



HIGH QUALITY EVA FILM FOR ENCAPSULATING SOLAR PANELS / GLASS SOLAR BACKSHEET

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Encapsulating Material



- > 15 yrs R&D Experience
- > 91.5% High transmittance
- > 25 yrs Longlasting ageing-resistant
- < 15 mins Ultra fast lamination time
- < 2% PID FREE
- > 50 million Annual capacity

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About us



Zhejiang Zhengxin Photovoltaic Technology Co., LTD. is specialized in solar photovoltaic research and new materials development, production, sales and service. Zhengxin (ZXEVA) was founded in 2010, setting up more than 3000 square meters plant at the national high and new technological industrial concentration area on the west part in Zhejiang province. In 2016, we attained annual production capacity of 50 million square meters.

The founder and R&D team enter in this industry from 2002. The core product Z1261A/Z1261 is our patented product with excellent performance in long lasting ageing-resistant performance, excellent capability with other contact materials. ZXEVA strictly in accordance with the ISO9001 quality management system operation and the core product has passed ISO, SGS, TUV and PID test. ZXEVA will continue to do innovation and timely development of superior performance, cost-effective products to meet the requirements of customers.



Company Capability



High Tech Machine
Precision equipment
and automatic
production line base.



Quality Management...
Have own quality
control testing center
Make sure the quality
from the raw material



Long Term Cooperati...
Customers more than 5
years of cooperation.
Have OEM experience
of superior brand.

Company Vision & Mission

Our Vision & Mission : To become World-class EVA encapsulation film provider, serve as a professional expert in innovating high efficiency and low cost product.



BUILDING CASE

建筑案例



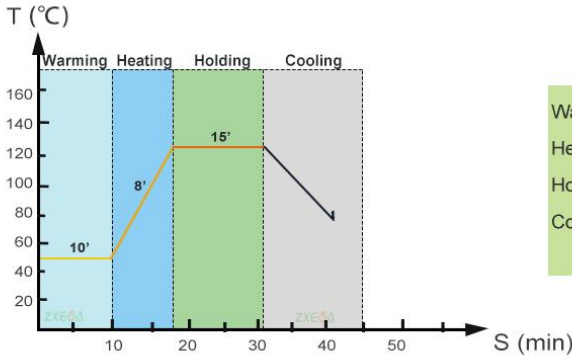
ZXEVA[®] GLASS EVA FILM



Technical Specifications

Item	Unit	Value
Thickness	mm	0.20-0.76
Width	mm	500-2100
Length	m/roll	80-170
Size could be customized		

Physical Properties	Standard	Unit	G1261	G1261A
VA content	TGA	%	28-30	28-30
Softening	DSC	°C	55	55
UV cutoff wavelength	UV-vis	Nm	360	--
UV blocked rate (290-380nm)	GB/T 29848	%	>95	--
Optical transmittance	GB2410-80	%	>91	>91.5
Elongation (after crosslinking)	ISO527-3	%	600	600
Thermal Properties	Standard	Unit	G1261	G1261A
Cross-linking rate (130°C , 15min)	Q/ZX001-2012	%	≥75	≥75
Thermal shrinkage (0.50mm)	GB/T 29848	MD%	3.0	3.0
(120°C, 3 mins)		TD%	1.0	1.0
Peeling strength (with Glass)	GB/T 29848	N/cm	>60	>60
UV exposure (1500h)	Q/ZX001-2012	ΔYI	<3	<5



Warming: Drying step Set at 50 - 60 °C, warm up the film and glass;
Heating: Heating step Melting the eva film;
Holding: Holding step Keep warming process, melting completely;
Cooling: Cooling step Let the glass cool out in the vacuum bag;
 Remove it out after cooling to below 60 °C.

