

PHOTOVOLTAIC

Extra moisture barrier

BACKSHEET FOR PV MODULE PROTECTION

Thanks to the excellent resistance to atmospheric agents of high grade PET, the outstanding barrier provided by Aluminium and the high voltage insulation of the laminate structure, dyMat APYE® is properly indicated for the back protection of solar modules in highly aggressive environments, or as back protection for solar systems with high sensitivity to moisture (i.e. a-Si and CIGS thin film solar cells). 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 long term resistance of the laminate is granted by specific adhesives at improved hydrolysis resistance.

	Unit	Method	Typical values
PET thickness air side, white	micron	caliper	50
Aluminium thickness	micron	caliper	9
PET thickness inner layer	micron	caliper	190
Primer thickness	micron	caliper	100
Laminate thickness	micron	caliper	370 +/- 5%
Unit weight	gr/sqm	10x10 weight	510 +/- 5%
Tensile strength (MD)	N/10 mm	ASTM D-882	310
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	< 1,0
Heat shrinkage (TD) 150°C x 30'	%	ASTM D-1204	< 0,8
Layer peel strength	N/10 mm	T - peel (peak value)	> 5
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	0.005
Breakdown voltage	kV	ASTM D-149	> 20
Partial discharge test	VDC	IEC 60664-1	> 1000

Legend

* 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)

*** Instrument sensitivity 10⁻³

Notes

Other thicknesses available on request (Aluminium layer 20µ and 50µ)

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 APYE® 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 APYE® is completely recycable

dyMat APYE® is a Coveme registered trademark



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