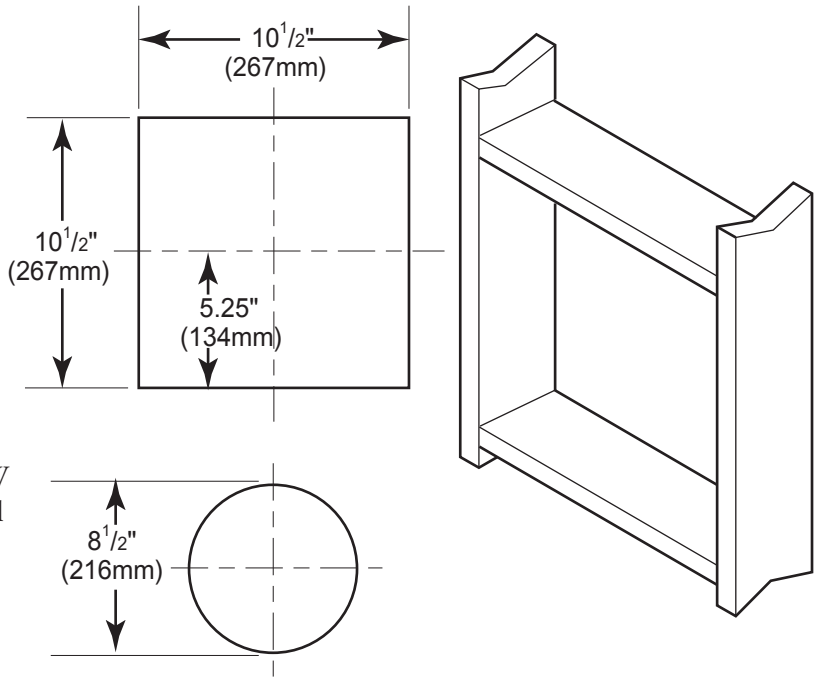
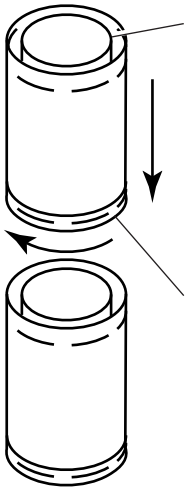


Figure 12 - Vent Opening Requirements



Note: Horizontal runs of vent must be supported every three feet (914mm). Use wall straps for this purpose.

Figure 13 - Rigid Vent Pipe Connections

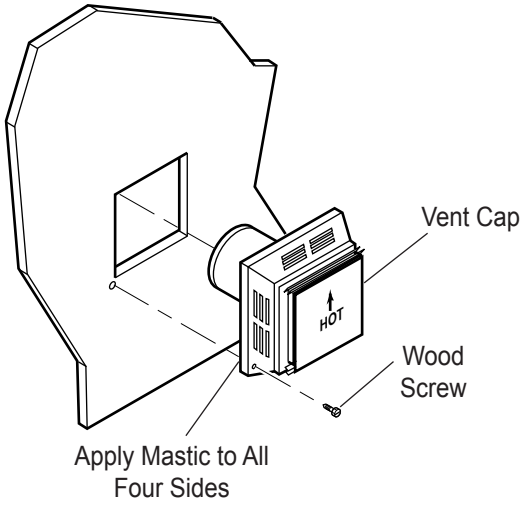


Figure 14 - Installing Horizontal Vent Cap

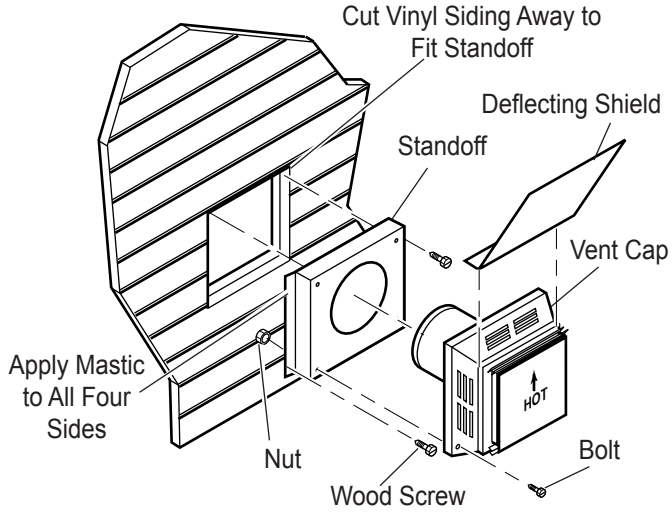


Figure 15 - Installing Vinyl Siding Standoff

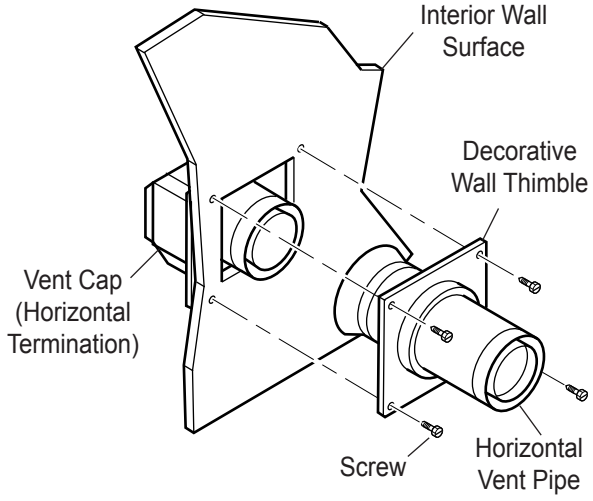


Figure 16 - Connecting Vent Cap with Horizontal Vent Pipe

REAR WALL VENT INSTALLATION *(continued)*

4. Apply a bead of non-hardening mastic around the outside edge of vent cap. Position the vent cap in the center of hole on the exterior wall with the word "UP" on the vent cap facing up. Insure proper clearance of 1" to combustibles is maintained. Attach the vent cap with four wood screws supplied. *See Figure 14.*

WARNING

Do not recess vent termination into any wall. This will cause a fire hazard.

NOTE: Replace the wood screws with appropriate fasteners for stucco, brick, concrete, or other types of siding.

For vinyl siding, stucco, or wood exterior use vinyl siding standoffs between vent cap and exterior wall. The vinyl siding standoff prevents excessive heat from melting the vinyl siding material. Bolt the vent cap to the standoff. Apply non-hardening mastic around outside edge of the standoff instead of the vent cap assembly. Use wood screws provided to attach the standoff. *See Figure 15.*

5. Slide the wall thimble over the vent pipe before connecting the horizontal run to the vent cap. *See Figure 16.*
6. Carefully move the fireplace with vent assembly attached toward the wall and insert the vent pipe into the horizontal termination. The pipe overlap should be a minimum of $1^{1}/_{4}$". Apply silicone to the outer pipe connection. Fasten all vent connections with screws provided.
7. Slide the wall thimble against the interior wall surface and attach with srews. *See Figure 16.*

HORIZONTAL TERMINATION CONFIGURATIONS — RIGID VENTING

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

The Vent Graph, showing the relationship between vertical and horizontal side wall venting, will help to determine the various dimensions allowable. *See page 16.*

Minimum clearance between vent pipes and combustible materials is 3" on top and 1" from bottom and sides unless otherwise noted.

When vent termination exits through foundations less than 20" below siding outcrop, the vent pipe must flush up with the siding.

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

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace (or the top of the Transition Elbow) to the face of the outer wall.

FOR STATE OF MASSACHUSETTS:

The Commonwealth of Massachusetts requires the installation and USE of Carbon Monoxide detectors in the rooms of ALL direct vent units which utilize a SIDE WALL VENTING TERMINATION

The maximum number of 90° elbows per side wall installation is three (3), the maximum horizontal run is 20" (Figures 18, 19).

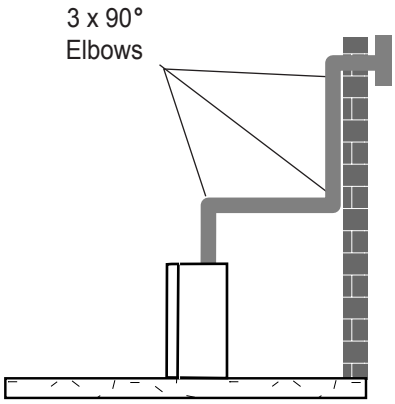
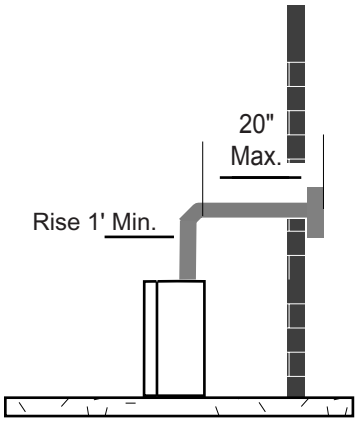


Figure 18 - Maximum Three (3) 90 Elbows Per Installation



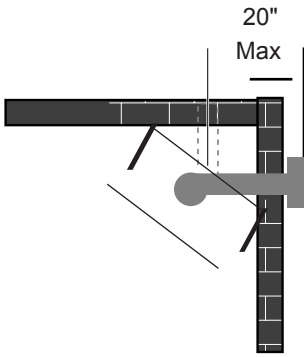


Figure 19 - Maximum Horizontal Run with 1 foot rise

HORIZONTAL TERMINATION CONFIGURATION — RIGID VENTING *(Continued)*

- If a 90° elbow is used in the horizontal vent run (level height maintained) the horizontal vent length is reduced by 36" (914 mm) (Fig. 21 A and B) This does not apply if the 90° elbows are used to increase or redirect a vertical rise. *See Figure 19.*

Example: According to the vent graph (page 16) the maximum horizontal vent length in a system with a 7.5' vertical rise is 20' (6m) and if a 90° elbow is required in the horizontal vent it must be reduced to 17' (5.2 m).

In Figures 20 and 21, Dimension A plus B must not be greater than 17' (5.2m).

- The maximum number of 45° elbows permitted per side wall installation is two (2). These elbows can be installed in either the vertical or horizontal run.
- For each 45° elbow installed in the horizontal run, the length of the horizontal run MUST be reduced by 18" (45cm). This does not apply if the 45° elbows are installed on the vertical part of the vent system.
- The maximum number of elbow degrees in a system is 270°. *See Figure 22.*

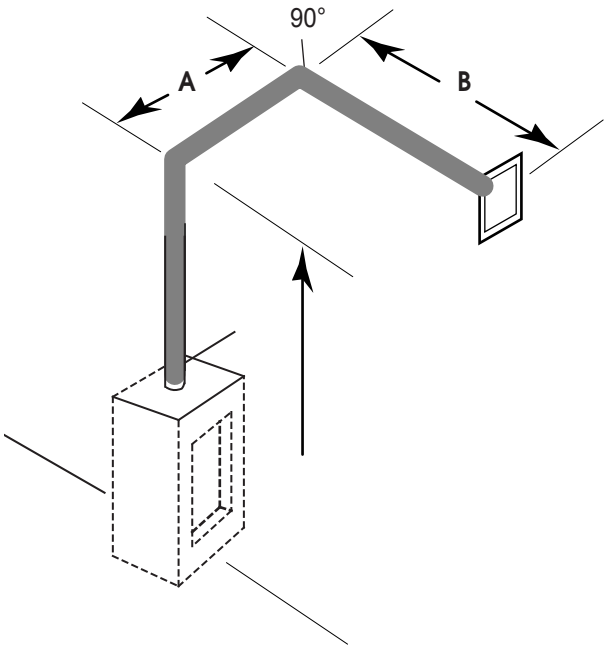


Figure 20 - Horizontal Run Reduction

Example:	Elbow 1	=	90°
	Elbow 2	=	45°
	Elbow 3	=	45°
	Elbow 4	=	90°
Total Angular Variation		=	270°

