

PVC Bitumen Tape T5160-63

Usage

T5160-63 PVC modified bitumen adhesive anti corrosion protection tape, generally for buried medium to large diameter steel or ductile iron pipes, girth welds, bends and fittings, or where the soil stress is moderate.

Characteristics

- Extremely tough PVC backing,
 Excellent resistance to impact
- 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.

DATA SHEET*

PROPERTY METHOD UNIT DATA Backing Colour - - Black /Blue Backing Thickness ASTM D1000 mm 0.50 Adhesive Thickness ASTM D1000 mm 1.10 Total Thickness ASTM D1000 mm 1.60 Elongation ASTM D1000 mm 1.60 Elongation ASTM D1000 N/mm 1.45 Modulus (50% ext.) ASTM D1000 N/mm 6.5 Tear Strength ASTM D1000 N/mm 3.5 Adhesion (180°peel/24hrs) ASTM D1000 N/mm 3.5 To Primed Steel ASTM D1000 N/mm 3.5 To Self ASTM D1000 N/mm 3.5 Impact Resistance ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM G8 mm 8 Water Vapour Transmission (24hrs) ASTM E96 g/m² 0.35 Water Absorption ASTM D570<				
Backing Colour - - Black /Blue Backing Thickness ASTM D1000 mm 0.50 Adhesive Thickness ASTM D1000 mm 1.10 Total Thickness ASTM D1000 mm 1.60 Elongation ASTM D1000 % 285 Tape Strength ASTM D1000 N/mm 14.5 Modulus (50% ext.) ASTM D1000 N/mm 6.5 Tear Strength ASTM D1004 N 45 Adhesion (180°peel/24hrs) ASTM D1000 N/mm 3.5 To Primed Steel ASTM D1000 N/mm 3.5 Impact Resistance (Two Layers) ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10¹² Cathodic Disbondment Resistance ASTM G8 mm 8 Water Vapour Transmission (24hrs) ASTM E96 g/m² 0.35 Water Absorption ASTM D570 .% -5	PROPERTY	TEST	UNIT	DATA
Backing Thickness ASTM D1000 mm 0.50 Adhesive Thickness ASTM D1000 mm 1.10 Total Thickness ASTM D1000 mm 1.60 Elongation ASTM D1000 % 285 Tape Strength ASTM D1000 N/mm 14.5 Modulus (50% ext.) ASTM D1000 N/mm 6.5 Tear Strength ASTM D1004 N 45 Adhesion (180°peel/24hrs) N/mm 3.5 To Primed Steel ASTM D1000 N/mm 3.5 Impact Resistance (Two Layers) ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10¹²² 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		METHOD		
Adhesive Thickness ASTM D1000 mm 1.10 Total Thickness ASTM D1000 mm 1.60 Elongation ASTM D1000 % 285 Tape Strength ASTM D1000 N/mm 14.5 Modulus (50% ext.) ASTM D1000 N/mm 6.5 Tear Strength ASTM D1004 N 45 Adhesion (180°peel/24hrs) ASTM D1000 N/mm 3.5 To Primed Steel ASTM D1000 N/mm 3.5 To Self ASTM D1000 N/mm 3.5 Impact Resistance ASTM G14 Nm 10 Dielectric Strength ASTM D257 Ohm 10¹2 Cathodic Disbondment ASTM G8 mm 8 Water Vapour Transmission (24hrs) ASTM E96 g/m² 0.35 Water Absorption ASTM D570 .% 0.15 Temperature Range - °C +5 to+50 Temperature Range - °C -30 to+75 Core Size# 76mm	Backing Colour	_	-	Black /Blue
Total Thickness	Backing Thickness	ASTM D1000	mm	0.50
Elongation ASTM D1000 % 285 Tape Strength ASTM D1000 N/mm 14.5 Modulus (50% ext.) ASTM D1000 N/mm 6.5 Tear Strength ASTM D1004 N 45 Adhesion (180°peel/24hrs) N/mm 3.5 To Primed Steel ASTM D1000 N/mm 3.5 To Self ASTM D1000 N/mm 3.5 Impact Resistance ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10¹² 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 - - - +5 to+50 Temperature Range - - - - - - - - - - - -	Adhesive Thickness	ASTM D1000	mm	1.10
Tape Strength ASTM D1000 N/mm 14.5 Modulus (50% ext.) ASTM D1000 N/mm 6.5 Tear Strength ASTM D1004 N 45 Adhesion (180°peel/24hrs) ASTM D1000 N/mm 3.5 To Primed Steel ASTM D1000 N/mm 3.5 To Self ASTM D1000 N/mm 3.5 Impact Resistance ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10¹²² 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 -	Total Thickness	ASTM D1000	mm	1.60
Modulus (50% ext.) ASTM D1000 N/mm 6.5 Tear Strength ASTM D1004 N 45 Adhesion (180°peel/24hrs) ASTM D1000 N/mm 3.5 To Primed Steel ASTM D1000 N/mm 3.5 Impact Resistance ASTM D1000 N/mm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10¹² 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 - - - +5 to+50 Temperature Range - °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Elongation	ASTM D1000	%	285
Tear Strength Adhesion (180°peel/24hrs) To Primed Steel ASTM D1000 N/mm 3.5 To Self ASTM D1000 N/mm 3.5 Impact Resistance (Two Layers) ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10¹² Cathodic Disbondment Resistance ASTM G8 Mater Vapour Transmission (24hrs) ASTM E96 Water Absorption ASTM D570 ASTM D570 Temperature Range Wrapping Temperature Range In Service 76mm Roll Width# 100-325mm	Tape Strength	ASTM D1000	N/mm	14.5
