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CI/SfB Ry	(K2)

August 2023

Kemwell **KSL** Soffit Liner Insulation

A1 non-combustible thermal, fire and acoustic insulation liner for concrete soffits



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Thermal, fire and acoustic insulation liner board for concrete soffits

Kemwell Soffit Liner (KSL) is an A1 non-combustible building board which is ideally suited for providing effective fire resistance and thermal insulation in commercial and industrial building projects.

The board is available with a variety of facings - High impact (6mm calcium silicate board), foil-faced, white tissue faced, black tissue faced and plain.

Kemwell Soffit Liner insulation and facing boards have a reaction to fire classification of A1 as defined in BS EN 13501-1.

You can specify **Kemwell Soffit Liner (KSL)** with confidence.

SUPPORT

Our project team provides expert support services throughout all stages of any construction project, including:

- Technical advice
- Supply of data sheets and certification
- Product selection and application consultation
- Site-visits
- Installation advice
- On-site and off-site educational seminars
- Benefit from years of industry knowledge and experience

We understand the complex and stringent requirements of the building and construction industry and our products provide architects, developers, and contractors with adaptability and performance benefits to enable safe and innovative designs to be easily realised.

Please contact us to discuss your project or requirements further.

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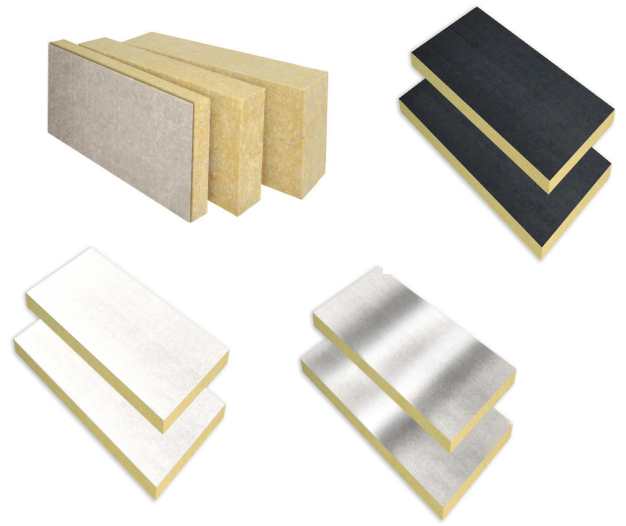
COMPOSITION

Kemwell Soffit Liner board is manufactured using high performing, non-combustible stone wool insulation. The high impact version has a 6mm rigid calcium silicate board facing. This combination of two non-combustible products provides increased impact resistance and durability in addition to improved fire safety. Also available in plain, white tissue faced and black tissue faced.

APPLICATIONS

Suitable for use with concrete soffits where a thermal, fire or acoustic performance is required.

Kemwell Soffit Liner board provides a cost effective solution for fire resistance and thermal insulation needs in concrete car park soffits and similar applications.



FEATURES



Acoustic/Thermal Performance

The thermal performance and acoustic insulation provided by the KSL board is greatly effective. The KSL board has a thermal conductivity (k value) of 0.035 W/mK. U-Value calculations available upon request.

Thermal resistance of un-faced Soffit Liner:

130mm Soffit Liner: 3.71 m²K/W
140mm Soffit Liner: 4.00 m²K/W
150mm Soffit Liner: 4.29 m²K/W
160mm Soffit Liner: 4.57 m²K/W
170mm Soffit Liner: 4.86 m²K/W

A concrete floor slab of 200mm thick underlined with 130mm thick KSL would achieve a U-value of 0.25W/m²k. With 160mm thick Kemwell Soffit Liner, a U-value of 0.21 W/m²k can be achieved.



Moisture and Weather Resistant

Kemwell Soffit Liner boards are water repellent and will not deteriorate when used in damp or humid conditions and will not encourage mould or bacteria growth.



Chemical Stability

When installed KSL boards are chemically inert and compatible with most materials that encounter the KSL board in normal building applications.



Easy Workability

Kemwell Soffit Liner boards can be easily cut to accommodate services and simply butt together at joints.



Smooth Surface

They can be easily decorated to match designs and colour schemes.



Durability

Kemwell Soffit Liner is a lightweight but strong composite board. System performance is unaffected by the hazards and condition of its working environment. It does not rot.



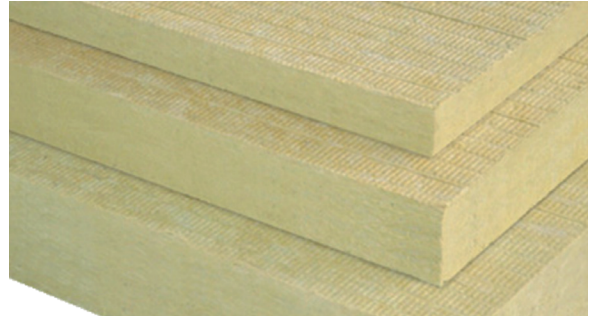
Dimensional Stability

Kemwell Soffit Liner board has excellent dimensional stability.

