



GOLD^{2IN1}

INSULATING BREATHER MEMBRANE

THE EASY WAY TO INSULATE ABOVE RAFTERS

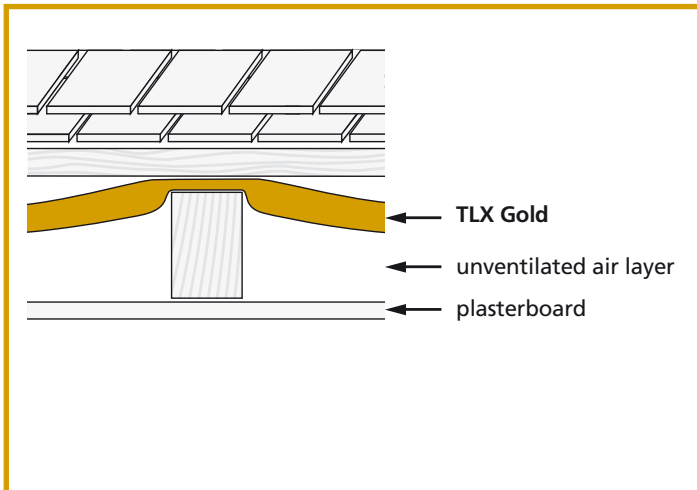
Installation instructions

2 in 1 insulating breather membrane

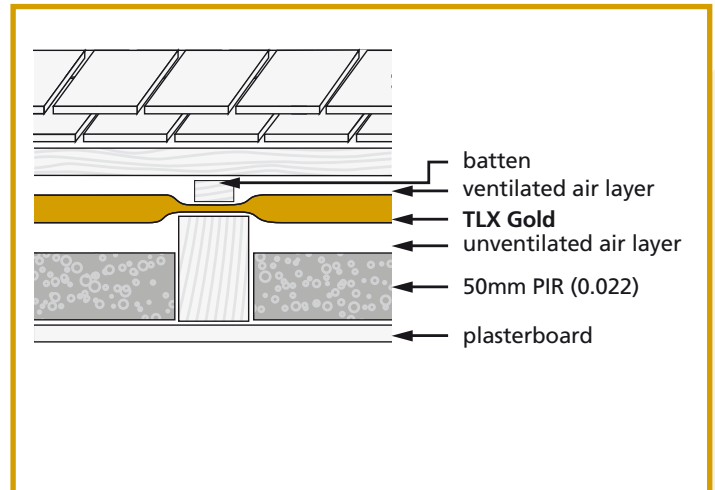


Retrofit roof insulation - warm roof

75mm rafter: U-value = 0.67

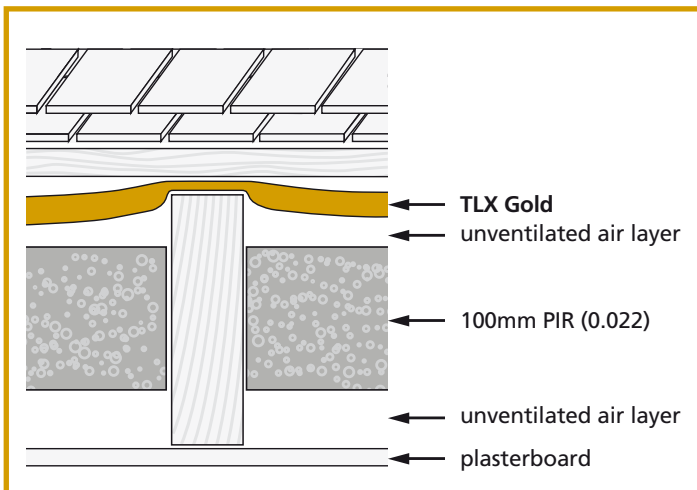


75mm rafter: U-value = 0.34

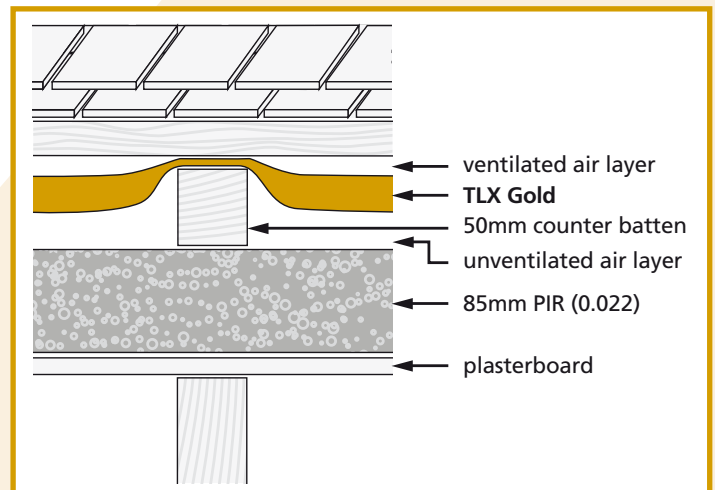


Barn conversion

175mm rafter: U-value = 0.18

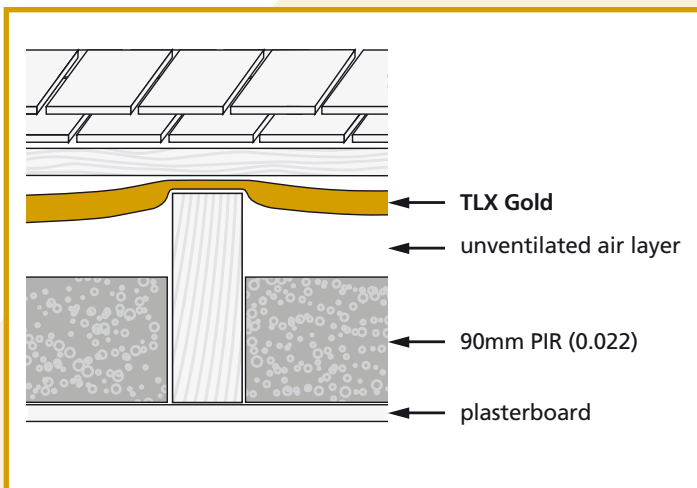


Exposed rafter: U-value = 0.18

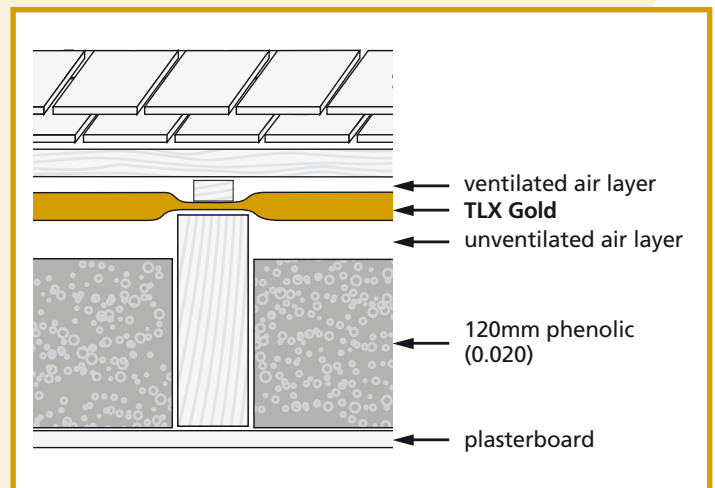


