

PROCTOR AIR[®]

THE AIR & VAPOUR PERMEABLE PITCHED ROOF UNDERLAY

INSTALLATION

Cold Roof Installation Techniques

Install Proctor Air purple side up in the traditional manner, parallel to the eaves.

The airtightness of the slate or tile should be considered when assessing the requirement for ventilation above the underlay. Insulation should be laid horizontally at ceiling level pressed tightly into the eaves against the underlay to ensure no gaps are present. BS 5534:2014 should be followed for the general installation of the underlay under tiling and slating.

Advice related to specific constructions, including U-value calculations and condensation risk analysis is available from the Technical Department: Telephone 01250 872261 or email: technical@proctorgroup.com.

PROCTOR AIR DETAILS

Tile and Slate Roofs

For tile and slate roof applications, Proctor Air should be laid horizontally across the rafters starting at the eaves and secured in place with battens or counter-battens.

MINIMUM HORIZONTAL LAP		
Rafter Pitch	Partially Supported	Fully Supported
12½° – 14°	225mm	150mm
15° – 34°	150mm	100mm
35°	100mm	75mm

Underlay laps should be covered by a batten and, where necessary, the lap of the underlay adjusted to coincide with the nearest slating or tiling batten.

Vertical laps should be at least 100mm wide and above a rafter position. The edge distance to the fixings should be at least 50mm.

Metal Roofs

For sheet roof applications, Proctor Air should be laid such that it forms a continuous membrane over the entire area of the roof, allowing any water to drain down to the gutters.

On a low pitch metal roof, the draping of Proctor Air between purlins can result in ponding which is unsatisfactory and should be avoided. It is preferable for the Proctor Air to be fully supported to give a clear drainage path.

If this is not practical on low slope roofs then the laps should be taped to prevent water finding its way down onto the insulation below. Advice for suitable tape

Adverse Weather – Good Practice

The British Board of Agreement has issued an Information Bulletin (No. 2) relating to good site practice when using permeable roof underlays. This highlights:-

- An underlay is not a total waterproof barrier and if used as a temporary waterproof covering then rain penetration may occur
- In certain conditions, particularly if there is heavy rainfall combined with subsequent severe freeze/thaw conditions, an underlay should not be exposed for more than a few days.

BS 5534

APLR underlays should always been considered as water resistant membranes, based on their function as secondary protection below slates or tiles.

As per section 4.9 Roofing Underlay and Clause 4.9.1 e) 'provide temporary weather protection before the installation of the primary roof covering. An

Delivery and Site Handling

Rolls of Proctor Air are delivered to site, individually wrapped in a clear polythene sleeve. A Proctor Air 'User Guide' is included with each roll. Rolls may be stored flat or upright on a clean, level surface and kept under cover.

The dwelling below the roofspace should be ventilated in accordance with Building Regulations, extractor fans installed in rooms of high humidity e.g. kitchens and bathrooms, cold water tanks in the loft space should be covered and all pipework lagged.

Penetrations into the loft space from inside and outside must be sealed, loft hatches must be ensured a draught free fit.

When the product is used unsupported, there is a risk that fire can spread if the material is accidentally ignited during maintenance works, eg. by a roofer's or plumber's torch. As with all types of sarking material, care should be taken during building and maintenance to avoid the material being ignited.

The purple side over printed with Proctor Air should be uppermost. The minimum horizontal laps are given in the table, taken from BS5534:2014.

specification for specific applications is available from the A. Proctor Group's Technical Department.

At penetrations, such as vent pipes and rooflights, an additional piece of Proctor Air should be laid upslope and taped in position, to channel water away to each side of the opening.

Laying lightweight membranes in high wind conditions is difficult and appropriate precautions should be taken during installation.

Details

Attention to detail is important. Avoid blockages where possible that would otherwise prevent the free drainage of water. At the eaves ensure that the Proctor Air is dressed into the gutter, or laid over an eaves carrier in accordance with best practice.

exposed underlay is subjected to UV light which might lead to premature failure; therefore, the exposure periods should be kept to a minimum. In certain conditions, particularly if there is persistent heavy rainfall combined with subsequent severe freeze/thaw conditions, an underlay should not be exposed for more than a few days.

Note 2 If an underlay has to be left without a roof covering for a period of time when adverse weather rainfall and weather is expected, a tarpaulin or similar protective sheeting may be used to protect the underlay until such time that the roof covering can be completed.'

