

INSTALLATION INSTRUCTIONS

PRESSURE VENT

VENTING SYSTEM
FOR CATEGORY II, III, AND IV APPLIANCES

DuraVent
Member of M&G Group

A MAJOR CAUSE OF VENT RELATED FIRES IS FAILURE TO MAINTAIN REQUIRED CLEARANCES (AIR SPACES) TO COMBUSTIBLE MATERIALS. IT IS OF THE UTMOST IMPORTANCE THAT DOUBLE WALL PRESSURE VENT BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

NOTE:

Read through all of these instructions before beginning your installation. Failure to install as described in this instruction will void the manufacturer's warranty, and may have an effect on your homeowner's insurance and UL listing status. Keep these instructions for future reference.

Dear Customer, Installer, or End User:

We welcome any comments regarding matters pertaining to our DuraVent products. We welcome any ideas, input or complaints and we'll make sure that someone responds directly back to you.

Send your emails to:

president@duravent.com

If you are searching for tech support or product information, please phone us at 800-835-4429.

Or email us at:

techsupport@duravent.com

PRESSURE VENT DOUBLE WALL FOR CATEGORY II, III, AND IV APPLIANCES.

CONTENTS:

INTRODUCTION: GENERAL REQUIREMENTS

HORIZONTAL THROUGH-THE-WALL INSTALLATION

VENTING THROUGH MASONRY CHIMNEY

INTRODUCTION

DuraVent manufactures a special vent system for gas fired appliances as a category II, III and IV venting system in the USA and Canada as BH venting system . For continuous operating exhaust temperature (see table 1) pressure of 6" water column. Pressure vent must be installed by an experienced installer familiar with the operation and maintenance of heating appliances and venting. Failure to follow proper installation procedures may cause unsafe conditions.

Do not mix pipe or fittings with other manufacturers. Vent pitch is important for condensate removal and improper appliance connections and may cause unsafe conditions. Refer to the gas appliance manufacturers instructions to determine venting requirements and limitations.

Permits may be required before starting an installation. It is the responsibility of the installer to contact local building and fire officials concerning any restrictions and / or inspection requirements that may apply.

GENERAL INSTALLATION REQUIREMENTS:

Proper planning for your vent installation will result in greater safety, efficiency and convenience, saving both time and money. Use only DuraVent listed parts. Do not install damaged parts.

- (1) When passing through ceilings and walls make sure all venting pipes are at proper clearances from combustible materials, and that Fire Stops and Wall Thimbles are in place. Wall penetration assemblies are not to be located directly behind a heating

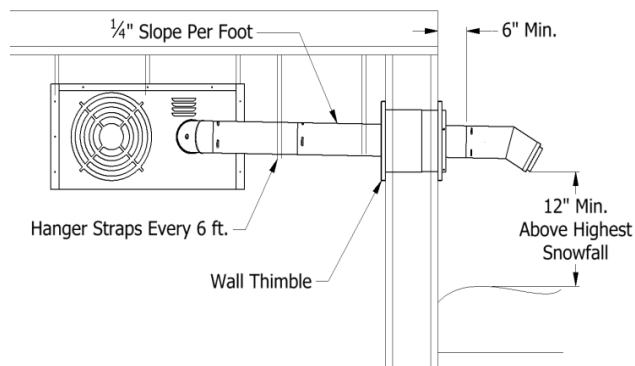
appliance.