New build roof insulation

150mm rafter: U-value = 0.20

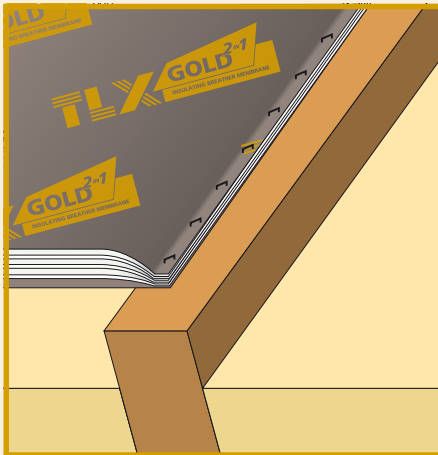


150mm rafter: U-value = 0.17

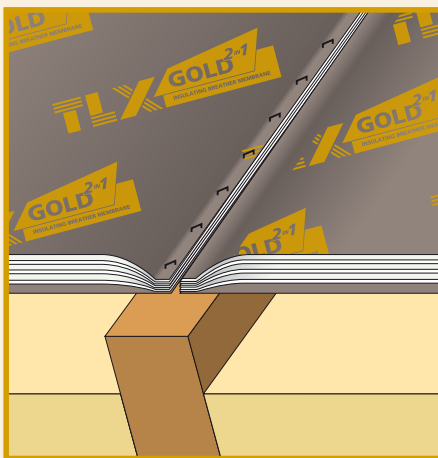


TLX Gold installation details

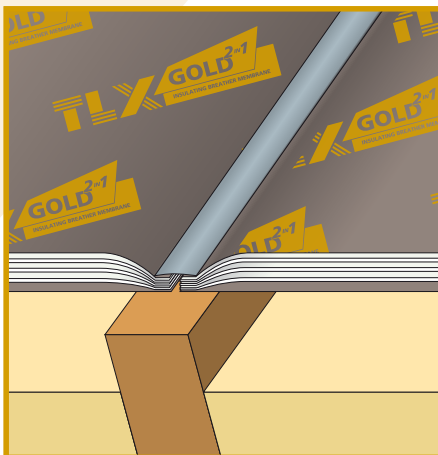
Vertical joint



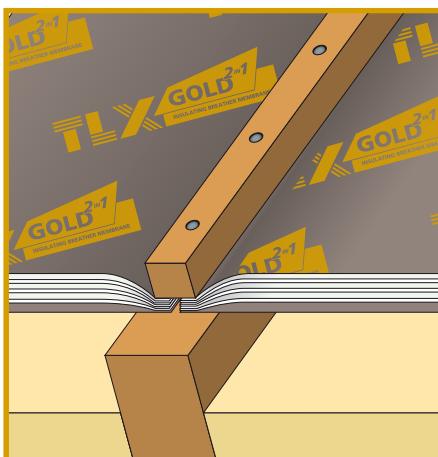
Unroll the TLX Gold across the top of the rafters. At the end of the roll, cut back the TLX Gold so that it ends at the middle of a rafter. Staple the end of the TLX Gold to the rafter.



Butt the end of the next roll of TLX Gold against the end of the first roll. Staple the second roll to the rafter.



