SuperFOIL

Experts in Insulation

Let SuperFOIL Save You Space, Time and Money On Your Next Project

A family business, established in 2008, under our parent company Boulder Developments Ltd. SuperFO L insulation was created due to discovering a need in the construction market for a high performing, great value insulation.

Whilst working on our own self build project, we realised that the traditional methods of insulation weren't going to fit with the modern construction methods of our new home, so we started searching for an alternative, with no avail.

Through years of research and innovation, SuperFO L was developed. These ethics have continued through the business and SuperFO L now manufactures the widest range of multifoil products on the market. We have a range of insulation products such as breathable, fire rated, non- combustible, under floor insulation and reflective membranes.

n addition to providing outstanding thermal products, we have an in house technical team to answer all questions and queries you or your building inspector may have. SuperFOIL offers all of its services completely free of charge, to ensure that you get the results you require.

Our team of experts can help with build-up solutions, bespoke U-value calculations, condensation risk analysis and installation advice.

SuperFO L provides exceptional performance, for every build type, whatever the budget.

SuperFOIL

BOULDER DEVELOPMENTS

SuperFOIL

MULTIFOIL INSULATION

Thermal Insulation for use in Roofs, Walls & Floors

3 IN 1 DESIGN

FOIL INSULATION, VAPOUR CONTROL LAYER & RADIANT BARRIER

SUPERFOIL CAN HELP ACHIEVE YOUR REQUIRED U-VALUE

EASY TO INSTALL

NO SPECIALIST TOOLS REQUIRED

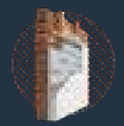
SUSTAINABLE

MADE FROM UP TO 40% RECYCLED MATERIALS

SUITS ALL BUILD TYPES

IDEAL FOR NEW BUILD & RETROFIT. ROOFS, WALLS & FLOORS

ROOF



WALL

FLOOR

SuperFOIL.co.uk

MULTIFOIL INSULATION

The multifoil insulation range offers a 3-1 product, providing a highly efficient insulation, as well as a vapour control layer (VCL) and a radiant barrier. All of the SuperFO L range is made from the same modern technology utilising the best nano coated foil layers, alongside high performing wadding to make an outstanding product. Certified by BBA and LABC, all products have undergone rigorous testing to ensure that they meet the requirements of new Building Regulations.

Unlike more traditional types of insulation, SuperFOIL insulation works on all three types of heat transfer giving you the best efficiency without the need for additional layers within the build-up.

Offering excellent value for money, our multifoil insulation is ideal for both new build or retrofit projects. It can be used anywhere in the home, meaning that one product can cover the roof, walls and floor!

CERTIFIED **HIGH PERFORMANCE**

COST EFFECTIVE

SUITS **ALL BUILD TYPES**

	SF6	SF19+	SF40	SF60
Product Dimensions				
Thickness	30mm	45mm	65mm	100mm
Length	10m	10m	10m	8m
Width	1.2m	1.2 /1.5m	1.5m	1.5m
Coverage	12 m^2	12 / 15 m^2	15 m^2	12 m^2
Thermal Performance				
Core	0.99 m2k/W	1.63 m2k/W	2.57 m2k/W	3.58 m2k/W
Roof	1.90 m2k/W	2.53 m2k/W	3.7 m2k/W	4.48 m2k/W
Wall	2.32 m2k/W	2.97 m2k/W	3.91 m2k/W	4.92 m2k/W
Floor	3.64 m2k/W	4.28 m2k/W	5.22 m2k/W	6.23 m2k/W

BBA · registered LABC · LABSS · CE · NHBC

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

BREATHABLE INSULATION

Breathable Insulation for use in Roofs & Walls

3 IN 1 DESIGN

FOIL INSULATION, BREATHER MEMBRANE & RADIANT BARRIER

SUPERFOIL CAN HELP ACHIEVE YOUR REQUIRED U-VALUE

EASY TO INSTALL

NO SPECIALIST TOOLS REQUIRED

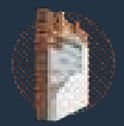
SUSTAINABLE

MADE FROM UP TO 40% RECYCLED MATERIALS

SUITS ALL BUILD TYPES

IDEAL FOR NEW BUILD & RETROFIT. ROOFS, WALLS & FLOORS

ROOF



WALL

SuperFOIL.co.uk

BREATHABLE INSULATION

The Breathable insulation range is a 3 in 1 product, providing a highly efficient insulation, as well as a breather membrane, all whilst acting as a radiant barrier. Made from the highest quality materials, the SuperFOIL BB range offers exceptional value for money.

The use of a breathable membrane helps to prevent the formation of mould and damp by reducing the risk of condensation within the fabric of the building. t is suitable for all types of building projects.

With a 'W1' rating for water tightness, the BB range is suitable for use within both roofs and walls.

Manufactured using 40% recycled materials and fully recyclable at the end of its 50+ year useful life.

Top Tip - Combine the BB range with SuperFOIL multifoil products in a duet system to provide outstanding thermal performance by insulating both internally and externally.

