# Raychem

# 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
Max operating temperature	50°C (122°F)
Compatible line coatings	PE, FBE,
	Tape & Coal Tar
Min preheat temperature	70°C (158°F)
Recommended pipe preparation	ST3 or SA 2½
Soil stress restrictions	None
Performance	EN 12068 B30

# Product thickness

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

# **Product properties: FLEXCLAD**

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

<sup>\*</sup> Remaining coating thickness

# **Ordering information**

#### FLEXCLAD type products are available:

• as a roll (closure patches included)

### FLEXCLAD

Example: FLEXCLAD-50X15000				
FLEXCLAD-II-C	30-50x15000			
		Standard Ordering options		
FLEXCLAD	Product type	Flexclad		
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)		

	<b>ge</b> (including 50 mm overlap on the mi	3 D-Bend	5 D-Bend
		B/C 30	B/C 30
	Recommended	Tape length	Tape length
	tape width in mm	FLEXCLAD (II) in m	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 CPSM tubular sleeves can be used.

For proper product installation, see latest installation instruction. \\

Tyco Adhesives 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 Tyco Adhesives' written instructions. Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith. Tyco Adhesives' liability is stated in the standard terms and conditions of sale. Tyco Adhesives 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.