

Installation Instructions



PolyPro Double-Wall Flex
Gas Vent System for Category II &
IV Gas-Burning Appliances

POLYPRO® FLEX

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 POLYPRO® BE INSTALLED ONLY IN ACCORDANCE WITH THESE INSTRUCTIONS.

! WARNING

Risk of carbon monoxide poisoning or fire due to joint separation or pipe breakage.

- Examine all components for possible shipping damage prior to installation;
- Proper joint assembly is essential for a safe installation. Read all instructions before beginning the installation and follow these instructions exactly as written.
- Check the integrity of joints upon completion of assembly.
- This venting system must be free to expand and contract under normal operation.
- This venting system must be supported in accordance with these instructions.
- Assure unrestricted vent movement where required through walls, ceilings and roof penetrations.
- Do not mix pipe, fittings, or joining methods from different vent system manufacturers. Do not use adhesives of any kind with this venting system.

! IMPORTANT

Throughout this manual you will see special attention boxes intended to supplement the instructions and make special notice of potential hazards. These categories mean, in the judgment of M&G.

! WARNING

Indicates a condition or hazard which may cause severe personal injury, death or major property damage.

! CAUTION

Indicates a condition or hazard which will or can cause minor personal injury or property damage.

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 to help improve our product offering. 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

PolyPro® is one of M&G DuraVent's GreenVent® line of products.



Intertek

PolyPro Flex Gas Vent System

For the most up-to-date installation instructions, see www.duravent.com

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POLYPRO FLEX[®]

APPLICATION

M&G DuraVent's PolyPro vent pipe is a single-wall polypropylene gas vent for use with ANSI Category II and IV gas-burning appliances. PolyPro is listed by Intertek to the ULC S636 standard in Canada and is rated as a Class IIA, IIB, and IIC vent system suitable for exhaust temperatures up to 230°F (110 °C), and a maximum positive pressure of 8" w.c. Check with your appliance manufacturer or look in the appliance installation instructions to verify that M&G DuraVent's PolyPro Vent is allowed for use with your appliance.



CAUTION

The application of the M&G DuraVent Systems and type of terminals must be approved by the manufacturer of the appliance to which it is applied. Always use genuine M&G DuraVent roof or wall terminations. Terminating the vent pipe or air inlet with an elbow or tee for termination is prohibited.

PRESSURE DROPS

Refer to the appliance manufacturer's instructions for information about the maximum length that can be installed and pressure drops or equivalent length of the fittings.

MINIMUM CLEARANCE TO COMBUSTIBLES

Refer to **Table A** for the minimum clearance to combustible materials. Use this table if the appliance manufacturer's instructions do not recommend greater clearances. It is prohibited to place any type of insulation around the venting system within these clearances.

Table A

Minimum Clearance To Combustibles Table

	CLEARANCE
Horizontal	1.2" (30mm)
Vertical	1.2" (30mm)



IMPORTANT

The vent system must terminate in accordance with local code requirements and appropriate National Codes:

In the US: NFPA 54 / ANSI Z223.1 National Fuel Gas Code or the International Fuel Gas Code.

In Canada: CAN/CGA-B149.1 Natural Gas Installation Code or CAN/CGA-149.2 Propane Installation Code.

INSTRUCTIONS

Before installation, consult the authority having jurisdiction (such as gas inspection authority, municipal building department, fire department, fire prevention bureau, etc) to determine the need to obtain a permit or for applicable local or national codes. A venting system that extends through any area above the one where the vented appliance is located shall be provided with an enclosure which has a fire resistance rating equal to or greater than the fire resistance rating of the floor or roof assemblies through which it passes. This requirement does not apply to one or two family dwellings.

WARNING

It is recommended that the venting system be checked once a year by a qualified serviceman; special attention should be paid to the presence of debris and for signs of leakage.

