

# ThermaQuilt

## Multi-layer insulation Blanket

Thermal insulation in 9 layers, 32mm thin, flexible, multi-layer membrane

High thermal resistance

- R-Value up to 2.11 m<sup>2</sup>K/W, equivalent to 90mm of Mineral Wool Insulation
  - Up to 76% reduction in heat loss, saving you money on your energy bills (single layer pitched roof application)
  - Built in airtight vapour control layer to prevent the passage of moisture, reducing the risk of condensation
  - Manufactured using 84% recycled materials
- Product Integrity**
- Building Control Compliance
  - NHBC Accepted
  - Certified To Industry Standards

Insulation for roofs, walls and floors

Technical Guide



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

# Insulation for use in roofs, walls and floors

## Benefits

- High thermal resistance
- Ideal for loft conversions
- Fast and simple installation
- Lightweight and flexible
- Warmer in winter and cooler in summer
- Roll size 1.2m x 10m

*ThermaQuilt is a very flexible, easy to fit, multi-layer insulation thermally tested achieving a high thermal resistance of up to 2.11m<sup>2</sup>K/W for ThermaQuilt accompanied by a 38mm air cavity either side of the material.*

## How does ThermaQuilt Work?

*Due to the special composition of multi-layers of insulation, ThermaQuilt effectively deals with all forms of energy transfer (i.e. conduction, convection and radiation). ThermaQuilt works most effectively by reflecting infra-red radiation. This means that not only is ThermaQuilt effective in winter by reflecting heat back into the building and cold out, but also in summer. ThermaQuilt is a very effective barrier to solar overheating which reduces the need for artificial cooling systems as it prevents the accumulation of heat within the building.*

## General fixing instructions

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

*ThermaQuilt must be installed with a minimum 50mm overlap with all joints taped and sealed with YBS 75mm foil tape.*

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

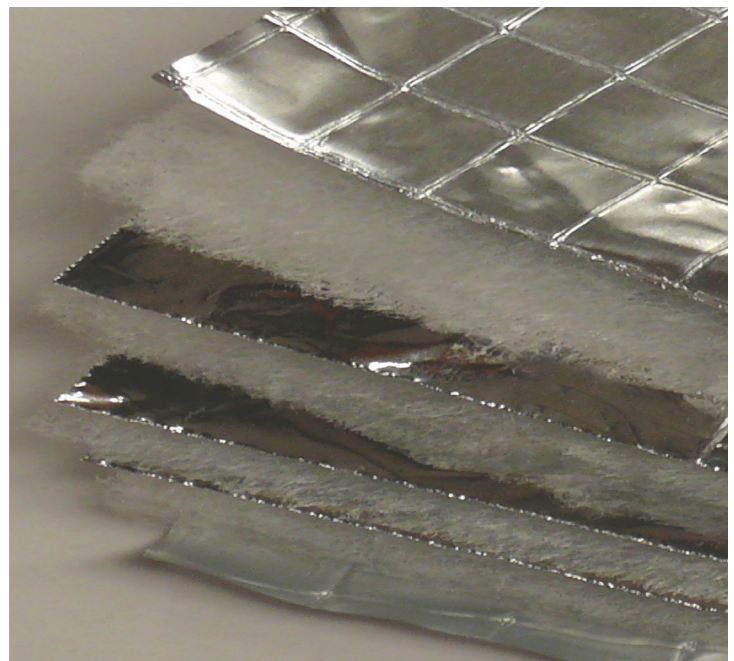
*ThermaQuilt can be easily fixed with staples at regular intervals. Minimum 14mm stainless steel or galvanised staples are recommended.*

*ThermaQuilt is most effective with a minimum 38mm air gap on either side when installed in a roof or wall application. Battens can be used to create these air gaps.*

