

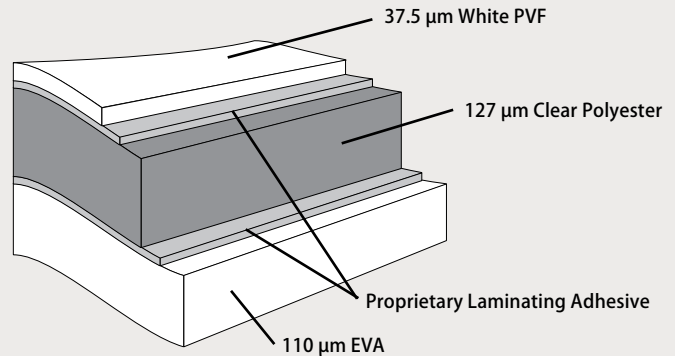
TPE HD Datasheet

PVF Backsheets with Dielectric Bond Technology

MATERIAL COMPOSITION

| TEST: | |
|-------------------------------|------------------------|
| Thickness* | 285 μm |
| Width Range | 51 - 1700 mm |
| Weight | 330 g/m ² |
| Density | 1.20 g/cm ³ |
| 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 ² 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 Typical Data – Not Specification

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