Normal operation of gas burning appliances does not result in deposits of combustible soot in venting systems. However, a poorly adjusted or malfunctioning appliance can deposit soot and other debris which can enter the vent system. Any such accumulation should be removed and the appliances adjusted to eliminate future accumulation. Use only a soft brush for cleaning the sections and fittings.

If any leakage is found at the joints the connected appliances should be turned off and the leaks repaired.

CAUTION

No other appliance may be vented into the same chimney flue if the flexible venting system is routed through this chimney.

Plastic venting systems shall not pass through rated fire separations.

The distance between the point of termination of the system shall be **1. 6 feet (1.8m) or more from combustion air inlet of any appliance;**

2. more than 3 feet (0.91m) from any other building opening, gas utility meter, service regulator, and the like; or

3. less distance if specified in the appliance instructions.

Contact the local building or fire officials about restrictions and installation inspection in your area.

WARNING

Proper installation of the venting system and appliance is dependent on the use of all parts specified by the manufacturer for use in particular installations. The performance of the system may be affected if the proper assembly of all required parts is not accomplished. Acceptance and use of the venting system requires full compliance with these installation instructions.

ENSURE THE FOLLOWING FOR EACH INSTALLATION

1. M&G DuraVent pipe, fittings & termination must be used for the entire length of the vent. These products are supplied with specific instructions and must be followed.
2. A condensate drain with a U-bend or P-trap water seal made of corrosion resistant material (like PVC or CPVC) must be connected to the 1¼" (32mm) outlet of the condensate drain.
3. Consult the appliance manufacturer's instructions if a separate drain fitting must be used.

CAUTION

The maximum allowable deflection (bend) of the flexible vent is 45°, so that condensate does not collect in the corrugations of the flexible vent. Since flexible vents can not be used in a complete horizontal position (see above), the connection between the appliance and the flexible vent must be done by M&G rigid vent system. Follow the specific instructions that are supplied with these products.

4. Common venting of more than one appliance is not allowed unless the appliance manufacturer has a separate third party approval for such venting option and the manufacturer's instructions allow such installation.
5. The maximum length, the correct diameter and number of fittings must be in conformance with the specifications of the appliance manufacturer's instructions.
6. The venting systems must be installed with

correct distance to combustible material.

7. Check for proper joint construction.

WARNING

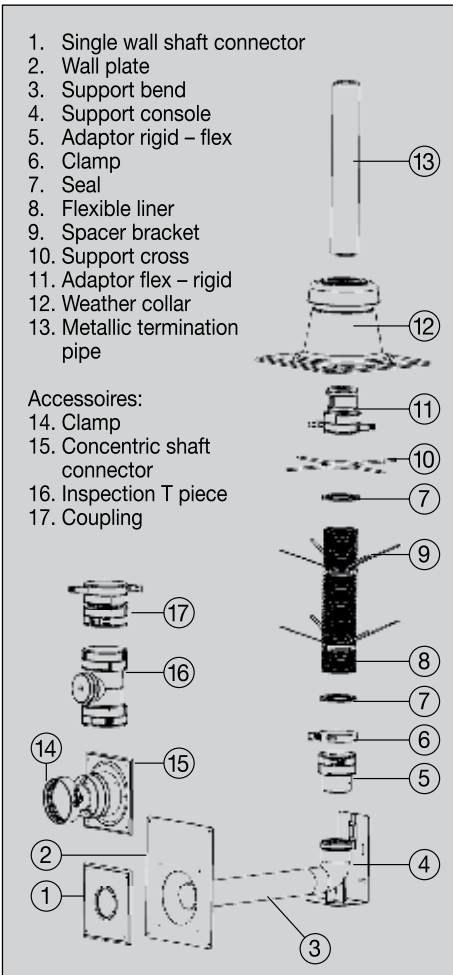
The instructions of the appliance manufacturer with regards to the minimum trap height of the condensate drain must be followed. If the height is not enough the flue gases can be blown out under a blocked vent condition before the appliance's blocked vent detection system can functions.

