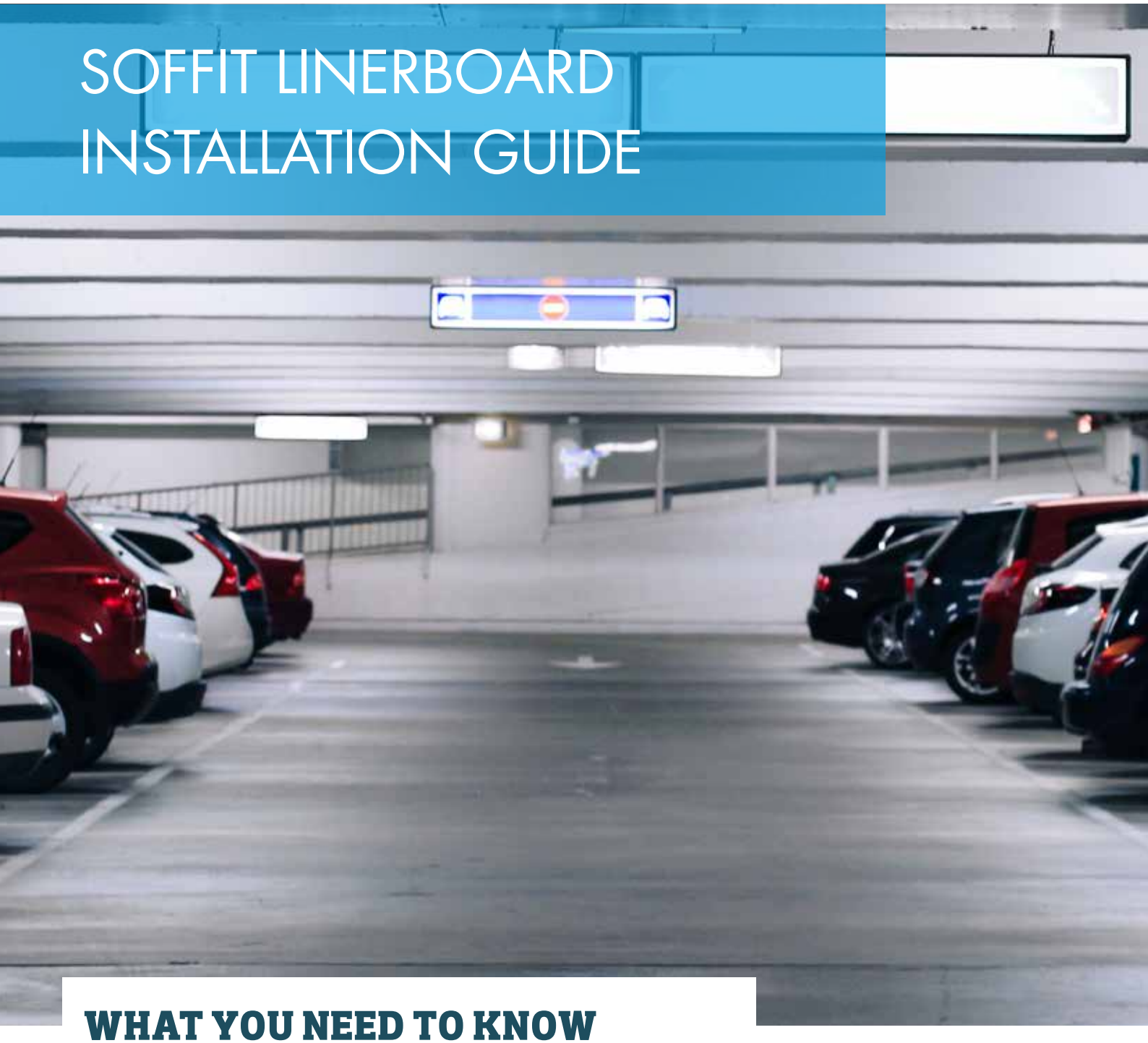
KNAUF INSULATION

www.knaufinsulation.co.uk

SOFFIT LINERBOARD INSTALLATION GUIDE

