

INSTALLATION INSTRUCTIONS

DIRECT VENT FIREPLACE

model 1000

FOR YOUR SAFETY ... WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance
- Do not touch any electrical switch
- Do not use any phone in your building
- Immediately call your gas supplier from an outside phone
- Follow the gas supplier's instructions
- If you can not reach your gas supplier, call the fire department

FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

MODELS: 360, 1760, 460, 1860, 960, 2360, 1060, 2460, 1160, 2560, 1260, 2660



A Division of GSW Inc.

Heating Products Company

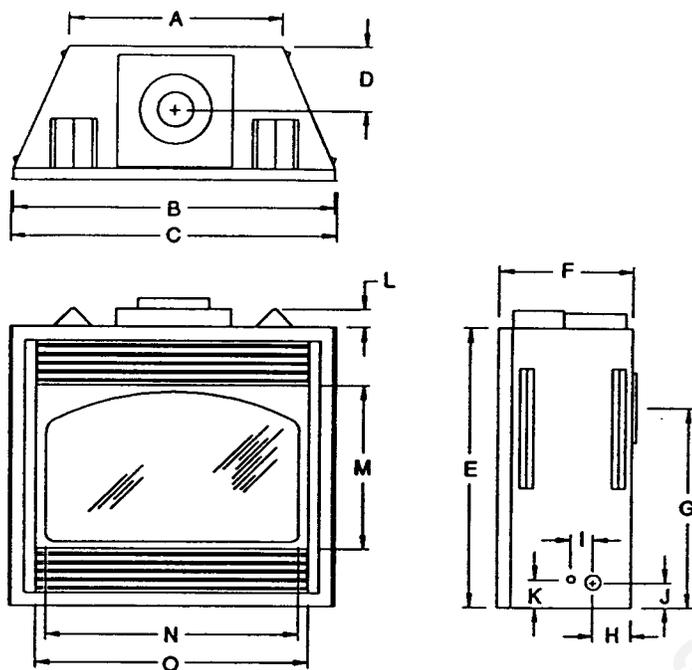
PLEASE READ THESE INSTRUCTIONS BEFORE INSTALLING OR OPERATING YOUR GAS FIREPLACE AND KEEP THESE INSTRUCTIONS FOR CONSTANT REFERRAL.

PART # 1000DVTB - GSW

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INSTALLATION AND OPERATION



DIMENSION	TOP VENT	BACK VENT
A	23½"	23½"
B	36"	36"
C	36¾"	36¾"
D	7¼"	TOP VENT ONLY
E	31¾"	31¾"
F	15"	15¼"
G	BACK VENT ONLY	22⅞"
H	4½"	4½"
I	2½"	2½"
J	2⅞"	2⅞"
K	3¼"	3¼"
L	2"	½"
M	19⅞"	19⅞"
N	29¾"	29¾"
O	32¼"	32¼"

NOTE: PIPE DIAMETERS FOR BOTH THE BACK VENT AND TOP VENT ARE 4" FOR THE INNER PIPE AND 8" FOR THE OUTER PIPE.

INSTALLATION REGULATIONS

This gas appliance must be installed by a qualified installer in accordance with local building codes, or in the absence of local codes, with the current CAN CGA-B149.1-M86 installation code or the National Fuel Gas Code Z223.1-1988 when installed in the United States.

This appliance, when installed, must be electrically connected and grounded in accordance with local codes, or in the absence of local codes, with the current CSA C22.1 Canadian Electrical Code or with the national Electrical Code; ANSI/NFPA 70-1987 when installed in the United States.

FOR SAFE INSTALLATION AND OPERATION OF YOUR GAS FIREPLACE PLEASE NOTE THE FOLLOWING:

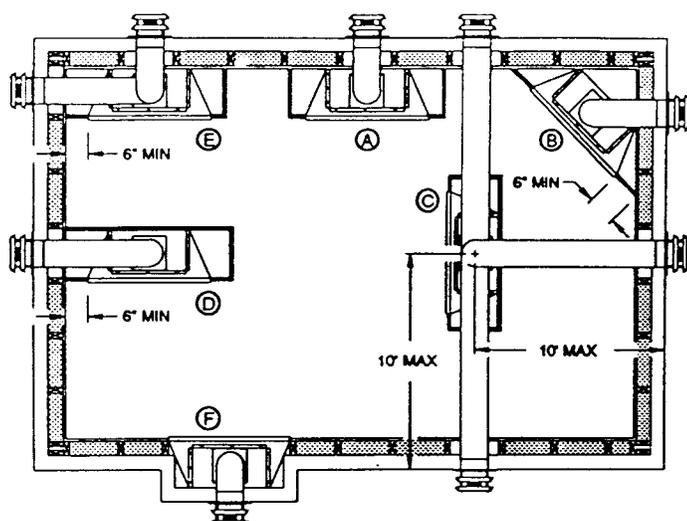
1. This appliance gives off high temperatures and should be located out of heavy traffic areas and away from furniture and draperies.
2. Children and adults should be alerted to the hazards of the high surface temperatures of this appliance and should stay away to avoid burns or ignition of clothing.
3. Children should be carefully supervised when they are in the same room as your fireplace appliance.
4. Under no circumstances should this appliance be modified. Any parts that have to be removed for servicing should be replaced prior to operating this appliance.
5. Installation and any repairs to this appliance should be done by a qualified service person. A professional service person should be called to inspect this appliance annually. Make it a

practice to have all your gas appliances checked annually.

6. Control compartments, burners and air passages in this appliance should be kept clean and free of dust and lint. Make sure that the gas valve and pilot light are turned off before you attempt to clean this unit.
7. The venting system(chimney) of this appliance should be inspected at least once a year and if needed, your venting system should be cleaned.
8. Keep the area around your appliance clear of combustible materials, gasoline and other flammable vapours and liquids. This appliance should not be used as a drying rack for clothing nor should Christmas stockings or decorations be hung from it.
9. This appliance needs good ventilation for safe operation. Provisions must be made for an unobstructed adequate supply of combustion and ventilation air. Refer to CAN 1-B149 installation codes or your local building codes. Applies to vented units only, direct vents have outside air supplied as part of the system.
10. Under no circumstances should any solid fuels(wood, paper) be used in this appliance.
11. For safe operation, glass doors must be closed.
12. Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and to replace any part of the control system and any gas control which has been under water.
13. Do not operate appliance unless completely installed as per installation instructions.

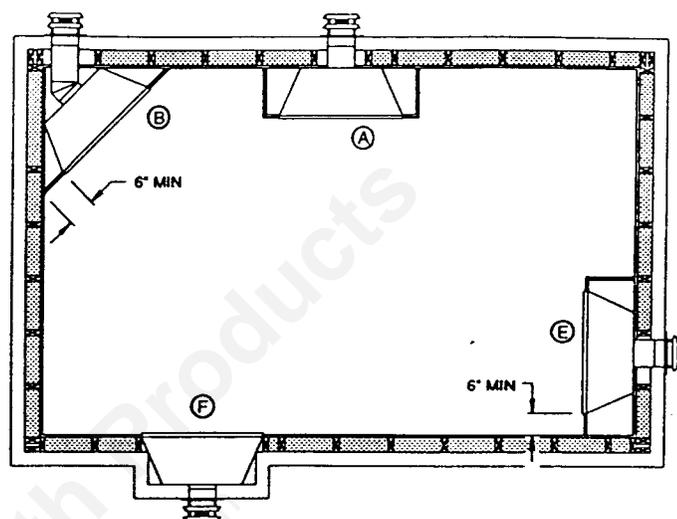
LOCATING YOUR APPLIANCE

INSTALLING WITH TOP VENT OPTION



Island installation with a top vent is possible as long as the horizontal portion of the vent system does not exceed 10 feet (305cm). When you install your fireplace as in position 'B', 'D' or 'E', a minimum of 6 inches (153mm) clearance must be maintained from the perpendicular wall and the front of the appliance.

INSTALLING WITH BACK VENT OPTION



- A - Flat on a wall
- B - Across the corner
- C - As an island
- D - As a room divider
- E - Flat on wall corner
- F - Exterior wall

FRAMING FOR YOUR GAS FIREPLACE

FRAMING SPECIFICATIONS

1. Choose fireplace location and frame in accordance with the fireplace dimensions specified on page one of this manual.
2. Place fireplace into position and secure to floor with 1½" screws or nails.
3. Cold climate installation recommendation: when installing this fireplace against non-insulated exterior wall or chase, it is recommended that the outer walls be insulated to conform to applicable insulation codes.
4. When this appliance is being installed against a non-insulated wall or in a chase, fiberglass insulation should be installed around body of fireplace. Do not put insulation on top.

Note: This is a less desirable installation and definitely not recommended for cold climates.

