



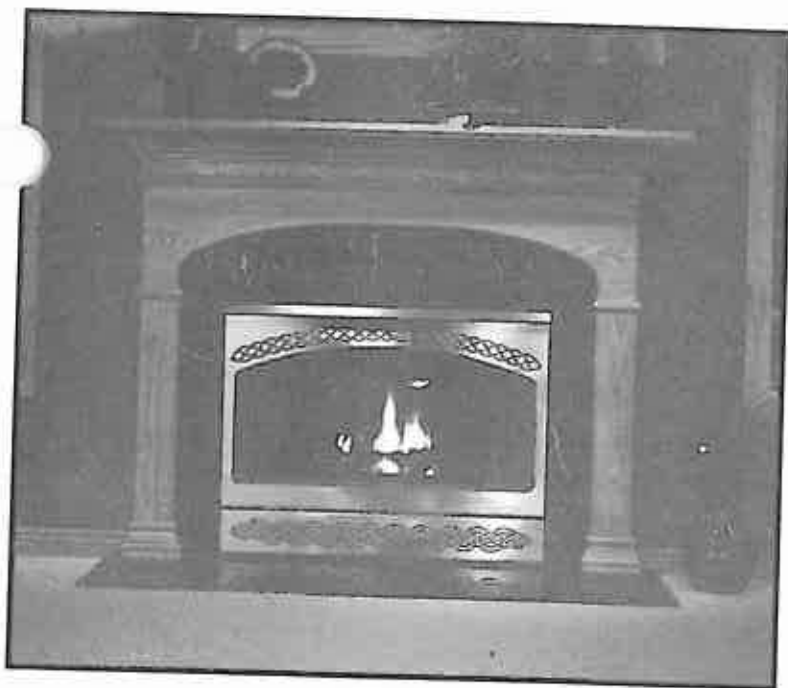
heatilator®

The first name in fireplaces

Hearth Technologies-Mt. Pleasant
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Mt. Pleasant, Iowa 52641
Division, HON INDUSTRIES
www.heatilator.com

INSTALLATION & OPERATING INSTRUCTIONS

CALIBER NXT DIRECT VENT CNXT70E/90E HEATER LISTED



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 this appliance to the elements (such as rain, etc.).

WARNING!

The fixed glass panel on the front of this heater is extremely hot while it is in operation and for one hour after it has been shut off. A secondary barrier has been provided to prevent direct contact with the fixed glass panel. Do not operate this appliance with the barrier removed.

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.

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WARNING!

Do NOT use this appliance if any part has been under water! You must call a qualified service technician immediately to inspect the appliance and to replace any part of the control system or gas control that has been under water.

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. The Caliber 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 appliance. Provide adequate clearances around the openings into the combustion chamber and adequate accessibility clearances for servicing and proper operation.

A. APPLIANCE SPECIFICATIONS

1. U.S. and Canada Certification

The Caliber NXT gas appliance has been tested in accordance with the ANSI standard Z21.88-2000 in the United States, the current CSA 2.33-2000, IR41, P4, and IR66 in Canada, and has been listed by Underwriters Laboratories Inc. for installation as described in this manual. All components are UL, AGA, CGA or CSA safety certified.

2. Local Codes

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

The Caliber NXT gas appliance has also 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.

If you need assistance during installation, contact your local dealer or the Heatilator Technical Services Dept., Hearth Technologies Inc. (HTI), 1915 W. Saunders St., Mt. Pleasant, IA 52641, 1-800-843-2848.

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3. 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.

4. Glass Certifications/Specifications

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.

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 installation instructions are not drawn to scale.

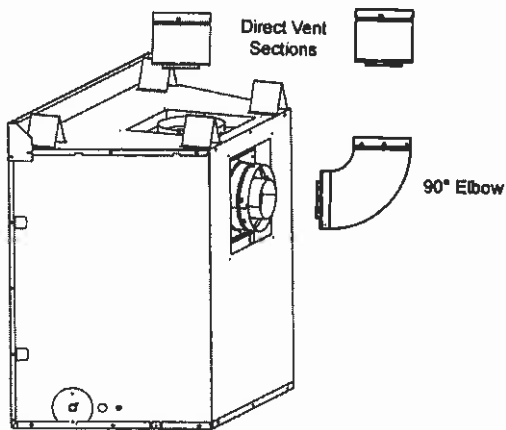
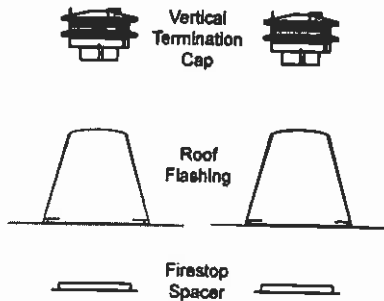
Tools and building supplies normally required for installation:

Saw	Framing Material
Pliers	Appliance Surround
Hammer	Caulking Material
Phillips Screwdriver	Gloves
Tape Measure	Framing Square
Plumb Line	Electric Drill and Bits
Level	Wall-finishing materials
Safety Glasses	

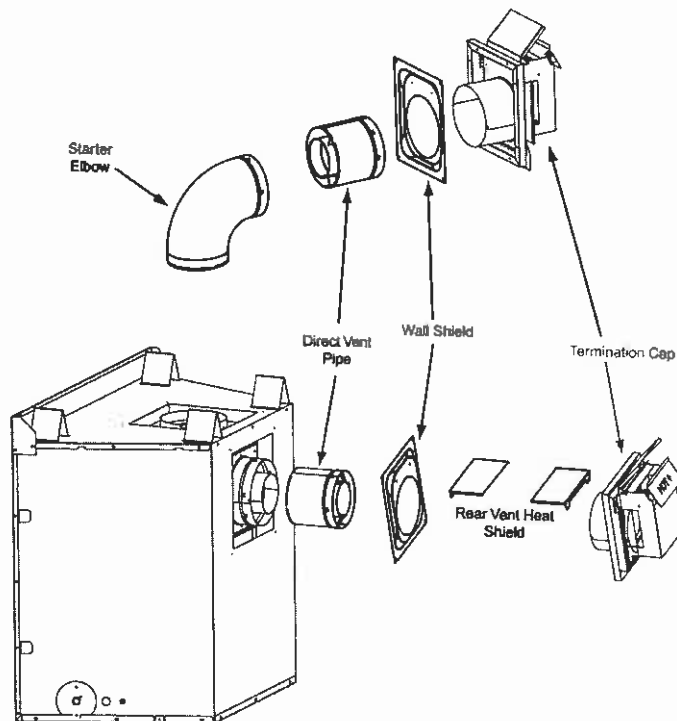
CALIBER NOMENCLATURE

Catalog #	Description
CNXT70E	41" width, 36" opening, intermittent pilot, natural gas appliance
CNXT90E	47" width, 42" opening, intermittent pilot, natural gas appliance
The following suffixes are defined as follows:	
No suffix	Natural gas
L	Propane gas
T	Traditional refractory
H	Herringbone refractory
Examples:	CNXT70LET is a propane gas with traditional refractory appliance CNXT90EH is a natural gas with herringbone refractory appliance
Installation Components	Description
CS	Direct Vent Cap Shield (for horizontal termination only)
VP-TH	Standard Horizontal Termination Cap with 5" collar
VP-TR	Standard Horizontal Termination Cap with 5" collar and heat shield - rear vent
VP-TR2	Standard Horizontal Termination Cap with 3.5" collar and heat shield - rear vent
VP-TV	Vertical Termination Cap
VP-VT1	Horizontal Termination Cap
VP-VT1X	Extended Horizontal Termination Cap
VP-TB1	Basement Horizontal Termination Cap
VP-THK	Horizontal Top Vent Kit: VP-TH, WS6, VP6-9, VP90ST
VP-THK-MI	Horizontal Top Vent Kit: VP-TR, WS6, Heat Shield, VP24MI, VP90ST
VP-TRK	Horizontal Rear Vent Kit: VP-TR, WS6, Heat Shield, VP6-9
VP-TRK2	Horizontal Rear Vent Kit: VP-TR2, WS6, Heat Shield, VP4
VP45	45° Elbow
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
VP12MI	12" Non-unitized Vent Section (can be cut to length)
VP24MI	24" Non-unitized Vent Section (can be cut to length)
VP6-9	6-9" Slip Section
VP9-14	9-14" Slip Section
VP14-24	14-24" Slip Section
FS6	Firestop Spacer
WS6	Wall Shield to ensure horizontal clearances
VSS2	Vinyl Soffit Shield
RF6	Roof Flashing (vertical termination for 0/12 to 6/12 pitch)
1243S	Sleep Pitch Roof Flashing (for 7/12 to 12/12 pitch)
VS4	Vertical Vent Support