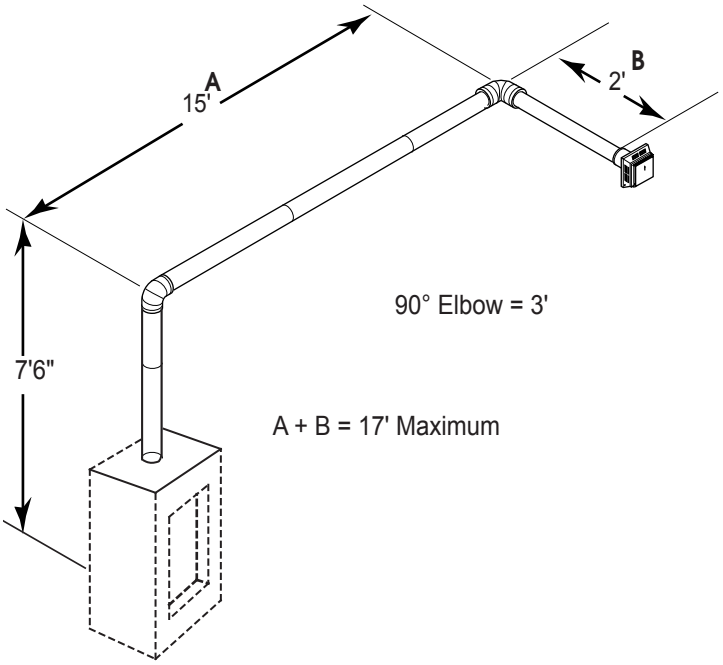


Figure 21 - Maximum Vent Run with Elbows

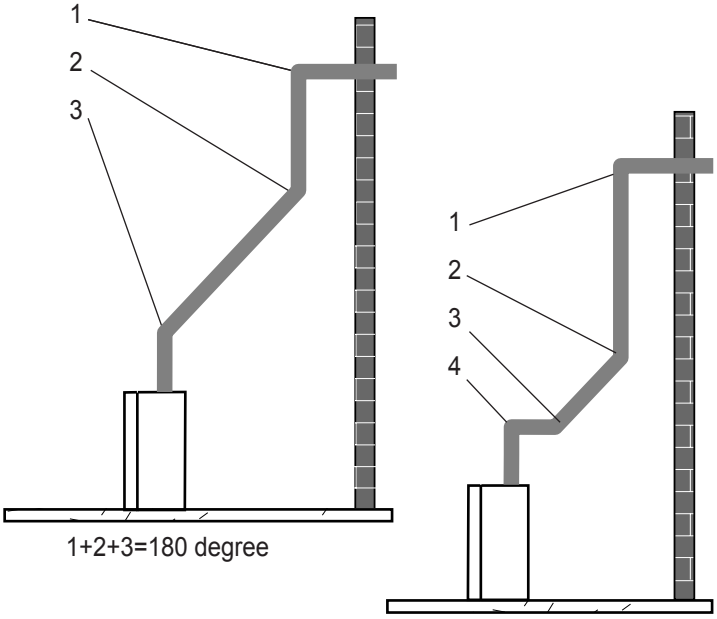


Figure 22 - Maximum Elbow Usage

BELOW GRADE INSTALLATIONS — RIGID VENTING

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

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

If installing a snorkel, a minimum 24" vertical rise is necessary. The maximum horizontal run with the 24" vertical pipe is 36". This measurement is taken from the collar of the fireplace (or transition elbow) to the face of the exterior wall. See the Sidewall Venting Graph for extended horizontal run if the vertical exceeds 24".

1. Establish vent hole through the wall. *See Figure 12, page 17.*
2. Remove soil to a depth of approximately 16" below base of snorkel. Install drain pipe. Install window well (not supplied). Refill hole with 12" of coarse gravel leaving a clearance of approximately 4" below snorkel. *See Figure 21.*
3. Install vent system.
4. Ensure a watertight seal is made around the vent pipe coming through the wall.
5. Slide the snorkel into the vent pipes and secure to the wall.
6. Level the soil so as to maintain a 4" clearance below snorkel. *See Figure 23.*

WARNING

- **Do not back fill around snorkel.**
- **A clearance of at least 4" must be maintained between the snorkel and the soil.**

If the foundation is recessed, use recess brackets (not supplied) for securing lower portion of the snorkel. Fasten brackets to wall first, then secure to snorkel with self drilling #8x1/2 sheet metal screws. It will be necessary to extend vent pipes out as far as the protruding wall face. *See Figure 24.*

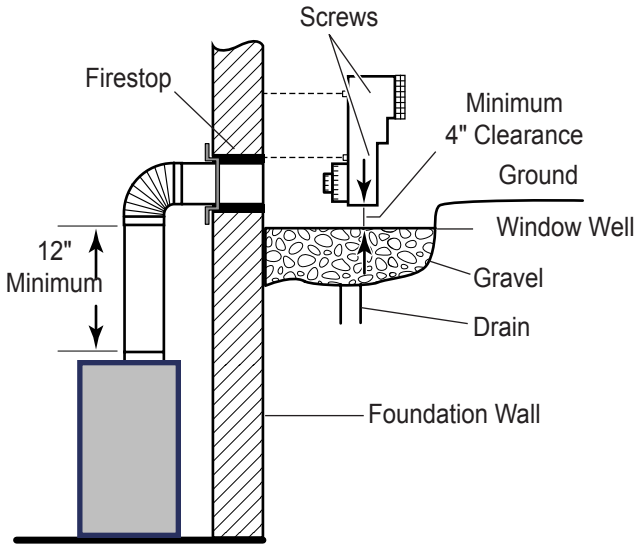


Figure 23 - Below Grade Installation

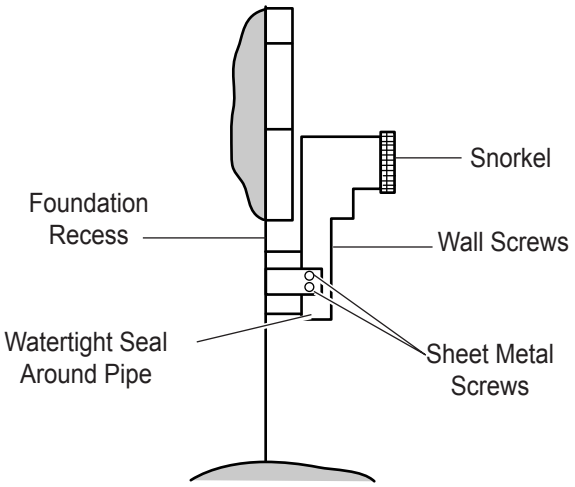


Figure 24 - Snorkel Installation, Recessed Foundation

VERTICAL THROUGH-THE-ROOF APPLICATIONS — RIGID VENTING ONLY

This Gas Fireplace has been approved for,

- Vertical installations up to 40' (12m) in height. Up to a 10' (3m) horizontal vent run can be installed within the vent system using a maximum of two 90° elbows. *See Figure 25.*

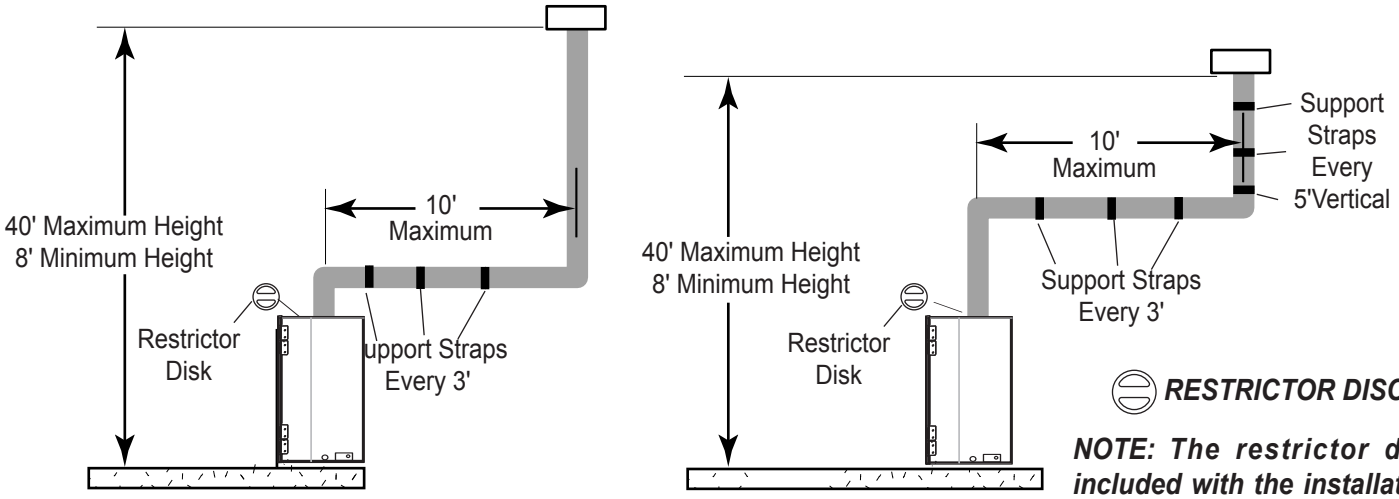


Figure 25- Support Straps for Horizontal Runs

RESTRICTOR DISC

NOTE: The restrictor disc included with the installation instructions should be used on vertically terminating installations only.

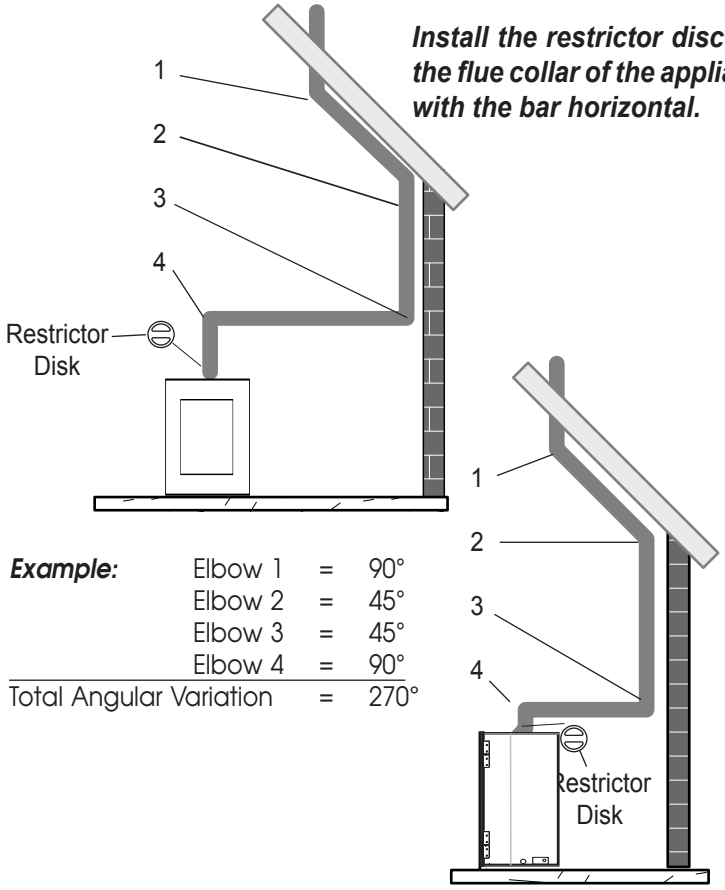
Install the restrictor disc into the flue collar of the appliance with the bar horizontal.

- Up to two 45° elbows may be used within the horizontal run. For each 45° elbow used on the horizontal plane, the maximum horizontal length must be reduced by 18" (450mm).