5. Drywall can extend flush with the appliance on the bottom and sides of the fireplace. A non-combustible material must be used to extend flush with the top of the fireplace and must have a vertical length equivalent to the height of the standoffs.

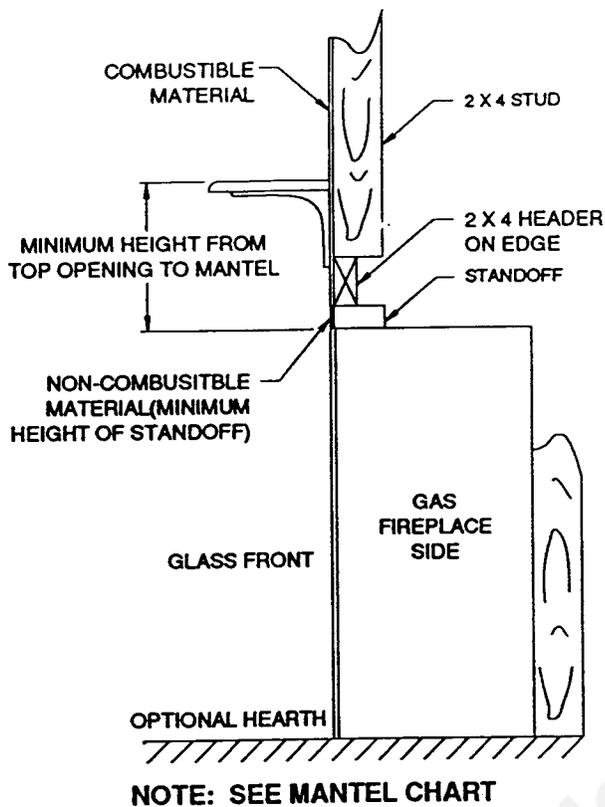
6. If you are installing the top vent unit with a 90° elbow installed, the minimum clearance to combustibles directly above the 90° elbow is 4" (102mm).

7. Non-combustible materials such as brick and tile can be extended across the face of the fireplace. If brass trim kit is going to be installed, brick and tile will have to be installed flush with the front of this appliance.

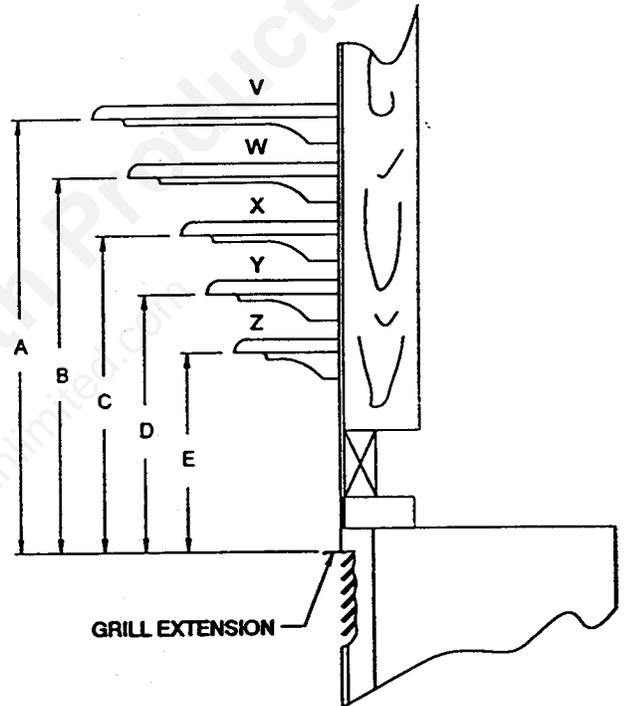
HEARTH

A hearth is not mandatory but is recommended for aesthetic purposes. We recommend a non-combustible hearth projecting out 12" (305 mm) or more in front of the fireplace.

CLEARANCE TO COMBUSTIBLES	
BACK	0 inches/mm
SIDE (FROM STANDOFFS)	0 inches/mm
FLOOR	0 inches/mm
TOP (FROM STANDOFFS)	0 inches/mm
TOP OF 90° ELBOW	4 inches/102mm



	MANTEL WIDTH		HEIGHT FROM FIREPLACE OPENING									
	INCH	METRIC	A		B		C		D		E	
			IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
V	10.0"	254mm	12	305								
W	8.0"	203mm			10	254						
X	5.0"	152mm					8	203				
Y	4.0"	101mm							5	127		
Z	2.0"	51mm									4	102



MANTLES

Depending on the width of the fireplace mantel, it may be installed higher or lower from the top of the fireplace opening. See drawing and chart below for proper installation height of your combustible mantelpiece. Non-combustible mantles may be installed at any height above the fireplace opening.

When installing the top vented unit in the United States, a grill extension must be used. The grill extension should extend 1"(25mm) from the front face.

NOTE: When using paint or lacquer to finish the mantel, such paint or lacquer must be heat resistant(250°F) to prevent discoloration.

GAS LINE INSTALLATION

This gas appliance should be installed by a qualified installer in accordance with local building codes and with current CAN/CGA - B149(.1 or .2) installation codes for Gas Burning Appliances and Equipment.

1. The gas pipeline can be brought in through either the right or the left side of the appliance. A knockout is provided at either location to allow for the gas pipe installation and testing of any gas connection.

2. The gas control inlet is 1/2" NPT. Typical installation layout for rigid pipe is shown this page next page.

3. When using copper or flex connector, use only approved fittings. Always provide a union so that gasline can be easily disconnected for burner or fan servicing. See gas specification for pressure details and ratings.

4. When a vertical section of gas pipe is required for the installation, a condensation trap is needed. See CAN/CGA - B149.1 M86 for code details.

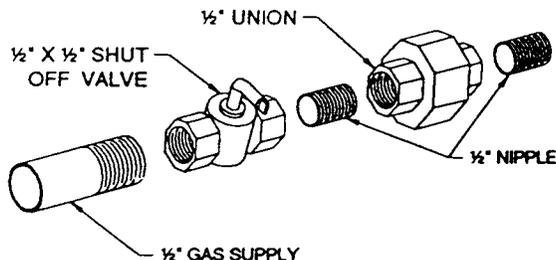
5. For natural gas, a minimum of 3/8" iron pipe with gas pressure 4.5 w.c. must be used for supply from the gas meter. Consult with the local gas utility if any questions arise concerning pipe sizes.

6. A 1/8" NPT plugged tapping, accessible for test gauge connection, must be installed immediately upstream of the gas supply connection to the appliance.

7. Turn the gas supply ON and check for leaks. **DO NOT USE OPEN FLAME FOR THIS PURPOSE.** Use an approved leak testing solution.

8. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ PSIG (3.5 KPa).

9. The appliance must be isolated from the gas supply piping system by closing its individual shutoff valve during any



pressure testing of the gas supply piping system at test pressures equal to or less than ½ PSIG (3.5KPa).

NOTE: The gas line connection may be made of ½" rigid pipe, ½" copper pipe or an approved flex connector. Since some municipalities have additional local codes, it is always best to consult your local authorities and the CAN/CGA - B149.1 M86 installation code.

IMPORTANT: Always check for gas leaks with a soap and water solution. Do not use open flame for leak testing.

GAS SPECIFICATIONS

MODEL	FUEL	GAS CONTROL	MAXIMUM INPUT
1000DVTB	NATURAL	MILLIVOLT	25000 BTU
1000DVTB	PROPANE	120 VOLT	25000 BTU
1000DVB	NATURAL	MILLIVOLT	25000 BTU
1000DVP	PROPANE	120 VOLT	25000 BTU
1000VT	NATURAL	MILLIVOLT	25000 BTU
1000VT	PROPANE	120 VOLT	25000 BTU

MANIFOLD PRESSURE	•NATURAL GAS •PROPANE GAS	3.5 W.C. 11.0 W.C.
GAS INLET	½" NPT	½" NPT
MINIMUM SUPPLY PRESSURE	•NATURAL GAS •PROPANE GAS	4.5 W.C. 12.0 W.C.
MAXIMUM SUPPLY PRESSURE	½ PSIG	½ PSIG
ORIFICE SIZE	•NATURAL •PROPANE(0-2000ft) •PROPANE(2000-4500ft.)	36 55 56

OPERATING AND MAINTENANCE INSTRUCTIONS

This gas appliance should be installed by a qualified installer in accordance with local building codes and with current CAN/CGA - B149(.1 or .2) installation codes for Gas Burning Appliances and Equipment.

WARNING: WHEN PURGING THE GAS LINE, THE GLASS FRONT MUST BE REMOVED.

FOR SAFE INSTALLATION AND OPERATION NOTE THE FOLLOWING:

This appliance gives off high temperatures and should be located out of heavy traffic areas and away from furniture and draperies.

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

Under no circumstances should this appliance be modified. Parts that have to be removed for servicing should be replaced prior to operating this appliance again.

