



heatilator®

The first name in fireplaces

Hearth & Home Technologies-Mt. Pleasant
1915 W. Saunders Street
Mt. Pleasant, Iowa 52641
Division, HON INDUSTRIES
www.heatilator.com

INSTALLATION & OPERATING INSTRUCTIONS

MAXUS DIRECT VENT HEATER LISTED GAS APPLIANCE



MAX60 (Shown with the FFMAX2G Face)
For Residential Use - Meets all HUD requirements for
manufactured housing installations.

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or loss of life.

- 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.
 - 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.

CAUTION:

Do not expose the appliance to the elements (such as rain, etc.).

FOR MANUFACTURED (MOBILE) HOMES:

This appliance may be installed as an OEM installation in a manufactured (mobile) home and must be installed in accordance with the manufacturer's instructions and the *Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280* or *Standard for Installation in Mobile Homes, CAN/CSA Z240 MH*. For assistance during installation contact your local dealer or contact the Heatilator Technical Services Department, Hearth & Home Technologies Inc., 1915 W. Saunders St., Mt. Pleasant, IA 52641. This appliance may be installed in an aftermarket permanently located, manufactured (mobile) home, where not prohibited by local codes. This appliance is only for use with the type of gas listed on the rating plate. This appliance is not convertible for use with other gases, unless a certified conversion kit is used.

WARNING!

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

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

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SAFETY PRECAUTIONS

1. Please read these installation instructions completely before beginning installation procedures. Failure to follow them could cause an appliance malfunction resulting in serious injury and/or property damage.
2. Always check your local building codes prior to installation. This installation must comply with all local, regional, state and national codes and regulations.
3. Installation and repair should be done by a qualified service person. This appliance should also be inspected annually by a qualified service person. More frequent inspections/cleaning may be required due to excessive lint from carpeting, bedding materials, etc. It is imperative that the control compartment, burners and circulating air passageways of the appliance be kept clean.
4. This is a vented decorative gas appliance. Do not burn wood or other material in this appliance.
5. **NEVER** leave children unattended when there is a fire burning in the appliance.
6. This appliance may only use the approved venting systems shown in these installation instructions. Venting **must not be connected** to chimney flue servicing a solid fuel burning appliance or a gas fuel burning appliance.
7. **NEVER** use gasoline, gasoline-type lantern fuel, kerosene, charcoal lighter fluid, or similar liquids in this appliance. Keep any flammable liquids a safe distance from the appliance.
8. While servicing this appliance, always shut off all electricity and gas to the appliance. This will prevent possible electrical shock or burns. Also, make sure the appliance is completely cooled before servicing.
9. 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.
10. Be sure to provide adequate clearances around the air openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.

A. LISTINGS AND CODE APPROVALS

1. U.S. AND CANADIAN CERTIFICATION

The Maxus Gas Appliance has been tested in accordance with the ANSI standard Z21.88-1998, CSA 2.33-M98, and has been listed by UL for installation and operation as described in these Installation and Operating Instructions. All components are AGA, CGA, CSA or UL safety certified.

2. LOCAL CODES

This installation must conform with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-latest edition in the U.S.A., and the CAN/CGA B149-latest edition in Canada.

The Maxus Series gas appliance has been tested and listed for use in manufactured housing (mobile homes). These installation instructions conform with the *Manufactured Home Construction and Safety Standard*, Title 24 CFR, Part 3280, or when such a standard is not applicable, the Standard for *Manufactured Home Installations*, ANSI A225.1.

This appliance is approved for installation in bedrooms and manufactured housing (mobile homes) in the United States and Canada.

3. GLASS SPECIFICATIONS/ CERTIFICATIONS

Heatilator gas appliances manufactured with tempered glass may be installed in hazardous locations such as bathtub enclosures as defined by the CPSC. The tempered glass has been tested and certified to the requirements of ANSI Z97.1-1984 and CPSC 16 CFR 1202. (Safety Glazing Certification Council SGCC# 1595 and 1597. Architectural Testing, Inc. Reports 02-31919.01 and 02-31917.01.)

This statement is in compliance with SPCS 16 CFR Section 1201.5 "Certification and labeling requirements" which refers to 15 USC 2063 stating "...Such certificate shall accompany the product or shall otherwise be furnished to any distributor or retailer to whom the product is delivered."

Some local building codes require the use of tempered glass with permanent marking in such locations. Glass meeting this requirement is available from the factory. Please contact your dealer or distributor to order.

4. EFFICIENCY

The efficiency rating of the appliance is a product thermal efficiency rating determined under continuous operating conditions and was determined independently of any installed system.

If any assistance is required during installation please contact your local dealer or contact the Heatilator Technical Services Department, Hearth & Home Technologies Inc., 1915 W. Saunders St., Mt. Pleasant, IA 52641.

WARNING!


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.

Note: Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installations may vary slightly due to individual design preferences. However, minimum and maximum clearances must be maintained at all times.

The illustrations and diagrams used throughout these instructions are not drawn to scale.

