

YBS Insulation

HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY

SuperQuilt

Multi-layer Insulation Blanket for *walls*
Thermal Insulation in a thin, flexible, multi-layer membrane



- Fully certificated
- Hot box tested
- Meets requirements of BR443
- High thermal resistance of 2.44m²K/W
- Class 1 Surface spread of flame
- Ideal for New build & Refurbishment
- Effective solar over heating barrier
- Effective in summer and winter
- Lightweight, thin & flexible
- Fast and simple installation



BDA Agrément Nr.
BAW 09-341 • BAW 09-342
BAW 09-343

Warrington
FIRE
research

167855

www.ybsinsulation.com

INSULATION FOR USE IN WALLS

Benefits

- Fully certificated
- High thermal resistance of 2.44m²K/W
- Effective solar over heating barrier
- Effective in summer and winter
- Lightweight, thin & flexible
- Fast and simple installation

SuperQuilt is a very flexible, easy to fit, multilayer insulation that offers tremendous thermal benefits. Hot box testing confirms high thermal resistance of 2.44m²K/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 Super-Quilt is a very effective solar over heating barrier reducing the need for Artificial cooling systems, preventing uncomfortable heat build up in the building.

General Fixing Instructions

Installation of SuperQuilt for Timber Frame and Masonry Wall Applications and additional insulation products should be in accordance with the Certificate, YBS fixing instructions and current good building practice.

When the SuperQuilt is cut to fit around openings, care should be taken to minimise gaps. SuperQuilt can be cut easily using sharp scissors or a knife.

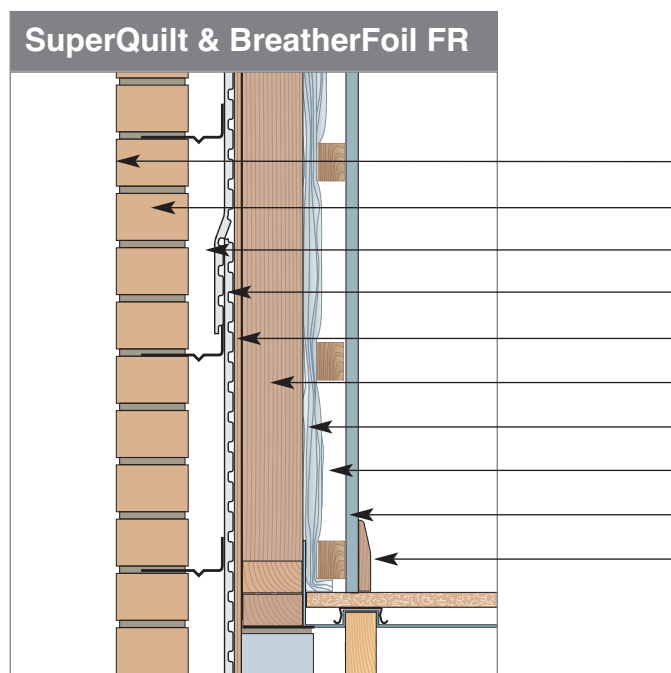
The surfaces of the masonry wall should be sound and free from loose material; large projections should be removed and holes filled and levelled. A survey of the wall may be required to establish the extent of any packing that may be required to ensure a uniform plane for the materials to be fixed.

Bearing surfaces for timber battens should comply with BS 8212 : 1995. The depth of timber battens will determine the air space achieved on either side of the SuperQuilt, YBS recommend 25mm battens.

All joints and perforations in the products must be securely sealed with YBS Foil Tape

Services may be accommodated within the void created by the dry lining system.

Timber Frame



U-Value Combined Method (W/m ² K)			0.27
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.060
Brick, External	102.50	0.770	0.133
Cavity	50.00	-	0.665
BreatherFoil FR	4.00	-	0.125
Sheathing Board	9.50	0.140	0.068
Stud Cavity	89.00	-	2.440
SuperQuilt	40.00		
Batten Cavity	25.00		
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.120
Total Resistance			3.677

Fixing Instructions

Installation of SuperQuilt for Timber Frame wall applications and additional insulation products should be in accordance with the certificate, YBS fixing instructions and current good building practice.

