

SuperQuilt

Multi-layer Insulation Blanket for Walls

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



- Meets requirements of L1A, L1B 2010
- High performance wall insulation
- Full Agrément certification
- Thermally tested in accordance with EN 16012
- High thermal resistance of up to 3.00m²K/W
- Class 1 Surface spread of flame
- Ideal for New build & Refurbishment
- Effective solar over-heating barrier
- Lightweight, flexible & 40mm thin
- Fast and simple installation
- Vapour control layer
- External application

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



YBS Insulation
HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY

Insulation for use in Walls

Benefits

- Meets requirements of L1A, L1B 2010
- Fully certificated
- Thermally tested in accordance with EN 16012
- High thermal resistance of up to 3.00m²K/W
- Class 1 Surface spread of flame
- Ideal for New build & Refurbishment
- Effective solar over-heating barrier
- Lightweight, thin & flexible
- Fast and simple installation
- Vapour control layer

SuperQuilt is a very flexible, easy to fit, multilayer insulation thermally tested in accordance with EN 16012 achieving a high thermal resistance of up to 3.00m²K/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 & Dormer Cheeks

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.

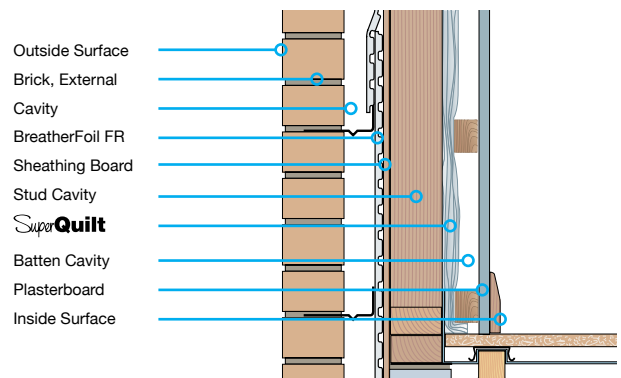
SuperQuilt is applied directly from the roll either vertically or horizontally depending on the wall height, pulled tight and stapled onto the timber studs at minimum 300mm centres.

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

Perpendicular 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 Combined Method (W/m ² K)			0.24
	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	12.00	0.130	0.092
Stud Cavity	89.00	-	0.740
SuperQuilt	14.00	-	1.52
Batten Cavity	38.00	-	0.740
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.120



U-Value table

*For custom calculations please send request to technical@ybsinsulation.com

Description

Description	25mm Batten	38mm Batten
SuperQuilt and YBS BreatherFoil FR	0.25 W/m ² k	0.24 W/m ² k
SuperQuilt, YBS BreatherFoil FR and 50mm Glasswool 0.040	0.21 W/m ² k	0.20 W/m ² k
SuperQuilt, YBS BreatherFoil FR and 100mm Glasswool 0.040	0.17 W/m ² k	0.16 W/m ² k
SuperQuilt, YBS BreatherFoil FR and 25mm PIR 0.022	0.21 W/m ² k	0.20 W/m ² k
SuperQuilt, YBS BreatherFoil FR and 50mm PIR 0.022	0.18 W/m ² k	0.17 W/m ² k
SuperQuilt, YBS BreatherFoil FR and 100mm PIR 0.022	0.14 W/m ² k	0.14 W/m ² k
SuperQuilt, YBS BreatherFoil FR and 140mm PIR 0.022	0.13 W/m ² k	0.12 W/m ² k
SuperQuilt, YBS BreatherFoil and SuperQuilt	0.17 W/m ² k	0.17 W/m ² k
SuperQuilt, Standard Breather Membrane	0.30 W/m ² k	0.28 W/m ² k
SuperQuilt, Standard Breather Membrane and 50mm Glasswool 0.040	0.24 W/m ² k	0.22 W/m ² k
SuperQuilt, Standard Breather Membrane and 100mm Glasswool 0.040	0.19 W/m ² k	0.18 W/m ² k
SuperQuilt, Standard Breather Membrane and 25mm PIR 0.022	0.25 W/m ² k	0.23 W/m ² k
SuperQuilt, Standard Breather Membrane and 50mm PIR 0.022	0.21 W/m ² k	0.20 W/m ² k
SuperQuilt, Standard Breather Membrane and 100mm PIR 0.022	0.16 W/m ² k	0.15 W/m ² k
SuperQuilt, Standard Breather Membrane and 140mm PIR 0.022	0.14 W/m ² k	0.13 W/m ² k
SuperQuilt, Standard Breather Membrane and SuperQuilt	0.19 W/m ² k	0.18 W/m ² k

