

PolyPro®

Specifications

Applications

PolyPro is a polypropylene vent pipe for use with ANSI Category II and IV gas-burning appliances, including high-efficiency water heaters, condensing boilers and warm air furnaces. PolyPro is listed by Intertek to the ULC S636 standard in Canada 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 15 in-w.c.

Materials and Construction

Rigid pipe constructed of 2.2mm (minimum) thick polypropylene. Flex is double-wall polypropylene. EPDM or optional Viton Gaskets

Clearances

0" clearance to combustibles for exhaust temperatures up to 194°F / 90°C, and 0" clearance for vertical installations up to exhaust temperatures of 230°F / 110°C and ¼" / 6mm clearance to combustibles for horizontal installations at exhaust temperatures up to 230°F / 110°C. PolyPro concentric vent system components, including concentric Horizontal Termination and Vertical Termination, are listed at 0" clearance to combustibles for exhaust temperatures up to 230°F / 110°C. Double Wall PolyPro provides 0" clearance to combustibles.

Diameters

2" (60mm), 3" (80mm), 4" (100mm), 5" (130mm), 6" (150mm), and 8" (200mm).

Listings

Listed with the appliance in the USA and Canada, check with appliance manufacturer. Intertek / ETL listed to ULC S636 Listed as a Class IIA, IIB, and IIC vent system.

PolyPro is approved by the Massachusetts Plumbers Board. Approval code G1-0811-42.



PolyPro and PVC/CPVC: PVC pipes are commonly used for venting water heaters, condensing boilers and warm air furnaces, yet PVC was never designed for such use. PolyPro is an engineered alternative for condensing gas appliances. Engineered for venting, it is easier and faster to install than PVC, saving the contractor time and money. Polypropylene has a higher operating temperature limit of 230°F/110°C (PVC is 149°F/65°C max and CPVC is 194°F/90°C). PolyPro is engineered with a condensation management system.

Flex

PolyPro Flex through B Vent as a Chase: Retrofit venting for new, high-efficiency appliances. When replacing a mid-efficiency appliance with a new condensing 90+ appliance, you can use the existing B vent (any brand) as a chase for the new appliance with PolyPro. The perfect solution for utilizing the B Vent already in place, use the convenient pull cone to insert double-wall PolyPro Flex through the B Vent pipe and terminate in either a two pipe or single pipe system. At the other end is the unique B Vent/PolyPro Support Cap, allowing for the connection of flex to rigid PolyPro lengths and elbows to finish the installation.

Terminations

DuraVent's concentric PolyPro vertical terminations are lab tested to handle harsh weather and remain icicle free in freezing temperatures. Air circulation and weather conditions like rain, wind and ice have the potential to reduce the efficiency of a unit's performance and the operation of its venting system.

Double Wall

DW shells are offered separately, handling pipe lengths, elbows, and appliance connections. For installation, single wall PolyPro is inserted into the metal shell, which has a support disk inside. Adjustable DW sections are available if needed. The vent system is supported using typical means, including wall straps, elbow straps and roof or firestop supports. Vertical and Horizontal Terminations are available. Additionally, you can use adapters to transition from a DuraVent / Security Chimney stainless vent systems, to DW PolyPro. This integration of vent systems gives you unmatched installation flexibility.

Concentric

PolyPro® Concentric provides users the most versatile polypropylene venting system for high efficiency, condensing appliances. The injection-molded modular system is designed with a powder-coated aluminum outer pipe and a polypropylene inner pipe. It does not require a locking band and provides users with a fast, safe, clean, and sustainable venting solution. The PolyPro Concentric system also includes elbows that have a smooth wall lining and are designed to reduce condensate that may be left behind.

The DuraVent PolyPro product line is superior in performance and easier to install than PVC or CPVC pipe. Polypropylene has a higher operating temperature limit of 230°F/110°C (PVC is 149°F/65°C max and CPVC is 194°F/90°C), and PolyPro is engineered with a corrosion-free, condensation management system.

Commercial & OEM Product Development

DuraVent engineers are expertly skilled to develop venting components to OEM specs. To satisfy specific venting requirements, DuraVent has the experience to provide custom design, prototyping and testing of vent systems and components engineered to the demands of specific appliances.