Shelf time
 max. 9 months
 max. 30 °C
 max. 60% humidity

Characteristics
 Strong adhesive strength
 Super clear transmission
 Excellent material compatibility with contact materials

Application
 Glass encapsulation
 Structure:
 Glass/EVA*2/Glass
 Glass/EVA/Print paper/EVA/Glass
 Glass/EVA/Decorative film/EVA/Glass

Recommend Machinery
 Thermal laminating machine
 Vacuum eva laminating machine
 Glass laminating oven



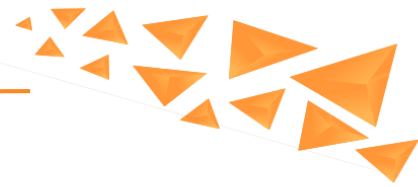
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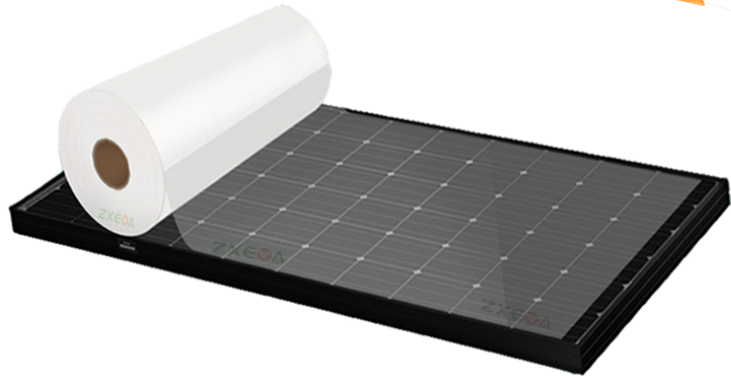


ZXEVA[®] SOLAR EVA FILM



Technical Specifications

Item	Unit	Value
Thickness	mm	0.45±0.05
Width	mm	990±10
Length	m/roll	120-150
Size could be customized		



Physical Properties	Standard	Unit	Z1261	Z1261A
VA content	TGA	%	26-33	26-33
Softening	DSC	°C	55	55
UV cutoff wavelength	UV-vis	Nm	360	--
UV blocked rate (290-380nm)	GB/T 29848	%	>95	--
Optical transmittance	GB2410-80	%	>91	>91.5
Elongation (after crosslinking)	ISO527-3	%	600	600

Thermal Properties	Standard	Unit	Z1261	Z1261A
Cross-linking rate (140°C , 17min)	Q/ZX001-2012	%	≥75	≥75
Thermal shrinkage (120°C, 3 mins)	GB/T 29848	MD%	3.0	3.0
		TD%	1.0	1.0
Peeling strength (with Glass)	GB/T 29848	N/cm	>60	>60
Peeling strength (with TPT)	GB/T 29848	N/cm	>40	>40

Stability Properties	Standard	Unit	Z1261	Z1261A
Heat/Humidity resistance (90°C, 90%RH, 2000h)	Q/ZX001-2012	ΔYI	<3	<3
UV exposure (1500h)	Q/ZX001-2012	ΔYI	<3	<3
Volume resistance	GB/T 29848	Ω•cm	≥1*10 ¹⁵	≥1*10 ¹⁵
PID resistance (85°C, 85%RH, -1000Vdc, 96h)	IEC62804	power loss%	<5	<5

Shelf time

max. 9 months
max. 30 °C
max. 60% humidity

Characteristics

Strong adhesive strength
10 mins short lamination time
25 years longlasting aging-resistance
Excellent material compatibility with contact materials

Application

Solar module encapsulation
Structure:
Glass/EVA/Cells/EVA/Backsheet
Glass/EVA/Cells/EVA/Glass
PVDF/EVA/Cells/EVA/Other materials

Recommend setting

Heating panel: 145 ± 2 °C
Pumping time: 5 ± 1 mins
Holding time: 7 ± 2 mins



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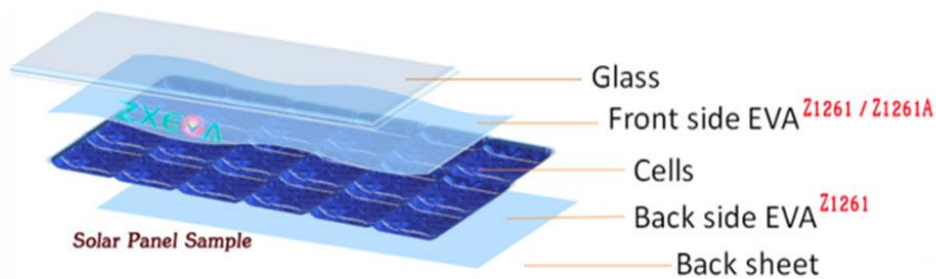
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ZXSOLAR
POWER OF NATURE

