

PROCTORVENT Drainage Batten (DB-FR)

Ventilated roof and wall drainage battens

Product Description

The ProctorVent Drainage Batten (DB-FR) is a high compressive strength drainage batten manufactured from a flame retardant polyolefin extrusion with a spread of flame index of 0. (AS1530.3) The ProctorVent DB-FR is supplied with a self adhesive applied to one face of the batten.



Applications - Roofing

It is common industry practice with metal roofing to install sarking running up the roof fixed on top of roof battens. Such practice restricts air movement and drainage between the sarking and flat profile or concealed-fix roof cladding. If there is excessive drape in the sarking this can lead to ponding, or where sarking is pulled tight, it will be in direct contact with the roof sheet.

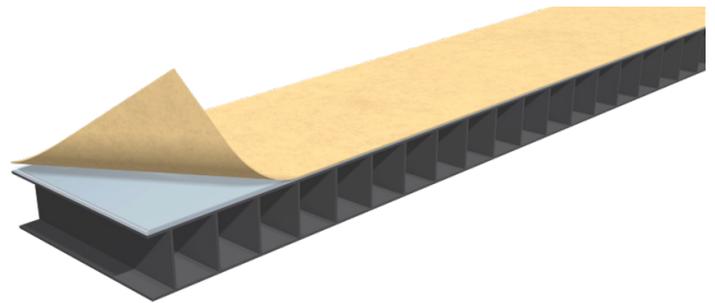
ProctorVent DB-FR has been designed to resolve these issues with the drainage batten providing for air and vapour movement and a pathway for drainage between the sarking and the roof cladding.

Applications - Walls

The ProctorVent DB-FR can be used either in combination with, or as an alternative to wall battens, to create a ventilation and drainage cavity behind the wall cladding.

As the ProctorVent DB-FR is open to air movement and drainage, it is well suited for use horizontally or vertically above and below windows where solid battens can potentially block ventilation and drainage.

Please check with the cladding supplier as fixing details for the cladding may need to change.



Benefits

- Provides for a drainage and ventilation path under flat profile and concealed-fix roof or wall claddings.
- Can reduce the risk of ponding of water on sarking behind roof battens and the fascia.
- Allows for vapour permeable membranes to be installed without direct contact to the roof or wall cladding thus reducing localised condensation risk on the interior face of these membranes.
- Reduces conductive heat transfer between the roof or wall cladding and the structure.
- Does not restrict buoyancy induced air flow under the roof sheet or within wall cavities.
- Has a minimum 300kPa compressive strength - a requirement of some major roof cladding manufacturers when using extruded polystyrene (XPS) foam insulation packers.
- For ease of handling and delivery, the battens are pre-cut and folded in half to a 1.25m length.

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Installation - General

Reference should be made to the fastening specification of the cladding and ensure that the specified spacing, position and thread penetration through the supporting structure is suitable when using the drainage batten. The fastener length should be increased to suit the drainage batten thickness (10.5mm or 21mm). If the DB-FR is being left exposed for a long period or under windy conditions then a mechanical fix or stronger double sided tape may be needed.

Installation - Walls

ProctorVent DB-FR can be used in wall applications to create or maintain a drained and vented cavity behind the cladding. The batten is fixed as required, vertically or horizontally, aligned with studs, noggins, and the top and bottom plates. Prior to fixing the cladding, temporarily hold the batten in position with the self adhesive. Fix the cladding as soon as possible as the self adhesive is only intended as temporary for positioning the batten.

Cladding must be fixed through the drainage battens into the structural frame or substrate as normal. Ensure that the fastener length is increased appropriately to suite the drainage batten thickness (10.5mm or 21mm).

NOTE - The ProctorVent DB-FR is not structural. As the drainage batten is combustible, it must not be used in type A & type B non-combustible wall constructions.

Installation - Roofs

There are several ways to provide for an air and drainage pathway between the roof sheet and the sarking. The example in Figure 1 is a familiar approach, similar to the sarking installation under roof tiles, allowing for the sarking to be installed in a shingled fashion. Water can cascade over the overlaps in the drape where no penetrations are located. This type of install however may not be suitable for low pitched roofs to avoid ponding behind the fascia.

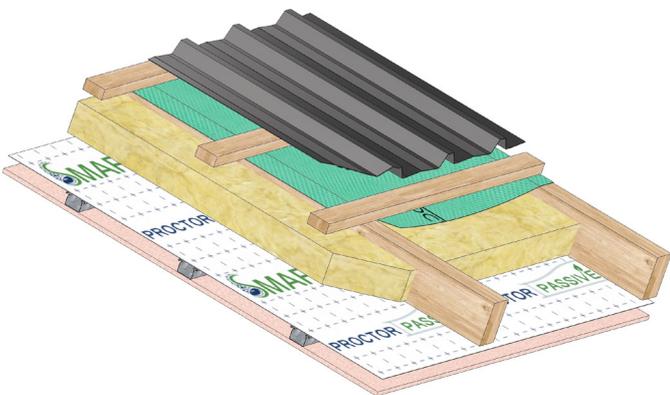


Fig 1. Conventional method for a pitched roof where the sarking is installed draped over and perpendicular to the roof truss/rafters to permit safe drainage under the roof batten. The ProctorVent DB-FR drainage batten is not required to be used in such installations.

