

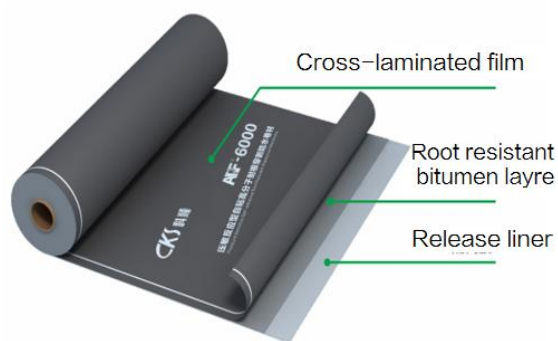
Aquathene APF-6000

Self-Adhesive Modified Bitumen Waterproof Membrane



Product Description

Aquathene APF-6000 consists of a cross-laminated film and a bitumen layer with root resistance. It offers dual waterproofing assurance, providing both full adhesion and resistance to roots. This combination ensures safety, cost-effectiveness, and dependability.



Specifications

Product structure	L x W x T	Product type	Construction method
Single side (S)	20m*1m*1.5mm	E	Wet applied
	15m*1m*2.0mm	N; Class I	Dry applied

Product Features

- Full surface bonding: Prevents water, moisture, and gas infiltration;
- Stability: Dimensional stability and durability, high tear strength, puncture, and impact resistance;
- Safe & easy installation: Cold application with self-adhesive overlaps;
- Flexibility: High elongation to accommodate movement.
- Root resistance: Adding chemical inhibitors to hinder plant root growth or alter their direction, achieving root growth inhibition.

Where To Use

- Versatile green roofs prevent seepage and provide waterproofing, including planted roofs, balconies, rooftops, and terraces.
- Planted roofs in structures requiring greenery, like planted roofs for underground garages.
- Specialized projects requiring greening in specific spaces, such as greening and waterproofing overpasses.

Advantages

- Automatically grows with concrete and forms long-lasting bonding effect
- Automatically heals the damage under ϕ 2mm and expresses excellent water tightness to nail.
- Automatically locks the leakage position, avoids water channeling
- Automatically absorbs and remove the structural pressure, avoids deformation and make the waterproof course to be long-lasting
- Automatically protects itself; the cross-layered film can prevent from being damage

Technical Data Based For Reference

Technical indicators of wet applied

No.	Item		Index
			E
1	Expansion rate	Tension/(N/50mm) $\geq$	200
		Elongation at maximum tension % $\geq$	200
		Phenomenon during stretching	There is no separation between the adhesive layer and the polymer membrane base
2	Tear strength, N $\geq$		25
3	Heat resistance (70℃, 2h)		No flowing and sliding, sliding $\leq$ 2mm
4	Low temperature flexibility		-25℃, No crack
5	Impermeability (0.3mpa, 120min)		Impermeable
6	Thermal aging (80 ℃, 168h)		-22℃, No crack

Technical indicators of self-adhesive without reinforcement

No.	Item		Index
			Type I
1	Tensile property	Tensile force N / 50mm) $\geq$	150
		Elongation at maximum tension (%) $\geq$	200
		Elongation at break of asphalt (%) $\geq$	250
		Phenomenon during stretching	During stretching, there is no separation between asphalt coating and membrane before membrane fracture
2	Tear strength of nail rod, N $\geq$		60
3	Heat resistance		Slipping no more than 2mm under 70 ℃
4	Low temperature flexibility, ℃		-25 ℃, no crack
5	Impermeability		0.3MPa, 120min impervious
6	Peel strength (N/MM) $\geq$	membrane and membrane	1.0
		membrane and aluminum plate	1.5

Technical indicators of root puncture resistance

No.	Item		Index
1	Root puncture resistance		pass
2	Mould corrosion resistance	Mildew proof grade	Level 0 or 1

Construction Procedures

Wet apply

Substrate Preparation

- The base surface shall be flat, solid and free of open water. The floating ash of the base course shall be cleaned as far as possible before construction;
- The joint parts such as pipe root, internal and external corners and water outlet shall be strengthened with non curing treatment first, and then large-area construction shall be carried out;
- The vertical plane joint part of the base course shall be made into a circular arc, with a minimum radius of 50mm for the internal corner and 10mm for the external corner.

Construction process:

Base course cleaning → base surface grinding → glue melting → node and additional layer treatment → spraying or scraping non curing rubber asphalt waterproof coating while paving waterproof membrane → waterproof layer acceptance

Remarks: hot melting is recommended for overlapping edge

Precautions:

- Construction in rainy days, snowy days and strong winds above level 5 are strictly prohibited
- When using hot-melt non curing products, pay attention to high-temperature protection measures to prevent the risk of high-temperature scald of coatings;
- After the quality of waterproof layer is accepted, the protective layer shall be constructed, and the corresponding concrete or cement mortar protective layer shall be made according to the design requirements

Storage And Transportation

- The storage temperature should be maintained between 5° C and 45° C, avoiding exposure to direct sunlight and rain. Adequate ventilation should be ensured during storage.
- The material should be stored vertically as a single layer. Avoid contact with acids, alkalis, oils, organic solvents, etc.
- Shelf life is 12 months from the date of production under appropriate storage conditions.