City of Portland, Maine - Building or Use Permit Applicatio

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-871

Permit No:	Issue Date:	CBL:
05-1843	PERMIT ISSUED	392 A007001

Location of Construction:	Owner Name:	Owner Address:	Phone:
140 HOPE AVE	SHAW LARRY R & KEVIN L SH	23 LONGWOODS RD	
Business Name:	**Contractor Name:**	**Contractor Address:**	**Phone**
	Kevin Shaw	140 Hope Ave Portland	2077806156
Lessee/Buyer's Name	**Phone:**	**Permit Type:**	**Zone:**
		HVAC	R-2

JAN 2 4 2006

CITY OF PORTLAND

Past Use:	Proposed Use:	Permit Fee:	Cost of Work:	CEO District:
Single Family	Single Family install a gas fireplace	$30.00	$500.00	5

FIRE DEPT:	INSPECTION:
☐ Approved ☐ Denied	Use Group R3 Type: 5B
Signature	Signature:

Proposed Project Description:
Install a gas fireplace

Action: ☐ Approved ☐ Approved w/Conditions ☐ Denied

Signature: Date:

Permit Taken By:	Date Applied For:
dmartin	12/15/2005

Zoning Approval

Special Zone or Reviews	Zoning Appeal	Historic Preservation
☐ Shoreland	☐ Variance	☒ Not in District or Landmark
☐ Wetland	☐ Miscellaneous	☐ Does Not Require Review
☐ Flood Zone	☐ Conditional Use	☐ Requires Review
☐ Subdivision	☐ Interpretation	☐ Approved
☐ Site Plan	☐ Approved	☐ Approved w/Conditions
Maj ☐ Minor ☐ MM ☐	☐ Denied	☐ Denied
Date: 1/12/06	Me:	Date:

CERTIFICATION

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter **all** areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE **OF** APPLICANT ADDRESS DATE PHONE

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE DATE PHONE

FILL IN AND SIGN WITH INK

392 H 007

APPLICATION FOR PERMIT
HEATING OR POWER EQUIPMENT

To the **INSPECTOR OF BUILDINGS, PORTLAND, ME.**

The undersigned hereby applies for a permit to install the following heating, cooking or power equipment in accordance with the Laws of Maine, the Building Code of the City of Portland, and the following specifications:

Location / CBL 0 Hope Ave Use of Building _____ Date Dec 15 2005

Name and address of owner of appliance KEVIN SHAW 146 HOPE AVE PORTLAND ME 04103

Installer's name and address KEVIN SHAW 146 HOPE AVE PORTLAND ME 04103

Telephone 780 6156

Location of appliance:

- ☐ Basement
- ☐ Attic
- O Floor
- O Roof

Type of Fuel:

- ☑ Gas
- ☐ Oil
- ☐ Solid

Appliance Name: EMPIRE / V. KING GAS FIREPLACE Gas Stove Top

U.L. Approved ☐ Yes ☐ No

Will appliance be installed in accordance with the manufacture's installation instructions? ☐ Yes O No

IF NO Explain: _____

The Type of License of Installer:

- ☐ Master Plumber # _____
- ☐ Solid Fuel # _____
- ☐ Oil # _____
- ☑ Gas # PNT1407
- ☐ Other _____

***Type* of Chimney:**

- O Masonry Lined
  Factory built _____
- O Metal
  Factory Built U.L. Listing # _____
- ☐ Direct Vent
  Type _____ uL# _____

Type of Fuel Tank

- ☐ Oil
- ☐ Gas

Size of Tank _____

Number of Tanks _____

Distance from Tank to Center of Flame _____ **feet.**

Cost of Work: $ 500.00

Permit Fee: $ 30.00

DEPT. OF BUILDING INSPECTION
CITY OF PORTLAND, ME
DEC 15 2005
RECEIVED

Approved

Fire: _____

Ele.: _____

Bldg.: _____

App d with liti

☐ *See* attached letter or requirement

_____ Inspector's Signature

_____ Date Approved

Signature of Installer Kevin Shaw

White - Inspection Yellow - File Pink - Applicant's Gold - Assessor's Copy

INSTALLATION

Framing and Finishing

1. Choose unit location.
2. Frame in fireplace with a header across the top. It is important to allow for finished face when setting the depth of the frame.
3. Attach fireplace to frame using adjustable frame. Preset depth to suit facing material (adjustable to 1/2", 5/8" or 3/4" depths).
4. Use **(8)** 1/2" hex-head screws supplied in hardware package, to screw through slotted holes in drywall strip and then screw into pre-drilled holes on fireplace side. Measure from face of fireplace to face of drywall strip to determine final depth.

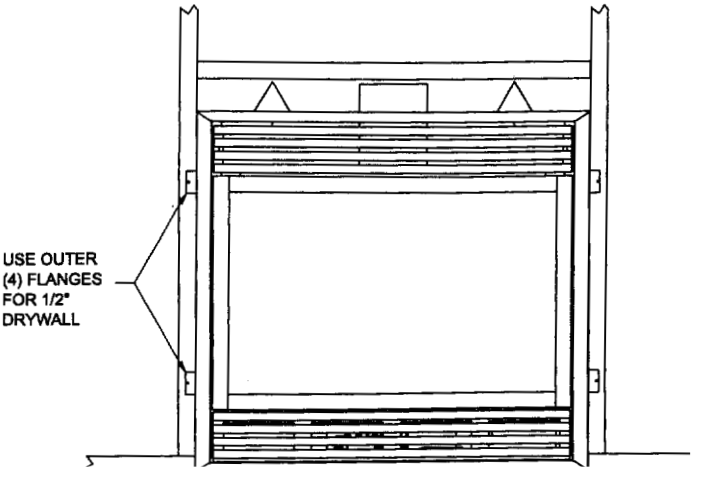


Figure **8**

Vent Pipe Clearance

Note: Maintain one inch (1") of clearance around vertical vent pipe. **See Fig. 9A.** For horizontal vent, maintain a minimum 1" clearance to the bottom and sides of the vent, and 3" clearance to combustibles above the vent pipe. **See Fig. 9B**