Where additional ventilation is needed or when sarking is installed over roof battens, ProctorVent DB-FR offers a cost effective and simple solution as shown in Figure 2.

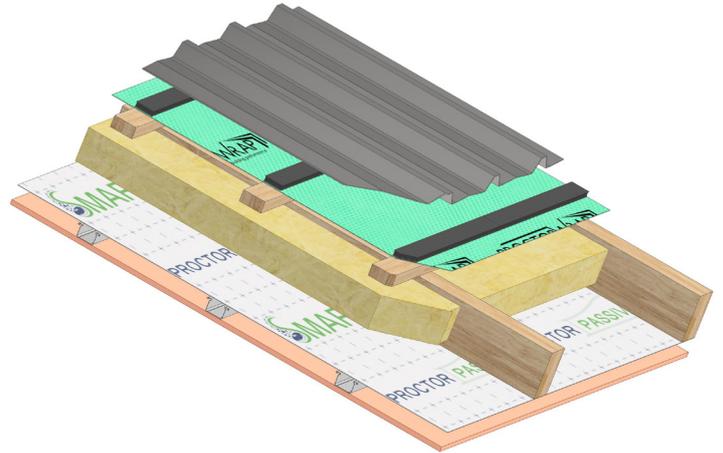


Fig 2. Where the sarking is installed above roof battens, the ProctorVent DB-FR drainage batten is installed above the sarking to create a free path for drainage and ventilation.

Install the sarking in accordance with AS4200.2:2017, taping overlaps where required, such as on low pitched roofs. When sarking is installed over roof battens/purlins the drape should be minimised to avoid ponding behind battens, but also draped sufficiently to manage any shrinkage as declared by the sarking manufacturer.

Prior to fixing the roof sheet, cut the ProctorVent DB-FR to the required length and position along each roof batten adhering to the sarking using the self adhesive backing to hold the DB-FR in position. Fix the roof sheet as soon as possible as the self adhesive is only intended as a temporary fix for positioning the batten. If the DB-FR is being left exposed for longer under windy conditions, a mechanical fix or stronger double sided tape may be needed.

Care must be taken when fixing the roof sheet not to compress the ProctorVent DB-FR. To avoid deformation of the roof sheet, compression of the drainage batten or damaging washers, ensure that torque is not set too high when fixing through the batten. Sufficient foot pressure should be applied to the roof sheet to ensure the batten does not lift from the sarking when fixing the roof sheet.

The DB-FR is not a structural batten and is designed only to provide and maintain separation between the roof batten/purlin and the roof sheet. When using the DB-FR in roof applications a hi-grip roof fastener must be used.

Concealed-fix roof cladding

For ease of install, one option is to pre-adhere ProctorVent DB-FR to the underside of the concealed-fix roofing clip.

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Double thickness batten (21mm)

A 21mm double batten is made, as per Figure 3 below. For ease of handling and delivery, the battens are pre-cut through one wall of the extrusion and folded in half to a 1.25m length. Cut the other outer wall of the batten, and adhere the two battens utilising the integrated self adhesive.

