



WPC100M is a two-layer coating system for pipeline operating at ambient and elevated temperature.

Product description

WPC100M field-joint coating.

Construction: Two-layer system:

First layer: Visco-elastic adhesives sealant.

Second layer: Radiation cross-linked, high density polyethylene

WPC100M is a wraparound heat-shrinkable sleeve specially suitable for higher stress conditions caused both by elevated temperatures and by soils with severe contraction between wet-dry cycles. The WPC100M is compatible with most commonly used steel pipe sections and large radius bends. WPC100M may be cut to the appropriate length to cover all pipe diameters.

The installation is carried out directly on the cleaned and pre-heated surface without any primer required. During installation, the heat-shrinkable sleeve is wrapped around and shrunk to form a tight fit around the joint. During recovery, the adhesive softens and flows to form a perfect bond with the pipe surface providing protection against corrosion. The radiation cross-linked outer layer forms a tough barrier against mechanical damage and moisture transmission.

Product features/benefits

- **Dimpled backing provides a 'permanent change' indicator for application of heat**
Ensures correct application heat & allows easy post-heat inspection. Reliable inspectability at any time.
- **Low preheat sensitivity & proven functionality**
Installation friendly in combination with high functional performance.
- **Available as all-in-one unit or roll form**
Saves money by keeping inventory and logistics costs low.
- **High shear resistance**
WPC offers "safer protection"
- **Covers a wide range of operating temperature ratings**
Offers a solution for nearly every application.
- **No special equipment (standard gas & a roller)**
Makes installation fast and easy. Keeps installation costs low.

Product selection guide

	WPC100M
Max operating temperature	80°C (176°F) *
Compatible line coatings	PE, PP, FBE, Tape & Coal Tar
Min preheat temperature	100°C (212°F)
Recommended pipe preparation	ST 2 1/2 - ST3 or SA 2 1/2
Soil stress restrictions	Moderate

*for offshore applications max operating temperature 100°C (212°F)

Product thickness

	WPC100M
Backing (as supplied)	0.030 in. (0.75 mm)
Backing (fully free recovered)	0.040 in. (1.0 mm)
Adhesive (as supplied)	0.040 in. (1.0 mm)

Product properties> WPC100M (1)

Property	Test method	Typical value WPC100M
Backing		
Tensile strength	ASTM D-638	3300 psi (22.8 MPa)
Elongation	ASTM D-638	600%
Hardness, Shore D	ASTM D-2240	55
Shrink force	ASTM D-638	40 psi
Dielectric strength	ASTM D-149	900 volts/mil (35 KV/mm)
Water absorption	ASTM D-570	0.05%
Adhesive		
Softening point	ASTM E-28	155°C (311°F)
Lap shear	ASTM D-1002	47psi @ 23°C (73°F) 5psi @ 80°C (176°F)
	EN 12068/DIN30672 @ 10 mm (0.4")/min.	13 N/cm ² @ 23°C (73°F) 1 N/cm ² @ 80°C (176°F)

Product properties: (2)

Property	Test method	Typical Value
Sleeve	Test method	
Peel to Steel	ASTM D-1000	57 lbs/in.width @ 23°C (73°F) 4 lbs/in.width, @ 80°C (176°F)
	EN 12068 @ 10 mm (0.4")/min.	1.7 N/mm @ 23°C (73°F)
Cathodic disbondment	ASTM G42 (30 days)	17mm radius, @ 80°C (176°F)
Low temperature flexibility	ASTM D-2671-C	-40°C (-40 °F)
Impact resistance	ASTM G-14 EN 12068	64 in-lbs > 8 Nm
Penetration resistance	ASTM G-17	no holiday with 10 kV detector @ 80°C (176°F)

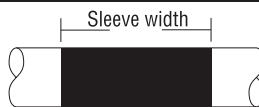
* Remaining coating thickness

Ordering information

WPC100M type product is available:

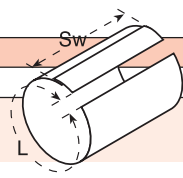
- as cut piece (pre-cut sleeve and separate closure patch)
- as Uni-sleeve (pre-cut sleeve with pre-attached closure patch)
- as a roll (closure patch to be ordered separately)

* Cut piece / Uni-sleeve



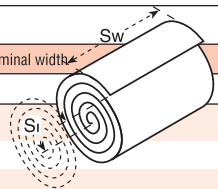
Select sleeve width that will overlap onto the mill-applied coating by 2 inches (50 mm) minimum on each side of the weld joint. Take a 10% shrinkage during installation of sleeve width into account when calculating the minimum sleeve width.

Example: WPC100M-10750X17			(1) Nominal width
Product type	Standard ordering options:		
10750	Outside pipe diameter in mils	2.375" – 48.000"	
17	Sleeve width in inches (Sw)	11" (285 mm) ⁽¹⁾ , 17" (450 mm) ⁽¹⁾ , 24" (600 mm) ⁽¹⁾ , 34" (870 mm) ⁽¹⁾	
/UNI	Designates pre-attached closure patch	optional	



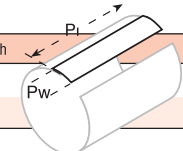
* Roll form (closure patches to be ordered separately)

Example: WPC100M-17x100-RL			(1) Nominal width
WPC100M	Product type	Standard ordering options:	
17	Roll width in inches (Sw)	11" (285 mm) ⁽¹⁾ , 17" (450 mm) ⁽¹⁾ , 24" (600 mm) ⁽¹⁾ , 34" (870 mm) ⁽¹⁾	
100	Roll length in feet (SI)	100 ft (30 m), 66 ft	



* Closure patch

Example: WPCP-IV-4X17			(1) Nominal width
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 (PI)	11" (285 mm) ⁽¹⁾ , 17" (450 mm) ⁽¹⁾ , 24" (600 mm) ⁽¹⁾ , 34" (870 mm) ⁽¹⁾	



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

For proper product installation, see latest installation instruction.

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

Local Distributor / Representative:

For contact details of local Distributors / Representatives
Please visit www.berrycpg.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