Installation and any repairs to this appliance should be done by a qualified service person. A professional service person should be called to inspect this appliance annually. Make it a practice to have all of your gas appliances checked annually.

Never use your gas fireplace as a cooking device.

The CV Burner/Log Assembly has been engineered and permanently adjusted for proper flame control. **DO NOT ALTER GAS ORIFICE.**

Periodically remove the logs from the grate assembly and vacuum any loose particles from the grate and burner areas.

IF YOUR APPLIANCE IS EQUIPPED WITH 120 VOLT HSI, CAUTION MUST BE USED WHEN VACUUMING AS NOT TO TOUCH THE HSI ROD

Control compartments, burners and air passages in this appliance should be kept clean and free of dust and lint. Make sure that the gas valve and pilot light are turned off before you attempt to clean this unit.

The venting system (chimney) of this appliance should be inspected at least once a year and if needed, your venting system should be cleaned.

Keep the area around your appliance clear of combustible materials, gasoline and other flammable vapours and liquids.

This appliance should not be used as drying rack for clothing, nor should Christmas stockings or decorations be hung near it.

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

NOTE: It is normal for your gas fireplace to give off some odour the first time it is burned. This is due to the curing of the paint and any undetected oil from the manufacturing process.

Please ensure that your room is well ventilated - open all windows.

It is recommended that you burn your gas fireplace for at least four (4) hours the first time you use it without the fan on.

GENERAL GLASS INFORMATION

GLASS CLEANING

It will be necessary to clean the glass periodically. During start-up, condensation, which is normal, forms on the inside of the glass and causes dust, lint etc. to cling to the glass surface. Also, initial paint curing can deposit a slight film on the glass. It is therefore recommended that initially the glass be cleaned two or three times with non-abrasive common household cleansers and warm water. After that, the glass should be cleaned two or three times a season depending on the circumstances.

CAUTIONS AND WARNINGS

DO NOT CLEAN WHEN THE GLASS IS HOT.

THE USE OF SUBSTITUTE GLASS WILL VOID ALL PRODUCT WARRANTIES.

CARE MUST BE TAKEN TO AVOID BREAKAGE OF THE GLASS.

DO NOT OPERATE THIS FIREPLACE WITHOUT THE GLASS FRONT OR WITH A BROKEN GLASS FRONT.

DO NOT STRIKE OR ABUSE GLASS

GLASS REPLACEMENT

REPLACEMENT GLASS FOR BOTH DIRECT VENT UNITS

Only Robax ceramic or coated Neoceram glass may be used for replacement. Must be minimum 5mm thick.

REMOVAL OF THE GLASS DOOR

1. Remove the two screws located behind upper grill.
2. To remove, pull frame forward and lift from bottom door retainer. Caution: when removing door on 1000VT model care must be taken not to drop door as there is no bottom door retainer support.
3. To replace glass, clean all materials from door frame. Using a high heat silicone (temperature-resistant to 500°F (260°C)) apply a bead of approximately ¼" to all four sides of frame and insert glass with new gasket. Frame should be on flat surface, with a small amount of weight pressing glass into silicone. Let dry approximately 15 to 20 minutes. The door can be re-installed by reversing Steps 1 & 2.

LOG ASSEMBLY & FAN KIT

LOG ASSEMBLY

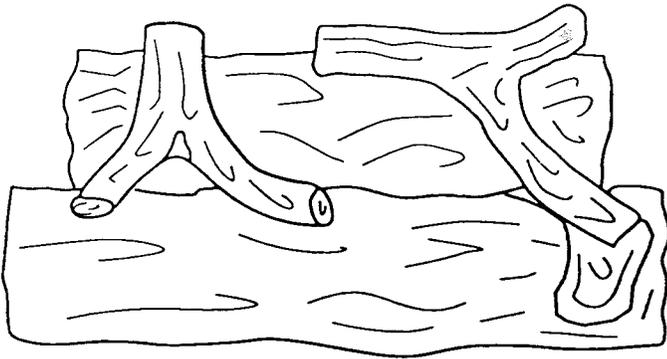
1. Remove glass door by removing two (2) screws behind upper grills and lift off bottom door retainer.
2. Remove logs from carton (4) and inspect.
3. Rear log should be installed into rear log holder (located

and attached to back of firebox above and to the rear of the burner pan). Insert 1 x 6 log partition into appropriate slot.

4. The front log should be placed on the burner pan with slot in log inserted over flame spreader log bracket.

5. Top log can then be placed in their appropriate slots provided in pattern on back and front logs.

- Purge lines and test pilot operation.
- Replace glass door. The door must be installed before operating the fireplace.



FAN KIT

INSTALLATION FOR MODELS 100DVTB, 100DVB & 1000VT

- Open and remove lower access grill by removing torsion spring and sliding the grill to either left or right and lifting up.
- Remove control panel by removing 2 - 1/4" bolts.
- Install 2 screws and washers provided for each fan into the holes provided in the wiring harness channel. (Do not tighten screws at this point - leave as loose as possible)
- Insert fans into grill opening and slide into position (fans pointing to the back of the unit) over the previously installed screws and washers. Be certain that the wires from the fans are running into the wiring harness channel.
- Tighten fan screws.
- Connect ends of wiring harness to the fans utilizing the terminals pre-installed on both the fans and wiring harness.
- Align the wiring harness in the wiring harness channel so the "T-Branch" is located in the notch of the channel.
- Push the wiring harness into the channel along with the connections to the fans.

RECOMMENDED MAXIMUM LEAD LENGTH (DOUBLE WIRE) WHEN USING WALL SWITCH OR THERMOSTAT	
WIRE SIZE	MAX. LENGTH
14 GA.	100 FT.
16 GA.	64 FT.
18 GA.	40 FT.
20 GA.	25 FT.
22 GA.	16 FT.

9. Attach the ground wire from the wiring harness to the channel through the eyelet utilizing the screw and hole provided.

10. Have wiring harness and variable speed wall switch hooked up to 120V power source by a qualified electrician to appropriate electrical codes.

11. Install deflectors/fan shields supplied through 3 pre-punched holes on each fan using the three self tapping screws included.

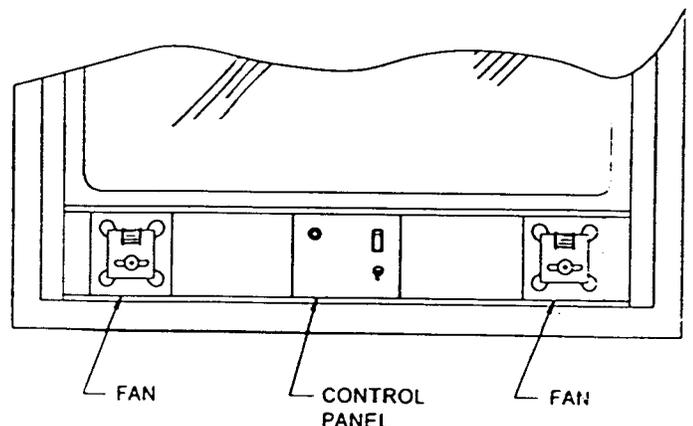
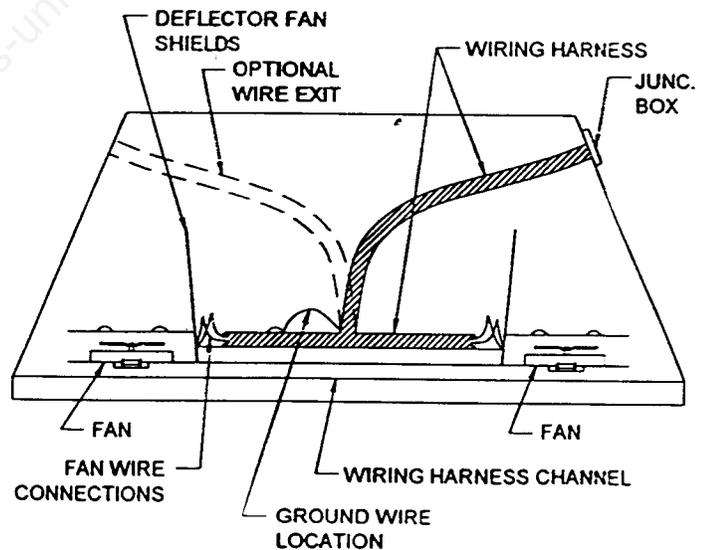
12. Re-install control panel and lower access grill.

ELECTRICAL SERVICES

All optional fan kits are equipped with a 120V, 60Hz blower.

NOTE: All electric connections are to be made in accordance with CSA Standard C22.1 - Canadian Electrical Code part 1 or with the National Electrical Code, ANSI/NFPA 70 (latest addition) and/or in accordance with local codes.

CAUTION: SHOULD THIS FAN REQUIRE SERVICING, THE POWER SUPPLY MUST BE DISCONNECTED.