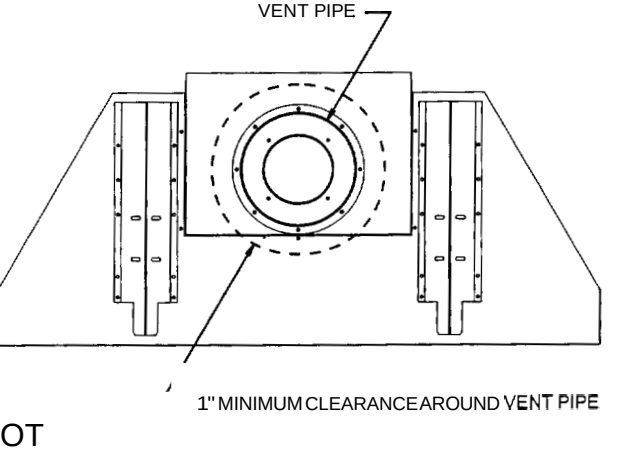


Figure **9A**

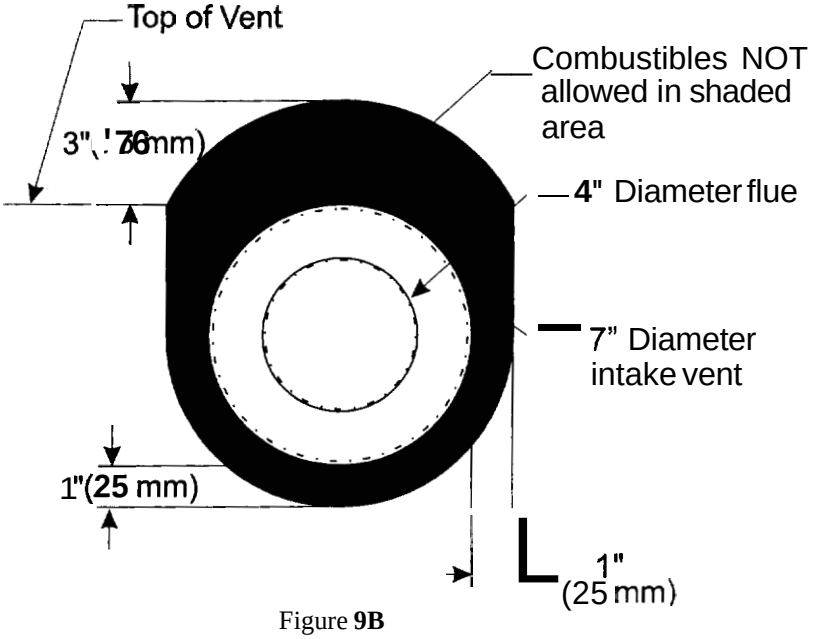


Figure **9B**

INSTALLATION (continued)

Blush Mount Mantel Installation (Figure 10)
The fireplacemust extend 314" beyond finished wall surface when using a flush mount mantel. Refer to Figure 10 to locate nailing flanges on fireplace sides. Mark and drill two (2) 118" holes into fireplace side to mount each nailing flange. Use eight (8) 1/2" hex-head screws supplied in hardware package to attach nailing flanges to fireplace sides.

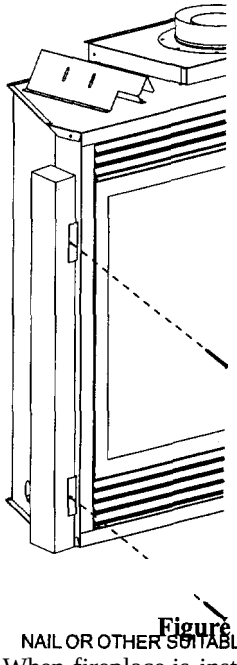


Figure 10

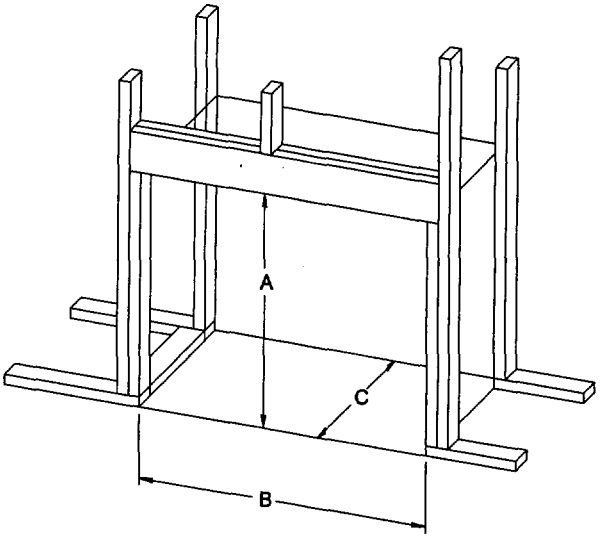
Attention: When fireplace is installed in optional full cabinet mantel or comer mantel the (4) four nailing flanges shown in Figure 10 will not be installed on the side of outer casing. The fireplace will be attached to the full cabinet mantel or comer mantel with the (2) two nailing flanges located on the top of the outer casing assembly.