RATING PLATE LOCATED IN THE HEATER

(Example only)

HEATILATOR A Div. of Hearth Tech. Inc. 1915 W. Saunders Street Mt. Pleasant, IA 52841		SERIAL NO. DE SERIE	GA000001	 71R3 CERTIFIED FOR CANADA CERTIFIE POUR LE CANADA
ANSI Z 21.88-1998 CSA 2.33-1998 VENTED GAS FIREPLACE HEATER FOR USE AT HIGH ALTITUDES. UL 307B APPROVED FOR MOBILE HOME USE.				
MODEL MODELE	MFG. DATE DATE DE FAB.			
GAS TYPE/TYPE DE GAZ	NATURAL/NATUREL	PROPANE		
ALTITUDE	0-4500 FT/PI	0-4500 FT/PI		
MAX. INPUT/DEBIT	40,000 BTUH	37,000 BTUH		
MIN. INPUT/DEBIT	27,600 BTUH	25,900 BTUH		
OUTPUT	29,200 BTUH	27,010 BTUH		
STEADY STATE				
THERMAL EFFICIENCY	73%	73%		
MANIFOLD PRESSURE	3.5 IN. W.C.	10.0 IN. W.C.		
PRESSION TUBULURE	C. D'EAU	C. D'EAU		
MIN. INLET PRESS.	4.5 IN. W.C.	11.0 IN. W.C.		
FOR THE PURPOSE OF	C. D'EAU	C. D'EAU		
INPUT ADJUSTMENT				
PRESS. MIN. D'ALIMENTATION	.125/3.18 DIA.	.073/1.85 DIA. IN./mm		
ORIFICESIZE				
DIAM. INJECTERU				
LESS THAN/MOINS DE 3 AMPERES., 60 Hz.				
THIS VENTED GAS FIREPLACE HEATER IS NOT FOR USE WITH AIR FILTERS				
DO NOT REMOVE OR COVER THIS LABEL.				
VENTED GAS FIREPLACE HEATER - NOT FOR USE WITH SOLID FUEL. RADIATEUR MURAL A EVACUATION DIRECT PAR GRAVITE - NE DOIT PAS ETRE UTILISE AVEC UN COMBUSTIBLE SOLID.				

WARNING!

This valve has been preset at the factory. Altering settings may result in fire hazard or bodily injury.

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B. APPLIANCE SPECIFICATIONS

MAXUS NOMENCLATURE

Catalog #	Description
MAX60	38" wide/36" Glass/Standing Pilot - Natural Gas
MAX60L	38" wide/36" Glass/Standing Pilot - Propane
MAX60F	38" wide/36" Glass/Natural Gas Standing Pilot with Fan Kit
MAX60LF	38" wide/36" Glass/L.P Standing Pilot with Fan Kit
MAX60E	38" wide/36" Glass Electronic Ignition - Natural Gas
MAX60LE	38" wide/36" Glass Electronic Ignition - Propane
MAX60EF	38" wide/36" Glass/Natural Gas Electronic Ignition with Fan
MAX60LEF	38" wide/36" Glass/L.P. Electronic Ignition with Fan
FFMAX1	Black Grille, Black Hood, and Bright Brass Trim around Flat Top Opening
FFMAX2	Black Filligree Front, Black Hood, Bright Brass Trim around Arched Top Opening
FFMAX2G	Gold Filligree Front, Gold Hood, no extra Trim and Arched Top Opening
Installation Components	Description
CS	Direct Vent Cap Shield for horizontal termination only
VP-TV	Vertical Termination Cap
VP45	45° Elbow
FS6	Firestop Spacer
VP90ST	90° Starter Elbow
VP90	90° Elbow
VP4	4" Vent Pipe
VP6	6" Vent Pipe
VP12	12" Vent Pipe
VP24	24" Vent Pipe
VP36	36" Vent Pipe
VP48	48" Vent Pipe
WS6	Wall Heat Shield, Flue Heat Shield
VSS2	Vinyl Soffit Shield
RF6	Roof Flashing (Vertical Termination) - 0/12 to 6/12 Pitch
VP6-9	6" - 9" Slip Section
VP9-14	9" - 14" Slip Section
VP14-24	14" - 24" Slip Section
VP12MI	12" Vent Section, non-unitized so it can be cut to length
VP24MI	24" Vent Section, non-unitized so it can be cut to length
VP-TH	Horizontal Termination Cap
VP-VT1X	High Wind Horizontal Termination Cap
VP-TB1	Basement Horizontal Termination Cap
VP-THK	Top Vent Horizontal Kit: Cap, Wall Shield, 6"-9" Slip Section, and a Starter Elbow
VP-THK-MI	Same as the VP-THK except the Kit includes the VP24MI instead of a Slip Section
VP-TRK	Rear Vent Horizontal Kit: Cap, Wall Shield, Heat Shield, and a 6"-9" Slip Section
VP-TRK2	Same as the VP-TRK except the Kit includes a 4" Vent Section instead of a Slip Section

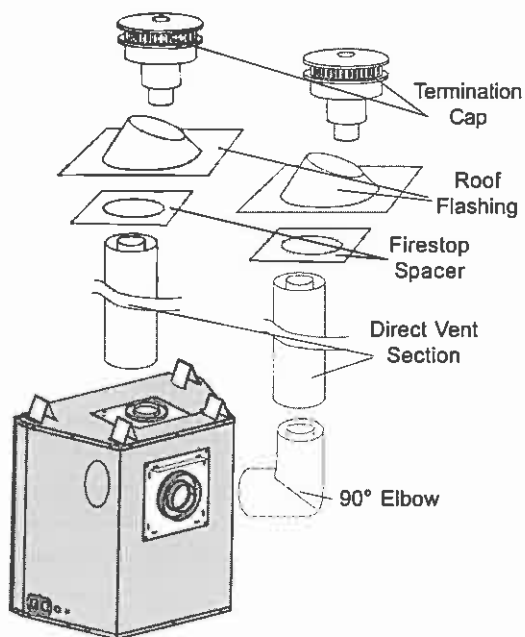
Note: Minimum and maximum clearances must be maintained at all times. Illustrations throughout these instructions reflect typical installations and are for design purposes only. Actual installation may vary slightly due to individual design preferences.

The illustrations and diagrams used throughout these installation instructions are not drawn to scale.