TECHNICAL PROPERTIES

	Value
Length	1200mm
Width	600mm
Stand Stock Thickness*	130, 136, 160 and 166mm
Thermal Conductivity	0.035 W/mk
Reaction to Fire	Euroclass A1

*Other thicknesses available upon request.



INSTALLATION

When commencing installation it is advised to start with a reference KSL board at the centre of the soffit when fixing a tile or modular system, ensuring to fix all following KSL boards outwards towards each edge.

To aid in safeguarding the alignment of the installation, it is advised to use string lines or laser alignment equipment.

Mechanical Fixings

Each KSL board should be fixed using Ejot DDS fixings with the Ejot DDT70 washer or similar, direct to the concrete soffit. Refer to the table and diagram below for the recommended number and pattern of fixings for each KSL board size.

Due care should be taken not to damage the surface of the KSL board by over-tightening the fixing. For more information on the fixing type, please refer to the fixing manufacturers' guide for suitability.

Light Fittings and Services

Light fittings and services should be supported from the concrete soffit.

Do not use Kemwell Soffit Liner to support these types of installations.

Specification Clauses

The insulation/fire protection of the concrete soffit is to be Kemwell Soffit Liner foil-faced / High impact / white tissue / black tissue / plain¹mm thick² as supplied by Kemwell PFP Ltd. and installed in accordance with the manufacturer's recommendations.

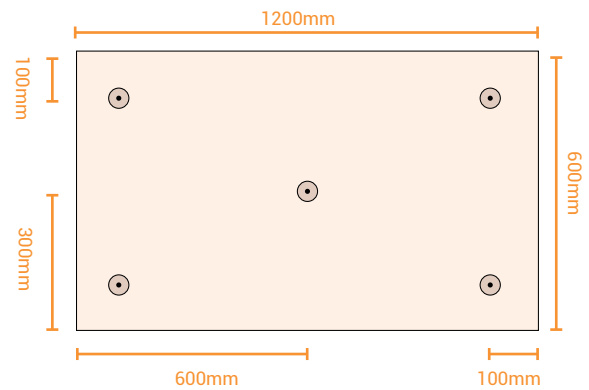
1. Delete as necessary. 2. Insert required thickness.

Kemwell Soffit Liner is associated with the following NBS specification clauses: K11 Rigid sheet flooring/sheathing/decking/sarking/linings/casings | 885 Fire Protection Board | 890 Board.

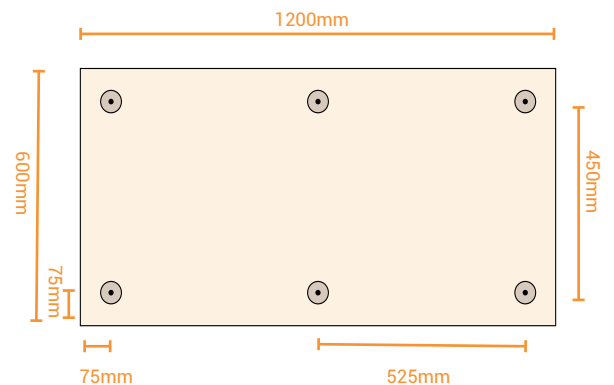
For thermal soffit lining applications

Thickness	High Impact Soffit Liner		Plain, Foil & Tissue Faced Soffit Liner			
	136mm	166mm	130mm	140mm	150mm	160mm
Ejot Fixing	DDS 7.3 x 175mm	DDS 7.3 x 200mm	DDS 7.3 x 175mm	DDS 7.3 x 175mm	DDS 7.3 x 200mm	DDS 7.3 x 200mm
Ejot Washer	DDT 70mm					

Installation Data	Information
Fixings Centres and edge spacing	Refer to below diagrams.
Fixings/m²	6.94 (Detail 1), 8.33 (Detail 2)
Fixing Method	Pre-drill Kemwell KSL board and concrete to a depth that is suitable for the fixing requirements (as per fixing manufacturers guidance). Insert fixing and hammer or screw tight to 'line and level'. Note: Do not overtighten fixings to avoid damage to the surface of the KSL board.



Alternative fixing pattern





Disclaimers

Kemwell Soffit Liner board should only be installed and used in accordance with the relevant Kemwell Fire International product datasheets, installation guidelines and fire resistance testing.



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