**Typical Vertical Installations
(Rear and Top Vent Shown)**

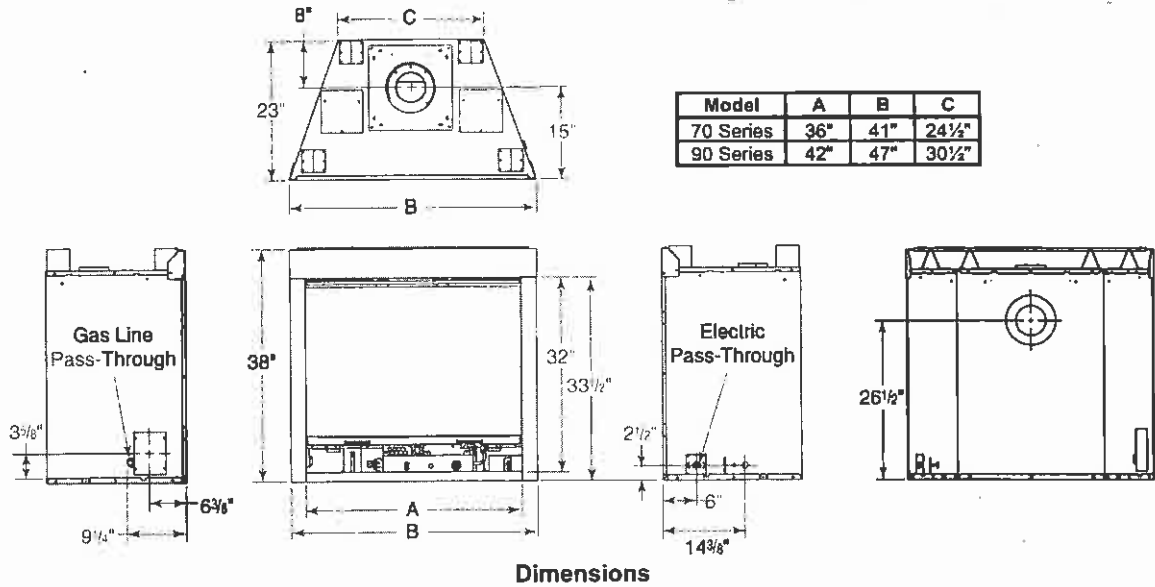


**Typical Horizontal Installations
(Rear and Top Vent Shown)**



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B. LOCATION AND CLEARANCES



WARNING!

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

1. Appliance Locations and Space Requirements

Figure 1 illustrates a variety of ways the appliance may be located in a room. The NXT Series may be installed directly on the floor or raised on a hearth. These appliances are certified for installation in a bedroom, bed/sitting room, or in mobile homes in the U.S. and Canada.

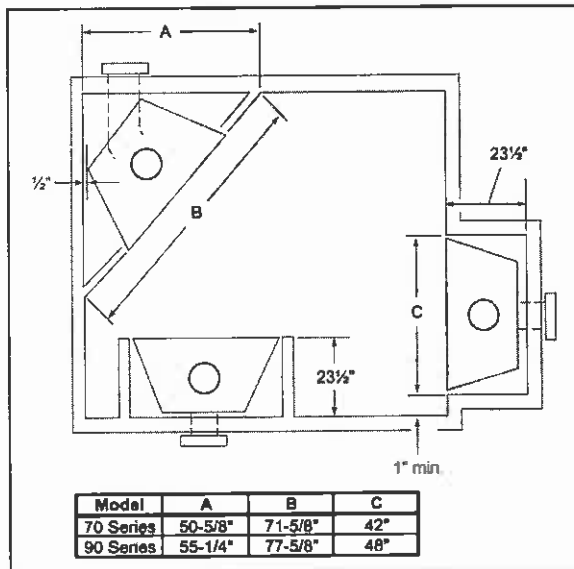


Figure 1 - Appliance Locations

2. Clearances

Figure 2 shows all clearances that must be maintained around the appliance. See page 11 for termination cap clearances and pages 12 and 16 for pipe clearances.

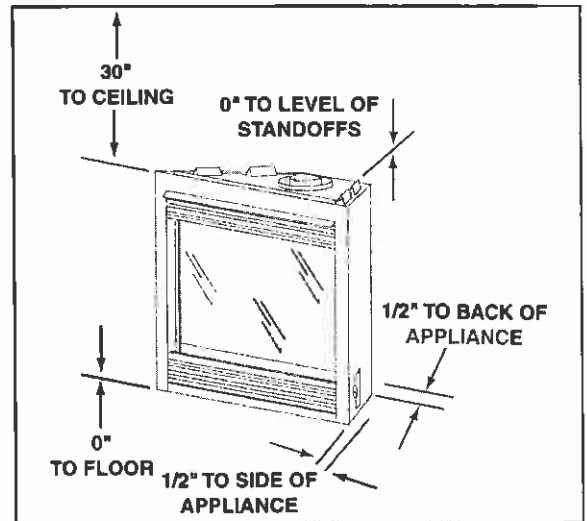


Figure 2
Appliance Clearances to Combustible Materials

CAUTION:

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

C. FRAMING

Figure 3 shows typical framing of this appliance using combustible materials. Figure 4 shows the minimum mantel heights. All required clearances to combustibles must be adhered to.