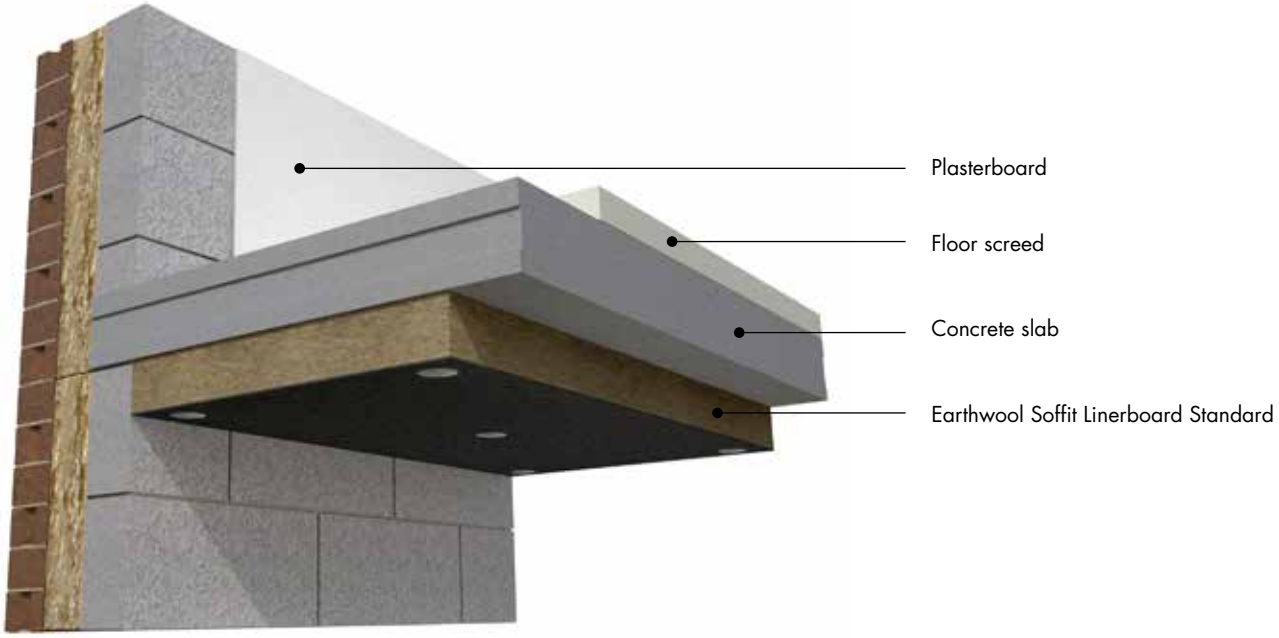


WHAT YOU NEED TO KNOW

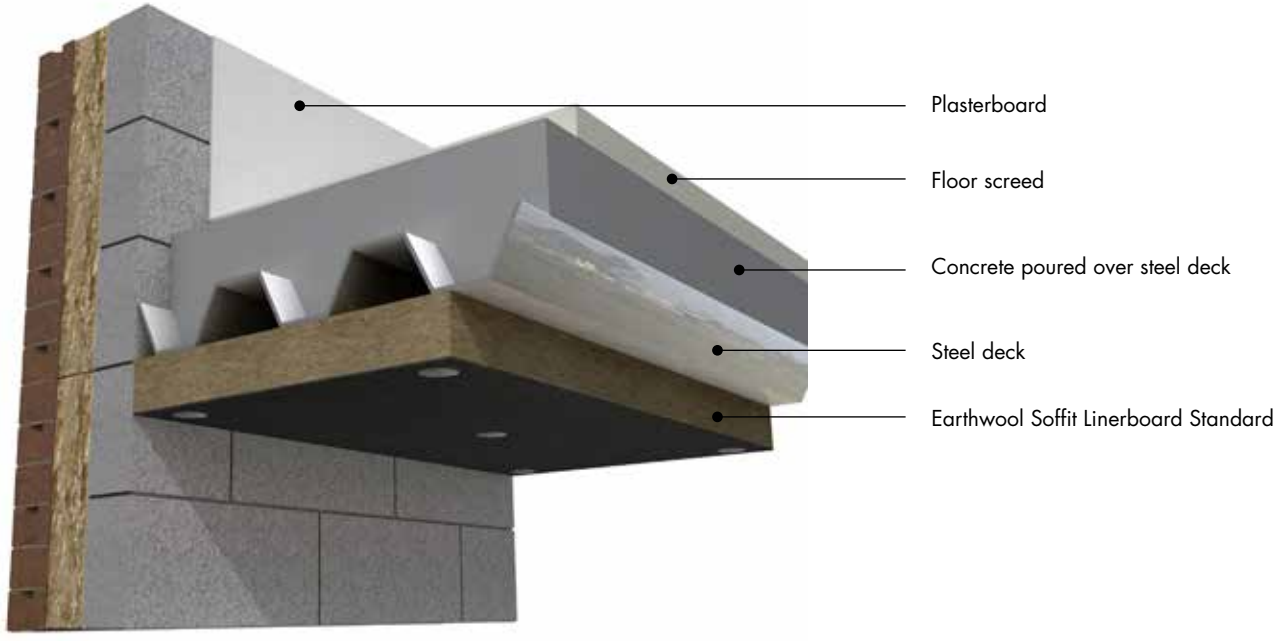
challenge.
create.
care.

