

SAFE-R 019

PHENOLIC
INSULATION

Soffit Application

SR019/STP

Impact resistant 6mm
building panel

Fire Classification B-s1, d0

Accepts decorative finish

Reduced Thermal Bridging

Lower Lambda value for
improved U-Values



 **UNILIN** INSULATION

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Soffit Application

SR019/STP

SR019/STP provides effective thermal and fire performance solutions in structural ceiling applications in commercial and residential buildings.

The high performance phenolic insulation board, with composite foil facings, is adhesively bonded to a 6mm building panel which offers a secure finish for ease of maintenance to which a decorative finish may be applied.

Benefits

- Impact resistant 6mm building panel
- Fire Classification B-s1, d0
- Accepts decorative finish
- Reduced Thermal Bridging
- Lower Lambda value for Improved U-Values



Specification Clause

The soffit insulation shall be Safe-R 019 SR019/STP ____ comprising of a rigid Phenolic core between composite foil facings manufactured to EN 13166:2012+A1:2015 by Unilin Insulation, bonded to 6mm building panel. The SR019/STP ____ mm with a declared Lambda value of 0.019W/mK (Phenolic only) to achieve a U value of ____ W/m²K for the soffit element to be installed in accordance with instructions issued by Unilin Insulation

Refer to NBS clause P10 185.
Uniclass Pr 25 71 63 59.



Thermal Resistances

Thickness Phenolic	R-Value (m ² K/W)
75	3.90
80	4.20
100	5.25
120	6.30
150	7.65

Note: 6mm building panel not included in thickness.

Resistance 'R' Values

The resistance value of any thickness of material can be ascertained by dividing the thickness (in metres) by its Lambda value, for example: Lambda 0.019 W/mK and Phenolic thickness 75mm -> 0.075/0.019 -> R-Value = 3.947. In accordance with EN 13950, R-Values should be rounded down to the nearest 0.05 (m²K/W).

SR019/STP

1. SR019/STP can be fixed directly to the concrete slab, onto battens or used with proprietary fixing systems, to provide an even surface. The rigid product is convenient to handle and allows for fast and fixing.
2. The bonded facing of non combustible building panel is water and impact resistant providing a durable protection to which a decorative finish may be applied.
3. Using SR019/STP on soffit areas, whether new build or refurbishment situations, provides the most efficient U-Values with minimal thickness of insulation. The product achieves a thermal conductivity of 0.019 W/mK and has a Euroclass B fire classification.



SR019/STP

Length (mm)	2400
Width (mm)	1200
Thickness* (mm)	81, 86, 106, 126

*6mm building panel included in thickness.

Other thicknesses may be available depending on minimum order quantity and lead time.

Property & Units

Thermal Conductivity	0.019 (W/mK)
Reaction to Fire	Euroclass B-s1, d0

INSTALLATION GUIDELINES

SR019/STP

A high performance phenolic insulation laminate, with impact resistant 6mm building panel that accepts a decorative finish.

Directly to Concrete

1. Where applicable, ensure cavity wall insulation has continued past the soffit insulation to reduce Thermal Bridging.
2. Install SR019/STP onto the soffit, ensuring all joints are supported. The boards should be tightly butt jointed, laid staggered in a break bonded pattern and fitted tightly at edges and around any service penetrations. Any gaps or service penetrations should be addressed with propriety fillers and components in accordance with fire engineers specifications.
3. Fix SR019/STP to soffit with approved fixings*, ensuring the fixings penetrate the substrate by a minimum of 40mm. Generally 12 fixings (min shank diameter of 5.2mm) per board are required. Fixings should have a head diameter of at least 35mm. Distribute fixings evenly across the board, at max 600mm across and 800mm along, at a minimum of 50mm from the board edge and a maximum of 150mm. Refer to fixing patterns below for indicative purposes. It is recommended to seek advice from the fixing manufacturer for specific guidance.
4. Boards joints can be covered with a suitable cover strip (acrylic tape).