Example: Maximum horizontal length

No elbows	=	10′ (3m)
1x45° elbows	=	8.5′ (2.6m)
2x45° elbows	=	7′ (2.1m)

- A minimum of an 8' (2.5m) vertical rise is required.
- Two sets of 45°elbows offsets may be used within the vertical sections. From 0 to a maximum of 8' (2.5 m) of vent pipe can be used between elbows. *See Figure 26.*
- DV2501 Series fireplaces allow for offsets. This application will require that you first determine the roof pitch and use the appropriate starter kit.
- The maximum angular variation allowed in the system is 270°. *See Figure 26.*
- The minimum height of the vent above the highest point of penetration through the roof is 2' (610mm).



Example:	Elbow 1	=	90°
	Elbow 2	=	45°
	Elbow 3	=	45°
	Elbow 4	=	90°
Total Angular Variation		=	270°

Figure 26 - Maximum Elbow Usage

INSTALLATION FOR VERTICAL TERMINATION

1. Determine the route your vertical venting will take. If ceiling joist, roof rafters or other framing will obstruct the venting system, consider an offset. *See Figure 27* to avoid cutting load bearing members.

NOTE: Pay special attention to these installation instructions for required clearances (air space) to combustibles when passing through ceilings, walls, roofs, enclosures, attic rafters, etc. Do not pack air spaces with insulation. Also note maximum vertical rise of the venting system and any maximum horizontal offset limitations. Offsets must fall within the parameters shows in Figure 10, page 16.

2. Set fireplace in desired location. Drop a line plumb down from the ceiling to the position of the flue exit. Mark the center point where the vent will penetrate the ceiling. Drill a small locating hole a this point.

   Drop a plumb line from the inside of the roof to the ceiling locating hole in the ceiling. Mark the center point where the vent will penetrate the roof. Drill a small locating hole at this point.

FLAT CEILING INSTALLATION

1. Cut a $10^1/_2$" (267mm) square hole in the ceiling using the locating hole as a center point The opening should be framed to $10^1/_2$"x$10^1/_2$" (267mm x 267mm) inside dimensions as shown in *Figure 12, page 17* using framing lumber the same size as the ceiling joist. If the area above the ceiling is an insulated ceiling or a room, nail firestop from the top side. This prevents loose insulation from falling into the required clearance space. *See Figure 28.* Otherwise, install firestop below the framed hole. The firestop should be installed with no less than three nails per side. *See Figure 29.*
2. Assemble the desired lengths of pipe and elbows necessary to reach from the burner system flue up through the firestop. Be sure pipe and elbow connections are fully twist-locked. *See Figure 13, page 17.*
3. Cut a hole in the roof using the locating hole as a center point. (Cover any exposed open vent pipes before cutting hole in roof). The $10^1/_2$"x$10^1/_2$" (267mm x 267mm) hole must be measured on the horizontal. Actual length may be larger depending on the pitch of the roof. There must be a 1" minimum clearance from the vent pipe to combustible materials. (Insulation should be considered a combustible material) Frame the opening as shown in *Figure 12 on page 17.*

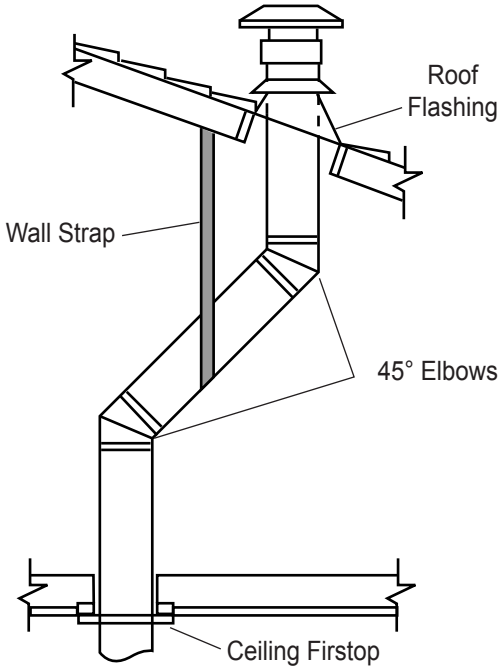


Figure 27 - Offset with Wall Strap and 45 Elbows

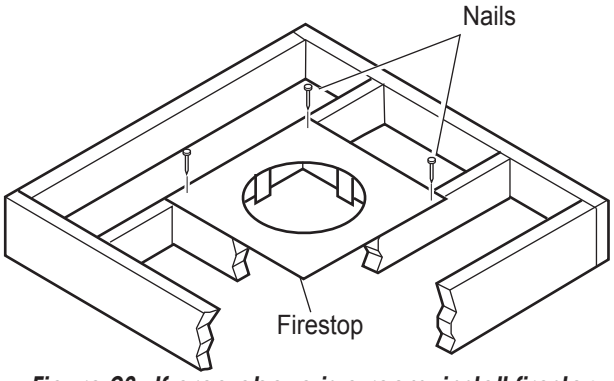


Figure 28- If area above is a room, install firestop above framed hole as shown

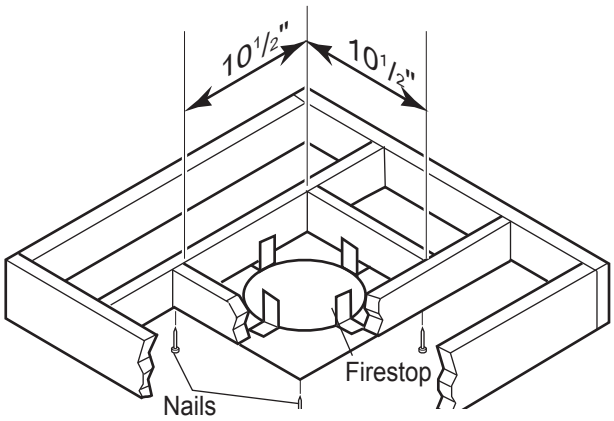


Figure 29 - If area above is not a room, install firestop below framed hole as shown

Continued on next page

4. Connect a section of pipe and extend up through the hole.

NOTE: If an offset is needed to avoid obstructions, you must support the vent pipe every three (3) feet. Use wall straps for this purpose. See Figure 25, page 22. Whenever possible, use 45° elbows instead of 90° elbows. The 45° elbow offers less restriction to the flow of the flue gases and intake air.

5. Place the flashing over the pipe section(s) extending through the roof. Secure the base of the flashing to the roof and framing with roofing nails. Be sure roofing material overlaps the top edge of the flashing. There must be a 1" clearance from the vent pipe to combustible materials.
6. Continue to add pipe sections until the height of the vent cap meets the minimum building code requirements.

NOTE: You must increase vent height for steep roof pitches. Nearby trees, adjoining roof lines, steep pitched roofs, and other similar factors may cause poor draft or down-drafting in high winds. Increasing the vent height may solve this problem.

NOTE: If the vent pipe passes through any occupied areas above the first floor, including storage spaces and closets, you must enclose pipe. You may frame and sheetrock the enclosure with standard construction material. Make sure to meet the minimum allowable clearances to combustibles. Do not fill any of the required clearance spaces with insulation.

CATHEDRAL CEILING INSTALLATION

IMPORTANT: Review all information on previous page before planning this installation. Cathedral ceiling installations can be very tricky.

1. Remove shingles or other roof covering as necessary to cut the rectangular hole for the support box. Mark the outline of the cathedral ceiling support box on the roof sheathing using the locating hole as a center point.
2. Cut the hole 1/8" larger than the support box outline. *See Figure 30.*
3. Lower the support box through the hole in the roof until the bottom of the box extends at least 2" (mm) below the ceiling. *See Figure 30.* Align the support box vertically and horizontally using a level. Temporarily tack the support box in place through the inside walls and into the roof sheeting.
4. Using tin snips, cut the support box from the top corners down to the roofline and fold the resulting flaps over the roof sheeting. *See Figure 31.* Apply a bead of non-hardening mastic around the top edges of the support box to make a seal between the box and the roof. Nail in place with roofing nails. Remove any combustible material that might be inside the support box.
5. Complete the cathedral ceiling installation by following the same procedures outlines in steps 2 through 6 for *Flat Ceiling Installation*, page 23 and above.

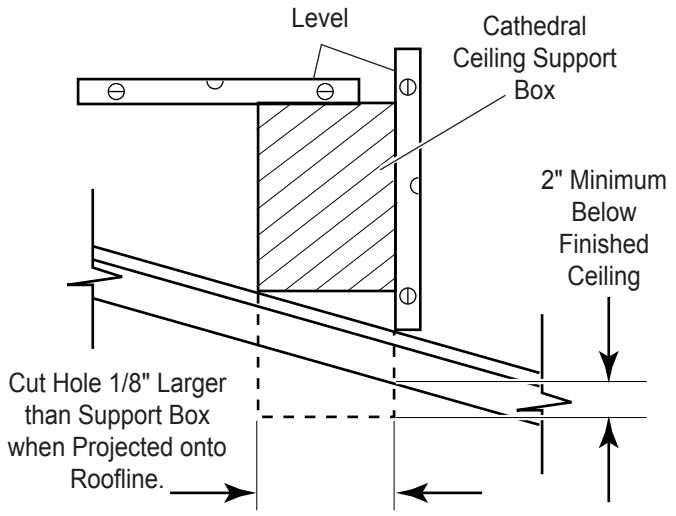


Figure 30 - Cathedral Ceiling Support Box Installation

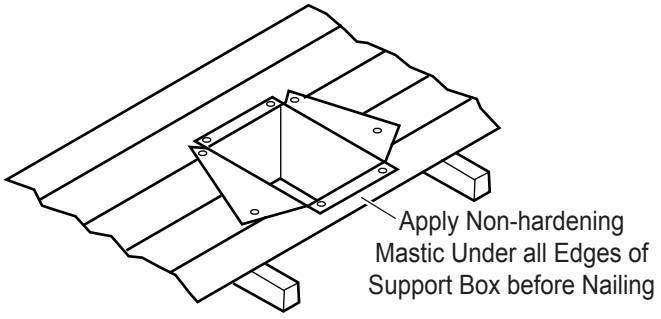


Figure 31 - Installed Cathedral Ceiling Support Box

CHECK GAS TYPE

Use proper gas type for the fireplace you are installing. If you have conflicting gas type, do not install fireplace. See dealer where you purchased the fireplace for proper fireplace for your gas type or conversion kit.

INSTALLING GAS PIPING TO FIREPLACE / BURNER SYSTEM LOCATION

WARNING

A qualified installer or service person must connect appliance to gas supply. Follow all local codes.

CAUTION

For propane/LP units, never connect fireplace directly to the propane/LP supply. This burner system requires an external regulator (not supplied). Install the external regulator between the burner system and propane/LP supply.

INSTALLATION ITEMS NEEDED

Before installing fireplace and burner system, make sure you have the items listed below.

- External regulator (supplied by installer)
- Equipment shutoff valve*
- Tee joint
- Piping (check local codes)
- Test gauge connection*
- Pipe wrench
- Sealant (resistant to propane/LP gas)
- Sediment trap (recommended)
- approved flexible gas line with gas connector (if allowed by local codes — not provided)

* A CSA design-certified equipment shutoff valve with $^{1}/_{8}$" NPT tap is an acceptable alternative to test gauge connection. Purchase the CSA design-certified equipment shutoff valve from your dealer.

For propane/LP connections only, the installer must supply an external regulator. The external regulator will reduce incoming gas pressure. You must reduce incoming gas pressure to between 11 and 13 inches of water. If you do not reduce incoming gas pressure, burner system regulator damage could occur. Install external regulator with the vent pointing down as shown in *Figure 32.* Pointing the vent down protects it from freezing rain or sleet.