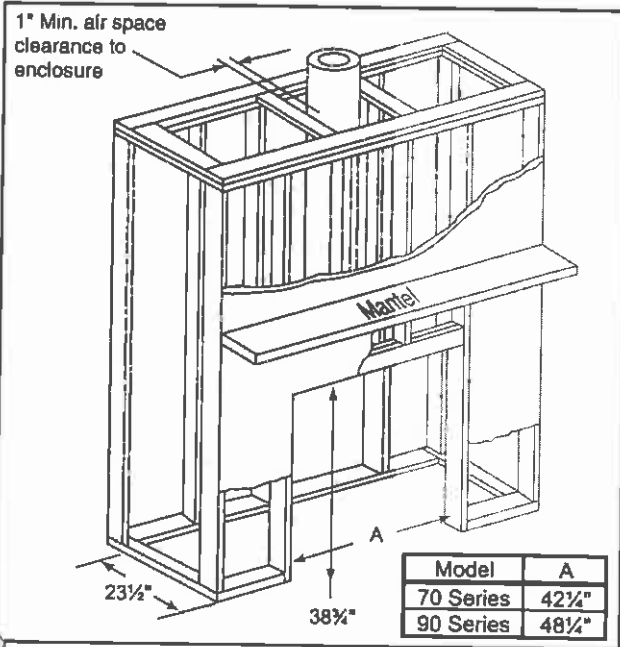


Figure 3 - Framing

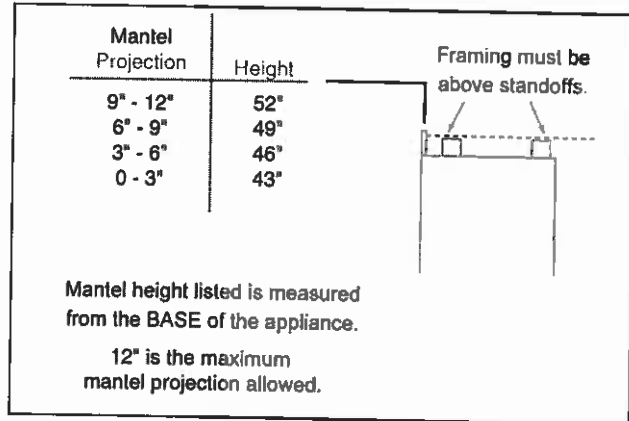


Figure 4 - Mantel Heights

CAUTION:
Wear gloves and safety glasses for protection.

CAUTION:
Provide adequate accessibility clearances around the upper and lower grilles for servicing and proper operation.

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.

WARNING!

To prevent contact with sagging or loose insulation, the appliance must not be installed against vapor barriers or exposed insulation.

D. SETTING 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 from side-to-side and front-to-back. Shim with noncombustible material as necessary.

Secure the appliance by bending out the nailing flanges on each side of the appliance and nail to the 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 use only 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.

Note: If the appliance is to be top vented, remove and discard the plate (Figure 5) and replace the screw you removed in Step 1.

E. CONVERSION FROM TOP VENT TO REAR VENT

1. Remove one screw holding the cover plate (see Figure 5) to the top of the appliance and set aside to be used in Step 14 if you are converting to rear vent.
3. Remove the cover plate (four screws) from the top pan heat shield and discard. See Figure 7.

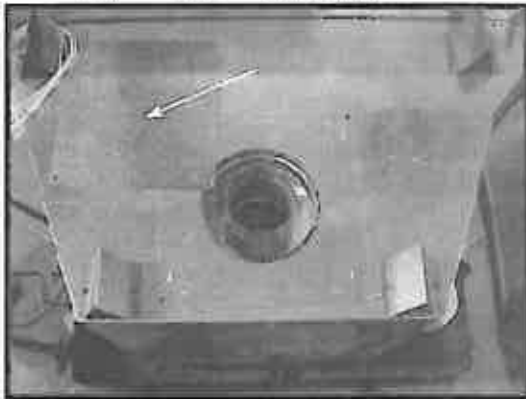


Figure 5 - Cover Plate, Top of Appliance

Note: When converting from Top Vent to Rear Vent, retain all parts removed from the top. They will be used again, with the exception of the top pan heat shield removed in Step 3.

