

# SuperQuilt

## Multi-layer Insulation Blanket for Floors

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



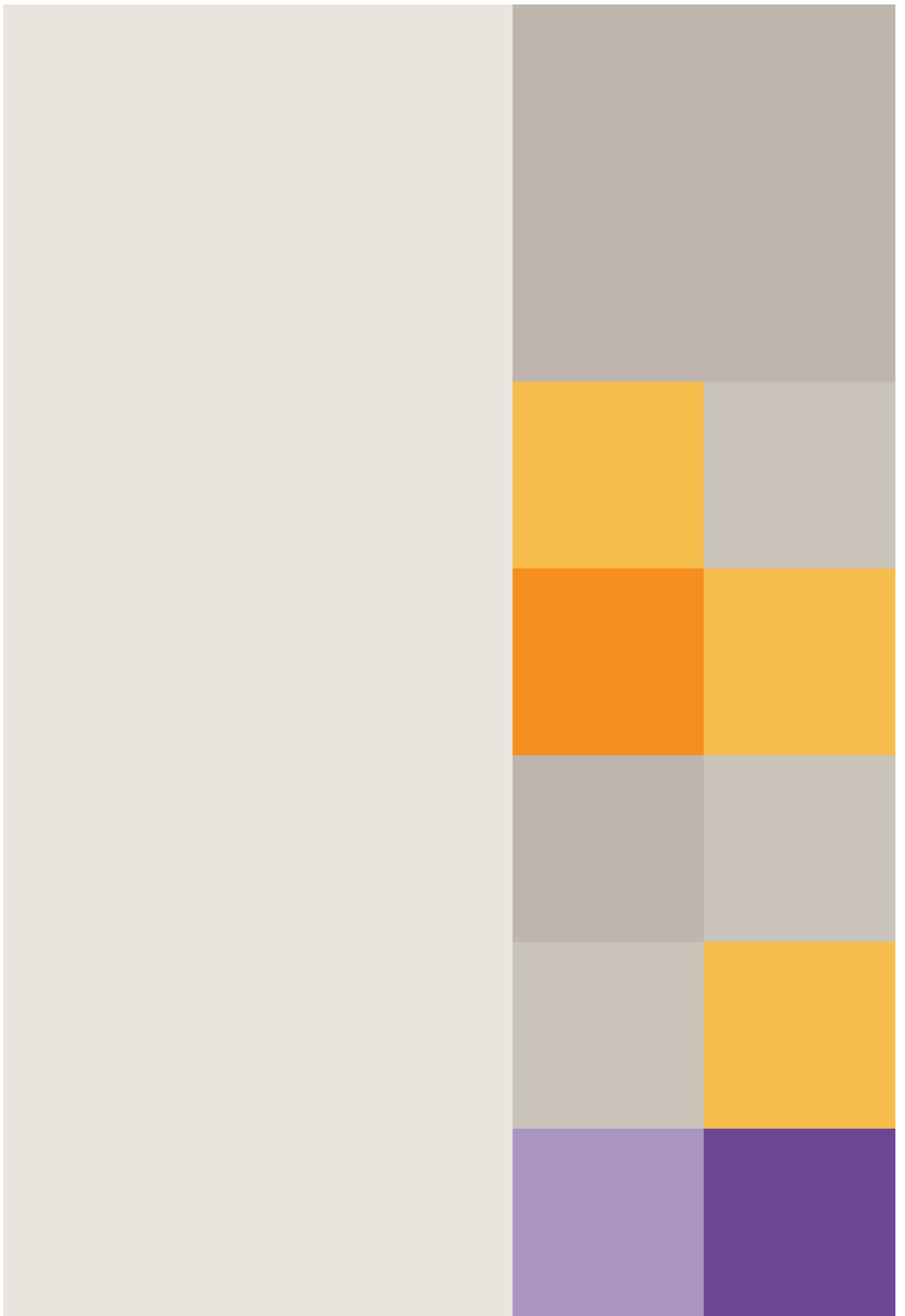
- For suspended & floating floors
- Full Agrément certification
- High reflective performance
- Thermally tested in accordance with EN12667
- Core thermal resistance of  $1.38\text{m}^2\text{K/W}$
- Class 1 Surface spread of flame
- Ideal for New build & Refurbishment
- Effective in summer and winter
- Lightweight, flexible & 40mm thin
- Fast and simple installation
- & only 40mm thin

