SuperQuilt

Multi-layer Insulation Blanket for Roofs

Thermal Insulation in a 40mm thin, flexible, multi-layer membrane

- Meets requirements of L1A, L1B 2010
- In accordance with BR443
- NHBC Acceptance
- Pitched roof insulation
- Full Agrément certification
- Thermally tested in accordance with EN16012
- High thermal resistance of 2.50m²K/W
- Class E Fire Resistance
- Ideal for New build & Refurbishment
- Effective solar over-heating barrier
- Lightweight, flexible & 40mm thin
- Fast and simple installation
- Vapour control layer

Thermally the best performing multi-foil on the market by far.

registered LABC | BDA KEUR | kiwa | Warrington Fire research | Scottish Type Approval Scheme

YBS Insulation

HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY

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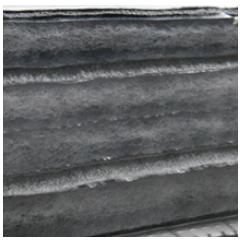
Thermally the best performing multi-foil on the market by far.

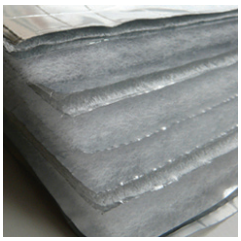
Unique Technology

Our unique patented technology allows the material to expand where necesary, increasing overall thermal performance.



19 Layers

19 layers of material including Reflective Foil, Expanded Poly-ethylene & Polyester Wadding.



Thermally the best performing

Thermally the best performing multi-foil on the market by far.

SuperQuilt is Equivalent to 200mm of Glass Wool in a two layer Roof Application

Under Rafter Application
(See page 3)

Over Rafter Application
(See Page 4)

Two Layer Application
(See Page 5)

Insulation for use in Roofs

Benefits

- **NHBC Acceptance**
- **Meets requirements of L1A and L1B 2010 addition**
- **In accordance with BR443**
- **Fully certificated**
- **Thermally tested in accordance with EN16012**
- **High thermal resistance of 2.50m²K/W**
- **Effective solar over-heating barrier**
- **Effective in summer and winter**
- **Lightweight, thin & flexible**
- **Fast and simple installation**
- **Tear Resistant**
- **For pitched roofs between 20° and 70°**

SuperQuilt is a very flexible, easy to fit, multilayer insulation thermally tested in accordance with EN16012 achieving a high thermal resistance of 2.50m²K/W for SuperQuilt accompanied by a 25mm air cavity either side of the material.

How does SuperQuilt Work?

Due to the special composition of multi-layers of insulation, SuperQuilt effectively deals with all forms of energy transfer (i.e. conduction, convection and radiation). SuperQuilt works most effectively by reflecting infra-red radiation. This means that not only is SuperQuilt effective in winter by reflecting heat back into the building and cold out, but also in summer, SuperQuilt is a very effective solar over-heating barrier reducing the need for artificial cooling systems, preventing uncomfortable build up of heat in the building.

General Fixing Instructions

Installation of SuperQuilt for pitched roof applications and additional insulation products should be in accordance with the manufacturers certificate, fixing instructions and current good building practice.

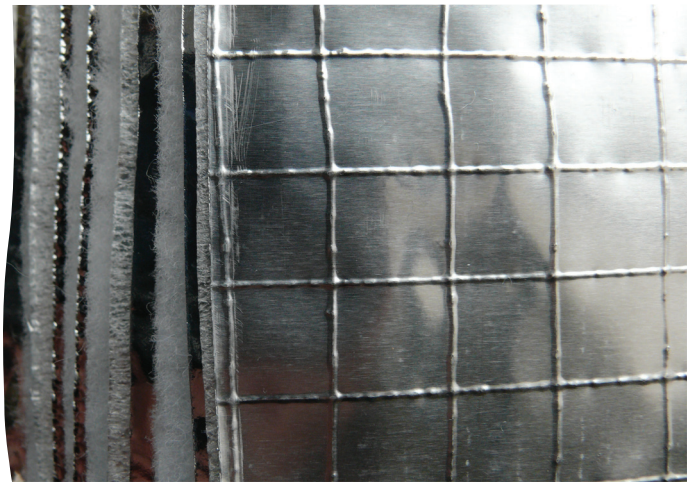
SuperQuilt must be installed with a 50mm overlap with all joints taped with YBS 75mm foil tape.