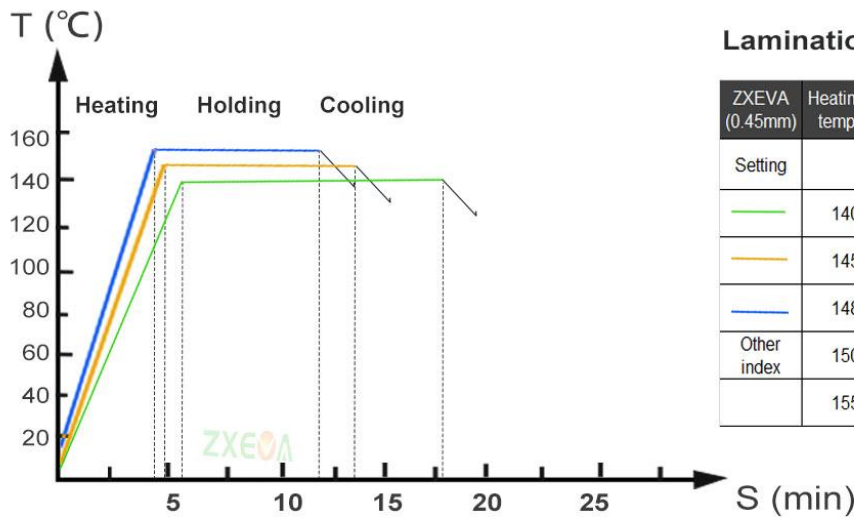


Operating structure



SET1: Front Z1261 _Back Z1261, gives more protection of UV resistance, long time warranty secured

SET2: Front Z1261A _Back Z1261, cells absorb UV light, transfer more solar power



Lamination index

ZXEVA (0.45mm)	Heating panel temp (°C)	Vacuuming	Pressure 1	Pressure 2	Pressure 3	Total time
Setting	-	<-99	-60	-40	-10~0	Time (seconds)
—	140 ± 1	300	10	50	600	960
—	145 ± 1	290	10	50	480	830
—	148 ± 1	280	10	50	380	720
Other index	150 ± 1	270	10	50	270	600
	155 ± 1	240	10	50	180	480

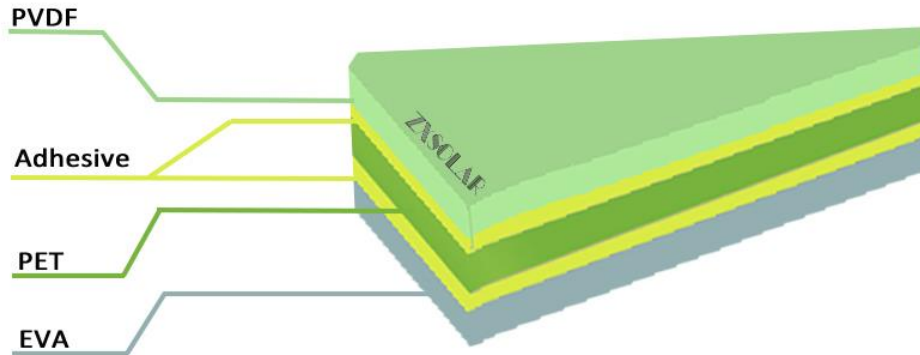
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ZXSOLAR SOLAR MODULE BACKSHEET

PPE Structure:



Item	Unit	Value
Thickness	mm	0.30/0.35
Width	mm	990±1
Length	m/roll	100-1500
Color		white
Size could be customized		

				ZX300 / ZX350
Test Items	Test Standard	Unit	Standard value	Typical value
Thickness tolerance	GB/T6672-2001	---	±10%	300 / 350
Tensile strength (MD)	ASTM D 882-2002	Mpa	≥100	141
Tensile strength (TD)	GB/T 13542	Mpa	≥100	128
Elongation at break (MD)	ASTM D 882-2002	%	≥80	145
Elongation at break (TD)	GB/T 13542	%	≥80	118
Heat shrinkage 150°C,30min(MD)	ASTM D 1204-2002	%	≤1.5	-0.4
Heat shrinkage 150°C×30min(TD)	GB/T 13542	%	≤1.0	-0.2
Peel strength PVDF&PET	ASTM D 882-2002	N/cm	≥4	5.3
Peel strength Backsheet&EVA	GB/T 2790	N/cm	≥40	120
Breakdown voltage	ASTM D 149-1997 GB/T 1408	KV	≥18	21
Partial discharge vooltage	IEC 60664-1-2007 GB/T 16935	VDC	> 1000	1181
Water vapor permeability (38°C,100%RH)	ASTM F 1249-2006 GB/T 21529	g/m ² .d	≤2	1.2
Damp-heat treatment (85°C,85%RH,2000h)	IEC 61215 GB/T 3979/7921		No bubble, no separation, no crack and significantly sticky	No obvious appearance defect
Hot and cold cycle processing (-40°C~85°C,6h/400 times)	IEC 61215 GB/T 1408		No bubble, no separation, no crack and significantly sticky	No obvious appearance defect
Wet frozen processing After 50 times Hot and cold cycle (-40°C~85°C,24h/20 times)	IEC 61215 GB/T 1408		No bubble, no separation, no crack and significantly sticky	No obvious appearance defect