MILLIVOLT SYSTEM, LIGHTING, & BURNER CONTROL

LIGHTING INSTRUCTIONS

1. Open access grill on bottom.
 2. Push in gas control knob slightly and turn clockwise to "OFF". NOTE: Knob can not be turned from "PILOT" to "OFF" unless knob is pushed in slightly. Do not force.
 3. Wait five (5) minutes to clear out any gas remaining in burner component
 4. Turn knob on gas control counter-clockwise to "PILOT".
 5. Push in control knob all the way and hold in. Immediately light the pilot with piezo-electric igniter. Continue to hold the control knob and it will pop back up. Pilot should remain lit. If it goes out, repeat steps 2 through 5.
- If knob does not pop up when released, stop and immediately call your service technician or gas supplier.
 - If pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
6. Turn gas control knob counterclockwise to "ON".
 7. Turn on main burner rocker switch provided in instrument panel.
 8. Close control access grill.

NOTE: The gas control is designed to be either fully on or off. Never use control to vary flame height, etc.

TO TURN OFF GAS APPLIANCE

Turn off all electric power to the appliance if service is to be performed. Open control access grill.

Push in gas control knob slightly and turn clockwise to "OFF". Do not force. Close control access grill.

BURNER ON/OFF CONTROL

All models are supplied with a wall switch that turns the main burner on or off. Because your fireplace is equipped with an "On/Off" wall switch, in the valve compartment, the main burner may not come on when you turn the valve to "ON" position and press switch.

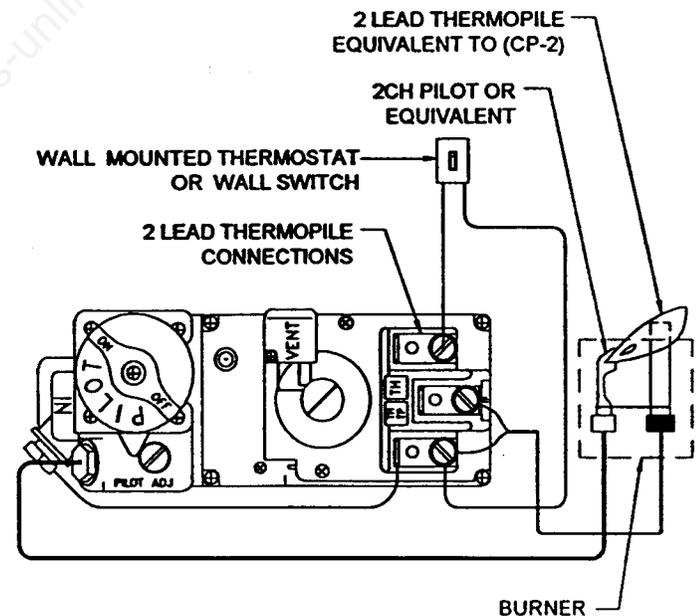
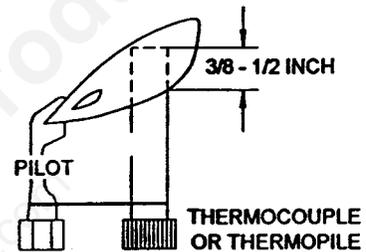
The gas valve on these units may be automatically operated by replacing this wall switch with a wall thermostat suitably located to sense ambient temperature.

The gas valve on these units may be automatically operated by replacing this rocker switch with a wall thermostat suitably located to sense ambient temperature. (Type level temperature 24A05A-1 White Rogers)

750 MV wall thermostat
Robertshaw CH66, CH250, CH260
Honeywell TS822A1187
White Rogers IF30604, IE30609

PILOT BURNER ADJUSTMENT

1. Remove pilot adjustment cap.
2. Adjust pilot screw to provide proper sized flame
3. Replace pilot adjustment cap.
4. Leak Test



OPTIONAL WIRING FOR INSTRUMENT PANEL

- (A) To instrument panel rocker switch
- (B) To wall switch remote (mounted)
- (C) To wall thermostat 120 VOLT VALVE SYSTEM USING H.S.T.

CAUTION: DO NOT WIRE 120 VOLT POWER TO MILLIVOLT SWITCHES OR THERMOSTATS.

FAIL SAFE FEATURES OF H.S.I. GAS LOG SYSTEM

MOMENTARY POWER INTERRUPTION

If power is interrupted, all valves will be de-energized and will drop out. The system will close. Upon resumption of power, (the flame switch contacts still in on position) the system will automatically now go through the normal cycle for re-ignition.

MOMENTARY GAS INTERRUPTION (PRESSURE LOSS)

If gas is momentarily interrupted, the system will close. Upon resumption of gas pressure, the system will go through the normal cycle for re-ignition as in Momentary Power Interruption.

IGNITION FAILURE

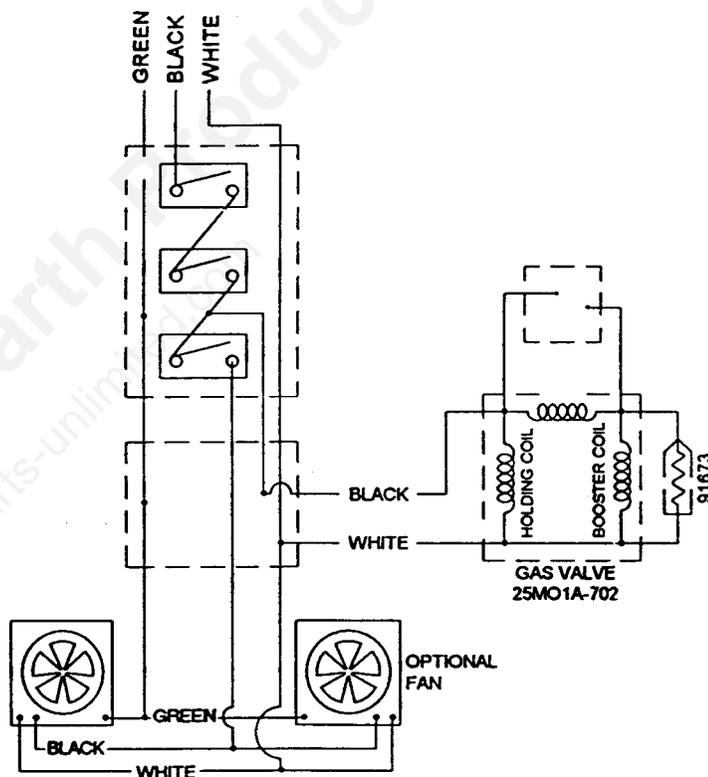
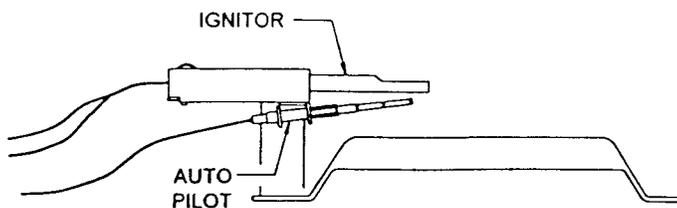
If a flame is not established as flame switch contacts, flip to open side. The secondary valve will remain open until the flame switch contacts will flip back to closed side at which time the secondary valve will re-close. Flame switch will continue to re-cycle the igniter and secondary valve until the problem is corrected or timing device locks out.

FLAME FAILURE

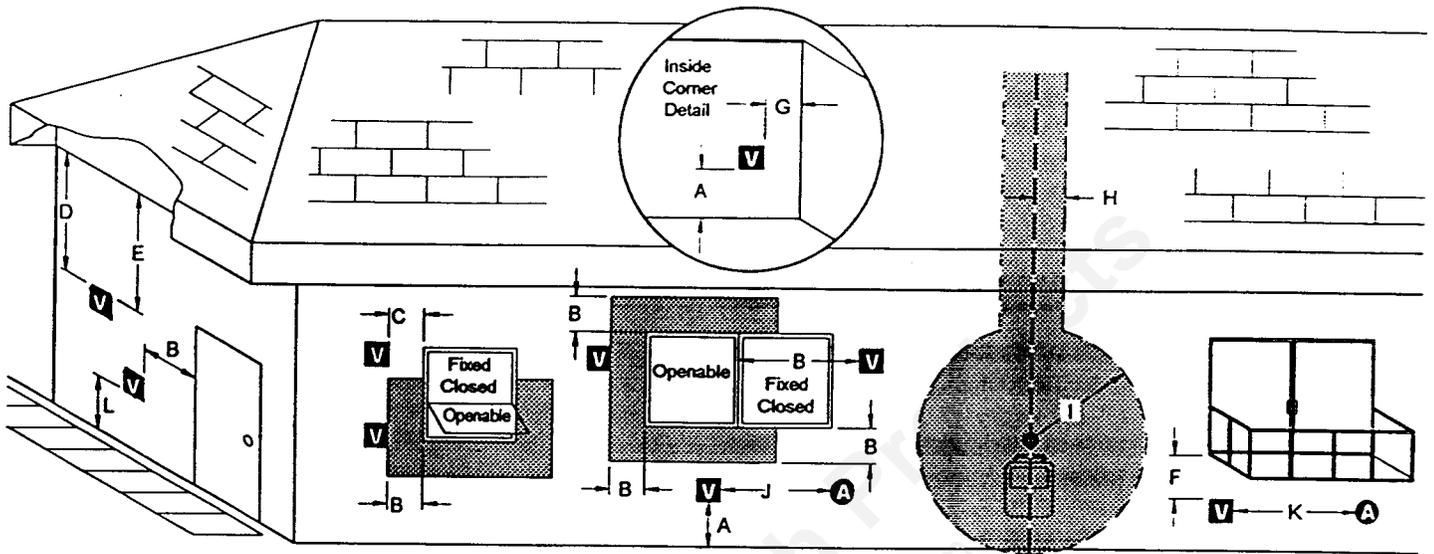
In the event of a flame failure, the flame switch contacts will flip back to closed position in approximately 25-30 seconds. The secondary valve will close (split-coil valve will stay open) and a try for re-ignition will be made as a NORMAL CYCLE.

