

# SuperFOIL Insulation

## Solutions Guide

Timber Frame - Internal

CONSTRUCTION	THICKNESS	'R'-VALUE
EXTERNAL SURFACE	-	0.040
BRICK	100mm	0.130
CAVITY	50mm	0.180 - 0.665
BREATHER MEMBRANE	1mm	-
SHEATHING BOARD	9mm	0.069
ADDITIONAL INSULATION	SEE TABLE	-
STUD CAVITY	20mm	0.713
<b>SFTV</b>	1mm	-
BATTEN CAVITY	25mm	0.713
PLASTERBOARD	12.5mm	0.066
EXTERNAL SURFACE	-	0.100

### SFTV Combined With... (Standard Breather Membrane)

England	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	105mm	120mm	160mm	195mm
Extension	0.28	55mm	55mm	75mm	95mm
Renovation	0.30	40mm	50mm	65mm	80mm

Scotland	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	140mm	160mm	210mm	250mm
Extension	0.17	115mm	130mm	175mm	210mm
Renovation	0.22	75mm	85mm	120mm	145mm

Wales	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	125mm	145mm	190mm	230mm
Extension	0.21	80mm	95mm	130mm	155mm
Renovation	0.30	40mm	50mm	65mm	80mm

### SFTV Combined With... (Reflective Breather Membrane)

England	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	90mm	100mm	140mm	170mm
Extension	0.28	35mm	40mm	55mm	65mm
Renovation	0.30	30mm	35mm	45mm	55mm

Scotland	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	125mm	140mm	185mm	225mm
Extension	0.17	100mm	110mm	150mm	190mm
Renovation	0.22	60mm	70mm	95mm	115mm

Wales	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	110mm	125mm	175mm	210mm
Extension	0.21	65mm	75mm	105mm	125mm
Renovation	0.30	30mm	35mm	45mm	55mm

Insulation thickness' are a minimum requirement to achieve the desired u-value, increasing the thickness will only improve the overall u-value

- ✓ CERTIFIED HIGH PERFORMANCE
- ✓ SUITS ALL BUILD TYPES
- ✓ QUICK AND EASY TO INSTALL



# SF19+

# Timber Frame Solutions

CONSTRUCTION	THICKNESS	'R'-VALUE
EXTERNAL SURFACE	-	0.040
BRICK	100mm	0.130
CAVITY	50mm	0.180 - 0.665
BREATHER MEMBRANE	1mm	-
SHEATHING BOARD	9mm	0.069
ADDITIONAL INSULATION	SEE TABLE	-
STUD CAVITY	40mm	0.670
<b>SF19+</b>	45mm	1.640
BATTEN CAVITY	38mm	0.670
PLASTERBOARD	12.5mm	0.066
EXTERNAL SURFACE	-	0.100

## SF19+ Combined With... (Standard Breather Membrane)

England	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	55mm	65mm	85mm	105mm
Extension	0.28	5mm	5mm	5mm	5mm
Renovation	0.30	0mm	0mm	0mm	0mm

Scotland	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	85mm	95mm	130mm	160mm
Extension	0.17	65mm	75mm	100mm	125mm
Renovation	0.22	30mm	35mm	45mm	55mm

Wales	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	75mm	85mm	115mm	140mm
Extension	0.21	35mm	40mm	55mm	65mm
Renovation	0.30	0mm	0mm	0mm	0mm

## SF19+ Combined With... (Reflective Breather Membrane)

England	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	40mm	45mm	65mm	80mm
Extension	0.28	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

Scotland	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	70mm	80mm	110mm	135mm
Extension	0.17	50mm	55mm	80mm	95mm
Renovation	0.22	15mm	15mm	25mm	30mm

Wales	U Value (Wm²K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	60mm	65mm	95mm	115mm
Extension	0.21	20mm	25mm	35mm	40mm
Renovation	0.30	0mm	0mm	0mm	0mm

