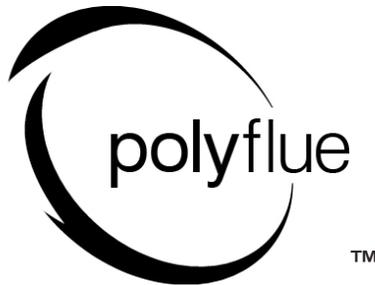


# Installation and Maintenance Instructions

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## Single Wall Rigid & Flexible Polypropylene Type BH Vent Class IIc 230°F/110°C Max Flue Temp

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### For Venting Residential & Commercial Category II & IV Gas Burning Appliances

### 2" - 4" (60-100mm) Diameter Vent For Positive, Neutral and Negative Pressures up to 15" w.c. (3733 Pa)

**Important: Do NOT install this product until you have read and fully understand these installation instructions. Failure to comply with these instructions may result in injury or damage to property. An improper installation will void any stated warranty.**

- Follow these instructions exactly as written.
- Examine all components for possible shipping damage prior to installation.
- Proper joint assembly is essential for a safe installation. Check integrity of joints upon completion of assembly.
- This venting system must be supported in accordance with these instructions.
- Check for restricted vent movement through the walls, ceilings and roof penetrations. This venting system must be free to expand and contract.
- Do not mix Polyflue with pipe from different manufacturers.

**⚠ WARNING!!**

Failure to follow the installation instructions could cause FIRE, CARBON MONOXIDE POISONING, OR DEATH. If you are unsure of installation requirements, please call the phone number listed on the instructions or visit the website shown.



Tested and Listed to ULC S636 (Standard for Type BH Gas Venting Systems) & ULC S635 (Standard for Lining Systems for Existing Masonry or Factory-Built Chimneys and Vents)  
By Underwriters Laboratories, Inc.  
File MH 16161

5030 Corporate Exchange Blvd  
Grand Rapids, MI 49512  
Call 800-992-8368  
Fax 877-393-4145  
[www.Polyflue.com](http://www.Polyflue.com)

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## Pipe & Misc Fitting Equivalent Length Chart

	2" (60mm) Dia.	3" (80mm) Dia.	4" (100mm) Dia.
1 Ft. (305mm) Vent Pipe	1 Ft. (305mm)	1 Ft. (305mm)	1 Ft. (305mm)
1 Ft. (305mm) Flex Pipe	2.5 Ft. (762mm)	2.3 Ft. (701mm)	2.7 Ft. (823mm)
1 Ft. (305mm) Flex Pipe (Upsized 1 Diameter)	0.4 Ft. (122mm)	0.9 Ft. (274mm)	n/a
45 Elbow	3.3 Ft. (1006mm)	3.6 Ft. (1097mm)	5.4 Ft. (1646mm)
90 Elbow	4.8 Ft. (1463mm)	7.2 Ft. (2195mm)	11.9 Ft. (3627mm)
Tee	9.1 Ft. (2774mm)	18.5 Ft. (5639mm)	22.4 Ft. (6828mm)
Horizontal Concentric Termination	5 Ft. (1524mm)	6.5 Ft. (1981mm)	5.5 Ft. (1676mm)

### **Application Information**

Polyflue™ Gas Vent Systems may be used to vent safety certified Category II, IV and Certain Direct Vent gas appliances with a flue gas temperature of not more than 230°F (110°C). Polyflue can also be used to vent category II, IV gas fired appliances, when used as a re-liner for an unused existing masonry chimney liner or unused existing Type B Gas Vent. The Polyflue system is for use with appliances which produce positive vent pressures of 15" w.c. (3733 Pa) or less. Because these types of appliances may produce vent gases under positive pressure and/or at or near their dew point, special installation considerations may be required. Install in accordance with these instructions and those of the appliance manufacturer. Consult the appliance manufacturer's instructions for the maximum horizontal length of the vent connector as well as any restriction on total vent height, proper sizing of the vent, common venting considerations and procedures for connecting the vent to the appliance.

The installation must conform to applicable National, Regional, State and local codes. Contact the Authority Having Jurisdiction prior to beginning any work to obtain any required permits.

### **Pre-Installation Considerations**

Proper planning prior to installation is essential. The authority having jurisdiction (such as gas inspection authority, municipal building department, fire department, fire prevention bureau, etc.) should be consulted before installation to determine the need to obtain a permit.

A continuous straight-line **upward** pitch of minimum 3/8" rise per foot (31mm / 1000mm) (2°) on horizontal runs must be maintained in order to properly rid the system of the flue gas condensate via the appliance drain, inline drains, or drain tee caps.

Terminations must comply with the requirements USA Natural Gas & Propane Codes (NFPA 54 / ANSI Z223.1). In Canada, shall terminate in accordance with the requirements of CAN/CSA-B149.1, Natural Gas and Propane Installation Code, or CAN/CSA-B149.2, Propane Storage and Handling Code, as applicable.

Plastic venting systems shall not pass through rated fire separations

Be sure to plan a sufficient number of supports for the entire system to maintain the required straight-line pitch and to hold the system in place. Where the vent is enclosed within a chase, the enclosures should be built to permit future inspection of the system.

Reference *Combustion & Ventilation Air* on the last page for proper air supply guidelines

### **Safety**

Wear eye protection and heavy gloves throughout the installation. In addition, wear an approved dust and vapor respirator whenever in contact with building insulation. Proper and safe scaffolding and/or ladders should be used. Check overhead for antennas, power lines or other obstacles before erecting ladders or scaffolding and while working with conduit on any roof structure.

The safe operation of a system is based on the use of parts supplied by the manufacturer and the performance of the system may be affected if the combination of these parts is not used in actual building construction

### **Tools Required for Installation**

Common building tools including but not limited to a Tape Measure, Pliers, Screw Drivers, Saws and/or Snips, Drills, Drop Cloth(s); Ladder/Scaffold; Safety and Personal Protective Clothing.

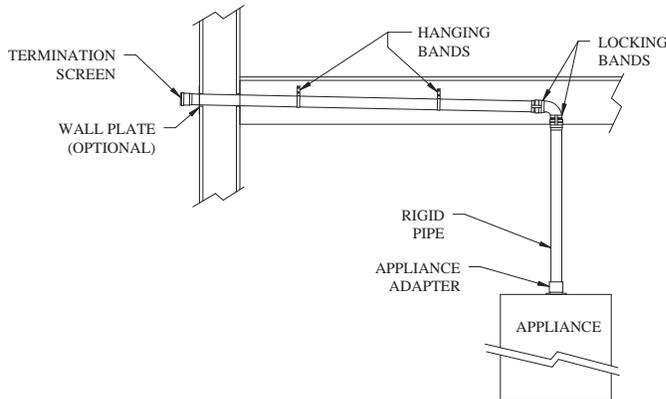
### **Clearance to Combustibles**

Polyflue single wall rigid and flexible pipe has zero clearance to combustibles for flue gases not exceeding 230°F (110°C) and can be fully enclosed within combustible construction.