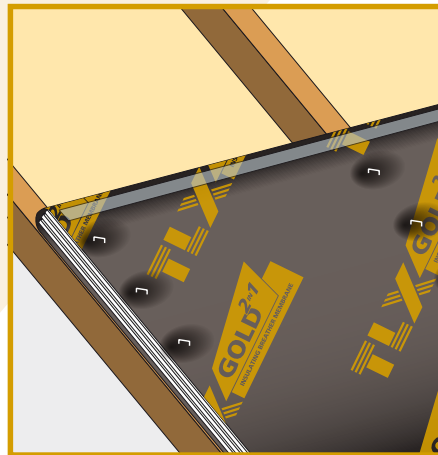
Tape over the overlap and the staples using a 50mm wide waterproof tape.



Nail a 38 x 38mm counter batten along the rafter to cover the tape and hold both pieces of TLX Gold firmly in place.

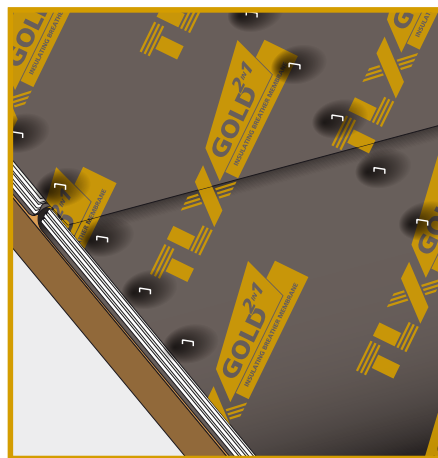
Nail 25mm tiling battens across the counter battens, and fit tiles or slates.

Horizontal joint

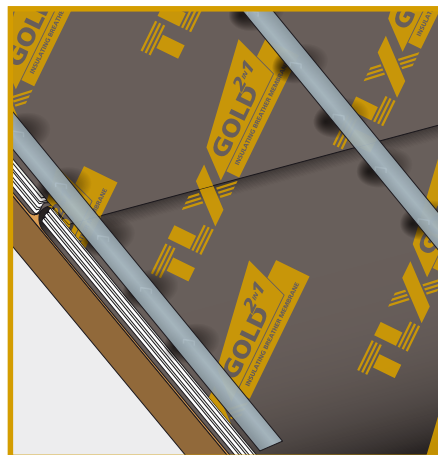


Starting at the bottom of the roof, roll TLX Gold across the rafters, and hold in place with staples.

