

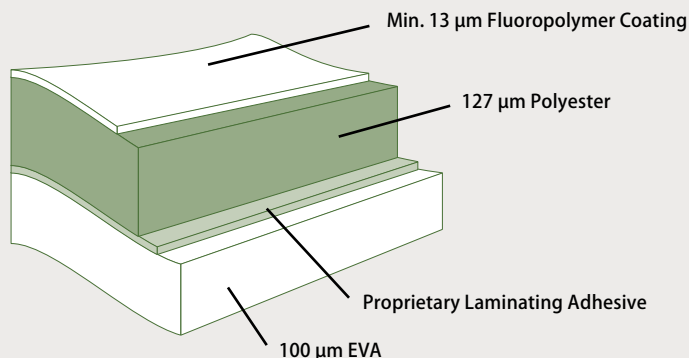
# Protekt® HD Datasheet

## Madico's Classic Fluoropolymer Coating Backsheet Design

### MATERIAL COMPOSITION

TEST:	RESULTS:
Thickness*	249 µm
Width Range	51 - 1700 mm
Weight	279 g/m <sup>2</sup>
Density	1.15 g/cm <sup>3</sup>
Coating Color (air side)	White, Charcoal
EVA Color Options (cell side)	All Colors

### FLUOROPOLYMER COATING / PET / EVA



### TECHNICAL CHARACTERISTICS

TEST:	TEST SPECIFICATION(S):	RESULTS:
Tensile Strength at Break (MD/TD)	Internal Testing – Data Available	100 MPa (MD) / 112 MPa (TD)
Elongation at Break (MD/TD)	Internal Testing – Data Available	120% (MD) / 110% (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

### ELECTRICAL INSULATION TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Partial Discharge	IEC 60664-1	≥ 1000 VDC
Dielectric Strength	UL 746 A	18 kV
Volume Resistivity		18 10 <sup>9</sup> ohm-cm
Comparative Tracking Index (CTI)	Thickness tested: 3.0mm	600V

### 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 proper ties retained
UV Stability	UL 746C	≥ 2000 Hours
MVTR	ASTM F1249	≤ 2.5 g/m <sup>2</sup> per day

### FLAME RESISTANCE TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Flame Spread Index	In accordance with ASTM E162	64
High Current Arc Ignition (HAI)	Exposed to 150 arcs with no ignition	PLC 0
Vertical Burn	(Protekt®/PET construction) Flammability VB Testing in accordance with IEC 60695-11-10	5VB

\*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](http://www.madico.com/patents) Typical Data – Not Specification



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