The PolyPro Commercial Difference

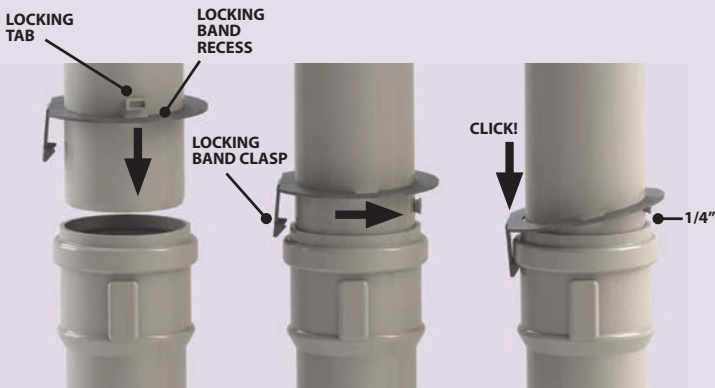
- Available in 5in. (130mm), 6in. (150mm) and 8in. (200mm) diameters.
- Completely smooth inner wall for optimal flow performance.
- Components designed for complete discharge of condensate.
- Design allows for system distance adjustment from the back of the appliance.
- Sizing services available to help in calculating required vent size.

PolyPro® Locking System

Incorporates a locking tab on the male end of the pipe and a revised locking band that slides over the tab, twists and firmly grasps the socket of the next pipe. This approach offers installers a number of important advantages including a secure mechanical connection (rather than relying on friction alone) and the ability to inspect the joint after installation for proper insertion depth.

The locking band is placed on the pipe, elbows and tees at the factory. Including the locking band(s) with the part will ensure the requirement for the listing is met. There is no need to remember to include separate locking bands on your order as before. All new parts with the upgraded locking system will have a new part number ending in "L".

To see the PolyPro locking system, visit duravent.com and click on the link for the PolyPro Locking System video.



DuraVent is dedicated to one thing: focusing on the design and manufacturing of venting products. As experts in this industry, our team is passionate about creating innovative, quality products. We invest in equipment with the latest technology to develop and test venting products that are engineered to one standard: excellence. All measuring equipment is calibrated to the same levels as used by testing agencies and are compliant with ISO 17025, the test-laboratory standard.



Wind Tunnel Laboratory

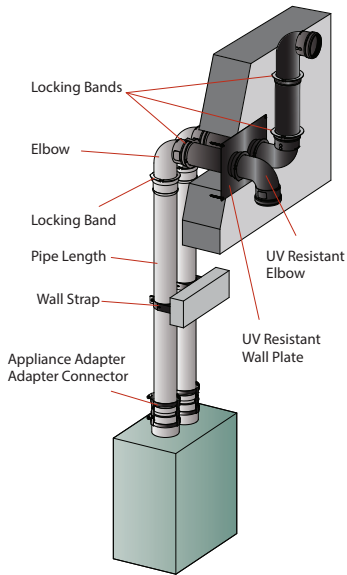
The wind tunnel lab allows us to gather precise data with 270 degrees of measurement on terminations. All data is analyzed for product performance under rigorous conditions before going to market.

Rain Testing

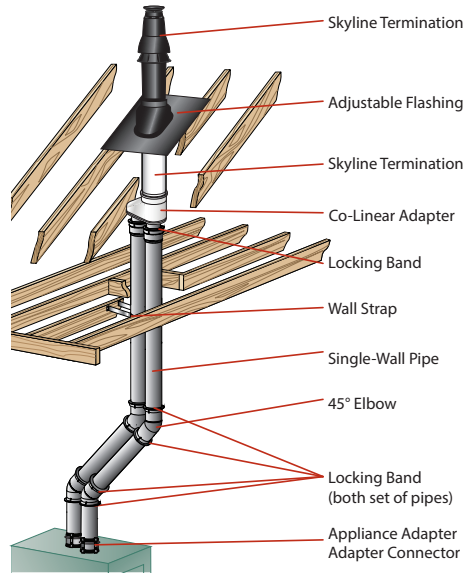
Labs test the vapor/moisture barrier of products by subjecting them to extreme rain and wind conditions. These tests are compliant with both the US and Canadian requirements as well as the stringent European standards.

Climate Testing

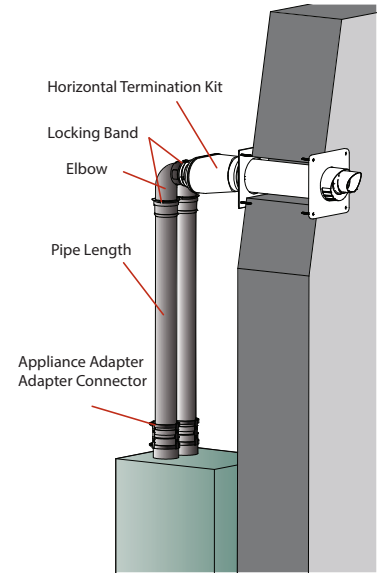
Labs have developed a patented ice testing system in the climate room. Tests run to -4°F (-20°C). PolyPro vertical terminations are engineered to remain icicle free.