SuperQuilt can be cut with a YBS SuperQuilt cutter, craft knife or a sharp pair of scissors.

SuperQuilt can be easily fixed with staples at regular intervals. Minimum 14mm stainless steel or galvanised staples are recommended.

SuperQuilt is most effective with a minimum 25mm air gap on either side. Battens can be used to create this gap.

No protective clothing/handling required.



Under Rafter Application

Fixing Instructions

Installation of SuperQuilt for under rafter applications and additional insulation products should be in accordance with the manufacturers certificate, fixing instructions and current good building practice.

SuperQuilt is applied directly from the roll either vertically or horizontally depending on the rafter height, pulled tight and stapled onto the rafters at minimum 300mm centres.

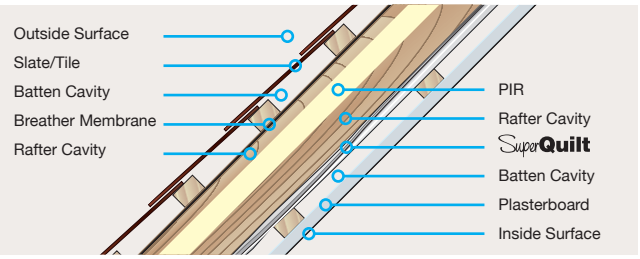
SuperQuilt should be overlapped at each joint by approx. 50mm and stapled onto the rafters, the joints should be sealed using YBS Foil Tape. Additionally, at the eaves SuperQuilt is cut around the rafters and sealed to the Cavity wall insulation or wall plate.

Fix 25mm by 38mm battens at right angel to rafters. Battens must always be fixed around the perimeter of windows.

The plasterboard is fixed over the SuperQuilt and onto the battens in the usual manner.

See installation video at www.ybsinsulation.com

U-Value Combined Method (W/m²K)			0.18
	Thickness (mm)	Conductivity (W/mK)	Resistance (m²K/W)
Outside Surface	-	-	0.040
Slate/Tile	10.00	-	-
Batten Cavity	25.00	-	-
Breather Membrane	-	-	-
Rafter Cavity	30.00	-	0.340
PIR	70.00	0.022	3.182
Rafter Cavity	25.00	-	0.490
SuperQuilt	14.00	-	1.520
Batten Cavity	25.00	-	0.490
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.100
Total Resistance			6.292



U-Value table

All calculations are based on 50mm rafters and include the effect of cold bridging. For individual calculation please contact the technical team on 0871 917 0044

Description (rafters at 400mm centres)	U-Value
SuperQuilt and 75mm PIR (0.022 W/mk)	0.18 W/m²k
SuperQuilt and 130mm Glasswool (0.040 W/mK)	0.18 W/m²k
SuperQuilt and 110mm PIR (0.022 W/mk)	0.15 W/m²k
SuperQuilt and 180mm Glasswool (0.040 W/mK)	0.15 W/m²k
Description (rafters at 600mm centres)	**U-Value**
SuperQuilt and 70mm PIR (0.022 W/mk)	0.18 W/m²k
SuperQuilt and 120mm Glasswool (0.040 W/mK)	0.18 W/m²k
SuperQuilt and 95mm PIR (0.022 W/mk)	0.15 W/m²k
SuperQuilt and 165mm Glasswool (0.040 W/mK)	0.15 W/m²k

Over Rafter Application

Fixing Instructions

Installation of SuperQuilt for over rafter applications and additional insulation products should be in accordance with the manufacturers certificate, fixing instructions and current good building practice.

SuperQuilt is applied directly from the roll either vertically or horizontally depending on the rafter height, pulled tight and stapled onto the rafters at minimum 300mm centres.