ADDITIONAL INSTRUCTIONS FOR TERMINATION

1. The vent system must terminate at least 2 feet above the roof line or any wall or vertical structure within 10 feet.
2. Do not install an extra rain cap on the terminal. The terminals are specially designed for high efficiency boilers which produce large quantities of moisture due to condensation of combustion gases. This design allows rain to enter the terminals which also serves to dilute acidic condensate. However, a drain must be incorporated to allow condensation and rainwater to escape from the venting system. The drain must include a trap to prevent combustion gases from entering the living space.
3. Follow the specific mounting instructions at the end of this manual.

Special notes:

INSTALLATION FOR FLEXIBLE FLUE LINERS



- The flexible liner must be treated carefully at low temperatures <math><41^{\circ}\text{F}</math> (<math><5^{\circ}\text{C}</math>)
- Check all the parts for possible damage.
- Rotate the components, slightly to assist assembly.

INSTRUCTIONS:

1. Determine the required location of the opening in the shaft. Ensure the flue access cut-out meets the minimum specified size to allow manual assembly of connections within the flue. The slope of the connecting flue pipe must have a minimum of 3° (equivalent 5cm/m) (inch/feet).

2. Fix the elbow support bracket (**Figure 1**) with 4 screws on the wall of the chimney.

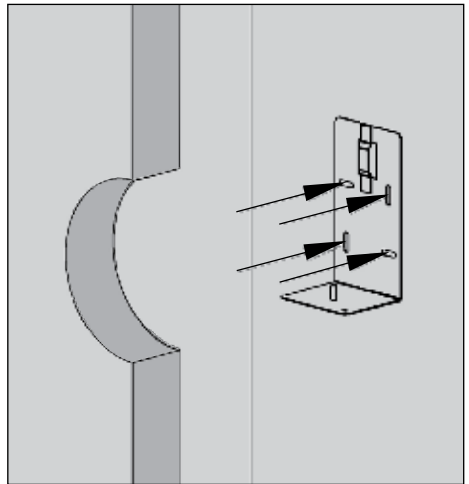


Figure 1, Fixing the Support Bracket

3. The length of the flexible liner can be determined in two ways: use a rope with a piece of lead to measure the shaft length, add 16" (40cm) extra length for each bend. The flexible liner can be shortened with a saw or scissors by cutting in a groove. The right length can also be determined after installing the liner in the shaft and cutting it at the top of the chimney, see **Figure 11**, dimension B.

4. When required, an inspection T piece must be used in the system, (**Figure 2a**). With the connection piece, (**Figure 2b**), two lengths of flexible liner can be connected to each other (can be ordered as accessory).

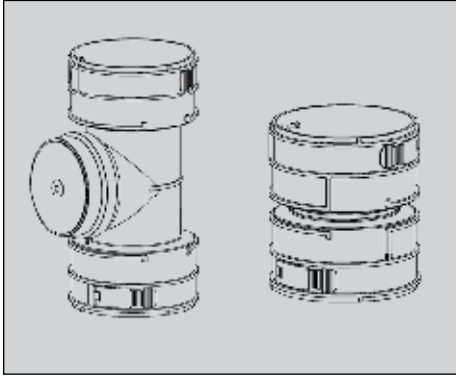


Figure 2a
Inspection T piece

Figure 2b,
Connection Piece

5. Mount the seal into the lowest whole groove (**Figure 3** and **Figure 4**) and push the flexible liner into the adaptor until it stops.

