

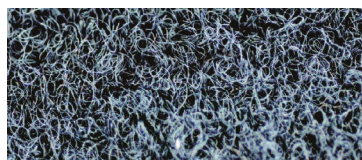
# Product Data Sheet

## **BANDFIX<sup>®</sup>** Solar PV Fastening System

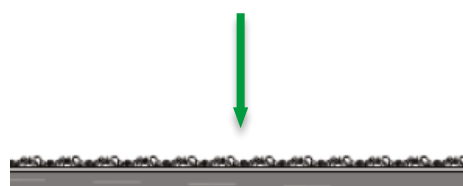
**Lightweight non-penetrative fastening system for use with Axter Solar PV<sup>FLEX</sup> copper indium gallium selenide (CIGS) photovoltaic modules on to Ecoflex<sup>®</sup> / Ecoline<sup>®</sup> single-ply, synthetic PVC-p waterproofing membranes.**

BandFix<sup>®</sup> comprises a Velcro<sup>®</sup> loop tape which is factory bonded to the surface of a 10cm wide strip of Axter's Eco R single ply, polyester reinforced PVC waterproofing membrane. BandFix<sup>®</sup> does not require any mechanical fasteners or washers and does not penetrate the roof waterproofing, ensuring the waterproofing system remains watertight during and post installation of the Solar PV<sub>FLEX</sub> system.

Velcro loop



Eco R single ply PVC strip



## Advantages

- Fast simple installation.
- No mechanical fasteners required.
- Preserves the integrity of the waterproofing during and post installation.
- Weathering and UV resistance.
- High strength and mechanical resistance.
- Superior weld characteristics.
- Zero flame – hot air welded installation.
- 35 year manufacturer service life.
- 20 year insured guarantee covering materials, design, workmanship and insolvency.

## Installation

- Clean the surface of the single ply (PVC) synthetic waterproofing on to which the BandFix® will be welded with a PVC cleaner.
- Unroll the BandFix® and fully bond this to the PVC waterproofing substrate using hot air welding equipment at a temperature of 380 to 420 degrees. Note weld temperatures will vary dependent upon ambient conditions and destructive test welds must be taken prior to installation.
- BandFix® must be installed without overlaps.
- Once installed, probe test the laps to ensure a secure weld (minimum 30mm) has been achieved between the BandFix® and the field membrane.
- Once BandFix® is installed, revive the loop with your hand (gloves must be worn) or stiff hand brush. Refer to Axter installation guidance document for more detailed installation instructions.

## Technical Properties

### LOOP

Test Description	Unit	Nominal Value	Tolerances
Width	mm	100	Average value
Length	m	10.00	-1%
Thickness	mm	2.35	±0.25
Weight	gm/lm	30	±10%

### Eco R PVC membrane

Test Description	Standard (Bs)	Unit	Nominal Value
Thickness	EN 1849-2	mm	1.5
Mass per unit area	EN 1849-2	kg/m <sup>2</sup>	1.8
Watertightness	EN 1928 (B)	Pass	

Test Description	Standard (Bs)	Unit	Nominal Value
Tensile strength to break	EN 12311-2 (A)	N/5cm	≥1100
Elongation to break	EN 12311-2 (A)	%	≥15
Resistance to impact	EN 12691 (A)	mm	≥800
Static puncture resistance	EN 12730	kg	≥20
Tear resistance	EN12310-2	N	≥200
Joint peel resistance	EN12316-2	N/50mm	≥200
Joint shear resistance	EN12317-2	N/50mm	≥600
Foldability at low temperatures	EN 495-5	°C	≤ -25
Root resistance	EN 13948	Pass	
Dimension stability	EN 1107-2	%	≤ 0.5
Water vapour transmission properties	EN 1931	μ	20,000
Artificial ageing by long-term exposure to the combination of UV radiation, elevated temperature and water	EN 1297	Visual (1000h)	Pass

## Quality assurance

BandFix® should be installed in accordance with project specific design layouts and Axter Ltd installation guidelines by trained Axtershield Installers to ensure compliance with Axter system guarantee criteria.

BandFix® installations must be inspected and certified by Axter Quality Assurance Managers prior to installation of photovoltaic modules and system commissioning to ensure system guarantee compliance.

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