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



**YBS Insulation**  
HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY





## Insulation for use in Floors

### Benefits

- Fully certificated
- Fast and simple installation
- High core thermal resistance of 1.38m<sup>2</sup>K/W
- Tear Resistant
- Effective in summer and winter
- For suspended & floating floors
- Lightweight, thin & flexible

SuperQuilt is a very flexible, easy to fit, multilayer insulation thermally tested in accordance with EN12667 achieving a high core thermal resistance of 1.38m<sup>2</sup>K/W for SuperQuilt.

### 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 floor applications should be in accordance with the certificate, YBS fixing instructions and current good building practice.

SuperQuilt must be installed with a 50mm overlap.

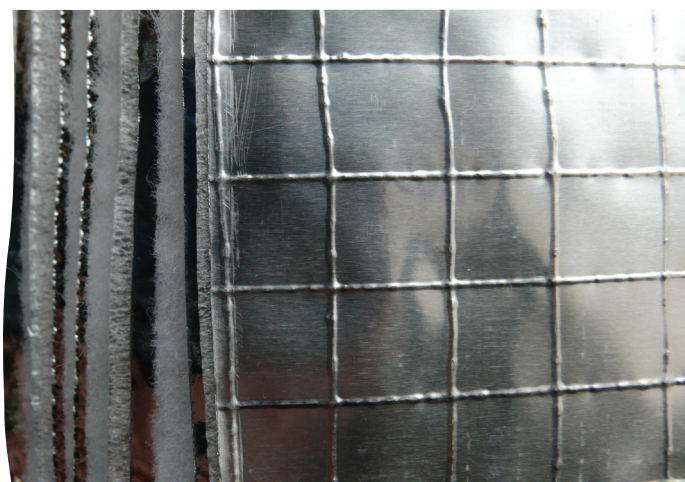
SuperQuilt can be cut with a YBS SuperQuilt cutter, craft knife or a sharp pair of scissors.

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

No protective clothing/handling required.

### P/A Ratio

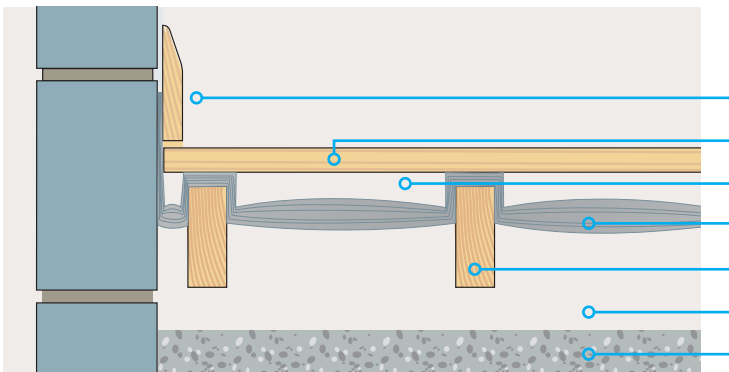
The heat loss in a floor is greater at the exposed perimeter edge of the floor. To calculate the U-value, the exposed perimeter edge to area ratio needs to be worked out e.g. - a 100m<sup>2</sup> area, semi-detached house with 3 external walls of 10m each has a perimeter to area ratio 0.3(i.e. 30m : 100m<sup>2</sup> = 0.3).