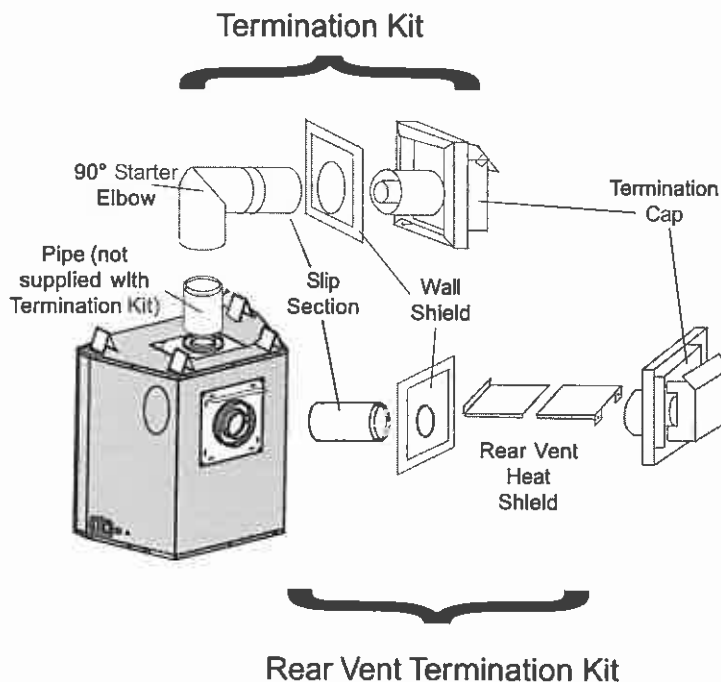
Tools and building supplies normally required for installation:

Saw	Wall-finishing materials
Pliers	Framing material
Hammer	Surround
Phillips screwdriver	Caulking material
Tape measure	Gloves
Plumb line	Framing square
Level	Electric drill and bits
Safety glasses	

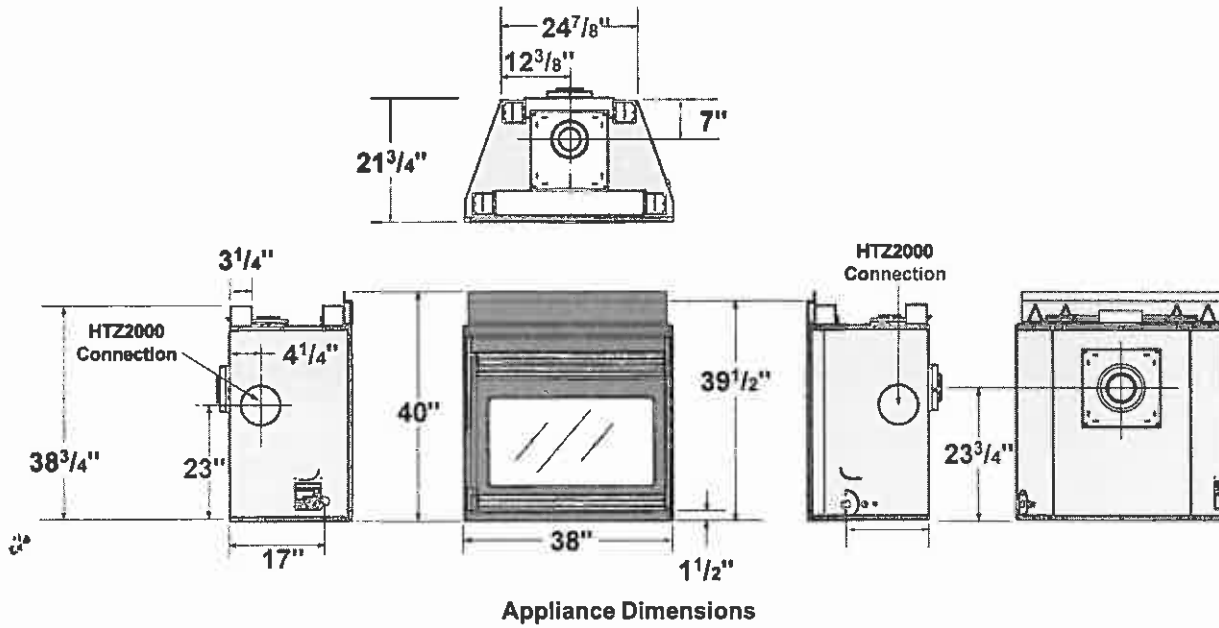
Typical Vertical Installations (Rear and Top Vent Shown)



Typical Horizontal Installations (Rear and Top Vent Shown)



C. LOCATIONS AND CLEARANCES



WARNING!

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

1. CLEARANCES TO COMBUSTIBLE MATERIALS

Figure 1 illustrates appliance clearance to combustible materials.

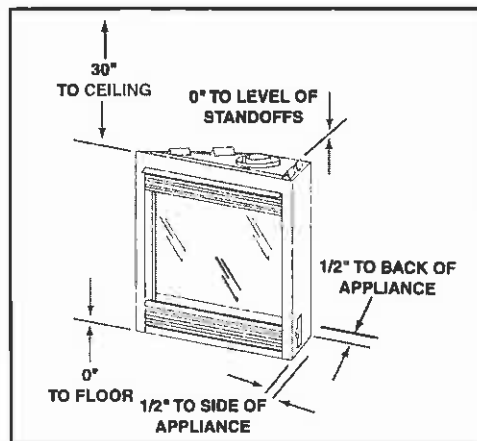


Figure 1
Appliance Clearances to Combustible Materials

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2. LOCATIONS AND SPACE REQUIREMENTS

Figure 2 illustrates different ways the appliance may be located in a room and the space required. This appliance may be installed directly on the floor or raised on a hearth. Adjacent combustible side walls must be located a minimum of 12" from the appliance. If you are using a decorative surround constructed of combustible material, it must be located within the shaded area defined in Figure 2. Short stub walls are acceptable if they are contained within the shaded area.

