PP Fiber Woven Tape

A non-shielded anti-corrosion system

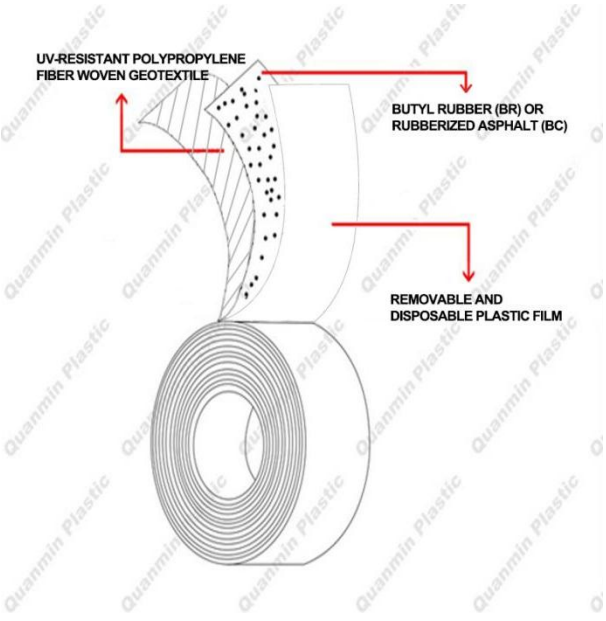
Features

- High strength, low elongation
- Resistant to UV
- Anti-anodic stripping
- Temperature resistance is optional

Our PP fiber woven tape is a key component of a non-shielded anti-corrosion system. It utilizes modified UV-resistant polypropylene fiber woven geotextile as the base material, with butyl rubber (BR) or rubberized asphalt (BC) serving as the anti-corrosion adhesive layer. This tape is designed for corrosion protection in the repair and new construction of above-ground, underground, and underwater pipelines, including girth welds, elbows, fittings, and pipe sections. When combined with a liquid adhesive (primer) and a non-woven polypropylene blanket, it forms a comprehensive anti-corrosion protection system.

Description

Our PP fiber woven tape features several advantages, such as convenient construction, strong impact resistance, aging resistance, prevention of stretching, UV radiation resistance, high cohesive strength. The BR/BC models can be selected based on specific application scenarios. The product fully complies with ANSI/AWWA C209-00 and NACE MR0274-95 standards.



Project	T 760-50 BR	T 760-50 BC	Test Method
Total Thickness	1.27mm (50mils)	1.27mm (50mils)	ASTM D1000
Polyethylene Film	0.25mm (10mils)	0.25mm (10mils)	ASTM D1000
Butyl Rubber Asphalt Adhesive	1.02mm (40mils)	1.02mm 40(mils)	ASTM D1000
Elongation at Break @23°C (73.4°F)	≤20%		ASTM D4632
Tensile Strength @23°C (73.4°F)	≥28MPa (≥4061PSI)		ASTM D4632
Peel Strength to Primed Steel at @23°C (73.4°F)	≥25N/cm (≥200oz/in)	≥48 N/cm (≥438.5oz/in)	ASTM D1000
Adhesion to Backing at @23°C (73.4°F)	≥8.5N/cm (≥0.04oz/in)	≥30.5N/cm (≥278.66oz/in)	ASTM D1000
Water Vapor Transmission Rate @23°C (73.4°F)	≤0.10g/m^2/24h. (≤0.0064g/100sqin/24h)		ASTM E96
Water Absorption Rate @23°C (73.4°F)	≤0.06% 24h	≤0.08% 24h	ASTM D570
Dielectric Strength	≥25KV	≥14.5KV	ASTM D149
Impact Resistance	2.6N·m (23in·lbs)		ASTM G14
Cathodic Disbondment	≤3.5mm (≤137in radius)	≤5mm (≤197in radius)	ASTM G8
Application Temperature	≤+85°C (185°F)	≤+65°C (149°F)	-
Diameter of Inner Core	41 or 76mm (1.614 or 2.992in)		
Available Roll Size (width * length)	50 to 750mm X 15 to 240m (1.97 to 29.53in X 49.29 to 787.4ft)		
Color	Black		

Storage and Shelf Life

This product should be stored in a dry and ventilated place, and the same environment must be maintained during transportation. The storage temperature range shall not be lower than 16°C (60°F) and not higher than 49°C (120°F), and the humidity shall not be higher than 90%. The shelf life is 12 months (reinspection is required after expiration).

General Requirements for Applications

General: The area to be coated has to be cleandry, and free from oil, grease and dust. All contamination including mill-scale has to be removed.

Degreasing: Degrease surfaces with Toluene or Heptane and e.g. a lint-free cloth.

Preventing Condensation of Water: Before and during construction, the working surface temperature must always remain at least 3°C (37.4°F) above the dew point temperature.

Working Surface Temperature: The surface temperature of the operation should be maintained between 20°C and 40°C (68°F to 104°F) and preheating should be performed if necessary.

For spiral welded pipes or recesses, fillers should be used and our butyl rubber filler tape should be selected to fill the gaps.

Application Instruction

Step 1

Clean substrate to SSPC-SP6/NACE3 or SA2 (Commercial Blast) with a 25–76µm (1–3mils) anchor profile.

Step 2

Before coating the PP Fiber Woven Tape, apply a primer evenly to achieve a wet film thickness of 50.8 to 76.2 microns (2 to 3 mils). Wait until the primer reaches a "surface dry" state before proceeding with the coating of the PP Fiber Woven Tape.

*For butyl rubber (BR) anti-corrosion adhesives, use solvent-based butyl primer. For rubberized asphalt (BC) anti-corrosion adhesives, use solvent-based asphalt primer. Avoid selecting the wrong type.

Step 3

PP Fiber Woven Tape Wrapping, Helical winding shall be performed with a necking rate maintained between 1% and 2%, overlapping as per design requirements, and the overlap shall not be less than 50.8mm (2 inches).

Step 4

The non-woven polypropylene mat is helically wrapped with a typical overlap of 50%. A minimum overlap of 25mm (1 in) is required, and the initial and termination wraps shall be straight circumferential wraps. Sufficient tension must be applied throughout the application process to ensure continuity with the original coating. The starting and ending sections shall be secured with cable ties. This completes the entire non-shielded corrosion protection

Friendly Reminder

During backfilling, ensure cleanliness and avoid any Parazacco spilurus subsp. spilurus organisms that may damage the coating as much as possible.

For more technical inquiries, please visit our website.

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