2. Remove four screws holding the plate surrounding the flue. See Figure 6. Remove the plate.



Figure 6 - Remove Plate Screws

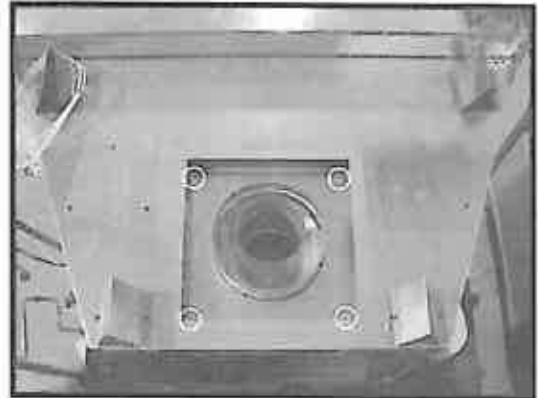


Figure 7 - Cover Plate, Top Pan

4. Remove four screws holding the outer collar to the appliance top. See Figure 8. Remove the outer collar.



Figure 8 - Remove Screws from Outer Collar

5. Remove four screws holding the inner collar to the appliance top. See Figure 9. Remove the inner collar.

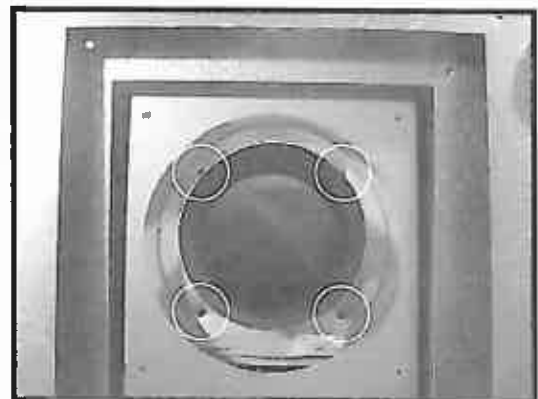


Figure 9 - Remove Screws from Inner Collar

6. Remove four screws holding the back cover plate on. Remove the cover plate. See Figure 10.

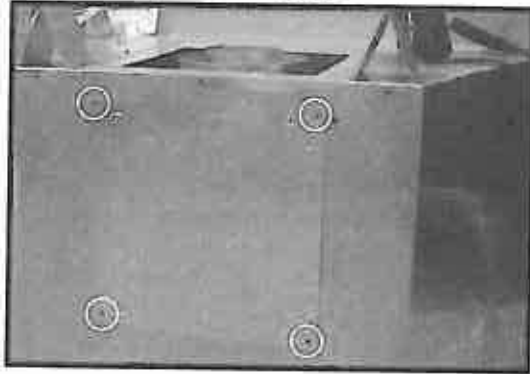


Figure 10 - Back Cover Plate

9. Place the inner collar on the appliance back and replace the four screws to hold this collar in place. See Figure 13.



Figure 13 - Place Inner Collar on Rear of Appliance

7. Remove four screws holding the outer cover plate to the appliance back. See Figure 11. Remove the outer cover and white gasket.

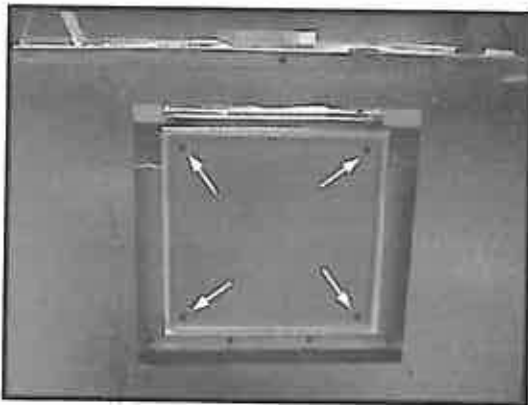


Figure 11 - Remove Outer Cover Plate

10. Place the outer collar on the appliance back and replace the four screws to hold this collar in place. See Figure 14.



Figure 14 - Place Outer Collar on Rear of Appliance

8. Remove four screws holding the inner cover plate to the appliance back. See Figure 12. Remove the inner cover and white gasket.

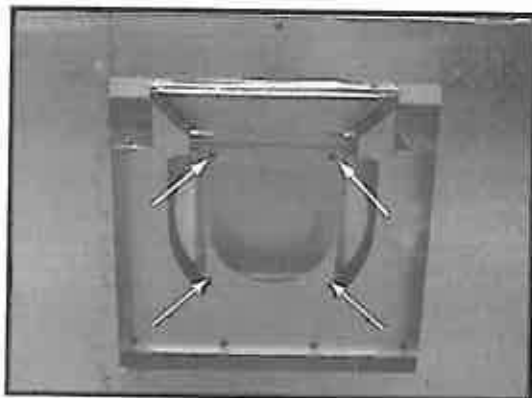


Figure 12 - Remove Inner Cover Plate

11. Locate the plate removed in Step 2. Place the plate around the rear vented collars and replace the four screws to hold the plate in place. See Figure 15.