## Suspended Timber Floor

### Fixing Instructions

SuperQuilt is rolled out over the joists, then stapled in place to create required airspace or nailed in place through the YBS saddle clips to maintain the required 50mm airspace (4 saddle clips per m<sup>2</sup>). The horizontal joints are tightly overlapped and left open to allow any moisture accumulation to dissipate. SuperQuilt should be sealed around the perimeter or brought up above the floor deck. The decking is then fixed at 200mm centres with screws 37mm into the joists.



Construction	Thickness (mm)
Inside Surface	-
Chipboard Deck	22.00
Joist Cavity	50.00
SuperQuilt	40.00
Joist Cavity	100.00
Ventilated Void	-
Ground	-

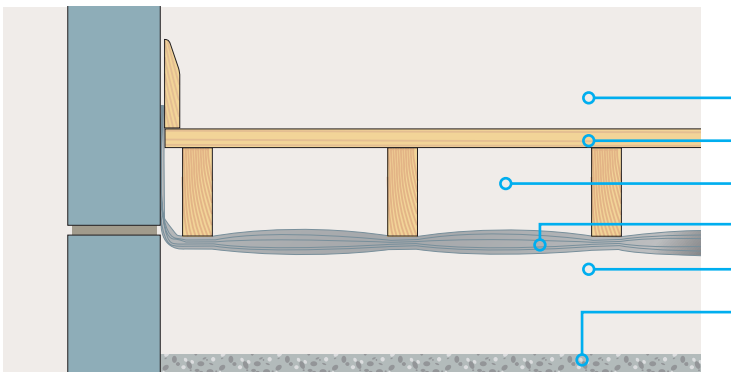
### U-Value table

P/A Ratio	U-Value (with 50mm Cavity above)	U-Value (with 100mm Cavity above)
0.1	0.13 W/m <sup>2</sup> k	0.12 W/m <sup>2</sup> k
0.2	0.18 W/m <sup>2</sup> k	0.16 W/m <sup>2</sup> k
0.3	0.21 W/m <sup>2</sup> k	0.18 W/m <sup>2</sup> k
0.4	0.22 W/m <sup>2</sup> k	0.20 W/m <sup>2</sup> k
0.5	0.24 W/m <sup>2</sup> k	0.20 W/m <sup>2</sup> k
0.6	0.24 W/m <sup>2</sup> k	0.21 W/m <sup>2</sup> k
0.7	0.25 W/m <sup>2</sup> k	0.22 W/m <sup>2</sup> k
0.8	0.26 W/m <sup>2</sup> k	0.22 W/m <sup>2</sup> k
0.9	0.26 W/m <sup>2</sup> k	0.23 W/m <sup>2</sup> k
1	0.27 W/m <sup>2</sup> k	0.23 W/m <sup>2</sup> k

## Crawl Space Floor

### Fixing Instructions

SuperQuilt is rolled out under the floor joists than stapled in place. Access is gained using the under floor crawl space. The horizontal joints are tightly overlapped and left open to allow any moisture accumulation to dissipate. SuperQuilt should be sealed around the perimeter or brought up above the floor deck.



Construction	Thickness (mm)
Inside Surface	-
Tongue & Groove Floorboards	22.00
Joist Cavity	150.00
SuperQuilt	40.00
Ventilated Void	-
Ground	-

### U-Value table

P/A Ratio	U-Value (with 150mm Cavity above)	U-Value (with 200mm Cavity above)
0.1	0.11 W/m <sup>2</sup> k	0.11 W/m <sup>2</sup> k
0.2	0.14 W/m <sup>2</sup> k	0.14 W/m <sup>2</sup> k
0.3	0.16 W/m <sup>2</sup> k	0.15 W/m <sup>2</sup> k
0.4	0.17 W/m <sup>2</sup> k	0.16 W/m <sup>2</sup> k
0.5	0.18 W/m <sup>2</sup> k	0.17 W/m <sup>2</sup> k
0.6	0.18 W/m <sup>2</sup> k	0.17 W/m <sup>2</sup> k
0.7	0.19 W/m <sup>2</sup> k	0.18 W/m <sup>2</sup> k
0.8	0.19 W/m <sup>2</sup> k	0.18 W/m <sup>2</sup> k
0.9	0.19 W/m <sup>2</sup> k	0.18 W/m <sup>2</sup> k
1	0.20 W/m <sup>2</sup> k	0.19 W/m <sup>2</sup> k