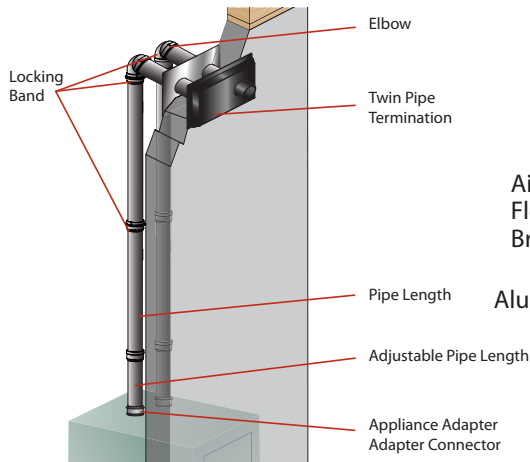
Horizontal Twin Pipe Elbow Termination



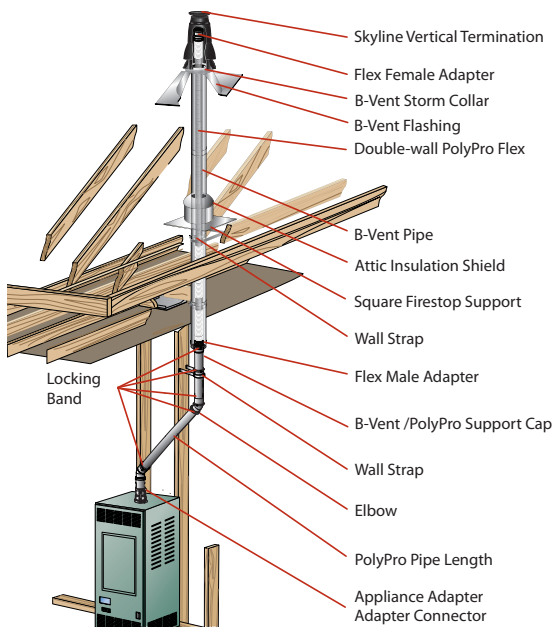
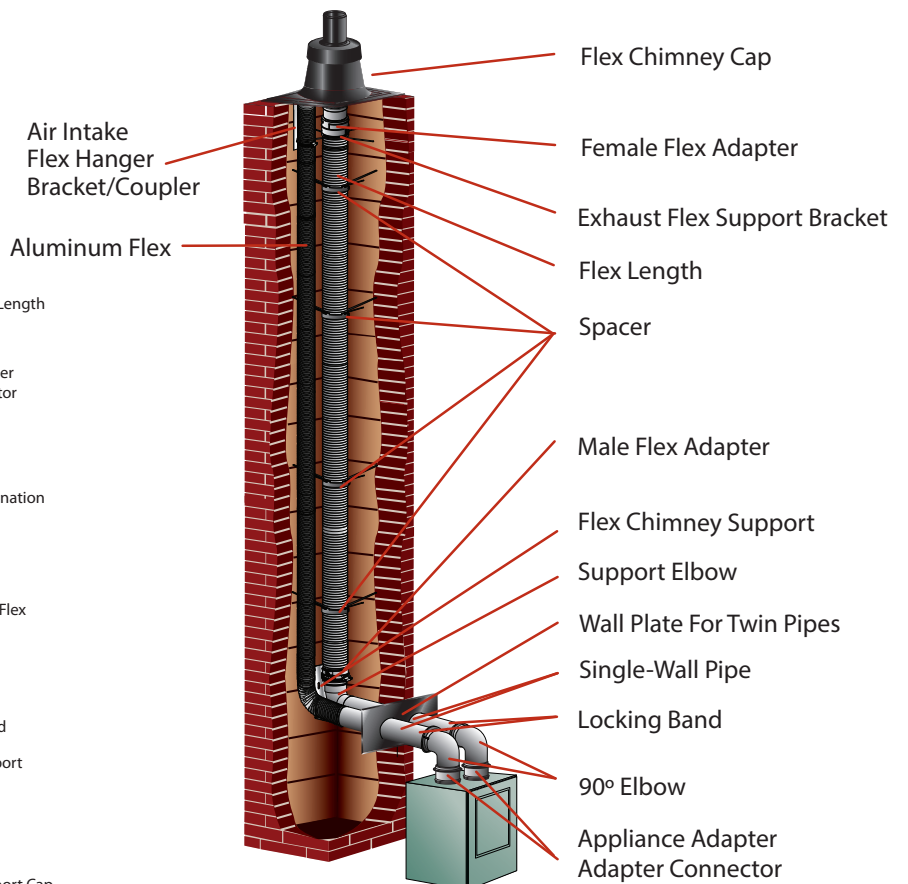
Twin Pipe with Concentric Termination