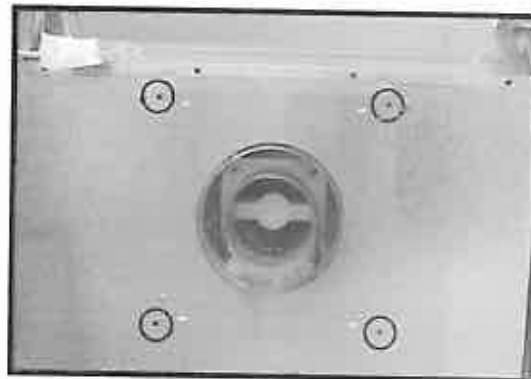


Figure 15 - Place Plate on Rear of Appliance

12. Place the inner cover plate and white gasket (removed in Step 8) on the appliance top and replace the four screws to hold the inner cover plate in place. See Figure 16.

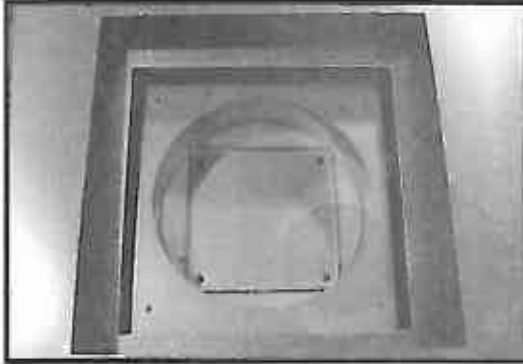


Figure 16 - Place Inner Cover Plate on Top of Appliance

13. Place the outer cover plate and white gasket (removed in Step 7) on the appliance top and replace the four screws to hold the outer cover plate in place. See Figure 17.

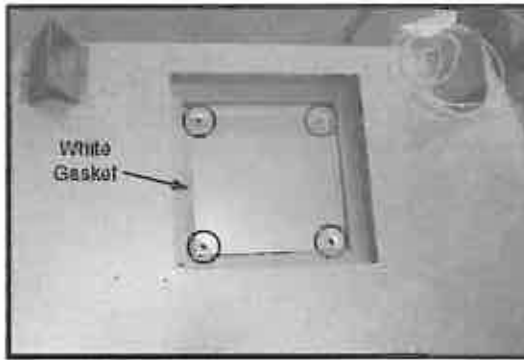


Figure 17 - Place Outer Cover Plate on Top of Appliance

14. Locate the cover plate removed in Step 1 and place on top of the top pan heat shield. Replace the four screws to hold this plate in place. See Figure 18.

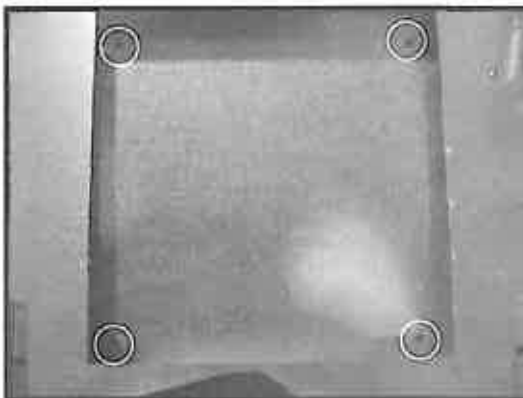


Figure 18 - Cover Plate

15. Locate the cover plate removed in Step 6. Place the plate on top of the appliance. See Figure 19. Replace the four screws to hold this plate in place. See Figure 20.