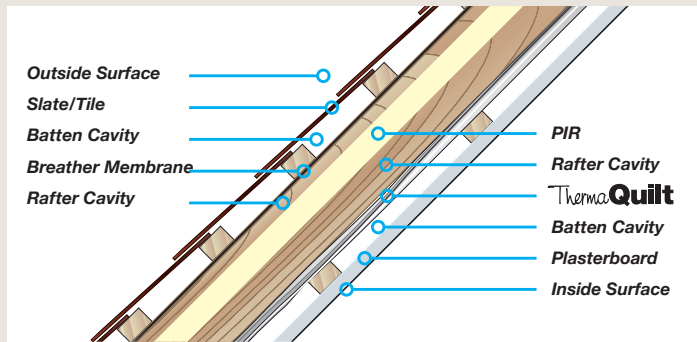
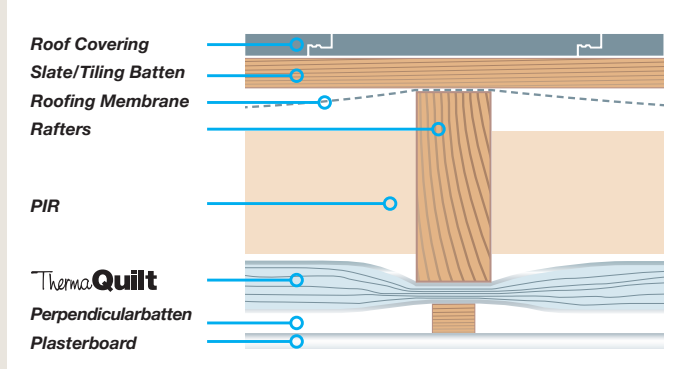
*No protective clothing/handling required.*

## Accessories

- SuperQuilt knife available
- YBS Foil joining tape available



## Under Rafter Detail



### Description (rafters at 400mm centres)

ThermoQuilt and 100mm PIR

### U-Value

0.18 W/m<sup>2</sup>k

ThermoQuilt and 170mm PIR

0.13 W/m<sup>2</sup>k

### Description (rafters at 600mm centres)

ThermoQuilt and 90mm PIR

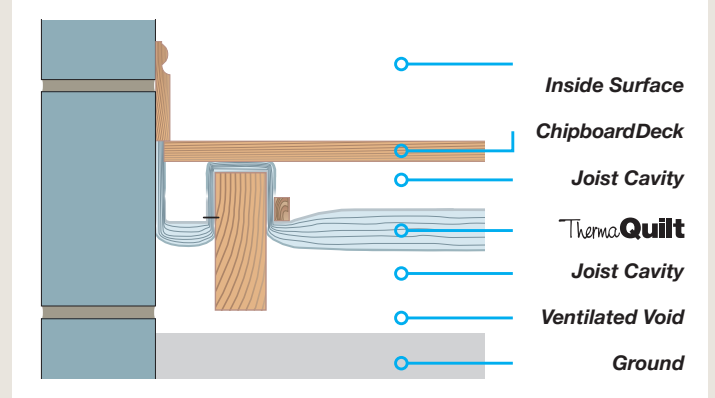
### U-Value

0.18 W/m<sup>2</sup>k

ThermoQuilt and 150mm PIR

0.13 W/m<sup>2</sup>k

## Suspended Timber Floor



### P/A Ratio

0.1

0.2

0.3

0.4

0.5

0.6

0.7

0.8

0.9

1.0

### U-Value

(with 50mm Cavity above)

0.17 W/m<sup>2</sup>k

0.23 W/m<sup>2</sup>k

0.27 W/m<sup>2</sup>k

0.29 W/m<sup>2</sup>k

0.31 W/m<sup>2</sup>k

0.32 W/m<sup>2</sup>k

0.33 W/m<sup>2</sup>k

0.34 W/m<sup>2</sup>k

0.34 W/m<sup>2</sup>k

0.35 W/m<sup>2</sup>k

### U-Value

(with 100mm Cavity above)