Framing (Figure 11)
Fireplace framing can be built before or after the fireplace is set in place. Framing should be positioned to accommodate wall covering and fireplace facing material. The fireplace framing should be constructed of **2 x** 4 lumber or heavier. The framing headers may rest on the fireplace standoffs. Refer to Figure 11 for minimum framing dimensions.

CAUTION: MEASURE FIREPLACE DIMENSIONS AND VERIFY FRAMING METHODS,AND WALL COVERING DETAILS BEFORE FRAMING CONSTRUCTION BEGINS.

Framing dimension " A **includes a three inch clearance for standoffs 0n firebox. After installing firebox into framing, the finished wall surface must cover the three** inch opening above the firebox.

Note: For finishing to top of fireplace, refer to Figure 12.



	DVD32	DVD36	DVD42	DVD48
"A"	35 3/4" (908mm)	35 3/4" (908mm)	37 3/4" (959mm)	37 3/4" (959mm)
"B"	34 3/8" (873mm)	37 3/8" (949mm)	43 318 (1102mm)	49 3/8" (1254mm)
"C"	16 3/8" (416mm)	16 3/8" (416mm)	16 3/8" (416mm)	16 3/8" (416mm)

Figure 11

Attention: Add 3-3/4" **to** "A" dimensions when using a flush mantel base.

Attention: If a base or mantel is not used and the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, it shall be installed on a metal or wood panel extending the full width and depth of the appliance. The vertical dimension in Figure 11 must be adjusted when a metal or wood panel is placed beneath the appliance.

Finishing (Figures 12 and 13)
Finish the walls with the material of your choice. Figure 3 on page 7 shows the minimum vertical and corresponding maximum horizontal dimensions of mantels or other combustible projections above the top front edge of the fireplace.
Only non-combustible materials may be used to cover the black fireplace front.

Warning: When finishing the fireplace never obstruct **or** modify the air inlet/outlet louvers in any manner. Provide adequate clearances around air openings into the combustion chamber.

Caution: If the joints between the finished wall and the fireplace surround (top and sides) are sealed, a 300°F minimum sealant material must be used. These joints are not required to be sealed. Only non-combustible material (using 300°F minimum adhesive if needed), can be applied as facing to the fireplace surround.

Flush Wall Installation

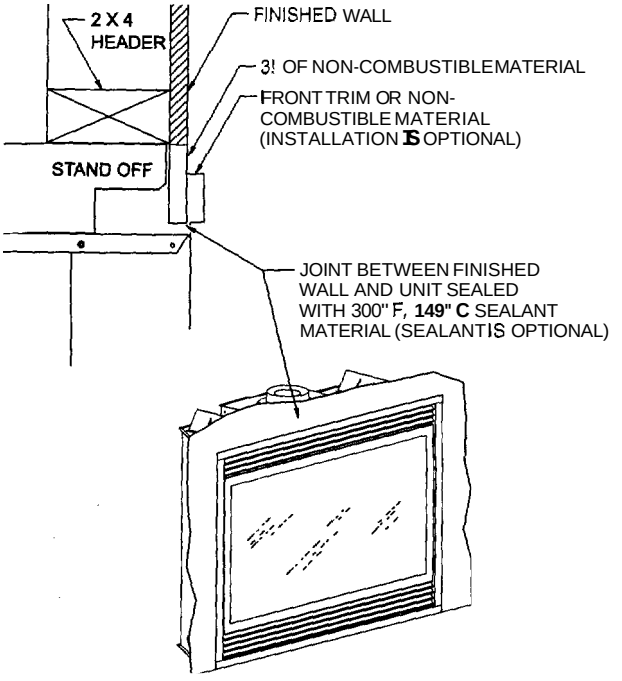


Figure 12

Combustible Surround Installation

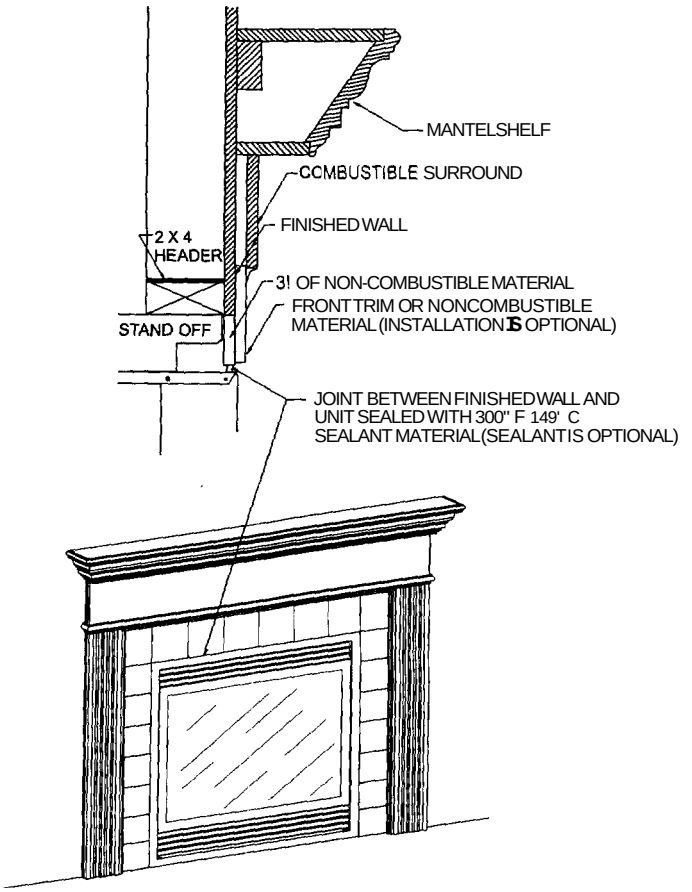


Figure 13

Attention: Cold climate installation recommendation: When installing this unit against a non-insulated exterior wall, it is mandatory that the outer walls be insulated to conform to applicable insulation codes.