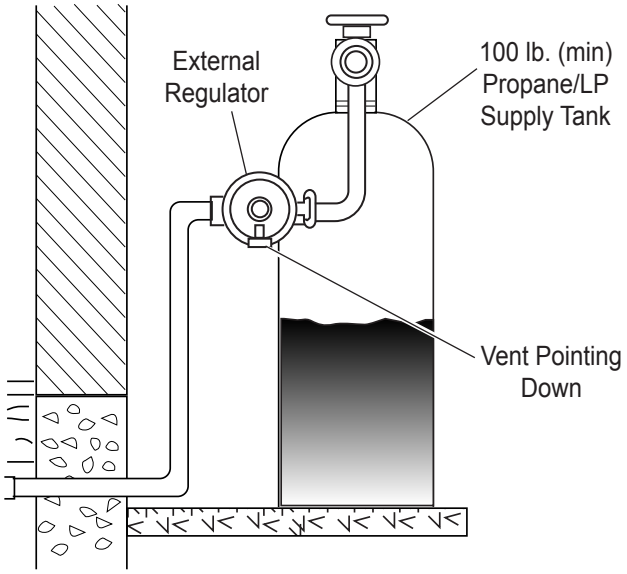


Figure 32 - External Regulator with Vent Pointing Down (Propane/LP Only)

CAUTION

Use only new black iron or steel pipe. Internally tinned copper or copper tubing can be used per National Fuel Code, section 2.6.3, providing gas meets hydrogen sulfide limits, and where permitted by local codes. Gas piping system must be sized to provide minimum inlet pressure (listed on data plate) at the maximum flow rate (BTU/hr). Undue pressure loss will occur if the pipe is too small.

When using copper or flex connectors use only fittings approved for gas connections. The gas control inlet is $^{3}/_{8}$" NPT.

WARNING

Only persons licensed to work with gas piping may make the necessary gas connections to this appliance.

CAUTION

A manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *See Figure 33.*

NOTE : The gas line connection may be made using 1/2" rigid tubing or an approved flex connector. Since some municipalities have additional local codes it is always best to consult your local authorities and the current edition of the National Fuel Gas Code ANSI.Z223.1, NFPA54. In Canada CAN/CGA-B149 (1 or 2) Installation Code.

A listed manual shutoff valve must be installed upstream of the appliance. Union tee and plugged 1/8" NPT pressure tapping point should be installed upstream of the appliance. *See Figure 33.*

IMPORTANT: Install main gas valve (equipment shutoff valve) in an accessible location. The main gas valve is for turning on or shutting off the gas to the fireplace.

Check your building codes for any special requirements for locating equipment shutoff valve to fireplaces.

CAUTION

Use pipe joint sealant that is resistant to liquid petroleum (LP) gas.

Apply pipe joint sealant lightly to male threads. This will prevent excess sealant from going into pipe. Excess sealant in pipe could result in clogged burner system valves.

We recommend that you install a sediment trap/drip leg in supply line as shown in *Figure 33*. Locate sediment trap/drip leg where it is within reach for cleaning. Install in piping system between fuel supply and burner system. Locate sediment trap/drip leg where trapped matter is not likely to freeze. A sediment trap traps moisture and contaminants. This keeps them from going into the burner system gas controls. If sediment trap/drip leg is not installed or is installed wrong, burner system may not run properly.

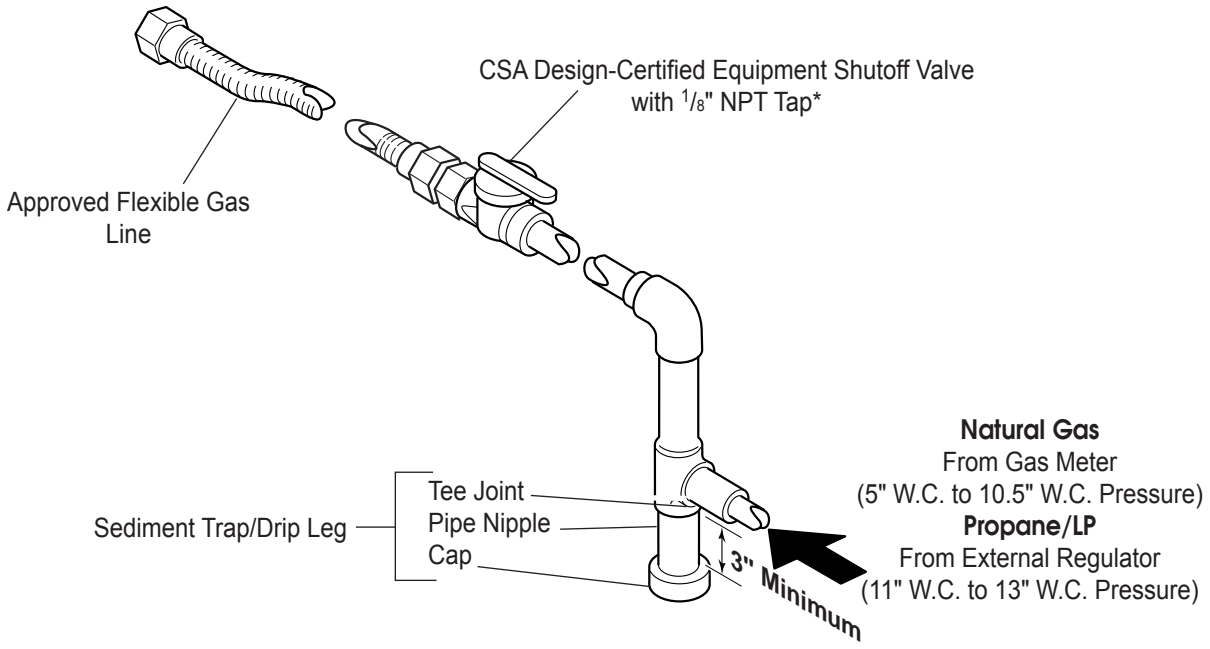


Figure 33 - Gas Connection

CHECKING GAS PRESSURE

1. Check gas type. The gas supply must be the same as stated on the appliance's rating decal. If the gas supply is different from the fireplace, STOP! Do not install the appliance. Contact your dealer immediately.
2. 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).
3. To ease installation, a 18" flex line with manual shut-off valve has been provided with on this appliance. Install and attach 1/2" gas line onto shut-off valve.
4. After completing gas line connection, purge air from gas line and test all gas joints from the gas meter to the fireplace for leaks. Use a solution of 50/50 water and soap or a gas sniffer.
5. To check gas pressures at valve, turn captured screw counter clockwise 2 or 3 turns and then place tubing to pressure gauge over test point. Turn unit to high. *See Figure 34.* After taking pressure reading, be sure and turn captured screw clockwise firmly to reseal. Do not over torque. Check test points for gas leaks.

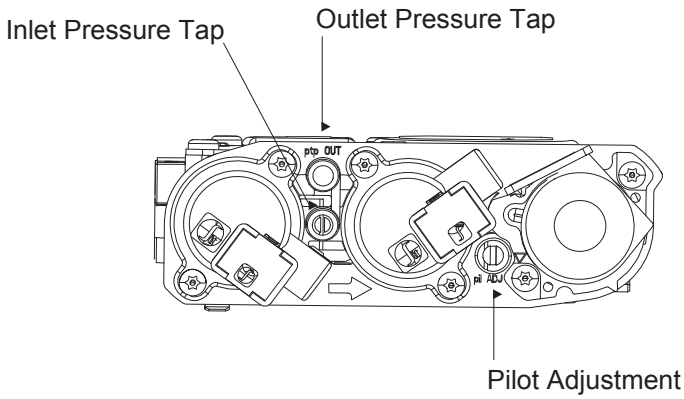


Figure 34 - Gas Pressure Check at Gas Valve

WARNING

Do not use open flame to check for gas leaks.

ELECTRICAL INSTALLATION

ELECTRICAL WIRING

This fireplace requires 110V AC electrical supply for normal operation in order to power up blower and 7V DC adapter which is required to operate Remote Control. However, during power outage situation, its electronic system (DFC board) can be temporarily powered with 6V DC battery pack (4 AA batteries).

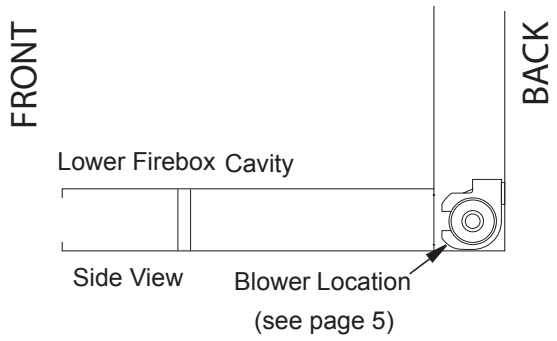
WARNING

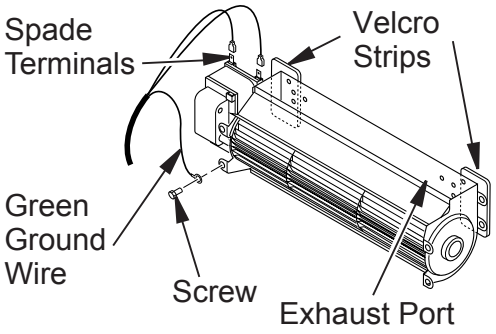
Electrical connections should only be performed by a qualified, licensed electrician. Main power must be off when connecting to main electrical power supply or performing service. All wiring shall be in compliance with all local, city, and state codes. The appliance, when installed, must be electrically grounded in accordance with local codes, or in the absence of local codes, with the *National Electrical Code ANSI/ NFPA 70 (latest edition)* and *Canadian Electrical Code, CSA C22.1.*

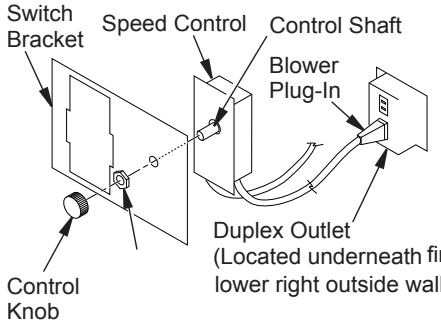
CAUTION

Label all wires before disconnecting when servicing controls. Wiring errors can cause improper and dangerous operation.

BLOWER/FAN LOCATION







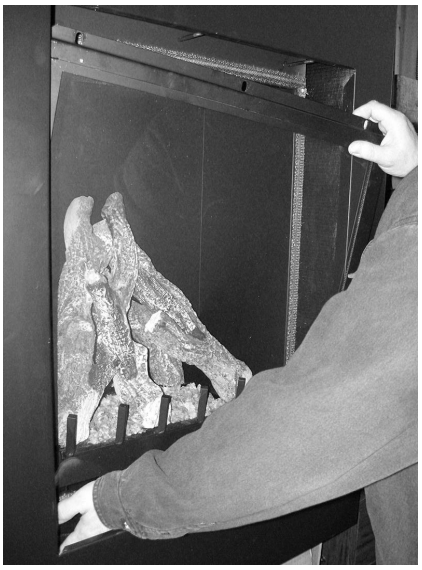
FAN ASSEMBLY DIAGRAMS

GLASS FRAME REMOVAL

1. Locate 3 (three) 1/4" nuts holding springs on top of the glass frame. Using a 7/16" ratchet remove all three nuts and then springs and washers from the studs.

2. Tilt the glass frame forward and lift it up until it clears bottom channel of firebox. Lower the glass frame in front of the firebox inside the fireplace avoiding the controls and valve motor below.

3. While holding the glass frame as shown on the picture, start carefully moving right corner of the glass frame out, support the glass frame at the bottom



4. Completely remove the glass frame from the the fireplace and set it safely aside.

Figure 36 - Removing Glass Frame

ROCK WOOL PLACEMENT

1. Place rock wool on burner to provide glowing embers. For best results, pull the rock wool apart into pieces the size of a nickel or smaller.
2. Distribute one layer of rock wool to cover the entire burner. Fill front gap between grate and burner.

