



GOLD^{2_{IN}1}

INSULATING BREATHER MEMBRANE

THE EASY WAY TO INSULATE ABOVE RAFTERS

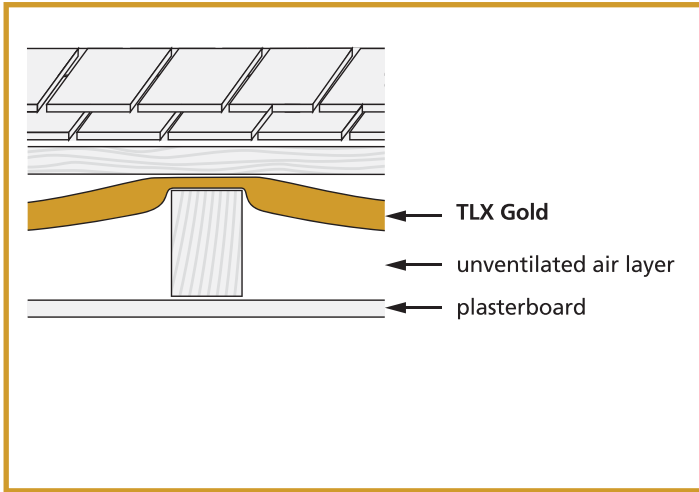
Installation instructions

2 in 1 insulating breather membrane

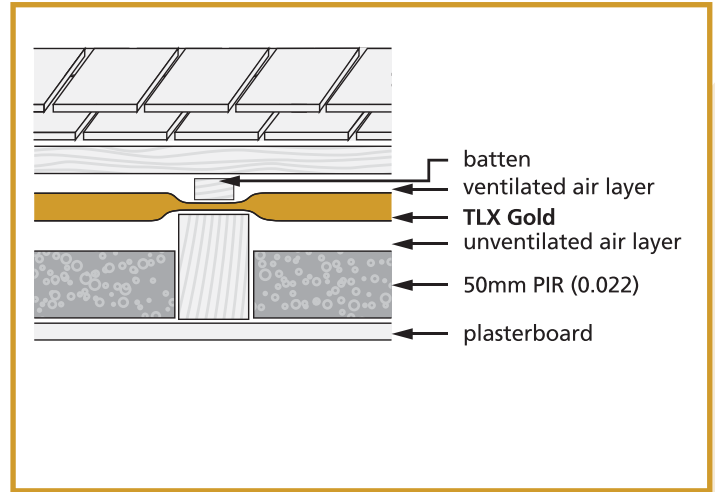


Retrofit roof insulation - warm roof

75mm rafter: U-value = 0.69

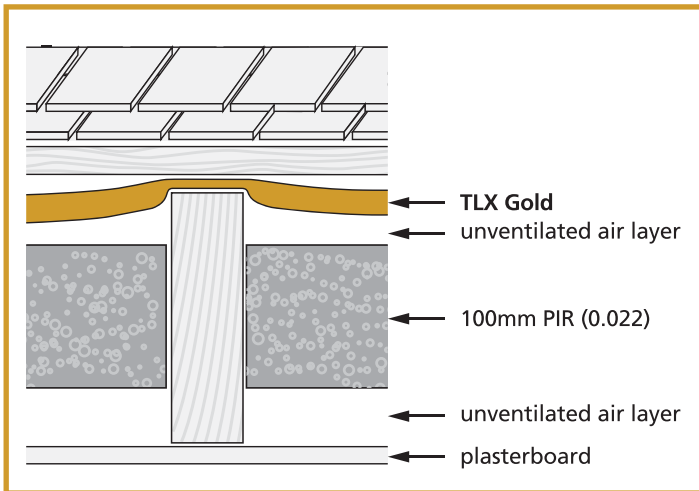


75mm rafter: U-value = 0.34

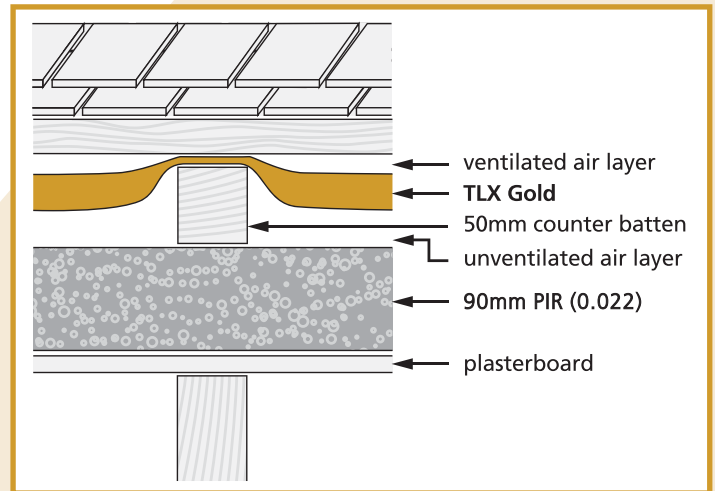


Barn conversion

175mm rafter: U-value = 0.19

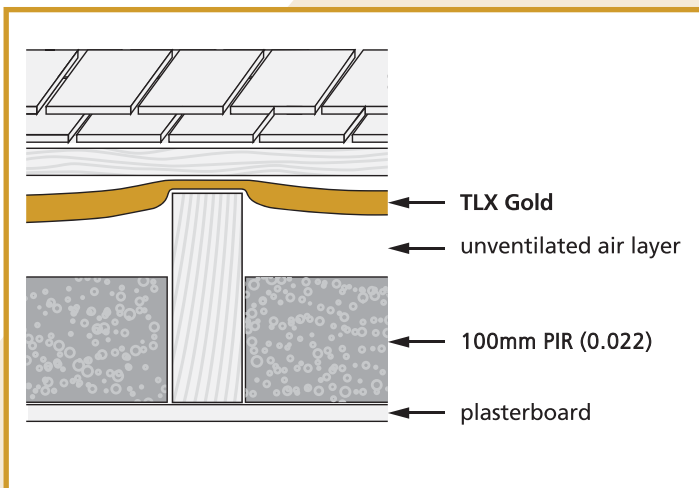


Exposed rafter: U-value = 0.18

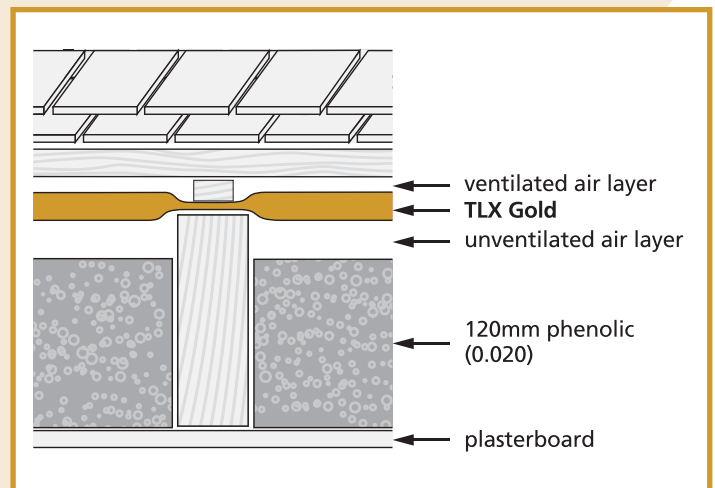


New build roof insulation (rafters are @ 600mm centres)

150mm rafter: U-value = 0.20



150mm rafter: U-value = 0.17



TLX Gold measured data

Performance

Emissivity	0.16		
Fire	Class E	EN 11925 - 1	UKAS
Moisture transmission Top breather membrane	0.21 MN s/g MVTR:975 g/m ² 24hr	BS EN 3177	UKAS
Moisture transmission Bottom reflective layer	S _d 0.03m MVTR: 1336 g/m ² 24hr	EN ISO 12572	UKAS
Core R-value	0.85 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	0.16
Foiled rigid insulation (0.020W/mK)	95mm	110mm	130mm
Glass wool (0.032W/mK)	130mm	150mm	175mm
Glass wool (0.035W/mK)	140mm	160mm	190mm



**THERMAL
HOTLINE**

01204 674730

We've got the answers... just ask

TLX Insulation Ltd
Moss Lane, Station Road
Blackrod, Lancs BL6 5JB
Telephone: +44 (0)1204 695666
Fax: +44 (0)1204 695333
www.tlxinsulation.co.uk

www.tlxgold.co.uk

GENERAL INSTRUCTIONS

- These installation instructions assume uniform rafter centres of 400mm or 600mm and that any battening applied to the roof is of a suitable size to avoid movement or rocking of the battens over the top of the TLX Gold. If these assumptions do not apply, the TLX Hotline (01204 674730) should be contacted for advice.
- Protective clothing is not required when handling TLX Gold.
- TLX Gold must be installed with the Gold side facing into the building.
- 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 an electrician.