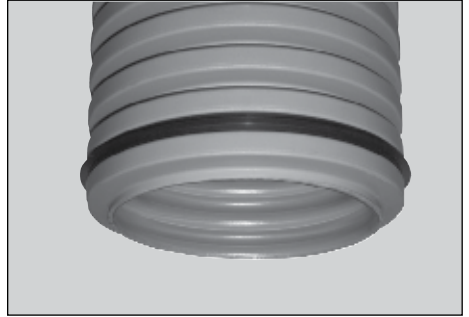


Figure 3, Mounting the Seal

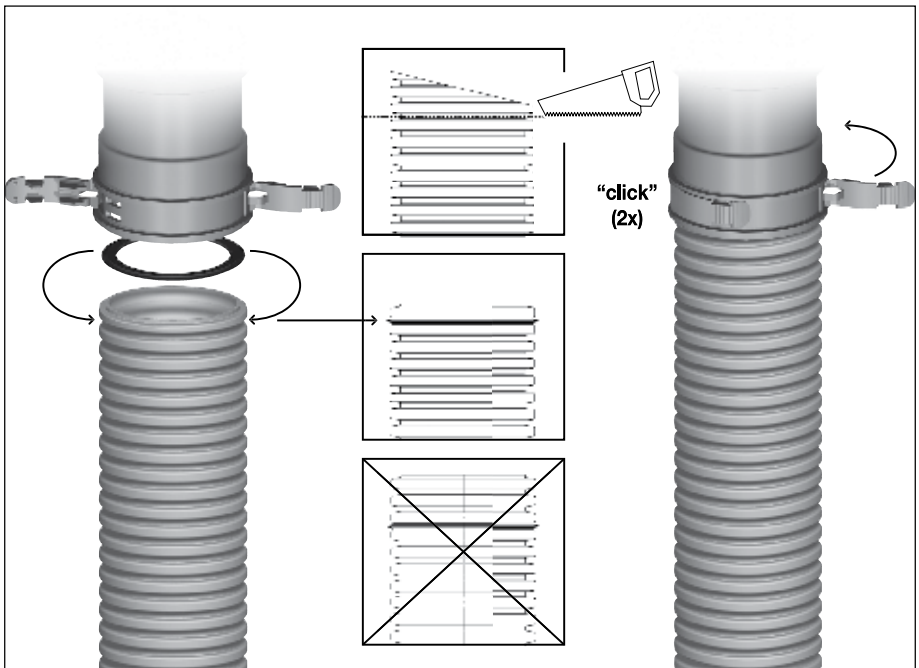


Figure 4, Mounting the Seal

6. Fix the adaptor on the liner with the latching tabs (**Figure 4** and **Figure 5**).

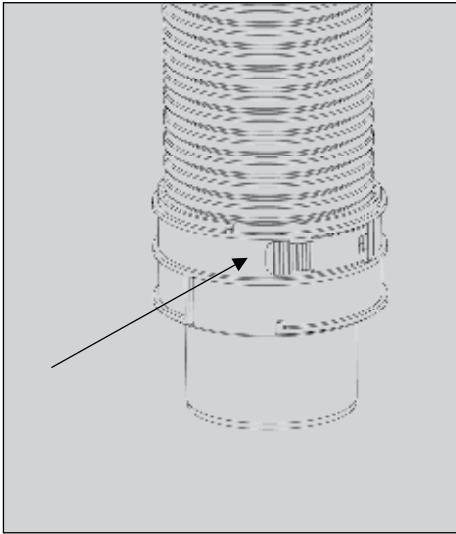


Figure 5, Fixing the Adapter

7. It is possible to loosen the latching tabs with a screw driver, see **Figure 6**.

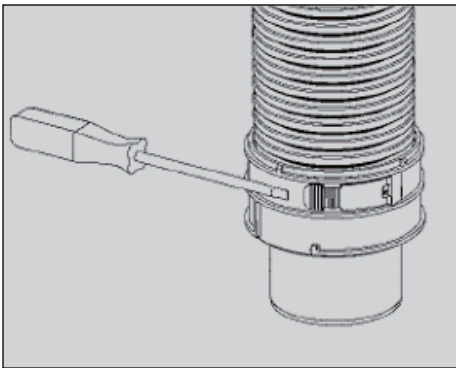


Figure 6, Loosening the Latching Tabs

8. Mount the spacer brackets with a maximum distance between them of 6 feet (2m).

9. The installation aid must be connected using a bayonet connection with a rotating movement of $\frac{1}{4}$ turn to the right (+). Install the liner now from the top, see **Figure 7**.