Cavity Wall

Fixing Instructions

A 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.

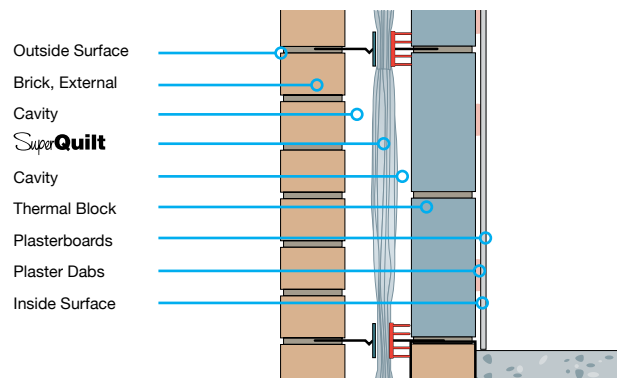
The initial run of SuperQuilt is positioned over the wall ties, ensuring that it is kept taut but with sufficient drop to below floor insulation. SuperQuilt can be cut with a sharp blade to fit onto wall ties. The top edge of the material should be a minimum of 75mm over the top row of the wall ties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

U-Value Combined Method (W/m ² K)			0.24
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.040
Brick, External	102.50	0.770	0.133
Cavity	50.00		0.740
SuperQuilt	40.00	-	1.52
Cavity	20.00		0.740
Thermal Block	100.00	0.110	0.909
Plaster Dabs	15.00	-	0.170
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.130



U-Value table

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Description

SuperQuilt and 100mm Dense Block	1.130
SuperQuilt and 100mm Medium Block	0.500
SuperQuilt and 100mm Lightweight Block	0.250
SuperQuilt and 100mm Thermal Block	1.110
SuperQuilt and 100mm Thermal Block 0.110 Thin Mortar	0.250
SuperQuilt and 140mm Dense Block	1.130
SuperQuilt and 140mm Medium Block	0.500
SuperQuilt and 140mm Lightweight Block	0.250
SuperQuilt and 140mm Thermal Block	1.110
SuperQuilt and 140mm Thermal Block 0.110 Thin Mortar	0.230

100mm Cavity

0.31 W/m ² k
0.30 W/m ² k
0.29 W/m ² k
0.26 W/m ² k
0.25 W/m ² k
0.31 W/m ² k
0.29 W/m ² k
0.25 W/m ² k
0.24 W/m ² k
0.23 W/m ² k

110mm Cavity

0.29 W/m ² k
0.28 W/m ² k
0.27 W/m ² k
0.24 W/m ² k
0.24 W/m ² k
0.29 W/m ² k
0.27 W/m ² k
0.26 W/m ² k
0.23 W/m ² k
0.22 W/m ² k

Dry Lining

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.

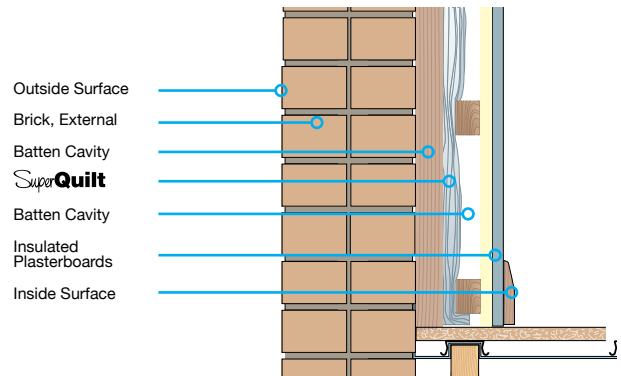
SuperQuilt is applied directly from the roll either vertically or horizontally depending on the wall height, pulled tight and stapled onto the battens at minimum 300mm centres.