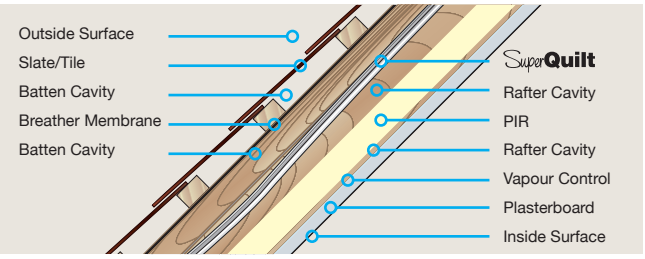
SuperQuilt should be overlapped at each joint by approx. 50mm and stapled onto the rafters, the joints should be sealed using YBS Foil Tape. Additionally, at the eaves SuperQuilt is cut around the rafters and sealed to the Cavity wall insulation or wall plate.

Parallel battens, recommended 38mm by 50mm are fixed to the rafters. Battens must always be fixed around the perimeter of windows.

A breather membrane is fitted in accordance with the manufacturers fixing details above the battens before tile battens and tiles. A vapour control layer should be fitted behind plasterboard to prevent any risk of interstitial condensation.

See installation video at www.ybsinsulation.com

U-Value Combined Method (W/m²K)			0.18
	Thickness (mm)	Conductivity (W/mK)	Resistance (m²K/W)
Outside Surface	-	-	0.040
Slate/Tile	10.00	-	-
Batten Cavity	25.00	-	-
Breather Membrane	-	-	-
Batten Cavity	38.00	-	0.490
SuperQuilt	14.00	-	1.520
Rafter Cavity	25.00	-	0.490
PIR	70.00	0.022	3.182
Rafter Cavity	40.00	-	0.340
Vapour Control	-	-	-
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.100
Total Resistance			6.292



Calculated to include timber bridging

U-Value table

All calculations are based on 50mm rafters and include the effect of cold bridging. For individual calculation please contact the technical team on 0871 917 0044

Description (rafters at 400mm centres)	U-Value
SuperQuilt and 80mm PIR (0.022 W/mk)	0.18 W/m²k
SuperQuilt and 135mm Glasswool (0.040 W/mK)	0.18 W/m²k
SuperQuilt and 115mm PIR (0.022 W/mk)	0.15 W/m²k
SuperQuilt and 185mm Glasswool (0.040 W/mK)	0.15 W/m²k
Description (rafters at 600mm centres)	**U-Value**
SuperQuilt and 70mm PIR (0.022 W/mk)	0.18 W/m²k
SuperQuilt and 125mm Glasswool (0.040 W/mK)	0.18 W/m²k
SuperQuilt and 100mm PIR (0.022 W/mk)	0.15 W/m²k
SuperQuilt and 170mm Glasswool (0.040 W/mK)	0.15 W/m²k

Two Layer Application

Fixing Instructions

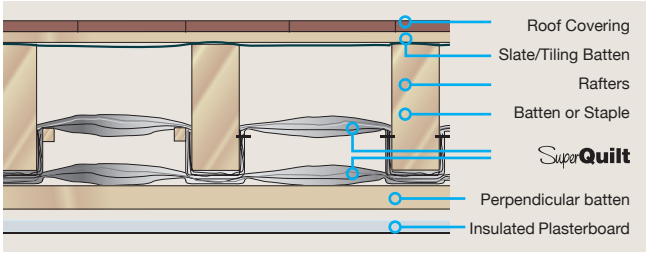
Installation of SuperQuilt for under rafter applications and additional insulation products should be in accordance with the manufacturers certificate, fixing instructions and current good building practice.

For recessed installation please see page 6.

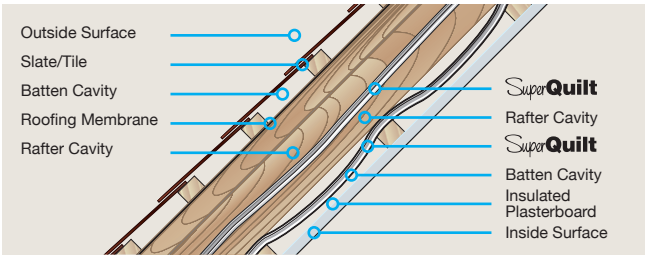
For under rafter installation please see page 3 fixing instructions.

When installing two layers of SuperQuilt a 38mm air space should be maintained between layers at all times.

