

COVALENCE[®] FLEXCLAD-II

Product Information

Product description: Covalence[®] FLEXCLAD –II 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.

Construction: Multi wrap construction:

- Adhesive: High-Shear strength copolymer adhesive).
- Backing: Flexible, radiation cross-linked, low density polyethylene.

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.

Features:

- Different mechanical classes.
- Highly flexible.
- Compatible with varying pipe diameters.
- Self-tensioning, heat-shrinkable backing.
- No special equipment required.

Benefits:

- Provides options to the customer and allows cost savings.
- Easy to apply at both low or high temperatures & on pipes of small diameter.
- Minimizes inventory, thus saving money.
- Easy to use. Saves time.
- Keep installation costs low.

Product selection guide

	FLEXCLAD-II-C30
Max operating temperature	60°C
Compatible line coatings	PE, FBE, Tape & Coal Tar
Min. preheat temperature	80°C min.
Recommended pipe preparation	ST3 or SA2½
Soil stress restrictions	None
Performance	EN 12068 C30 ⁽¹⁾ EN 12068 C50 ⁽³⁾

General order information (continued)

Installation guide	For proper product installation, see latest installation instruction.
Handling	Handle with care. Keep boxes upright.
Storage	Store indoor, clean and dry, away from direct sunlight in a cool place below +50°C. Unlimited shelf life.

Information

Documentation	Extensive information is available on our web-site. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending an email to info@sealforlife.com
Certified staff	Application of the described coating system should be carried out by certified personnel.

Product properties

Backing

Property	Test method	Typical value
Tensile strength at break	ASTM D-638	22 MPa
Elongation at break	ASTM D-638	900%

Adhesive

Property	Test method	Typical value
Softening point	ASTM E-28	94°C
Shear strength	EN 12068 @10 mm/min	1.20 N/mm ² @ 23°C 0.5 N/mm ² @ 50°C

Installed sleeve

Property	Test method	Typical value
Peel to steel	EN 12068 @10 mm/min	7.6 N/mm @ 23°C 1.3 N/mm @ 50°C
Cathodic disbondment	EN 12068 30 days	11 mm radius @ 23°C ≤ 20 mm radius @ 50°C

Impact resistance	EN 12068 Class C, @ 23°C	> 15 J ⁽¹⁾
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Indentation resistance	EN 12068 Class C, >10N/mm ² @ 23°C @ 50°C	> 0.6 mm ⁽¹⁾⁽²⁾ > 0.6 mm ⁽³⁾
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(1) 50 % overlap

(2) Remaining coating thickness

(3) 66% overlap

Note: The typical values in this data sheet are based on lab prepared samples. Values shown are not to be interpreted as product specifications.

Product thickness

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

General order information

Covalence[®] FLEXCLAD type products are available
– As a roll (closure patches included)

Example	FLEXCLAD-II-C30-50X15000	
	Designation	Standard ordering options
50	Roll width (mm)	35 mm (1.5"), 50 mm (2.0"), 75 mm (3.0"), 100 mm (4")
15000	Roll length (mm)	15000 mm = 15 m (50 ft)

Calculated material usage

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

Pipe diameter	Recommended tape width (mm)	3 D-Bend		5 D-Bend	
		Tape length FLEXCLAD-II (m)	Tape length FLEXCLADII (m)	Tape length FLEXCLADII (m)	Tape length FLEXCLADII (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 DN 300, the use of MEPS, WPC or HTLP is recommended.

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