Vent Runs (Figures 14, 15, 16, 17 and 18)

In planning the installation for the fireplace, it is necessary to install certain components before the appliance is completely positioned and installed. These include the direct vent system, gas piping for the appliance and the electrical wiring. (If the fan option is used.)

The appliance can be mounted on any of the following surfaces:

1. A flat, hard combustible (burnable) surface.
2. A raised wooden platform.
3. Four (4) corner supports. (Example: Four (4) concrete masonry blocks.) These supports must be positioned so they contact all four (4) perimeter edges on the bottom of the unit.

VERTICAL, 90° ELBOW WITH HORIZONTAL TERMINATION

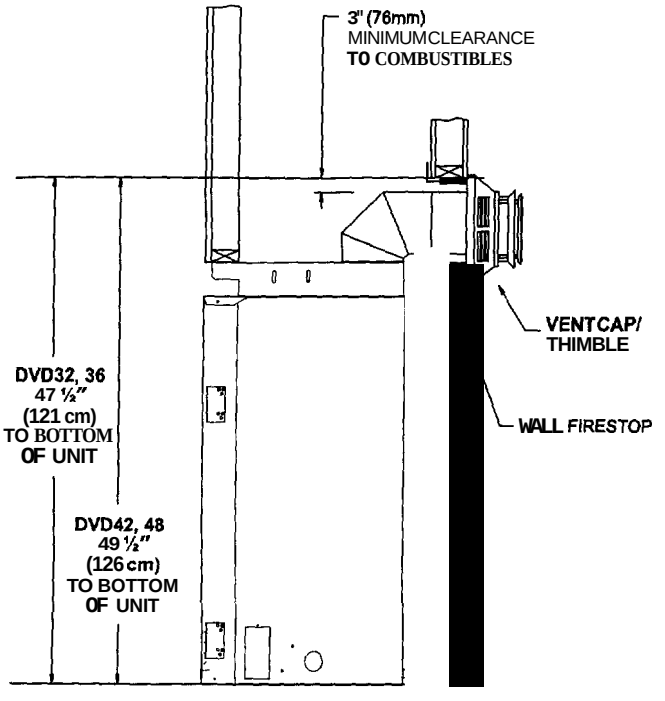
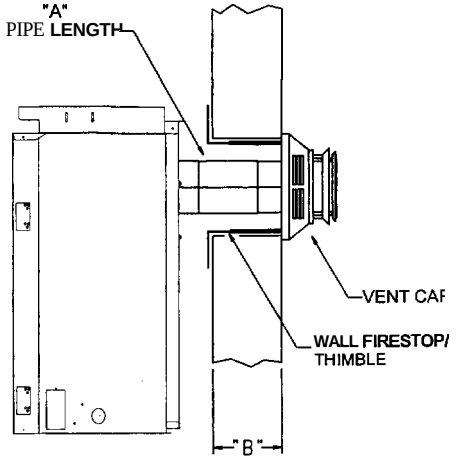


Figure 14

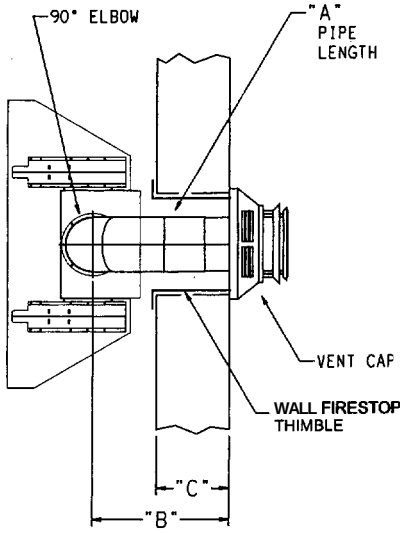
HORIZONTAL ONLY, STRAIGHT OUT THE BACK



"A"	" B	Models
6"	5 1/8" to 6 112" (130mm to 165mm)	DVD 32,36,42,48
9"	8 118" to 9 1/2" (206mm to 241mm)	DVD 32,36,42
12"	11 118" to 12 112" (283mm to 317mm)	DVD 32,36,42

Figure 15

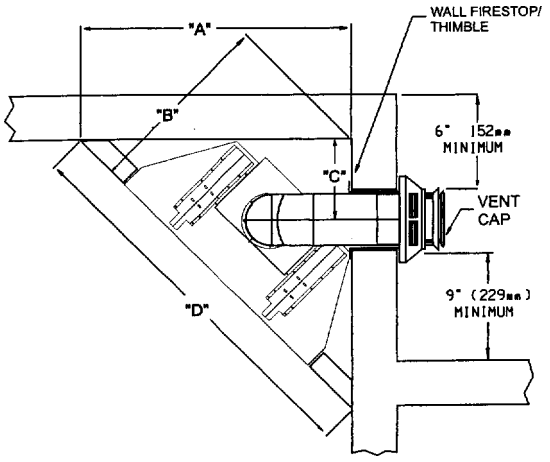
VERTICAL, 90° ELBOW TO HORIZONTAL OUT THE WALL



"A"	"0"	"C"
6"	11 1/4" to 12 3/4" (286mm to 324mm)	4 3/4" to 6 1/4" (121mm to 159mm)
9"	14 1/4" to 15 3/4" (362mm to 400mm)	7 3/4" to 9 1/4" (197mm to 235mm)
12"	17 1/4" to 18 3/4" (438mm to 476mm)	10 3/4" to 12 1/4" (273mm to 311mm)

