

# A1<sup>®</sup> SOLAR

TYPE HR ROOFING UNDERLAY

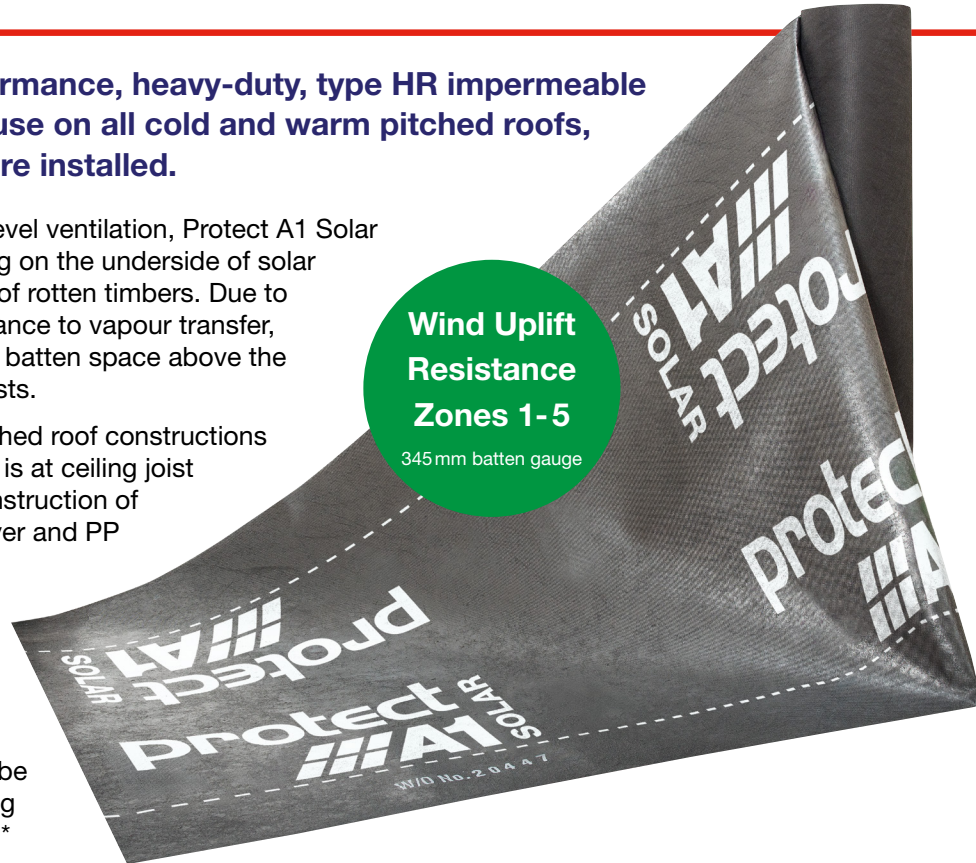
**NEW**

**Protect A1 Solar is a high performance, heavy-duty, type HR impermeable roofing underlay, designed for use on all cold and warm pitched roofs, where in-roof solar PV panels are installed.**

Used in conjunction with high and low level ventilation, Protect A1 Solar reduces the risk of condensation forming on the underside of solar PV panels and therefore lowers the risk of rotten timbers. Due to the impermeable design and high resistance to vapour transfer, there is no need for a ventilated counter batten space above the membrane, saving time and material costs.

Protect A1 Solar can be used for all pitched roof constructions (tiled and slated), whether the insulation is at ceiling joist level or at rafter level. It is a twin-ply construction of polypropylene non-woven spunbond layer and PP film. Providing a second line of defence against wind driven rain and snow, the use of Protect A1 Solar helps reduce the wind uplift loads on the roof covering and has unrestricted use in wind uplift zones 1-5 to BS 5534.

Being waterproof, Protect A1 Solar can be used as a temporary roof covering during the period the slates or tiles are applied.\*



**Wind Uplift  
Resistance  
Zones 1-5**

345mm batten gauge

## BENEFITS

- No need to install additional counter battens above the membrane, reducing time and material costs.
- Ideal membrane solution to support the growth of in-roof solar PV on new build and refurbishment, as detailed in Building Regulations Part L 2021 and the Standard Assessment Procedure (SAP).
- Used in conjunction with high and low level ventilation, Protect A1 Solar can help you meet BS 5250 ventilation requirements.
- Completely water and airtight.
- Excellent nail tear and tensile strength.
- UV & heat resistant.
- Easy to cut and handle.
- Absorbent under-surface prevents condensate drip-off.
- Produced in the UK.
- BM TRADA independently certified.
- UKCA and CE marked.



protect  
**A1** SOLAR



**bimstore**

**NBS Source  
PARTNER**

\* For clarification on exposure times please contact Glidevale Protect's Technical team.