A full copy of this BBA Information Bulletin No.2 - Permeable Roof Tile Underlay Guide to Good Site Practice is available from the BBA web site: www.bbacerts.co.uk.

USER GUIDE

ROLL SPECIFICATION

Colour:

Purple (top)

Weight:

170gsm

Thickness:

0.67mm

Roll size: 1m x 50m & 1.5m x 50m

Quality control checks are carried out during production and on the finished product.

Quality control checks on the finished product include:

- Weight
- Tensile strength and elongation
- Tear resistance
- Water resistance

TECHNICAL ADVICE

The A. Proctor Group has a dedicated Technical Department which can assist with installation details, view drawings for approval and give specialist advice on the correct use of the A. Proctor Group's products.

Telephone:

+44 (0)1250 872261

Email:

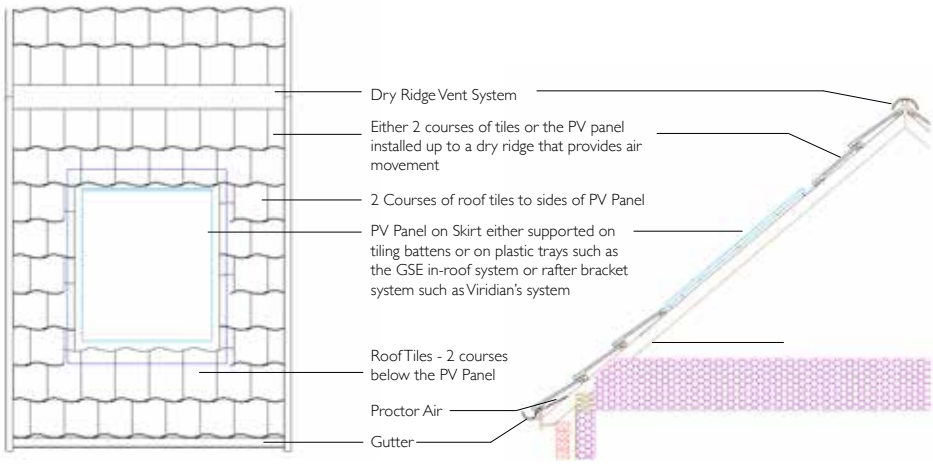
contact@proctorgroup.com

www.proctorgroup.com



Polypropylene is recyclable. Mechanical recycling is the primary option, depending of the requirements of the application and the intended article specification. It can also be valorised for energy recovery, its high calorific value is around 44 MJ/kg. Polyolefins are neither biodegradable nor compostable.

PROCTOR AIR & THE USE OF PV PANELS



Where in line PV panels are to be installed on pitched roofs with Proctor Air, vapour and air permeable underlay, there is no requirement for ventilation in the loft space below the underlay or in the batten cavity above the underlay. This is assuming:

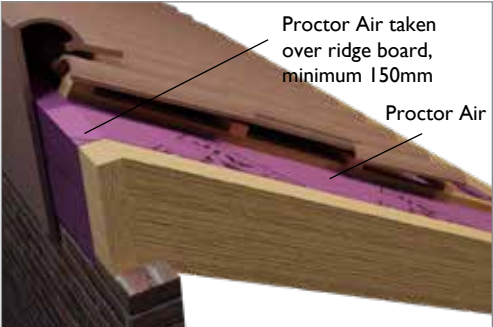
- To ensure adequate air flow below the PV panel, there must be a minimum of 2 courses of tiles below the PV panel. Above the PV panel can be either 2 courses of tiles or the PV panel installed up to a dry ridge that provides air movement.
- There should be a minimum of 2 tiles (around 600mm) to either side of the PV panel to ensure adequate air flow.
- The underlay should be sufficiently draped below the tile battens as per BS 5534, alternatively, a plastic tray such as GSE integrated solar mounting tray or a fixing system such as the Viridian rafter/ batten bracket system.

