

WaterWrap Wrap-around Girth Weld Sleeve



WaterWrap with PCI (Permanent Change Indicator) is a 2-layer field-joint coating system designed for corrosion protection of buried large diameter water pipelines operating at ambient temperature.

Product description

Construction: 2-layer system:

First layer: Visco-elastic low preheat adhesive sealant.

Second layer: Thick-walled, radiation cross-linked, high density polyethylene with **PCI** (Permanent Change Indicator)

WaterWrap is a wrap-around heat-shrinkable, ready-to-fit assembly for the corrosion protection of field girth weld joints in water distribution and transmission systems. WaterWrap/B is compatible with standard pipe coatings WaterWrap can also be used for coating bare, replacement pipe sections and

large radius bends WaterWrap System-B is designed to be applied with a minimum preheating and is ideal for large diameter pipe. The installation is carried out directly on the cleaned and dried (pre-heated) pipe surface. The use of the 939 filler is required when the step down on the weld bead is $\geq 1/4"$. The filler 939 is a thick mastic-like butyl rubber designed to fill and smooth transition areas. The semi-tacky composition remains flexible and easily molded in place to conform around irregular shapes. During installation, the heat-shrinkable sleeve is wrapped around the pipe and heat is applied.

The heat activated backing contracts to form a tight fit around the joint eliminating entrapped air and filling the smallest of crevices with a high quality, corrosion inhibiting Visco-elastic adhesive sealant. The permanently cross-linked polyolefin outer layer forms a tough barrier against mechanical damage and moisture.

Product features/benefits

- Contains no asphalt**
 Does not off-gas toxic vapors.
 Safe to use.
- Offers two Permanent Change Indicators (PCI)**
 Underheat Indicator - Ensures correct application heat to entire sleeve.
 Overheat Indicator - Ensures no excess heat.
 Result - Reliable installation and full inspectability at any time after installation.
- High modulus of elasticity backing**
 Greater soil stress resistance.
 Better overall performance.
- High impact and penetration resistance**
 Tough, but flexible throughout.
- High shrink force**
 Optimizes flow & fill of visco-elastic adhesive sealant.
- Greater, long term protection.**
- Low application preheat**
 Makes installation fast and easy.
- Keeps installation costs low.**
- No special equipment or skills required**
 Easy to install.
- Saves time.**

Product selection guide

	WaterWrap
Max operating temperature	50°C (122°F)
Compatible line coatings	PE, FBE, Coal Tar, Tape & Asphalt
Min preheat temperature	20°C (68°F)
Surface preparation	SP 2 or SP 3 Ref. AWWA C216
Performance	AWWA C216-00

Product thickness

	WaterWrap/B
Total supplied thickness	0.088 in. (2.2 mm)
Backing thickness	0.028 in. (0.7 mm)
Adhesive thickness	0.060 in. (1.5 mm)
Fully free recovered	0.121 in. (3.0 mm)
Sleeve % recovery	28%

Product properties: WaterWrap (1)

Property	Test method	Typical Value
Backing		
Tensile strength	ASTM D-638	3300 psi (22.8 MPa)
Elongation	ASTM D-638	600%
Hardness, Shore D	ASTM D-2240	58 min
Shrink force	ASTM D-638	40 psi
Dielectric strength	ASTM D-149	900 volts/mil (35 KV/mm) 31 kV/mm
Water absorption	ASTM D570 23°C (73°F) 24 hrs	0,05 %
Adhesive		
Softening point	ASTM E-28	> 205°C (401°F)
Lap shear	ASTM D-1002 EN12068 @ 10 mm(0.4")/min.	> 18 psi > 5 N/cm ²

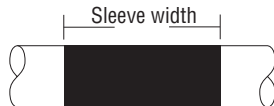
Product properties: WaterWrap (2)