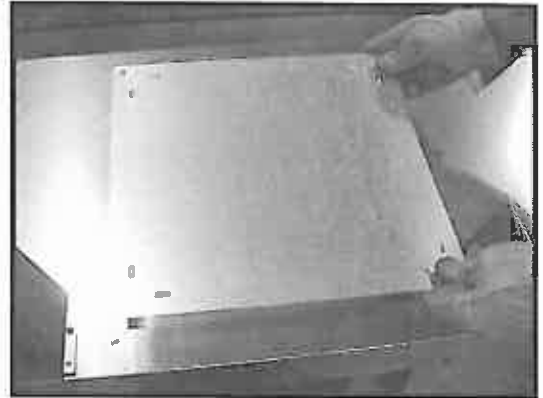


Figure 19 - Plate on Top



Figure 20 - Plate into Place

16. The appliance should look like the one shown in Figure 21 after it has been converted to a rear vent appliance.



Figure 21 - Completed Conversion

F. VENTING AND TERMINATION

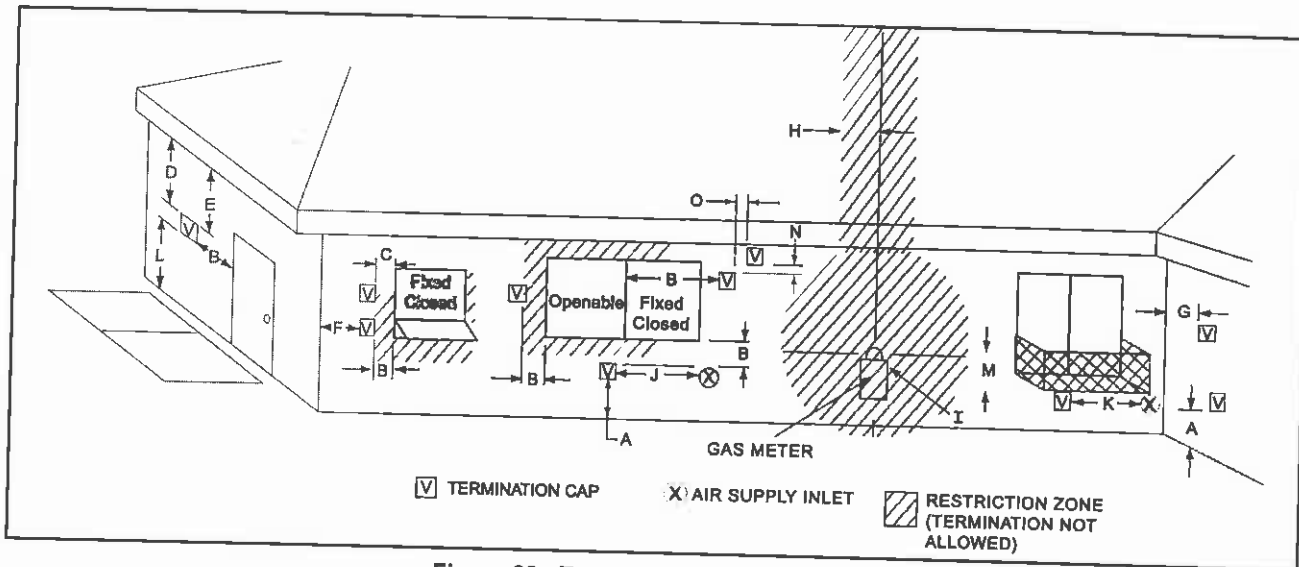


Figure 22 - Termination Cap Locations

Dimension Descriptions

- A** Clearance above the ground, a veranda, porch, deck or balcony - 12 inches (30 cm) minimum. *
- Clearance to window or door that may be opened - 10,000 BTUs or less, 6 inches (15 cm) minimum; 10,000-50,000 BTUs, 9 inches (23 cm) minimum; over 50,000 BTUs, 12 inches (30 cm) minimum. *
- C** Clearance to permanently closed window - 12 inches (30 cm) minimum - recommended to prevent condensation on window.
- D** Vertical clearance to ventilated soffit located above the termination within a horizontal distance of 2 feet (60 cm) from the centerline of the termination - 18 inches (46 cm) minimum. **
- E** Vertical clearance to unventilated soffit - 12 inches (30 cm) minimum. **
- F** Clearance to outside corner - 6 inches (15 cm) minimum.
- G** Clearance to inside corner - 6 inches (15 cm) minimum.
- H** Not to be installed above a meter/regulator assembly within 3 feet (90 cm) 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 into building or the combustion air inlet to any other appliance - 12 inches (30 cm) minimum. *
- K** Clearance to mechanical air supply inlet - 6 feet (1.8 m) minimum. *
- L** Clearance above a paved sidewalk or paved driveway located on public property - 7 feet (2.1 m) minimum.
A vent may not terminate directly above a sidewalk or paved driveway which is located between two single family dwellings and serves both dwellings.
Clearance under veranda, porch, deck or balcony - 12 inches (30 cm) minimum. * Recommended 30 inches (76 cm) for vinyl or plastic.
Only permitted if veranda, porch, deck or balcony is fully open on a minimum of 2 sides beneath the floor. *

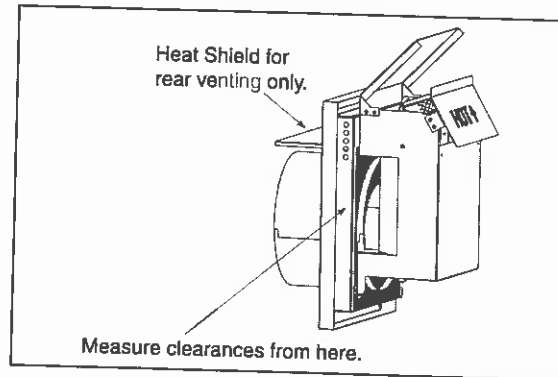
- N** Vertical clearance between two horizontal termination caps - 12 inches (30 cm) minimum.
- O** Horizontal clearance between two horizontal termination caps - 12 inches (30 cm) minimum.
- * As specified in CGA B149 Installation Codes
Note: Local codes or regulations may require different clearances.
- ** Clearance required to vinyl soffit material - 30 inches (76 cm) minimum. With a vinyl soffit shield - 18 inches (46 cm) minimum.

WARNING!

In the U.S.: Vent system termination is NOT permitted in screened porches. You must follow side wall, overhang and ground clearances as stated in the instructions.

