






# BS5534 - FREQUENTLY ASKED QUESTIONS

## Where can Roofshield be used under the new changes to BS5534:2014?

Roofshield can be used in all zones 1 - 5. See table below.

## Wind Uplift Resistance

Product	Identification	Accessories	Manufacturer	Website
Roofshield	LR		A. Proctor Group	www.proctorgroup.com
Batten Gauge	Declared wind uplift resistance Pa (N/m <sup>2</sup> )		Zone Suitability	Wind Zone Map
≤345mm	1252	None	1 - 3	
	2192	≥11mm* counter batten	1 - 5	
	2615	Wraptite Tape	1 - 5	
≤250mm	2574	None	1 - 5	
Softwood sarking with slates**	2974	n/a	1 - 5	
<b>No tape required in zones 1 - 3</b>				

\*Alternatively, a 38mm tile batten can be used instead of a 25mm tile batten which would alleviate the need for an 11mm counter batten.

\*\*The slates were set with a headlap of 54mm; which is the minimum allowed in BS5534. The nail diameter of 2.65mm is also the minimum allowed in BS5534. This roof configuration as tested therefore represents the weakest (with respect to wind uplift) configuration allowed in BS5534 for these slates.

### What accessories are required to comply?

#### Most importantly Roofshield Does Not Require Taping to Comply!

No extra considerations need to be made when using Roofshield in Zones 1-3 – installation is as usual. If the building is in Zone 4 or 5, and you are using sarking boards with slates fixed directly through, then install as usual.

If the building is in Zone 4 or 5, and you have an open rafter construction, then you will need a minimum 11mm counter batten fixed over Roofshield.

### Underlay Overlaps – battened, taped or increased?

There are a number of manufacturers view points and arguments doing the rounds regarding the correct detailing of the membrane overlaps. BS5534:2014 states the following.

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. Laps may also be sealed using proprietary means in accordance with manufacturers' instructions (see also 5.9.3.2). Where a proprietary sealant is used, its durability should meet the same recommendations as the underlay.

It has always been good practice to lay out the membrane so the lap falls below a tile batten. If this is not possible, due to the tile gauge, then either the lap should be increased to ensure it is below a batten or an additional batten should be used between the tile batten gauge spacing.

The use of this additional batten, Klobber call it a "fly batten", is deemed by most roofers to be a trip hazard and as such we have always recommended this is not done and that the lap is increased. It is true that this is more material for us but it is based on a fundamental health and safety precaution.

### What is a fly batten – as referenced by some of our competitors?

As regional slang for building components varies a fly batten may mean a different thing to different people. Some of the possible descriptions include counter batten, batten to membrane overlap or a temporary batten, often used when you need to get the underlay on quickly to protect the insides of the building (also referred to as strap battening). This practice can also come in useful when the roof is going to have counter battens 'on-top' of the underlay instead of, or as well as underneath, because you can get all the underlay on and then install full length counter battens, rather than small sections.

**Fly Battens are only mentioned by Klobber in their wind uplift tables. When approached, by an independent party, for a response they have confirmed that they are referring to the use of an extra batten, outwith the required batten gauge, fixed over the overlap.**

There may be other terms for this therefore the use of fly batten as a term could be/is confusing to the market. Our use of an 11mm counter batten, and not an additional batten at the overlap, is clear and transparent.

### Do the wind zones cover all eventualities?

NO - the table small print says it is only applicable where there is a well-sealed ceiling, ridge height is not greater than 15m, pitch is between 12.5 and 70 degrees and there is no significant topography present. For areas outwith this you may need a stronger membrane or have to seek professional advice.

### Does that mean you will need to install a VCL to ensure you have a well sealed ceiling?

No, BS 9250 (the Code of Practice for Design for the Airtightness of Ceilings in Pitched Roofs) discusses how to achieve a well-sealed ceiling. It does not stipulate that you must use a VCL (although it shows it as an example as it does showing the plasterboard being used as an air tight layer) to achieve a well-sealed ceiling. Indeed it focusses more on detailing and workmanship. The following are extracts from the relevant British Standards-

BS5250 Defines a well-sealed ceiling as:

3.37 well-sealed ceiling

ceiling incorporating seals which prevent the transfer of warm, moist air into the loft or roof space in accordance with the recommendations of BS9250

BS9250 gives this definition

3.7 well-sealed ceiling

ceiling that satisfies the following criteria:

- a) The design avoids constructional gaps, especially at the wall/ceiling junction and holes in the ceiling.
- b) No access door or hatch should be located in rooms where large amounts of moisture are produced, including kitchens or bathrooms.
- c) The air leakage rate through an access hatch, including its frame, when tested to BS EN 13141-1:2004 4.3 is less than 1 m<sup>3</sup>/h at a pressure difference of 2 Pa.
- d) Penetrations, such as those for services and rooflights, are permanently sealed with suitable proprietary products.
- e) The ceiling is sealed to the external walls to limit any leakage through cracks.
- f) The total leakage through all recessed light fittings should not exceed 0.06 m<sup>3</sup>/h•m<sup>2</sup> of ceiling at 2 Pa pressure difference across the ceiling.
- g) The head of any cavity in any wall or partition should be sealed to prevent transfer of warm moist air into the loft [Based on BS 5250]

### Does the BBA certificate still say no VCL required?

Yes and the existing benefits of Roofshield remain the same.

### Will there be new BBA certificates and APG Literature?

Yes all BBA certificates for roofing underlays will have to be updated to take the new BS 5534 requirements. All of our literature and BBA certificates for Roofshield have been updated to reflect changes in wind uplift requirements.