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

Counter battens are fixed to the wall battens through the material at 600mm centres.

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

U-Value Combined Method (W/m ² K)			0.28
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.040
Brick, External	100.00	0.770	0.292
Cavity	50.00	-	0.180
Block	100.00	1.130	0.89
Batten Cavity	38.00	-	0.740
SuperQuilt	14.00		1.52
Batten Cavity	38.00		0.740
Insulated Plasterboard	30.00	-	0.560
Inside Surface	-	-	0.130



U-Value table

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Description

Description	25mm Batten	38mm Batten
SuperQuilt and Solid Wall	0.34 W/m ² k	0.29 W/m ² k
SuperQuilt, Solid Wall and 30mm Insulated Plasterboard EPS	0.29 W/m ² k	0.26 W/m ² k
SuperQuilt, Solid Wall and 40mm Insulated Plasterboard EPS	0.27 W/m ² k	0.24 W/m ² k
SuperQuilt, Solid Wall and SuperQuilt	0.22 W/m ² k	0.19 W/m ² k
SuperQuilt and Cavity Wall un-insulated	0.33 W/m ² k	0.28 W/m ² k
SuperQuilt, Cavity Wall un-insulated & 30mm Ins. Plasterboard EPS	0.28 W/m ² k	0.25 W/m ² k
SuperQuilt, Cavity Wall un-insulated & 40mm Ins. Plasterboard EPS	0.26 W/m ² k	0.23 W/m ² k
SuperQuilt, Cavity Wall un-insulated & SuperQuilt	0.22 W/m ² k	0.18 W/m ² k
SuperQuilt and Cavity Wall Insulated	0.25 W/m ² k	0.22 W/m ² k
SuperQuilt, Cavity Wall Insulated & 30mm Ins. Plasterboard EPS	0.23 W/m ² k	0.21 W/m ² k
SuperQuilt, Cavity Wall Insulated & 40mm Ins. Plasterboard EPS	0.22 W/m ² k	0.20 W/m ² k
SuperQuilt, Cavity Wall Insulated & SuperQuilt	0.18 W/m ² k	0.16 W/m ² k

Dwarf Wall

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.

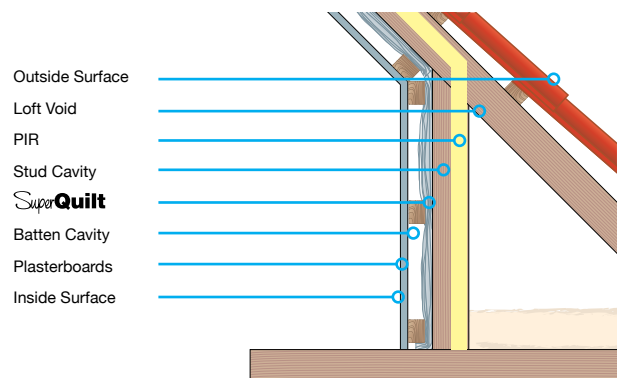
SuperQuilt is applied directly from the roll either vertically or horizontally depending on the wall height, pulled tight and stapled onto the timber studs at minimum 300mm centres.