Property	Test method	Typical Value
Sleeve		
Peel to Steel	ASTM D-1000, @ 23C, 10"/min.	> 20 lbs/in.
	EN12068 @ 10 mm (0.4")/min.	> 4 N/cm
Cathodic disbondment	ASTM G8, 30 days	< 10mm @ 23C
Impact resistance	ASTM G-14	70 in-lbs
	EN12068	> 8 Nm for /B, >15 Nm for /C
Penetration resistance	ASTM G-17	Pass, no holiday with 12.5 KV detector
	EN12068, class B30 & C30	0.80 - 1.05 mm residual thickness

Ordering information

WaterWrap type product is available in Black :

- as Uni-sleeve (pre-cut sleeve with pre-attached closure patch)
- as a roll (closure patches to be ordered separately)



* Cut piece / Uni-sleeve,

Example: WaterWrap -56000X17/B/UNI

WaterWrap	Product type	Standard Ordering options
56000	Outside pipe diameter in mils	Up to 144" (DN 3600) Larger Diameters available on request
17	Sleeve width in inches (Sw) ⁽¹⁾	min. 6", 9", 12", 14", 17", 20", 24" & 34" Other widths available on request
/B	Designates total product thickness construction, as supplied	/B, /1-1.5, /1.2-1, /1.4-1, /C
/UNI	Designates pre-attached closure patch	optional

⁽¹⁾ Minimum width

* Roll form (closure patches to be ordered separately)

Example: WaterWrap -17x100/B-RL

WaterWrap	Product type	Standard Ordering options
17	Roll width in inches (Sw) ⁽¹⁾	min. 6" - max. 34"
100	Roll length in feet (Sl)	100 ft (= 30 m)
/B	Designates total product thickness construction, as supplied	/B, /1-1.5, /1.2-1, /1.4-1, /C

⁽¹⁾ Minimum width

* Closure patch

Example: WPCP-IV-4X17

WaterWrap	Product type	Standard Ordering options
4	Closure patch width in inches (Pw)	4" (100 mm), 5" (125 mm), 6" (150 mm), 8" (200 mm)
17	Closure patch length in inches (Pl)	same as sleeve width: min. 6" - max. 34"

Sleeve cut lengths and appropriate closure patch widths depend on the pipe size and product construction, see latest application table AT-GIRTHWELD.

Berry Plastics warrants that the product conforms to its chemical and physical description and is appropriate for the use stated on the technical data sheet when used in compliance with Berry Plastics written instructions. Since many installation factors are beyond the control of Berry Plastics, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection herewith. Berry Plastics liability is stated in the standard terms and conditions of sale. Berry Plastics makes no other warranty either expressed or implied. All information contained in this technical data sheet is to be used as a guide and is subject to change without notice. This technical data sheet supersedes all previous data sheets on this product.



CORROSION PROTECTION GROUP
www.berrycpg.com



Distributed by:
Protection Engineering
2201 Harbor Street, Unit C
Pittsburg, CA 94565
Tel: 800.878.8837 Fax: 925.427.6202

www.corrosioncoatings.com sales@corrosioncoatings.com

Headquarters : Berry Plastics Tapes & Coatings Division, Franklin MA, USA

Franklin, MA, USA
Tel: +1 508 918 1714
US Toll Free: +1 800 248 0149
Fax: +1 508 918 1910
CPG@berryplastics.com

Houston, TX, USA
Tel: +1 713 676 0085
US Toll Free: 01 888 676 7202
Fax: +1 713 676 0086
CPGH@berryplastics.com

Tijuana, Mexico
Tel USA +1 858 633 9797
Fax US: +1 858 633 9740
Tel Mexico: +52 664 647 4397
Fax Mexico: +52 664 647 4370
CPGTJ@berryplastics.com

Aarschot, Belgium
Tel: +32 16 55 36 00
Fax: +32 16 55 36 74
CPGE@berryplastics.com

Baroda, India
Tel: +91 2667 264721
Fax: +91 2667 264724
CPGIN@berryplastics.com