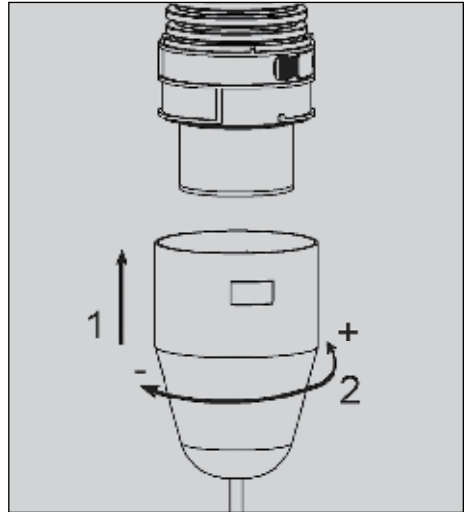


Figure 7, The Installing Aid

10. The flexible liner must be installed from the top of the shaft into the installation room. A second person must guide the flexible liner from the top in the middle of the shaft to prevent damage of the liner.

11. After installing the required length of liner, remove the mounting aid by rotating $\frac{1}{4}$ turn counter clockwise (-). Then attach the rigid-flex adapter into the support bend (see 1 and 2, **Figure 8**).

11a. Position the support elbow on the support bracket (see 2 and 3, **Figure 8**)

11b. Secure the support elbow with the clamp (see 1, **Figure 9**) around the adaptor flex-rigid (see 1, **Figure 8**) and through the slot of the support console (see 4, **Figure 8**).

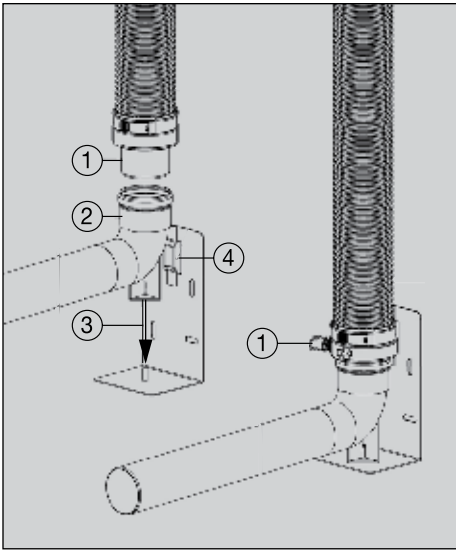


Figure 8,
Installation
Support Elbow

Figure 9,
Securing
Support Elbow

12. Mount the wall plate on the wall of the shaft (**Figure 10**). Pay attention to the correct slope of 3°. The pipe of the support elbow must be in the centre of the hole in the wall plate (**Figure 10**).

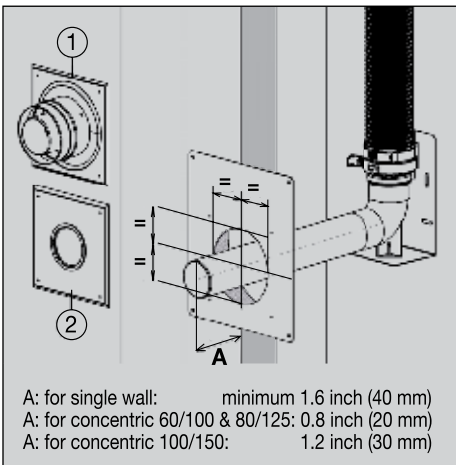


Figure 10, Mounting the Wall Plate

13. Depending on the type of system, single wall or concentric, the support elbow can be shortened. For single wall, the length A (**Figure 10**) must have a minimum length of 1.6" (40mm). For concentric the length A (**Figure 10**) must be 0.8" (20mm).