See installation video at www.ybsinsulation.com



U-Value Combined Method (W/m²K)			0.18
	Thickness (mm)	Conductivity (W/mK)	Resistance (m²K/W)
Outside Surface	-	-	0.040
Slate/Tile	10.00	-	-
Batten Cavity	25.00	-	-
Roofing Membrane	-	-	-
Rafter Cavity	38.00	-	0.490
SuperQuilt	14.00	-	1.520
Rafter Cavity	38.00	-	0.490
SuperQuilt	14.00	-	1.520
Batten Cavity	25.00	-	0.490
Insulated Plasterboard	27.00	-	0.630
Inside Surface	-	-	0.100
Total Resistance			5.784



Calculated to include timber bridging

U-Value table

All calculations are based on 50mm rafters and include the effect of cold bridging. For individual calculation please contact the technical team on 0871 917 0044

Description (rafters at 400mm centres)	U-Value
SuperQuilt (2 Layers) with 40mm insulated Plasterboard (XPS) (1.070 m²K/W)	0.18 W/m²k
SuperQuilt (2 Layers) and 50mm PIR (0.022 W/mK)	0.15 W/m²k
SuperQuilt (2 Layers) and 85mm Glasswool (0.044 W/mk)	0.15 W/m²k
SuperQuilt (2 Layers) and 57.5mm Insulated Plasterboard (PIR) (2.2 m²K/W)	0.15 W/m²k
Description (rafters at 600mm centres)	**U-Value**
SuperQuilt (2 Layers) with 40mm insulated Plasterboard (XPS) (1.070 m²K/W)	0.18 W/m²k
SuperQuilt (2 Layers) and 45mm PIR (0.022 W/mK)	0.15 W/m²k
SuperQuilt (2 Layers) and 75mm Glasswool (0.044 W/mk)	0.15 W/m²k
SuperQuilt (2 Layers) and 57.5mm Insulated Plasterboard (PIR) (2.2 m²K/W)	0.15 W/m²k

Recessed Detail

Over Rafter Application

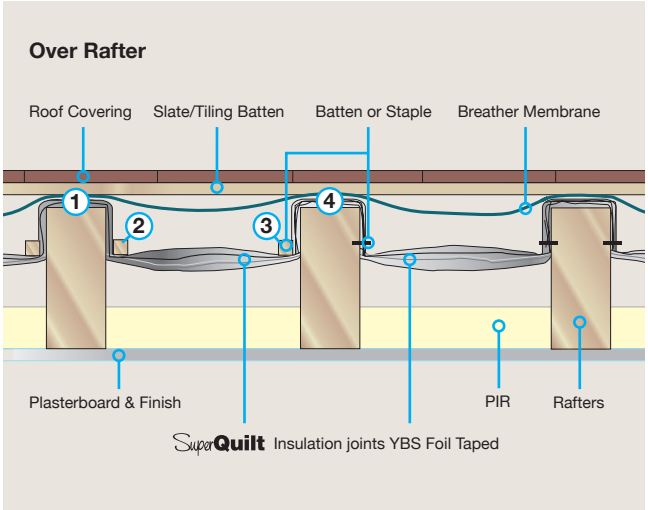
Where roof height is critical SuperQuilt can be recessed between the rafters.

1. SuperQuilt is stapled to the top of the first rafter.
2. SuperQuilt is recessed into the rafter void and fixed with staples or with battens.
3. The material is then fixed to opposite rafter as per instruction 2.
4. SuperQuilt is then wrapped around the rafter and the procedure starts again.

Once all the SuperQuilt is fitted, all joints should be taped using YBS Foil Tape.

A breather membrane is then fitted in accordance with the manufacturers fitting instructions.

Tile batten and tiles can then be fitted.



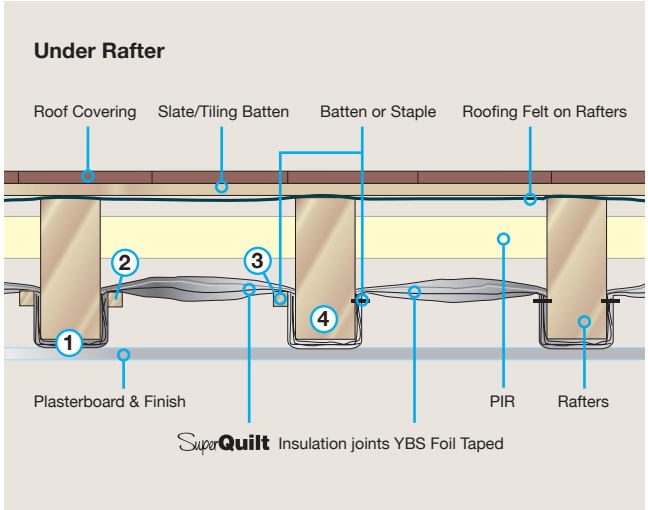
Under Rafter Application

Ensure that there is an airspace above the SuperQuilt at all times.