Figure 16

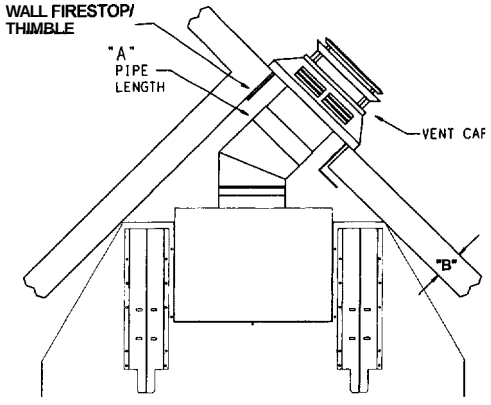
CORNER INSTALLATION VERTICAL, 90° ELBOW TO HORIZONTAL OUT THE WALL



Dim.	DVD32	DVD36	DVD42	DVD48
A			42 112" 1080mm	46 3/4" 1187mm
B	648mm	689mm	30 1/8" 765mm	33 1/8" 841mm
C	292 mm	321 mm	14 314" 375 mm	16 7/8" 429 mm
D	51 118 1299mm	54 114" 1378mm	60 1/8" 1527mm	66 1/8" 1680mm

Figure 17

CORNER INSTALLATION HORIZONTAL, 45° ELBOW TO HORIZONTAL OUT THE WALL



	DVD32	DVD36	DVD42	DVD48
-A"	"B"	"B"	" B	"B"
6" (152mm)	4" to 5 112" (102mm to140mm)	4" to 5" (102mm to 127mm)	n/a	n/a
9" (229mm)	6" to 7 112" (152mm to 191mm)	6" to 7 112" (152mm to 191mm)	4" to 5 1/2" (102mm to 140mm)	n/a
12" (305mm)	9" to 10 112" (229mm to 267mm)	9" to 10 1/2" (229mm to 267mm)	9" to 10 1/2" (229mm to 267mm)	nla

TERMINATION CLEARANCES

Termination clearance for buildings with combustible and noncombustible exteriors.

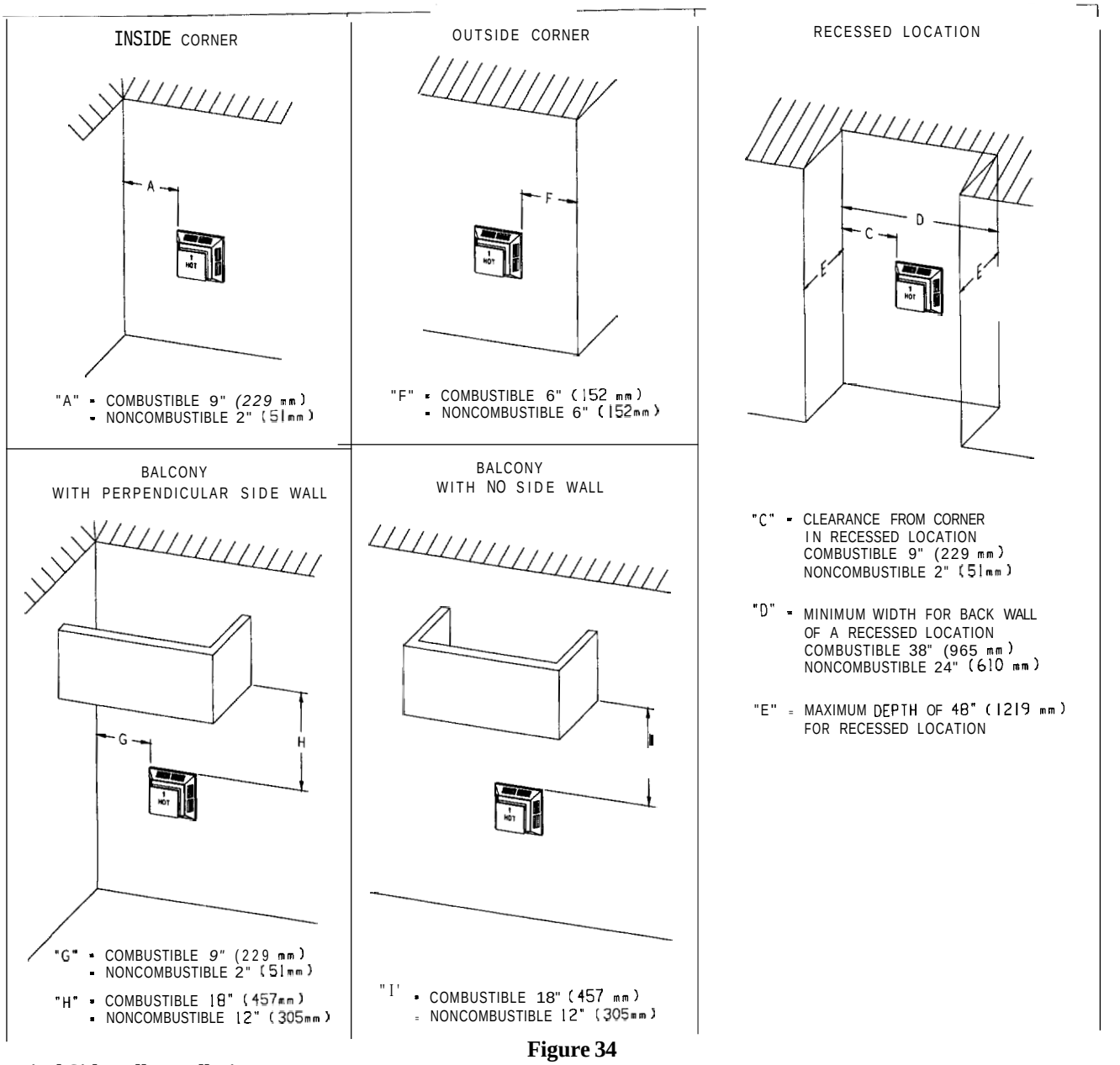


Figure 34

Vertical Sidewall Installations

Important! Minimum clearance between vent pipes and combustible materials is three **(3")** (76mm) on top, and (1") (25mm) on bottom and sides.