CERTIFIED **HIGH PERFORMANCE**

COST EFFECTIVE

SUITS **ALL BUILD TYPES**

	SF19BB	SF40BB
Product Dimensions		
Thickness	40mm	75mm
Length	10m	10m
Width	1.2 / 1.5m	1.5m
Coverage	12 / 15 m^2	15 m^2
Thermal Performance		
Core	1.454 m2k/W	2.92 m2k/W
Roof	2.22 m2k/W	3.67 m2k/W
Wall	2.53 m2k/W	3.98 m2k/W
Emittance	0.3 / 0.03	0.3 / 0.03

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

UNDERFLOOR INSULATION

Reflective Thermal Insulation for use in Roofs, Walls & Floors

3 IN 1 DESIGN
FOIL INSULATION, RADIANT BARRIER & VAPOUR CONTROL LAYER

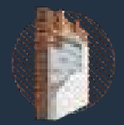
CAN BE USED DIRECTLY BELOW SCREED

EASY TO INSTALL
NO SPECIALIST TOOLS REQUIRED

SUSTAINABLE
MADE FROM UP TO 40% RECYCLED MATERIALS

SUITS ALL BUILD TYPES
IDEAL FOR NEW BUILD & RETROFIT. ROOFS, WALLS & FLOORS


ROOF


WALL


FLOOR

SuperFOIL.co.uk

UNDERFLOOR INSULATION

SFUF is a high-performance insulation with a slim, 6mm, multi-layer build up. It can be used in roof, floors and walls, although designed specifically with solid floors in mind.

Due to its design, SFUF can be directly screeded over and be used with all types of underfloor heating systems. SFUF makes installation easy due to having grid markings which assists with the laying of underfloor pipes.

SFUF also provides sound insulation (by an estimated 22dB), and helps to reduce or eliminate cold bridging issues when turned up the walls.
Like the rest of SuperFOIL products, SFUF is simply to install and requires no specialist equipment. t can be used in multiple layers and combined with other types of insulation for the perfect solution.

It is suitable for use in both newbuilds and retrofit projects.

CERTIFIED **HIGH PERFORMANCE**

COST EFFECTIVE

SUITS **ALL BUILD TYPES**

SFUF

Product Dimensions	
Thickness	6mm
Length	8m
Width	1.5m
Coverage	12 m^2
Thermal Performance	
Core	0.8 m2k/W
Roof	0.8 m2k/W
Wall	0.8 m2k/W
Floor	0.8 m2k/W

CE

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

FIRE RATED INSULATION

FIRE RATED INSULATION

Class “0” Fire Propagation &
Class “1” Spread of Flame

3 IN 1 DESIGN

FOIL INSULATION,
RADIANT BARRIER &
VAPOUR CONTROL LAYER

EASY TO INSTALL

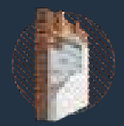
NO SPECIALIST TOOLS REQUIRED

SUPERFOIL CAN HELP ACHIEVE YOUR REQUIRED U-VALUE

SUITS ALL BUILD TYPES

IDEAL FOR NEW BUILD & RETROFIT. ROOFS, WALLS & FLOORS


ROOF


WALL


FLOOR

SuperFOIL.co.uk

Fire Rated Thermal Insulation for use in Roofs, Walls & Floors

FIRE RATED INSULATION

SuperFOIL fire rated (FR) range offer the same high-performance insulation as the SuperFOIL multifoil range, but with enhanced fire protection for that added peace of mind. Certified by BBA and DIBt, all products have undergone rigorous testing to ensure it meets the high SuperFO L standards. The FR products have received a British Standard of Class 0 for fire propagation and class 1 for spread of flame.

The FR range is a 3 in 1 product, providing highly efficient insulation, a vapour control layer and a radiant barrier.

SFNC is an A1 rated (Euroclass), non-combustible product. It is suitable for use in commercial projects and buildings over 18m in height. It provides outstanding thermal efficiency whilst being fully flexible and will not ignite or burn.

The FR products can be used in walls, roofs and floors and are suitable for new build or retrofit projects.

CERTIFIED **HIGH PERFORMANCE**

COST EFFECTIVE

SUITS **ALL BUILD TYPES**

	SF19FR	SF40FR	SF60FR	SFNC
Product Dimensions				
Thickness	40mm	65mm	100mm	20mm
Length	10m	10m	8m	8.35m
Width	1.2 / 1.5m	1.5m	1.5m	1.2m
Coverage	12 / 15 m^2	15 m^2	15 m^2	10 m^2
Thermal Performance				
Core	1.31 m2k/W	2.62 m2k/W	3.46 m2k/W	0.62 m2k/W
Roof	2.27 m2k/W	3.58 m2k/W	4.42 m2k/W	1.54 m2k/W
Wall	2.73 m2k/W	4.04 m2k/W	4.88 m2k/W	1.99 m2k/W
Floor	4.37 m2k/W	5.69 m2k/W	6.53 m2k/W	3.68 m2k/W

CE DIBt

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

BUBBLE FOIL INSULATION

Bubble Foil Thermal Insulation for use in Roofs, Walls & Floors

3 IN 1 DESIGN

INSULATION,
VAPOUR CONTROL LAYER
& RADIANT BARRIER

CORROSION RESISTANT

SUITABLE FOR MULTIPLE APPLICATIONS

EASY TO INSTALL

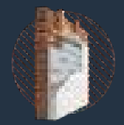
NO SPECIALIST TOOLS REQUIRED

EASY, PRE-PACKED PRODUCT KITS AVAILABLE

SUITS ALL BUILD TYPES

IDEAL FOR NEW BUILD
& RETROFIT. ROOFS,
WALLS & FLOORS


ROOF


WALL


FLOOR

SuperFOIL.co.uk

BUBBLE FOIL INSULATION

SuperFOIL bubble foil is a multi-layer, air bubble insulation. It is a waterproof, corrosion resistant insulation, suitable for use in a multitude of application types. Perfect for D Y solutions, bubble foil provides exceptional value for money.

