

Aquaprufe APF-D100

Butyl Self-adhesive TPO waterproof membrane



Product Features

- The combination of butyl rubber and TPO has excellent water tightness and air tightness;
- Strong bonding effect, can form full adhesion with a variety of different base surfaces;
- Excellent durability, blister resistance, longer service life;
- The overlap edge can be welded, and the roll can be used outside;
- 0 asphalt 0 pollution, cold construction is safe and environmentally friendly.

Product Description

APF-D100 is mainly made of butyl rubber and TPO sheets. Butyl rubber is a new type of non-asphalt environmentally friendly high-performance rubber with good air tightness and water tightness, and is more durable than other adhesive layers. The main sheet TPO is a rubber-plastic blend material, which has the excellent aging resistance of rubber and the weldability of resin. The overlap edge is welded, which makes the overlap more reliable.

Where To Use

Waterproof and moisture-proof projects such as roofs, basements, water conservancy projects, rail transit projects, underground integrated pipe galleries, grain depots, swimming pools, and pools of various industrial and civil buildings.

Product Specifications

Width (m)	1m,2m
Length (m)	20m
Thickness (mm)	1.2、1.5 (Q/SDKS 083-2025) 1.6 (GB 27789-2011、GB/T 23260-2009)
Area (m²/roll)	20,40m ²
Overlap joint	Back-coated self-adhesive, welding, double-lock lap joint

Implementation Standards

Implementation standard: The sheet meets GB 27789-2011 Thermoplastic polyolefin (TPO) waterproof membrane

No.	Item		Index H
1	Tensile properties	Tensile strength/MPa≥	12.0
		Elongation at break/%≥	500
2	Heat treatment dimensional change rate/%≤		2.0
3	Low temperature flexural properties		−40℃ no cracks
4	Artificial climate accelerated aging	Time/h	1500
		Appearance	No bulging, cracks, delamination, bonding and holes
		Tensile strength retention rate/% ≥	90
		Elongation at break retention rate/% ≥	90
		Low temperature flexural properties	−40℃ no cracks
The artificial climate accelerated aging time of the product used for single-layer roll roofing is 2500h			

The self-adhesive layer meets the following requirements: GB/T 23260-2009 Waterproof membrane with self-adhesive layer

No.	Item		Index
1	Peel strength/(N/mm)	Roll and roll	≥ 1.0
		Roll and aluminum plate	≥ 1.5
2	Peel strength after immersion in water/(N/mm)		≥ 1.5
3	Peel strength after heat aging/(N/mm)		≥ 1.5
4	Heat resistance of self-adhesive surface		70°C, 2h without flow
5	Stickiness/min		≥ 15

Storage and Transportation

- Prevent tilting or horizontal pressure during transportation, and cover with tarpaulin if necessary;
- The coils should be stored in a ventilated place that is protected from the sun and rain. The storage temperature should not be higher than 45°C;
- Coils of different types and specifications should be stacked separately;
- The stacking height of coils should not exceed five layers when laid flat. When placed upright, they should be stacked in a single layer. It is prohibited to contact with acids, alkalis, oils and organic solvents;
- Under normal storage conditions, the storage period is one year.

Construction technology

- Base surface treatment: The base should be solid, flat, clean, dry, without hollows, sand, cracks, looseness, unevenness, roughness, steel bar heads and other defects;
- Construction process: clean the base → brush/spray the base treatment agent → mark the line for positioning → detail node treatment → pre-lay the roll → lay the roll → overlap the roll joints → fix and press the edges → organize acceptance.

Precautions

- The base treatment agent can only be applied when the moisture content of the base layer is less than 9%;
- The roll material can be laid only after the base treatment agent is completely dry;
- After the roll material is laid, it must be compacted with a roller to expel the gas between the roll material and the bonding layer, so that the roll material and the adhesive are tightly attached.