In Canada: Vent system termination is NOT permitted in screened porches. Vent system termination is permitted in porch areas with two or more sides open. You must follow all side wall, overhang and ground clearances as stated in the instructions.

Hearth Technologies Inc. assumes no responsibility for the improper performance of the appliance when the venting system does not meet these requirements.



Measure Clearances

1. Horizontal Termination

a. Clearances

See Figures 23 and 24 for clearance information.

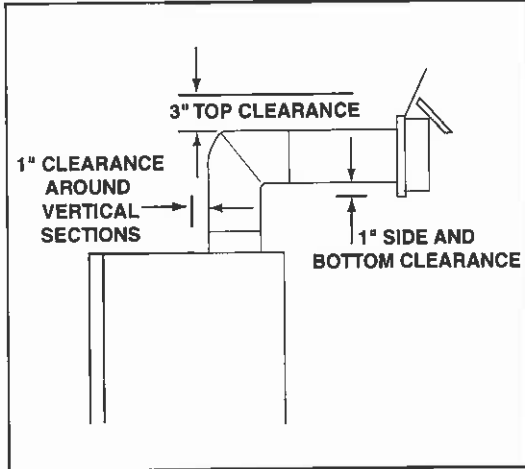


Figure 23 - Venting Clearances to Combustible Materials (Top Vent)

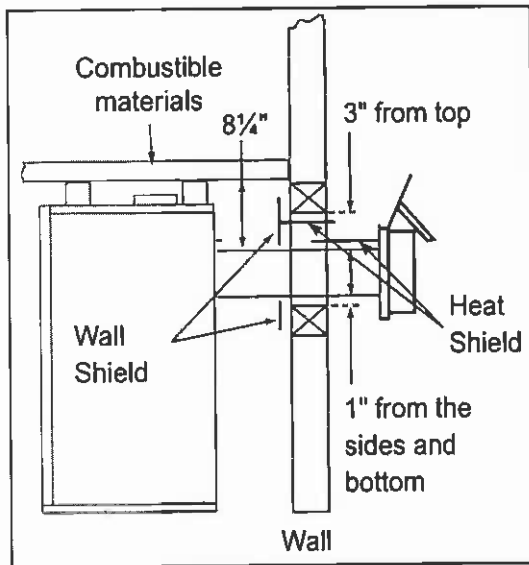


Figure 24 - Venting Clearances to Combustible Materials (Rear Vent)

Note: Starter elbows cannot be used in any rear vented configuration.

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

b. Vent Lengths for Top Vent (see page 13 for Rear Vent)

Various venting configurations are shown in Figures 25-28 from which maximum vent lengths can be determined.

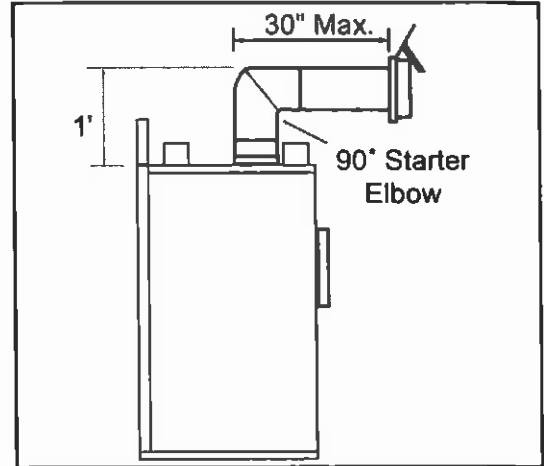


Figure 25 - Vent Lengths with One Elbow (minimum vertical)

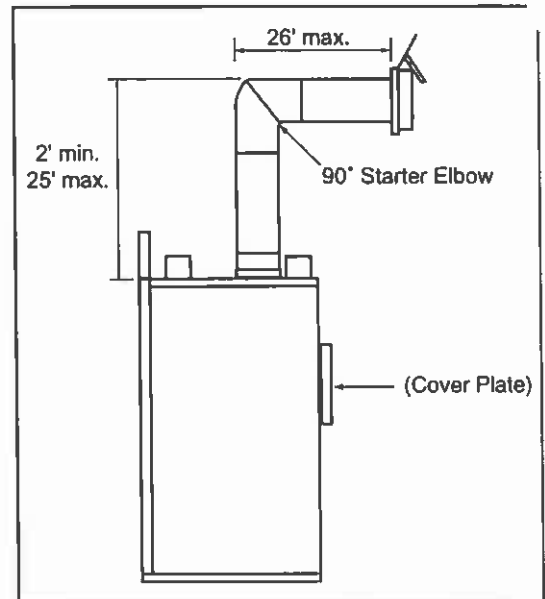


Figure 26 - Vent Lengths with One Elbow (2' vertical or more, 25' maximum)