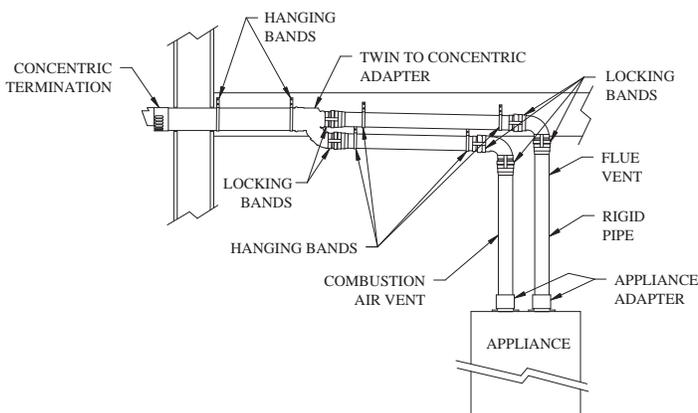
Maximum Flue Temperature	Clearances to Combustibles
230°F( 110°C)	0" (0mm) for all orientations & fully enclosed

## Typical Installations & Surroundings

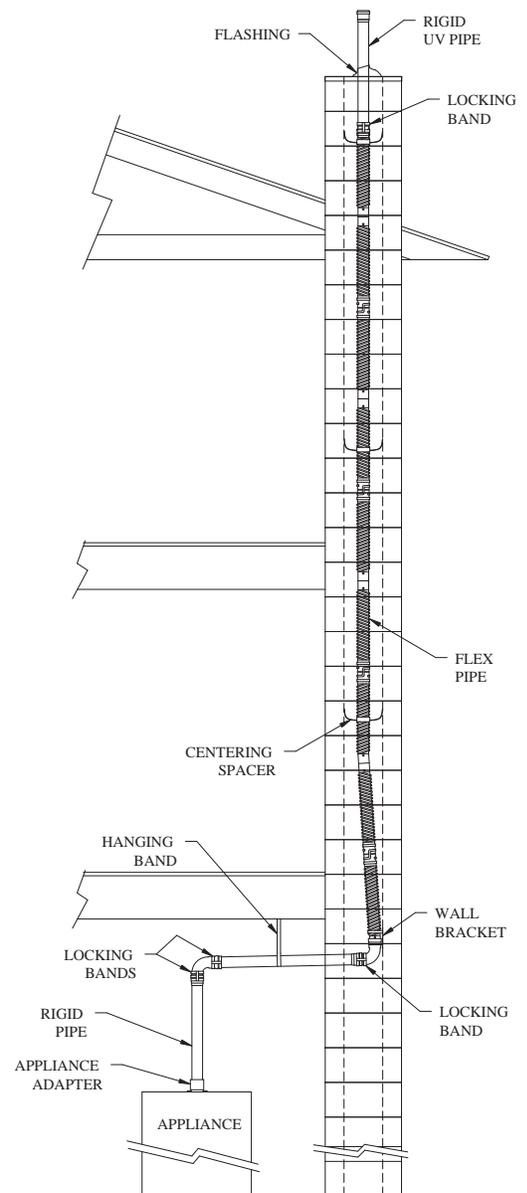
1. This system may be installed in any combination of vertical and horizontal, enclosed and unenclosed configurations. The total length and number of fittings should not exceed the appliance manufacturer's recommendations. This system may also be installed within an existing unused masonry chimney, unused B-vent or chimney system. The flexible pipe system may only be used vertically and can be used in all installations (combustible enclosure, unused existing masonry chimney, or unused existing B-vent/chimney system). It is limited to 66 feet (20.1m) in height. Except for installation in single- and two-family dwellings, metal venting systems which extend through any story above that on which the connected appliance is located are to be provided with enclosures having a fire resistance rating equal to or greater than that of the floor or roof assemblies through which they pass.



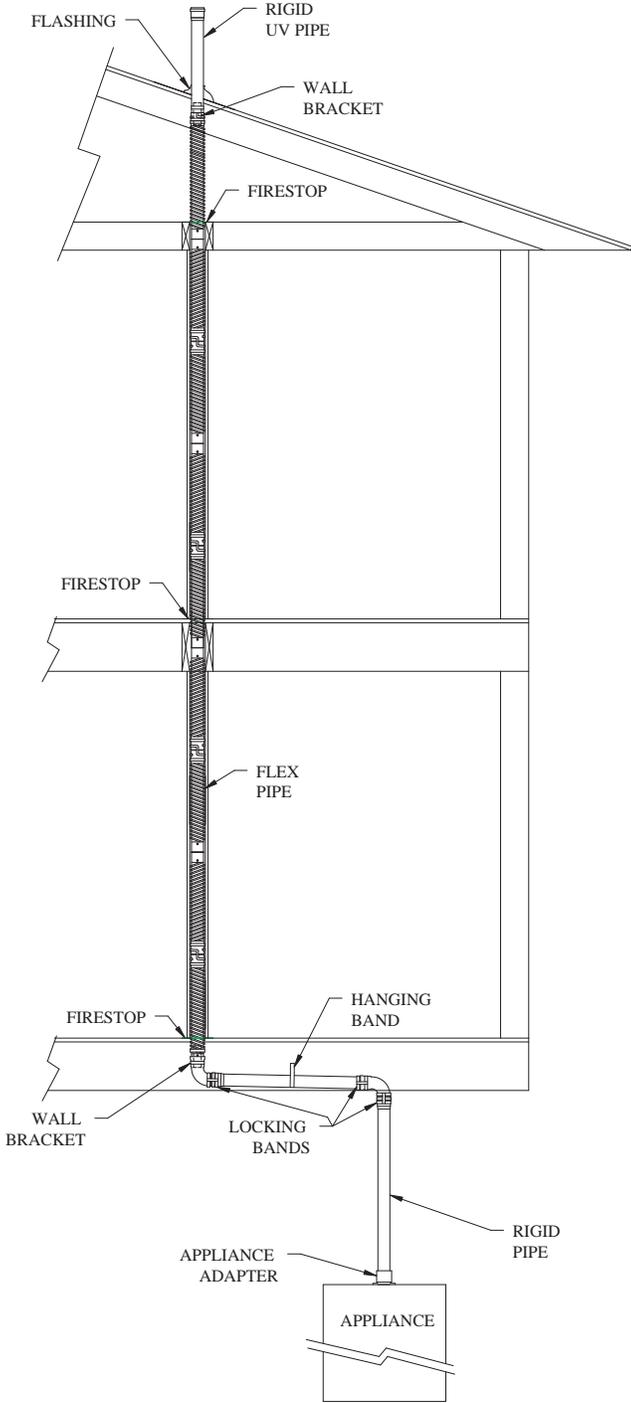
Horizontal Installation of Single Wall Pipe



