

PHOTOVOLTAIC

Resists over 3000 h DHT

BACKSHEET FOR PV MODULE PROTECTION

This innovative backsheet has been developed for applications where a superior performance under extreme aging conditions is required. dyMat PYE3000® resists over 3000 hours of Damp Heat Test (DHT)*. Thanks to its excellent resistance to the atmospheric agents, its strong barrier to oxygen and humidity, the high voltage insulation and the long term resistance to the hydrolysis of adhesives, dyMat PYE3000® is properly indicated for solar cell module protection and insulation. The cell side is treated with a special thick primer which provides extremely high bonding to encapsulants. This primer can be supplied in different colours and in transparent finishing. The laminate thickness has been designed to provide the best combination of properties in terms of electrical insulation and weatherability.

	Unit	Method	Typical values
PET thickness, air side, white	micron	caliper	50
PET thickness, inner layer, hazy	micron	caliper	125
Primer thickness	micron	caliper	100
Laminate thickness	micron	caliper	295 +/- 5%
Unit weight	gr/sqm	10x10 weight	360 +/- 5%
Tensile strength (MD)	N/10 mm	ASTM D-882	290
Tensile strength (TD)	N/10 mm	ASTM D-882	310
Elongation at break (MD)	%	ASTM D-882	110
Elongation at break (TD)	%	ASTM D-882	100
Heat shrinkage (MD) 150°C x 30'	%	ASTM D-1204	< 1,5
Heat shrinkage (TD) 150°C x 30'	%	ASTM D-1204	< 0,6
Layer peel strength	N/10 mm	T - peel (peak value)	> 5,0
EVA adhesion*** (primer coated side vs EVA)	N/10 mm	internal	> 40,0
Moisture barrier (at 38° 90% RH)	gr/sqm x day	ASTM F-1249	2,40
Breakdown voltage	kV	ASTM D-149	> 20
Partial discharge test	VDC	IEC 60664-1	> 1000
Reflectivity (400-700nm)	%	internal	Avg 85

Legend

* tests realized in laminated modules (glass//Encapsulating EVA//PYE3000), DHT (Damp Heat Test) at 85°C 85% RH (IEC 61215 procedure 10.13) and PCT (Pressure Cooker Test) at 121°C 100% RH (internal procedure):

According to our estimates 80h of PCT equal to approx. 3000h DHT, based on elongation at break measurement criteria.

** Primer colours available: W (white), B (black) and R (regal blue). Other colours available upon request

***EVA Corona treated available upon request (adhesion typically > 80N/10mm)

Notes

Other thicknesses on request

Cut sheets (sizes, drills etc.) according to customer's specifications

Shelf life: 2 years

All values stated are to be considered as Typical values.

The above information is liable to change due to innovation and improvement in the manufacturing process.

We assume no liability for any infringement of any patent, copyright or design on the part of the customer while exploiting the film for different end-uses.

dyMat PYE 3000® is TÜV certified
and UL recognized (UL file n° E313506)

Coveme is UNI EN ISO 9001-2008
and ISO 14001 certified

The polyester film employed in the manufacturing
of dyMat PYE 3000® is completely recycable
dyMat PYE 3000® is a Coveme registered trademark



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