14. Fix the correct version of the shaft connector to the wall plate (see 1, **Figure 10**).

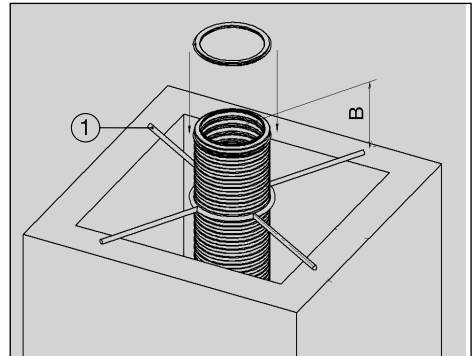


Figure 11, Required Liner Length

15. At the top of the shaft, shorten the flexible liner to the required length and make sure that dimension B in **Figure 11** is between 1½ - 2½" (between 38 and 64 mm).

16. Fit the support cross (see 1, **Figure 11**) over the liner and let it rest on the wall of the shaft. Mount the seal (see **Figure 3**) in the last whole groove of the liner. Push the flex-rigid adaptor on the liner and close the latching tabs. Allow the assembly to rest on the support cross.

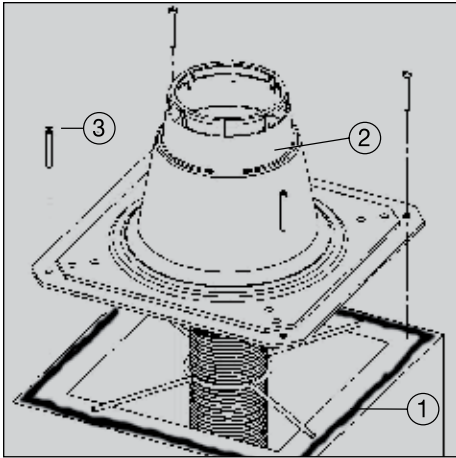


Figure 12, Installing Vent Cap

17. Seal the edge of the chimney shaft with water-resistant sealant (see 1, **Figure 12**) and push the vent cap (see 2, **Figure 12**) on the shaft and fix it with four screws (see 3, **Figure 12**).

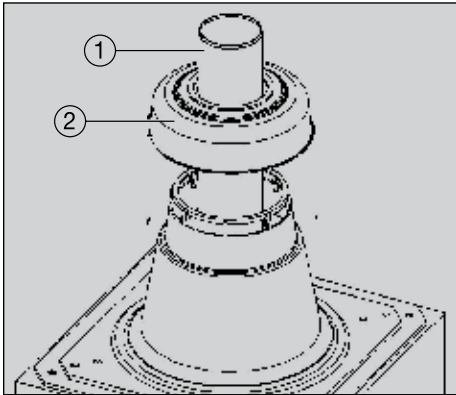


Figure 13, Installing Termination Pieces

18. Install the metallic termination pipe (see 1, **Figure 13**). Assemble the shaft vent cap (see 2, **Figure 13**).

19. Connect the appliance to the flexible vent system with M&G DuraVent rigid vent system.

M&G DURAVENT WARRANTY

M&G DuraVent, Inc. ("DuraVent") provides this limited lifetime warranty for all of its products to the original purchaser, with the exception of Ventinox® (lifetime), PolyPro® (ten years), DuraBlack® (five years) and all Termination Caps (five years). Subject to the limitations set forth below, DuraVent warrants that its products will be free from substantial defects in material or manufacturing, if properly installed, maintained and used. This Warranty is non-transferable with the exception of Ventinox which is transferable from the original homeowner to the buyer of the home for a period of ten (10) years. This warranty does not cover normal wear and tear, smoke damage or damage caused by chimney fires, acts of God, or any product that was: (1) purchased other than from an authorized DuraVent dealer, retailer or distributor; (2) modified or altered; (3) improperly serviced, inspected or cleaned; or (4) subject to negligence or any use not in accordance with the printed materials provided with the product as determined by DuraVent. This limited lifetime warranty applies only to parts manufactured by DuraVent.