DAMAGED IGNITER (BROKEN OPEN)

If silicon carbide igniter is damaged - open circuit, the system will not operate. Flame switch will remain in closed position, secondary coil closed.



VENT TERMINATION



V VENT TERMINAL

A AIR SUPPLY INLET

 AREA WHERE TERMINAL NOT PERMITTED

A - Clearance above grade, veranda, porch, deck, or balcony 12 inches (30cm) minimum.₁

G - Clearance to inside corner - 14" (35.5cm).

B - Clearance to window or door that may be opened. 12 inches (30cm) minimum for appliances 100 000Btuh (30 kW) and lower.

H - Not to be installed above a meter/regulator assembly within 3 feet (90cm) horizontally from the center line of the regulator.

C - Clearance to permanently closed window minimum 12 inches (30cm) recommended to prevent condensation on window.

I - Clearance to service regulator vent outlet 6 feet (1.8m) minimum.₁

D - Vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 2 feet (60cm) from the center line of the terminal. 18 inches (46cm) minimum.

J - Clearance to non-mechanical air supply inlet to building or the combustion air inlet to any other appliance 12 inches (30cm) minimum for appliances 100 000Btuh (30kW) and lower.₁ 36 inches (90cm) minimum for appliances greater than 100 000Btuh (30kW).

E - Clearance to unventilated soffit 12 inches (30cm) minimum.

K - Clearance to a mechanical air supply inlet 6 feet (1.8m) minimum.₁

F - Clearance under veranda, porch, deck or balcony 12 inches, (30cm) minimum.₂

L - Clearance above paved sidewalk or a paved driveway located on public property 7 feet (2.1m) minimum.₃

1 - As specified in CGA B149 Installation codes (1991).

2 - Only permitted if veranda, porch, deck, or balcony is fully open on a minimum to two sides beneath the floor.₁

3 - A vent shall not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.

NOTE: Local Codes or Regulations may require different clearances.

TERMINATION

It is imperative that the vent termination be located observing the minimum clearances as shown. There must not be any obstruction such as bushes, garden sheds, fences, decks or utility buildings within 24" from the front of the termination.

Do not locate termination where excessive snow or ice build-up may occur. Be sure to check vent termination area after snow falls and clear to prevent accidental blockage of venting system. When using snow blowers, make sure snow is not directed towards vent termination area.

GENERAL VENTING INFORMATION

The gas fireplace is approved to be vented either through the side wall or vertically through the roof.

Only venting components specifically approved and labelled for this fireplace may be used.

Minimum clearance between vent pipes and combustible materials is 1 inch (25 mm).

Venting terminal shall not be recessed into a wall or siding.

SIDE WALL VENTING

Location of vent termination is imperative to be located observing the minimum clearances as shown on the previous page.

VENTING ROUTES AND COMPONENTS

Since it is very important that the vent 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 graph showing the relationship between vertical and horizontal side wall venting will help to determine the various vent lengths.

The maximum horizontal vent run with the 90 degree elbow attached to the fireplace flue outlet is 3 feet (91 cm) Figure 1. The maximum horizontal vent run is 10 feet (305 cm) when the vertical rise is 8 feet (244 cm) Figure 2. Note: 1" vertical rise is required for every 12" of horizontal run.

The maximum number of 90 degree elbows per side wall installation is one (1).

The maximum number of 45 degree elbows per side wall installation is two (2). These elbows can be installed in either the horizontal or vertical run.

Maximum vertical run is 31 feet (945 cm)

Special Note: For each 45 degree elbow installed in the horizontal run, the length of the horizontal run must be reduced by 18" (45 cm).

This does not apply if the 45 degree elbows are installed on the vertical part of the vent system.

Example: If, according to the chart, the length of the horizontal run is 10 feet, and two 45 degree elbows are required, the horizontal run length must be reduced to 7 feet.

FIG. 1

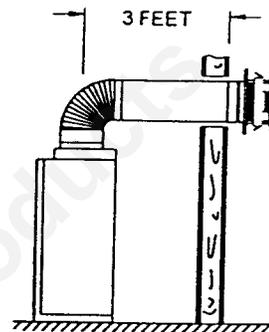
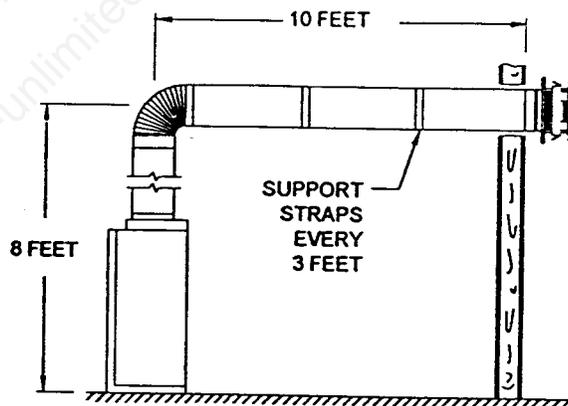