Product property

- a. Strong adhesive property;
- b. Good stability after aging;
- c. High light transparent and long lasting guarantee;
- d. Excellent humidity, heat and weather resistance (PID);
- e. High efficiency and shorter laminating time;
- f. Excellent material compatibility with contact materials.

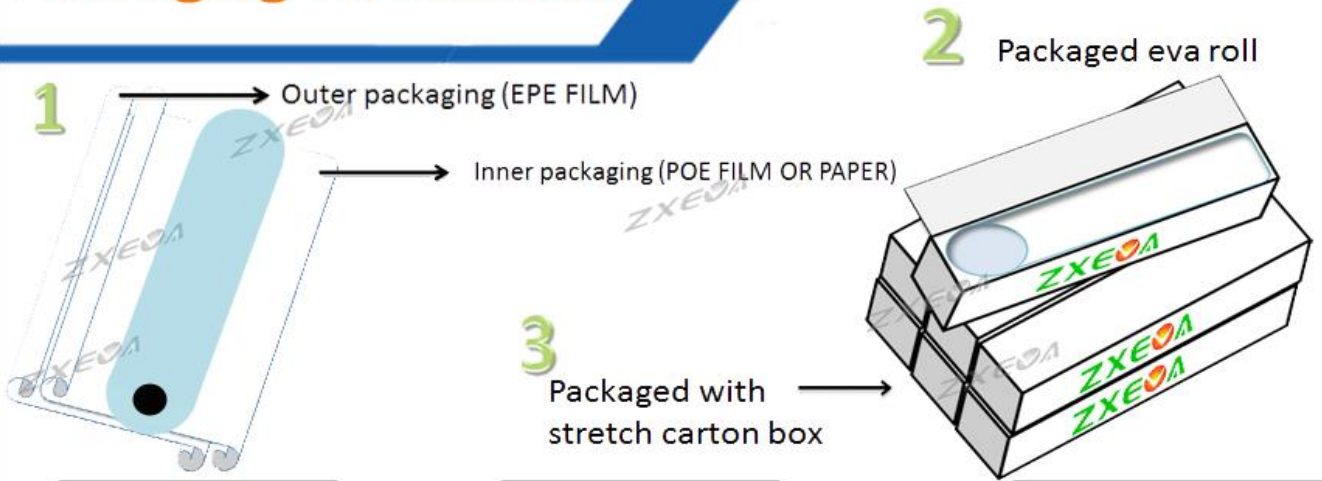


ZXEVA – only use the superior raw material. Perfect solution for pv modules to save energy wasting.

Product packaging

1. Each roll is packed with PE film and vacuum packing process, after that put one roll in one carbon box. (Under 500mm width will be packed with 2-3 rolls in one box).
2. The inner package of the products is polyethylene bags, and the external packages are cartons and pallets. Every roll of EVA is put in a carton, and each pallet can be put on 16 to 24 rolls.
3. Production storage: Being stored in a dry and shade place with temperature $0^{\circ}\text{C} \sim 30^{\circ}\text{C}$, and humidity $\leq 60\%$, sunlight direct radiation should be avoided. The product must be not placed nearby heating equipment and the place with dust.
4. Product usage: Before using, check the package intact and untouched. The product should be quickly used once you open it, the other unused part re-sealed by original packaging or similar packaging. The product is guaranteed for 6 months from the production date in the unopened state, you are suggested to use up within 3 months.

Packaging Information



Factory Overview

Employee Locker Room



Packging Area



Store House



Store House

Pending Delivery Area

Safe Loading