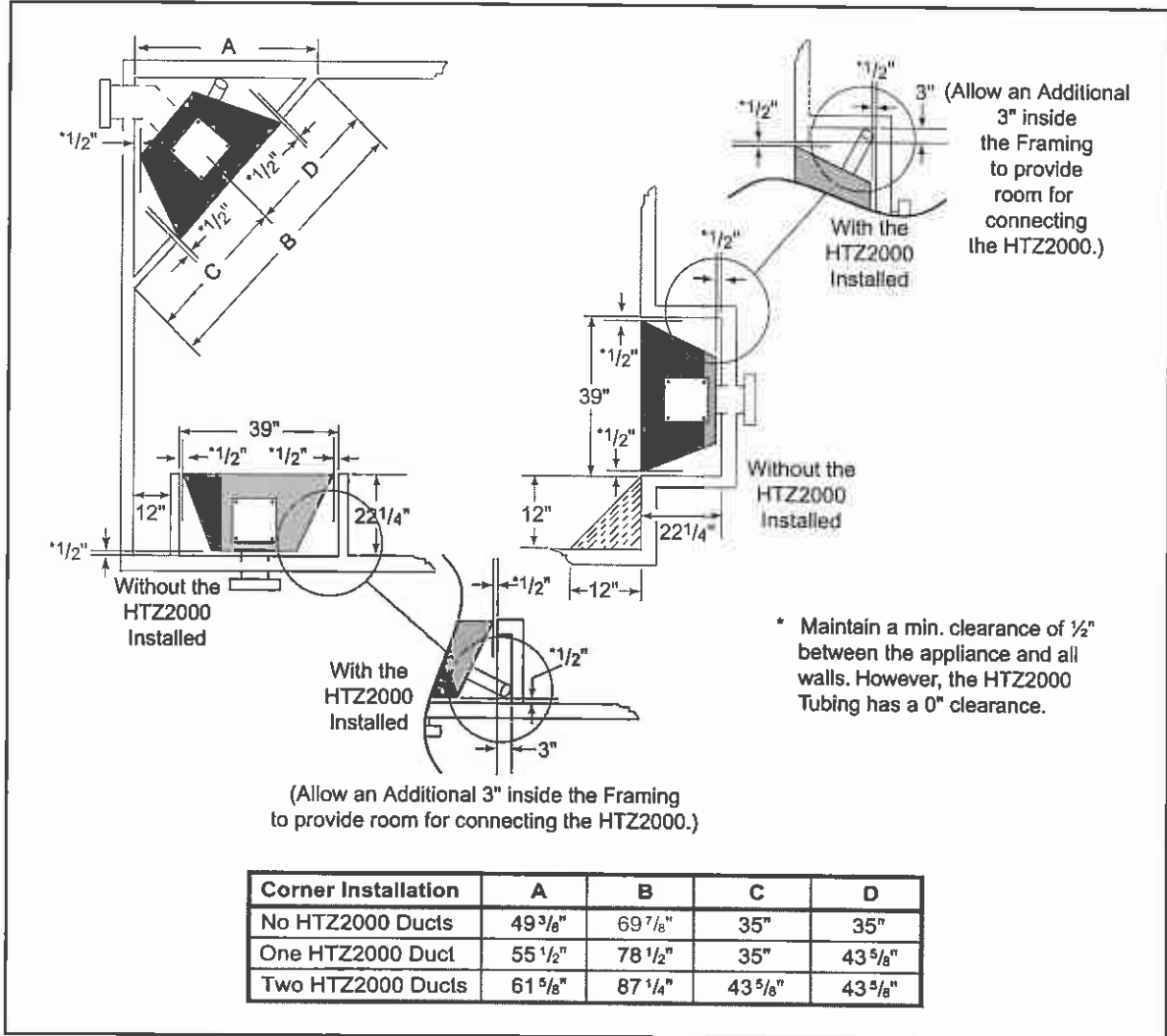


Figure 2 - Appliance Locations

D. FRAMING/SETTING THE APPLIANCE

1. FRAMING

Figure 3 shows typical framing and mantel heights of this appliance using combustible materials. All required clearances to combustibles must be adhered to.