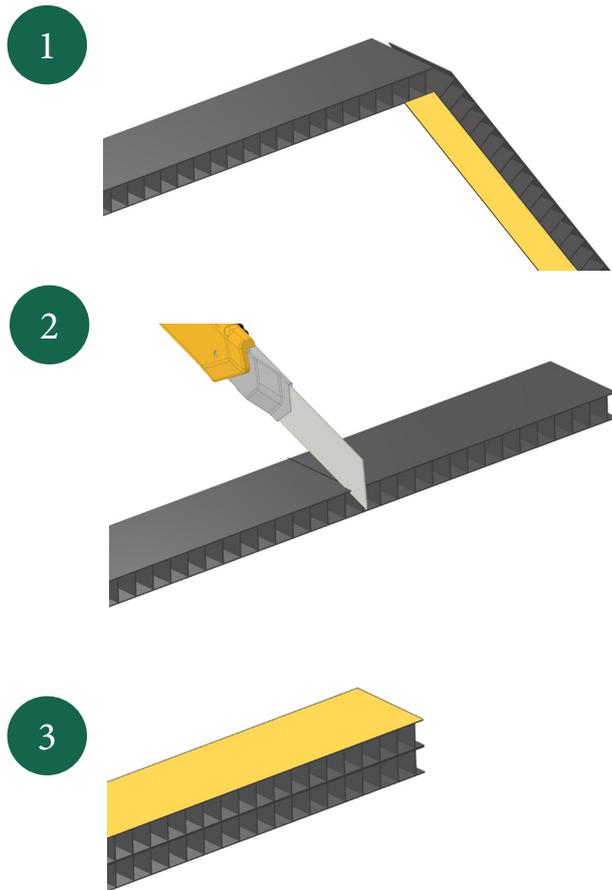


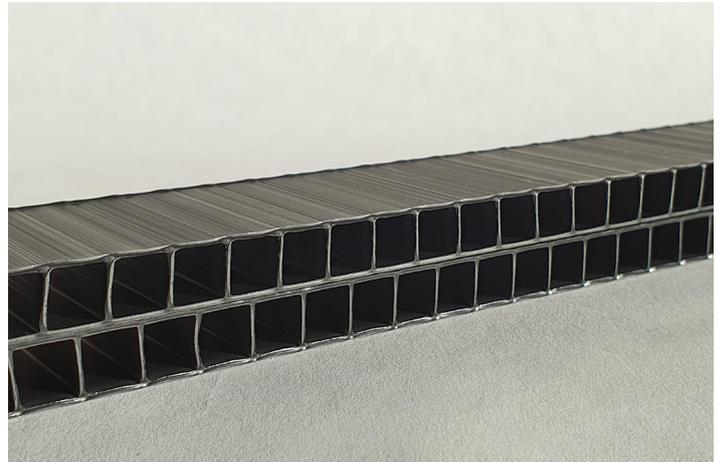
Fig 3. Conversion from 10.5mm to 21mm batten

Bush Fire Prone Applications

Where the ProctorVent DB-FR is used at the eaves, ridge or hip or anywhere that embers could be expected to be drawn into a cavity through the opening, the batten must be wrapped on the exterior face by a corrosion resistant, non-combustible mesh with maximum aperture of 2mm, independently tested to meet the physical properties required by AS3959-2018 Amdt. 1.

Thermal Efficiency

Depending on the roof pitch, the creation of an air space under the roof sheet can take advantage of buoyancy-induced air flow to release warmer air at the ridge. This in turn introduces cooler air from the eaves to the underside of the roof sheet thus reducing the heat load on thermal insulation. Although no credit is given for this under the deemed to satisfy provisions of the National Construction Code (NCC), this phenomena is well understood and researched.



The cavity between the roof sheet or wall cladding and the insulation or sarking is considered as a vented air space and thus ProctorVent DB-FR does not increase insulation performance by increasing any effective R-value claimed by manufactures of reflective (low emissivity) radiant barriers that rely on treating ventilated cavities as a still air space.

Durability

Although ProctorVent DB-FR can be left exposed temporarily during construction, the product may be damaged by careless handling or vandalism, and should not be left uncovered for longer than is absolutely necessary. Any damaged product should be replaced before completion.

Ensure that ProctorVent DB-FR is covered as soon as possible, and **not left exposed for longer than 4 weeks**. ProctorVent DB-FR is not to be used in installations where it could be exposed to long term UV radiation or constant high temperatures.

Product Performance

ProctorVent DB-FR performs to specification in normal building applications when installed in accordance with this product guide. The information herein is supplied in good faith and to the best of our knowledge was accurate at the time of publication. Users are advised to make their own determination as to the suitability of this information in relation to their particular purpose and specific requirements.

Health & Safety

Information on any known health risks on the material are listed in the Material Safety Data Sheets available from Proctor Group Australia.

Take care when working on roofs and follow all guidance and industry good practice guidelines. In particular pay attention to the disposal of any tape release liner or packaging that could be a slip hazard.



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Sample Specification

Where required to provide drainage, air movement or separation between the roof sheet / wall cladding and a sarking or weather resistive barrier, ProctorVent DB-FR shall be installed in accordance with the product user guide

- Thickness (Select 10.5mm / 21mm)
- Self adhesive
- Compressive Strength: >300kPa,
- Spread of flame index (AS1530.3): ≤ 9
- Smoke-Developed Index (AS1530.3) : ≤ 8

Available from DCTech/Proctor Group Australia.
W: www.proctorgroup.com.au/contact/

Technical Data

Criteria	Test Method	Result
Thickness		10.5mm (±0.5mm)
Colour		Black
Compressive Strength	AS 1301.429S	>300 kPa (Average 600kPa)
Flexural Modulus	ASTM D790	1000MPa
Melting temperature	ASTM D3418	160°C
Maximum service temperature		90°C
Heat Deflection Temperature (HDT) (0.46MPa) @ 3.2mm	ASTM C518	0.22 m²K/W
	ASTM D648	100°C
Spread of Flame Index: (Range 0-10)	AS1530.3	0
Heat Evolved Index: (Range 0-10)	AS1530.3	3
Smoke Developed Index: (Range 0-10)	AS1530.3	5

Values quoted are the result of test on representative samples

Dimensions & Packaging

Product	Thickness (mm)	Width (mm)	Length** (m)	Colour	Weight (kg)	Packaging dimension**	Battens per pack (Total linear metre)
ProctorVent DB-FR	10.5*	40	2.5	Black	0.21	1.25m x 200mm x 176mm	40 (100Lm)

* Note that the batten can be cut and adhered to make a 21mm thick batten.

** ProctorVent DB-FR battens are supplied in 2.5m lengths but comes packaged, pre folded in half to 1.25m lengths.

The cream coloured intumescent version VB10-INT is no longer available.

Accessories

Product	Width (mm)	Length (m)
ProctorPassive Duo Tape (double sided tape)	24	50

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