

# SOFFIT LINER

**U-Spec Soffit Liner** is a laminate of two components – a mineral wool or foam plastic insulation board bonded to a choice of rigid building boards

## Application

U-Spec Soffit Liner is typically used in semi-exposed applications, such as open-sided car parks, where it is used for the underlining of ceilings and soffits. It is primarily used to provide thermal insulation, but depending upon the choice of components, can also provide fire protection, acoustic insulation, high impact resistance, and an aesthetic finish. It is suitable for use in both residential and non-residential applications, in new-build and refurbishment projects.

## Typical Soffit Liner Components

### Mineral wool – stone wool slab

- Thermal conductivity 0.035 W/m.K (typical value)
- Reaction to fire classification of A1 as defined in BS EN 13501 – 1 (totally non-combustible, and Class O to the Building Regulations)

### PIR

- Thermal conductivity 0.021 – 0.022 W/m.K
- Euroclass F (Typical Reaction to Fire classification) and Class 1 or Class O fire classification to the Building
- Compressive strength of 120 kPa at 10% compression

### Phenolic

- Thermal conductivity, typically 0.020 – 0.023 W/m.K
- Euroclass B (typical Reaction to Fire classification) and Class O to the Building Regulations
- Compressive strength 100 kPa at 10% compression

## Liner board options

**Calcium Silicate** – A building board that can be cut, drilled, sanded and worked in a similar fashion to that of timber, with equivalent tools and machinery. Building Regulations fire classification is Euroclass A1 and with a Class O designation. Typical thermal conductivity is 0.14 W/m.K. and with a typical density of 1150 kg/m<sup>3</sup>.

**Magnesium Silicate** – a building board manufactured using inorganic substances and incorporating alkaline resistant glass fibre mesh. Building Regulations fire classification is Euroclass A1. Typical thermal conductivity is 0.26 W/m.K. and with a typical density of 1050 kg/m<sup>3</sup>.



Other boards can be used, such as cement particle boards or magnesium oxide/magnesium chloride boards.

## Dimensions

### Thickness

Building board liner is typically 6mm, but other thicknesses can be used.

Insulation thickness is typically a minimum of 25mm and maximum thickness can be 165mm or above, depending upon the type of insulant and desired U value of the application.

### Length and width

Soffit Liner laminate made with mineral wool is typically available in 1200mm x 600mm nominal dimensions. Soffit Liner laminate made with foam plastic insulants can be supplied in 2400mm x 1200mm nominal dimensions. However, the laminate can be manufactured in a range of dimensions, upon request.

## Fixing Recommendations

For horizontal applications, such as car park soffits, U-Spec Soffit Liner can be mechanically fixed direct to the masonry substrate using suitable fixings, and the fixing supplier should be contacted for advice prior to fixing. Alternatively, U-Spec Soffit Liner can be attached to treated timber battens which have previously been secured to the ceiling.

## Packaging

U-Spec Soffit Liner is supplied on pallets, complete with edge protection, polythene wrapping, and a weather-proof pallet hood. This packaging is designed for short-term protection only. For long-term protection on site, the product should be stored indoors, or under cover and off the ground. U-Spec Soffit Liner should not be left permanently exposed to the elements before installation.