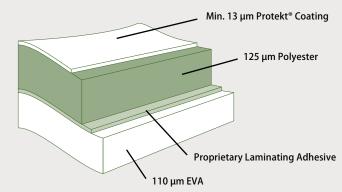
# Protekt® HD Datasheet

# Madico's Classic Fluoro-Coating Backsheet Design

### **MATERIAL COMPOSITION**

TEST:	RESULTS:
Thickness	$249\pm25~\mu m$
Width Range	25 - 1700 mm
Weight	279 g/m²
Density	1.15 g/cm <sup>3</sup>
Protekt® Colors	White, Charcoal
EVA Colors	Bright White, Black , Clear, Custom Colors
	PROTEKT® COATING / PET / EVA



# TECHNICAL CHAPACTERISTICS

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	130% (MD) / 80% (TD)
Tear Strength (MD/TD)	Internal Testing – Data Available	5 N (MD) / 7 N (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

## 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

# WEATHERABILITY TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Relative Thermal Index (RTI)	Suitable for use at continuous 85°C	105°C
Damp Heat Testing	85°C, 85% RH IEC 61215	>1000 hours
Heat Freeze Humidity	In accordance with UL 1703, >10 cycles	>70% of initial mechanical proper ties retained
UV Stability	In accordance with UL 746C	>70% of initial mechanical proper ties retained
MVTR	In accordance with ASTM F1249	≤ 2.5 g/m² per day

### **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>x</sup> ohm-cm
Comparative Tracking Index (CTI)	Thickness tested: 3.0mm	600V

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