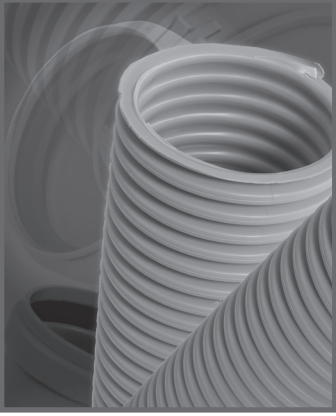


Installation Instructions



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

POLYPRO® FLEX

DuraVent

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.

! IMPORTANT

Throughout this manual you will see special attention boxes intended to supplement the instructions and make special notice of potential hazards. In the judgement of DuraVent, these categories mean:

! 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.

! WARNING

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

- Assure unrestricted vent movement where required through walls, ceilings and roof penetrations.
- This venting system must be supported in accordance with these instructions.
- Do not mix pipe, fittings, or joining methods from different vent system manufacturers. Do not use adhesives of any kind with this venting system.

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.

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

Or email us at:
techsupport@duravent.com

- Examine all components for possible shipping damage prior to installation;
- Read all instructions before beginning the installation and follow these instructions exactly as written.
- Proper joint assembly is essential for a safe installation. Check the integrity of ALL joints upon completion of assembly
- This venting system must be free to expand and contract under normal operation.

PolyPro® is one of DuraVent's line of products.



PolyPro Flex Gas Vent System

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

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POLYPRO[®] FLEX

DuraVent

APPLICATION / LISTING

For specific information on application, equivalent length of fittings, listings, etc., please reference Duravent's installation instructions for rigid pipe (Document L273).

Duravent's PolyPro vent pipe should not be installed in areas where the temperature could exceed 230 F / 110 C.

PERMITS

Check with your local Building Official, Fire Official, or other authority having jurisdiction regarding permits, restrictions, and installation inspections in your area.

MINIMUM CLEARANCE TO COMBUSTIBLES

Refer to Table A for minimum clearances to combustible materials. Use the values shown in this table unless the appliance manufacturer specifies otherwise. If there is a conflict between the two, the greater clearance shall apply. It is prohibited to place any type of insulation around the venting system within these clearances.

CAUTION

Installation applications and terminations shown in these instructions must be approved by the manufacturer of the appliance to which it is applied. Use only listed DuraVent terminations with PolyPro Venting.

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.

GENERAL INSTALLATION NOTES

Reference the Installation Instructions provided with Duravent's rigid pipe (L273) for general instructions. **PP Flex must be enclosed, and used in conjunction with rigid PP pipe to connect to an appliance.**

- When used to conduct flue gases, PP flex must not be installed at an angle greater than 45 degrees from vertical. This will ensure proper condensate flow back towards the appliance outlet.
- PP Flex may be used to bring combustion air into the appliance. In these instances, pipe can be unenclosed and oriented in a vertical or horizontal position.
- PP flex must be treated carefully to prevent damage when being installed during low temperatures (<41°F, < 5 °C). In colder weather, pre-warm flex prior to installation. When relining, it may be easier to insert flex from the bottom up

Table A

Minimum Clearance To Combustibles Table

VENT ORIENTATION	CLEARANCE
Horizontal	Single Wall: 0" for flue temperatures up to 194°F (90°C). 1/4" (6mm) for flue temperatures up to 230°F (110°C). Flex: N/A- NOT ALLOWED
Vertical	Single Wall: 0" Flex: 0" (Must be enclosed)

rather the top down.

- **Always use soapy water to lubricate gaskets prior to joint assembly. Do not use Petroleum based lubricants!**
- Plastic venting systems shall not pass through rated fire separations.

ADDITIONAL INSTRUCTIONS FOR TERMINATION

Duravent's PP Flex terminations are specifically designed for use with high-efficiency appliances that are known to produce high volumes of fluid due to condensation of moisture within flue gases. DO NOT modify these terminations.

IMPORTANT: Unless the appliance is designed to address flow of condensates from the vent system, a drain must be incorporated within the vent to allow condensates and rainwater to escape. This drain must include a trap to prevent combustion gases from entering living spaces. Be sure to check the appliance manufacturer's installation instructions closely in regards to condensate management.