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

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

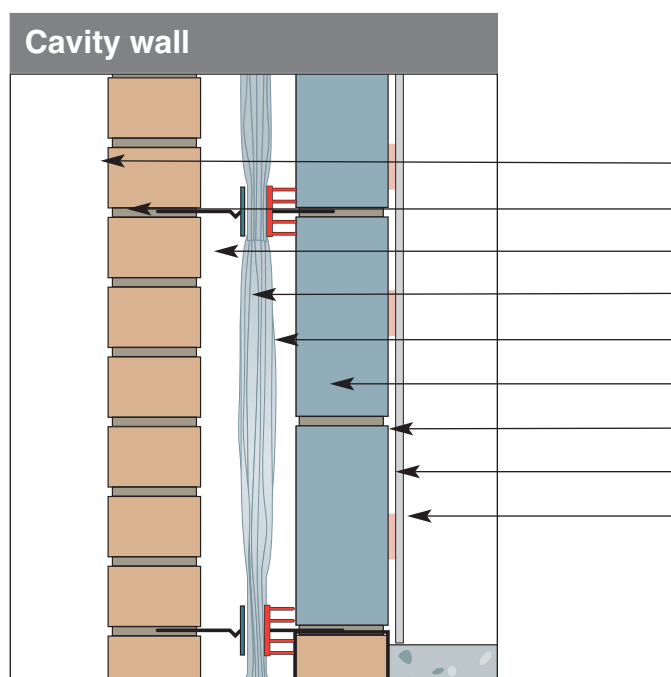
Vertical counter battens, recommended 25mm by 38mm are fixed to the wall. Battens must always be placed at the top and bottom of the wall and around the perimeter of doors and windows.

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

U-Value table

Description	U-Value
SuperQuilt and standard breather membrane	0.31 W/m ² k
SuperQuilt and YBS BreatherFoil	0.27 W/m ² k
SuperQuilt, YBS BreatherFoil and 25mm PUR	0.23 W/m ² k
SuperQuilt, YBS BreatherFoil and 50mm glasswool	0.22 W/m ² k
SuperQuilt, YBS BreatherFoil and 50mm PUR	0.20 W/m ² k
SuperQuilt, YBS BreatherFoil and 100mm glasswool	0.18 W/m ² k
SuperQuilt, YBS BreatherFoil and 100mm PUR	0.15 W/m ² k

Cavity Wall



U-Value Combined Method (W/m ² K)			0.27
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.060
Brick, External	102.50	0.770	0.133
Cavity	50.00	-	2.440
SuperQuilt	40.00		
Cavity	25.00		
Thermal Block	100.00	0.110	0.909
Plaster Dabs	15.00	-	0.170
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.120
Total Resistance			3.898

Fixing Instructions

The spider clip is fitted on to the wall tie against the inner leaf and this creates the minimum cavity between the product and the blockwork.

The initial run of SuperQuilt is positioned over the wall ties, ensuring that it is kept taut but with sufficient drop to below floor insulation. SuperQuilt can be cut with a sharp blade to fit onto wall ties. The top edge of the material should be a minimum of 75mm over the top row of the wall ties giving a weathered lap joint.

When a full run is in position, the retaining clip is fixed to the wall tie to keep the SuperQuilt central to the cavity.