- (2) For horizontal terminations make sure NFPA 211 and NFPA54 rules are followed for minimum distance from windows and openings.
- (3) Do not mix and match with other manufactured products or improvise solutions.
- (4) Never use a vent with an inside diameter that is smaller than the appliance flue outlet.
- (5) Sections of pipe are joined together by lining up the female end of the locking lug with the male end slot. Push them together and turning clockwise to twist lock. Screws are not required. If screws are desired use ¼ long sheet metal screws. Do not penetrate the inner liner with screws.
- (6) Never fill any required clearance space with insulation or any other combustible material.
- (7) An internal O-Ring gasket on the outside of the inner liner is on the female end of the pipe section. These gaskets are lubricated and help seal pipe sections as they are connected together. If your O-Ring gasket is missing or becomes unseated during connection, you must replace it with a new O-Ring gasket.
- (8) DuraVent recommends that the vent system be inspected once a year by a qualified service technician.
- (9) For installation in masonry chimneys check standard for chimney, fireplaces vents solid fuel appliances.
NFPA 211 for terminations

"MINIMUM CLEARANCE TO COMBUSTIBLE MATERIALS AND BUILDING INSULATION				
Diameter , in	Max. Flue Gas Temp, ° F	Installation Position	Enclosure	Clearance, in.
2 through 5	550	Vertical	Fully Enclosed	1
2 through 5	480	Horizontal	Unenclosed	Top -2 / Side - 1
2 through 5	330	Horizontal	Fully Enclosed	3
2 through 5	480	Horizontal	Fully Enclosed	6

UNIT HEATER APPLIANCES HORIZONTAL INSTALLATION:

- Horizontal commercial applications are for buildings which are not attached to living spaces. When venting through a sidewall termination residential or commercial the system shall be not less than 12" (.3m) above the ground and 12" above the highest snow fall. Terminate the system at least 7' (2.1 m) above a public walkway or driveway and less than 6' (1.8 m) from the combustible intake of any appliance and no less than 3' (.9 m) from any other building opening. For more information on terminations. See National Fuel Gas Code ANSIZ223 .1 and NFPA54. CAN/CSA-B148.1 or CAN/CSA-B149.2 Propane installations code as applicable.
- The total vent length from the appliance flue collar to the outside termination shall not be greater than the maximum specified in the appliance manufacturer's instructions.
- A horizontal installation shall have a slope downwards of no less than $\frac{1}{4}$ " (6.4 mm) every 12 "(305mm) to prevent excessive condensate formation, ice buildup, or blockage at any location in the assembly. See appliance manufacturer's installation instructions for further details regarding condensate drain fittings and pitch of the system.



Pressure Vent Horizontal Installation

PRESSURE VENT INTO MASONRY CHIMNEY

AN IMPORTANT MESSAGE ABOUT RELINING YOUR CHIMNEY

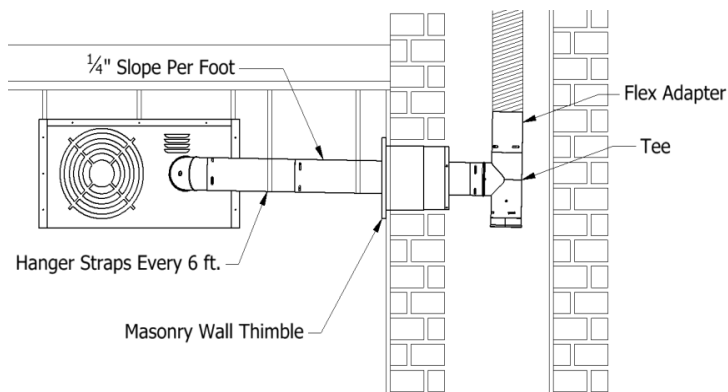
1. Have a professional installer thoroughly clean, and install your new appliance and relining system.
2. Determine condition of creosote buildup in masonry flue, always clean before relining. Any tar glaze creosote buildup must be removed prior to relining the chimney.
3. Determine condition of masonry fireplace and chimney. See that they meet code requirements. The chimney should be checked for cracked, loose or missing bricks, mortar, or other materials that could inhibit a correct installation of the liner system. Make necessary repairs before relining.
4. The air space clearances between the masonry chimney exterior and combustible materials should be checked to verify that the chimney is in accordance with the clearance specifications of 1) the NFPA; 2) other applicable building codes; or 3) these instructions. 0" clearance if installed in accordance with these instructions).

