

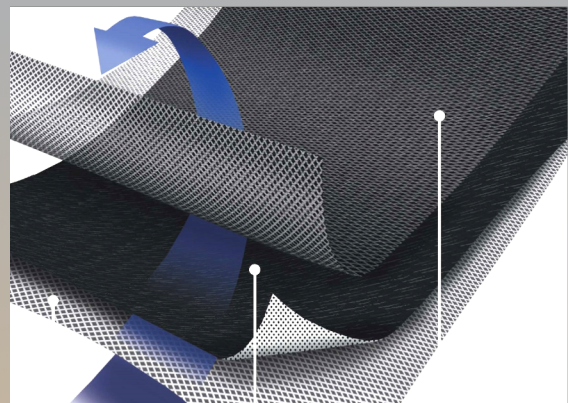


THE BAT FRIENDLY BREATHABLE MEMBRANE

Here at TLX Insulation, we used our knowledge and expertise to create **TLX Batsafe™** - the bat friendly, energy-saving breather membrane.

Bats are a protected species in the UK and play an important role in the ecosystem. Until now when bats are found, only Bitumen 1F felt has been used. This has come at considerable cost to the thermal performance of the roof because 1F felt requires extra rafter space if insulation is used; in old buildings this is often not possible.

Properties with an uninsulated 1F felt roof can release up to **10 tonnes of CO₂ per year**. Replacing 1F felt with a breathable membrane and additional insulation between the rafters **can improve thermal performance by 87%** and reduce **CO₂ emissions by 57%**.



PROTECTIVE
BAT MESH

HIGH PERFORMANCE
BREATHABLE MEMBRANE

PROTECTIVE
BAT MESH

These factors have a large impact on global warming and climate change. **TLX Batsafe™** has passed the Snagging Propensity test for Roofing Membranes developed by university academics, Statutory Nature Conservation Organisations and The Bat Conservation Trust.



We've got the answers... just ask

Applications

- Can be used in warm or cold roof constructions
- Suitable for unsupported and supported applications
- May be laid directly over insulation and insulated sarking board in convection-tight roof designs.

Fixing instructions

- Fit Batsafe™ with the black side uppermost.
- Install Batsafe™ in accordance with the following instructions and with the relevant standards, for example:

BS 5534:2014+A2:2018 Code of Practice for slating and tiling and BS 5250:2011 Code of Practice for the control of condensation in buildings.

- Lap Batsafe™ according to the following minimum overlap requirements in the table below:

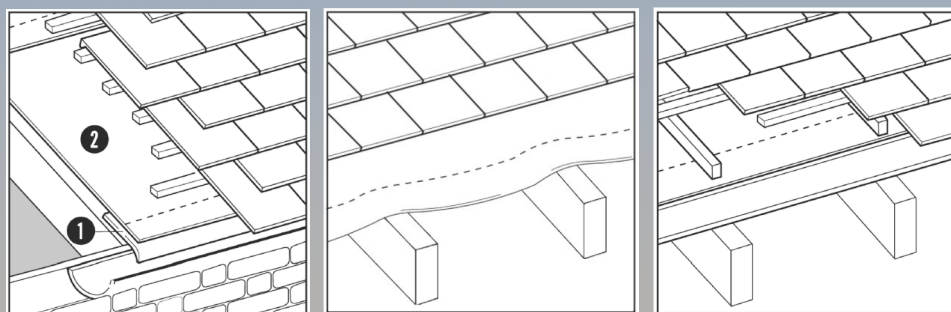
Roof Pitch	Horizontal Lap mm		Vertical Lap mm
	partially supported	fully supported	
12.5°-14°	225	150	100
15°-30°	150	100	100
34°+	100	75	100

Hips mm	150
Valleys mm	300
Standard ridges mm	150 on either side of the apex
Roll - 0.95m - 23.75m ² coverage (8.3kg)	

- At hips Batsafe™ should be lapped over 600mm (min) wide strips of Batsafe™ covering hips.
- At valleys Batsafe or a traditional bitumen 1F felt that does not contain non-woven material such as spunbond should be used underneath the valley lining itself, with the lapping over it under the first tile/slate.

Fitting safely

- TLX Batsafe™ may be slippery, especially in wet weather, so take appropriate safety precautions.
- Take care to avoid being cut by the edge of the mesh, especially when cutting it. Protective gloves are recommended.



- At eaves, use an eaves guard or eaves sheet extending into the gutter then overlap the eaves guard with the first run of Batsafe™, black side uppermost (1).

- Lay Batsafe™ parallel to eaves, starting at the eaves and working up the slope of the roof (2).

- For unsupported applications, allow Batsafe™ to drape slightly (at least 10mm) between the rafters to allow water run-off.

- Where Batsafe™ is installed over a fully supported system, fix counter battens, at least 25mm thick, over the underlay and through to the rafters using corrosion-resistant clout nails.

- Fix tile battens to the counter battens so that there is an uninterrupted air space between the underlay and the roof tiles or slates.

Limitation advice

- Laid directly over insulation, a vapour control layer may be required on the warm side of the insulation. Refer to BS5250: 2011 British Standard Code of Practice for the control of condensation in buildings.
- Do not bring into contact with solvents or undried timber preservatives.
- Avoid excessive use of nails and clamps.
- Do not walk on the membrane. This can cause damage to the product.
- Damaged areas should be covered with a second layer of Batsafe™, sealing around the edges with a proprietary breather membrane tape with thick acrylic adhesive and applying pressure
- Counter-battening is recommended.
- Batsafe™ may be used as a temporary waterproof covering for up to two weeks. However, like all polymer membranes, sunlight will cause gradual deterioration and it is good practice to cover with tiles or slates at the earliest opportunity. In periods of intense sunlight, protect the roof underlay with a temporary cover prior to tiling or slating.