1. SuperQuilt is stapled to the underside of the first rafter.
2. SuperQuilt is recessed into the rafter void and fixed with staples or with battens.
3. The material is then fixed to opposite rafter as per instruction 2.
4. SuperQuilt is then wrapped around the rafter and the procedure starts again.

Once all the SuperQuilt is fitted, all joints should be taped using YBS Foil tape.

Plasterboard can then be fixed directly to the underside of the rafters below the SuperQuilt.



Purlins Details

Between Purlins Application

SuperQuilt is fixed horizontally or vertically and stapled to the underside of the the rafters.

At the purlins the SuperQuilt is turned up at stapled in place.

Perpendicular Battens are fixed through the SuperQuilt into the rafters, at the purlins the battens are fixed into the rafters crushing the SuperQuilt tightly against the purlins.

Plasterboard can then be fixed to the battens.

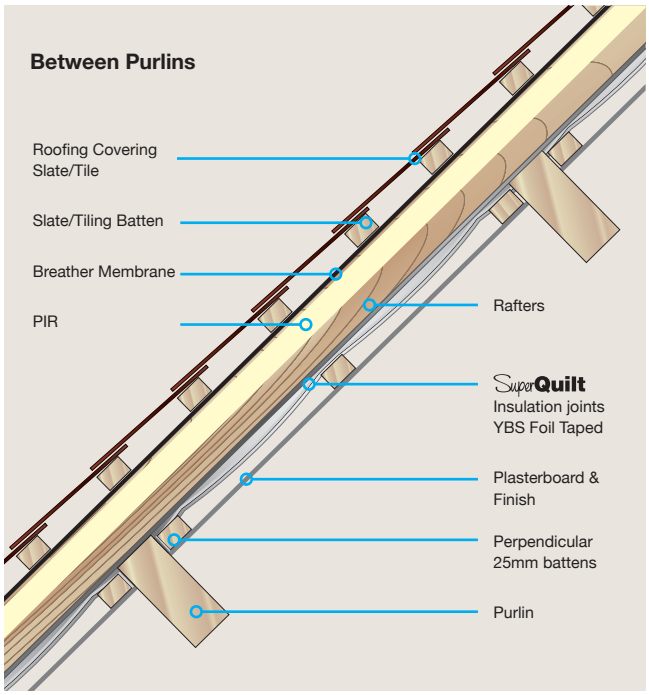
Around Purlins Application

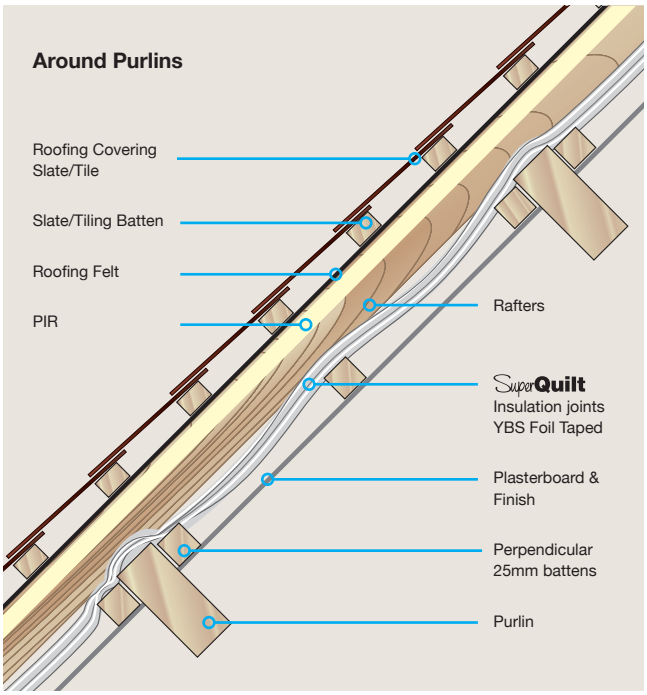
SuperQuilt is fixed horizontally or vertically and stapled to the underside of the the rafters.