INSTALLATION - NO COUNTER BATTENING

- TLX Gold may be fitted without a counter batten when there is at least a 50mm void available at the top of the rafters for the product to drape into. If there is less than 50mm of space available the product will need to be fitted taut with a 38mm counter batten.
- The right hand side of TLX Gold is fitted in place with nails or staples of at least 20mm. TLX Gold is then unrolled across the rafters. The TLX Gold should sag between each rafter centre, so that when the tiling battens are fitted there is a clear 10mm channel formed between the underside of the tile batten and the TLX Gold to allow for water runoff and air movement.
- Side laps at the end of runs are created by separating the breather membrane layer from the rest of the product. The insulation layers are then cut back to the last rafter that the material has crossed. A new roll is then laid from where the cut back material ends. The created membrane flap then laps onto the new roll and is sealed with a suitable tape to create a watertight finish.
- 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 the layers. The overlap is then sealed by removing the release paper from the integral tape on the TLX Gold and bringing the lap in contact with the lower layer. The drape should be consistent for each layer of TLX Gold.
- A 10mm draped 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 or a length of 10mm diameter pipe may be fitted to introduce a drape.
- The membrane overlap on the bottom layer of the TLX Gold should extend onto a suitable eaves protection system. The TLX Gold should be sealed to the eaves protection system to avoid introducing air movement below the TLX Gold.
- TLX Gold is permanently held in place by tiling battens and tiles are fitted in accordance with BS 5534. If there is any doubt about the water tightness at the fixing point butyl tape or a bead of bitumen adhesive may be applied to give an improved seal.

INSTALLATION WITH COUNTER BATTENING

- The right hand side of TLX Gold is fitted in place with nails or staples of at least 20mm. TLX Gold is then unrolled tightly across the rafters parallel to the eaves.
- Side laps at the end of runs are created by separating the breather membrane layer from the rest of the product. The insulation layers are then cut back to the last rafter that the material has crossed. A new roll is then laid from where the cut material ends. The created membrane flap then laps onto the new roll and is sealed with a suitable tape to create a watertight finish.
- 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 the layers. The overlap is then sealed by removing the release paper from the integral tape on the TLX Gold and bring the lap in contact with the lower layer.

- The membrane overlap on the bottom layer of the TLX Gold should extend onto a suitable eaves protection system. The TLX Gold should be sealed to the eaves protection system to avoid introducing air movement below the TLX Gold.
- TLX Gold is permanently held in place with 38mm deep counter batten, then tiling battens and tiles are fitted in accordance with BS 5534. If there is any doubt about the water tightness at the fixing point butyl tape or a bead of bitumen adhesive may be applied to give an improved seal.

CUTTING

- TLX Gold can be cut using a sharp pair of scissors such as 10" carpet fitter scissors. TLX recommend Kretzer Finny 74525.
- Pieces that have been cut should be sealed, stapled and battened as soon as possible and should not be left unsecured overnight.
- Up stands (such as dormers, abutments and dormer cheeks) should have the membrane separated from the insulation layers so as to create an up stand of membrane that provides a watertight finish. This up stand should be stapled, taped and battened immediately.
- Any small tears or holes should be patched with tape. Larger holes should be patched with a piece of breathable underlay.

TAPING

- TLX Gold is supplied with an integral tape across the top length of the roll to seal the horizontal overlaps.
- Side laps of the material should be sealed using a high tack acrylic adhesive such as Gawler Airtight tape.

AIR LAYERS

- Unventilated air layers form an important part of the TLX Gold insulation system. If the air spaces are omitted the overall thermal performance will be significantly reduced.

EXPOSURE

- The membrane layer of TLX Gold should be watertight for up to 2 months exposure, but the product should be covered as soon as possible by the roof covering.

ADDITIONAL INFORMATION

- Install additional insulation according to the manufacturer's instructions.
- Provide air gaps between TLX Gold and additional insulation as required.

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 80C. Penetrations for heat sources above this temperature should be in compliance with Approved Document J of the Building Regulations.

VAPOUR CONTROL AND VENTILATION

- A vapour control layer is not required for any of the recommended solutions. For some bespoke solutions it may be necessary to include one.
- A well-sealed ceiling in line with BS 5250, 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 roof coverings such as clay or concrete tiles and rough natural slates. Smooth slates and sealed roof systems such as metal roofs will require additional ventilation of this space. If there is any concern about the classification of the covering, advice should be sought from the manufacturer.
- If in any doubt about harmful condensation, contact TLX Insulation for guidance.

TLX Hotline (01204 674730)