TYPICAL SOFFIT SYSTEMS

SOFFIT USING A CONCRETE DECK



SOFFIT USING A METAL COMPOSITE DECK



Technical Support Team **01744 766 666** ■ **technical.uk@knaufinsulation.com** ■ **www.knaufinsulation.co.uk**

challenge.
create.
care.

FIXING

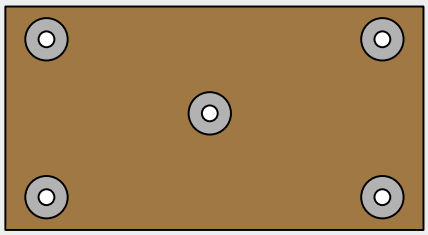
FIXING PATTERN

Earthwool Soffit Linerboards are available in 1200x600mm slabs and it is recommended that they are fixed into position using five fixings per board. This should be done using one steel fastener in the centre of the slab and four perimeter fixings at each corner, minimum 50mm from each corner.

? Five metal fixings provide suitable support to stop the insulation from sagging over time.

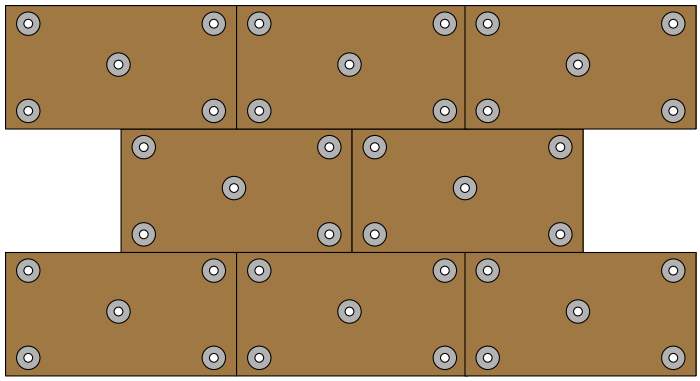
MECHANICAL FIXINGS

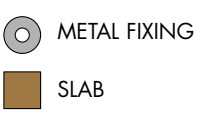
Due to the nature of this application, multiple different fixing types are available. Any fixings approved by the fixing manufacturer may be used to secure Earthwool Soffit Linerboards in position. Due to the variations in the specifications of concrete and other substrates, Knauf Insulation advises that you seek specialist advice from the fixing manufacturer prior to installation for confirmation.



Five metal fixing arrangement

Using this method all perimeter, as well as the centre fixing should be installed using metal screws and insulation washers.





Technical Support Team **01744 766 666** ■ **technical.uk@knaufinsulation.com** ■ **www.knaufinsulation.co.uk**

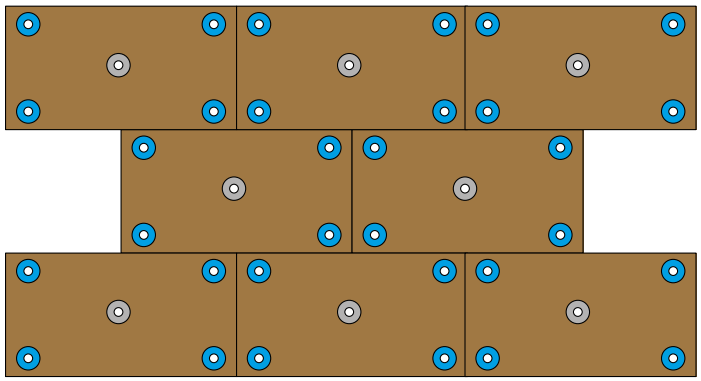
challenge.
create.
care.

FIXING

MECHANICAL FIXINGS

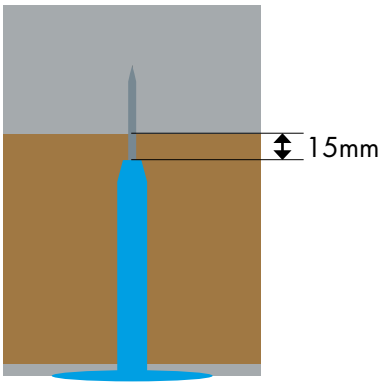
Tube washer arrangement

Earthwool Soffit Linerboards may also be installed using one centre metal fixing and four perimeter fixings being made up of tube washers.