Important! When vent termination exits through foundation less than 20" below siding outcrop, the vent pipe must flush up with the siding. **SD-985** termination cap must be used.

Information on Various Venting Routes and Components

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

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 graph showing the relationship between vertical and horizontal side wall venting will help to determine the various vent lengths allowable.

The horizontal vent run refers to the total length of vent pipe from the flue collar of the fireplace to the face of the outer wall.

The maximum horizontal vent run is 20 feet (457 cm) when the vertical vent rise is 8 feet (244 cm) (See Figure **19).**

Venting terminals shall not be recessed into wall or siding.

VENT CLEARANCES

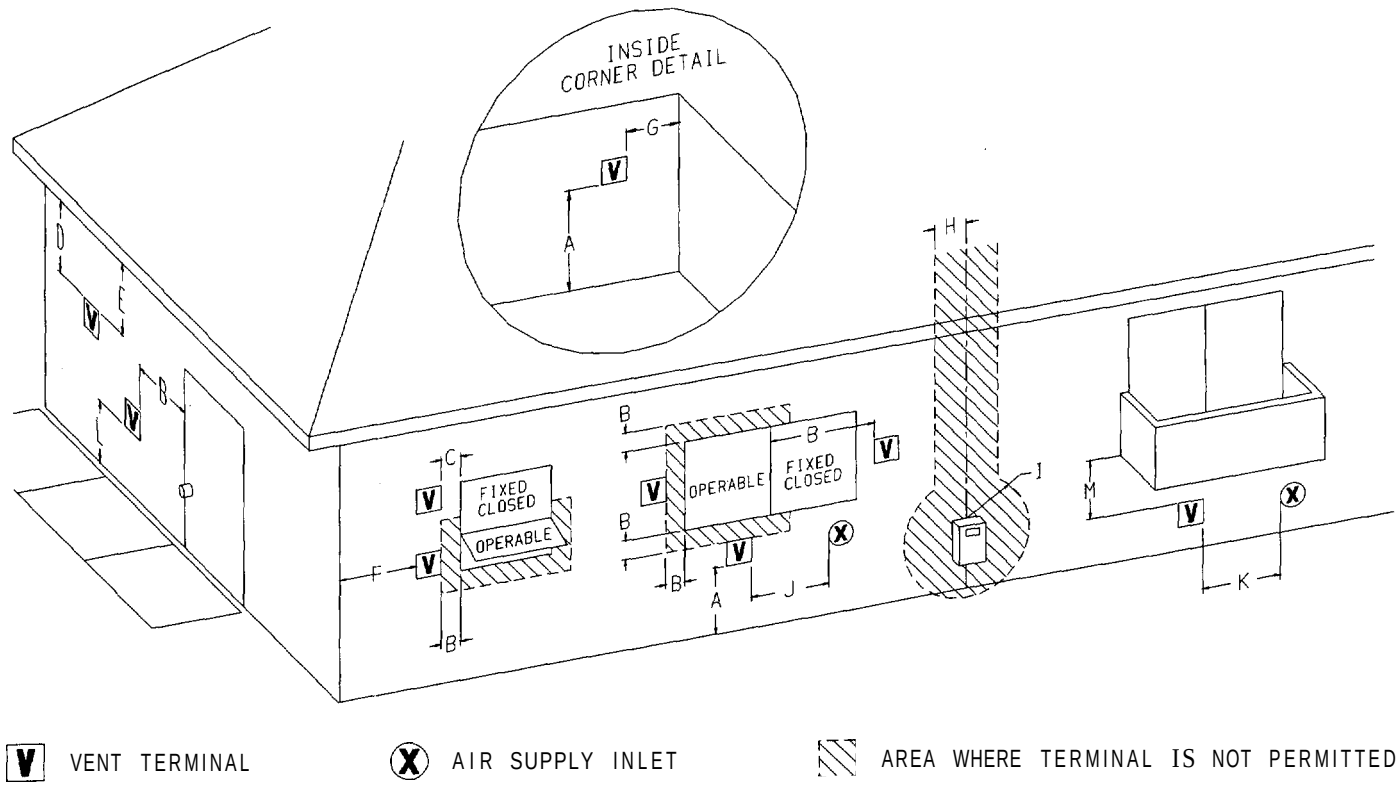


Figure 35

A = *Clearance above grade, veranda, porch, deck or balcony [*12 inches (30cm) minimum]

B = clearance to window or door that may be opened [*12 inches (30cm) minimum for appliances < 100,000 Btuh (30kW)

C = clearance to permanently closed window [minimum 12 inches (30cm) recommended to prevent condensation on window]

D = vertical clearance to ventilated soffit located above the terminal within a horizontal distance of 24 inches (60 cm) from the center of the terminal [18 Inches (46 cm) minimum

E = clearance to unventilated soffit [12 inches 30cm) minimum]

F = clearance to outside corner [See Page 20]

G = clearance to inside comer [See Page 20]

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

I = clearance to service regulator vent outlet **[*6** feet (1.8m) 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 ≤ 100,000 Btuh (30 kW)

36 inches (90cm) minimum for appliances > 100,000 Btuh (30kW)]

K = clearance to a mechanical air supply inlet [* 6 feet (1.8m) minimum]

L = †clearance above paved sidewalk or a paved driveway located on public property [*7 feet (2.1m) minimum]

M= clearance under veranda, porch, deck, or balcony [*12 inches (30cm) minimum ¥]

† a vent shall 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 *2* sides beneath the floor*

* as specified in **CGA** B149 Installations Codes or ANSI 2223.1. Note: Local Codes or Regulations may require different clearances.