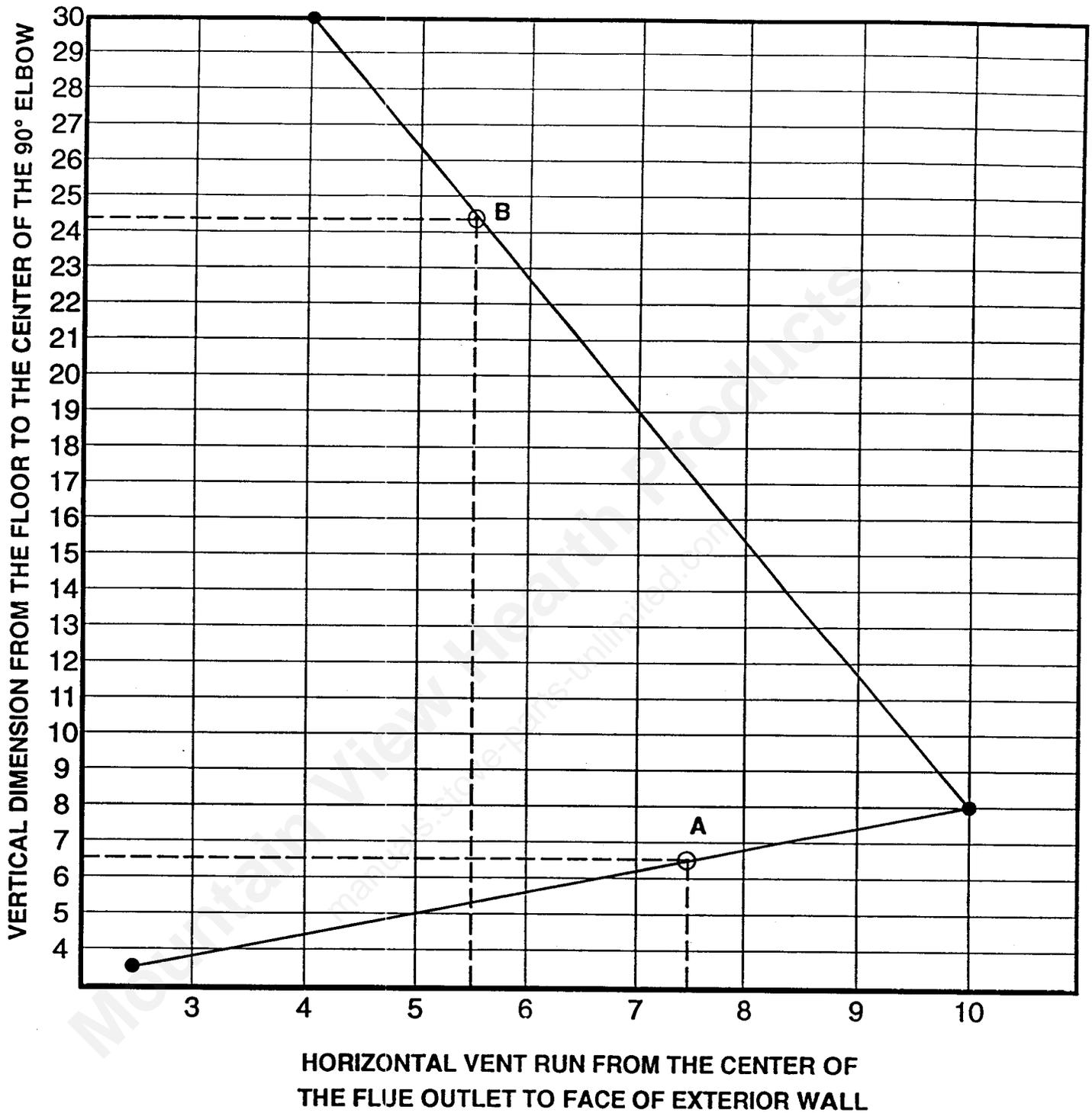
FIG. 2



IMPORTANT: ALWAYS LOCATE THE FIREPLACE IN SUCH A WAY THAT A MINIMUM OF OFFSETS AND/OR HORIZONTAL RUNS ARE REQUIRED. 1" VERTICAL RISE IS REQUIRED FOR EVERY 12" HORIZONTAL RUN.

HOW TO USE THE VENT GRAPH

1. Determine the height of the centre of the vent termination elbow and mark a horizontal line until it intersects 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.



Note: Horizontal run is determined by selecting the vertical run first.

Example A:

If the vertical dimension from the floor of the fireplace is 6.5ft, the horizontal run to the wall flange of the vent termination must not exceed 7.5ft.

Example B:

If the vertical dimension from the floor of the fireplace is 24.5ft, the horizontal run to the wall flange of the vent termination must not exceed 5.5ft.

NOTE: The final location of the fireplace must be such that the horizontal vent dimensions fall within those stated on the graph. The Maximum Vertical vent run is 31feet(945cm)

IMPORTANT: Minimum clearance between vent pipes and combustible materials is 1 inch(25mm).

GENERAL INSTALLATION INFORMATION

GENERAL INFORMATION ON ASSEMBLING THE VENT PIPES

Before joining elbows and pipes, apply a bead of high temperature silicone sealant (GE RTV 106 or Loctite RTV 81585) to crimped end of elbow or pipe. Attach four inch (4") flue pipe to fireplace with silicone and screws first, then attach the eight inch (8") flange ring to fireplace with silicone and screws, and then attach the eight inch (8") pipe by the same method. Join pipes and secure joints with three (3) sheet metal screws (see diagram).

FRAMING DIMENSIONS

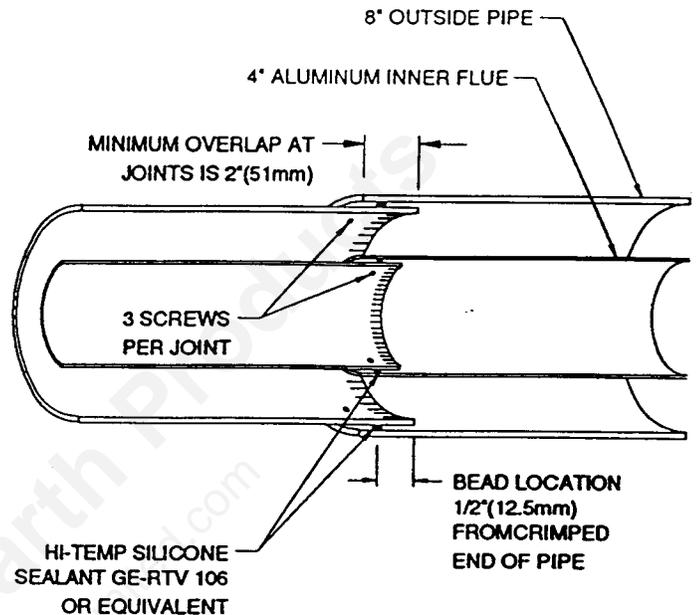
• COMBUSTIBLE WALLS:

Cut a 12-inch (12") 305mm minimum hole through the exterior wall and frame as shown next page.

• NON-COMBUSTIBLE WALLS:

Hole opening must be 8.5" or 216mm in diameter.

TYPICAL TELESCOPIC PIPE SECTION



NOTE: IT IS IMPORTANT THAT ON ALL CONNECTIONS (INCLUDING TELESCOPIC LENGTHS) THE INNER LINER AND THE OUTER CASING ARE BOTH CAULKED WITH SILICONE.

INSTALLATION OF TOP VENTS

STEP 1

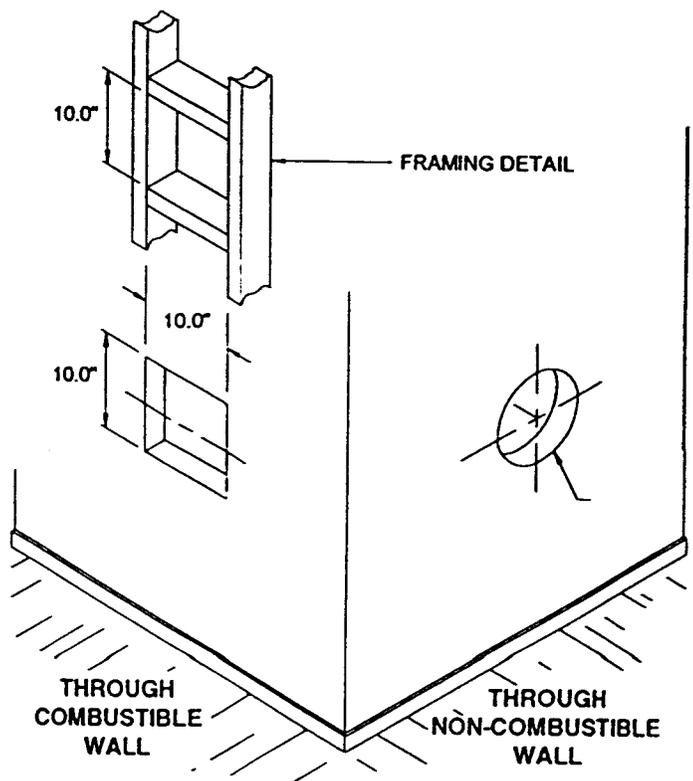
Locate vent opening on the wall. Cut a hole through the exterior wall allowing for a 10" x 10" minimum inside framing or an 8½" diameter hole if venting through a non-combustible wall.

Place fireplace into position. Measure height from fireplace vent outlet to centre of wall opening as shown in Fig 1.

Before joining elbows and pipes, apply a bead of high temperature silicone sealant (GE RTV 106 or Loctite RTV 81585) to crimped end of elbow or pipe. Attach four inch (4") flue pipe to fireplace with silicone and screws first, then attach the eight inch (8") flange ring to fireplace with silicone and screws, and then attach the eight inch (8") pipe by the same method. Join pipes and secure joints with three (3) sheet metal screws.

STEP 2

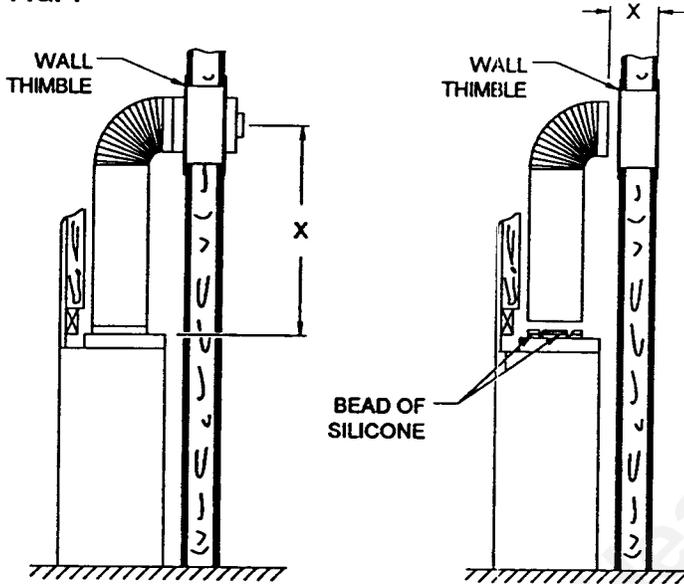
Using appropriate telescoping pipe sections, telescope to necessary length and install. The sections which go through the wall should also be siliconed and screwed on and can be cut to suit if necessary. Measure the horizontal length requirement, i.e. from the elbow to the outside finish wall as shown in Fig 1.