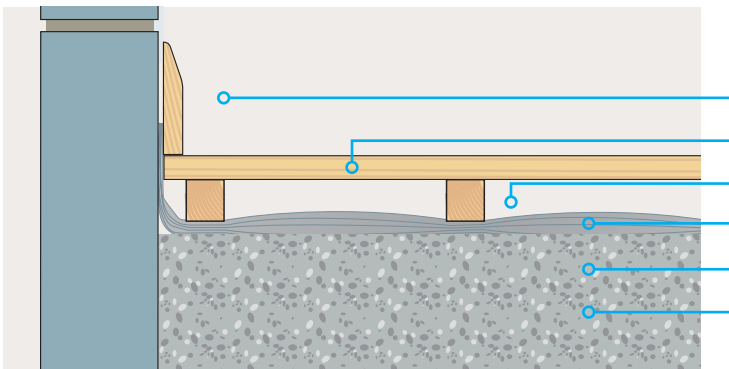
## Floating Timber Floor

### Fixing Instructions

SuperQuilt is rolled out onto the concrete floor leaving enough edge overlap to protrude above the floor deck. Timber joists/battens are then laid on top of the SuperQuilt, spaced at centres to suit the particular flooring. The deck is then fixed at 200mm centres with screws 37mm into the joists/battens.

### Accessories

- SuperQuilt knife available
- YBS Foil joining tape available



Construction	Thickness (mm)
Inside Surface	-
Chipboard Deck	22.00
Joist Cavity	50.00
SuperQuilt	40.00
Concrete Slab	150.00
Ground	-

### U-Value table

P/A Ratio	U-Value (with 50mm Cavity above)	U-Value (with 100mm Cavity above)
0.1	0.13 W/m <sup>2</sup> k	0.12 W/m <sup>2</sup> k
0.2	0.20 W/m <sup>2</sup> k	0.17 W/m <sup>2</sup> k
0.3	0.24 W/m <sup>2</sup> k	0.20 W/m <sup>2</sup> k
0.4	0.26 W/m <sup>2</sup> k	0.22 W/m <sup>2</sup> k
0.5	0.28 W/m <sup>2</sup> k	0.23 W/m <sup>2</sup> k
0.6	0.30 W/m <sup>2</sup> k	0.24 W/m <sup>2</sup> k
0.7	0.31 W/m <sup>2</sup> k	0.25 W/m <sup>2</sup> k
0.8	0.32 W/m <sup>2</sup> k	0.26 W/m <sup>2</sup> k
0.9	0.33 W/m <sup>2</sup> k	0.27 W/m <sup>2</sup> k
1	0.34 W/m <sup>2</sup> k	0.27 W/m <sup>2</sup> k



**CAD Drawings**

Can now be downloaded  
from [www.ybsinsulation.com](http://www.ybsinsulation.com)

### Technical Properties

Product Description		
19 Components		
Thickness	40mm approx.	
Weight	880g/m <sup>2</sup>	
Mechanical Properties	Value	Reference Standard
Thermal performance	1.38m <sup>2</sup> K/W (core)	BS EN 12667
Flammability	Class 1	BS 476-1
	Class E	BS EN 13501-1
Water vapour resistance	1569MNs/g	BS EN 12572
Emission coefficients of surfaces	0.05	ASTM C 1371
Tensile strength	142KPA	BS EN 1608
Packaging	15m <sup>2</sup>	7.5m <sup>2</sup>
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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