Fixing to Timber Battens/ Proprietary Systems

1. Treated timber battens may be used to provide an even surface when direct fixing to the soffit is not possible. Battens should be treated timber.
2. The battens, measuring minimum 50mm x 40mm, should be mechanically fastened at minimum 600mm centres.
3. Fix SR019/STP to the timber battens with approved fixings*, ensuring the fixings penetrate the substrate by a minimum of 40mm. Ensure joints are tightly butted and fill any gaps with fire retardant expanding foam. Generally 12 fixings (min shank diameter of 5.2mm) per board are required. Fixings should have a head diameter of at least 35mm. Distribute fixings evenly across the board, at max 600mm across and 800mm along, at a minimum of 50mm from the board edge and a maximum of 150mm. Refer to fixing patterns below for indicative purposes. It is recommended to seek advice from the fixing manufacturer for specific guidance.
4. When using proprietary metal grid systems refer to manufacturer for fixing instructions. Board joints can be covered with a suitable cover strip (acrylic tape).

*Fixing type and specification should be verified by the fixing manufacturers design, to take account of topographical and fire considerations. Account should be taken of any Thermal Bridging through the fixings as should the effect of any supporting beams. Fixing manufacturers: Ejot or Fischer.

THERMAL PERFORMANCE

SR019/STP

Typical U-Values

Table 1

U-Value calculations to EN ISO:6946:2017
SR019/STP Insulation for Soffit Application

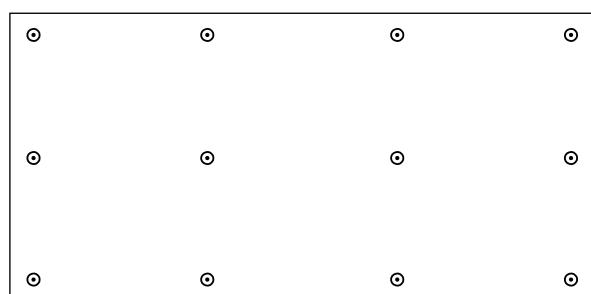
Build up:

- 200mm concrete
- SR019/STP (Including 6mm building panel)

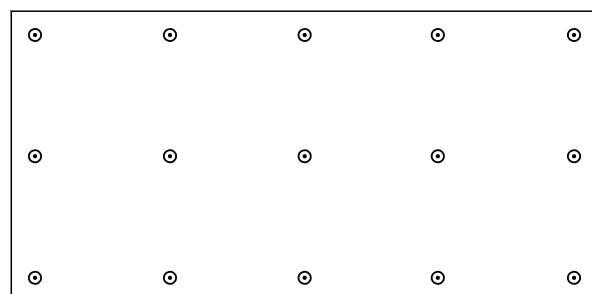
	Thickness (mm)			
	81mm	86mm	106mm	126mm
U-Value	0.25	0.23	0.19	0.16

Thickness includes 6mm building panel

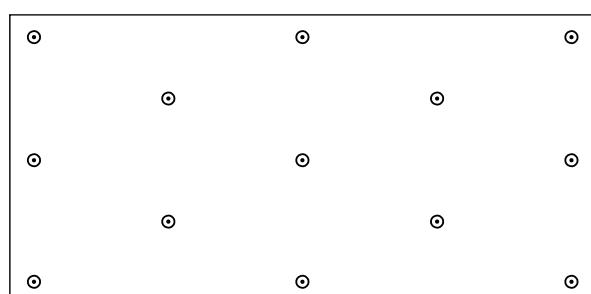
Typical Fixings Patterns



12 fixings per board
(4.16 fixings / m²)



15 fixings per board
(5.20 fixings / m²)



13 fixings per board
(4.51 fixings / m²)

HANDLING, CUTTING & STORAGE

Unilin insulation should be stored off the ground, on a clean, flat surface and must be stored under cover. The polythene wrapping is not considered adequate protection for outside exposure. Care should be taken to protect the insulation in storage and during the build process.