At the purlins the SuperQuilt is cut and pushed behind the purlins then taped to the next piece at the opposite side of the purlin.

Perpendicular Battens are fixed through the SuperQuilt into the rafters.

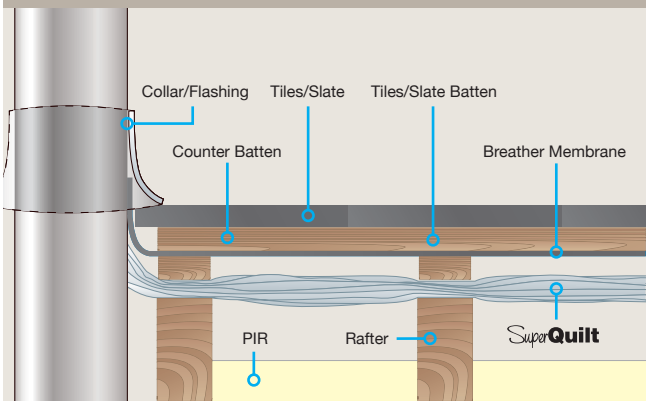
Plasterboard can then be fixed to the battens.



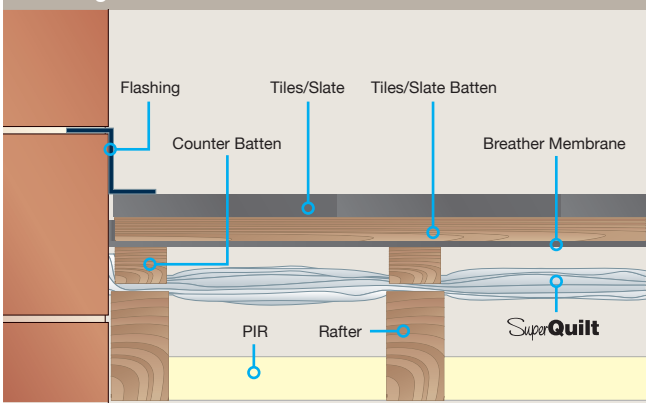


Detailing

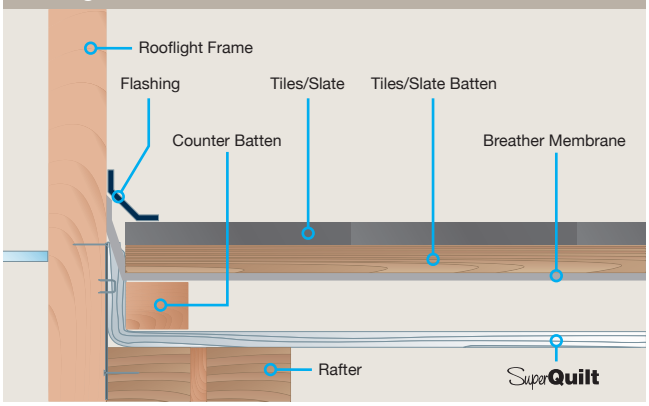
Vents / Light Pipes



Flashing



Rooflight



Fixing Instructions

SuperQuilt is fixed above rafters as per fixing details and turned up at the vent/wall/rooflight and sealed with YBS Foil Tape. Battens are placed on the rafters above the Super-Quilt. A breather membrane is fixed above the battens and finished by turning up at the vent/wall/rooflight and sealing to the vent/wall/rooflight. Tile battens are fixed in place. The flashing/collar for the vent/wall/rooflight is fitted above the tile battens and then tiles.

Over Rafter Fixing Details

SuperQuilt is stapled to the rafters. At the eaves the Super-Quilt is cut and taken down between the rafters to the cavity wall insulation or the wall plate. The SuperQuilt needs to be sealed with staples and taped to the rafters and the cavity wall insulation or wall plate to create an airtight envelope.

