



MacWrap Coupler for precast concrete structure joints

CONCRETE INFRASTRUCTURE



MarMac MacWrap is an advanced external joint coupler designed to permanently prevent infiltration at reinforced concrete pipe connections, manhole sections, box culverts, and many other round or elliptical concrete structures.

MacWrap integrates several unique components into a single, customizable, full-perimeter, external sealing band. Our specially formulated mastic provides a positive seal against infiltration. The coupler reinforced internalized woven bν polypropylene with heavy dutv polyethylene backing and secured with tensioning ratchets.

With tens of thousands of these couplers installed and performing successfully throughout North America, MacWrap has proven to be the premiere solution for the most challenging of installations, becoming the "go to" solution when it really matters. MarMac MacWrap is designed to be installed in the worst field conditions, succeeding where other products fail, and is appropriate for rehabilitation of failed joints as well as new installations.





MacWrap Coupler data sheet

Features & Benefits

- Strong, permanent, shear & puncture resistant
- Easily installed & immediately inspectable
- Protection from corrosion, acids & alkali
- Full-perimeter, positive seal = infiltration-proof, exfiltration-resistant

Applications

- Bell-and-spigot RCP
- RCP Repair
- Manhole Repair
- In-ground applications

- Tongue-and-groove RCP
- Manholes
- Box culverts
- Above-ground applications

Versions

- MacWrap for RCP
- MacWrap for Box Culverts
- Chemical Resistant MacWrap

- MacWrap for Manholes
- MacWrap Repair

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

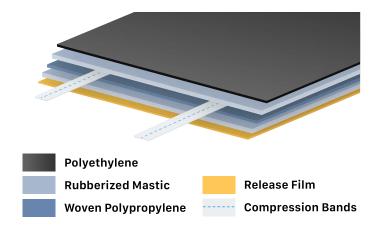
Specifications

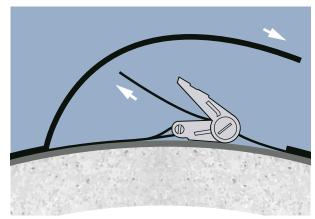
MacWrap integrates several unique components into a single, full-perimeter, external sealing band. The coupler composition consists of:

- · Heavy duty polyethylene backing
- Internal woven polypropylene reinforcement
- High-tensile compression bands
- Specially formulated mastic contact layer

MarMac MacWrap meets or exceeds all requirements of the industry standards for external joint seals of RCP and concrete structures set by:

- ASTM C 877, Type II
- ASTM C 1244







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TYPICAL PROPERTIES	MIN	MAX
RUBBERIZED MASTIC		
Ash-inert matter	8.0%	15.0%
Volitiles	0.1%	2.0%
Softening temp	175 °F	
Specific gravity	0.95	1.05
Penetration	60 dmm	90 dmm
Flow	10 mm	10 mm
POLYETHYLENE BACKING		
Tensile strength	4000 psi	
Elongation at break	100%	
Tear resistance	1500 psi	
Water absorption		0.01%
REINFORCING MESH ELEMENT		
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	

Storage

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

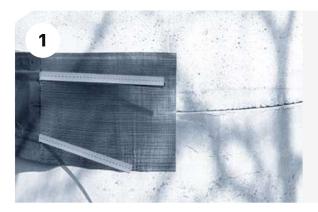
Installation

Surface preparations: Inspect the outside of the joint. Brush and/or repair surface as needed to ensure there are no loose materials or voids. If installing on horizontal pipe, dig the bell hole for complete access to the joint.

The coupler shall be placed around the pipe, mastic side centered on the pipe joint, and then the protective release film shall be removed. The straps will then be tensioned and secured with preinstalled ratchet tensioners. The closing flap shall cover the service area and exposed straps, completing the installation. Backfill may commence immediately following the inspection of proper sealing band installation.



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Clean Joint & Position

Clean the external surface of the joint to insure that foreign materials do not interfere with direct contact between the coupler and the joint.

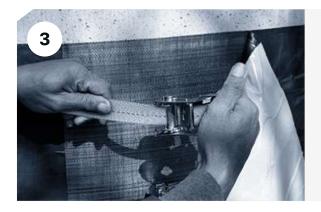
Place and center coupler on the pipe joint.



Remove Release Film & Apply

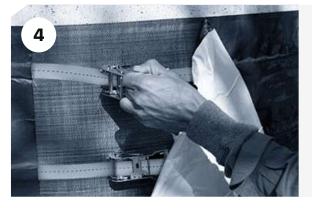
Peel the main release film from the (mastic side) main surface of coupler and the raised butyl reinforcement strips.

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

Slide the compression band tails into the ratchet tensioners on the opposite end.



Tighten Straps

Using the proper tool, tighten the outside compression bands followed by the inside compression bands.

