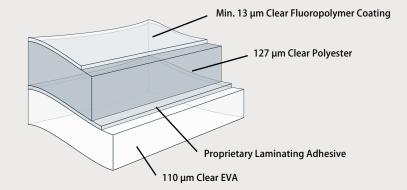


Madico's Transparent Backsheets for Bifacial Modules and BIPV

MATERIAL COMPOSITION

TEST:	
Thickness*	255 μm
Width Range	25-1700 mm
Weight	310 g/m²
Density	1.18 g/cm ³
Coating Color (air side)	Clear
EVA Color Options (cell side)	Clear
FLUOROPOLYM	ER COATING/PET/EVA



TECHNICAL CHARACTERISTICS

TEST:	TEST SPECIFICATION(S):	RESULTS:
Tensile Strength at Break (MD)	Internal Testing – Data Available	100 MPa (MD) / 113 MPa (TD)
Elongation at Break (MD)	Internal Testing – Data Available	140% (MD) / 130% (TD)
Dimensional Stability	150°C for 30 min; Internal Testing – Data Available	≤ 1%
EVA Peel Strength from Encapsulant	Internal Testing – Data Available	≥ 40 N/cm
Peel Strength of Layers	PET / EVA	≥ 5 N/cm
Relative Thermal Index (RTI)	Suitable for continuous use at 85°C	105°C

WEATHERABILITY TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Damp Heat Testing	85°C, 85% RH; IEC 61215	≥ 1000 Hours
Heat Freeze Humidity	UL 1703; >10 cycles	>70% of initial mechanical properties retained
UV Stability	UL 746C	≥ 2000 Hours
MVTR	ASTM F1249	≤ 2.5 g/m² per day

ELECTRICAL INSULATION TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Partial Discharge	IEC-60664, IEC-61730	≥ 1000 VDC
Dielectric Strength	ASTM D149	≥ 18 kV
Comparative Tracking Index (CTI)	IEC 60112	600 Volts

FLAME RESISTANCE TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Flame Spread Index	ASTM E162	85
High-current Arc Ignition (HAI)	UL746A	PLC 1

OPTICAL CLARITY TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Visible Light Transmission (VLT)	400 nm-1200 nm; BYK Gardner HazeGuard plus	≥ 90%
Haze	BYK Gardner HazeGuard plus	7% - 12%

^{*}Theoretical nominal

This product is covered by one or more U.S. patents and pending U.S. and other patent applications. Please see www.madico.com/patents Typical Data – Not Specification © 2014 Madico, Inc.

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