Tube washer length

A minimum of 15mm should be left between the end of the tube washer to allow for some compression and to stop the tube washer coming into contact with the substrate.



Technical Support Team **01744 766 666** ■ **technical.uk@knaufinsulation.com** ■ **www.knaufinsulation.co.uk**

challenge.
create.
care.

FIXING

MECHANICAL FIXINGS

Tube washers with Earthwool Soffit Linerboard Extra

When installing tube washers through Earthwool Soffit Linerboard Extra a pilot hole big enough to push the tube washer through the cementitious board must be drilled. This can be done before or after the slab has been offered to the soffit.

Approved fixings

The table below details the combination of metal fixings and Fixfast tube washers for use with standard thicknesses of Earthwool Soffit Linerboards. For details on bespoke thicknesses please contact our Technical Support Team.

Earthwool Soffit Linerboard Standard thickness (mm)	**Perimeter fix - plastic to concrete**		**Centre fix - metal to concrete**	
	Tube	**Screw**	**Washer**	**Screw**
130	SF-T-75x100	SF-RS-6.1x85	SF-P-70-F	SF-RS-6.1x175
160	SF-T-75x125	SF-RS-6.1x85	SF-P-70-F	SF-RS-6.1x200
185	SF-T-75x150	SF-RS-6.1x85	SF-P-70-F	SF-RS-6.1x225
220	SF-T-75x200	SF-RS-6.1x75	SF-P-70-F	SF-RS-6.1x250
270 (220 + 50)	SF-T-75x250	SF-RS-6.1x75	SF-P-70-F	SF-RS-6.1x300
Earthwool Soffit Linerboard Extra thickness (mm)				
136	SF-T-75x100	SF-RS-6.1x100	SF-P-70-F	SF-RS-6.1x175
166	SF-T-75x125	SF-RS-6.1x100	SF-P-70-F	SF-RS-6.1x200
191	SF-T-75x150	SF-RS-6.1x100	SF-P-70-F	SF-RS-6.1x225
226	SF-T-75x200	SF-RS-6.1x85	SF-P-70-F	SF-RS-6.1x275
276 (226 + 50)	SF-T-75x250	SF-RS-6.1x85	SF-P-70-F	SF-RS-6.1x325

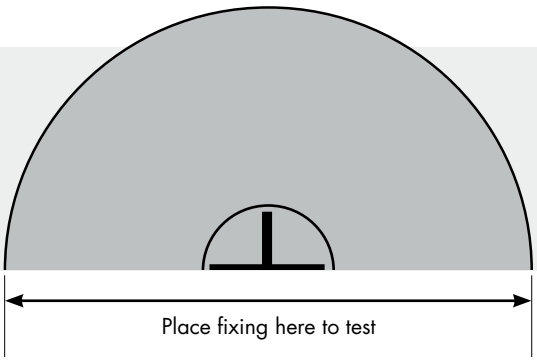
FIXING

FIXINGS MINIMUM HEAD DIAMETER OF 70MM

Provides optimum strength of fixing between substrate

✓ **Fixings 70mm or ABOVE**

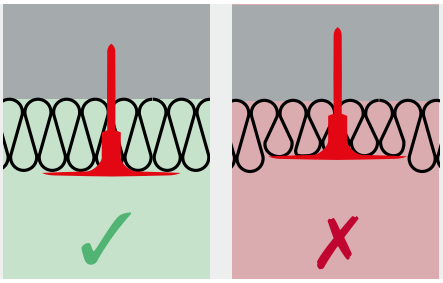
✗ **Fixings BELOW 70mm**



DON'T OVERTIGHTEN MECHANICAL FIXINGS

Ensure that mechanical fixings are not over tightened, surface compression of the product is not recommended.