STEP 3

Mount vent termination and seal to wall using caulking around the wall thimble to weatherproof. After installing the vent termination, double check to make sure the pipe extends properly into the vent termination.

FIG. 1



STEP 4

Support horizontal pipes every three (3) feet (91 cm) with metal pipe straps. Re-check fireplace to make sure it is levelled and properly positioned, and nailed or screwed to the floor.

FIG. 2

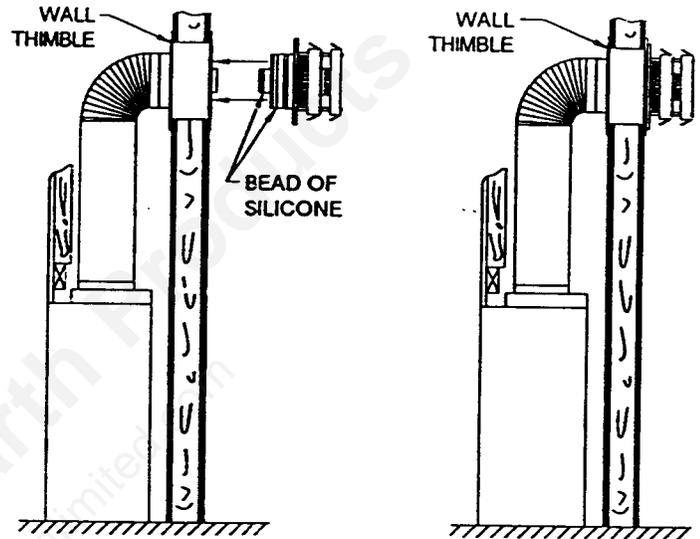
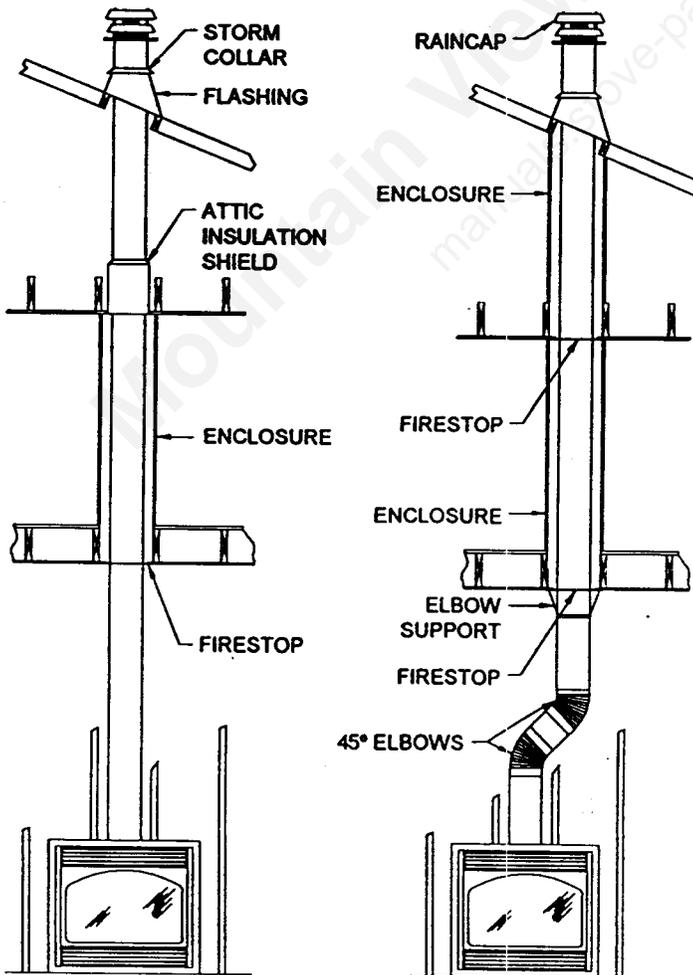


FIG. 3



VENTING STRAIGHT UP THROUGH ROOF

An Attic Insulation Shield must be installed where the vent passes from a lower living space into an attic space where the chimney is not enclosed. It is designed to keep insulation materials away from the chimney. See figure 3.

When installing the Attic Insulation Shield where the chimney passes from a living space to an attic space, install the shield from below and nail in place using 1" spiral nails.

A firestop must be installed on the bottom side of the joists when passing through a ceiling or floor. If an attic insulation shield is to be used, a firestop is not required.

One pair (two) 45° elbows may be used to provide an offset in order to avoid cutting of joists and to clear other obstructions.

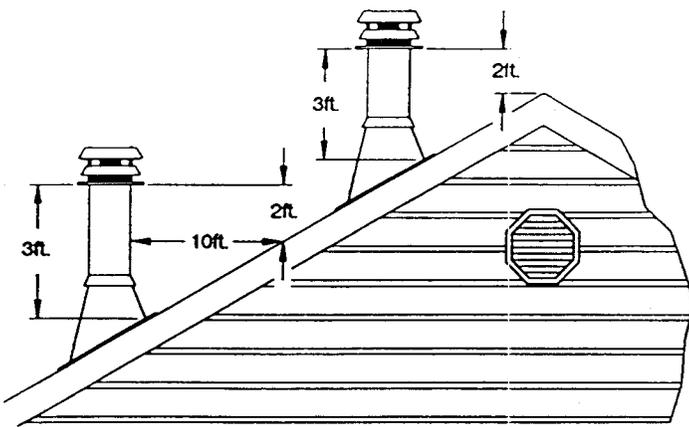
Maximum horizontal offset when using 45° elbows is 6 feet.

When using 45° elbows, an elbow support is required directly above the highest elbow.

Never install an elbow in a joist area. Vent sections must pass vertically through framed joist areas.

Maximum vertical height of vent sections should not exceed 12 feet.

Authorities require that the venting extend not less than 3 feet above the highest point where it passes through the roof of a building and not less than 2 feet above any portion of the building within 10 feet. See figure below.



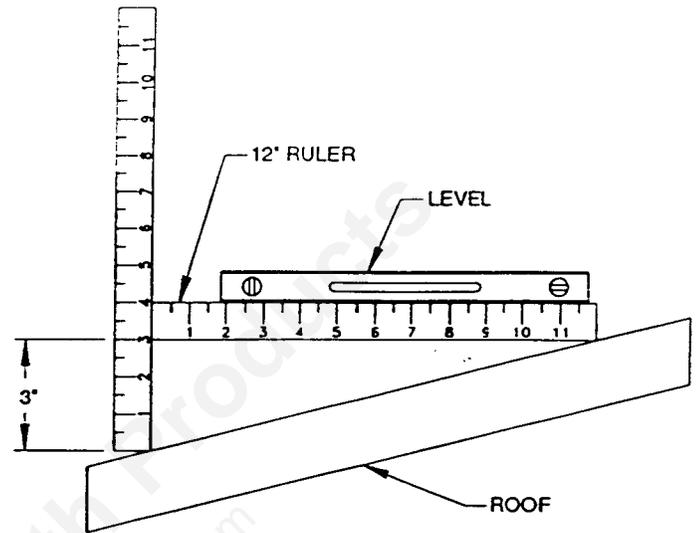
ROOF FLASHING

Ensure that you have the proper roof flashing by checking your roof pitch using a level and two rulers, or by using a roof pitch card. See figure over.

Slide a Roof Flashing suitable to your roof slope over the vent. Place the edge of the flashing plate that will be on the higher part of the roof slope under the shingles. Both the sides and the lower edge lay on top of the shingles.

NOTE: AT THE TOP EDGE OF THE FLASHING PLATE, LIFT THE SHINGLES AND NAIL THE PLATE TO THE ROOF DECK, THEN CEMENT THE SHINGLES TO THE PLATE WITH A SUITABLE WATERPROOF MASTIC.

Ensure that the chimney is plumb. Square up the flashing plate and nail in place to the roof deck. Use 12 nails with neoprene washers or cover the heads with a suitable waterproof mastic.



Wrap the storm collar around the vent above the flashing. Secure the ends together loosely with nut and bolt supplied. Slide the collar down the vent until it comes in contact with the flashing. Tighten the bolt and seal the Storm Collar to the vent with a suitable waterproof non-combustible mastic.

The flashing and storm collar should be painted to match the roof shingles. This will extend its life and improve the appearance. Clean, prime and paint with suitable painting products.

Continue adding lengths of vent until the proper height is achieved (See diagram left). Slide raincap into vent.

