

Anti-root APP Modified Bitumen Waterproof Membrane

Description

The anti-root APP modified bitumen waterproof membrane is an APP (Atactic Polypropylene or Amorphous Polyolefin (APAO, APO)) type modified bitumen membrane with anti-root additive. It is reinforced with polyester felt and finished with PE film on both sides. It has high resistance to root puncture and excellent mechanical characteristics and dimensional stability. The membranes are widely used at civil and industrial projects where it is necessary to prevent the aggression of plant growth which may damage waterproofing layer. The anti-root additive is harmless to plants and never washed away from the membrane, also it is very stable to the heat from open flame torch.

Uses

- ♦ Roof gardens, planting roofs, underground backfilled structures of residential and commercial buildings
- ♦ Parking lots, retaining walls, plant boxes

Features

- ♦ Excellent waterproofing, high temperature , ageing, and anti-root resistance; Will not decay
- ♦ Superior impermeability, flexibility, and elasticity
- ♦ Excellent elongation and tension properties
- ♦ Strong shape adaptability to deformation and cracks, withstand thermal shocks
- ♦ Pollution free, no toxic, resistance to chemical attacks, no influence on plants growth



Products specification

Reinforcement	Thickness(mm)	Width(mm)	Upper surface materials	Lower surface materials
Polyester felt (PY)	4,5	1000	Polyethylene film (PE)	Polyethylene film (PE)

Technical Data: Executive Standard JC/T1075-2008

No	Item		Index
1	Soluble content , g/m ² ≥	4mm	2900
		5mm	3500
2	Thermal resistance, 130°C		≤2mm, No drift, no flow, no dripping
3	Low temperature flexibility, -25°C		No crack
4	Water impermeability, MPa at 30min		0.3
5	Tension	Tension at maximum peak, N/50mm≥	800
		Tension at second peak, N/50mm≥	800
6	Elongation at second peak, %≥		40
7	Water absorption, %≤		1.0
8	Thermal ageing	Retention of tension, %≥	80
		Retention of elongation, %≥	80
		Low temperature flexibility, -20°C	No crack
		Dimension change rate, %≤	0.7
		Mass loss rate, %≤	1.0
9	Oil permeability	Pieces, ≤	2
10	Seam peel strength, N/mm ≥		1.5
11	Adhesivity of mineral granules, g≤		2.0
12	Asphalt thickness on the lower side, mm≥		1.0

13	Accelerated weathering	Appearance	No drift, no flow, no dripping
		Retention of tension, %≥	80
		Low temperature flexibility, -20°C	No crack
14	Resistance to root penetration		Pass
15	Mold corrosion resistance	Anti-mold level	0 or 1
		Retention of elongation, %≥	80
16	Dimensional stability, %≤		1.0

Packing

Roll size: 1m x 10m, 1m x 7.5m

Rolls per pallet: 25 rolls/pallet more or less

Application instructions

Surface Preparation: Substrates need to be clean, smooth, dry (Moisture <9%), no grit and free of sharp edges, loose or foreign materials, oil, grease and other materials that may damage the membrane. All surface voids greater than 5mm width, shall be properly filled with an acceptable fill material and level it.

Priming: Prior to membrane laying, substrate treating agent need to be brushed evenly and completely cover all laying places.

Application: For adhesion between membrane and substrate or membranes, it can use hot melt method or cold adhesion method. According to application designs and specific applied parts, it can be applied by fully adhered method, strip adhered method and border adhered method. There should be side laps of 100mm and end laps of 150mm. Overlaps shall be sealed by torch, a thorough inspection is required after application to insure there is no air bubble, no falling away and etc.

Storage

Inclination and lateral placement during transportation should be avoided. Be stored in well-ventilated places protected from sunlight and raining. The temperature in stored areas can not be higher than 50° C. It can not be put in more than two levels. If packed by cartons, it can not be put in more than five levels.

The normal shelf life is 1 year.

Safety precautions

Do not work in a rainy or snowy day, or heavy wind (above 5 grade); Unsuitable for installation when ambient temperature below 0°C.

If it rains or snows in the construction, protective action to the laid membrane is a must.

Safety protection facilities and articles shall be well prepared, fire-fighting equipment shall be deployed according to regulations.