VENTING FIREPLACE - REAR

To Use the Vent Graph (Figure 29)

1. Determine the height of the center of the horizontal vent pipe. Using this dimension on the Sidewall Vent Graph, locate the point 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 unit in accordance with same.

EXAMPLE A:

If the vertical dimension from the floor of the unit is 12 feet, the horizontal run to the outer wall flange must not exceed 12.3 feet.

EXAMPLE B:

If the vertical dimension from the floor of the unit is 6 feet, the horizontal run to the outer wall flange must not exceed 6.5 feet.

SPECIAL NOTE: For each 45 degree 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** degree elbows are installed on the vertical part of the vent system. Reduce 3' for every 90° elbow.

Example: According to the chart the maximum horizontal vent length is 20' and if two 45 degree elbows are required in the horizontal vent it must be reduced to 17'.

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

Note: When rear venting unit, adjust air shutter from 1/16" open up to between 1/8" and 3/16" for NAT gas.

Adjust air shutter from 1/4" open to between 5/16" and to 3/8" for LP gas.

Venting Graph (Dimensions in Feet)

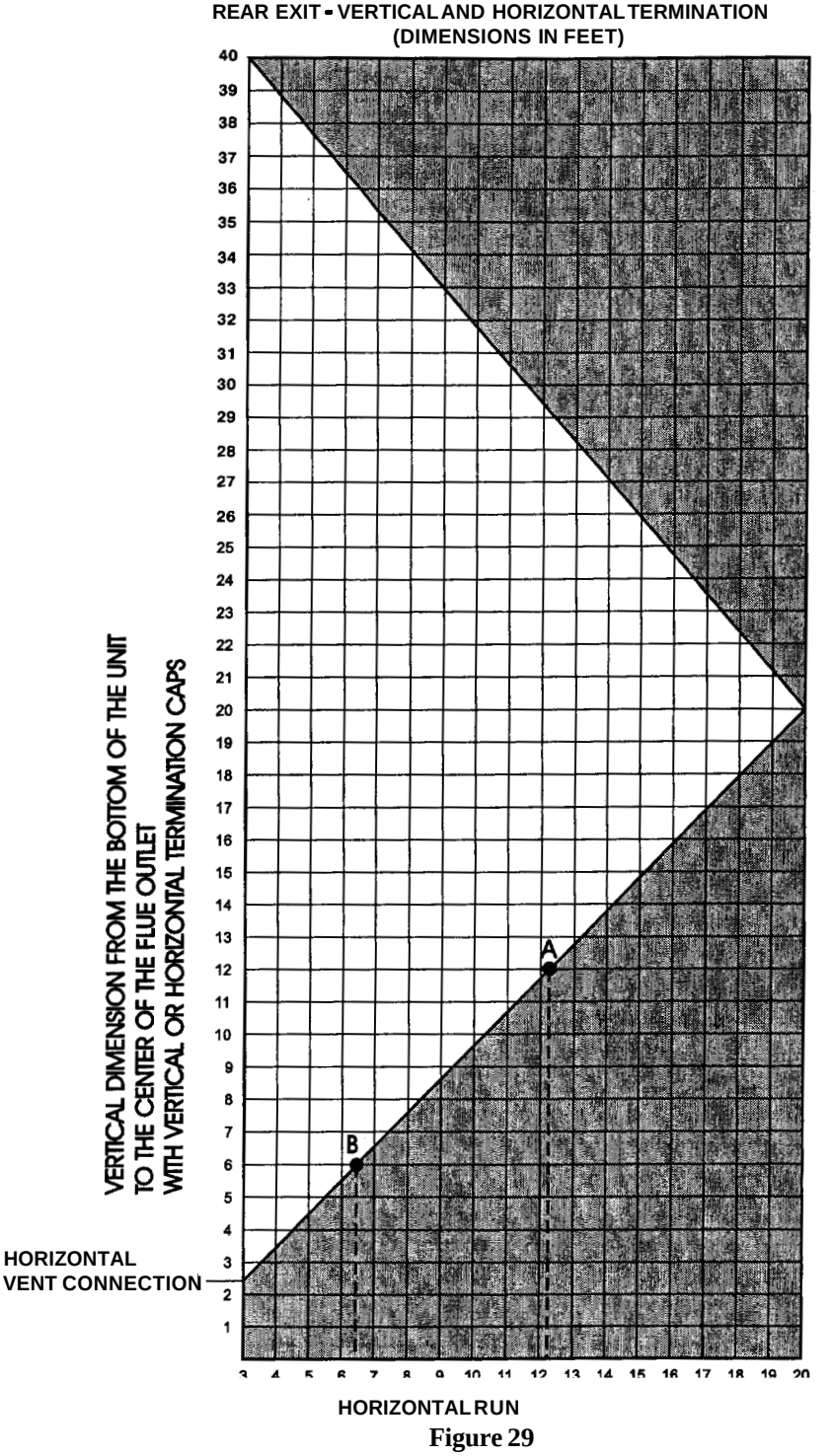


Figure 29

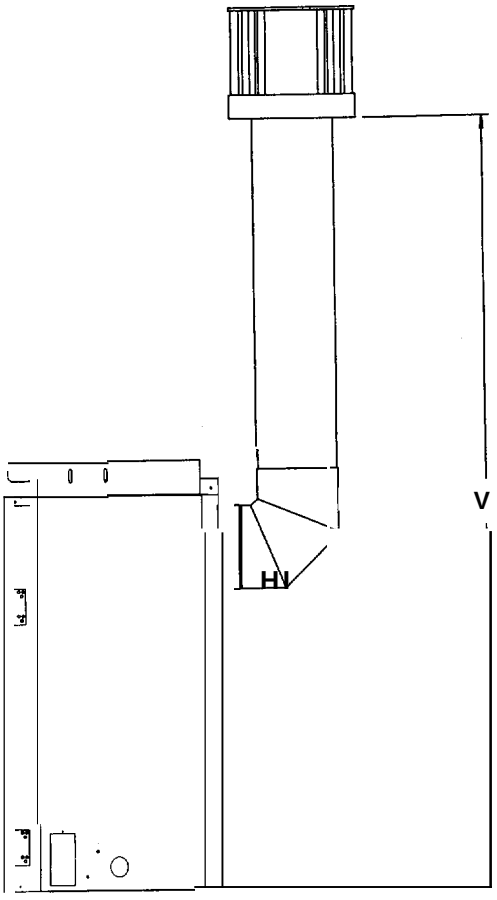
□ Acceptable vertical and horizontal vent run.

■ Unacceptable vertical and horizontal vent run.

Note: When rear venting unit, adjust air shutter from 1/16" open up to between 1/8" and 3/16" for NAT gas.

Adjust air shutter from 1/4" open to between 5/16" and 3/8" for **LP** gas.

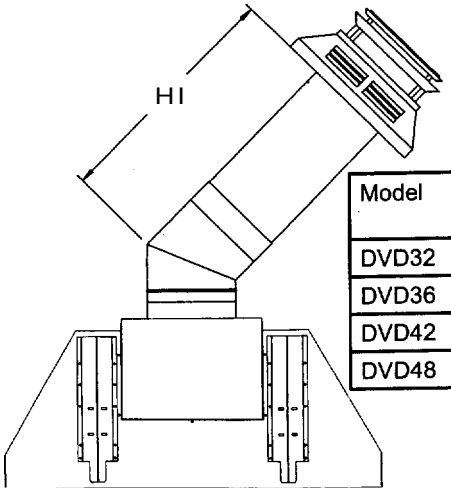
EXAMPLES - REAR VENT RUN



Example
H1 (90°) 3ft
V1 = 22ft

H = 3ft V = 22ft

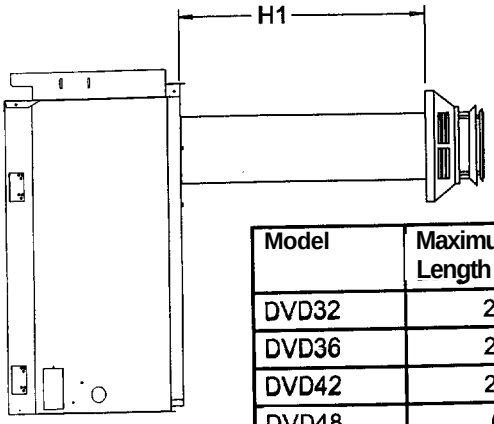
Figure 30



TOP VIEW

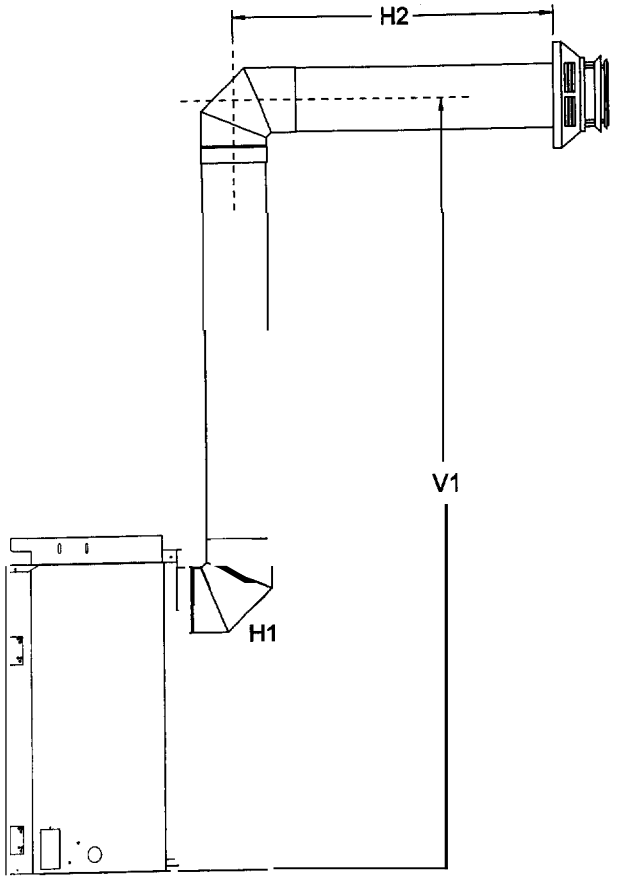
Model	Maximum Pipe Length H1
DVD32	24"
DVD36	24"
DVD42	18"
DVD48	N/A

Figure 31



Model	Maximum Pipe Length H I
DVD32	24"
DVD36	24"
DVD42	24"
DVD48	6"

Figure 32



Example
H2 = 4R
(90° + 90°) = 6ft
V1 = 12ft

H = 10ft V = 12ft

Figure 33