



# PolySeal Coupler for corrugated plastic pipe joints

CORRUGATED PLASTIC PIPE



MarMac PolySeal Couplers are flexible, high-strength, over-engineered, external pipe couplings that permanently seal and restrain corrugated HDPE and HDPP plastic pipe joints. PolySeal is designed to be infiltration-proof, exfiltration-resistant, and are over-engineered to outlast the pipes they connect. They are perfect for cut & butt joints, field repairs, new detention systems, and more.

Today, millions of PolySeal pipe couplings have been installed underground around the world with nearly a 100% success rate. PolySeal is the proven, premiere coupler for HDPE pipe connections, and the "go to" solution for when it really matters. Designed to be installed in the worst field conditions and succeeding where other corrugated pipe adapters fail, PolySeal is an excellent choice for both field repairs and new installations.

## Features & Benefits

- Infiltration-proof, exfiltration-resistant
- Easily installed & immediately inspectable
- Permanent protection
- Track record of proven performance
- Highly durable, shear/puncture-resistant



# PolySeal Coupler data sheet

## Applications

- HDPE & HDPP corrugated plastic pipe
- Cut & Butt joints
- Detention & retention systems
- Field repairs
- New installations

## Versions

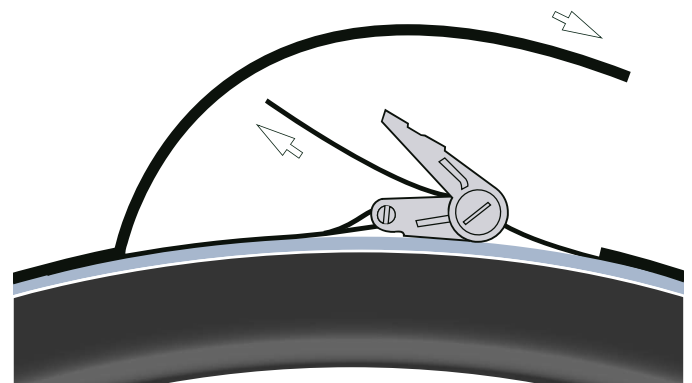
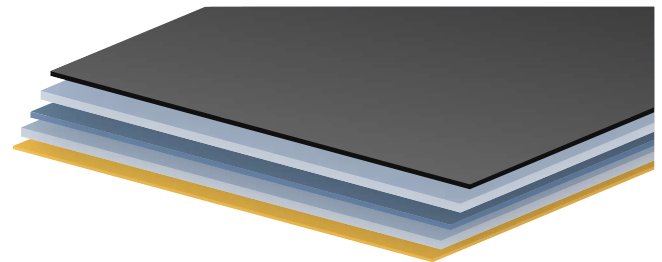
- Standard PolySeal
- Chemical Resistant PolySeal
- Double-Wide PolySeal

Please refer to the appropriate section for specific PolySeal version details & availability.

## Specifications

PolySeal is manufactured with interval layers of our rubberized mastic, specially formulated to adhere aggressively to all known pipe surfaces. A sheet of puncture and shear-resistant woven polypropylene, and an outside backing of cross-laminated polyethylene makes PolySeal resistant to most acids and bases (additional protection available with Chemical Resistant PolySeal). The integrated compression bands mechanically "lock" into the corrugations of the pipe, bonding the mastic to the pipe wall, and forming a permanent seal.

The minimum length of a PolySeal Coupler is the circumference of the outside diameter of the pipe, plus eight inches for overlap.



TYPICAL PROPERTIES	MIN	MAX
<b>RUBBERIZED MASTIC</b>		
Ash-inert matter	8.0%	15.0%
Volatiles	0.1%	2.0%
Softening temp	175 °F	
Specific gravity	0.95	1.05
Penetration	60 dmm	90 dmm
Flow	10 mm	10 mm



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TYPICAL PROPERTIES	MIN	MAX
<b>POLYETHYLENE BACKING</b>		
Tensile strength	4000 psi	
Elongation at break	100%	
Tear resistance	1500 psi	
Water absorption		0.01%
<b>REINFORCING MESH ELEMENT</b>		
Tensile strength warp	75 lb/in	
Tensile strength fill	75 lb/in	
Elongation at break warp	20 lb/in	
Elongation at break fill	20 lb/in	

## Performance

In a laboratory setting, PolySeal held 10.8 psi internal hydrostatic pressure for 10 minutes with no visual leakage, as per ASTM D 3212. PolySeal has been third party tested to 22" Hg vacuum for 10 minutes with no loss of vacuum, per ASTM D 3212.

## Storage

PolySeal should be stored carefully in their original packaging, out of direct sunlight and protected from the elements. Materials should be kept away from direct heat, sparks and open flame. For optimum results, store in a tepid (60°-80°F) environment prior to installation.

## Installation

Surface preparations: Inspect the outside of the joint. Brush surface as needed to ensure it is free of debris. If installing on horizontal pipe, dig a bell hole for complete access to the joint.

The coupler shall be placed around the pipe with the mastic side to the pipe wall and spanning the joint, while centered on the joint gap to be sealed. The protective film shall be removed and the coupler applied with the overlap at the top of the pipe. The tensioning straps shall be aligned between the pipe corrugations and tightened. The closing flap protective film shall be removed and the closing flap shall cover the exposed straps and the work area.



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## Clean Joint & Position

Clean the external surface of the joint to ensure it is dry and free of debris.

Line up the center compression band on the pipe joint corrugation.



## Remove Release Film & Apply

Peel the main release film from the (mastic side) main surface of coupler.

Place the exposed mastic (tail end) of the coupler on the joint. Pull the coupler around, spanning the joint, and creating the overlap at the top.



## Feed Straps

Thread the compression band adjustable ends (tails) through the ratchet tensiometer pins.



## Tighten Straps

Beginning with the center compression band, move the ratchet handle back and forth until the strap is tight and sunken into the corrugation of the pipe.

Repeat the process with the remaining bands.