RIDGES

Duopitch Ridge Detail

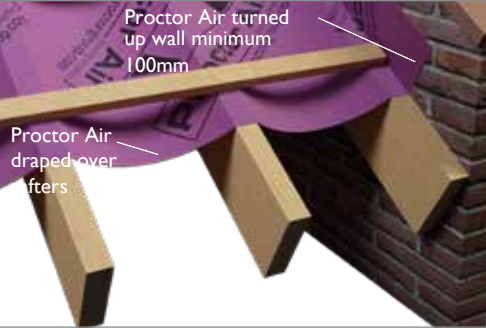


Monopitch Ridge Detail

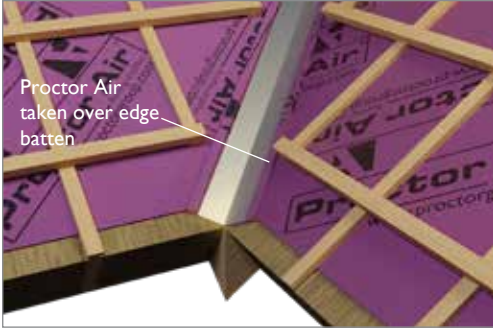


VERGE AND SLOPING VALLEY

Verge Abutment Detail



Valley Detail

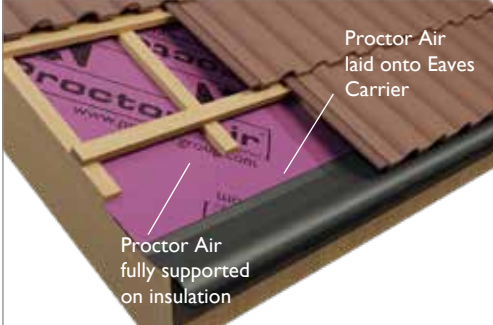


PIPE PENETRATION AND EAVES

Pipe Detail

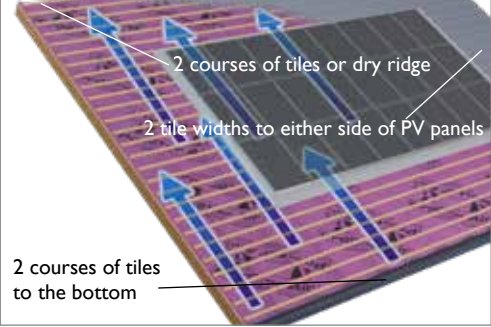


Eaves Detail



SOLAR / PV

Detail



The contents of this installation guide are provided by A. Proctor Group Limited (APG) in good faith for general information purposes only. The statements and data contained in this guide are not specific technical recommendations as to any particular design or application. APG give no warranty and accept no liability for its contents and the ultimate determination as to product suitability is the sole responsibility of the installer or end user. APG strongly recommends following the installation guidelines and the relevant Codes of Practice which are correct at the time of publication and results may vary depending on the particular design/and or application.

Proctor Air® Warranty

Specify Responsibly



A. Proctor Group Proctor Air construction membrane 15 years limited warranty

This is not a consumer warranty. This document offers the limited warranty for the A Proctor Group “Proctor Air” products (“Products”) for distributors who have a distribution agreement with the A Proctor Group or customers who buy directly from A Proctor Group (hereinafter “CUSTOMER”) in the UK and Ireland and for the End-use that is specified in the distribution agreement or is specified in the sales documents where A Proctor Group sells the Products directly to the CUSTOMER. This document replaces any previous communication in any form regarding warranties for the Products.

Upon the following terms and conditions, effective 1st January 2024 A Proctor Group hereby offers to the CUSTOMER a limited warranty for a period of fifteen (15) years starting from the earlier of i) the date of installation, and (ii) the date one year after the date of purchase.

*Products and End-use applications covered by this A Proctor Group Proctor Air warranty are exclusively those in accordance with EN13859: Part 1: Flexible sheets for water proofing Underlays for discontinuous roofing.

