

# Thermal, fire and acoustic insulation for concrete soffits

Soffit Slab consists of a non-combustible rigid ROCKWOOL® board with a variety of facings and is particularly suited for providing cost effective fire resistance and thermal insulation through concrete car park soffits and similar applications.







NBS Plus Clauses that include Soffit Slab are: K11/885 K11/60 K11/890

# Soffit Slab

# Advantages

- Excellent thermal performance
- Effective acoustic insulation
- Non-combustible stone wool insulation and facing options
- Fire resistance tested in-situ on a concrete soffit for insulation and integrity
- Cost effective and easy to install
- Water repellent
- Easily cut to accommodate services
- Simply butt together at joints
- Hi-impact option for durability, using non-combustible 6mm Promat PROMATECT® HD boards

#### **Dimensions**

For ease of handling, Soffit Slabs are generally supplied 1000x 600mm. Thickness range 130mm-160mm in 10mm increments. Hi-Impact Soffit Slab is available as 1200 x 600mm dimensions, with thickness of 136 -166mm.

#### **U-values**

A typical construction comprising of a 150mm concrete floor slab underlined with 130 mm thick Soffit Slab would achieve a U-value of 0.25W/m2K, which meets current thermal requirements. A Uvalue of 0.20 W/m2K can be achieved using 160mm thick Soffit Slab.

# Soffit Fire protection

Soffit Slabs have been tested to BS EN 1363-1 to offer fire protection to reinforced concrete floors. When applied to the soffit using the recommended fixings and pattern, 130 and 140mm thick products, with and without facings, provide 3 hours fire insulation and integrity to a minimum 90mm thick floor slab; 150 and 160mm thicknesses provide 4 hours to a minimum 150mm thick slab. For further advice call Customer Support (0871 222 1780).

#### Performance and Properties

## Reaction to Fire Classification

ROCKWOOL® Soffit Slab achieves a reaction to fire classification of A1 as defined in BS EN 13501-1 (includes un-faced products and facings as listed below.)

Non-combustible: as defined in Appendix A, table A6 ADB 2000 (2006 edition)

# **Facings**

- un-faced
- non-woven glass-tissue faced (white or black)
- aluminium foil facing

# Hi-Impact Soffit Slab

With a 6mm rigid Promat PROMATECT® HD board facing, this combination of two non-combustible products provides increased impact resistance and durability. Available in thicknesses from 136mm to 166mm in 10 mm increments, the off-white facing can be easily decorated to match design and colour schemes.

# Thermal performance

ROCKWOOL® Soffit Slab has a thermal conductivity (k value) of 0.034 W/mK

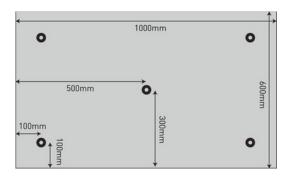
Thermal resistance of unfaced Soffit Slab

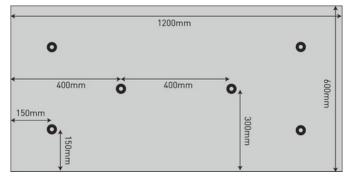
- 130mm Soffit Slab : 3.80 m2K/W
- 160mm Soffit Slab : 4.70 m2K/W

#### Installation and fixing methods

When fixing a tile or modular system, it is advisable to start with a focus reference slab in the centre of the soffit with subsequent slabs being fixed working towards each edge. The use of string lines or laser alignment equipment will assist in ensuring alignment and squareness of the installation.

# Soffit Slab





# Mechanical fixings

Soffit Slabs should be fixed direct to the concrete soffit using 200mm long ITW RoofGrip (HRG 200) fixings with 50mm washer, or ITW Spit Isomet hammer fixings. Recommended number and pattern of fixings for each slab size is shown above. Care should be taken not to over-tighten fixings to prevent damage to slab surface.

# Ancillary references

Promat UK Ltd Tel: 01344 381400

ITW Construction Products Ltd (Spit) Tel: 0800 731 4924

# Light fittings and services

Soffit insulation products should not be used for supporting light fittings or services. Such installations should be supported from the concrete soffit.

# Typical Specification Clause

The insulation/fire protection of the concrete soffit is to be ROCKWOOL® Soffit Slab alu-faced/Promat PROMATECT® HD faced/white tissue/black tissue/unfaced¹ .....mm thick², as manufactured by ROCKWOOL® Limited, Pencoed, Bridgend CF35 6NY and installed in accordance with the manufacturer's recommendations.

Delete as necessary.

Insert required thickness.

# Compatibility

ROCKWOOL® Soffit Slabs are chemically inert and compatible with most materials with which they are likely to come into contact in normal building applications.

# Biological

ROCKWOOL® Soffit Slabs offer no sustenance to vermin and do not encourage the growth of fungi, moulds or bacteria.

# Soffit Slab

### Sustainability

As an environmentally conscious company, ROCKWOOL® promotes the sustainable production and use of insulation and is committed to a continuous process of environmental improvement.











All ROCKWOOL® products provide outstanding thermal protection as well as four added benefits:

- Fire resistance
- Acoustic comfort
- Sustainable materials
- Durability

#### Health and safety

The safety of ROCKWOOL® stone wool is confirmed by current UK and Republic of Ireland health & safety regulations and EU directive 97/69/EC: ROCKWOOL® fibres are not classified as a possible human carcinogen. A Material Safety Data Sheet is available from ROCKWOOL® Technical Support (0871 222 1780) and can be downloaded from www.rockwool.co.uk to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

#### Environment

Relying on entrapped air for its thermal properties, we are proud to say that ROCKWOOL® insulation does not contain (and has never contained) gases that have ozone depleting potential (ODP) or global warming potential (GWP). ROCKWOOL® therefore complies with the relatively modest threshold of GWP<5 included in documents such as the Code for Sustainable Homes. ROCKWOOL® is increasingly involved in recycling waste ROCKWOOL® material that may be generated during installation or at end of life. We are happy to discuss the individual requirements of contractors and users considering returning Rockwool materials to our factory for recycling.

#### More information

For further details visit our website at www.rockwool.co.uk or phone ROCKWOOL® Technical Solutions on 0871 222 1780.

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publications up to date, readers will appreciate that between publications there may be pertinent changes in the law, or other developments affecting the accuracy of the information contained in this data sheet.

The above applications do not exhaustive list of applications for ROCKWOOL® Soffit Slab. Limited does not accept consequences of using ROCKWOOL® Soffit Slab

in applications different from those described within this data sheet. Expert advice should be sought where such different applications are listed application is in doubt.