INSTALLATION OF FLEX GASKET:

PP Flex pipe must always have gaskets installed on both ends of any installation. Gaskets are installed on the flex pipe, with the gasket seating inside the flex pipe grooves (Fig.1). Use soapy water to assist installation.

1. Cut PP flex pipe (knife, saw, etc) to desired length. Special care should be taken to ensure cut is square, and the edge is deburred.
2. Place Flex Gasket over Flex pipe and install in the first whole groove nearest the end.
3. Open the locking tabs (x2) of the appropriate flex fitting to accept the flex pipe (Fig.2)
4. Apply soapy water to the gasket, and push pipe/gasket into appropriate flex fitting, seating pipe down until it bottoms out (Fig.2).

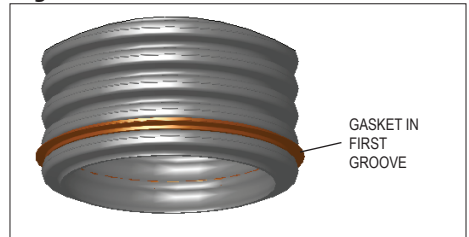


Figure 1, Mounting the Gasket

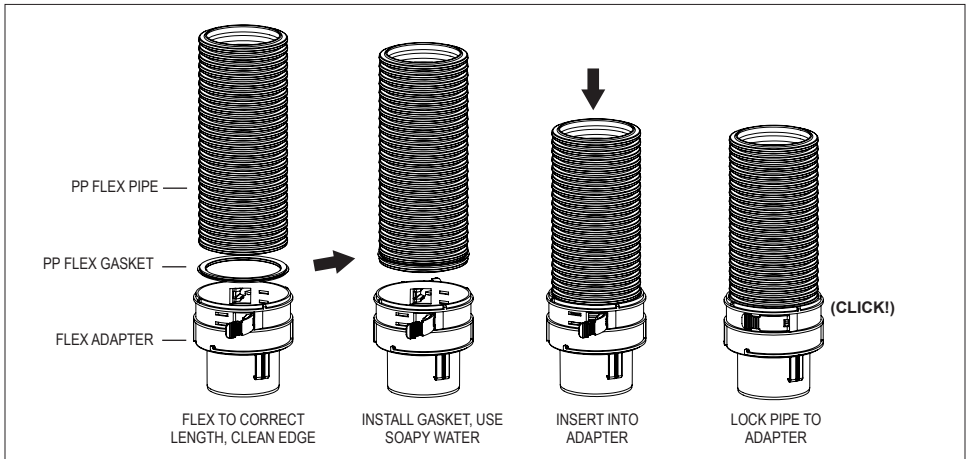


Figure 2, Installing Gasket / Flex Adapter

5. Close locking tabs on flex adapter so tabs seat in the flex pipe. Slight adjustment of pipe may be needed to ensure proper engagement.

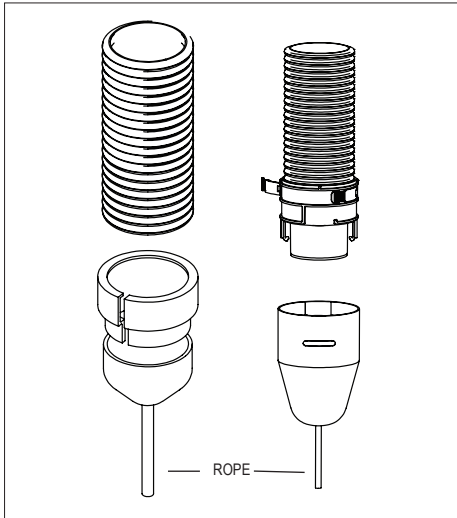


Figure 3, Flex Puller

FLEX PULLER

A flex puller is an optional component available to help ease installation of PP Flex through enclosures (**Fig.3**). The 2" (60mm) version is of different design than 3"-5" (80mm-130mm).

2" Dia: Unscrew ceramic holder from cone. Install ceramic holder around PP Flex pipe, and re-install into cone.

3"-5" Dia: Connected using bayonet style connection with a rotating movement of 1/4 turn to lock in.

