

NEW



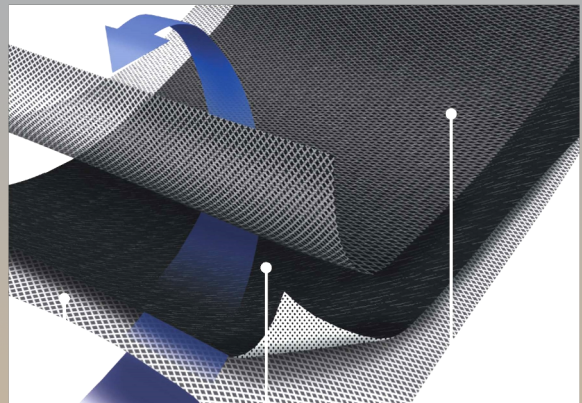
BATSAFE
BREATHER MEMBRANE

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
BREATHER 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 supported and unsupported applications

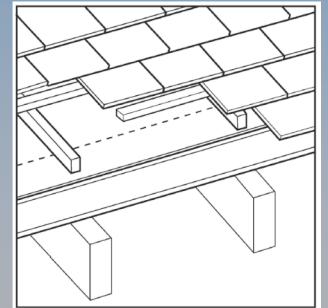
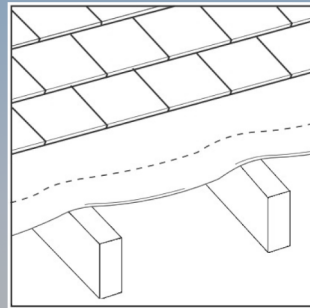
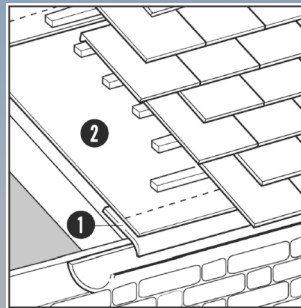
Fixing instructions

- 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
- 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 a conventional breather membrane or protective sheet should be used underneath the valley lining itself; Batsafe should then lap over it, under the first tile



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

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
- 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

BS EN 13859-1 & 13859-2
Version No 2
June 2021

UK
CA

| Essential Characteristics | | Performance |
|--|---------------------|-------------|
| Property | Standard | Measured |
| Resistance to fire | EN 13501-1 | Class E |
| Resistance to water penetration | EN 1928 (A) | W1 |
| Water vapour transmission (S _d) | EN ISO 12572 (C) | 0.018m |
| Tensile strength (MD) | EN 12311-1 | 385 N/50mm |
| Elongation at max force (MD) | EN 12311-1 | 44 % |
| Tensile strength (CD) | EN 12311-1 | 250 N/50mm |
| Elongation at max force (CD) | EN 12311-1 | 56 % |
| Resistance to tearing (MD) | EN 12310-1 | 256 N |
| Resistance to tearing (CD) | EN 12310-1 | 318 N |
| Flexibility at low temperature | EN 1109 | -40°C |
| Artificial ageing by UV and Heat | EN 1296 and EN 1297 | - |
| Resistance to water penetration after ageing | EN 1928 (A) | W1 |
| Tensile Strength after ageing (MD) | | 280 N/50mm |
| Elongation at max force after ageing (MD) | EN 12311-1 | 34 % |
| Tensile strength after ageing (CD) | EN 12311-1 | 185 N/50mm |
| Elongation at max force after ageing (CD) | EN 12311-1 | 50 % |