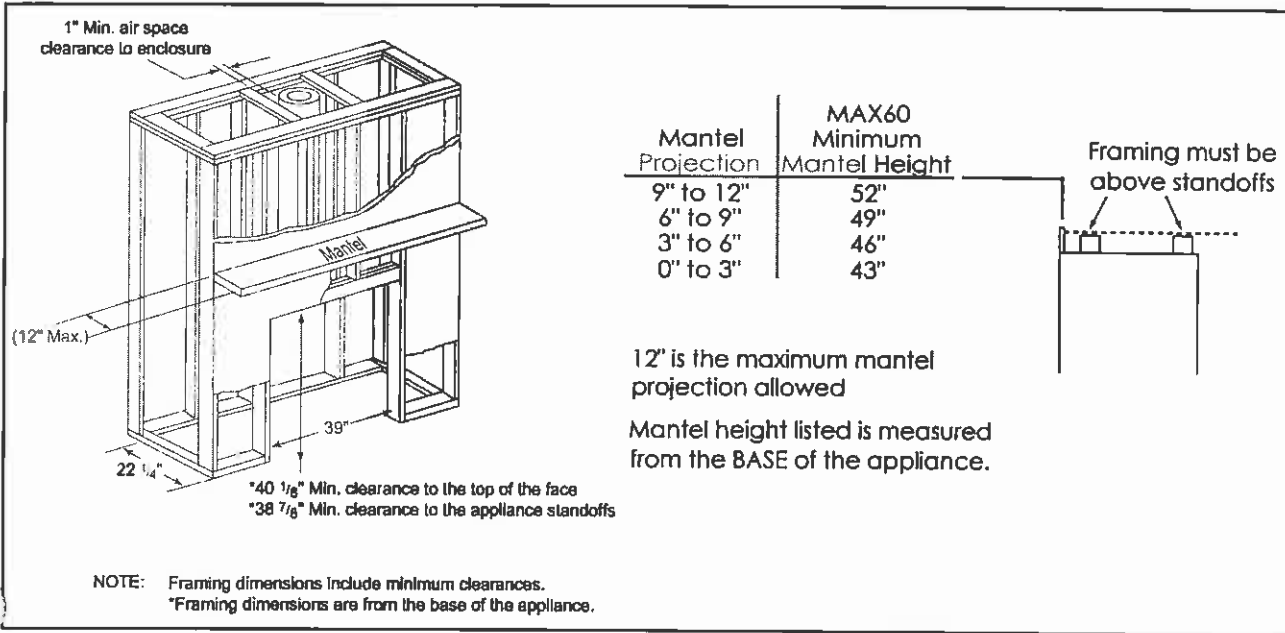


Figure 3 - Framing

CAUTION:
Wear gloves and safety glasses for protection.

CAUTION:
Provide adequate clearances around the air openings into the appliance and adequate accessibility clearances for servicing and proper operation.

2. SETTING THE APPLIANCE

a. Positioning the Appliance

This appliance may be placed on a smooth combustible or noncombustible continuous, flat surface. When the appliance is installed directly on carpeting, tile or other combustible material other than wood flooring, the appliance shall be installed on a metal or wood panel extending the full width and depth of the appliance. Slide the appliance into position and level the appliance from side-to-side and front-to-back. Shim with noncombustible material as necessary.

b. Secure the Appliance

Bend out the nailing flanges on each side of the appliance and nail to framing. The nailing flanges have been positioned 5/8" back from the front of the appliance to allow the addition of drywall.

WARNING!
This appliance may only use the approved venting systems shown in these installation instructions. It must not be connected to a chimney flue servicing a separate solid fuel or gas fuel burning appliance.

WARNING!
To prevent contact with sagging or loose insulation, the appliance must not be installed against vapor barriers or exposed insulation. Localized overheating could occur and a fire could result.

E. VENTING

1. REMOVAL OF VENT COVERS AND PLACEMENT OF COLLARS

This appliance may be vented off the rear or off the top. Depending on your specific installation, a vent cover will need to be removed from either the top or rear of the appliance and inner and outer collars attached.

Looking at the rear or top of your appliance (depending on which venting style you are going to use), there is a square plate, and other parts (see Figure 4) held to the firebox with four screws. Remove this plate (Insulation is attached to the top one). Below this piece is another plate attached to the inner shell of the firebox. Remove this plate as well. A third plate and gasket are attached to the firebox beneath the previous plate with four screws. Remove this last plate.

2. THE FOLLOWING VENTING COMPONENTS ARE SHIPPED ATTACHED TO THE TOP OF THE APPLIANCE

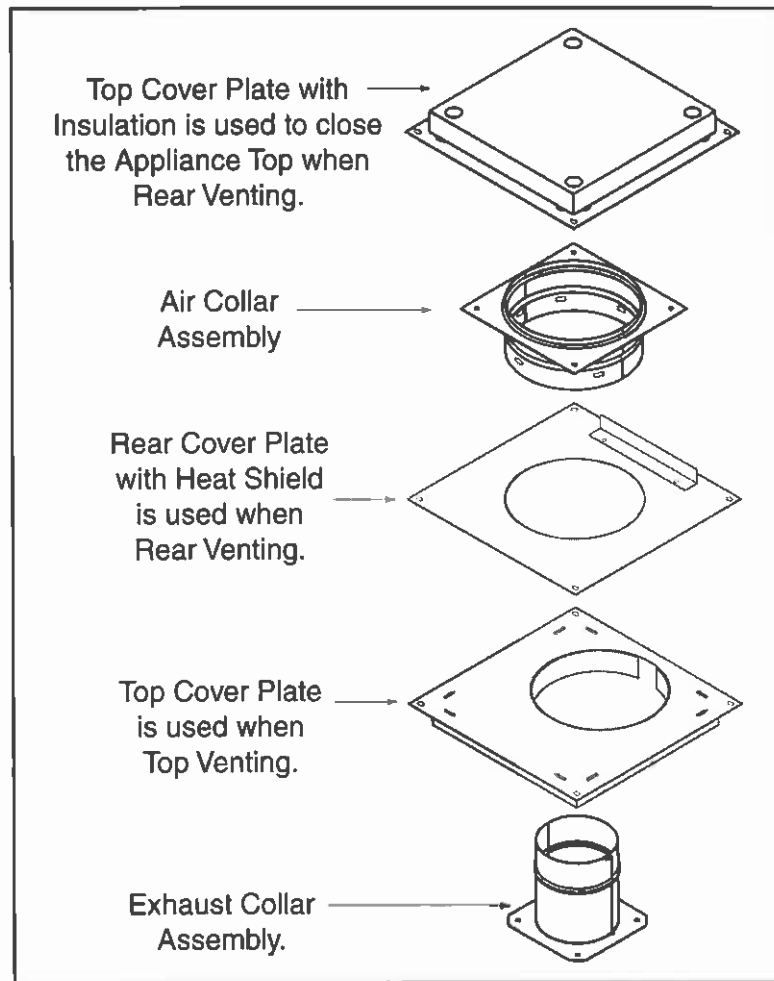


Figure 4
Venting Components
(in order of disassembly)

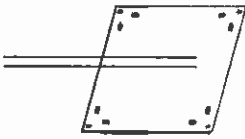
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3. REAR VENTING

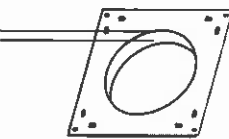
- a. Attach the collars supplied. See Figure 5.
- b. When attaching the 14" square plate with an 8" hole, there is a heat shield attached. This must be up and face out (away from the appliance).

