Polymer Bituminous Waterproofing Coating

Sinomaco Polymer Modified Bituminous Waterproof Coating (Bituminous Coating) is suitable for Road and Bridge which uses a variety of rubbers to modify the bitumen. The rubber in the modified bitumen forms a continuous mesh that interpenetrates and cross-links each other by giving the modified bitumen a high polymer performance.

Products Feature

1. High heat resistance and good elasticity. It will not melt at high temperatures and keep the membrane intact between 140°C and 160°C because of the special formulas and processes. Its original characteristics will remain unchanged and withstand the deformation requirements of the base under vibration load.

2. High bonding strength and excellent shear resistance. The product is a cationic bituminous waterproof coating, and the bonding of the base layer concrete is not solely based on its adhesiveness, but also the adsorption of cations and cations on one another. This can avoid the road surface displacement caused by the rigid waterproofing and also prevent the asphalting of the asphalt. When the waterproof layer is destroyed, it can effectively transmit traffic shear stress.

3. Good weather adaptability. This product is rubber modified bitumen, its low temperature flexibility and extensibility is also consistent with rubber properties, but adjust the formula so that it does not crack, rupture, elongation at the -10 °C to -40 °C, the extension performance can be greater than 600% It can adapt to the requirements of the construction standards in northern cold regions.

4. Environmental friendly. The product is water-based waterproof coating, odorless, non-toxic, non-polluting, cold film coating construction, construction process is simple and quick, spraying or brushing can be, for all kinds of irregular surface profile can guarantee construction quality.

	Coating application performance				
S/N	Item	Polymer bitumen coating		polyurethane	cementitious
		Type Ⅰ	Type Ⅱ		
1	50℃ shear strength	0.15 a/Mpa	0.2 a/Mpa	0.2 a/Mpa	
2	50℃bond strength	0.05 a/Mpa			
3	Impermeability after hot rolling	0.1Mpa、30min Impermeable			
4	Seam deformation ability	10,000 cycles without damage			
5	Customers can adapt other temperatures as needed				

Application Scope

This product can be directly applied to wet or dry masonry, mortar, concrete, metal, wood, hard plastic, glass, various moisture-retaining layers and waterproof layers. It is applicable to bridges, highways, tunnel, reservoirs, seismic loads sports field and etc.

Working Advices

1. Reasonable working temperature is 0°C ~ 35°C.

2. Staff steps or driving vehicles sould be avoid before the plane is dry or asphalt is laid.

3. The waterproof layer must be dry before asphalting.

Transportation & storage

1. The product is sealed and packaged in plastic barrels or iron drums with inner packaging in plastic bags, and placed in a clean, ventilated, dry, non-sunlit special warehouse. The storage temperature is 5-40°C. Under normal circumstances, it can reach six months. The storage period. If the storage period exceeds, it can be re-inspected according to national testing standards. After re-qualification, it can still be used.

2. Avoid collision, extrusion, rain, and freezing during storage and transportation and ensure the intact of packaging.

Performance Test Report

Performance Test Report						
S/N	Item		Polymer Bituminous		Polyurethane	cementious
1	Solid content		≥ 45 [a]/%	≥ 50 [a]/%	≥ 98 [a]/%	≥ 65 [a]/%
2	Surface drying time		≤ 4 [a]/h			
3	Drying time		≤ 8 [a]/h			
4	Heat resistance		140℃	160℃	160℃	
			No flowing, slipping, dripping			
5	Watertightness		0.3Mpa,30min; Impermeable			
6	Low temperature flexibility		-15 Mpa	-25 Mpa	-40 Mpa	-10 Mpa
			No crack			
7	Tensile Strength		≥ 0.5 Mpa	≥ 1.0 Mpa	≥ 2.45 Mpa	≥ 1.2 Mpa
8	Elongation at break		≥ 800%		≥ 450%	≥ 200%
9	Salt treatment	Rally retention rate	≥ 80%			
		Elongation at break	≥ 800%		≥ 400%	≥ 140%
		Low temperature flexibility	-10℃	-20℃	-35℃	-5℃
			No crack			
		Increased quality	≤ 2.0%			
10	Thermal aging	Rally retention rate	≥ 80%			
		Elongation at break	≥ 600%		≥ 400%	≥ 150%
		Low temperature flexibility	-10℃	-20℃	-35℃	-5℃
			No crack			
		Heat expansion rate	≤ 1.0%			
		Loss of quality	≤ 1.0%			
11	Coating and cement concrete bond strength		0.4 Mpa	0.6 Mpa	1.0 Mpa	0.7 Mpa
12	Applicable to polymer modified asphalt waterproof coating for R-type road bridge					

Product link：https://www.sinomaco.com/?p=1247