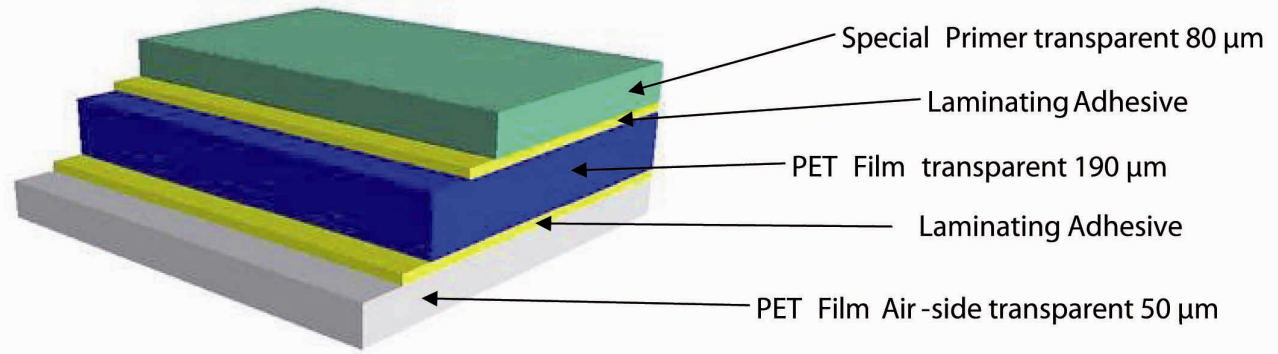
FILMCUTTER

MATERIALS AND MACHINES FOR ELECTRICAL INSULATION

BACKSHEET FOR PHOTOVOLTAIC MODULES

FILMBACK PVS 190 TRANSPARENT is a laminate made with two layers of high performance polyester film: cell-side is treated with a special primer with extremely high bonding properties to EVA (the primer can be supplied in different colours). FILMBACK-PVS is properly suitable for photovoltaic cell modules encapsulation, thanks to its long term resistance to hydrolysis and UV rays, its high dielectric strenght and its strong barrier to atmospheric agents (especially oxygen, humidity and pollution).



FILMBACK - PVS 190 TRANSPARENT MAIN FEATURES

1) Excellent resistance to atmospheric agents and outdoor exposure.
2) Strong barrier against oxygen and humidity permeation.
3) Long-term resi stance to adhesive hydrolysys.
4) High voltage insulation.
5) FILMBACK-PVS complies with IEC/CEI EN60626-3 Sheet 502 rules.

TECHNICAL SPECIFICATION	UNIT	METHOD	VALUE
PET film air-side transparent extra quality	micron	caliper	50
PET film inner layer transparent	micron	caliper	190
Primer transparent	micron	caliper	80
Laminate thickness	micron	caliper	320 +/- 5 %
Unit weight	g/sqm	100x100 mm weight	415 +/- 5 %
Tensile strenght (MD)	N/10mm	ASTM D-882	> 280
Tensile strenght (TD)	N/10mm	ASTM D-882	> 280
Elongation at break (MD)	micron	ASTM D-882	> 110
Elongation at break (TD)	micron	ASTM D-882	> 100
Heat shrinkage (MD) 150 °C x 30’	micron	ASTM D-1204	< 1,2
Heat shrinkage (TD) 150 °C x 30’	micron	ASTM D-1204	< 0,6
Layer peel strenght	N/10mm	180° peel	> 5
EVA adhesion (primer coated side vs. EVA)	N/10mm	internal	> 40
Moisture barrier at 38 C° 100 % RH	$g/m^2/day$	ASTM F-1240	< 2,47
Breakdown voltage	kV	ASTM D-149	> 15
Partial discharge test	VDC	IEC 60664-1	> 1000

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