DuraVent provides the following warranties for its products: One Hundred Percent (100%) of the purchase price or MSRP at time of purchase, whichever is lower, for 15 years from the date of purchase, and Fifty Percent (50%) thereafter, except for the following limitations: Ventinox liner and components in wood, oil, wood pellet, and gas installations are warranted at One Hundred Percent (100%) for the lifetime of the original homeowner; Ventinox 316 liner and components for coal burning installations which are warranted One Hundred Percent (100%) for ten years; all Termination Caps and DuraBlack® are warranted at One Hundred Percent (100%) for five years, and at Ten Percent (10%) thereafter.

All warranty obligations of DuraVent shall be limited to repair or replacement of the defective product pursuant to the terms and conditions applicable to each product line. These remedies shall constitute DuraVent's sole obligation and sole remedy under this limited warranty. This warranty provides no cash surrender value. The terms and conditions of this limited lifetime warranty may not be modified, altered or waived by any action, inaction or representation, whether oral or in writing, except upon the express, written authority of an executive officer of DuraVent.

VENTINOX WARRANTY CONDITIONS

Liner and Component warranties contained herein are subject to the following conditions: (1) The Liner and Components must be installed according to DV's installation instructions; (2) The Liner and Components are used only to line or reline chimneys venting residential appliances for which the liner was intended; and (3) documented annual inspection of the Liner and Components and maintenance as deemed necessary, beginning one year after the date of installation and continuing throughout the warranty period, by a Nationally Certified Chimney Sweep or Ventinox® installer. The Liner and Components warranty is further subject to compliance with the following requirements throughout the warranty period: The chimney must have a chimney cap and chemical chimney cleaners must not be used when cleaning the Liner or Components. Plastic-bristle flue cleaning brushes are recommended. Corn, bio-fuels, driftwood or other wood containing salt, preservative-treated lumber, plastic and household trash or garbage, or wood pellets containing such materials must not be burned in the appliance or fireplace. In case of a chimney fire, the chimney must be inspected and approved by a certified Chimney Sweep before reuse. After each annual inspection, maintenance, and cleaning, the certified Chimney Sweep must fill out and date the appropriate section of the warranty card provided with the chimney liner.

LIMITATIONS ON INTERNET SALES:

Notwithstanding any other terms or conditions of this limited lifetime warranty, DuraVent provides no warranty for the following specific products if such products are both: (a) purchased from an Internet seller; and (b) not installed by a qualified professional installer: DuraTech®, DuraPlus HTC®, PelletVent Pro®, FasnSeal®, and DuraVent's relining products including DuraLiner®, DuraFlex® 304, DuraFlex® 316, DuraFlex® Pro, DuraFlex® SW, and Ventinox®. For purposes of this warranty, a trained professional installer is defined as one of the following: licensed contractors with prior chimney installation experience, CSIA Certified Chimney Sweeps, NFI Certified Specialists, or WETT Certified Professionals.

DuraVent reserves the right to inspect defective product to determine if it qualifies for replacement under the terms of this limited lifetime warranty. All warranty claims must be submitted with proof of purchase. Labor and installation costs are not covered under this warranty. To obtain warranty service contact DuraVent promptly at DuraVent Warranty Service, 902 Aldridge Rd., Vacaville CA 95688, or call 800-835-4429.

WHERE LAWFUL, DuraVent DISCLAIMS ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL DuraVent BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OR DIRECT OR INDIRECT LOSS OF ANY KIND, INCLUDING BUT NOT LIMITED TO PROPERTY DAMAGE AND PERSONAL INJURY. DuraVent'S ENTIRE LIABILITY IS LIMITED TO THE PURCHASE PRICE OF THIS PRODUCT. SOME STATES DO NOT ALLOW LIMITATIONS ON IMPLIED WARRANTIES, OR THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS THAT VARY FROM STATE TO STATE.

For the most up-to-date installation instructions, see www.duravent.com
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M&G DuraVent, Inc.
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DuraVent

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