WARNING

Do not use the entire bag of rock wool to cover the burner. This could cause the flame to burn poorly and may lead to sooting.

Figure 37 - Placement of Rock Wool on Burner

LOG PLACEMENT

1. Place rear log (#1) behind pilot shield on log support bracket. *See Figure 38.*
2. Place left front log (#2) angled towards the rear log. Line up the notch in the bottom of the log #2 with left grate bar. *See Figure 39.*

Figure 38 - Placing Rear Log (#1) on Log Support Bracket

Figure 39 - Placing Front Left Log (#2)

3. Place right logs (#3) on right side of the burner aligning bottom notch with the right grate bar. *See Figure 40 below.*

4. Place central log (#4) between left and right logs. Align the log bottom notch with central grate bar. *See Figure 41.*

IMPORTANT: Avoid ports when placing logs on burner.

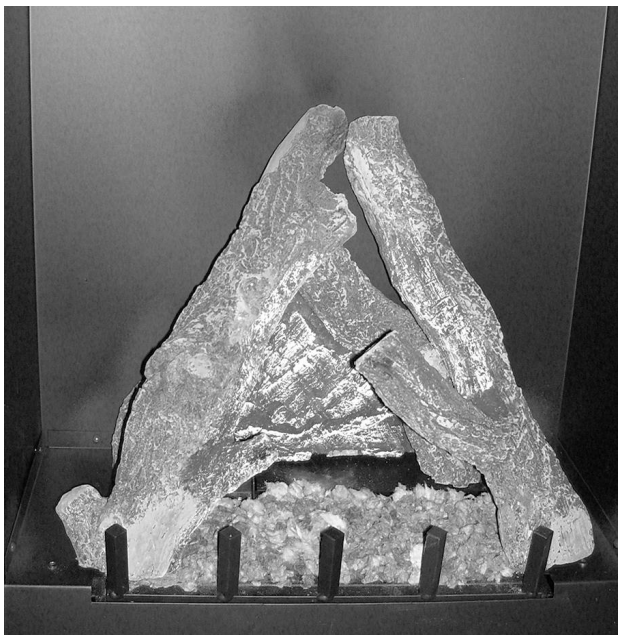


Figure 40 - Placing Front Right Log (#3)

Figure 41 - Placing Front Middle Log (#4) in Front of Rear Log

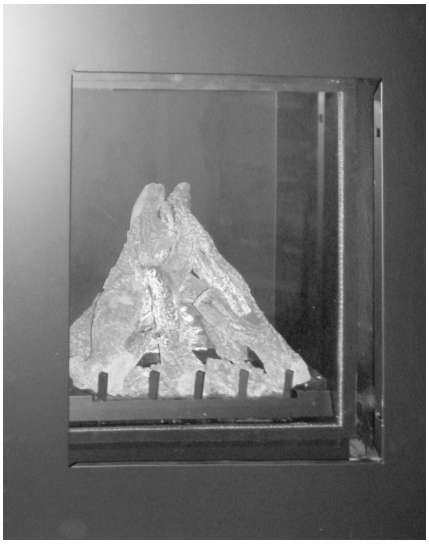
5. Replace the Glass Frame (see *Figure 36*).

6. Light unit and after 15 minutes, check burner flame and glow (See *Page 37*).
If the flame is blue and only in the center, turn off unit and let cool. After unit cools, remove logs. If the back holes are clear, add more rock wool to the center of the burner. Replace logs and check flame again. Save left over rock wool to refresh when cleaning later. Too much rock wool can disturb the flame and cause sooting on the glass or logs.

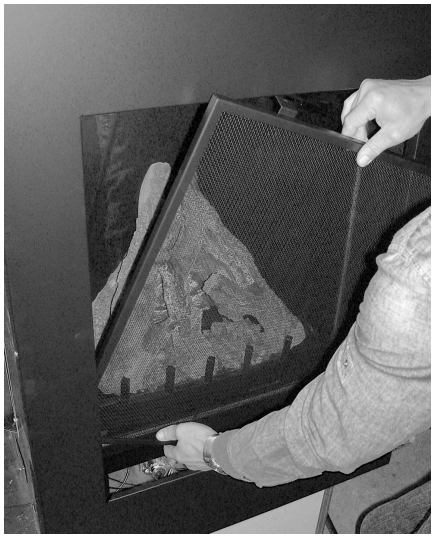
SAFETY SCREEN INSTALLATION

WARNING: A barrier (safety screen) 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.

IMPORTANT: Safety Screen must be in place when the fireplace is in operation. If the barrier becomes damaged, the barrier shall be replaced with the manufacturer's barrier for this appliance. Any safety screen, guard, or barrier removed for servicing the appliance, must be replaced prior to operating the appliance.

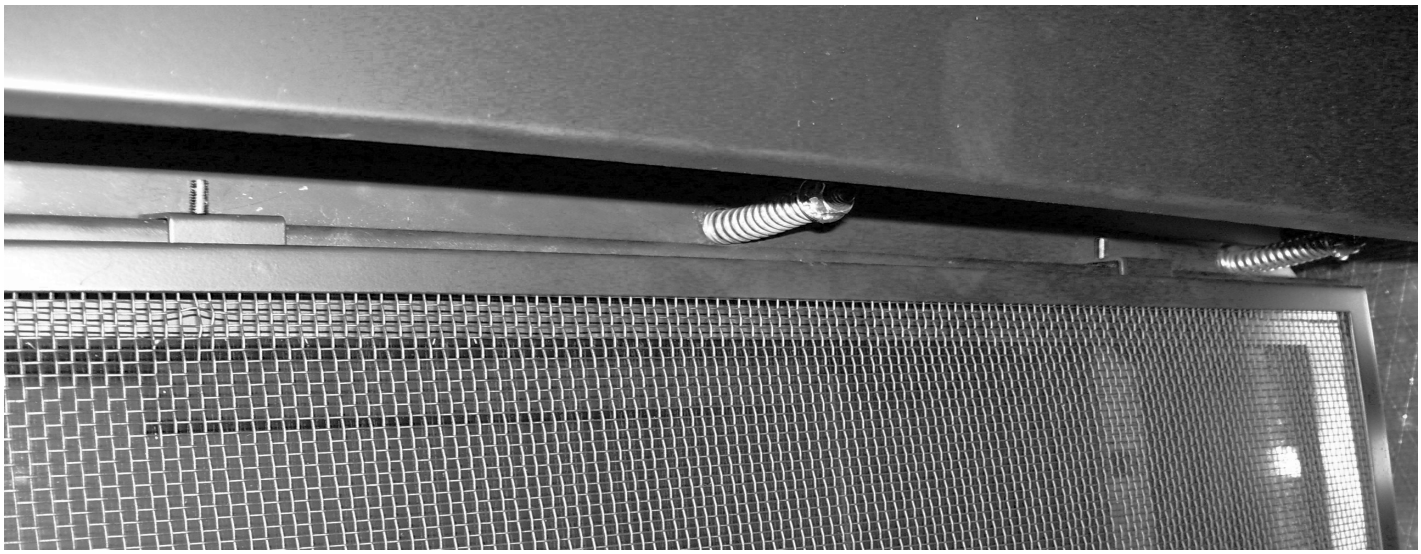


STEP 1: Remove Front Air Panel and both Side Panels from the fireplace. *See next page for reference photographs.*

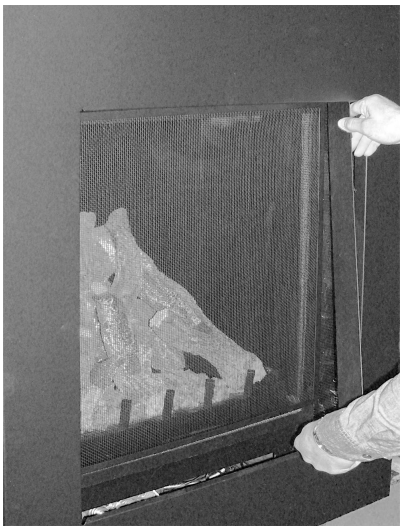


STEP 2: Angle the Safety Screen into the fireplace opening as shown above.

STEP 3: Lift the Safety Screen up so the tabs slide over the mounting bolts on the glass frame.



STEP 4: Secure the screen on small vertical studs with the two nuts provided.

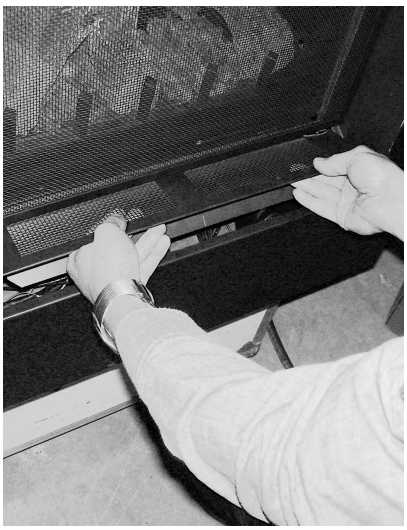


STEP 1: Insert the Right Side Panel into the opening angling in at the top.

STEP 2: Match up the tabs in the panel with the slots in the face and slide downward. Make sure the Side Panel is secured properly.

STEP 3: Repeat with Left Side Panel.

STEP 4: Angle the Air Flow Panel beneath the bottom of the screen.



STEP 5: Support the Air Flow Panel on the left and right Side Panels.

STEP 6: Tilt the Panel down to rest on the face support.

OPERATING FIREPLACE

FOR YOUR SAFETY READ BEFORE LIGHTING

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

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

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

WHAT TO DO IF YOU SMELL GAS:

- Do not try to light any appliance.
- Do not touch any 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. Main gas valve in this appliance is not serviceable and does not have any control knobs or switches to operate. Do not remove heat shields covering the valve and electronic devices; do not try to repair or modify the valve as it may result in a fire or explosion. Call a qualified service technician if you have any safety concerns.

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, starting on page 3.
2. Remove media tray from the appliance (see Illustrated parts list),
3. Turn off all electric power to the appliance. Unplug DC adapter from the power outlet.
4. Do not attempt to light the pilot by hand.
5. Turn main shutoff valve counterclockwise to ON position.
6. Set remote receiver switch to OFF position.

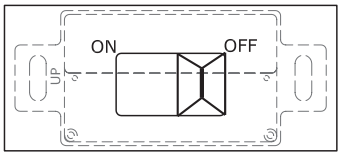


Figure 42a - Remote Receiver Switch in OFF Position

7. Wait five (5) minutes to clear out any gas. Then smell for gas, including near the floor. If you smell gas, STOP! Follow "B" in the safety information. If you don't smell gas, go to the next step.

   Note: Before applying any power supply to the DFC board, please verify that the electrical connections are in accordance to Wiring Diagram.

8. Plug supplied DC adapter into 110V power outlet.
9. Connect the wire to the DC input plug at the unit.
10. Locate remote receiver either inside the unit (see illustrated parts list), or mounted in adjacent wall. Make sure that the remote receiver switch is in "REMOTE" (middle) position.

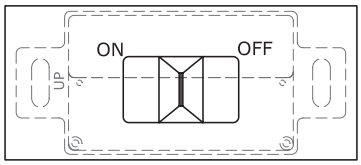


Figure 42b - Remote Receiver Switch in REMOTE Position

11. Replace access panel (i.e inner cover or optional media tray).

Initializing the System for the First Time

1. Set the remote receiver switch to the OFF position.

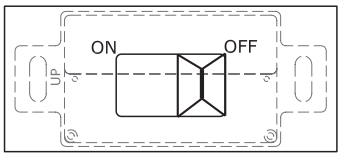


Figure 43 - Remote Receiver Switch in OFF Position

2. Make sure that fresh set of AA batteries are installed into the battery holder and verify the polarity indicated on the battery holder. If necessary, connect the battery holder to the DFC's main wiring harness.