? **This compromises the thermal performance and can impact the integrity of the black tissue facing.**



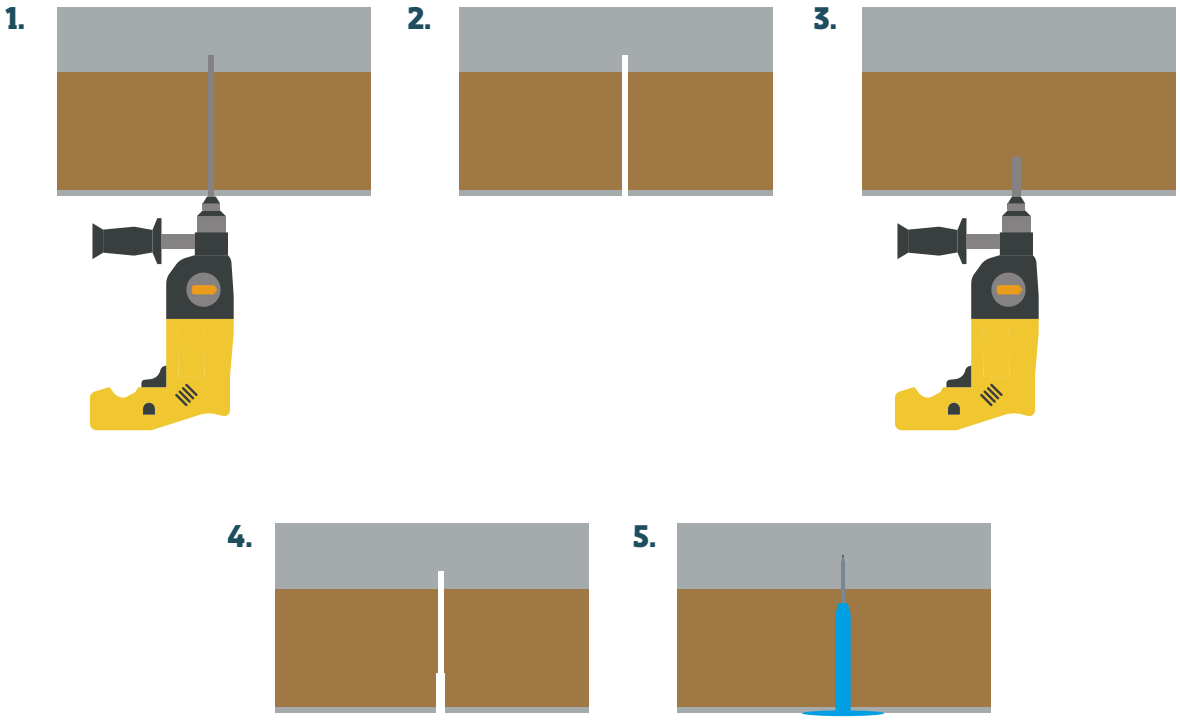
FIXING

SUBSTRATES

When installing into a concrete or steel composite deck, a pilot hole should first be drilled before the fixing is screwed into position.

In the case of Earthwool Soffit Linerboard Standard this can be done with or without the slab in its final position as the screw can be pushed through the insulation once the pilot hole has been drilled.

When installing Earthwool Soffit Linerboard Extra a pilot hole must also be made in the cementitious particle board facing. This can be done at the same time as the substrate pilot hole with the board placed into its final position.

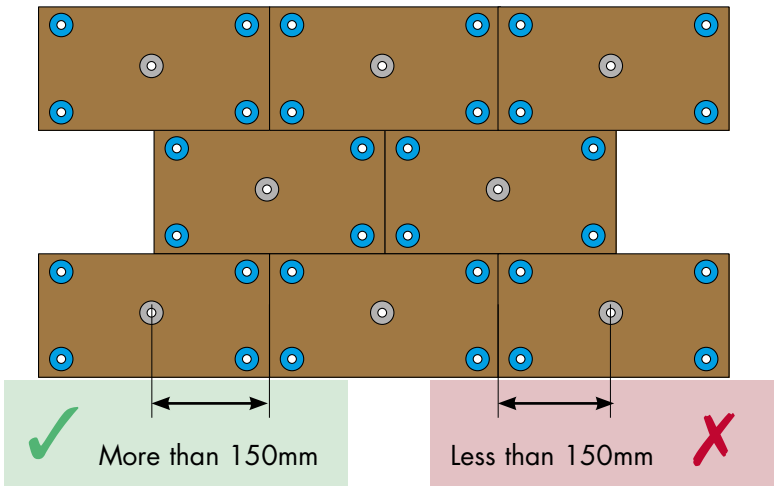


PLACEMENT

LAYOUT

Joints between slabs should be staggered by min 150mm and coincidental joints should be avoided

? To avoid coincidental joints



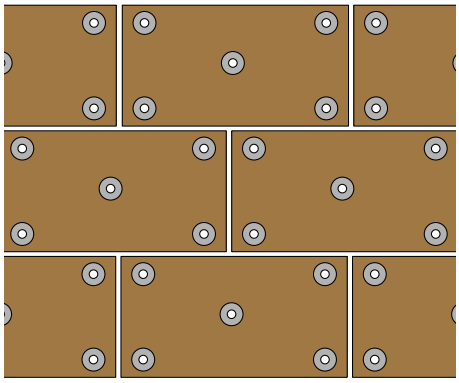
TUBE WASHER
METAL FIXING
SLAB

challenge.
create.
care.