WARNING!

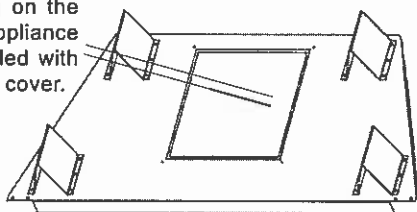
When rear venting, seal the unused top opening with the solid cover with the insulation (install with the insulation down).



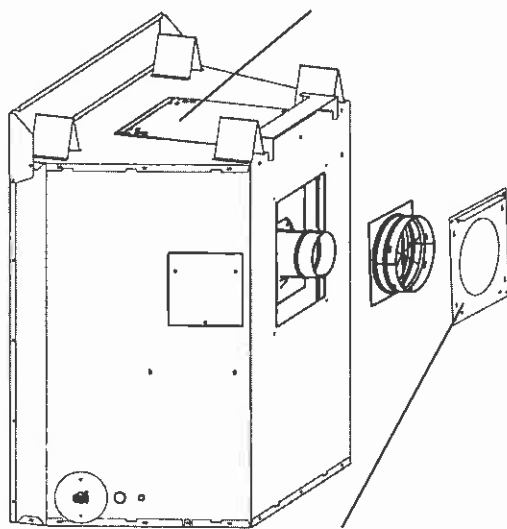
When top venting, use the plate with an 8" opening and insulation (install with the insulation down).



The opening on the top of the appliance must be sealed with an insulated cover.



The top opening must be enclosed with the insulated cover.



When installing this plate, the heat shield must face upwards and out (away from the appliance).

Figure 5

WARNING!

If not sealed, a fire hazard will be created and the appliance will not operate properly.

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4. TOP VENTING

Use the 5" diameter collar assembly (with the attached gasket) and the four screws removed earlier to attach the collar assembly where the last plate was removed. Take care not to strip the screws. Attach the 8" diameter collar assembly with four screws, to where the second plate was removed on the inner shell. Make sure the gasketing on the plate seals the firebox inner shell. The third and final piece to install has insulation attached to it and an 8" diameter hole. This piece should fit around the 8" collar assembly with the insulation going inside the outer shell of the firebox. Attach with screws. See Figure 6.

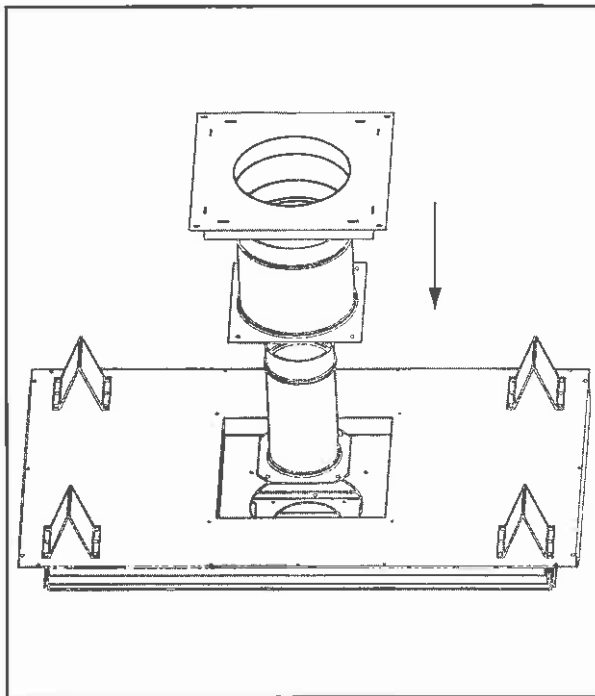


Figure 6
Placement of Inner and Outer collars

5. HORIZONTAL TERMINATION

a. Clearances

See Figures 7 and 8 for clearance information.