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

Perpendicular 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 Combined Method (W/m ² K)			0.19
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.040
Loft Void	-	-	0.500
PIR (Between Studs)	50.00	0.22	2.174
Stud cavity	35.00		0.740
SuperQuilt	14.00	-	1.52
Batten Cavity	38.00		0.740
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.130



U-Value table

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Description

SuperQuilt and 50mm Glasswool 0.040
 SuperQuilt and 100mm Glasswool 0.040
 SuperQuilt and 25mm PIR 0.022
 SuperQuilt and 50mm PIR 0.022
 SuperQuilt and 75mm PIR 0.022
 SuperQuilt and 100mm PIR 0.022
 SuperQuilt Two Layer

25mm Batten

0.24 W/m²k
 0.19 W/m²k
 0.25 W/m²k
 0.21 W/m²k
 0.18 W/m²k
 0.16 W/m²k
 0.21 W/m²k

38mm Batten

0.22 W/m²k
 0.18 W/m²k
 0.23 W/m²k
 0.19 W/m²k
 0.17 W/m²k
 0.15 W/m²k
 0.19 W/m²k

External Wall Insulation

Fixing Instructions

All timber exposed to the outer cavity, except naturally durable species should be treated.

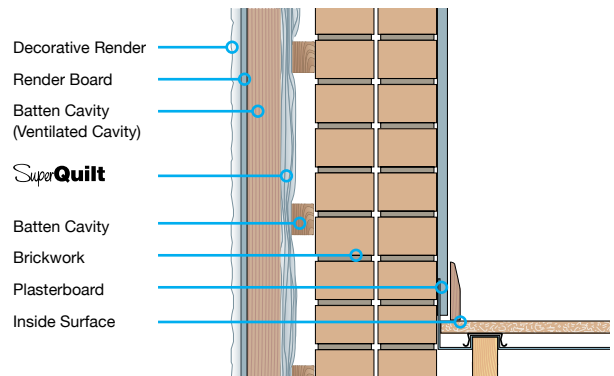
SuperQuilt is applied directly from the roll either vertically or horizontally depending on the wall height, pulled tight and stapled onto the timber battens at minimum 300 mm centres.

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

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

The carrier board is fixed over the product and onto the battens, the external rendered finishing should comply with BS EN 13914-119.

U-Value Combined Method (W/m ² K)			0.30
	Thickness (mm)	Conductivity (W/mK)	Resistance (m ² K/W)
Outside Surface	-	-	0.390
Render	19.00	-	-
Render Board	22.00	-	-
Batten (Ventilated Cavity)	38.00	-	-
SuperQuilt	14.00	-	1.52
Batten Cavity	38.00	-	0.740
Brickwork	225.00	0.560	0.402
Drylining - plaster dabs	15.00	-	0.170
Plasterboard	12.50	0.190	0.066
Inside Surface	-	-	0.130



WWF Green Game-Changers
Innovation of the Year



U-Value table

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Solid Wall

SuperQuilt and Cladding
SuperQuilt and Render Board (Ventilated Cavity)

25mm Batten

0.30 W/m²k
0.33 W/m²k

38mm Batten

0.26 W/m²k
0.30 W/m²k

Cavity Wall

SuperQuilt and Cladding
SuperQuilt and Render Board (Ventilated Cavity)

25mm Batten

0.30 W/m²k
0.33 W/m²k

38mm Batten

0.27 W/m²k
0.31 W/m²k



CAD Drawings

Can now be downloaded from www.ybsinsulation.com



Foil taped joints

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

Technical Properties

Product Description		
19 Components		
Thickness	40mm approx.	
Weight	800g/m ²	
Mechanical Properties	Value	Reference Standard
Core Thermal Resistance	1.52m ² K/W	BS EN 16012
Cavity Thermal Resistance 13mm	0.490m ² K/W	BS EN 16012
Cavity Thermal Resistance 20mm	0.790m ² K/W	BS EN 16012
Flammability	Class E	BS EN 13501-1
Water vapour resistance	1569MNs/g	BS EN 12572
Emission coefficients of surfaces	0.02	EN 16012
Tensile strength	142KPA	BS EN 1608
Packaging	15m ²	7.5m ²
Width	1.5m	1.5m
Length	10m	5m
Weight	12.5Kg	6.25Kg

YBS Insulation

HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY

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