The SuperFO L bubble foil range can be used for insulating under floors, in walls, dry lining and can also be used in greenhouses and industrial applications.

Made from aluminium metalized PET, it has a 50+year useful lifespan.

Available in a selection of roll sizes. t is the perfect product to always have available in the shed for life little emergencies.

Top Tip - SuperFOIL bubble foil is an ideal supplement to existing insulation due to its radiant barrier properties, keeping your house warmer in winter and cooler in the summer.

CERTIFIED **HIGH PERFORMANCE**

COST EFFECTIVE

SUITS **ALL BUILD TYPES**

	SFBA MP	SFBA 2/2	SFBA BB
Product Dimensions			
Thickness	3mm	6mm	3mm
Length	25 / 50m	25m	50m
Width	1.5 / 0.75m	1.2m	1.35m
Coverage	37.5 m^2	30 m^2	67.5 m^2
Thermal Performance			
Core	0.12 m2k/W	0.14 m2k/W	0.125 m2k/W
Roof	1.03 m2k/W	1.04 m2k/W	0.60 m2k/W
Wall	1.45 m2k/W	1.47 m2k/W	0.83 m2k/W
Floor	2.77 m2k/W	2.79 m2k/W	-

CE

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

RADIANT BARRIER MEMBRANES

Radiant Barriers for use in Roofs, Walls & Floors

2 IN 1 DESIGN
VAPOUR CONTROL LAYER & RADIANT BARRIER

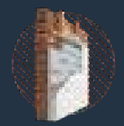
HIGH PERFORMANCE
CERTIFIED BY LABC & BBA

QUICK & EASY TO INSTALL
NO SPECIALIST TOOLS REQUIRED

SUSTAINABLE
MADE FROM UP TO 40% RECYCLED MATERIALS

SUITS ALL BUILD TYPES
IDEAL FOR NEW BUILD & RETROFIT. ROOFS, WALLS & FLOORS


ROOF


WALL


FLOOR

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RADIANT BARRIER MEMBRANES

SuperFOIL manufacture reflective membranes for all project types.

SFTV is a high performance, reflective vapour control layer.
The range has been tested and certified to achieve almost three times the performance of a standard vapour control layer, significantly reducing the risk of condensation within roofs, walls and floors.

SuperFOIL SFBB is a breathable, reflective membrane. With a low vapour resistance, it ensures that any vapour that enters the fabric of your home will escape without causing risk of condensation. SFBB is fully watertight and can be used in both your roof and walls.

**TIP ** SuperFOIL reflective membranes all provide a radiant barrier which will reduce solar gain.

CERTIFIED **HIGH PERFORMANCE**

COST EFFECTIVE

SUITS **ALL BUILD TYPES**

	SFTV 1L	SFTV	SFBB
Product Dimensions			
Thickness	>1mm	>1mm	>1mm
Length	20m	25 / 50m	25m
Width	1.2m	1.5m	1.5m
Coverage	24 m^2	37.5 / 75 m^2	37.5 m^2
Performance			
Roof	0.47 m2k/W	0.95 m2k/W	0.29 m2k/W
Wall	0.71 m2k/W	1.42 m2k/W	0.366 m2k/W
Emittance	0.03	0.03	0.19
Water Vapour Resistance	1200+ MNs/g	1200+ MNs/g	0.115 MNs/g

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

CASE STUDIES

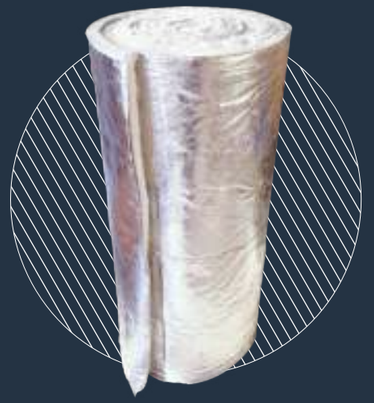
ROYAL PAPWORTH HOSPITAL

PROJECT VALUE
£165M

MAIN CONTRACTOR
SKANSKA AND HOK

PROJECT TYPE
A cladding insulation solution to meet the high rise fire & thermal performance requirements using SuperFOIL SFNC

SFNC



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The Project

Royal Papworth Hospital is a leading heart and lung hospital, located on the Cambridge Biomedical Campus in Cambridgeshire, England.

Construction of the new Royal Papworth Hospital in Cambridge began in 2015. The 300 bed hospital is designed to combine a highly efficient clinical layout with a stunning external appearance.

With 2,300 rooms, five operating theatres, five catheter laboratories, two hybrid theatres and a 46-bed critical care unit, the hospital is a world class facility for the area.

The old hospital in Papworth Everard was founded in 1918 and is recognised as one of Europe's leading heart and lung hospitals. The first successful heart transplant took place at the hospital as well as the world's first successful heart, lung and liver transplant.

The Problem

The unique and stunning curved blue glass cladding specified for the new hospital posed several design challenges. The insulation used needed to provide high thermal performance, be able to conform the curved surface and be completely non-combustible since the building is in excess of 18m.

SuperFO L nsulation was approached to provide replacement insulation that would meet all fire safety standards and which could be applied without requiring changes to the exterior or interior design of the building. After careful consideration as to what would be the most suitable solution, we supplied 5,500m of our non-combustible SFNC insulation.