INSTALLATION OF BACK VENTS

GENERAL BACK VENTING SPECIFICATIONS

Maximum vent length:	18"
Maximum number of elbows:	1 - 45 degree elbow
Maximum wall thickness:	20" (18" with elbow)

NOTE: MINIMUM CLEARANCE BETWEEN VENT PIPES AND COMBUSTIBLE MATERIALS IS ONE INCH OR 25mm

STEP 1

Locate vent opening on the wall. **COMBUSTIBLE WALLS** cut a 10" x 10" (254mm) minimum hole and frame as shown. **NON-COMBUSTIBLE WALL** hole opening must be 8.5" (216 mm) in diameter.

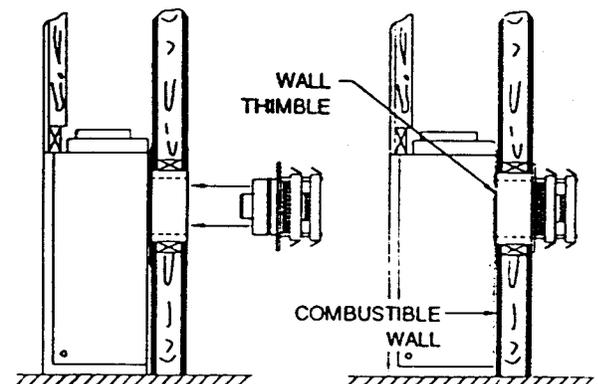
STEP 2

Place fireplace into place and attach vent pipes, four inch (4") first. Make sure pipes are pushed on securely.

STEP 3

Measure wall thickness. Mark pipes and cut or use proper telescoping length to desired lengths and secure with silicone and screws as described in General Installation Information on page 12. Pipes should be flush with outside wall. See figure below.

FIG. 1



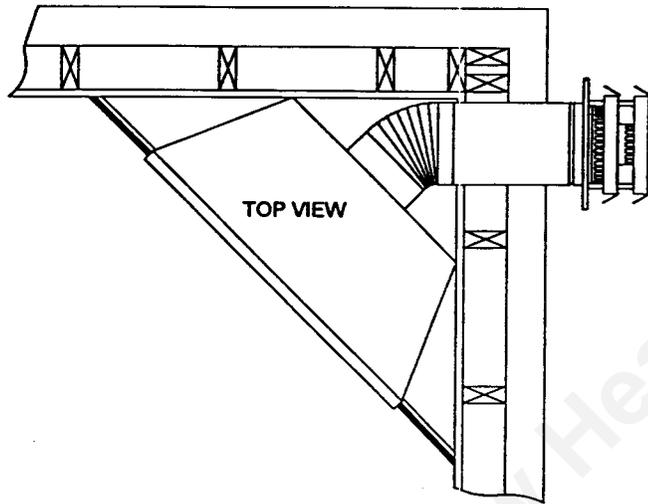
STEP 4

Install wall thimble. Place fireplace into place and secure to floor with nailing tabs.

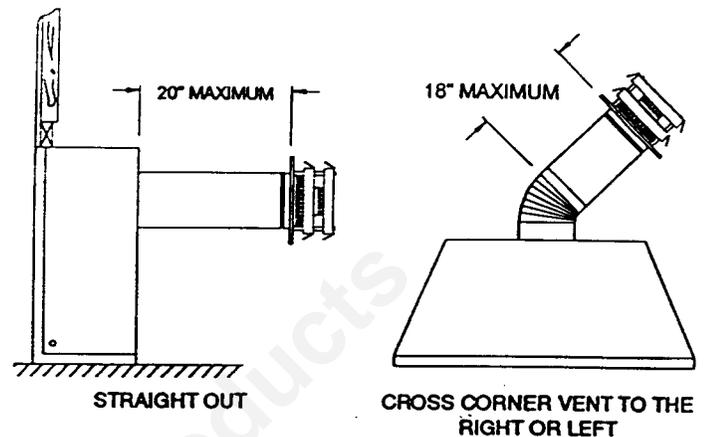
STEP 5

Mount vent termination, make sure 4" and 8" pipes are siliconed. Caulk around wall thimble to weatherproof.

CORNER INSTALLTION LOCATION



MAXIMUM PIPE LENGTHS ALLOWABLE



NOTE: When the fireplace is installed cross corner it is necessary to use a 45° Elbow Kit. The kit includes a 4" and 8" elbow and a termination vent.

REPAIR PARTS LIST

All repair parts will be available from your dealer. When ordering, always give the Part Number and Description.

NOTE: When ordering control, orifices, burner assembly, always specify NATURAL OR PROPANE GAS.

NATURAL GAS PT. #	PROPANE GAS PT. #	PART DESCRIPTION
120	120	Flue block off cap
121	121	Air cavity block off cap
122	122	8" outside air adaptor
125	125	Instrument panel
129	129	Explosion disk A & B
134	134	Gasket for explosion damper
200NG	200PG	Burner c/w orifice
201	201	Gas valve 120 volt WR
202	202	Autopilot frame switch
203	203	Igniter
204	204	Pressure switch
205	205	Millivolt (NG-R.S.)
206	206	Reg. assy. kit - propane
207	207	Pilot & bracket s/w spark
208	208	Thermopile
213	213	Igniter bracket 120 volt system
214	214	Piezoelectric spark
215	215	Pal nut for Piezoelectric
216	216	Switch - on/off rocker
218	218	Remote on/off wall switch
219	219	Wiring sleeve gasket

NATURAL GAS PT. #	PROPANE GAS PT. #	PART DESCRIPTION
301	301	Door straight-model DVTB,DVB
302	302	Door arch-model DVTB,DVB
303	303	Door straight-model VT
304	304	Door arch-model VT
305	305	Glass - robax or coated neoceram
306	306	Gasket - door
400	400	Grills (specify top or bottom) (antique,brightbrass,chrome)
601	601	Brick-back
602	602	Brick-right side
603	603	Brick-left side
701	701	Log-front
702	702	Log-back
703	703	Log-top left facing
704	704	Log-top right facing
800	800	Fan blower unit complete
801	801	Fan electric
802	802	Fan housing
803	803	Wiring harness
804	804	Switch variable-blower mount
805	805	Switch variable-wall mount

TROUBLE SHOOTING THE GAS CONTROL SYSTEM

**WARNING: BEFORE DOING ANY GAS CONTROL SERVICE WORK,
REMOVE THE GLASS FRONT.**

Note: Before troubleshooting the gas control system, be sure external gas shut off is in the "On" position.

PROBLEM	POSSIBLE CAUSES	CORRECTIVE ACTION
Sparkigniter will not light.	Defective or misaligned electrode at pilot	Check for spark at electrode and pilot; if no spark and electrode wire is properly connected, replace igniter.
	Defective igniter (push-button)	Using a match, light pilot. If pilot lights, turn off pilot and push the red button again. If pilot will not light - check gap at electrode and pilot should be 1/8" to 1/4" to have a strong spark.
Pilot will not stay lit after carefully following lighting instructions.	Defective pilot generator (thermopile), remote wall switch, or flame switch where applicable)	<p>Check pilot flame. Must impinge on thermopile. Clean and/or adjust pilot for maximum flame impingement on thermopile.</p> <p>Be sure wire connections from thermopile at gas valve terminals are tight and thermopile is fully inserted into pilot bracket.</p> <p>One of the wall switch wires may be grounded. Remove wall switch wires from valve terminals if pilot now stays lit, trace wall switch wiring for ground. May be grounded to appliance or gas supply.</p> <p>Check thermopile with millivolt meter. Take reading at thermopile terminals of gas valve. Should read 325 millivolts minimum while holding valve knob depressed in pilot position and wall switch "off". Replace faulty thermopile if reading is below specified minimum.</p>
	Defective valve magnet	Turn valve knob to "ON", place wall switch to "ON". Millivolt meter should read greater than 100mV. If the reading is okay and the burner does not come on, replace the gas valve.
	Defective flame switch (Direct Vent Fireplaces only)	Check all connections and try. If still not operating, disconnect lead between flame switch and valve operator. Then disconnect lead to pilot magnet and connect to valve operator terminal (TP, TH). If pilot stays lit, fault lies with flame switch. Check that bulb is in proper location. If still not working, replace flame switch (see drawing in manual for additional information).
Pilot burning, no gas to burner, Valve knob "ON", Wall Switch "ON".	Wall switch or wires defective.	Check wall switch and wires for proper connections. Jumper wire across terminals at wall switch. If burner comes on, replace defective wall switch. If okay, jumper wires across wall switch wires at valve. If burner comes on, wires are faulty or connections are bad.
	Thermopile may not be generating sufficient millivoltage	Re-check symptom #2.
	Plugged burner orifice	Check burner orifice for stoppage and remove.
	Defective automatic valve operator.	Remove wall switch wires from gas valve. Install jumper wires from top bottom terminals of gas valve. Turn valve to "On". If main burner does not light, replace valve.
Frequent pilot outage problem.	Pilot flame may be too low or blowing (high) causing the pilot safety to drop out.	Clean and/or adjust pilot flame for maximum flame impingement on thermopile.