Horizontal Twin Pipe Concentric

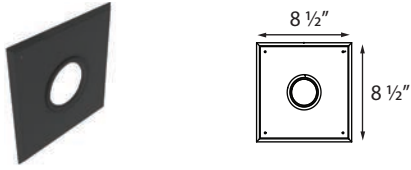


Horizontal Twin Pipe Below Grade



Flex Through B vent as a Chase

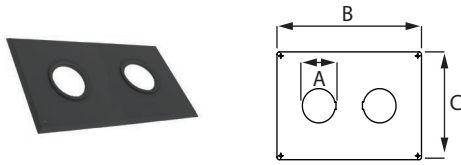
Black Wall Plate



Use to trim wall penetration. Painted black metal with gasket.

SIZE	ORDER #	STOCK #	SIZE	ORDER #	STOCK #
2" 60mm	2PPS-WPB	810004112	4" 100mm	4PPS-WPB	810004195
3" 80mm	3PPS-WPB	810004152			

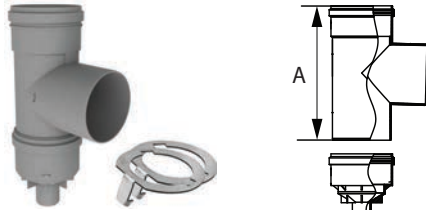
Black Wall Plate for Twin Pipes



Use to trim wall penetration when using two pipes. Painted black metal with gaskets.

SIZE	ORDER #	STOCK #	A	B	C
2" 60mm	2PPS-WPT	810004113	2" 60mm	11 7/8" 302mm	8 1/2" 216mm
3" 80mm	3PPS-WPT	810004153	3" 80mm	11 7/8" 302mm	8 1/2" 216mm
4" 100mm	4PPS-WPT	810004196	4" 100mm	12 7/8" 327mm	8 1/2" 216mm

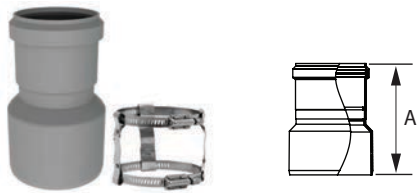
Tee w/ Drain Cap



Use to remove corrosive condensates from within the vent system at the bottom of a vertical stack. 1-1/4" OD drain outlet. Includes 2 locking bands.

SIZE	ORDER #	STOCK #	SIZE	ORDER #	STOCK #
2" 60mm	2PPS-TCDL	810009689	5" 130mm	5PPS-TCDL	810009768
3" 80mm	3PPS-TCDL	810009717	6" 150mm	6PPS-TCDL	810009788
4" 100mm	4PPS-TCDL	810009750	8" 200mm	8PPS-TCDL	810009804

Reducer



Use to transition the vent system to a smaller diameter. Includes 1 Adapter Connector clamp.

SIZE	ORDER #	STOCK #	A
3" - 2" 80 - 60mm	3PPS-R2L	810009714	5" 130mm
4" - 3" 100 - 80mm	4PPS-R3L	810009746	5" 130mm
5" - 4" 130 - 100mm	5PPS-R4L	810009764	7 5/8" 193mm
6" - 5" 150 - 130mm	6PPS-R5L	810009785	7 3/4" 197mm
8" - 6" 200 - 150mm	8PPS-R6L	810009801	5 15/16" 150mm

Increaser



Use to transition the vent system to a larger diameter. Install in vertical orientation only. Includes 1 Adapter Connector clamp.

SIZE	ORDER #	STOCK #	A
2" - 3" 60 - 80mm	2PPS-X3L	810009694	4 5/16" 110mm
3" - 4" 80 - 100mm	3PPS-X4L	810009722	4 5/16" 110mm
4" - 5" 100 - 130mm	4PPS-X5L	810009754	4 5/16" 110mm
5" - 6" 130 - 150mm	5PPS-X6L	810009771	4 5/16" 110mm
6" - 8" 150 - 200mm	6PPS-X8L	810009792	5 3/4" 145mm