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CONSTRUCTION	THICKNESS	'R'-VALUE
EXTERNAL SURFACE	-	0.040
BRICK	100mm	0.130
CAVITY	50mm	0.180 - 0.665
BREATHER MEMBRANE	1mm	-
SHEATHING BOARD	9mm	0.069
ADDITIONAL INSULATION	SEE TABLE	-
STUD CAVITY	50mm	0.670
<b>SF40</b>	65mm	2.570
BATTEN CAVITY	47mm	0.670
PLASTERBOARD	12.5mm	0.066
EXTERNAL SURFACE	-	0.100

### SF40 Combined With... (Standard Breather Membrane)

England	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	30mm	35mm	45mm	55mm
Extension	0.28	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

Scotland	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	55mm	65mm	90mm	100mm
Extension	0.17	35mm	40mm	60mm	70mm
Renovation	0.22	5mm	5mm	5mm	5mm

Wales	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	45mm	55mm	75mm	100mm
Extension	0.21	10mm	10mm	15mm	15mm
Renovation	0.30	0mm	0mm	0mm	0mm

### SF40 Combined With... (Reflective Breather Membrane)

England	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	15mm	20mm	25mm	30mm
Extension	0.28	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

Scotland	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	45mm	50mm	70mm	85mm
Extension	0.17	25mm	30mm	40mm	45mm
Renovation	0.22	0mm	0mm	0mm	0mm

Wales	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	35mm	40mm	50mm	70mm
Extension	0.21	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

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CONSTRUCTION	THICKNESS	'R'-VALUE
EXTERNAL SURFACE	-	0.040
BRICK	100mm	0.130
CAVITY	50mm	0.180 - 0.665
BREATHER MEMBRANE	1mm	-
SHEATHING BOARD	9mm	0.069
ADDITIONAL INSULATION	SEE TABLE	-
STUD CAVITY	60mm	0.670
<b>SF60</b>	100mm	3.580
BATTEN CAVITY	63mm	0.670
PLASTERBOARD	12.5mm	0.066
EXTERNAL SURFACE	-	0.100

### SF60 Combined With... (Standard Breather Membrane)

England	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	5mm	5mm	5mm	5mm
Extension	0.28	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

Scotland	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	30mm	35mm	50mm	60mm
Extension	0.17	10mm	10mm	15mm	20mm
Renovation	0.22	5mm	5mm	5mm	5mm

Wales	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	20mm	25mm	30mm	40mm
Extension	0.21	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

### SF60 Combined With... (Reflective Breather Membrane)

England	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.18	0mm	0mm	0mm	0mm
Extension	0.28	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

Scotland	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.15	20mm	20mm	30mm	35mm
Extension	0.17	0mm	0mm	0mm	0mm
Renovation	0.22	0mm	0mm	0mm	0mm

Wales	U Value (Wm <sup>2</sup> K/W)	Foam Board		Mineral Wool	
		0.018 (Phenolic)	0.022 (PIR/PUR)	0.034 (Mineral Wool)	0.044 (Mineral Wool)
New Build	0.16	10mm	10mm	10mm	10mm
Extension	0.21	0mm	0mm	0mm	0mm
Renovation	0.30	0mm	0mm	0mm	0mm

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# Fixing Instructions

## Timber Frame

SuperFOIL is installed over the timber wall studs horizontally or vertically, using the correct size galvanized or stainless-steel staples at 300mm intervals.

Care should be taken to ensure that any overlaps are at least 50mm and are taped over with 100mm Superior Foil Tape.

SuperFOIL should be sealed to other air and vapour barriers at floors and roof junctions.

The products are then further held in place by the correct size timber battens installed horizontally at no greater than 600mm centres. Timber battens should always be installed around the perimeter of floors, roofs, windows and doors.

Plasterboard is then fixed to the timber battens in accordance with the manufacturer's guidance.

For maximum performance SuperFOIL should be installed with two unventilated cavities.