The insulation boards can be readily cut using a sharp knife or fine toothed saw. Ensure tight fitting of the insulation boards to achieve continuity of insulation as asked for within the ACDs. Appropriate PPE should be worn when handling insulation. Please refer to Health & Safety data sheets on our website.

The boards are wrapped in polythene packs and each pack is labelled with details of grade/type, size and number of pieces per pack.

Durability

Unilin Insulation products are stable, rot proof, provide no food value to vermin and will remain effective for the lifetime of the building, depending on specification and installation. Care should be taken to avoid contact with acids, petrol, alkalis and mineral oil. When contact is made, clean materials in a safe manner before installation.





Expect more Knowledge

Unilin Insulation is one of the UK's largest manufacturers and suppliers of insulation. We have a 20-plus year history of working in partnership with construction professionals to close the gap between design and as-built performance.

Higher standards of fabric performance call for greater adherence to best practice detailing. To achieve this and to 'close the gap' between design and build, we provide a dedicated Technical Team, all qualified to the highest standards of competency in U-Value calculation and condensation risk analysis.

Here to support you

- BRE listed Thermal Bridging Detailing
- BRE Trained Modelling
- Warranted Calculations available
- Immediate technical response
- SAP Qualified
- Insulation systems to deliver real onsite performance

Get in touch

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FREE
One-to-one
advice





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The Sustainable Solution

Specifying Unilin Insulation is a real commitment to minimising energy consumption, harmful CO₂ emissions and their impact on the environment. Using our products is one of the most effective ways to reduce energy consumption - in fact, after just eight months the energy they save far outweighs the energy used in their production. In addition, our manufacturing facilities operate to an ISO 14001:2015+A1:2024 certified Environmental Management System.

Environmental Product Declaration (EPD)

An Environmental Product Declaration or EPD for a construction product indicates a transparent and credible step in the pursuit and achievement of real sustainability in practice, it is a public declaration of the environmental impacts associated with specified life cycle stages of that product. Unilin EPDs have been independently verified in accordance with EN 15804+A2:2019 and ISO 14025:2010 accounting for stages of the LCA from A1 to A3, with options A4-A5 and modules C1-C4 and D included. The process of creating an EPD allows us to improve performance and reduce resource wastage through improvements in product design and manufacturing efficiency. They play a crucial role in manufacturing and construction and are increasingly asked for by industry.

EPDs and BREEAM

BREEAM is primarily trying to encourage designers to take EPDs into consideration when specifying products. BREEAM requires EPDs to be verified by a third-party. For the Mat 02 category, points are awarded based on whether EPDs are generic, manufacturer-specific, or product-specific. Non 3rd party verified EPDs to EN 15804:2012+A2:2019 cannot be accepted. All of Unilin EPDs are externally verified.

Responsible Sourcing

Unilin has BES 6001 certification for responsible sourcing. The second BREEAM credit under that category is based on responsibly-sourced materials - at least 80% of the total insulation used in roofs, walls, ground floors and services must meet any of tier levels 1 to 6 in the BREEAM table of certification schemes. Our Environmental Management System is certified under EN ISO 14001:2015+A1:2024, and our raw materials come from companies with similarly certified EMS (copies of all certificates are available for BREEAM assessments). This level of responsible sourcing meets tier level 6 in the BREEAM table.

Good workmanship and appropriate site procedures are necessary to achieve expected thermal and airtightness performance. Installation should be undertaken by professional tradespersons. The example calculations are indicative only, for specific U-Value calculations contact Unilin Insulation Technical Support. Unilin technical literature, Agrément certifications and Declarations of Performance are available for download on the Unilin Insulation website. The information contained in this publication is, to the best of our knowledge, true and accurate at the time of publication but any recommendations or suggestions which may be made are without guarantee since the conditions of use are beyond our control. Updated resources may be available on our websites. All images and content within this publication remain the property of Unilin Insulation.



ISO 45001:2023+A1:2024	Occupational Health & Safety Management Systems
ISO 9001:2015+A1:2024	Quality Management Systems
ISO 14001:2015+A1:2024	Environmental Management Systems