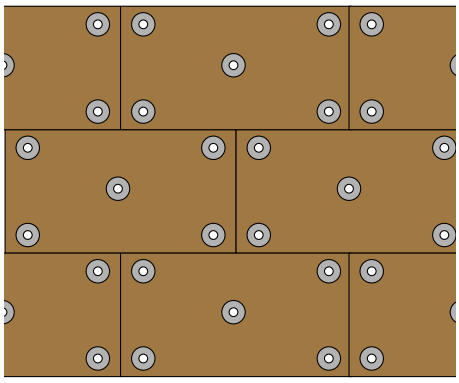
PLACEMENT

SLABS TO BE IN CONTACT WITH EACH OTHER

Earthwool Soffit Linerboards should be installed so they are tightly butted together at joints, staggered by min 100mm.



✗



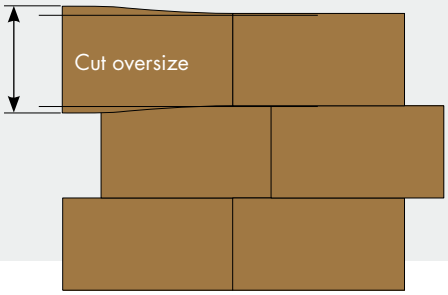
✓

? To ensure the insulation performs as thermally specified.

PLACEMENT

COMPRESSION FIT INTO PLACE

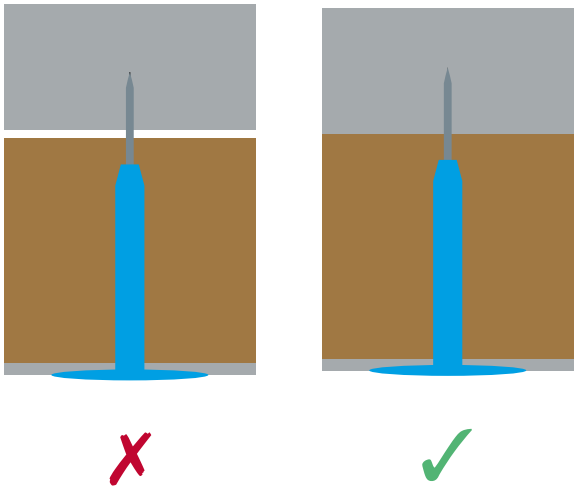
Ensure slabs are tightly butted, and if cut, cut slightly oversize and compression fit into place, making sure of a snug fit.



? To create a tight knit between slabs, to reduce the chance of air gaps and ensure thermal efficiency.

INTIMATE CONTACT WITH SUBSTRATE

Slabs should be in intimate contact with the building substrate. The nature of the insulation material lends itself to accommodate any irregularities in the surface of the substrate.



✗ ✓

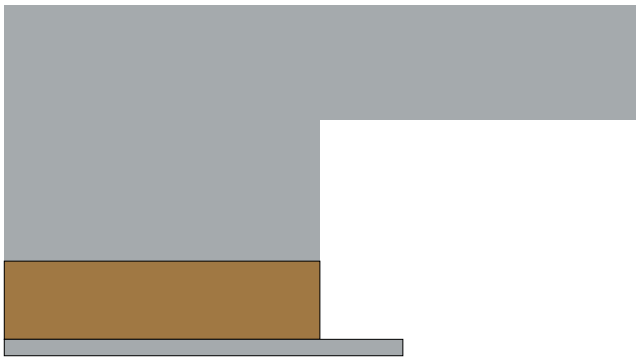
PLACEMENT

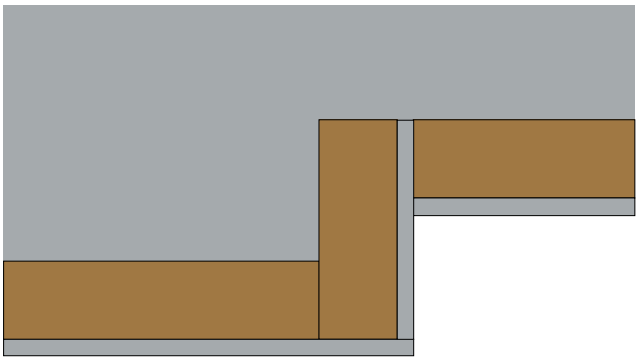
STEPS IN SOFFIT – EARTHWOOL SOFFIT LINERBOARD EXTRA

When steps in the soffit are seen when installing Earthwool Soffit Linerboard Extra the following process should be followed to ensure that the finished installation performs as intended from a thermal and aesthetical perspective.