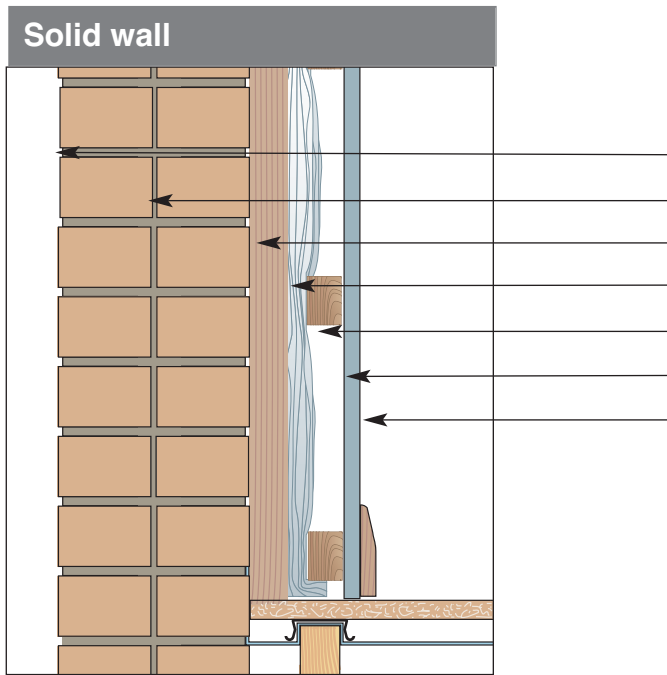
The second leaf is built up to the topmost line of the wall ties, (or two courses below) and the second run of SuperQuilt installed ensuring a minimum lap of 75mm. Vertical joints in the SuperQuilt should always be on a line of wall ties, ensuring a 100mm lap (ie 50mm either side of the wall tie) and sealed using YBS Foil Tape

At internal and external corners a recommended air space of 25mm must be maintained (as in image above).

U-Value table

Description (cavity wall)	U-Value
SuperQuilt and dense block	0.33 W/m ² k
SuperQuilt and medium weight block	0.32 W/m ² k
SuperQuilt and light weight block	0.30 W/m ² k
SuperQuilt and thermal block	0.27 W/m ² k

Dry Lining



U-Value Combined Method (W/m ² K)			0.34
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.060
Brick, External	225.00	0.770	0.292
Batten Cavity	25.00	-	2.440
SuperQuilt	40.00		
Batten Cavity	25.00		
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.120
Total Resistance			2.978

Fixing Instructions

Vertical counter battens, minimum 25mm by 38mm battens are fixed to the wall at 400mm centres. Battens must always be placed at the top and bottom of the wall and around the perimeter of doors and windows.

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

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

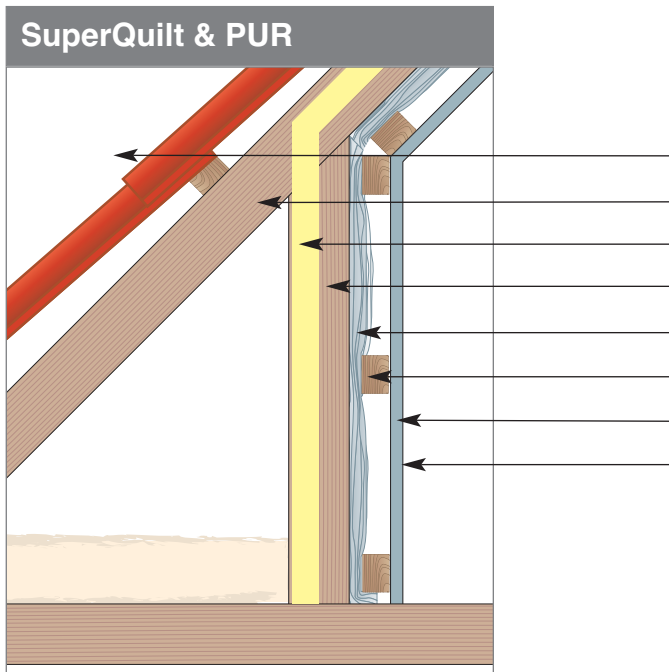
Counter battens are fixed to the wall battens through the material at 400mm centres.