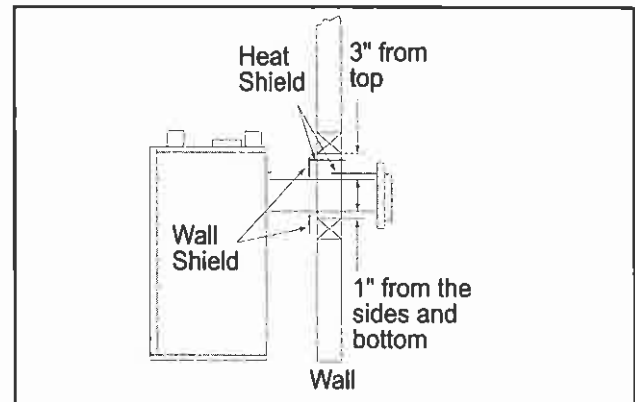


Figure 7
Venting Clearances to
Combustible Materials - Rear Venting

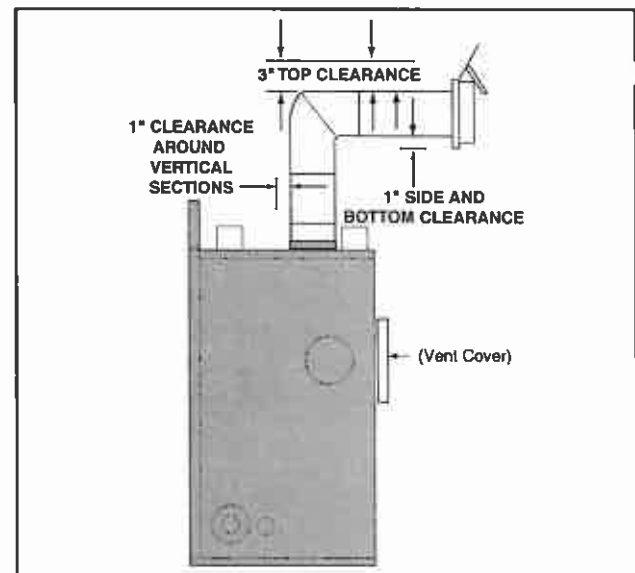


Figure 8
Venting Clearances to
Combustible Materials - Top Venting

WARNING!

Always maintain minimum air space clearances or greater around the vent system. See Figures 7 and 8. Do not pack air spaces with insulation or other material.

b. Vent Lengths for Top Venting (for rear venting, see page 14)

Various venting configurations are shown in Figures 9-12 from which maximum vent lengths can be determined.

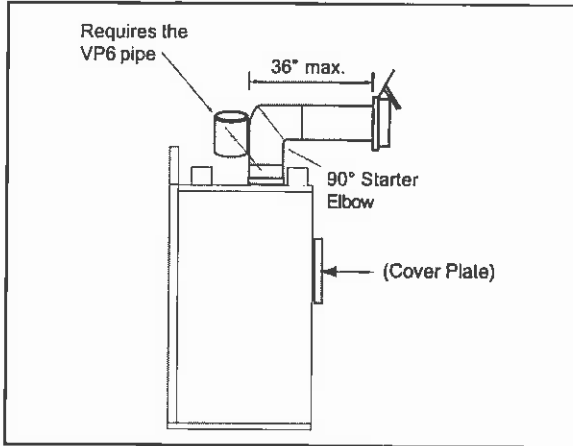


Figure 9
Vent Lengths with One Elbow
(Minimum Vertical)

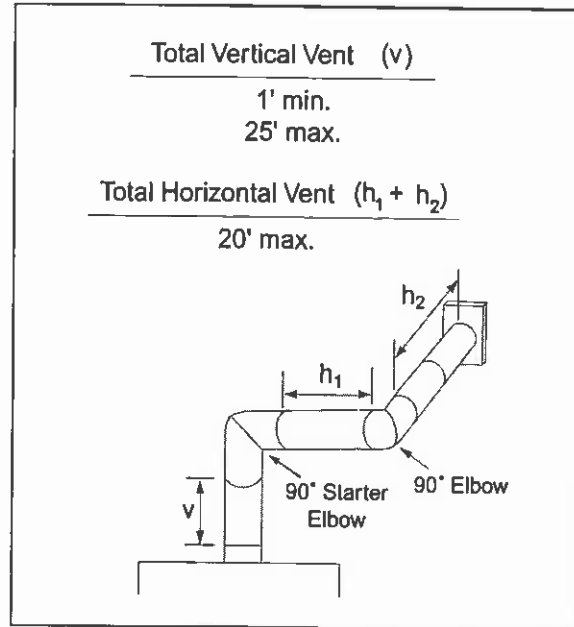


Figure 11
Vent Lengths with Two Elbows

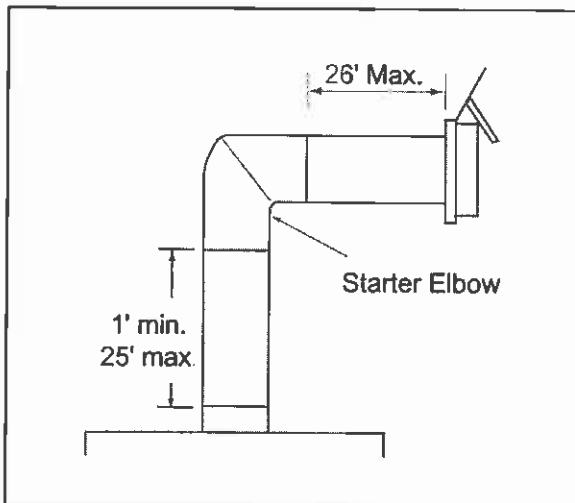


Figure 10
Vent Lengths with One Elbow
(1' vertical or more, 25' maximum)

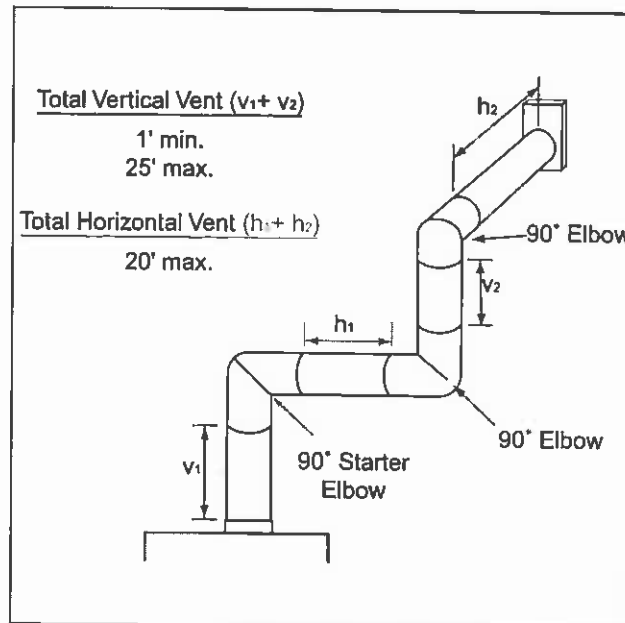


Figure 12
Vent Lengths with Three Elbows. Top Vent

CAUTION:
Provisions shall be made to provide adequate combustion and ventilation air.

