

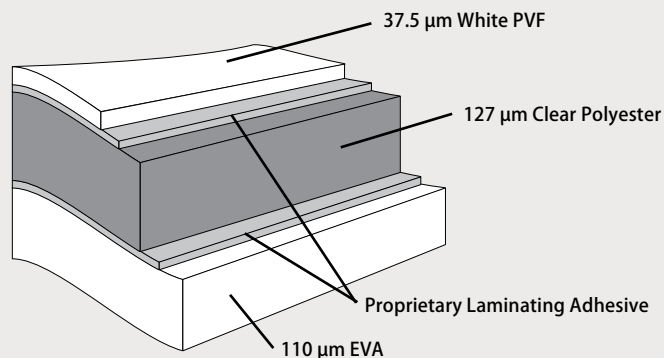
# TPE HD Datasheet

## PVF Backsheets with Dielectric Bond Technology

### MATERIAL COMPOSITION

TEST:	
Thickness*	285 $\mu\text{m}$
Width Range	25-1700 mm
Weight	330 g/m <sup>2</sup>
Density	1.20 g/cm <sup>3</sup>
PVF Color (air side)	White
EVA Color Options (cell side)	All Colors

PVF / PET / EVA



### TECHNICAL CHARACTERISTICS

TEST:	TEST SPECIFICATION(S):	RESULTS:
Tensile Strength at Break (MD/TD)	Internal Testing – Data Available	92 MPa (MD) / 108 MPa (TD)
Elongation at Break (MD/TD)	Internal Testing – Data Available	144% (MD) / 110% (TD)
Dimensional Stability	150°C for 30 min; Internal Testing – Data Available	≤ 1%
EVA Peel Strength from Encapsulant	Internal Testing – Data Available	≥ 70 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; 2500 hours	≥ 2000 Hours
MVTR	ASTM F1249	≤ 4 g/m <sup>2</sup> per day

### ELECTRICAL INSULATION TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Partial Discharge	IEC-60664, IEC-61730	≥1000 VDC

### FLAME RESISTANCE TESTING PERFORMANCE

TEST:	TEST SPECIFICATION(S):	RESULTS:
Flame Spread Index	ASTM E162	59

\*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 © 2014 Madico, Inc.

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