Under Rafter Fixing Details

SuperQuilt is stapled to the underside of the rafters. At the eaves the SuperQuilt is cut and taken down between the joists to the cavity wall insulation or the wall plate. The mate-rial needs to be sealed with staples and taped to the joists and the cavity wall insulation or wall plate to create an airtight envelope.

Foil taped joins

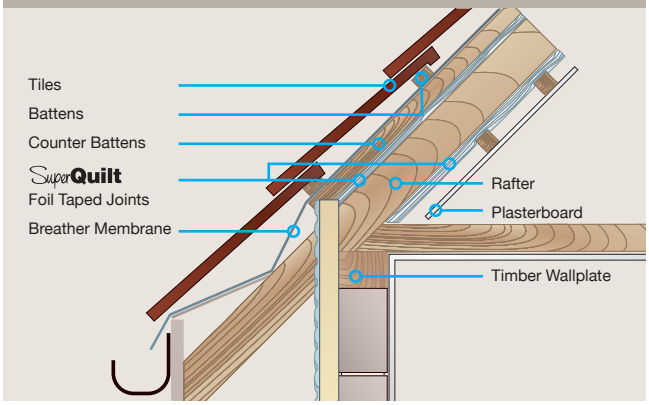
SuperQuilt should be overlapped at each joint by approx. 50mm and stapled onto the battens, the joints should be sealed using YBS 75mm Foil Tape.

Vapour control layer

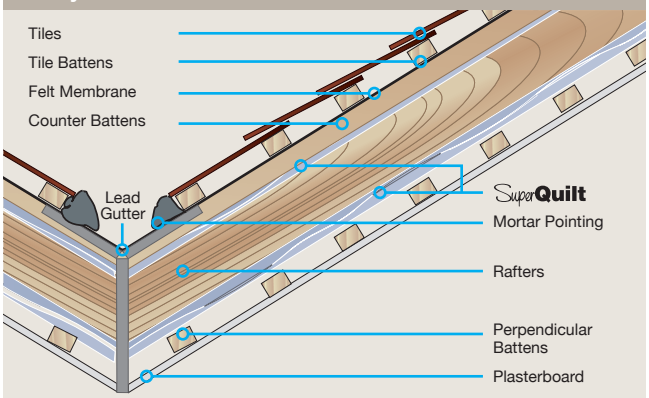
When all joints are sealed using foil tape
SuperQuilt also works as a vapour control layer.

- SuperQuilt knife available
- YBS Foil joining tape available

Eaves

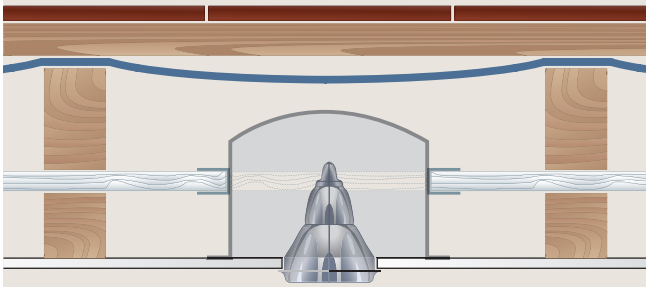


Valleys



Downlighters

YBS recommend fire hoods are used with all sunken lights.



A circular hole is cut in the SuperQuilt to create a minimum 25mm clearance from the downlighter. The cut edge must be completely sealed using YBS Foil Tape.

BDA Agrément Nr. BAR 12-454/01

CAD Drawings
Can now be downloaded
from www.ybsinsulation.com

Technical Properties

Product Description		
19 Components		
Thickness	40mm approx.	
Weight	800g/m²	
Mechanical Properties	Value	Reference Standard
Thermal performance		
Core	1.52m²K/W	BS EN 16012
Core +Airspaces	2.50m²K/W	BS EN 6946
Flammability	Class E	BS EN 13501-1
Water vapour resistance	1569MNs/g	BS EN 12572
Emission coefficients of surfaces	0.02	BS EN 16012
Tensile strength	142KPA	BS EN 1608
Packaging	**15m²**	**7.5m²**
Width	1.5m	1.5m
Length	10m	5m
Weight	13.5Kg	6.75Kg

YBS Insulation
HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY

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