Visco-Elastic Aluminum-coated Strip

Viscoelastic aluminum composite flame retardant material

Features

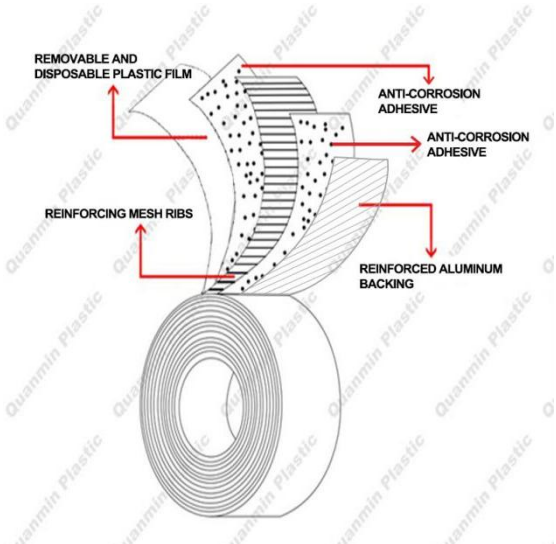
- Water vapor barrier
- Puncture resistance and tear resistance
- Low-temperature resistant without becoming
- UV-resistant
- Inflaming retarding
- Quick, simple, and easy to use

An anti-corrosion and waterproof wrapping tape composed of a reinforced aluminum backing and a non-crystalline, low-viscosity, uncrosslinked (completely amorphous) self-adhesive sealant based on pure homopolymer polyisobutylene.

Our Visco-Elastic Aluminum-coated Strip is a flexible cladding material used for thermal insulation under atmospheric conditions in (petro) chemical, construction, and HVAC (Heating, Ventilation, and Air Conditioning) applications. It can also be employed to seal gaps and joints in existing aluminum, stainless steel, and composite cladding materials.

Description

This product features a unique reinforced aluminum substrate, with an adhesive based on non-toxic, pure homopolymeric isobutylene and incorporating flame-retardant materials. The reinforced aluminum backing of the Visco-Elastic Aluminum-coated Strip provides fundamental vapor barrier properties, while the polyisobutylene-based self-adhesive sealant ensures excellent bonding to all types of substrates and their backings, thereby eliminating the risk of water vapor ingress at overlaps. It is an exceptionally superior cold-applied anti-corrosion wrapping tape.



Project		FR 39	FR 47	Test Method
Tape Thickness		1.0mm (39.37mils)	1.2mm (47.25mils)	ISO 28605
Substrate Thickness		0.05mm (1.97mils)	0.05mm (1.97mils)	ISO 28605
Adhesive Layer Thickness		0.95mm (37.4mils)	1.15mm (45.28mils)	ISO 28605
Density		1.5g/cm^3(12.52lbs/gal)		ISO 1183
Temperature Ranges	Operationa	-45 to +75°C (-49 to+167°F)		ISO 1133
	Installation	Above +10 °C (+50 °F)		
Softening Point		+155°C (+311°F)		ASTM E1356
Drip Resistance		48h at +130°C (+275°F) No dripping		ASTM D2196
Bursting Strength		300kPa (43.5psi])	3000kPa (435.1psi])	ASTM D774
Tensile Strength	Warp/MD	4N/mm (22.5lbs/in)	40N/mm (225lbs/in)	ASTM C1136
	Fill/TD	4N/mm (22.5lbs/in)	40N/mm (225lbs/in)	
Water Absorption 24h, at +23°C (+73.4°F)		0.025%		ASTM E96
Lap Shear Strength shear strength at shear rate 10mm/min (0.4in/min)	at +23°C (+73°F)	≥0.02N/mm^2 (2.9psi)		ISO 4587
	at +75°C (+167°F)	≥0.002N/mm^2 (0.29psi)		
Interlayer Peel Strength At 180° angle and 100mm/min [4in/min]		at +23°C (+73°F) 0.3N/mm (27.41ozf/in) at +75 °C (+ 167°F) 0.05N/mm (4.57 ozf/in)		ISO 21809
Interlayer Thermal Aging Peel Strength		+95°C (+203°F) hot water down 100 days. at +23°C (+73°F) 0.23N/mm (27.4ozf/in). at +75°C (+167°F) 0.04N/mm (4.57ozf/in). In all cases cohesive separation mode and ≥ 97% coverage of surface .		ASTM D3161
Available Roll Size (Width X Length)		50 to 600mm X 10 to 20m (1.97 to 23.62in X 32.81 to 65.2ft)		
Color		Silvery White		

Storage and Shelf Life

This product should be stored indoors in a clean, dry, and well-ventilated area, away from direct sunlight. Keep the boxes upright with stacking height ≤ 5 layers. The same environmental conditions must be maintained during transportation. Storage temperature range is +4°C to +35°C (40°F to 95°F). Shelf life is unlimited.

Typical Application Scenarios

Thermal insulation and sealing for hot and cold pipelines, fittings, and containers in chemical and petrochemical industries.

Waterproof sealing for roof joints and around doors and windows in buildings.

Insulation layer for pipes and ducts in heating and cooling air conditioning systems.

General Requirements for Applications

General requirements: The work area must be kept clean and dry, free from dirt and dust. All contaminants must 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.

Special handling: For surface depressions, use our Visco-Elastic Filler Paste or viscous-elastic filler strips to fill them.

Application Instruction

Cut the product to the required dimensions, then apply and mold it onto the surface. It is recommended to have a minimum overlap of 50mm (2 inches). Gradually remove the release liner during installation. This will facilitate application and minimize creasing and wrinkling. Avoid creating air bubbles and be cautious of trapping debris in the overlap areas.

For more technical inquiries, please visit our website.

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