Firstly a section of insulation should be trimmed from the edge of the slab, equal to the thickness of insulation being installed. The next slab should then be cut to size to fit into the recess created and the final slab butted tightly to the cementitious facing.

Care should be taken to ensure that all fixings are fixed directly into the soffit substrate and not into other slabs. One metal fixing per board is recommended for all slabs, whether full or sections of slabs.





PLACEMENT

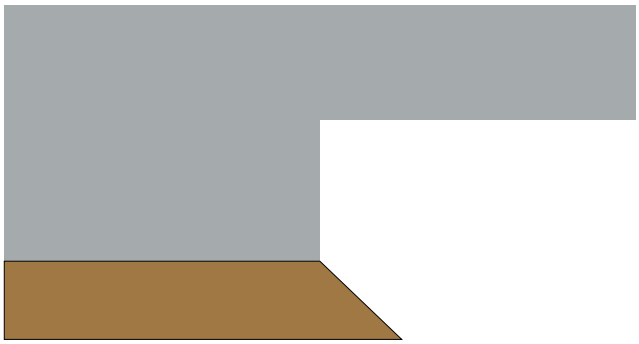
STEPS IN SOFFIT – EARTHWOOL SOFFIT LINERBOARD STANDARD

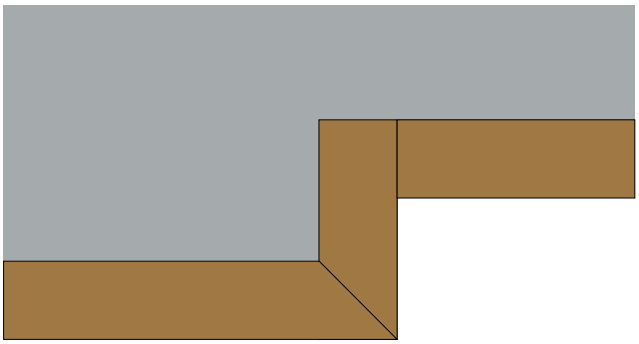
When steps in the soffit are seen when installing Earthwool Soffit Linerboard Standard the following process should be followed to ensure that the finished installation performs as intended from a thermal and aesthetical perspective.

The first slab should be mitred at 45 degrees to the step in the substrate, this can be done using a sharp bladed knife or a small toothed saw. The following slab should be mitred at 45 degrees again and tightly butted to the first slab to ensure a tight fit. At this stage the joint can be taped using an appropriate tape.

To finish the process the final slab can be tightly butted to the black tissue facing to ensure a tight fit between the slabs.

Care should be taken to ensure that all fixings are fixed directly into the soffit substrate and not into other slabs. One metal fixing per board is recommended for all slabs, whether full or sections of slabs.