Manually Turning ON the Appliance

1. Slide the remote receiver switch to the ON position. This will allow the main burner to ignite.

Manually Turning OFF the Appliance

1. Slide the remote receiver switch to the OFF position. This will turn off the main burner.

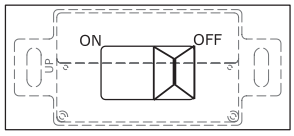


Figure 44 - Remote Receiver Switch in OFF Position

CAUTION: Do not try to adjust heating levels by using the equipment shutoff valve.

WARNING: Make sure the remote receiver switch is in the OFF position when you are away from home for long periods of time. Heater may come on automatically with remote receiver switch in the "REMOTE" position.

TO TURN OFF GAS TO APPLIANCE

1. Tum off all electric power to the appliance if service is to be performed. Unplug DC adapter from the power outlet.
2. If necessary, remove access panel from the appliance to access manual shutoff valve on gas line.
3. Turn the gas control manual valve clockwise to the full OFF position.
4. If necessary, replace media tray or access panel

REMOTE CONTROL OPERATION

Initializing the System for the First Time

1. Install the 4 AA batteries into the receiver batter bay. Note the polarity of the batteries and insert into the battery bay as indicated on the battery covel' (+/-).
2. Place the 3-posilion slider switch in the REMOTE position.
3. Insert the end of a paper clip into the hole marked PRG on the receiver front cover. The receiver will beep three times to indicate that it is ready to synchronize with a transmitter.
4. Install the 3 AAA batteries in the transmitter battery bay located on the base of the transmitter.
5. Press the ON button on the transmitter. The receiver will beep four times to indicate the transmitters command is accepted. The system is now initialized.

Temperature Indication Display

1. With the system in the OFF position, press the THERMOSTAT key and the MODE key at the same time.
2. Look at the LCD screen on the transmitter to verify that a °C or °F is visible next to the room temperature.

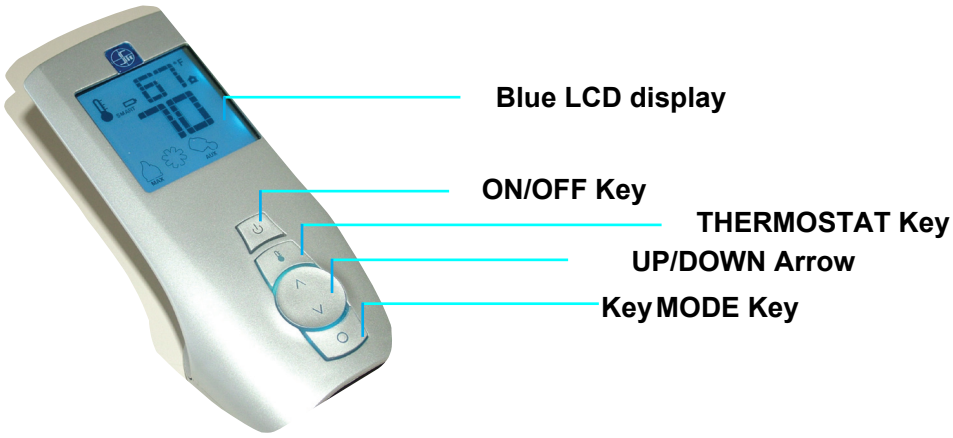


Figure 45 - Remote Receiver

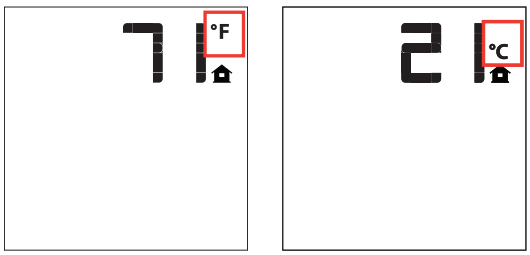


Figure 46 - Remote Control Display in Farenheit and Celsius

Turning ON the Appliance

1. Press the ON/OFF button on the transmitter. The transmitter screen will display all active icons. The receiver will command the DFC board to start the ignition process, Once the pilot flame is lit, the DFC board will open the main valve outlet and the main burner will ignite. A single "beep" from the receiver will confirm the command.

Turning OFF the Appliance

1. Press the ON/OFF button 011 the transmitter, The transmitter LCD display will only show the room temperature and icon (see Figure 48b). The receiver disconnects and will command the DFC board to turn off the burner.

   A single "beep" from the receiver will confirm the command.

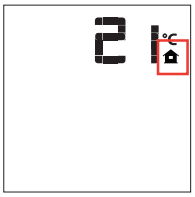


Figure 47 - Remote Control Displaying Room Temperature

Flame Height Control

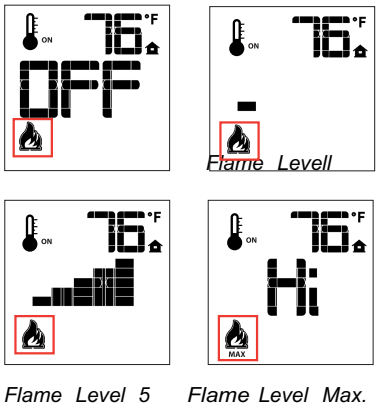
Proflame GTM

These units have six flame levels (see Figure 49).

1. With the system ON and the flame level at maximum height, press the down-arrow key once to reduce the flame height by one step. Continue pressing down-arrow key until flame is turned OFF.

2. Press the up-arrow key to increase the flame hcight.

   Note: If you press the up-arrow key while the remote system is ON but the flame is OFF, the flame will come on in the high position, A single "beep" from the receiver will confirm the command.



Flame Level 5 *Flame Level Max.*

Figure 48 - Remote Control Displaying Flame Levels

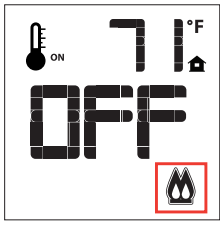


Figure 49 - Remote Control Displaying Split Flow Mode

Room Thermostat (Transmitter Operation)

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

1. To activate this function, press the Thermostat key. The LCD display on the transmitter will change to show that the room thermostat is ON and the set temperature is now displayed (see Figure 50).

2. Adjust the set temperature by pressing the up or down-arrow keys until the desired set temperature is displayed on the LCD screen (see Figure 50).

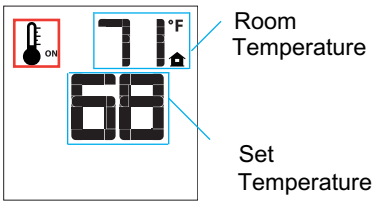


Figure 50 - Remote Control Displaying Room Temperature and Set Temperature

Smart Thermostat
(Transmitter Operation" Proflame GTM)

The Smart Thermostat function adjusts the flame height in accordance to the difference between the set point temperature and the actual room temperature. As the room temperature gets closer to the set point, the Smart Function will modulate the flame down.

1. To activate this function, press the Thermostat key until the word "SMART" appears to the right of the temperature bulb on the LCD screen (see Figure 51a).
2. To adjust the set temperature, press the up or down-arrow keys until the desired set temperature is displayed on the LCD screen.

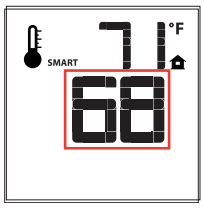


Figure 51a - Remote Control Displaying Smart Thermostat Function

Key Lock

This function will lock the keys to avoid unsupervised operation.

1. To activate this function, press the MODE and UP keys at the same time. A lock icon will appear on the LCD screen (sec Figure 51b).
2. To deactivate this function, press the MODE and UP keys at the same time. The lock icon will disappear from the LCD screen.

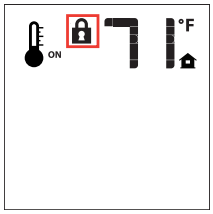


Figure 51b - Remote Control Displaying Key Lock Mode

Low Battery Power Detection

Receiver

The life span of the receiver batteries depends upon various factors: battery quality, Humber of appliance ignitions, number of thermostat set point changes, etc.

'Vhen the receiver batteries are low, no "beep" will sound from the receiver when a transmitter command is sent. Replace batteries when this happens,

Transmitter

The life span of the transmitter batteries depends upon various factors: battery quality, number of appliance ignitions, number of thermostat set point changes, etc.

When the transmitter batteries arc low, an icon will appeal' on the LCD display (see Figure51c), Replace batteries when this icon appears.

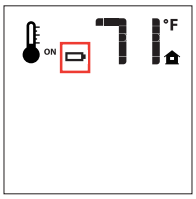


Figure 51c - Remote Control Displaying Low Battery

Manual Override

If the receiver or transmitter batteries are low or depleted, the appliance can still be turned on manually.

1. Move the receivers three-position slider to the ON position. This will bypass the remote control feature of the system and the appliance main burner will turn on.

Command Definitions

Pilot IPI / CPI switch	Position of the receiver slider switch	Command reference name	Commanded Fireplace State
Opened, IPI	"OFF" / "REMOTE" and "OFF received"	Turn-OFF	Flames OFF
Opened, IPI	"ON" / "REMOTE" and "ON received"	Turn-ON	Pilot + Main burner flames ON
Closed, CPI	"OFF" / "REMOTE" and "OFF received"	Pilot-ON	Pilot flame ON
Closed, CPI	"ON" / "REMOTE" and "ON received"	Turn-ON	Pilot + Main burner flames ON

WARNING

Turn off gas before servicing fireplace. It is recommended that a qualified service technician perform these check-ups at the beginning of each heating season.

BURNER, PILOT AND CONTROL COMPARTMENT

Keep the control compartment, logs, and burner areas surrounding the logs clean by vacuuming or brushing at least twice a year. Make sure the burner porting, pilot air opening and burner air opening are free of obstructions at all times.

PILOT FLAME

The flames from the pilot should be visually checked as soon as the heater is installed and periodically during normal operation. **The pilot flame must always be present when the fireplace is in operation.** *See Figure 52.* The pilot flame has two distinct flames, one engulfing the flame sensor, and the other reaching to the main burner.**.**

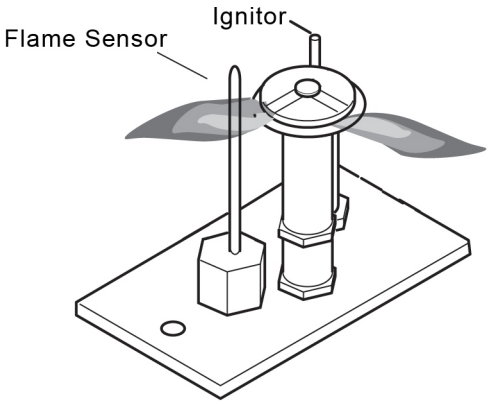


Figure 52 - Pilot Flame

BURNER

Inspect area around the injector. Remove any lint or foreign material with a brush or vacuum.

Figure 53 - Burner Flame Appearance

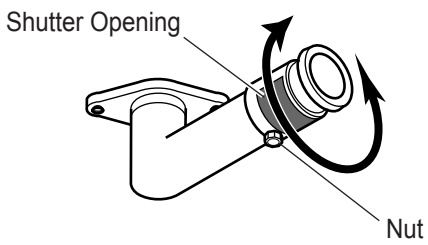


Figure 54 - Adjusting Air Shutter

BURNER FLAME

The flames from the burner should be visually checked as soon as the heater is installed and periodically during normal operation. In normal operation, at full rate, and after operating for about 15 to 30 minutes, the flame should be yellow and slightly taller than the rear log. *See Figure 53.*

If the flame is blue and only in the center, turn off unit and let cool. After unit is cool, remove logs and check to make sure the back holes in the burner are not covered with rock wool. If the back holes are clear, add more rock wool to the center of the burner. Replace logs.