SuperFOIL SFNC is the only insulation of its kind to be certified by the Building Research Establishment (BRE) as European Class A1 Non-Combustible, which is the highest possible rating of fire safety.

How We Helped

Working hand-in-hand with Skanska and HOK, the construction and completion of the state-of-the-art hospital has been a complete success. Because SFNC is Euro Class A1 non-combustible, it met the required fire safety levels and, as a result, the Royal Papworth Hospital was able to officially open its doors on 1st May 2019.

Despite the slim 20mm width of SuperFOIL's SFNC insulation, the product offers exceptionally high thermal performances. Its roof performance is 1.54 R-value, walls have a 1.99 R-value and flooring has a 3.68 R-value. Additionally, SFNC also has outstanding fire performance levels including an official Class A1 'non-combustible' rating which is the best possible rating for 'Reaction to Fire'. It also ranks in Class 0 for 'Fire Propagation' and Class 1 for 'Spread of Fire'.
Another quality of SFNC which made it a perfect fit for the Papworth Hospital project is its physical flexibility. It was suitable to be used alongside the unique blue curved glass cladding system that makes the exterior of the hospital so spectacular.

Managing Director of SuperFO L nsulation, William Bown said:

"The new Royal Papworth Hospital is an incredible building that help save lives so we wanted to do everything we could to help the hospital open as soon as possible.

"Of course, fire safety on large buildings is absolutely crucial and, as the only manufacturer of non-combustible multi-foil insulation, we were very happy to help."

"We're really proud of having played a role in helping this important building towards completion."

SFNC is quick and easy to apply and, because it offers an R-Value of up to 1.54 despite measuring just 20mm in thickness, it was the ideal insulation alternative.

BBA · LABC · LABSS · CE · NHBC

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

CASE STUDIES

HEREFORDSHIRE HOUSING ASSOCIATION

PROJECT VALUE
£3.5M

MAIN CONTRACTOR
MERRIMAN ROOFING

PROJECT TYPE
Our multifoil insulation was the only product on the market that could do the job and that was using SuperFOIL SF40

SF40

The Project

Recently, Herefordshire Housing Association, part of Connexus, announced plans of a five year project with the aim of improving the energy efficiency levels of its entire housing stock, which includes over 500 Cornish type houses across Herefordshire.

Many of these homes were built between 1946 and the 1960's as a 'temporary' solution to the post-war housing crisis and they are easily recognised because of their distinctive Mansard roof structure. While they were intended to be temporary, these Cornish-type homes are still inhabited by thousands of people across the country.

Herefordshire Housing Association have invested £3.5 million over 5 years to increase energy efficiency in their existing properties.

The Problem

The contractors, Merriman Roofing and distributor Encon Insulation were given the target of improving the thermal performance of this insulation in the Mansard roofs to a U-value of 0.30 W/m²K, while minimising the disruption to residents which wouldn't have been possible using traditional means.

Because the houses were occupied, all improvement works needed to be carried out from the outside to minimise the impact on the occupants.

Unfortunately, due to the Mansard roof which covers the second storey of the building, it's difficult to significantly improve the energy efficiency of the homes using traditional materials and tools, with a U-value target of 0.30 W/m2.K, traditional insulation was too thick.

In the past, efforts to improve the insulation of the Cornish-type homes have been limited by the design of the roof. Achieving a good fit within the timber frame using externally applied options has proved to be challenging due to the narrow cavity between the interior wall and the exterior roof and applying products from inside can typically be disruptive and intrusive for occupants.

How We Helped

To overcome this issue, the companies sought our expert advice and services to provide cost-effective insulation which could be quickly and easily applied from the outside of the property and which met their targets for thermal performance.
After visiting the houses that required new insulation, our experts came to the conclusion that our SuperFOIL SF40 multifoil insulation would be the perfect solution to the problem. Because SF40 measures to be just 65mm thick when installed, it was a suitable fit for the unusual Cornish-type properties and their distinctive roofs which only allow a narrow space for insulation.
Working with, Herefordshire Housing, Encon and Merriman Roofing Contractors Ltd, we have supplied enough insulation to provide for over 500 houses, improving heat retention in the winter and energy efficiency throughout the year.

SuperFOIL SF40 worked very closely with Hereford Housing Ltd and Merriman Roofing Contractors Ltd to offer a bespoke solution. SF40 was up to the challenge achieving 0.26 W/m2.K, significantly exceeding their target value. A single layer of SF40 provided maximum performance, minimal thickness, improved air-tightness, radiant barrier, huge cost savings and less disruption to the residents.

Director of Merriman Roofing, Mike Merriman, said:

"SuperFOIL SF40 multifoil insulation was the only product on the market that could do the job and we've used it on every one of the 500 homes to great effect. Using SuperFOIL, we've exceeded our target and cut the U-value to just 0.26 W/m²K.

"The SF40 insulation has been quick and easy to install, enabling us to complete the work with minimal disruption to residents. The upgraded houses should cut residents' heating bills significantly and they'll be much more comfortable in their homes over winter. I'm really pleased with the results."

QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

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SuperFOIL

CASE STUDIES

ONE HYDE PARK

PROJECT VALUE
£250M

MAIN CONTRACTOR
LAING O'ROURKE

PROJECT TYPE
Our most practical and efficient solution for this project was using insulation with a slim profile like SuperFOIL SFUF

SFUF

SuperFOIL.co.uk

The Project

One Hyde Park, owned by CPC Group, is a high-end residential and retail park situated in Knightsbridge, London. Due to the nature and standard of the construction, developers required the highest quality tools, equipment and materials to construct the building.

nnovative and ambitious, this project demanded the most out of every material used. The floor build-ups needed to be kept to a minimum thickness to deliver the sleek design envisioned by the architect. SuperFO L was approached during the project to supply underfloor insulation throughout the building.

Construction began in 2007 and was completed in 2009 – the interior fitting of the building began in April of the same year.

In August 2010, the development made headlines when a penthouse in the development was sold for £140million, making One Hyde Park the home of the most expensive residential property in the UK.

The Problem

nnovative and ambitious, this project demanded the most out of every material used. The ambition was to keep the design lines sleek, elegant and spacious, while still achieving the required high thermal performance expected in in a modern prestigious development in the heart of London.

Insulating the floors introduced another level of complexity and so the search for something that was up to the challenge began.

How We Helped

After meeting with developers, our experts concluded that SuperFOIL SFUF would be the most practical and efficient solution to the project. With a slim profile of just 6mm and R value of 0.8, SFUF gives a great solution where floor depths are limited.

Multi foil insulation offers additional benefits over more traditional types of insulation. Because SuperFO L consists of multiple layers of radiant barrier foil, it is able to protect against heat loss through radiation that non-foil insulation's offer no protection against.

SFUF has a slightly different build-up to our typical roof / wall products in that it doesn include layers of wadding, this makes it much slimmer and less compressible, making it an ideal combination for solid floor applications. Unlike our other products, SFUF is also typically installed with no air gaps which, again, contributes to its slim profile.

The top layer of SFUF is a polythene membrane which provides protection allowing it to be screeded onto directly with no need for additional layers to be installed. This also makes SFUF ideal for use with underfloor heating systems.

The application of SuperFOIL SFUF was a success and the building was finished in 2010. Starting at £20million, One Hyde Park residential properties began selling soon after the completion of the complex.

SuperFOIL SFUF provided a solution to achieve a high level of thermal performance in this prestigious development. SFUF has an impressive thermal R-value achieving excellent performance in a minimal amount of space.

Managing Director of Superfoil nsulation, William Bown said:

With our line of high performance multi-foil insulation, SuperFOIL is well suited for high-profile, high-quality projects. One Hyde Park is an incredible building and I'm glad that we were able to provide underfloor insulation which surpassed the clients' expectations. The product was easily applied and its narrow thickness and its ability to reflect radiant heat meant it was perfect for this project."

BBA · registered LABC · LABSS · CE · NHBC · QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015 · BOULDER DEVELOPMENTS

SuperFOIL

CASE STUDIES

WEMBLEY CENTRAL BUILDING 2

PROJECT VALUE
28M

MAIN CONTRACTOR
SOWCREST LTD

PROJECT TYPE
Our un-matched performance and highly reflective foils enables us to use a single layer of our SperFOIL SF40

SF40

SuperFOIL.co.uk

The Project

Part of a £60 million regeneration project for the centre of Wembley, Building 2 is a mixed-use development consisting of 20,000ft² of retail space at ground level, an 86 bed hotel over two floors and 38 executive apartments.

Built directly above Wembley Central Train and Underground Station, which remained operational throughout construction, Wembley Central Building 2 was built between November 2013 and February 2015 at a cost of £28 million. SuperFOIL SF40 insulation and SuperFO L Superior Tape was used to create a high performance insulation system with a U-value of just 0.15 W/m²K.

Overall, the Wembley Central development provides 120,000ft² of new retail and leisure space, 23,000ft², an 86-bedroom hotel with a bar/restaurant, and 273 apartments, including 85 affordable homes. In addition to the new public square, a refurbished 24-hour multi-storey car park, new public WC facilities, and a significantly enhanced tube and train station are features of the scheme.

The Problem

Situated above an important transport hub, the Wembley Central development was a flagship project to transform a busy area of London.

With a modern and eye-catching design, the hotel and residential apartment blocks of Building 2 are constructed in a lightweight steel frame faced with a combination of a coloured rain screen and sto render. n its design, the project s architects wanted high performance insulation without increasing the thickness of the external cladding.

Ensuring a minimal wall thickness is an important concern for developers in locations where land value is high and space is at a premium. Reducing the thickness of the structure is attractive because it creates more living space on the inside, increasing the value of the property. There are also aesthetic reasons for aiming for a slimmer wall profile which was an important consideration for this development which is characterised by it s modern, stylish design.

How We Helped

Measuring just 65mm thick and delivering a U-value as low as 0.22 W/m²K when used as a single layer of wall insulation, SuperFOIL SF40 is the UK's most cost effective multi-foil insulation on the market.

Paired with SuperFO L Superior Tape, our high performance fully reinforced foil tape for sealing all seams, joints and edges of SuperFOIL multi-foil insulation, the team was able to meet the clients needs for thermal resistance with just a few centimetres of insulation.
SuperFOIL SF40's un-matched performance and highly reflective foil layers allowed the architect to specify a solution to achieve the U-value target of 0.15 without using excessively thick panels.

SF40's thermal performance is certified by LABC and BBA, making the product the ideal solution for this development. The product is also CE certified for its performance as a vapour control layer and water barrier.