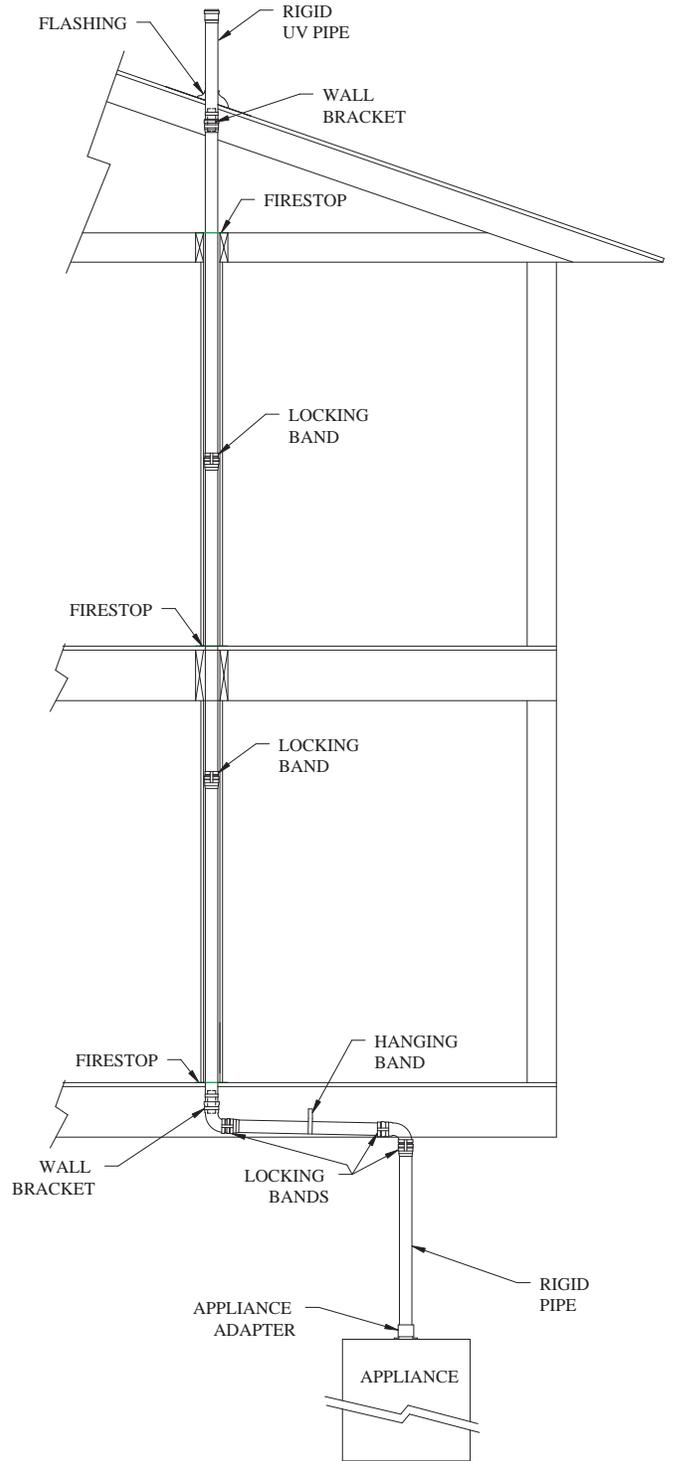
Horizontal Installation of Concentric Pipe



Installation into a Masonry Chimney



Vertical Installation of Flexible Pipe



Vertical Installation of Rigid Pipe

## Joint Sealing and Connection Method

Polyflue rigid single wall pipe is manufactured with a factory installed gasket on the inside of the female (outlet) end making the use of any additional sealant unnecessary. Flexible pipe (female end) will require to field apply a gasket as shown in the flexible section. Locking Bands (LB) are required on all connections, except as noted elsewhere in this document.

### Connection

Note: Apply a mild soap/water mix to the gasket by spray bottle, brush or dipping the gasket pipe end into a bucket to aid in joint connection. Do not use any petroleum based lubricant on gasket.

1. Slide the Pipe Locking Band (LB) onto the male end of the downstream connecting pipe (Fig 1).
2. Push the pipes together using a slight twisting motion until the male end bottoms out. Then retract the joint approximately 1/8" (3mm) – 1/4" (6mm) to compensate for thermal expansion.
3. Slide Locking Band over the female end of the connection and tighten up both hose clamps (Fig 2).
4. See Figures 3 & 4 showing connections to elbows & tees.

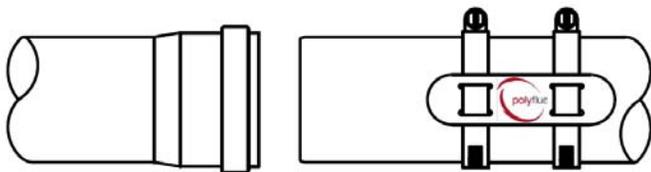


Figure 1

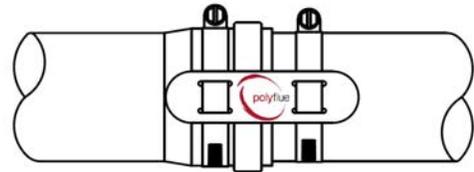


Figure 2

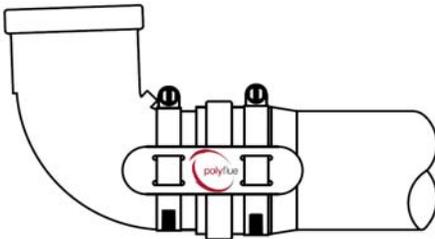


Figure 3

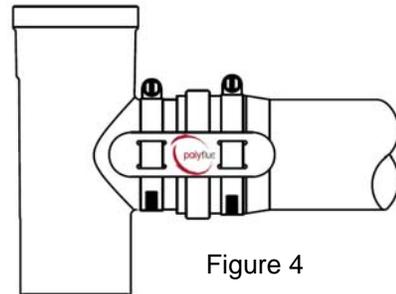


Figure 4

## Pitch and Flue Gas Condensate Removal

Polyflue, installed horizontally, must have an **upward** pitch at a minimum 3/8" rise per foot (31mm / 1000mm) so that condensate can drain back toward the appliance or inline drain section. If an internal condensate drain is NOT part of the appliance:

- A Polyflue Vertical/Horizontal In-Line Drain Section (CD) or Tee (with branch pointed down and Drain Cap (TCD) attached) is required. Install this drain fitting as close to the appliance flue outlet as possible (Tee method is only good for horizontal pipe).
- A Condensate Drain Tube Kit (CDT) is available to drain the condensate to an appropriate location (i.e. floor drain or vented sanitary sewer connection). A trap loop must be formed into the drain hose and must be a diameter that is at least four times the appliance's rated stack pressure in inches of water column or 3 inches (76mm), whichever is greater. Secure the loop with a cable tie. Prior to final assembly the trap loop must be 'primed' by pouring a small quantity of water into the drain hose.
- Follow all local and national codes and regulations for the draining of acidic condensate.
- In cold climates do not install a condensate drain on the exterior of the building. Doing so may result in dangerous icy conditions on surfaces near the drain and may cause damage to the vent system and/ or the building exterior. We will **NOT** be held liable for any injury or property damage due to formation of ice.

**Customized Lengths— Cutting Standard Lengths**

The Polyflue system is designed so that standard lengths may be field cut.

To custom cut a standard length part:

1. Measure custom length needed keeping in mind the pipe joint overlaps. Push the mating pipes together and pull back as explained in Step 2 of the Joint Connection Section. Mark and measure the overlap line needed on the male end that will be cut. Apply the overlap distance accordingly to the custom length.
2. Cut the pipe with a miter saw or hack saw at the male end of the pipe (non-gasketed end). To help get a square cut, create a straightedge by wrapping masking tape around the waste side of the cut point.
3. Make a chamfered edge at the new male end just like a normal pipe out of the box
4. File off any plastic burrs that develop in the cutting process prior to assembling. If the cutting process distorts the roundness of the pipe carefully use your thumbs to re-round the end.

**Horizontal Support**

For proper installation, install horizontal pipe at a 3/8" rise per foot (31mm / 1000mm) upward pitch and place Polyflue Horizontal Supports (HS) at the required minimum intervals below. Pipe strap can be looped around relative hose clamp and secured to the side or underside of the joist beam using (2) wood screws (by others) (Fig 5).

Pipe Size	Horizontal Support Spacing	Vertical Support Spacing
2" (60mm)	30" (762mm)	16 feet (4.9m)
3" (80mm)	39" (991mm)	
4" (100mm)	48" (1981mm)	

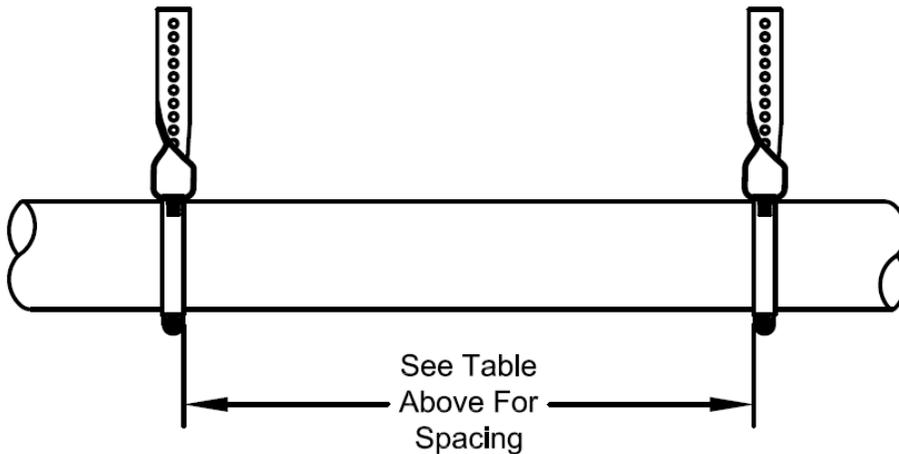


Figure 5

### Vertical Support (Wall Straps)

For proper installation, Wall Straps (WS) must be installed to support the Polyflue. Fasten using (2) #8 x 1”L (M4.2 x 25mm) wood screw or equal by others) the zero clearance Wall Strap to wood structure (Fig 6) and insert pipe through the hose clamps and draw tight (Fig 7). Maximum distance between Wall Straps is 16 feet (4.9m). A Wall Strap is also required just below the roof deck for all vertical installations (Fig 8 & vertical termination section). Never drill or screw through the Polyflue system.

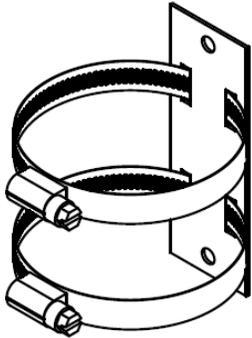


Figure 6

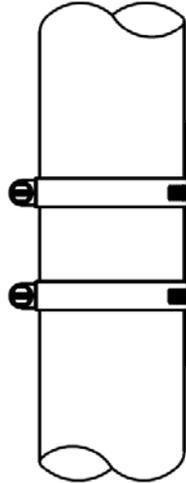


Figure 7

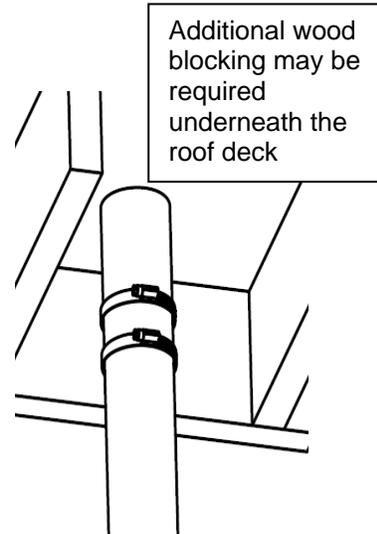


Figure 8

### Fire Stop

Wherever the vent passes through a ceiling or floor, a Fire Stop (FS) must be installed. To Install: slide the Fire Stop onto the male end of the pipe that will be passing through the floor. Nail to either side of floor/ceiling board. If installing the Fire Stop after the pipe has already been installed, then simply cut a seam in one of the four sides and bend & wrap the Fire Stop around the existing pipe to nail it to the floor.

### Horizontal Terminations

It is recommended to use Polyflue UV rated pipe that will be exposed to the outdoors. It is recommended to follow the appliance manufacturer's installation instructions for horizontal termination location requirements. Keep flue discharge and air intake a minimum of 12” (305mm) above the highest anticipated snow level.