## SuperFOIL Technical Details

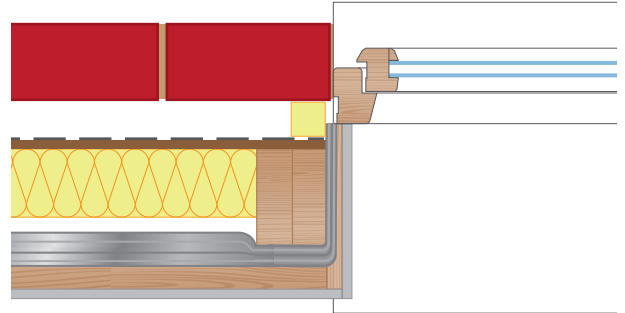
	SFTV	SF19+	SF40	SF60
Thickness	>1mm	45mm	65mm	100mm
Compressed Thickness	>1mm	8mm	11mm	16mm
No. of Layers	1	11	37	55
Weight	0.14 Kg/m <sup>2</sup>	0.87 Kg/m <sup>2</sup>	1.17 Kg/m <sup>2</sup>	1.48 Kg/m <sup>2</sup>
Length	25/50m	10m	10m	8m
Width	1500mm	1500mm	1500mm	1500mm
Area	37.5/75m <sup>2</sup>	15m <sup>2</sup>	15m <sup>2</sup>	12m <sup>2</sup>
Core Performance	0	1.64	2.57	3.58
Emissivity	0.05	0.05	0.05	0.05
Total 'R' Value	1.42	2.98	3.91	4.92
Recommend Cavity Size	20mm	38mm	47mm	60mm
Staple size	8mm	14mm	30mm	40mm



# Installation Details

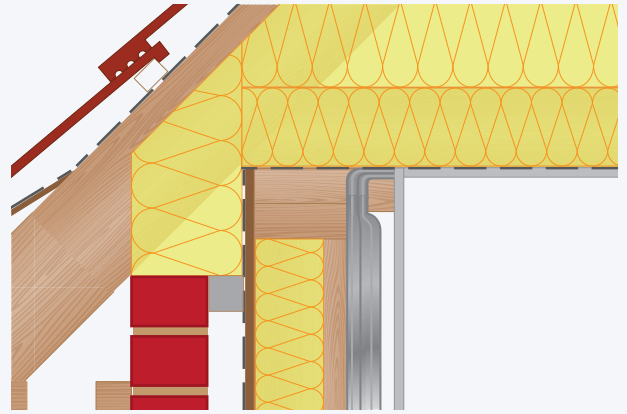
## Reveal Detail

At the reveals, return the SuperFOIL in direct contact with the studs, up to the window frame and seal with tape and mastic where possible. Install timber shims over the SuperFOIL for fixing of plasterboard.



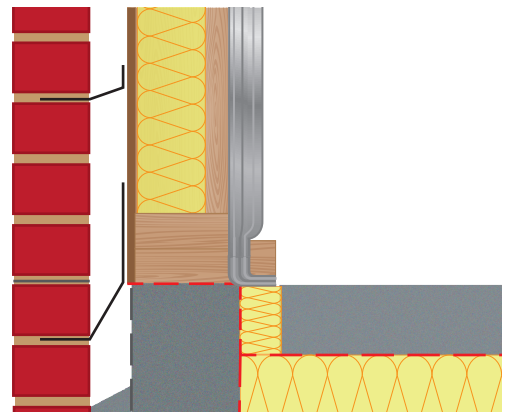
## Ceiling Junction

At the ceiling junction return the SuperFOIL onto the ceiling joists, sealing to the VCL to ensure air tightness. The SuperFOIL is then further held in place by the correct size timber battens installed around the perimeter.



## Floor Junction

At the floor junction continue the SuperFOIL down the studs to the floor, seal to the perimeter insulation and VCL where possible to ensure air tightness. The SuperFOIL is then further held in place by the correct size timber battens installed around the perimeter.





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