Adhesion (180°peel/24hrs) ASTM D1000 N/mm 3.5 To Self ASTM D1000 N/mm 3.5 Impact Resistance (Two Layers) ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 1012 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 - °C +5 to+50 Temperature Range - °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Modulus (50% ext.)	ASTM D1000	N/mm	6.5
To Primed Steel ASTM D1000 N/mm 3.5 To Self ASTM D1000 N/mm 3.5 Impact Resistance (Two Layers) ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10 ¹² 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 - °C +5 to+50 Temperature Range In Service - °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Tear Strength	ASTM D1004	N	45
To Self ASTM D1000 N/mm 3.5 Impact Resistance (Two Layers) ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10 ¹² 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 - °C +5 to+50 Temperature Range In Service - 76mm Roll Width# 100-325mm	Adhesion (180°peel/24hrs)			
Impact Resistance (Two Layers) ASTM G14 Nm 10 Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 1012 Cathodic Disbondment Resistance ASTM G8 mm 8 Water Vapour Transmission (24hrs) ASTM E96 g/m² 0.35 Water Absorption ASTM D570 ASTM D570 - Cenperature Range Wrapping - Centrology Temperature Range In Service Temperature Range In Service Temperature Temperature Range In Service Temperature Te	To Primed Steel	ASTM D1000	N/mm	3.5
(Two Layers)ASTM G14Nm10Dielectric StrengthASTM D1000KV35Insulation ResistanceASTM D257Ohm 10^{12} Cathodic Disbondment ResistanceASTM G8mm8Water Vapour Transmission (24hrs)ASTM E96 g/m^2 0.35 Water AbsorptionASTM D570.% 0.15 Temperature Range Wrapping-°C $+5$ to $+50$ Temperature Range In Service-°C -30 to $+75$ Core Size#76mmRoll Width# $100-325$ mm	To Self	ASTM D1000	N/mm	3.5
Dielectric Strength ASTM D1000 KV 35 Insulation Resistance ASTM D257 Ohm 10 ¹² 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 °C +5 to+50 Temperature Range In Service °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Impact Resistance			
Insulation Resistance ASTM D257 Ohm 10 ¹² 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 C +5 to+50 Temperature Range In Service C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	(Two Layers)	ASTM G14	Nm	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 - C Temperature Range In Service - Core Size# 76mm Roll Width# 100-325mm	Dielectric Strength	ASTM D1000	KV	35
Resistance ASTM G8 mm 8 Water Vapour Transmission (24hrs) ASTM E96 g/m² 0.35 Water Absorption ASTM D570 .% 0.15 Temperature Range Wrapping - °C +5 to+50 Temperature Range In Service - °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Insulation Resistance	ASTM D257	Ohm	1012
Water Vapour Transmission (24hrs) ASTM E96 g/m² 0.35 Water Absorption ASTM D570 .% 0.15 Temperature Range Wrapping "C +5 to+50 Temperature Range In Service Core Size# 76mm Roll Width# 100-325mm	Cathodic Disbondment			
(24hrs) ASTM E96 g/m² 0.35 Water Absorption ASTM D570 .% 0.15 Temperature Range °C +5 to+50 Temperature Range °C -30 to+75 In Service °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Resistance	ASTM G8	mm	8
Water Absorption ASTM D570 .% 0.15 Temperature Range Wrapping - °C +5 to+50 Temperature Range In Service - °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Water Vapour Transmission			
Temperature Range Wrapping C +5 to+50 Temperature Range In Service Core Size# Roll Width# 100-325mm	(24hrs)	ASTM E96	g/m²	0.35
Wrapping C +5 to+50 Temperature Range In Service C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Water Absorption	ASTM D570	.%	0.15
Temperature Range In Service Core Size# 76mm Roll Width# 100-325mm	Temperature Range			
In Service °C -30 to+75 Core Size# 76mm Roll Width# 100-325mm	Wrapping	-	°C	+5 to+50
Core Size# 76mm Roll Width# 100-325mm	Temperature Range			
Roll Width [#] 100-325mm	In Service	-	°C	-30 to+75
	Core Size#	76mm		
D 11 1 #	Roll Width#	100-325mm		
Koll Length [*] 12-60m	Roll Length#	12-60m		

^{*} Note: Above technical value has \pm 5% tolerance

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.

[#]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° C. Recommended storage temperature is between +5°C to +30°C. 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

(Width of Coating in inches) × (Area of pipe in square feet)*

- •-----=Squares **of Coating Required (Width of coating in inches-Overlap in inches) ×100
- *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

(Width of Coating in mm) ×(Area of pipe in square meter)*

•------Square meter of Coating Required (Width of coating in mm-Overlap in mm)

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



Factory:

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