SF40 is easy to fit, easy to handle and produces minimal wastage and the product is made with up to 40% recycled material. As an approved LABC Registered System, the product also saves time and money by streamlining Building Regulation applications.

SuperFOIL's multi-foil insulation is composed of layers of wadding in between sheets of reinforced and metallised film. This enables the insulation to prevent heat radiation and create a barrier to the movement of air and vapour helping to prevent draughts and, as a CE certified vapour-barrier, help to reduce condensation risks.

With SuperFO L SF40, the residents and hotel guests at Wembley Central Building 2 will enjoy well-insulated, safe and stylish accommodation for many decades to come thanks to the product s life expectancy of more than 50 years.

BBA · LABC · LABSS · CE · NHBC

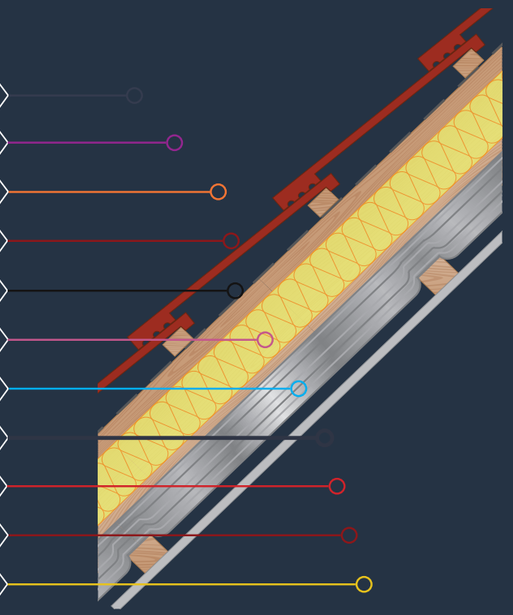
QUALITY SYSTEM MANUFACTURED TO: ISO 9001:2015

BOULDER DEVELOPMENTS

SuperFOIL

SOLUTIONS GUIDE

Construction	Thickness	R-Value
External Surface	-	0.040
Tiles / Slates	10mm	-
Batten Cavity	25mm	-
Breather Membrane	1mm	-
Rafter Cavity	25mm	0.184*
Additional nsulation	See Table	-
Rafter Cavity	38-63mm	0.476
SuperFO L	40-100mm	See Table
Batten Cavity	38-63mm	0.476
Plasterboard	12.5mm	0.066
nternal Surface	-	0.100



Pitched Roof - Internal Insulation Solutions

SuperFO L is installed tight under the pitched roof timber rafters, from the ridge to the eaves, using the correct size galvanized or stainless-steel staples at 300mm intervals. See table for correct sizes.

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

The sealing of the joints around openings such as windows, pipes and ventilation ducts should be completed with Superior Foil Tape to maximise the vapour tightness. Particular attention should be paid to the fastening of any penetrations through the products.

At eaves, the products should be trimmed, stapled and then then sealed with Superior Foil Tape to the timber wall plate.

The products are then further held in place by the correct size timber battens installed horizontally at no greater than 600 mm centres. Additional timber battens are installed around windows or sky lights. Where necessary, Superior Foil Tape should be applied to any tears, cuts or joints.

PITCHED ROOF U-VALUE SOLUTIONS

Solution Type	SuperFO L Product	Additional Insulation - Glass wool / Mineral Wool - 0.044W/mK												
		Any Rafter Depth	<100mm Rafter		125mm Rafter		175mm Rafter		225mm Rafter		>225mm Rafter			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.34	0.29	0.25	0.23	0.2	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.12
	SF40	0.26	0.23	0.2	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.1
	SF60	0.2	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.11	0.1	0.1	0.09
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.41	0.34	0.29	0.26	0.23	0.21	0.19	0.17	0.16	0.15	0.14	0.13	0.12
	SF40BB	0.26	0.23	0.21	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.1

Solution Type	SuperFO L Product	Additional Insulation - PIR (Foam Board) - 0.022W/mK												
		Any Rafter Depth	<100mm Rafter		125mm Rafter		175mm Rafter		225mm Rafter		>225mm Rafter			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.34	0.26	0.1	0.18	0.16	0.14	0.13	0.12	0.11	0.1	0.09	0.09	0.08
	SF40	0.26	0.21	0.18	0.16	0.14	0.12	0.11	0.1	0.1	0.09	0.08	0.08	0.07
	SF60	0.2	0.17	0.15	0.13	0.12	0.11	0.1	0.09	0.09	0.08	0.08	0.07	0.07
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.41	0.3	0.24	0.2	0.18	0.16	0.14	0.13	0.11	0.11	0.1	0.09	0.09
	SF40BB	0.26	0.21	0.18	0.16	0.14	0.12	0.11	0.1	0.1	0.09	0.08	0.08	0.07

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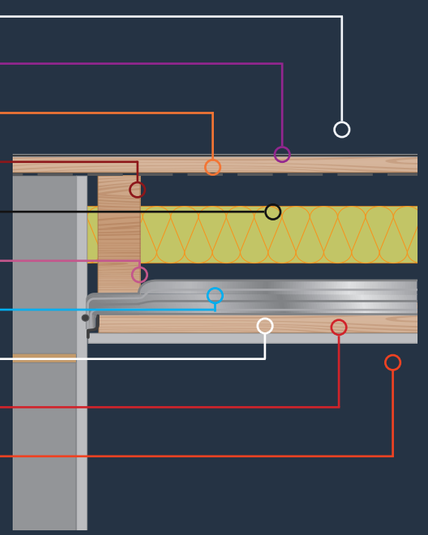
SuperFOIL