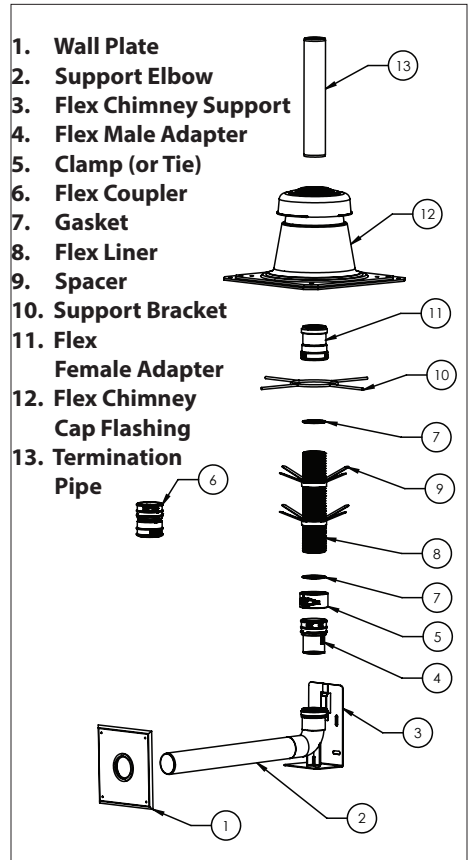
MASONRY / SHEET ROCK ENCLOSURE:

Examine the chimney or enclosure carefully for obstructions prior to starting an installation. Any structural defects or potential safety problems must be repaired prior to relining, and the enclosure should be clean. If working with a masonry chimney

that is lined with a clay or concrete liner, check to see if a short portion of the tile is sticking out of the top of the chimney. If so, this short top portion must be broken off to permit the termination's flashing to sit down flush on the chimney's crown. It is best to do this prior to beginning the installation.

1. Determine the required location of the opening within the enclosure. Ensure the flue access cut-out meets the minimum specified size to allow manual assembly of connections within the flue. With masonry chimneys, the breach opening may have to be enlarged

FLEX CHIMNEY LINING KIT



to permit proper access. If this is the case, patch up the opening after the installation is completed using best practices. The slope of the rigid connecting flue pipe must have a minimum of 3° (equivalent 5cm/m) (5/8" per foot).

2. Fix the Flex Chimney Support (**Fig.4**) with 4 screws on the wall of the enclosure.

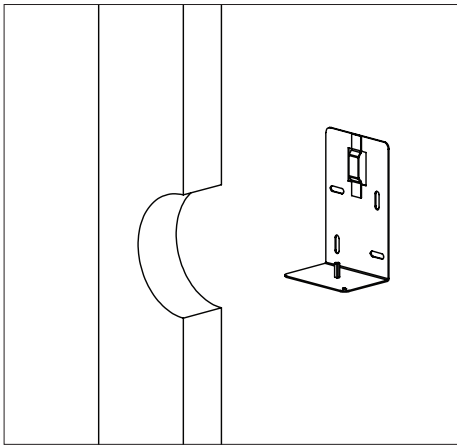


Figure 4, Mounting Flex Chimney Support

3. The length of the flexible liner can be determined in two ways: use a rope with a weight 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 correct length can also be determined after installing the liner in the shaft and cutting it at the top of the chimney, see **Fig.8**, dimension B.

4. Mount the Gasket into the flex pipe, and attach to the appropriate coupler as detailed above.

5. Mount the Spacers with a maximum distance between them of 6 feet (2m).

6. Install PP Flex liner into the enclosure. A second person is required to help feed the flexible liner into position (feeding either from the top or bottom of the enclosure). This will also help prevent damage from occurring.

7. After installing the required length of liner, remove the Flex Puller (if applicable)

8a. Position the Support Elbow on the Flex Chimney Support (see 2 and 3, **Fig.5**)

8b. Secure the Support Elbow with the clamp around the Flex Male Adapter and through the slot of the Flex Chimney Support (see 1, **Fig.6**).

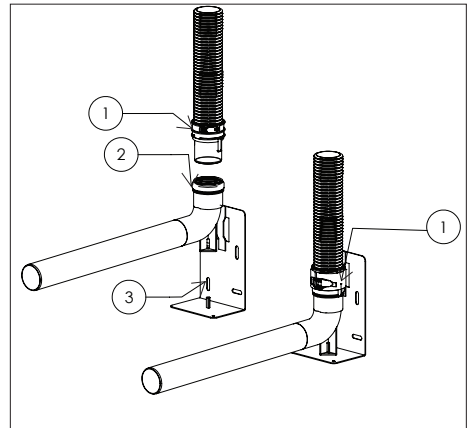


Figure 5, Installation Support Elbow

Figure 6, Securing Support Elbow

9. Mount the Wall Plate on the wall of the shaft (**Fig.7**). 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.

10. The Support Elbow can be shortened if required- For single wall, Dim A (**Fig.7**) must have a minimum length of 1.6" (40mm).