#### Single Rigid Pipe Horizontal Termination (white UV single wall pipe):

1. Cut hole in wall large enough to accommodate the Polyflue pipe. It is suggested to cut the hole slightly larger than the nominal diameter, to allow installation & thermal movement
2. Install the pipe from the exterior to the interior.
3. Using exterior grade silicone sealant, create a seal around the wall opening and the pipe.
4. Optional: To prevent animal entry into the Polyflue pipe, install the optional screen termination (HVST). To install, remove the pipe gasket and insert the screen into the pipe until it stops (Fig 9).

#### Concentric Horizontal Termination (white UV, Fig 10):

1. Cut hole in wall slightly larger than concentric pipe diameter.
2. Insert Concentric Termination Pipe (HCT) from exterior to the interior and seal in place after final installation.
3. Utilize the relative Concentric Horizontal Termination Support bracket (HCTHS).
4. Connect the Twin Pipe to Concentric Adapter (CTA) to transition to single wall rigid flue gas and combustion air vent pipes.

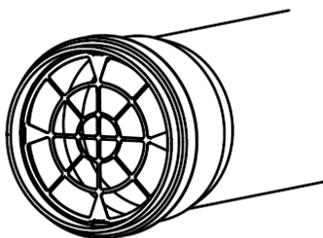


Figure 9

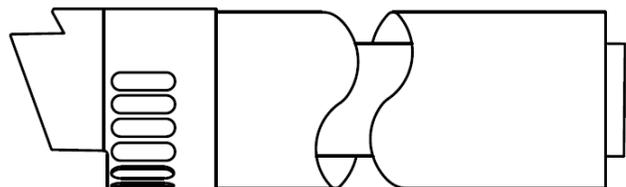


Figure 10

## Exterior Wall Plate

If a Wall Plate (WP) is utilized, mount it to the exterior of the building and underneath the siding, if relevant. Seal around it as necessary

## Vertical Terminations

It is recommended to use Polyflue UV rated pipe that is exposed to the outdoors. Maintain at least 12" (305mm) above the highest anticipated snow level. It is recommended to follow the appliance manufacturer's installation instructions for vertical termination requirements. Any pipe extending more than 36" (915mm) above the roof deck will need additional guying/bracing (by others).

A Wall Strap (WS) is required to be installed just below the roof deck. Additional wood blocking may be needed to do this (reference vertical support section).

*Single Rigid Pipe Vertical Termination (white UV single wall pipe, Fig 11):*

1. Cut hole in roof deck large enough to accommodate the Polyflue pipe. It is suggested to cut the hole slightly larger than the nominal diameter, to allow installation & thermal movement
2. Using the Polyflue rubber boot flashings, apply some soapy water mix to the top edge of the single wall rigid Polyflue pipe (female end).
3. Using a twisting motion, push the pipe thru the underside of the rubber boot flashing.
4. Even though the rubber boot flashing forms a tight seal around the pipe, it is recommended to apply additional sealant at the interface of the pipe and rubber boot for extra weather protection.
5. There is an optional stainless metal screen insert (HVST). See 'Horizontal Termination' section

*Concentric Vertical Terminations (black UV, Fig 12):*

1. Cut hole in roof deck slightly larger than pipe outer diameter.
2. The 2"x4" (51mm x 102mm) Vertical Concentric Termination (VCT) will only extend a maximum of 33" (838mm) above the roof deck due to the concentric adapter and Wall Strap (WS) connections.
3. The 2"x4" (51mm x 102mm) Vertical Concentric Termination will need to be installed from above the rubber boot and then slightly pulled back thru vertically to re-orient the rubber boot seal appropriately.
4. The 2"x4" (51mm x 102mm) Vertical Concentric Termination has a black storm collar like device (may need to be un-screwed) that can be slid down over the rubber boot.
5. It is recommended to add additional sealant at the interface of the storm collar device and the pipe for additional weather protection.
6. For 3"x5" (76mm x 127mm) Vertical Concentric Termination, there is a standard metal flashing and storm collar that should be used and will need to be installed from above the flashing.
7. Utilize (1) ½" (13mm) or ¾" (19mm) long sheet metal screw (by others) into the connection of the Concentric Adapter (CTA) and the outer wall of the concentric termination (just below the outer wall gasket bead)

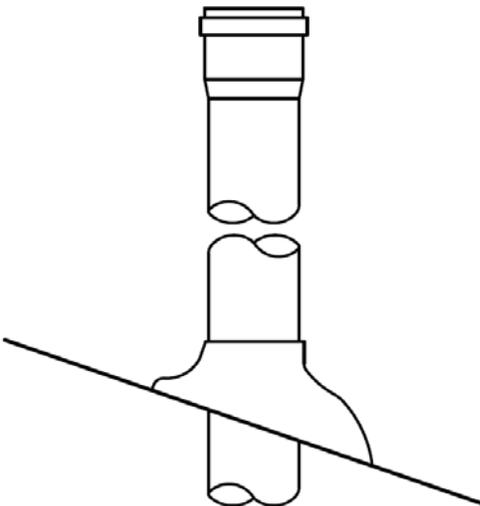


Figure 11

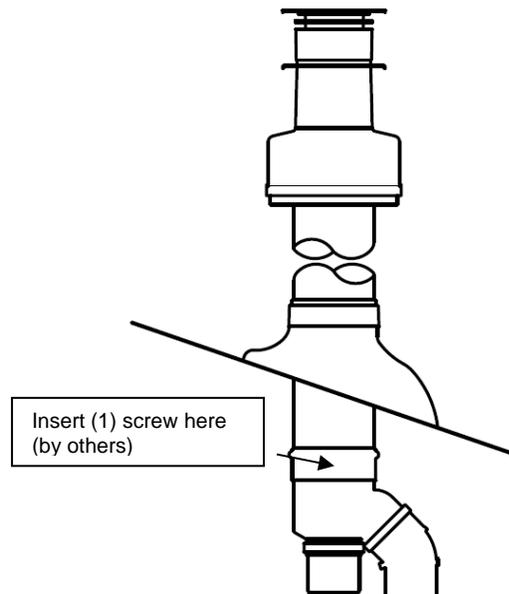


Figure 12

## Flexible Pipe Installations (Do NOT Stretch Out – Already stretched)

Flexible Polyflue (FLEXROLL) can only be utilized in a vertical application (unused existing masonry chimney or B-vent re-line, or continuous length in a combustible enclosure at 0" (0mm) clearance). It is allowed to be offset from vertical at a maximum of 45° and must be re-supported again. It can be field cut in approximately 20" (500mm) increments at the female or male end seams as shown below (Fig 13 & 14). See additional instruction in the 'Flexible In Masonry' section about the 20" (500mm) increment cut process.

