

# Technical Data Sheet

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## EXCEL<sup>®</sup> SOLAR

<b>1. Description</b>	Excel Solar is a polyester reinforced Alpa <sup>®</sup> polymer modified bitumen waterproofing membrane. The undersurface is a thermofusible film and the surface is a peel-off silicone film. Minimum selvedge width is 80mm.
<b>2. Use</b>	Top layer in Excel Solar PV FLEX waterproofing system on new build and refurbishment projects. Axter Solar PV FLEX CIGS* flexible photovoltaic modules are adhered in situ to the membrane surface, into the Alpa <sup>®</sup> binder, when the thermofusible film is heated. Excel Solar is designed for multi or single layer applications. With exceptional ageing and bond strength characteristics, it has been developed to be flexible and durable and is suitable for use on new build and refurbishment Solar PV projects. <i>*CIGS=Copper Indium Gallium Selenide.</i>
<b>3. Application Method</b>	<ul style="list-style-type: none"><li>• Installed fully bonded, with fully sealed joints, using torch-on technique.</li><li>• Mechanically fixed in selvedge with fully sealed joints using torch-on technique.</li></ul>
<b>4. Storage</b>	Rolls to be stored upright, without stacking and under cover.

<b>Reinforcement (g/m<sup>2</sup>)</b>	Stabilised polyester
<b>Binder (g/m<sup>2</sup>)</b>	Alpa®
<b>Surface finish (g/m<sup>2</sup>)</b>	Thermofusible film
<b>Under surface finish (g/m<sup>2</sup>)</b>	Thermofusible film
<b>Longitudinal overlap width (mm)</b>	80 (torch-on)

Characteristics		Standards (BS)	Units	Value	Tolerance	
					Min	Max
Dimensions	Length	EN 1848-1	mm	8	-1%	
	Width		mm	1	-1%	
	Thickness		mm	4	±5%	
	Nominal roll weight	EN 1849-1	kg	around 42		
Tensile properties: maximum tensile force	Longitudinal	EN 12311-1	N/50mm	500		
	Cross direction			500		
Tensile properties: elongation	Longitudinal	EN 12311-1	%	25		
	Cross direction			25		
Resistance to tearing (nail shank)	Longitudinal	EN 12310-1	N	180	-	-
	Cross direction			230	-	-
Resistance to impact (Method A)		EN 12691	mm	≥ 700		
Resistance to static loading (Method A)		EN 12730	kg	≥ 20		
Flow resistance at elevated temperature		EN 1110	°C	≥ 120		
Flexibility at low temperature		EN 1109	°C	≤ -15		

NA=Not applicable due to use of product.

NPD=No performance determined.

The manufacturer reserves the right to modify, at any time, the characteristics of this product.

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