- A Proctor Group warrants that Products will conform to the CE Declaration of Performance (DoP) in effect at the time of the sale of the Product to the CUSTOMER subject to the following terms.
- Within the warranty period, properties specified in the DoP may only change to the extent they still allow proper functioning of the diffusion open underlay. A proper functioning of the diffusion open underlay is considered sufficient under this warranty if the Product still has the following properties:
 - During first 10 years of the warranty period a water resistance class W1 according to EN 13859, tested per EN 1928 test standard.
 - After first 10 years until end of the warranty period a water resistance class W2 according to EN 13859, tested per EN 13111 test standard.
 - The water vapor transmission Sd value is lower than 0.2 metre according to EN13859 tested per EN ISO 12572, to allow water vapor diffusion.
- The CUSTOMER or its customers must install Products strictly per A Proctor Group's installation guidelines provided on the insert sheet that comes with each Product on the date of purchase, otherwise the limited warranty is invalidated.
- This limited warranty is null and void and shall be of no further force and effect in the event that:
 - A Proctor Group or (at the option of A Proctor Group) its CUSTOMER is not allowed to inspect the installation of the Products and/ or has not received a representative sample (minimum 1.5m x 1m) in connection with any claim asserted by CUSTOMER under this limited warranty;
 - Required supporting documents are not provided to A Proctor Group, including the following:
 - package number written on the core label and/or the batch number or date contained on the Product,
 - invoice showing the purchase date,
 - other material evidence of installation date;
 - Products are not applied according to A Proctor Group's installation guidelines for the Product in effect at the time of installation, including a maximum free exposure time as specified in the Technical Datasheet for the country and use in question.
 - A Proctor Group is notified in writing more than thirty (30) days after the circumstances giving rise to a claim either appear or should have been discovered after the exercise of reasonable diligence by the CUSTOMER or the CUSTOMER's contractor; subcontractor or other end user. Failure to notify A Proctor Group within such thirty (30) day period shall automatically relieve A Proctor Group of any and all responsibility and/or liability under this limited warranty.
- CUSTOMER'S exclusive and sole remedy for any warranty claim, if found to be valid, shall be a replacement of the Products giving rise to such claim(s).
- This limited warranty does not cover damage or failure of Products if:
 - Such damage or failure is caused by natural events, including, but not limited to fire, floods, lightning, hurricanes, hail, windstorms, earthquakes and cyclones; or
 - Such damage or failure is caused by physical penetration, vandalism, damage or attack by third parties and foreign objects or agents including animal and plant life; or
 - Such damage or failure is attributable in whole or in part to a latent or patent design defect in the structure or a component of the building (for example chimney, window or door details that could put unusual stress or water pressure on the membrane); or
 - Such damage or failure is attributable in whole or in part to a latent or patent defect in the installation or selection of structural materials or components;
 - Such damage or failure is attributable in whole or in part to product contact or exposure to chemical products that could alter its properties (for example biocides, oil, coatings, solvents, cleaning agents, etc.);
 - Such damage or failure is attributable in whole or part to a damage in the construction or coverage that was not promptly repaired, regardless of the time required for A Proctor Group to respond to any related claims.
- A Proctor Group makes no express or implied warranty beyond that stated above. This limited warranty is in lieu of all other warranties, whether express or implied, including but not limited to any warranty of merchantability or fitness for a particular purpose. Notwithstanding any of the foregoing, A Proctor Group shall have no liability for claims arising out of CUSTOMER's negligence or CUSTOMERS' contractors, subcontractors, or other third parties.
- The territory of product installation covered by this warranty is specified in the CUSTOMER's distribution agreement, if applicable.
- Products and End-use applications covered by this A Proctor Group Proctor Air warranty are exclusively those in accordance with EN13859: Part 1: Flexible sheets for water proofing Underlays for discontinuous roofing

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TYPICAL ROOF CONSTRUCTIONS

Cold Roof Slate Sarking Detail



1. Slate
2. Proctor Air
3. Timber sarking / Board
4. Rafter

Cold Roof Tile Detail



1. Tile
2. Batten
3. Proctor Air (draped)
4. Rafter

Metal Roof Profile Detail



1. Metal Cladding
2. Ventilation air space
3. Proctor Air
4. Insulation
5. Vapour Control Layer
6. Metal Lining

Warm Roof Slate Sarking Detail



1. Slate
2. Proctor Air
3. Timber sarking
4. Insulation
5. Rafter

Warm Roof Tile Detail



1. Tile
2. Batten
3. Proctor Air (draped)
4. Insulation
5. Rafter

Warm Roof Tile Alternate Detail



1. Tile
2. Batten
3. Counter batten
4. Proctor Air
5. Insulation
6. Rafter

Warm Roof Tile with OSB Detail



1. Tile
2. Batten
3. Proctor Air (draped)
4. Counter batten
5. OSB
6. Insulation
7. Rafter

Warm Roof Tile with OSB Alternate Detail



1. Tile
2. Batten
4. Counter batten
5. Proctor Air
6. OSB
7. Insulation
8. Rafter