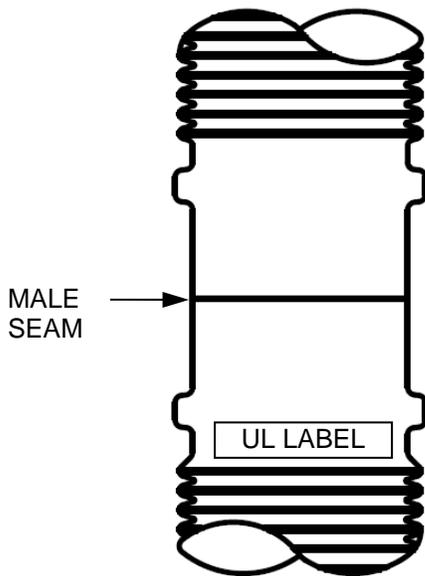


Figure 13

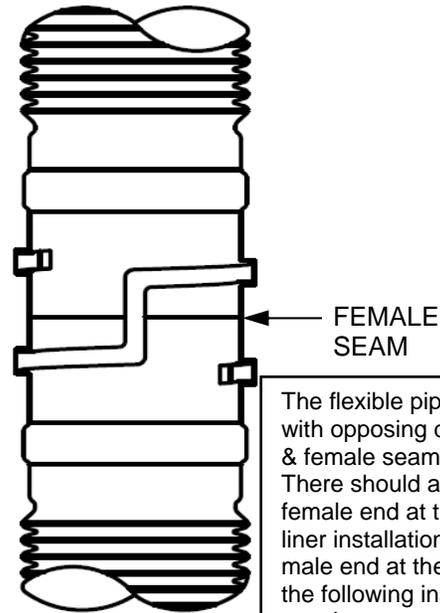


Figure 14

## Flexible Pipe Joint Sealing and Connection Method (Flex-Flex, Flex-Rigid, Rigid-Flex)

1. Install flexible pipe gasket into the gasket groove (just below the twist lock grooves) of the cut flex as shown (Fig 15). Ensure the flat side (Fig 16) of the gasket is to the outside (touching the flex). If a tapered/lead-in side of the gasket is offered (Fig 16 & 17), make sure it is on the top side of the female flex pipe to accept the mating pipe/flex section correctly.

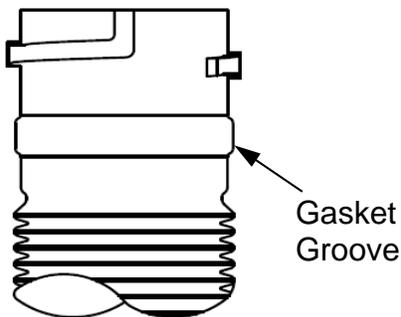


Figure 15

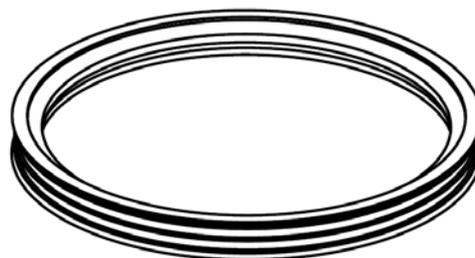


Figure 16



Figure 17

2. Position the Locking Band (LB) to the male end of the cut flex (Fig 18) and insert the bump protrusions (male end) into the female twist lock grooves of the other cut end (Fig 19). Twist together.
3. Slide the lower hose clamp over the twist lock groove but above the gasket groove. Tighten the hose clamps until snug (Fig 20).

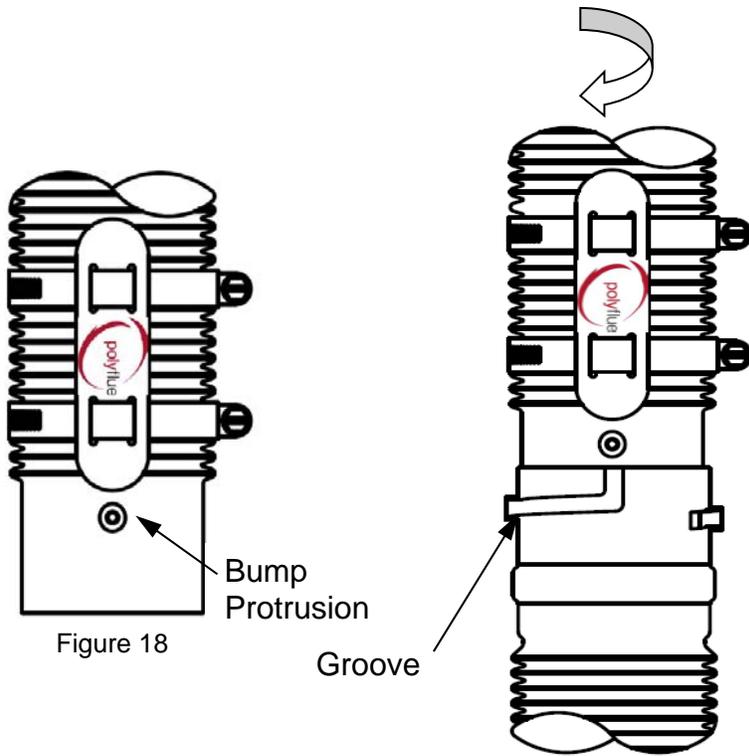


Figure 18

Figure 19

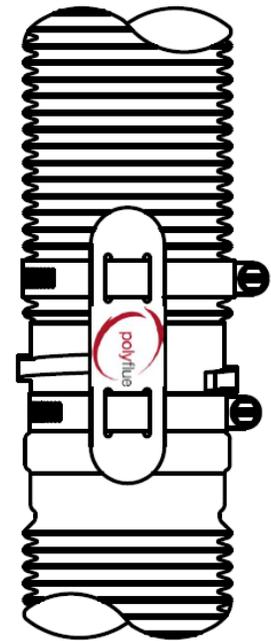


Figure 20

Connecting TO rigid pipe in the direction of flue gases (required before passing thru a roof flashing)

1. Place flexible gasket as shown previously (Fig 15) into gasket groove.
2. Position Locking Band (LB) or Wall Strap (WS) (required just before exiting roof) onto upper rigid pipe section (UV rated if passing through the roof) and slide the lower hose clamp onto the female-cut flexible pipe, in between the twist lock groove and the gasket groove as shown below (Fig 21).

Connecting FROM rigid pipe, elbows, and tees in the direction of flue gases (Fig 22 & 23).