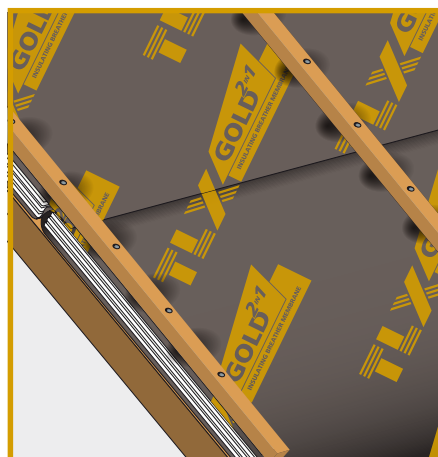
Fit a line of double-sided tape along the top edge of the TLX Gold.



Lay a second roll of TLX Gold above the first roll. The bottom edge should butt closely up against the first roll. Fix the overlap of breather membrane on the top layer of TLX Gold to the double sided tape to create a seal.



Lay a line of single sided tape across the staple holes.

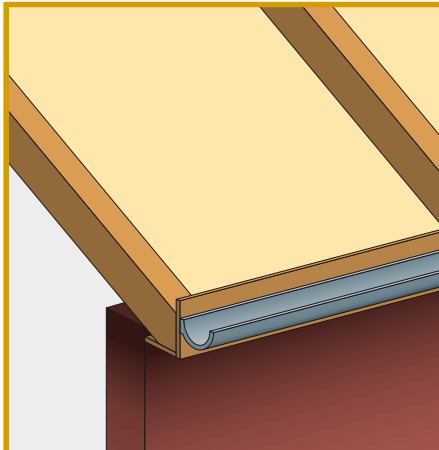


Fit counter battens along the line of the rafters.

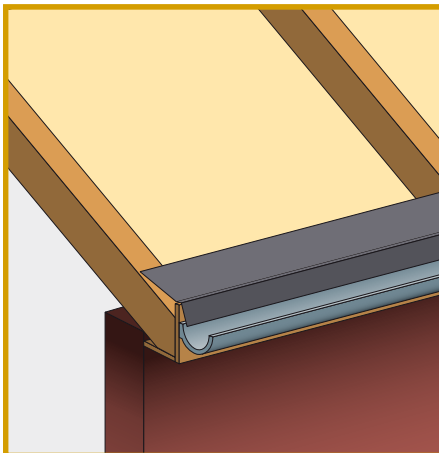
Fit the tile battens across the top of the counter battens.

TLX Gold installation details

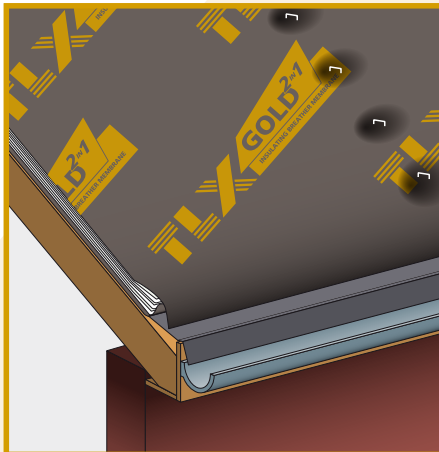
Eaves



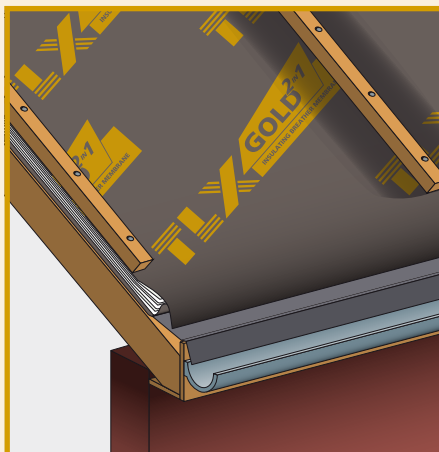
Construct eaves using fascia and soffit boards and fix guttering.



Fit eaves carrier over the end of the rafters so that it runs down into the gutter.



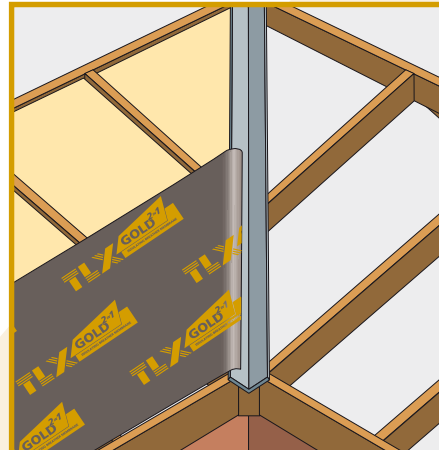
Install TLX Gold above rafters, such that the flange of breathable underlay along the bottom edge of the TLX Gold drapes over the eaves carrier. Staple the TLX Gold to the rafters.



