## Honeywell PowerShield® 3W

**Description** Effective Date 05/01/12

Nominal 309 µm (12.2 mil) semi-gloss white composite film structure specifically designed as a durable dielectric backsheet for crystalline Si photovoltaic modules rated for up to 1000 VDC system voltage

Properties of 309 µm composite at 73°F & 50% RH		Typical Value		Test Method
		English	Metric	
Yield		13.36 ft²/lb.	2.73 m²/kg	Honeywell
Reflectance (average 400-800 nm)		85%	85%	ASTM E424
60° Gloss (ECTFE side)		60-66 ± 5	60-66 ± 5	ASTM D2457
Breakdown Voltage		20,680 VDC	20,680 VDC	ASTM D149
Partial Discharge		1,138 VDC	1,138 VDC	IEC 60664-1
Dimensional Stability 30 mins. @ 302°F(150°C)	- MD -TD	<1.5 % <1.0 %	<1.5 % <1.0 %	ASTM D1204
Tensile Strength	-MD -TD	162 lbf/in 160 lbf/in	292 N/10mm 288 N/10mm	ASTM D882
Elongation @ break	-MD -TD	266 % 196 %	266 % 196 %	ASTM 882
Modulus (secant)	-MD -TD	173 Kpsi 179 Kpsi	1,193 Mpa 1,232 Mpa	ASTM D882
Peel Strength EVA* initial		>46 lb/in	>80 N/cm	ASTM D903
Inner Layer Laminate Peel Strength		>2.6 lb/in	>4 N/cm	ASTM D1876
Outer Layer Laminate Peel Strength		>2.6 lb/in	>4 N/cm	ASTM D1876
Water Vapor Transmission Rate @ 100°F (37.8°C) /100% RH		.089 g/100in <sup>2</sup> /day	1.38 g/m <sup>2</sup> /day	ASTM F1249

<sup>\*</sup> FAST CURE EVA 150C conditions

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## **Honeywell**

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