11. At the top of the shaft, shorten the flexible liner to the required length and make sure that dimension B in **Fig.8** is between 1½ - 2½" (between 38 and 64 mm).

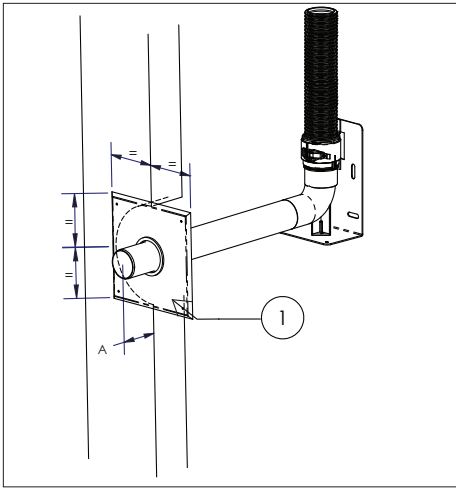


Figure 7, Mounting the Wall Plate

13. Fit the Support Bracket (see 1, **Fig.8**) over the liner and let it rest on the wall of the shaft. Mount the Gasket as detailed above (see **Fig.1**). Push the Flex Female Adapter on the liner and close the latching tabs. Allow the assembly to rest on the Support Bracket.

14. Seal the edge of the chimney shaft with water-resistant sealant (see 1, **Fig.9**) and push the Flex Chimney Flashing (see 2, **Fig.9**) on the shaft and fix it with four masonry anchors (see 3, **Fig.9**).

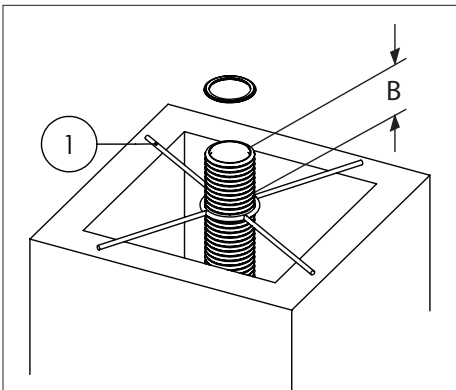


Figure 8, Required Liner Length

15. Install the Termination Pipe (see 1, **Fig.10**). Assemble the storm collar portion of the Flex Chimney Flashing (see 2, **Fig.10**).

16. Connect the appliance to the flexible vent system with DuraVent rigid PolyPro vent system.

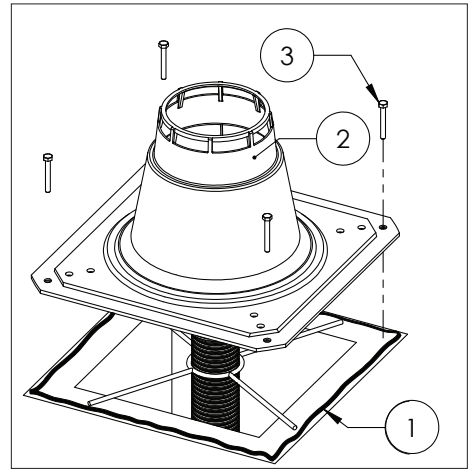


Figure 9, Installing Vent Cap

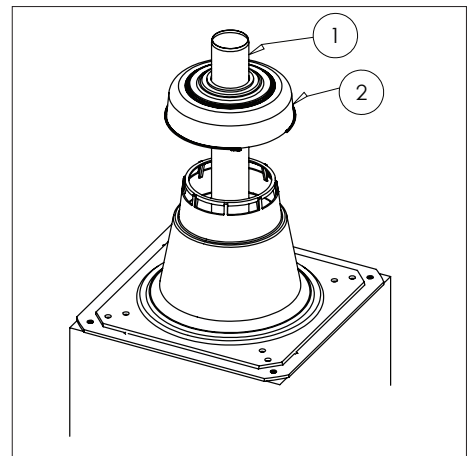


Figure 10, Installing Termination Pieces

B VENT RELINE:

From within the room where the appliance is located, remove any existing horizontal or angled sections of B Vent. PP Flex cannot be installed at an angle greater than 45 degrees from vertical. The *B Vent Adapter-Lower* will fit over the bottom of the existing B Vent's vertical stack at or near the ceiling. Carefully inspect the B Vent to ensure integrity. Ensure any visible screws or obstructions are removed. PP Rigid pipe must be used to complete install to the appliance-

Instructions- 2" (60mm) PP Flex in B Vent

1. Remove existing B Vent termination cap
2. Carefully feed flex down through B Vent so approx 2' of flex extends beyond the bottom of the B Vent (*Flex puller* or rope aid optional)
3. Cut to length the top of *Flex* pipe and insert flex through *B Vent Adapter- Upper*, and through the *Termination Base*.
4. Install the *PP Flex Gasket* and *Flex Female Adapter* onto *Flex* pipe using instructions in previous pages.
5. Lower the *B Vent Adapter- Upper* onto the top of the existing B Vent and secure using screws (x3) supplied with the hardware kit.
6. Attach the *Termination Top* to the *Termination Cap* (clicks when engaged), then insert the *Flex Female Adapter* into the *Termination Cap*. Push the assembly onto the *Termination Base* (clicks when engaged, see **Fig.12**).
7. Push the completed assembly down onto the *B-Vent Adapter- Upper*. When level, secure with three screws provided.
8. At the bottom end, cut the PP Flex to length 3" below the bottom of the vertical B Vent still protruding from the ceiling.
9. Install the *Flex Gasket* and *Flex Male Adapter* onto the *Flex* pipe
10. Install *B Vent Adapter-Lower*. (*Flex Male Adapter* should protrude beyond per **Fig.13**)
11. Secure the *B Vent Adapter-Lower* to the B Vent using three screws from the supplied hardware.

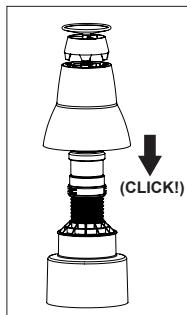


Figure 12

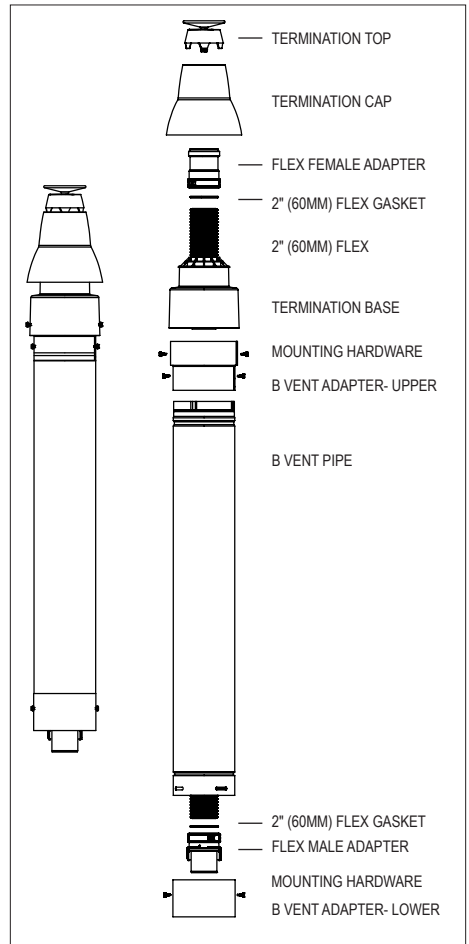


Figure 11- (2" Flex / B Vent)