These requirements apply when a unit heater is vented through a masonry chimney with DuraFlex. Single appliance venting of a fan assisted unit heater into a tile lined masonry chimney (interior or exterior is prohibited). The chimney must be lined with an insulated single wall flexible vent lining system sized in accordance with nationally accepted venting tables. The DuraFlex system in a masonry chimney should be insulated, because the performance of the entire heating system will be greatly enhanced with improved draft and reduced condensation. The DuraFlex liner system is held in place by the frame work at the top of

the chimney. Complete kits are available (Tee, Top Plate, and Flex). Connect only one appliance per chimney liner. The size of the liner should be the same as the appliance outlet.

See complete flexible chimney liner instructions L253 –

www.duravent.com/productdocumentsearch.aspx

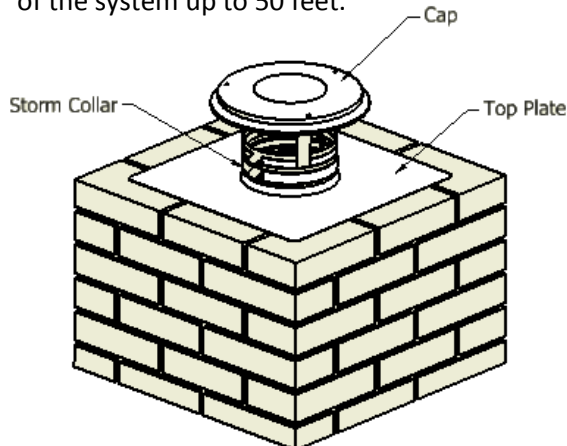


Pressure Vent Into Masonry Chimney

TO ASSEMBLE DURAFLEX LINER

Attach tee without branch to liner flex then wrap insulation around liner (see example), then lower liner down masonry chimney to the thimble area. If necessary, enlarge thimble to accommodate fittings. If penetrating a combustible wall be sure to install an approved wall penetration device.

The DuraFlex system is held in place by the top plate which is designed to support the weight of the system up to 50 feet.

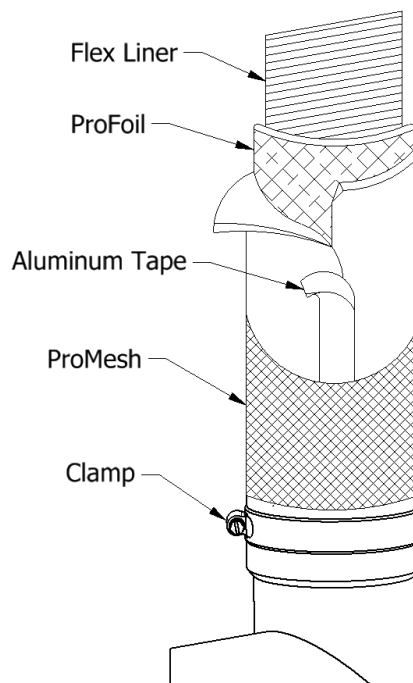


DF Installation

ATTACH PROFOIL CERAMIC BLANKET TO DURAFLEX LINER

Roll out the insulation blanket on a clean surface, foil face down. Lay the flex liner on top and trim the blanket so that it is about one foot shorter than the liner.

Wrap the insulation around the liner lengthwise and trim it so that a butt joint is formed. Seal the joint with aluminum foil tape. Spray adhesive may be used to hold the blanket in place until it can be secured with the foil tape. A minimum of 1/2" of insulation is required. If a double layer of blanket is needed, install it with the butt joint on the opposite side. Install ProMesh protective wire mesh over the blanket(s). The ProMesh is used to protect the ProFoil insulation as the liner is lowered into the chimney. Slip the ProMesh over the insulated liner and secure one end with a stainless steel band clamp. Pull the ProMesh towards the other end of the liner so that it tightens snugly around the insulation, then trim off the excess. Secure each end with a stainless steel band clamp.



Attaching a Ceramic Blanket