PVC Bitumen Tape T5105-41

Usage

T5105-41 PVC modified bitumen adhesive anti corrosion protection tape, generally for buried small diameter steel or ductile iron pipes, girth welds, bends and fittings, or where the risk of damage by impact or soil stress is slight.

Characteristics

- Comfortable PVC backing, Moderate resistance to damage
- Heavy duty bitumen adhesive ensures excellent adhesion and high shear resistance.
- Release liner, which should be discarded during application, is wider than tape to prevent from contamination
- Resistance to Acid and alkali
- Flexible, Non cracking and non absorbent to moisture
- Easy & Flexible to apply

Surface Preparation

Remove any dirt, oil, grease, rust by suitable methods. Remove any metal burrs or weld spatter. The minimum requirement for surface preparation of pipe /steel surface is by mechanical/power wire brushing to remove any rust scales. Grit blasting can also be done in heavily contaminated areas.

Priming

Primer should be compatible with T5000 PVC bitumen coating.
Stir the contents of the primer for 1-2 minutes to remove any sediment.
Apply the primer with a brush or roller evenly to ensure complete sealing of all small undulations and imperfections.

DATA SHEET*

PROPERTY	TEST METHOD	UNIT	DATA
Backing Colour	-	-	Black
Backing Thickness	ASTM D1000	mm	0.15
Adhesive Thickness	ASTM D1000	mm	0.90
Total Thickness	ASTM D1000	mm	1.05
Elongation	ASTM D1000	%	200
Tape Strength	ASTM D1000	N/mm	3.6
Modulus (50% ext.)	ASTM D1000	N/mm	2
Tear Strength	ASTM D1004	N	12
Adhesion (180ºpeel/24hrs) To Primed Steel To Self	 ASTM D1000 ASTM D1000	 N/mm N/mm	 3.5 3.5
Impact Resistance (Two Layers)	 ASTM G14	 Nm	 2.5
Dielectric Strength	ASTM D1000	KV	21
Insulation Resistance	ASTM D257	Ohm	10^{10}
Cathodic Disbondment Resistance	ASTM G8	mm	8
Water Vapour Transmission (24hrs)	ASTM E96	g/m²	0.35
Water Absorption	ASTM D570	.%	0.15
Temperature Range Wrapping	-	ºC	+5 to+45
Temperature Range In Service	-	ºC	-20 to+60
Core Size#	76mm		
Roll Width#	50-150mm		
Roll Length#	10-60m		

* Note: Above technical value has ± 5% tolerance # Other requirements to special order

Wrapping

Suitable for applied by hand or by machine on site/ in situ or in a workshop.
To protect the metal structures from the environment the tapes must cover the entire surface.
Wrapping should not commence until the primed surface has become touch dry. Apply suitable width strips of tape or molding compound along the weld bends or uneven suface and press firmly. Peel back 150mm to 300 mm of the release film and apply the tape, adhesive side, to the primed surface. The angle of the tape mush be such as to produce specified overlap. Apply only sufficient tension to ensure good conformation avoiding air pockets and bridging. Ensure end lap area of at least 150mm when splicing the tapes.

Storage and Shelf life

PVC bitumen tape should be stored under cover, out of direct sunlight and protect from extreme temperatures. Storage area should be cool, dry, well ventilated and regularly monitored for temperature and major sources of heat. Ambient temperature inside storage areas should be always be less than 30℃. Recommended storage temperature is between +5℃ to +30℃. In tropical climates the product must be stored in an air-conditioned environment. Shelf-life is up to 12 month when stored as per recommended storage conditions.

Material Health and Safety Data

See relevant Material Health and Safety Data Sheet

Equation for Anti Corrosion Protection Requirements

$$\frac{\text{(Width of Coating in inches)} \times \text{(Area of pipe in square feet)*}}{\text{(Width of coating in inches-Overlap in inches)} \times 100} = \text{Squares **of Coating Required}$$

*Area of pipe in square feet=(Diameter in inches)/12×3.1416×(Length in feet)
**One square=One hundred square feet=9.29 square meters

$$\frac{\text{(Width of Coating in mm)} \times \text{(Area of pipe in square meter)*}}{\text{(Width of coating in mm-Overlap in mm)}} = \text{Square meter of Coating Required}$$

*Area of pipe in square meter=（Diameter in mm)/1000×3.1416×(Length in meter)

Shandong Quanmin Plastic Co.,Ltd.

Factory:
Address: North of Shengli Oil Extraction Plant, Tuosi Joint Station, Dongying City, Shandong Province, P.R. China 257051
Tel, Fax: +86-546-8743309,2079159 http:// www.quanmin.com.cn
Foreign Trade Division:
Address: Room 1106, Xindu Fortune Plaza, No. 20 Jinan Road. Dongying City, Shandong Province, P.R. China 257061
Tel, Fax: +86-546-8279181 http:// www.anticorrosion-tape.com