# A1 SOLAR

TYPE HR ROOFING UNDERLAY

## Dimensions

Roll size: 1.0 m x 45 m (45 m<sup>2</sup>),  
1.5 m x 30 m (45 m<sup>2</sup>) (made to order).  
Roll weight: 7.5 kg.

## Appearance

Embossed dark grey upper and lower surface.  
Printed with product branding and batch number for identification.

## Compatibility

As with all vapour impermeable underlays, do not lay in direct contact with undried timber preservatives (whether water or solvent based).

Protect OFV Eaves Skirt should be used at all gutter details.

## Roof ventilation and wind uplift resistance

Roof space ventilation should be provided at both low and high level as with all impermeable (type HR) pitched roofing underlays irrespective of insulation type or position. Where insulation follows the rafters, there must be a ventilated air space at least 50 mm deep above the insulation and beneath the underlay. When used in conjunction with in-roof solar panels, there is no need to ventilate the batten cavity above the membrane with 25 mm counter battens. For further information on roof ventilation requirements please contact Glidevale Protect's Technical team.

Protect A1 Solar has unrestricted use in wind zones 1-5 at the maximum batten gauge of 345 mm to BS 5534. No adhesive tapes are required to restrain the overlaps and the underlay should be draped over rafters with a shallow valley up to a maximum of 15 mm whilst maintaining a clear air path.

For more information visit  
[glidevaleprotect.com/A1solar](http://glidevaleprotect.com/A1solar)

PERFORMANCE		
	MD	CD
Nail tear strength (N) to EN 12310-1 with mods	230	234
Unaged tensile strength (N/50mm) to EN 12311-1 with mods	287	274
Aged tensile strength (N/50mm) to EN 12311-1 with mods	285	238
Weight (g/m <sup>2</sup> )	145	
Watertightness (>2.0m hydrostatic head resistance)	Pass - Class W1	
Wind uplift resistance - Zones 1-5 at 345mm batten gauge and 600mm rafter centres		
MD = Machine Direction (along roll). CD = Cross Direction (across roll). UV and heat ageing conditions: UVA lamps at 50°C for 336 hours followed by heat ageing at 70°C for 90 days.		

## Specification clause:

Roofing underlay to be Protect A1 Solar supplied by Glidevale Protect, 2 Brooklands Road, Sale, Cheshire, M33 3SS.

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F: +44 (0)161 905 2085

E: [info@glidevaleprotect.com](mailto:info@glidevaleprotect.com)

Underlay to be of twin-ply construction 145gsm with polypropylene to achieve >2.0m hydrostatic head of water resistance. To prevent UV degradation of the underlay, install Protect eaves skirt to avoid sagging and ponding of underlay behind fascia and ensure correct water discharge into the gutter. Resistance to wind uplift: Zones 1-5 at maximum batten gauge of 345mm. No adhesive tapes are required to restrain the overlaps. Under-surface to have absorbent characteristics to prevent condensate drip-off. Underlay to be laid in accordance with BS 5534 and manufacturer's instructions.

## Wind Uplift Resistance Map

345mm batten gauge

Meets Zones 1-5 (unrestricted) at 345mm batten gauge (resistance to wind pressure 1732 Pa), when tested to Annex A of BS 5534.



## Related products

Protect Fulmetal UniRoll Universal Dry-fix Ridge Vent: [glidevaleprotect.com/uniroll](http://glidevaleprotect.com/uniroll)

Protect OFV Over Fascia Vent: [glidevaleprotect.com/fv-fascia-ventilators](http://glidevaleprotect.com/fv-fascia-ventilators)

Glidevale Versa-Tile G5 Tile Vent: [glidevaleprotect.com/versa-tile-g5](http://glidevaleprotect.com/versa-tile-g5)



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Glidevale Protect

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building  
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