SOLUTIONS GUIDE

Construction	Thickness	R-Value
External Surface	-	0.040
Single Ply Membrane	1mm	-
OSB / Plywood	9mm	-
Joist / Firring Cavity	25mm	0.184*
Additional nsulation	See Table	-
Joist Cavity	20-40mm	0.476
SuperFO L	40-100mm	See Table
Batten Cavity	25-63mm	0.454
Plasterboard	12.5mm	0.066
nternal Surface	-	0.100



Flat Roof - Internal Insulation Solutions

When installing on a flat roof, SuperFOIL insulation is to be installed at a 90 degree angle to the joists and starting at the external wall.

nstall the insulation in a continuous layer with a minimum of 50mm overlap at joints, and staple into place using galvanized or stainless-steel staples at regular intervals (See table for correct sizes).

The sealing of all joints and around openings such as windows, pipes and ventilation ducts should be completed with 100 mm Foil Tape to maximise the vapour tightness. Particular attention should be paid to the fastening of any pen-etrations through the products.

The products are then further held in place by timber battens installed perpendicular to the joists at no greater than 600 mm centres. Additional timber battens are installed around sky lights.

Where necessary, 100 mm Foil Tape should be applied to any tears, cuts or joints.

FLAT ROOF U-VALUE SOLUTIONS

Solution Type	SuperFO L Product	Additional Insulation - Glass wool / Mineral Wool - 0.044W/mK												
		Any Rafter Depth	<100mm Joist		125mm Joist		175mm Joist		225mm Joist		>225mm Joist			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.33	0.28	0.25	0.22	0.2	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11
	SF40	0.25	0.22	0.2	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.11	0.11	0.1
	SF60	0.2	0.18	0.17	0.15	0.14	0.13	0.13	0.12	0.11	0.1	0.1	0.1	0.09
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.4	0.33	0.28	0.25	0.2	0.2	0.18	0.17	0.16	0.15	0.14	0.13	0.12
	SF40BB	0.27	0.24	0.22	0.2	0.18	0.16	0..15	0.14	0.13	0.13	0.12	0.11	0.11

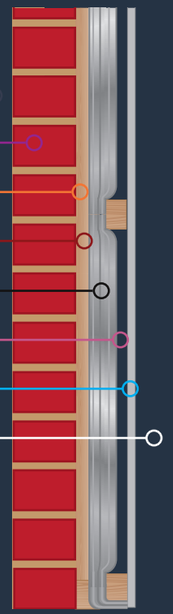
Solution Type	SuperFO L Product	Additional Insulation - PIR (Foam Board) - 0.022W/mK												
		Any Rafter Joist	<100mm Joist		125mm Joist		175mm Joist		225mm Joist		>225mm Joist			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.33	0.26	0.21	0.18	0.16	0.14	0.13	0.12	0.11	0.1	0.09	0.09	0.08
	SF40	0.25	0.2	0.18	0.15	0.14	0.12	0.11	0.1	0.1	0.09	0.08	0.08	0.07
	SF60	0.2	0.17	0.15	0.13	0.12	0.11	0.1	0.09	0.09	0.08	0.08	0.07	0.07
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.4	0.29	0.24	0.2	0.17	0.15	0.14	0.12	0.11	0.1	0.1	0.09	0.08
	SF40BB	0.27	0.22	0.19	0.16	0.14	0.13	0.12	0.11	0.1	0.09	0.09	0.08	0.08

This guide is designed to demonstrate possible solutions achievable with SuperFO L both on its own and combined with other insulation products. The results listed are based on set constructions as described in the charts. We would be happy to confirm suitabilty of any solution for use in your project, please get in touch and our expert technical team can provide bespoke U-value calculations using Government approved software

SuperFOIL

SOLUTIONS GUIDE

Construction	Thickness	R-Value
External Surface	-	0.040
Brick	103mm	0.133
Additional nsulation (Between Battens)	See Table	-
Batten Cavity	38-63mm	0.713
SuperFO L	40-100mm	See Table
Counter Batten Cavity	38-63mm	0.713
Plasterboard	12.5mm	0.066
nternal Surface	-	0.100



Solid Wall - Internal Insulation Solutions

Attach timber frame to existing solid wall by installing vertical battens, batten the top and bottom of the wall, and around any doors or windows. SuperFO L can then be applied directly to battens either horizontally or vertically. When applying horizontally, start at the bottom of the wall and work up. For vertical installations, start at the top of the wall and roll the insulation downwards.

When fitting the insulation, ensure to apply tension to the product whilst stapling into place. Staples should be placed at regular intervals of 50mm-100mm. Then simply cut to required length and repeat the process with the next layer, ensuring a minimum of a 50mm overlap between joints.

At the floor & ceiling trim SuperFOIL allowing for a small overlap, seal the SuperFOIL as conditions dictate to create a continuous layer of insulation using SuperFO L tape.

Ensure all joints, tears or cuts are sealed fully using SuperFOIL foil tape to achieve an airtight finish.
To finish installation, install counter battens on top of the SuperFOIL to create an air gap. The internal finish is then fixed onto the battens in line with manufacturer's recommendations.

