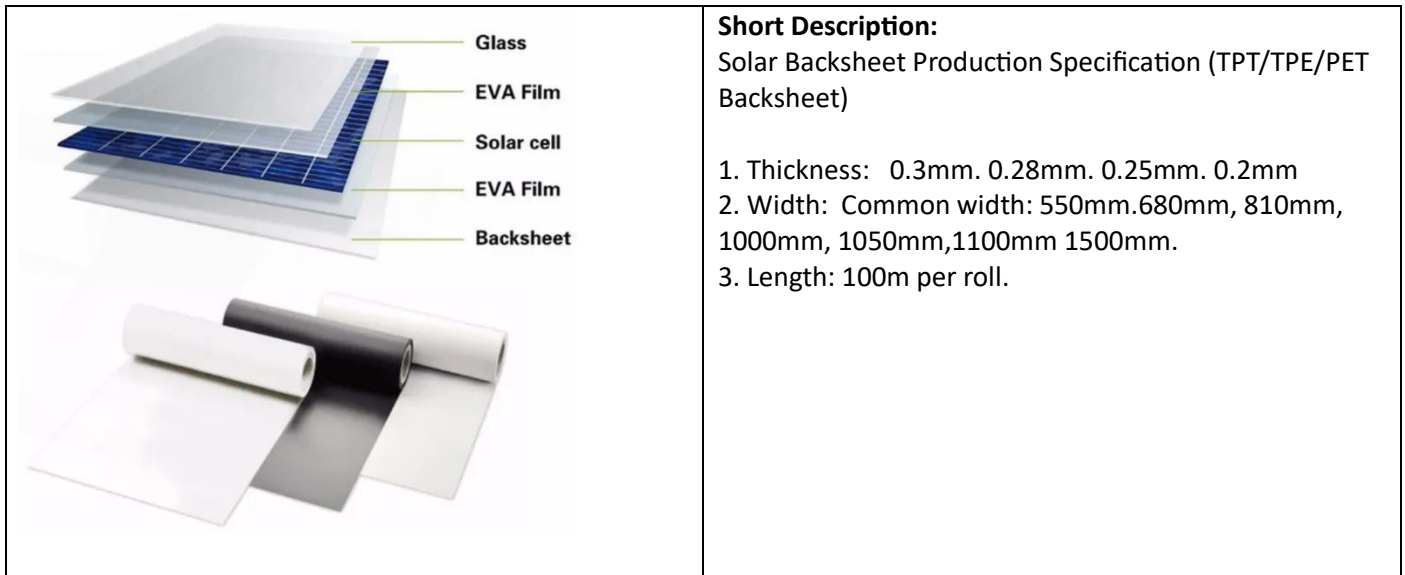


Strong Backsheet Film for Solar Panel for Reliable and Sustainable Energy Production



Description

Solar Pet backsheet is one of the key encapsulation materials which are applied in the PV module, composed of the fluorine materials with excellent climate durability and PET with outstanding electrical insulation.

Solar module back sheet mainly consists of two categories: fluorine-contained and no fluorine-contained. Fluorine-contained back sheet include double-sides fluorine-contained (eg. TPT) and single-side fluorine-contained (eg. TPE); while no fluorine-contained back sheets are laminated by multilayers of PET by adhesives.

PV products are widely used in many industries because of its energy-saving, environment friendly and long life. Back sheet is the critical factor to ensure it's more than 25-year working-life. The solar module back sheet is on the surface of the PV module. After bonding with EVA, it can block the air to make a vacuum seal for the core region of the module. In order to ensure that, the primary task of the seal is to be water-proof, air-proof and electricity-proof. So the solar module back sheet should have high electrical insulation, high weathering resistance, high adhesion and low water vapor permeability.

Pet back sheet with excellent performance for solar panels. For example: weather Resistance Backsheet. Good overall physical performance, water, oxygen block performance, dielectric weather aging resistance. Suitable for all kinds of laminating process. It can make the solar panels to be used more than 25 years in floor, roof, gobi, desert, coastal areas.

Solar Backsheet Production Specification (TPT/TPE/PET Backsheet):

1. Thickness: 0.3mm. 0.28mm. 0.25mm. 0.2mm
2. Width: Common width: 550mm.680mm, 810mm, 1000mm, 1050mm,1100mm 1500mm.
3. Length: 100m per roll.

Products Application:

Outdoor architectural; Curtain wall; Automobile glasses; Bullet-proof glass; skylight; doors and windows and other outdoors decorations etc.

Specifications

ITEM	UNIT	TPT-30
Tensile strength	N/cm	≥ 110
Elongation ratio	%	130
Tearing strength	N/mm	140
Interlaminar strength	N/5cm	≥25
Peeling strength	TPT/EVA	≥20
	TPE/EVA	≥50
Weightlessness (24h/150degree)	%	<3.0
Shrinkage ratio(0.5h/150degree)	%	<2.5
Water vapor transmission	g/m ² 24h	<2.0
Breakdown voltage	KV	≥25
Partial discharge	VDC	>1000
UV aging resistance(100h)	—	No discoloration
Life	—	More than 25 years

Application advantages of Pet back sheet for different size solar panels.

1.High Weather Resistance

Through the double accelerated ageing tests of 85 pairs of 1000 hours, there will be non-delamination, non-cracking, non-foaming. There will be non-yellowing no embrittlement after ageing by artificial ultraviolet radiation exposure (QUVB) test 3000 hours.

2.High Security

Security grade has passed the flame-retardant UL 94-V2 flame-retardant grade, the UL flame spread index is less than 100, which effectively guarantees the module security features.

3.High Insulation

TUV Rhineland of PD≥1000VDC can avoid electrical arcing module.

4.High Water Vapor Resistance

By infrared water vapor permeability tester, the water vapor permeability rates≤1.0g/m².d.

5.High Adhesion

After the nano-plasma treatment, the surface energy of high fluoride levels can last 45mN/m or more within six months.

6.High-end Match

Suitable for large-scale photovoltaic power plants with the crystalline silicon cells module package.

7.High Compatibility

Good compatibility comes from the bonding with the other packaging materials of module.

8.High Efficiency

For its double-sided adhesion, there is no need to distinguish the back sheet's positive and negative when components packaging, which brings convenience for technicians.

9.High Flexibility

The adhesive data of the bone packaging for the package for the module and EVA could be adjusted as per the clients' requirements.