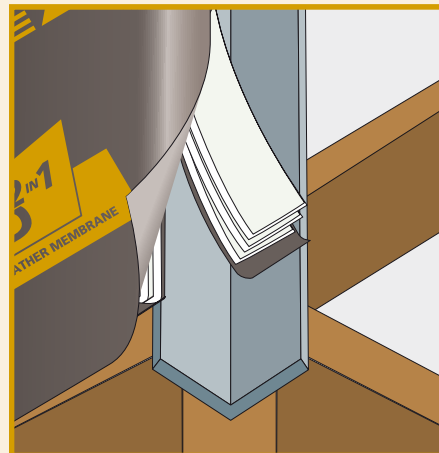
Fix counter battens down the rafters to hold the TLX Gold securely in place. Fit tile battens and tiles.

Fit the tile battens across the top of the counter battens.

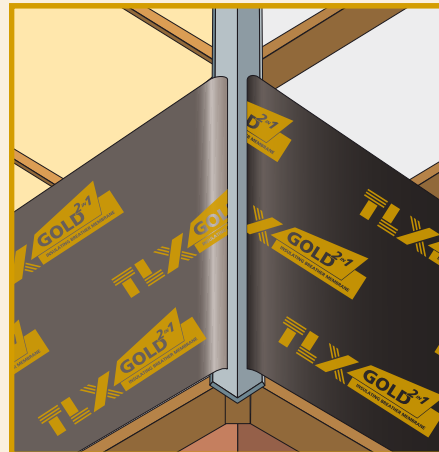
Valley



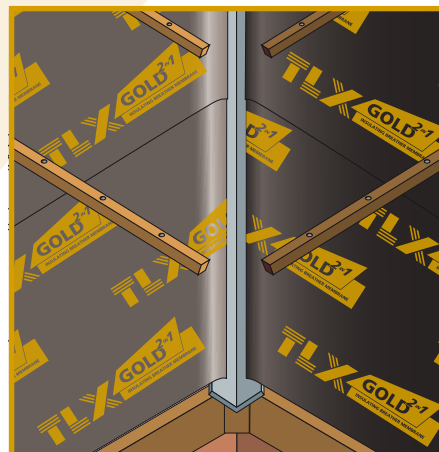
Unroll the TLX Gold across the rafters and into the valley gutter. Cut the TLX Gold along the angle of the valley, leaving it draped into the gutter.



Separate the insulation layers and cut them away to leave the membrane layer only in the valley gutter.



Fit the next layers in the same way.



Nail 38 x 38mm counter battens along the rafters to hold the TLX Gold firmly in place.

Nail 25mm tiling battens across the counter battens, and fit tiles or slates.

TLX Gold measured data

Performance

Emissivity	0.16	EN 16012	
Fire	Class E	EN 11925 - 1	UKAS
Moisture transmission Top breather membrane	0.21 MN.s/g MVTR:975g/m ² .24hr	BS EN 3177	UKAS
Moisture transmission Bottom reflective layer	Sd 0.03m MVTR: 1336 g/m ² .24hr	EN ISO 12572	UKAS
Core R-value	0.95 m ² K/W	EN ISO 8301:1991 (BS EN 12667:2001)	UKAS

Structure

Thickness	33mm	Composite layers	7
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Pack information

Roll width (excluding flap)	1.2m	Roll length	10.0m
Overlap flap	0.1m	Roll weight	11kgs

Minimum thickness of additional insulation with TLX Gold

	Target U-value W/m ² .K		
	0.20	0.18	1.16
Foiled rigid insulation (0.020W/mK)	70mm	90mm	110mm
Glass wool (0.032W/mK)	130mm	150mm	175mm
Glass wool (0.035W/mK)	140mm	165mm	190mm



We've got the answers... just ask

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GENERAL INSTRUCTIONS

- Protective clothing is not required when handling TLX Gold.
- TLX Gold must be installed Gold side facing in.
- Bare electrical wiring must not be allowed in contact with TLX Gold. PVC coated electrical wiring to normal domestic items such as light fittings may come into contact with TLX Gold.
- If electrical cables are surrounded by insulation they may need to be de-rated and guidance should be sought from a qualified electrician.