SOLID WALL U-VALUE SOLUTIONS

Solution Type	SuperFO L Product	Additional Insulation - Glass wool / Mineral Wool - 0.044W/mK												
		Any Stud Depth	<100mm Stud		125mm Stud		175mm Stud		225mm Stud		>225mm Stud			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.3	0.26	0.23	0.21	0.19	0.18	0.16	0.15	0.14	0.13	0.13	0.12	0.11
	SF40	0.23	0.21	0.19	0.18	0.16	0.15	0.14	0.13	0.13	0.12	0.11	0.11	0.1
	SF60	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.11	0.1	0.1	0.09
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.33	0.29	0.25	0.23	0.21	0.19	0.17	0.16	0.14	0.13	0.12	0.12	0.12
	SF40BB	0.22	0.2	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.11	0.1

Solution Type	SuperFO L Product	Additional Insulation - PIR (Foam Board) - 0.022W/mK												
		Any Rafter Depth	<100mm Stud		125mm Stud		175mm Stud		225mm Stud		>225mm Stud			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.3	0.24	0.2	0.18	0.16	0.14	0.13	0.12	0.11	0.1	0.1	0.09	0.08
	SF40	0.23	0.2	0.17	0.15	0.14	0.12	0.11	0.1	0.1	0.09	0.09	0.08	0.08
	SF60	0.19	0.16	0.15	0.13	0.12	0.11	0.1	0.09	0.09	0.08	0.08	0.07	0.07
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.33	0.26	0.22	0.19	0.16	0.15	0.13	0.12	0.11	0.1	0.1	0.09	0.09
	SF40BB	0.22	0.19	0.17	0.15	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.08	0.08

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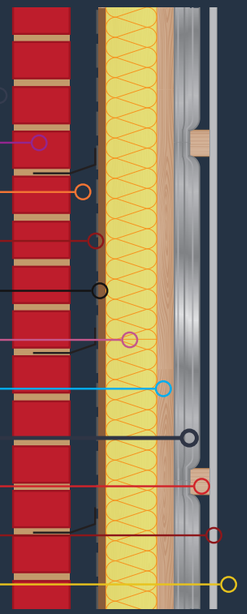
SuperFOIL

SOLUTIONS GUIDE

Construction	Thickness	R-Value
External Surface	-	0.040
Brick	100mm	0.133
Cavity	50mm	0.180
Breather Membrane	1mm	-
Sheathing Board	9mm	0.069
Additional nsulation	See Table	-
Stud Cavity	38-63mm	0.713
SuperFO L	40-100mm	See Table
Batten Cavity	38-63mm	0.713
Plasterboard	12.5mm	0.066
nternal Surface	-	0.100



Timber Frame Wall - Internal Insulation Solutions

SuperFO L is installed tight under the pitched roof timber rafters, from the ridge to the eaves, using the correct size galvanized or stainless-steel staples at 300mm intervals. See table for correct sizes.

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

The sealing of the joints around openings such as windows, pipes and ventilation ducts should be completed with Superior Foil Tape to maximise the vapour tightness. Particular attention should be paid to the fastening of any penetrations through the products.

At eaves, the products should be trimmed, stapled and then then sealed with Superior Foil Tape to the timber wall plate.

The products are then further held in place by the correct size timber battens installed horizontally at no greater than 600 mm centres. Additional timber battens are installed around windows or sky lights. Where necessary, Superior Foil Tape should be applied to any tears, cuts or joints.

TIMBER FRAME U-VALUE SOLUTIONS

Solution Type	SuperFO L Product	Additional Insulation - Glass wool / Mineral Wool - 0.044W/mK												
		Any Stud Depth	<100mm Stud		125mm Stud		175mm Stud		225mm Stud		>225mm Stud			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.3	0.26	0.23	0.21	0.19	0.18	0.16	0.15	0.14	0.13	0.13	0.12	0.11
	SF40	0.23	0.21	0.19	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.11	0.1
	SF60	0.18	0.17	0.16	0.15	0.14	0.13	0.12	0.12	0.11	0.11	0.1	0.1	0.09
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.38	0.37	0.31	0.27	0.24	0.22	0.2	0.18	0.17	0.16	0.15	0.14	0.13
	SF40BB	0.25	0.24	0.21	0.19	0.18	0.16	0.15	0.14	0.13	0.13	0.12	0.11	0.11

Solution Type	SuperFO L Product	Additional Insulation - PIR (Foam Board) - 0.022W/mK												
		Any Rafter Depth	<100mm Stud		125mm Stud		175mm Stud		225mm Stud		>225mm Stud			
		No Additional nsulation	25 mm	50 mm	75 mm	100 mm	125 mm	150 mm	175 mm	200 mm	225 mm	250 mm	275 mm	300 mm
INTERNAL NSULAT ON SOLUT ONS	SF19+	0.3	0.24	0.2	0.17	0.15	0.14	0.13	0.12	0.11	0.1	0.09	0.09	0.08
	SF40	0.23	0.2	0.17	0.15	0.13	0.12	0.11	0.1	0.1	0.09	0.09	0.08	0.08
	SF60	0.18	0.16	0.14	0.13	0.12	0.11	0.1	0.09	0.09	0.08	0.08	0.07	0.07
EXTERNAL NSULAT ON SOLUT ONS	SF19BB	0.38	0.33	0.26	0.22	0.19	0.17	0.15	0.13	0.12	0.11	0.11	0.1	0.09
	SF40BB	0.25	0.22	0.19	0.16	0.15	0.13	0.12	0.11	0.1	0.1	0.09	0.08	0.08

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