1. Position Locking Band or Wall Strap onto male end of flexible pipe (Fig 18).
2. Push flexible pipe into pipe or fitting until bumps contact rigid pipe edge
3. Slide lower hose clamp down onto rigid pipe/fitting below the gasket groove and tighten
4. Position upper hose clamp above bumps on flexible pipe and tighten

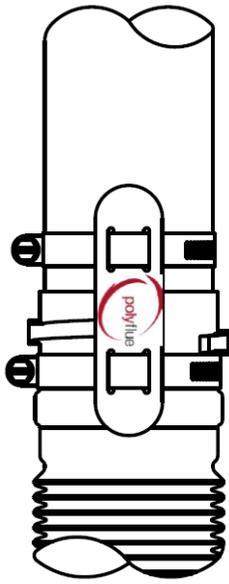


Figure 21

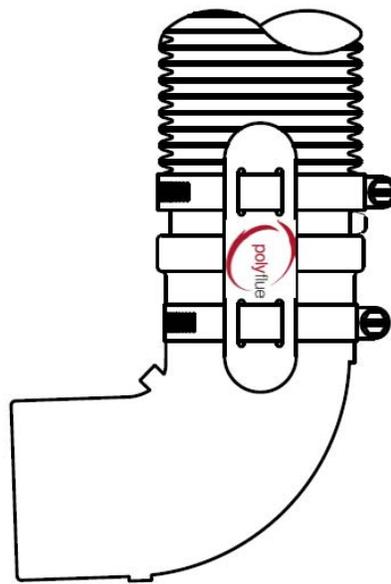


Figure 22

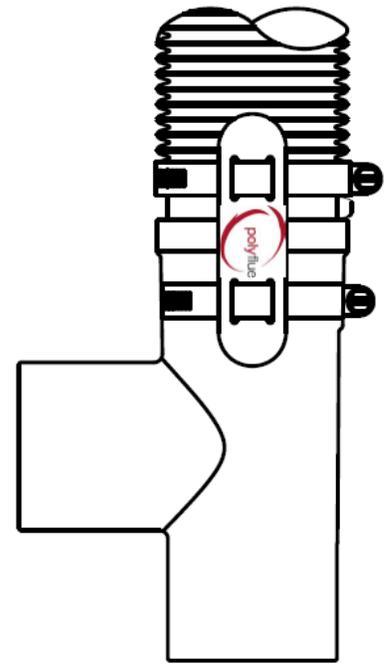
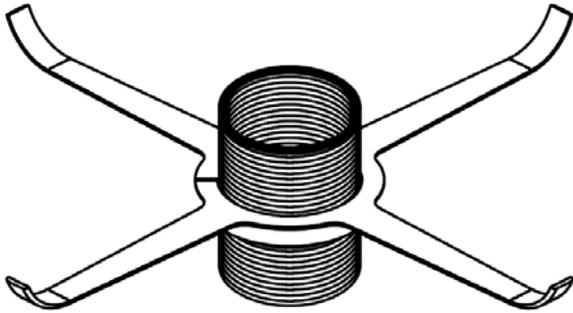


Figure 23

### Flexible in Unused, Existing Masonry Chimney (FLEXROLL & FLEX-KIT)

1. Measure distance needed from top of masonry to desired opening in appliance room. Add additional distance needed for termination above the masonry, per local code, as a UV rated Polyflue rigid pipe will also be used at the top to pass thru the rubber boot flashing with aluminum base. Remember, the flex can only be cut in 20" (500mm) increments (male or female seam), so additional rigid pipe may be needed at the bottom. To cut in 20" (500mm) increments, requires the shorter cut flexible pipe to be flipped around. An additional gasket and Locking Band (LB) will then need to be installed to join the flex pieces together (Figs 15-20). Otherwise, the male seams or female seams are 40" (1000mm) apart.
2. Fasten together the top UV rated rigid pipe section to the flexible pipe as shown above (Fig 21). It is permissible to cut the UV rated rigid pipe (at the male end) if the length will be aesthetically too tall above the flashing, keeping in mind any local code height requirements.
3. Secure around the flexible pipe a Flex Spacer (FLEX-SP) band at approximately every 7 feet (2.1m) starting with one at the very top of the flexible pipe and going down toward the base Wall Strap (WS). Position the band into the corrugation of the flexible pipe with the curved end on the legs pointing up (Fig 24).
4. Pull flexible pipe down masonry using a weighted string/rope (by others) that is looped around a hose clamp (by others). Secure the hose clamp above the flex male end bump protrusions.
5. Work UV rated termination pipe (female end) thru the rubber boot flashing at the top (Fig 25) before securing the top flashing down (and support collar) and anchoring the bottom Wall Strap (WS). Using soapy water on the edge of the pipe will help in passing it thru the boot flashing. Additional sheet metal (by others) may be necessary to fully flash off the top of the existing chimney opening.
6. Must use the Elbow or Tee (with Drain Tee Cap (TCD)) at the base supported by the Wall Strap. After desired length is met at the bottom and at the termination, secure Wall Strap to masonry using (2) 3/16" x 1"L (M5 x 25mm) minimum flat counter sunk masonry screws (by others).
7. Secure male end of flex, as shown above, to base Elbow or Tee fitting (Fig 22-23). If flexible measurement was not met, it is okay to add a rigid pipe in between flexible pipe and base Elbow or Tee.
8. Install remaining rigid pipe back toward the appliance making sure there is a minimum 3/8" rise per foot (31mm / 1000mm) upward pitch (in direction of flue gas).

**MAKE SURE INSTALLATION & SUPPORT PREVENTS FLEX PIPE FROM SAGGING & COLLECTING EXCESSIVE WATER.**



Install Flex Spacer approximately every 7 feet (2.1m) starting at the very top corrugation of the flexible pipe

Figure 24

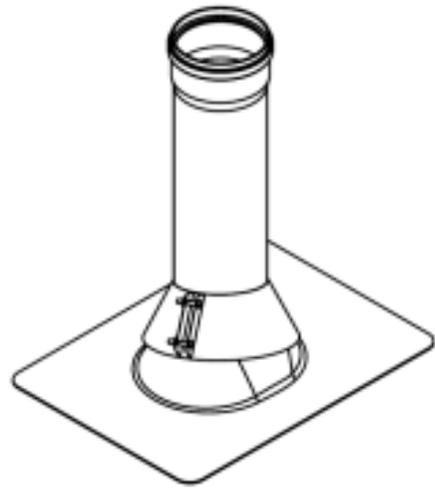


Figure 25

### Flexible in Unused Existing Type B Gas Vent or Metal Chimney (single appliance)

Installing per a maximum 30° offset from vertical:

2" (60mm) Flexible Polyflue allowed to go into minimum 4" (102mm) B-vent

3" (80mm) Flexible Polyflue allowed to go into minimum 5" (127mm) B-vent

4" (100mm) Flexible Polyflue allowed to go into minimum 6" (152mm) B-vent

1. Measure distance needed from top of B-vent (removing & discarding the B-vent rain cap) to the beginning of vertical B-vent in appliance room and then add additional length needed to make transition to rigid pipe or fitting. It is suggested to remove any B-vent sections that are not passing thru the floor above. Add, 6" (152mm) minimum needed for termination above the B-vent (Fig 26). Remember, the flex (male or female seam) can only be cut in 20" (500mm) increments. Reference step 1 in 'Flexible In Masonry' section.
2. Fasten together, the top UV rated Polyflue rigid pipe section to the flexible pipe as shown previously (Fig 21)
3. Pull flexible pipe down existing B-vent using a weighted string/rope (by others) that is looped around a hose clamp (tightened above the flex male end bump protrusions)
4. Secure male end of flex (Fig 22, 23) to base rigid pipe or fitting using a Locking Band (LB) or the Wall Strap (WS). If using a Wall Strap, wait to lock together until step 5 is complete and total system length is met, as necessary.
5. Secure the B-vent Relining Support Collar (BVSC) around the UV rated termination pipe below the female tooled end (Fig 27). Adjust total length of Polyflue system as necessary before anchoring the Support Collar to the Bvent outer wall (via 1/4" (6mm) L sheet metal screws by others) and before securing the bottom Wall Strap (WS) to some wood blocking as needed.
6. Tighten up the Support Collar around the Polyflue pipe (tight enough to not slide) and seal the interface of Polyflue pipe to Support Collar using silicone sealant when all pipe is secured.
7. Install remaining rigid pipe back toward the appliance making sure there is a minimum 3/8" rise per foot (31mm / 1000mm) upward pitch (in direction of flue gas) for any horizontal pipe.

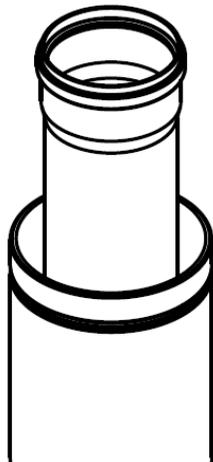


Figure 26

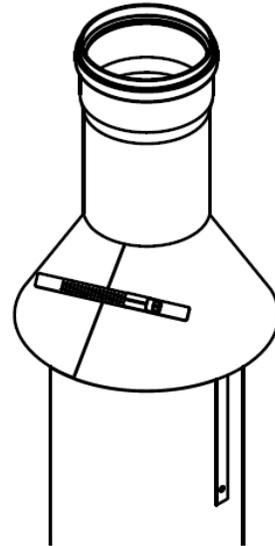


Figure 27

### Appliance Connectors

Polyflue uses stainless adapters. One common adapter is a PVC-PF, which is PVC/CPVC OD equivalent at the appliance interface (Fig 28). For any direct connect appliance adapter immediately transitioning to Polyflue, simply seal the interface of the adapter to the appliance outlet with red silicone (7000RTV). The Locking Band hose clamps (PF-LB / 4PF-LB / or field sourced) can be dismantled and used, additionally, to help secure the Polyflue pipe or stainless adapters to the appliance flue collar. 2" *Feroco* style couplers (typically sized for 2" PVC) can be a direct connect for 2" Polyflue pipe. Other Heatfab® Saf-T Vent stainless appliance adapters can be utilized and then transitioned to Polyflue by using the EZ Seal to Polyflue adapter, EZ-PF (Figure 29). Finally, to connect to the Polyflue pipe, simply insert the Polyflue pipe into the adapter and tighten the hose clamp to secure the connection.

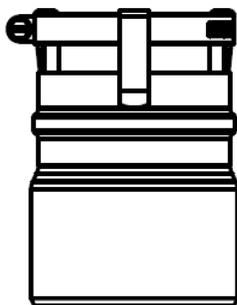
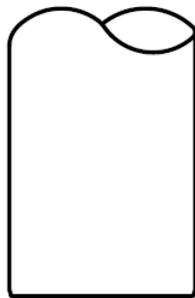


Figure 28

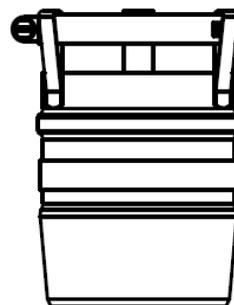


Figure 29

## Combustion & Ventilation Air

In order for appliances and their vent / chimney systems to operate properly they require a plentiful supply of clean combustion and ventilation air. Requirements for such combustion and ventilation air are found in the installation and maintenance instructions accompanying the appliance as well as in vent manufacturer's literature and various mechanical codes. Seek and follow guidelines provided there when installing an appliance / vent system.

In addition to a plentiful source, it is very important for the combustion air to be free of certain chemical contaminants that can be very corrosive in nature to the appliance and / or venting system during and as a result of the combustion process.

In some cases, the use of indoor air is acceptable with the exceptions stated below. However, wherever possible, it is best to take combustion air directly from the outside, unless outdoor air has contaminant vapors nearby as listed below.

The following common list of substances need to be avoided in all instances since vapors associated with them – if mixed with the combustion air – can be extremely corrosive / destructive to the appliance and / or venting system. \*Please note this list is not exclusive as to substance or effect and may be supplemented at any time.

- |   |   |
|---|---|
| a. Permanent wave solutions               | h. Cleaning solvents (i.e. perchloroethylene)     |
| b. Chlorinated waxes and cleaners         | i. Printing inks, paint removers, varnishes, etc. |
| c. Chlorine based swimming pool chemicals | j. Hydrochloric acid                              |
| d. Water softening chemicals              | k. Cements and glues                              |
| e. De-icing salts or chemicals            | l. Laundry room detergents, fabric softeners      |
| f. Carbon tetrachloride                   | m. Masonry acid washing materials                 |
| g. Halogen type refrigerants              |   |

Corrosion / deterioration of the vent / chimney and related system components caused by the use of contaminated combustion air voids the warranty on these products.

## Maintenance Procedures

- 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. As with all vents, the Polyflue system should be inspected at least annually for the presence of deposits of soot or debris. Any such accumulation should be removed and the appliances adjusted to eliminate future accumulation.
- At regular periods the system should also be inspected for signs of leakage of condensate or combustion by-products at all joints. If any leakage is found, the connected appliances should be turned off and the leaks repaired. If leaks are caused by unusual aggressive acidic condensate, as assessed by PH tests, then warranty may be voided and appliance should be remedied. Also inspect support brackets to insure rigidity
- If the system incorporates a drain hose from either an in-line fitting or from a drain tee then the hose must be inspected periodically to assure that water remains in the trap loop. If a proper trap loop is not maintained exhaust from the connected appliances may accumulate in the building area.
- Frequently inspect your terminations for foreign objects and remove them. Also inspect for wear and replace them as necessary

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**NOTES:**