WARNING - RISK OF FIRE!
The horizontal run of vent must have a 1/4" rise for every 1 ft. of run towards the termination. Never allow the vent to run downward. This could cause high temperatures and may create a fire hazard.

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c. Vent Lengths for Rear Vent

1) No Elbows

The maximum horizontal run, with no vertical sections of vent, is 24" from the back of the appliance to the base of the cap. See Figure 13.

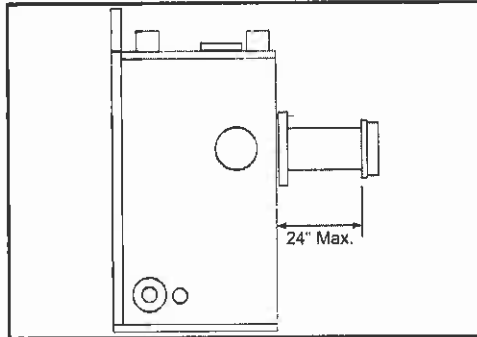


Figure 13
No Elbows

2) A 45° Elbow

For corner installations with horizontal venting, a maximum of one 45° elbow may be used. The maximum horizontal run following the elbow is 24" to the base of the cap and will include a 45° elbow and a termination cap. See Figure 14.

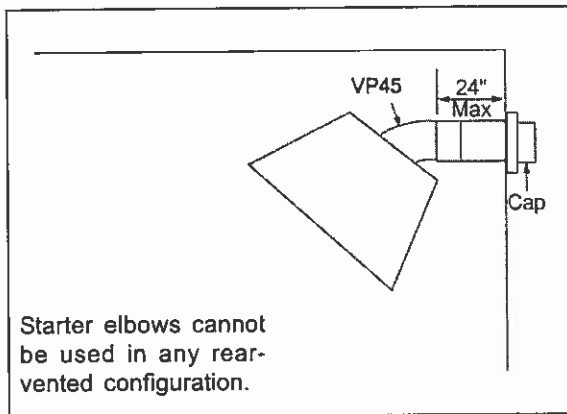


Figure 14
One 45° Elbow

3) Two Elbows

Elbows used on rear vented venting configurations should be either a 90° elbow or a 45° elbow. A starter elbow cannot be used in any rear-vented configuration. Figure 15 shows various venting configurations using two elbows to terminate horizontally.

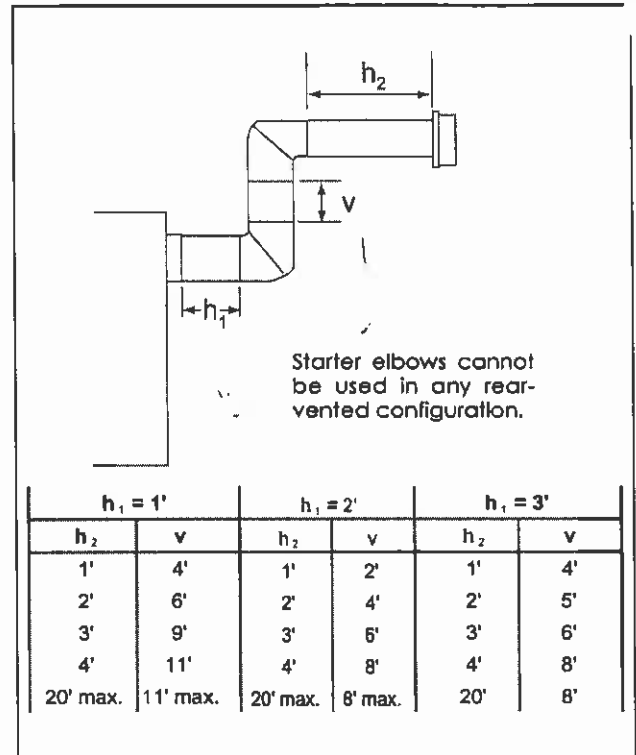


Figure 15 - Two Elbows

4) Three Elbows

Elbows used on rear vented configurations should be either a 90° elbow or a 45° elbow. A starter elbow cannot be used in any rear-vented configuration.

Figure 16 shows various venting configurations using three elbows to terminate horizontally.

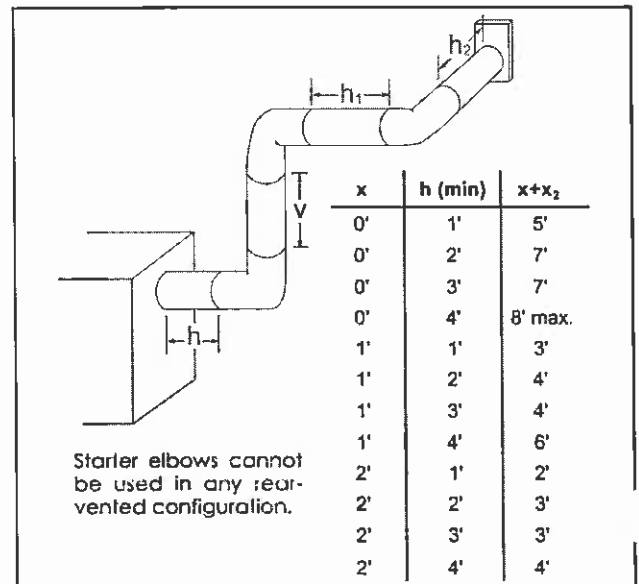


Figure 16 - Three Elbows

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