

回天® PV310R-BK solar cell backsheet consists of a reinforced, biaxially oriented high barrier polyester film as the support and the weather-resistant layer, and a polyacrylic coating independently developed by Huitian as the EVA adhesive layer.

Structural Parameters

Composition	Material	Thickness
Substrate	Reinforced PET film	305 μm
EVA layer	Polyacrylic coating	5 μm

Typical Application

This product is specifically designed for packaging crystalline silicon photovoltaic modules.

Packaging Parameters

The product is provided in rolls, which are sealed and externally packaged with cartons. The packaging box carries information such as the product name, model, batch number and batch barcode, production date, certification mark, instructions for use, and number of joints.

Roll specifications: 985 mm (customizable width).

Pallet specifications: 200m rolls, 3×3 rolls per pallet. 600m rolls are also available.

Outstanding bonding strength with commercially available packaging materials makes this product ideal for various lamination processes. It also has excellent physical & mechanical properties, insulation, barrier, weather resistance, and aging resistance, which can ensure a service life of more than 25 years for modules.

Performance Parameters

Item	Compliance Standard	Unit	Index	
Color	/	/	White outside and black inside	
Nominal Thickness	GB/T 13542.2-2009	μm	310	
Tensile Strength	ASTM D882-2010	MD	MPa	≥ 110
		TD	MPa	≥ 100
Elongation at Break		MD	%	≥ 100
		TD	%	≥ 90
Heat Shrinkage Rate	GB/T 13542.2-2009 150±2°C/30 min	MD	%	≤ 1.5
		TD	%	≤ 1.0
EVA Interlaminar Peel Strength	GB/T 2709-1995	N/cm	≥ 60	
Water Vapor Transmission Rate	GB/T 26253-2010	g/(m ² ·d)	< 2.0	
Infrared Reflectivity (800-1200 nm)	GB/T 3780.17-2017	%	≥ 50	
Coating Adhesion	GB/T 9286-1998	/	Level 0	
Volume Resistivity	GB/T 1410-2006	Ω·cm	≥ 1.0*10 ¹³	
Breakdown Voltage	GB/T 1408.1-2006	kv	≥ 16	
System Voltage 1500V	IEC62788-2 2017	μm	DTI > 300	
PCT48H	JESD33-A120D	/	No cracking, delamination, or blistering; yellowing index Δb ≤ 3; retention rate of elongation at break ≥ 30%	
DH1000H Test	IEC61215-05 10.13	/	No cracking, delamination, blistering, or pulverization; yellowing index Δb ≤ 3	
200 kWh UV Exposure (Air Side)	IEC61215-05 10.11			

Note:

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