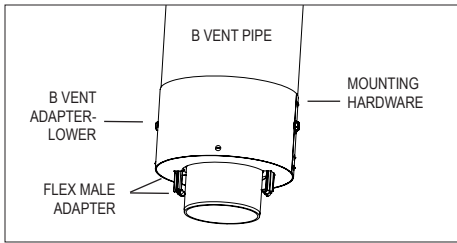


Figure 13

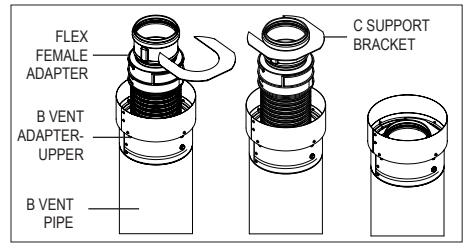


Figure 14

Instructions- 3" (80mm) PP Flex in B Vent

1. Remove existing B Vent termination cap
2. Carefully feed flex down through B Vent so approx 2' of flex extends beyond the bottom of the B Vent (*Flex puller* or rope aid optional)
3. Cut to length the top of *Flex* pipe and insert flex through *B Vent Adapter- Upper*
4. Install *PP Flex Gasket* and *Flex Female Adapter* onto *Flex* pipe per instructions detailed above
5. Lower *B Vent Adapter- Upper* to the top of the B Vent and secure with screws (x3) supplied
6. Install *C Support Bracket* as shown in **Fig.14** and lower *Flex Female Adapter* into *B Vent Adapter- Upper*
7. Attach *Termination Top* to *Termination Cap* (clicks when engaged), insert *3" Rigid Pipe* into *Termination Cap*, and attach *Termination Insert* into *Termination Cap* (clicks). Then connect *Termination Insert* to *Termination Transition* (click).
8. Line up inner pipe connections and push termination assembly down onto *B Vent Adapter- Upper* and secure with screws (x3) provided
9. Cut *Flex* to length 3" below the bottom of the B Vent
10. Install *Flex Gasket* and *Flex Male Adapter* on *Flex*
11. Install *B Vent Adapter- Lower*. (*Flex Male Adapter* should protrude beyond per **Fig.13**)
12. Secure *B Vent Adapter- Lower* to B Vent with hardware provided

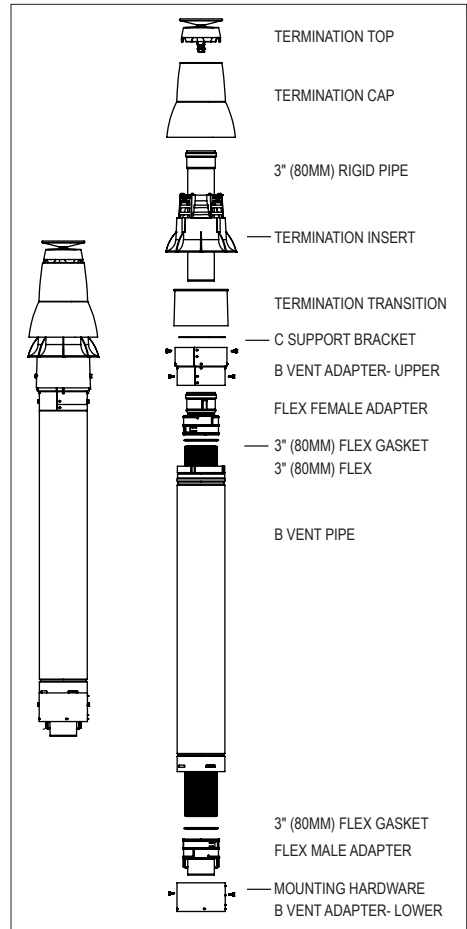


Figure 15- (3" Flex / B Vent)



POLYPRO WARRANTY

DuraVent, Inc. ("DuraVent") provides this warranty for PolyPro® for ten years. Subject to the limitations set forth below, DuraVent warrants that its products will be free from defects in material or manufacturing, if properly installed, maintained and used. DuraVent products are fully warranted if installed only by a professional installer. This Warranty is transferable from the original homeowner to the buyer of the home within the warranted ten 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 installation instructions included with the product as determined by DuraVent.

Installation instructions are available online at www.duravent.com under Support/Literature and through our Customer Service Department 800-835-4429 or customerservice@duravent.com.

DuraVent provides the following warranties for PolyPro: One Hundred Percent (100%) MSRP 10 years from the date of purchase.

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 warranty. This warranty provides no cash surrender value. The terms and conditions of this 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.

This product is intended for venting only category IV appliances burning Natural Gas, Propane and Oil. All other fuels are not covered under this warranty.

LIMITATIONS ON POLYPRO INTERNET SALES: Notwithstanding any other terms or conditions of this PolyPro Warranty, DuraVent provides no warranty for PolyPro® if it is not installed by a qualified professional installer.

DuraVent must be notified and given the opportunity to inspect defective product prior to 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 Warranty Service, 877 Cotting Ct., Vacaville CA 95688, or call 800-835-4429.

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

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