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

U-Value table

Description (Cavity Wall)	U-Value
SuperQuilt	0.32 W/m ² k
SuperQuilt and 30mm insulated plasterboard (0.560 m ² k/w)	0.28 W/m ² k
SuperQuilt and 40mm insulated plasterboard (0.810 m ² k/w)	0.26 W/m ² k
Description (Solid Wall)	U-Value
SuperQuilt	0.34 W/m ² k
SuperQuilt and 30mm insulated plasterboard (0.560 m ² k/w)	0.29 W/m ² k
SuperQuilt and 40mm insulated plasterboard (0.810 m ² k/w)	0.27 W/m ² k

Dwarf Wall



U-Value Combined Method (W/m2K)			0.22
	Thickness (mm)	Conductivity (W/mK)	Resistance (m2K/W)
Outside Surface	-	-	0.060
Loft Void	-	-	-
PIR (Between Studs)	50.00	-	2.174
Stud Cavity	25.00	-	2.440
SuperQuilt	40.00		
Batten Cavity	25.00		
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.120
Total Resistance			4.860

Fixing Instructions

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

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

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

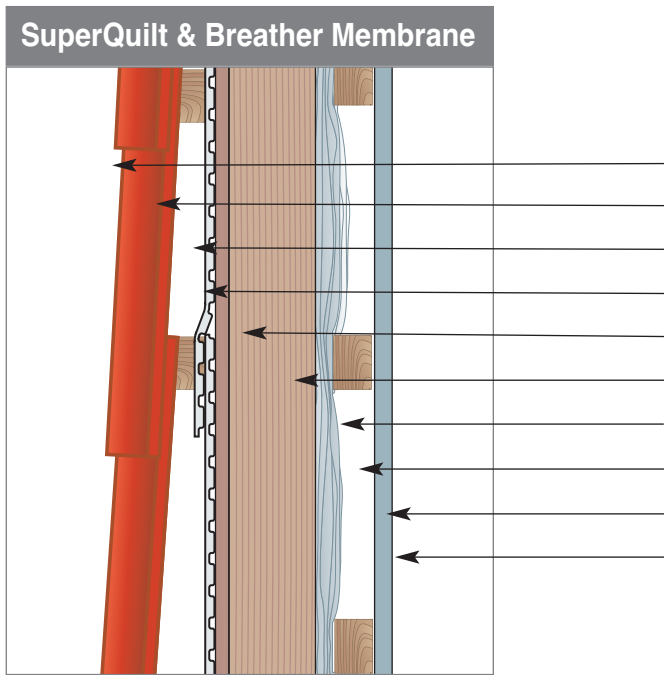
Vertical counter battens, recommended 25mm by 38mm are fixed to the wall. Battens must always be placed at the top and bottom of the wall and around the perimeter of doors and windows.

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

U-Value table

Description (Dwarf Wall)	U-Value
SuperQuilt and 50mm PUR	0.22 W/m ² k
SuperQuilt and 100mm glasswool	0.21 W/m ² k

Dormer Cheeks



U-Value Combined Method (W/m ² K)			0.29
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.060
Tiles	10.00	0.833	0.012
Batten Cavity	25.00	-	0.665
BreatherFoil FR	4.00	-	0.125
Sheathing Board	9.50	0.140	0.068
Stud Cavity	89.00	-	2.440
SuperQuilt	40.00		
Batten Cavity	25.00		
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.120
Total Resistance			3.556

Fixing Instructions

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

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

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

Vertical counter battens, recommended 25mm by 38mm are fixed to the wall. Battens must always be placed at the top and bottom of the wall and around the perimeter of doors and windows.

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

U-Value table

Description (Dormer Cheeks)	U-Value
SuperQuilt and standard breather membrane (Tile Hung)	0.34 W/m ² k
SuperQuilt and YBS BreatherFoil (Tile Hung)	0.29 W/m ² k
SuperQuilt, YBS BreatherFoil and 50mm PUR	0.19 W/m ² k

Technical Properties

Product Description

19 Components

Thickness 40mm approx. (nominal)

Weight 800g/m²

Mechanical Properties

Value

Reference Standard

Thermal performance 2.44m²K/W BS EN 12667

Flammability Class E BS EN 13501-1

Class 1 BS 476-1

Water vapour resistance 1569MNs/g BS EN 12572

Emission coefficients of surfaces 0.05 ASTM C 1371

Tensile strength 142KPA BS EN 1608

Packaging

15m²

10m²

Width 1.5m 1.5m

Length 10m 6.667m

Weight 12Kg 8Kg

Foil taped joins

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



Cutting SuperQuilt

SuperQuilt can easily be cut using either a stanley knife or a good pair of scissors.

