

FLEXCLAD Heat-Shrinkable Tape Wrap for Pipe Bends

Hand-wrapped, heat-shrinkable corrosion protection tape.



Product description

FLEXCLAD pipe bend coating.

Construction: Multi wrap construction:

Adhesives: Semi-crystalline mastic sealant (Flexclad),
High-shear strength copolymer adhesive (Flexclad-II-C30).

Backing: Flexible, radiation cross-linked, low density polyethylene.

FLEXCLAD tapes are stretchable, hand-wrapped, heat-shrinkable tapes used for corrosion protection of pipe bends and also for small diameter straight pipes in distribution networks.

FLEXCLAD is available in 2 mechanical classes: B30 = FLEXCLAD; C30 = FLEXCLAD-II-C30.

The installation is carried out directly on the cleaned and prepared pipe surface without any primer. During installation, FLEXCLAD(-II) is to be wrapped spirally around the bend with a 50% overlap. The carrier is heated and shrinks tightly around the substrate; at the same time, the sealing adhesive melts and is forced into all surface irregularities, forming a thorough coating and a complete bond with the substrate.

Product features/benefits

- **Different mechanical classes**
Provides options to the customer and allows cost savings.
- **Highly flexible**
Easy to apply at both low or high temperatures & on pipes of small diameter.
- **Compatible with varying pipe diameters**
Minimizes inventory, thus saving money.
- **Self-tensioning, heat-shrinkable backing**
Easy to use. Saves time.
- **No special equipment required**
Keeps installation costs low.

Product selection guide

	FLEXCLAD	FLEXCLAD-II-C30
Max operating temperature	50°C (122°F)	50°C (122°F)
Compatible line coatings	PE, FBE, Tape & Coal Tar	PE, FBE, Tape & Coal Tar
Min preheat temperature	80°C (176°F)	90°C (194°F)
Recommended pipe preparation	ST3 or SA 2½	ST3 or SA 2½
Soil stress restrictions	None	None
Performance	EN 12068 B30	EN 12068 C30

Product thickness

	FLEXCLAD	FLEXCLAD-II-C30
Backing (as supplied)	0.020 in. (0.5 mm)	0.020 in. (0.5 mm)
Backing (fully free recovered)	0.020 in. (0.5 mm)	0.020 in. (0.5 mm)
Adhesive (as supplied)	0.028 in. (0.7 mm)	0.028 in. (0.7 mm)

Product properties: FLEXCLAD

Property	Test method	Typical Value FLEXCLAD	Typical Value FLEXCLAD-II-C30
Backing			
Tensile strength	ASTM D-638	22 MPa	22 MPa
Elongation	ASTM D-638	900%	900%
Adhesive			
Softening point	ASTM E-28	82°C (180°F)	94°C (201°F)
Shear strength	ASTM D-1002	120 psi	170 psi
	EN 12068 @ 10 mm (0.40")/min.	80 N/cm ²	120 N/cm ²
Sleeve			
Peel to Steel	ASTM D-1000	45 lbs/in. width	68 lbs/in. width
	EN 12068	5.6 N/mm	7.6 N/mm
	@ 10 mm (0.40")/min.		1.3 N/mm at 50°C (122°F)
Cathodic disbondment	EN 12068 30 days	11 mm radius	11 mm radius <= 20 mm radius at 50°C (122°F)
Impact resistance	EN 12068		
	Class B	> 8 Nm	
	Class C		> 15 Nm
Penetration resistance	EN 12068		
	Class B (> 1 N/cm ²)	> 0.6 mm *	
	Class C (> 10 N/cm ²)		> 0.6 mm *

* Remaining coating thickness

Ordering information

FLEXCLAD type products are available:

- as a roll (closure patches included)

FLEXCLAD

Example: FLEXCLAD-50X15000
FLEXCLAD-II-C30-50x15000

Standard Ordering options

FLEXCLAD...	Product type	Flexclad, Flexclad-II-C30
50	Roll width in mm	35 mm (1.50"), 50 mm (2"), 75 mm (3"), 100 mm (4")
15000	Roll length in mm	15000 mm = 15 m (50 ft)

Calculated material usage (including 50 mm overlap on the mill-applied coating)

Pipe diameter	Recommended tape width in mm	3 D-Bend	5 D-Bend
		B/C 30	B/C 30
		Tape length FLEXCLAD (II) in m	Tape length FLEXCLAD (II) in m
DN 25	35	3.10	3.40
DN 40	35	4.80	5.40
DN 50	35	6.30	7.30
DN 80	50	7.50	9.00
DN 100	50	10.60	13.20
DN 125	50	14.50	18.50
DN 150	50	18.80	24.40
DN 200	75	19.10	25.40
DN 250	75	27.20	37.00
DN 300	100	27.30	37.60

Note: For pipe sizes exceeding DN300, the use of MEPS, WPC or HTLP is recommended.

For small riser bends also CPSP tubular sleeves can be used.

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.



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