0.16 W/m<sup>2</sup>k

0.21 W/m<sup>2</sup>k

0.24 W/m<sup>2</sup>k

0.26 W/m<sup>2</sup>k

0.27 W/m<sup>2</sup>k

0.28 W/m<sup>2</sup>k

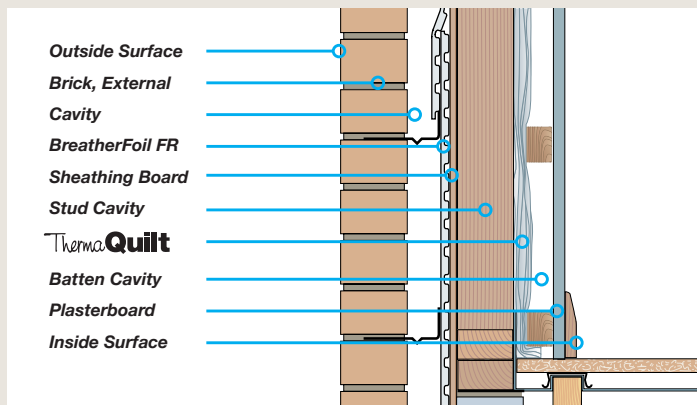
0.29 W/m<sup>2</sup>k

0.29 W/m<sup>2</sup>k

0.30 W/m<sup>2</sup>k

0.30 W/m<sup>2</sup>k

## Timber Frame



### Description

ThermoQuilt, YBS Breather Foil FR and 70mm PIR

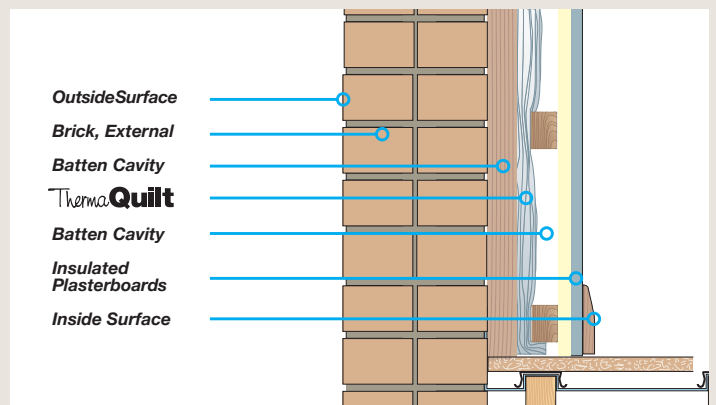
### U-Value

0.18 W/m<sup>2</sup>k

ThermoQuilt, YBS Breather Foil FR and 50mm Mineral Wool

0.24 W/m<sup>2</sup>k

## Dry Lining



### Description

ThermoQuilt and 32.5mm PIR backed insulated plasterboard (20mm PIR & 12.5mm plasterboard)

### U-Value

0.30 W/m<sup>2</sup>k

# ThermaQuilt



## Technical Properties

Technical Properties		
<b>Product Description</b>		
<b>9 Components</b>		
<b>Thickness</b>	32mm approx.	
<b>Weight</b>	460g/m <sup>2</sup>	
<b>Mechanical Properties</b>	<b>Value</b>	<b>Reference Standard</b>
<b>Thermal performance</b>		
<b>Core</b>	0.77m <sup>2</sup> K/W	BS EN 16012
<b>Roof</b> (Core + 2 x 25mm Cavities)	1.67m <sup>2</sup> K/W	BS EN 6946
<b>Wall</b> (Core + 2 x 38mm Cavities)	2.11m <sup>2</sup> K/W	BS EN 6946
<b>Floor</b> (Core + 1 x 150mm Cavity)	3.14m <sup>2</sup> K/W	BS EN 6946
<b>Flammability</b>	Class F	BS EN 13501-1
<b>Water vapour resistance</b>	1569MNs/g	BS EN 12572
<b>Emission coefficients of surfaces</b>	0.05	BS EN 16012
<b>Tensile strength</b>	142KPA	BS EN 1608
<b>Packaging</b>	12m <sup>2</sup>	
<b>Width</b>	1.2m	
<b>Length</b>	10m	
<b>Weight</b>	6.5Kg	

## YBS Insulation

HIGH QUALITY PRODUCTS FOR THE BUILDING INDUSTRY

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