INSTALLATION - NO COUNTER BATTENING

- The left hand side of TLX Gold is fitted in place with nails or staples of at least 14mm, and the TLX Gold unrolled across the rafters. TLX Gold should hang down between the rafters such that, when tile battened, a clear 10mm deep drap is formed down the TLX Gold at the centre of each rafter space. Staple the TLX Gold every few rafter spaces to hold it in place. The product is installed horizontally either from ridge to eaves or from eaves to ridge.
- Each layer of TLX Gold must butt-join the previous layer, with the membrane overlap running onto the lower layer, thus ensuring that any water runs down the roof slope without penetrating between layers. The drap should be consistent for each layer of TLX Gold.
- A 10mm channel should run above the TLX Gold, up the centre of each rafter space, to allow water to run down and for air movement. If a clear channel is not formed, 10mm spacers underneath the tiling battens may be fitted.
- The membrane overlap on the bottom layer of TLX Gold should extend onto a suitable eaves carrier. Additional breather membrane may be used to cover the gaps between TLX Gold and the eaves carrier if required.
- TLX Gold is permanently held in place by tiling battens and tiles are fitted. The tiling battens should hold the layers of TLX Gold in close contact, if there is any doubt then the overlap may be taped in place with a suitable double sided tape.

INSTALLATION WITH COUNTER BATTENING

- TLX Gold is rolled taut across the rafters in horizontal layers parallel to the eaves. The product can be installed either from ridge to eaves or from eaves to ridge.
- The membrane overlap on the lowest layer of TLX Gold should extend onto a suitable eaves carrier. Additional breather membrane may be used to cover the gaps between TLX Gold and the eaves carrier if required.
- As TLX Gold is unrolled across the rafters it is fixed in place with nails or staples of at least 14mm length. The next layer of TLX Gold must butt-join the previous layer, with the membrane overlap running onto the lower layer, thus ensuring that any water runs down the roof slope without penetrating between layers.
- TLX Gold is permanently held in place with 25mm deep counter battens, then tiling battens and tiles are fitted. The counter battens should hold the layers of TLX Gold in close contact, if there is any doubt

then the overlap may be taped with a suitable double or single sided tape.

CUTTING

- TLX Gold can be cut using a sharp pair of scissors such as 10" carpet fitter scissors.
- Pieces which have been cut should be stapled and battened as soon as possible, and should not be left unsecured overnight.
- Small pieces (such as around Velux windows or in dormer cheeks) should be taped in place, stapled and battened immediately.
- Any small tears or holes should be repaired with tape. Larger holes in the top layer of TLX Gold should be patched with a piece of breathable underlay.

TAPING

- Where TLX Gold requires taping, it is recommended that a good quality duct tape such as Unibond Power, Henkel All Purpose Duck tape or equivalent is used.

AIR LAYERS

- Unventilated air layers form an important part of the TLX Gold system. If the air spaces are omitted, whilst there is no danger of condensation, the overall thermal performance of the structure will decrease, and the U value will be higher. Additional insulation may be needed to achieve the desired U value for the roof.

ADDITIONAL INFORMATION

- Install additional insulation according to the manufacturer's instructions.
- Provide for air gaps between TLX Gold and additional insulation as required.
- It is good practice to cover TLX Gold once installed as soon as possible.

STORAGE

- TLX Gold rolls must be stored on a dry flat surface, protected from the weather and direct sunlight.
- Make sure when installing TLX Gold that it does not come into contact with heat sources above 80°C.

VAPOUR CONTROL AND VENTILATION

- A vapour control layer is not required for any of the recommended solutions, using breathable products prevents trapping of water vapour.
- A well-sealed ceiling, constructed in accordance with BS5250, is essential to prevent large amounts of water vapour from entering the roof space through air movement.
- Ventilation of the space between the TLX Gold and the outer roof covering is not required for air-open coverings such as clay or concrete tiles and rough natural slates. Smooth slates and sealed roof coverings such as metal roofs require additional ventilation of this space.
- If in any doubt about possible harmful condensation, contact Web Dynamics Ltd for guidance.

ACCESSORIES

- For information on suitable tapes, cutters and spacers please refer to www.webdynamics.co.uk or phone the thermal hotline 01204 674 730 for advice.