NOTE: The type of installation, vent system configuration, and wind effects may cause the flame patterns to vary.

AIR SHUTTER ASSEMBLY

Air shutter is factory set: 5/16" for natural gas and fully open for propane gas (additional 2 x 3/8" Dia. holes).

If necessary, change this by loosening nut and opening or closing the air shutter more. *See Figure 54.*

VENT SYSTEM

The fireplace and venting system should be inspected before initial use and at least annually by a qualified field service person. Inspect the external vent cap on a regular basis to make sure that no debris is interfering with the airflow. Inspect entire venting system to ensure proper function.

If the vent system is disassembled for any reason, it must be reassembled and secured before the appliance can be used.

GLASS DOOR

Thoroughly clean the inside of the glass door after using the fireplace for ten hours. Periodically clean the glass door as necessary.

When cleaning the glass, remember:

- **Do not remove the glass when hot.** Allow glass to cool before removal.
- NEVER use abrasive materials.
- Keep children and pets a safe distance away.
- Never operate the fireplace without the glass door properly secured.
- Never operate the fireplace if the glass is broken.
- Replace any glass that is chipped, cracked, or broken. Replacement glass door assemblies MUST be supplied by the fireplace manufacturer – **No substitute materials may be used.**
- Handle glass door with care to avoid striking or scratching it on hard objects.

To clean glass door, follow "Glass Removal" procedure outlined in the *Final Installation* section. Film deposit on the inside of the glass should be cleaned off using a nontoxic, non-corrosive, non-abrasive, mild-cleaning solution. Simply apply an adequate amount to the glass and wipe off with a damp cloth. After all maintenance has been completed, re-install glass door.

LOGS

Leave logs installed in the fireplace for cleaning. Vacuum surface of the logs with a brush attachment. If logs must be removed for cleaning, handle carefully by holding gently at each end. Gloves are recommended to prevent skin irritation from ceramic fibers. If skin becomes irritated, wash gently with soap and water. Vacuum surface of logs with brush attachment or brush logs with a soft bristle brush (i.e. clean, dry paintbrush). To place logs back in the fireplace, see "Log Placement" found in the *Final Installation* section.

NOTE: **Do not use cleaning fluid to clean logs.**

ROCK WOOL

Replace or add rock wool as required following installation instructions in the *Final Installation* section of this manual.

More frequent cleaning may be required due to excessive lint from carpeting, bedding material, etc. It is imperative that control compartments, burners and circulating air passageway of the appliance be kept clean.

TROUBLESHOOTING

⚠ WARNING: Turn off the unit and let cool before servicing. Only a qualified service person should service and repair this appliance.

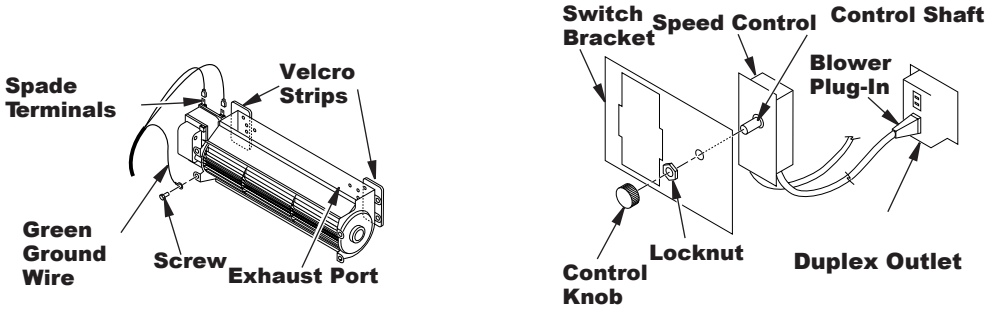
Note: All troubleshooting items are listed in order of operation.

SYMPTOM	POSSIBLE CAUSE	ACTION
1. Spark ignitor will not light pilot after repeated triggering of piezo.	A. Wire disconnected.	A. Open door and check to make sure wire is connected to ignitor. Check wiring connections at the DFC module and gas valve.
	B. Defective ignitor.	B. Check for spark at electrode and pilot. If no spark and electrode wire is properly connected, replace pilot assembly.
	C. No gas or low gas pressure.	C. Check remote/manual shut off valve from fireplace. Low pressure can be caused by bent lines, restricted lines, low pressure line pressure. Consult with plumber or gas supplier.
	D. No Propane/LPG in tank	D. Check Propane/LPG tank. Refill tank.
2. Pilot will not stay lit after carefully following lighting instructions.	A. Defective pilot sensor.	A. Check that pilot flame impinges on flame sensor. Clean and/or adjust pilot for maximum flame impingement. Ensure sensor is clean. Ensure that the sensor wiring connected to DFC module. If no success, replace pilot assembly.
	B. Defective DFC module.	B. If ignitor continues to spark after pilot is lit, replace the module.
3. Frequent pilot outage problem.	A. Pilot flame may be too high or too low, causing pilot safety to drop out	A. Clean and adjust the pilot flame for maximum flame impingement on thermocouple.
	B. Low gas pressure.	B. Check that inlet pressure meets requirements.
4. The pilot and main burner extinguish while in operation	A. Inner vent pipe leaking exhaust gases back into system	A. Check for flue product leak. Replace defective pipe section.
	B. Horizontal vent improperly pitched	B. Check horizontal-venting piping is running upward 1/4" per foot. Do not run the pipe level or downward.
	C. Improper vent cap installation.	C. Check for proper installation and freedom from debris or blockage.
	D. Weak batteries in remote control and receiver.	D. Replace AA batteries in remote receiver and AAA batteries in hand held unit. Re-program receiver making sure the battery cover is properly closed.
	C. Pilot flame wavering off pilot sensor.	C. Clean pilot head, make sure sensor is clean.
5. Flame burn blue and lifts off burner (ghosting)	A. Insufficient oxygen being supplied	A. Ensure that the vent cap is installed properly and free of debris. Ensure that the vent system joints are tight and have no leaks. Ensure that no debris has been blocking the inner air intake at the bottom back of the combustion chamber. Ensure that the glass is properly secure and latch.

BLOWER ELECTRICAL DIAGRAM AND INSTALLATION INSTRUCTIONS

FAN ASSEMBLY DIAGRAMS

NOTE: Unplug power cord before any servicing



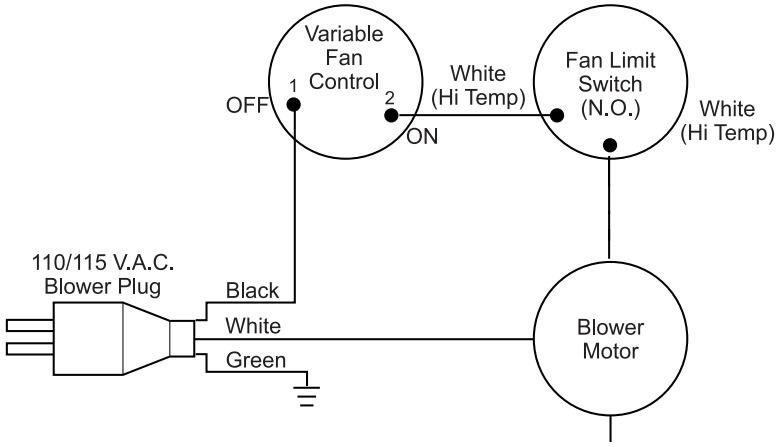
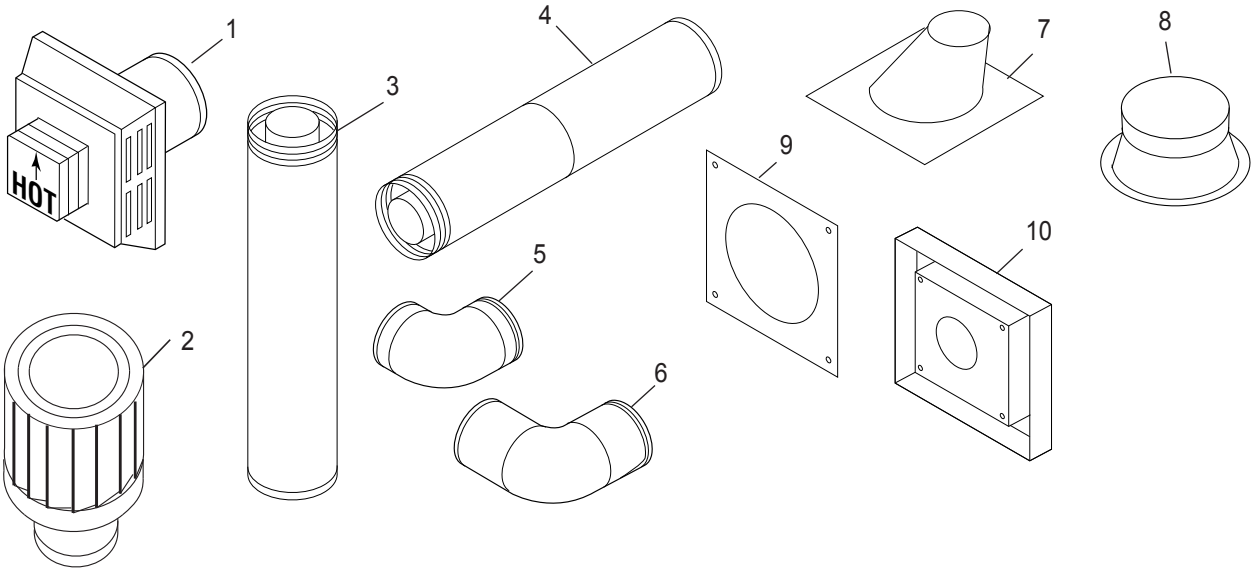


Figure 55 - Fan wire assembly diagram

CAUTION

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

RIGID VENT COMPONENTS



Item	Qty/Box	Description	Simpson Duravent Direct Vent Pro or Woodbridge Part #
1	1	Simpson Horizontal High Wind Horizontal Termination Cap	58DVA-HC
2	1	High Wind Vertical Termination	58DVA-VCH
3	4	6” Pipe Length	58DVA-06
3	4	9” Pipe Length	58DVA-09
3	4	12” Pipe Length	58DVA-12
3	4	24” Pipe Length	58DVA-24
3	4	36” Pipe Length	58DVA-36
3	4	48” Pipe Length	58DVA-48
4	4	8-1/2” Pipe Extension	58DVA-08A
4	4	16” Pipe Extension	58DVA-16A
5	4	45° Elbow	58DVA-E45
6	4	90° Elbow	58DVA-E90
7	6	Flashing, 0/12 To 6/12 Roof Pitch	58DVA-F6
8	4	Storm Collar	58DVA-SC
9	4	Firestop	58DVA-FS
10	1	Vinyl Siding Standoff	58DVA-VSS

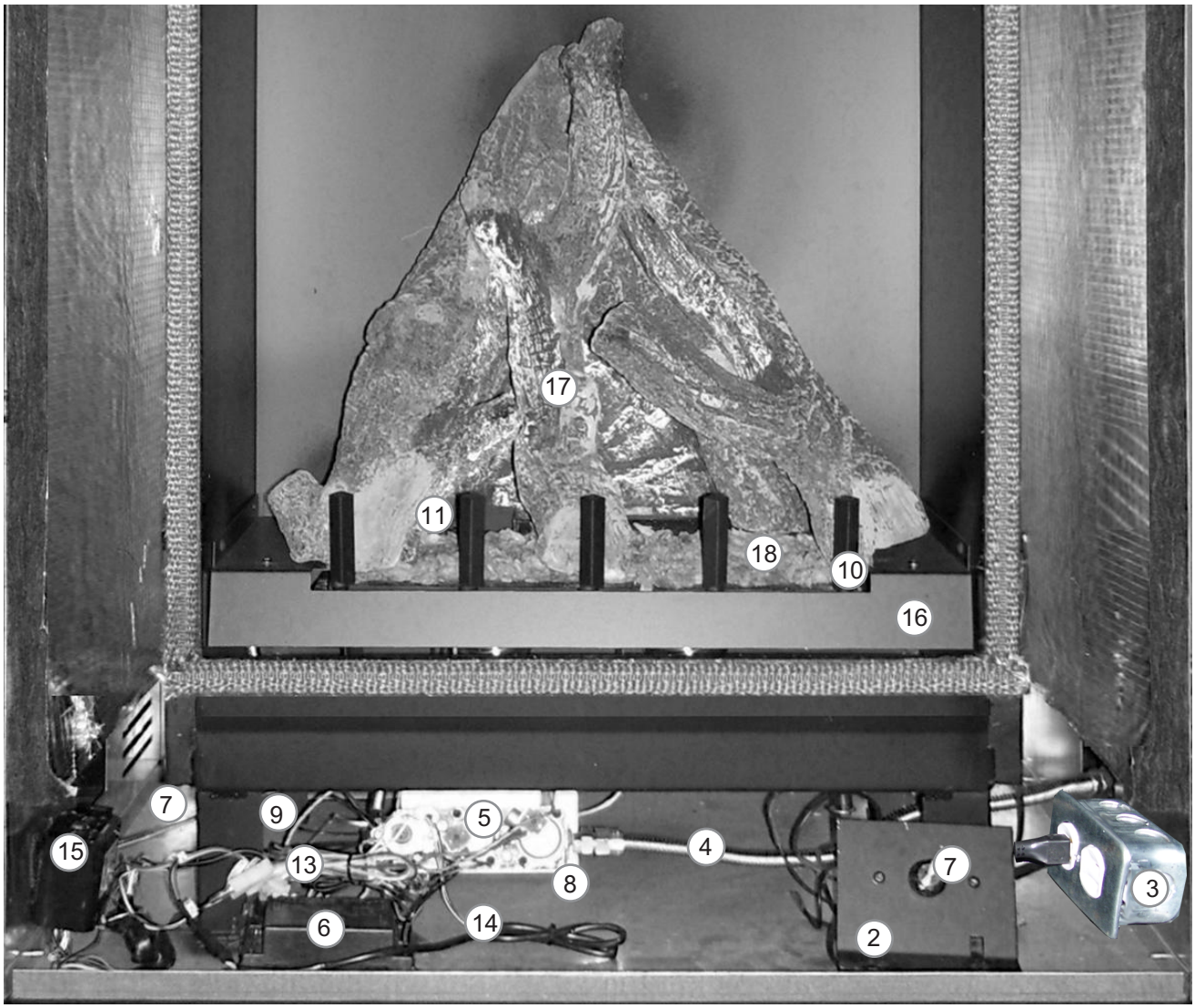
NOTE: This model is also approved for use with Metal Fab and Selkirk Direct Vent systems.

FIREBOX COMPONENTS

WARNING

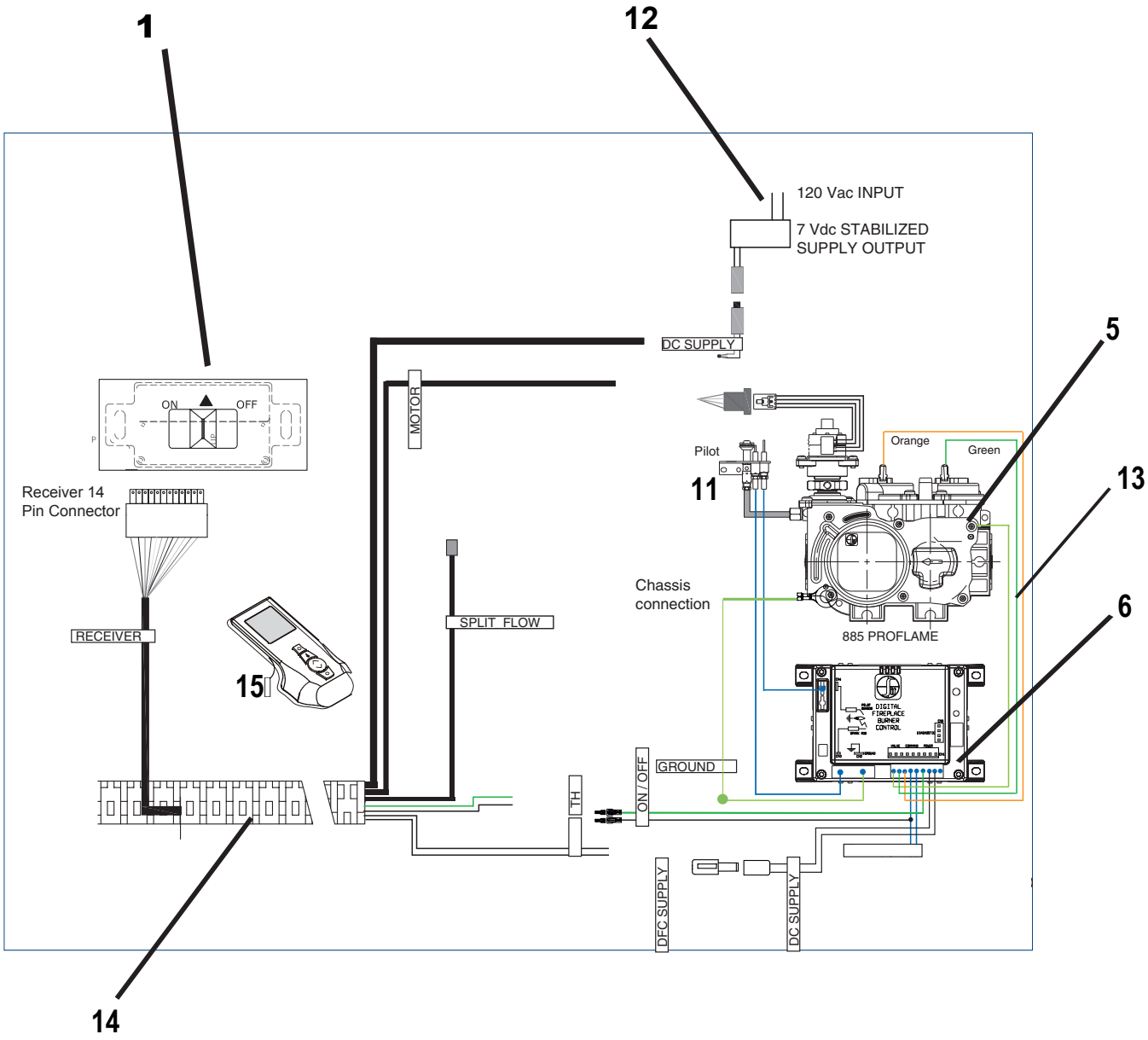
Failure to position the parts in accordance with these diagrams or failure to use only parts specifically approved with this appliance may result in property damage or personal injury.

This list contains replaceable parts used in your Fireplace. All replacement parts should be ordered from your retailer or from Woodbridge Fireplace Inc. at 1-905-799-5953 or on-line at www.woodbridgefp.com



Proflame Wiring Diagram

This diagram shows replaceable SIT Proflame parts used in your fireplace (please, refer to page 45).



PARTS LIST

This list contains replaceable parts used in your fireplace.
All replacement parts should be ordered from your installer or from Woodbridge Fireplace Inc.
at 1-905-564-3001 or on-line at www.woodbridgefp.com

KEY No.	PART NUMBER		DESCRIPTION	QTY
	DV 2500 N-E	DV 2500 P-E		
1	H200010	H200010	REMOTE CONTROL RECEIVER	1
2	D100027	D100027	FAN CONTROL FACE PLATE	1
3	C100020	C100020	DUPLEX OUTLET	1
4	C100010	C100010	18" FLEX CONNECTOR WITH SHUTOFF VALVE	1
5	C200001	C200002	MAIN GAS VALVE	1
6	H100142	H100142	ELECTRONIC CONTROL DFC BOARD	1
7	A100014	A100014	FAN WITH SPEED CONTROL (not shown)	1
8	D200020	D200020	VALVE BRACKET	1
9	H100018	H100019	ORIFICE	1
10	W300024	W300024	BURNER ASSEMBLY	1
11	C20003	C200004	PILOT ASSEMBLY	1
12	H100140	H100140	7V 10mA DC ADAPTER	1
13	H200012	H200012	DFC TO CPI WIRE HARNESS	1
14	H200011	H200011	GTMFS WIRE HARNESS	1
15	H200001	H200001	GTM REMOTE CONTROL	1
16	S300028	S300028	AIR FRONT PANEL SHIELD	1
17	A100068	A100068	CERAMIC LOG SET (4 PCS)	1
18	G100026	G100026	EMBER MATERIAL	BAG
NOT SHOWN REPLACEMENT PARTS:				
-	W300041	W300041	GLASS DOOR FRAMED ASSEMBLY	1
-	W300007	W300007	AIR FLOW PANEL	1
-	S300009	S300009	LEFT SIDE PANEL	1
-	S300010	S300010	RIGHT SIDE PANEL	1
-	W300019	W300019	SAFETY SCREEN	1

NOTES

NOTES

LIMITED LIFETIME WARRANTY POLICY

LIFETIME WARRANTY

The following components are warranted for life to the original owner, subject to proof of purchase: Firebox, Combustion Chamber, Heat Exchanger, Grate and Steel Burners.

FIVE YEAR WARRANTY

The following components are warranted five (5) years to the original owner, subject of proof of purchase: Ceramic Fiber Logs.

BASIC WARRANTY

Woodbridge Fireplace Inc. warrants the components and materials in your gas appliance to be free from manufacturing and material defects for a period of two years from date of installation. After installation, if any of the components manufactured by Woodbridge Fireplace Inc. in the appliance are found to be defective in materials or workmanship, Woodbridge Fireplace Inc. will, at its option, replace or repair the defective components at no charge to the original owner. Woodbridge Fireplace Inc. will also pay for reasonable labor costs incurred in replacing or repairing such components for a period of two years from date of installation. Any products presented for warranty repair must be accompanied by a dated proof of purchase.

This Limited Lifetime Warranty will be void if the appliance in not installed by a qualified installer in accordance with the installation instructions. The Limited Lifetime Warranty will also be void if the appliance is not operated and maintained according to the operating instructions supplied with the appliance, and does not extend to (1) firebox/burner assembly damage by accident, neglect, misuse, abuse, alterations, negligence of others, including the installation thereof by unqualified installers, (2) the costs of removal, reinstallation or transportation of defective parts on the appliance, or (3) incidental or consequential damage. All service work must be performed by an authorized service representative.

This warranty is expressly in lieu of other warranties, express or implied, including the warranty of merchantability of fitness for purpose and of all other obligations or liabilities. Woodbridge Fireplace Inc. does not assume for it any other obligations or liabilities in connection with sale or use of the appliance. It states that do not allow limitations on how long an implied warranty lasts, or do not allow exclusion of indirect damage, those limitations of exclusions may not apply to you. You may also have additional rights not covered in the Limited Lifetime Warranty.

Woodbridge Fireplace Inc. reserves the right to investigate any and all the claims against the Limited Lifetime Warranty and decide upon method of settlement.

For information about this warranty, contact:

Woodbridge Fireplace Inc.

1305 Meyerside Dr., Mississauga
Ontario, Canada L5T 1C9

Tel.: 1-905-564-3001

www.woodbridgedealer**.com**

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