PLACEMENT

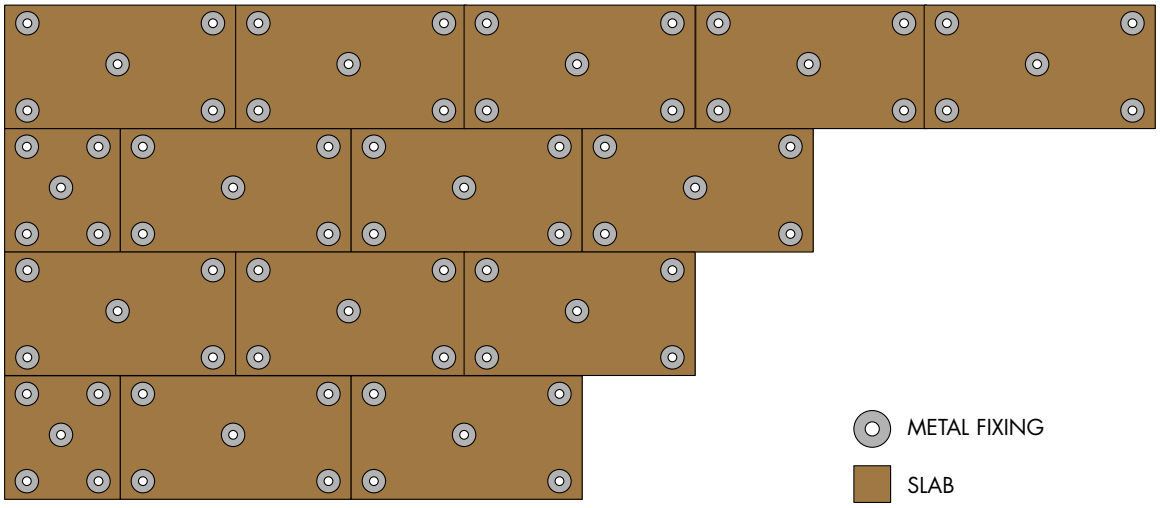
EXPOSED SOFFITS

Earthwool Soffit Linerboard Extra should be used in cases when the soffit will be in an exposed or semi exposed environment. This is because the cementitious particle board facing provides an enhanced weatherproof facing while further protecting the insulation by acting as a highly impact resistant layer.

PLACEMENT

PROCESS

Installation of both Earthwool Soffit Linerboard Standard and Extra should be done by starting in one corner and working across the soffit to finish in the adjacent corner. A singular row of slabs should be installed first to create a straight line from which to butt up against.

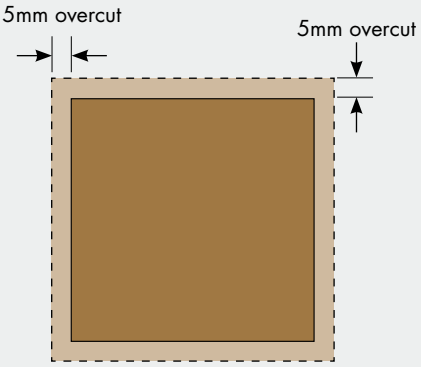


challenge.
create.
care.

CUTTING

CUT NEATLY AROUND PENETRATIONS AND CONSTRUCTION DETAILS

When installing Earthwool Soffit Linerboard Standard, cut oversize by 5mm to allow for some local compression of the slab around the feature to ensure a tight fit. Since the cementitious particle board facing on Earthwool Soffit Linerboard Extra does not allow for compression, care should be taken to cut around penetrations and details precisely.



? To maximise thermal performance

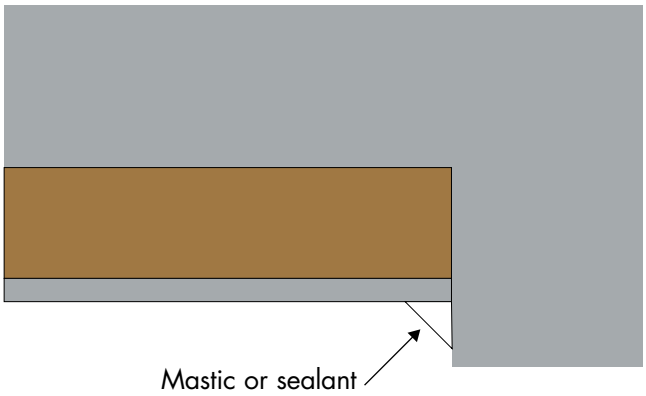
✓ **Leave 5mm overcut**

✗ **Cut directly to penetrations**

SEAL PERIMETERS

For both Earthwool Soffit Linerboard Standard and Extra areas that abut penetrations and perimeter walls can be sealed with a suitable mastic or sealant.

? To form a good seal



challenge.
create.
care.

CUTTING

CUT NEATLY WITH A SHARP INSULATION SAW/KNIFE

Cut neatly with a fine serrated saw or a large bladed knife.

? Gives a factory quality cut and prevents tearing

✓ **Use insulation saw or knife**

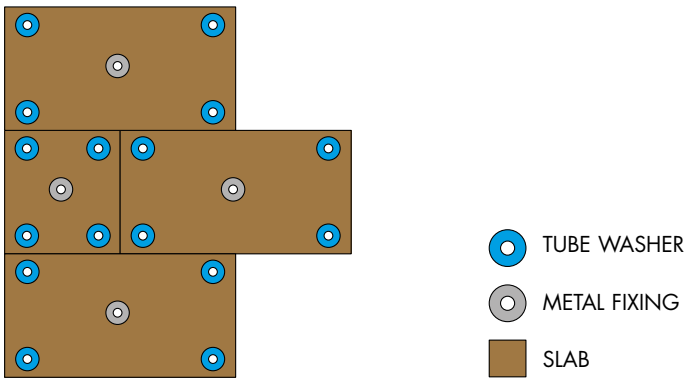
✗ **Cut using bladed saw**

AREAS THAN CANNOT ACCEPT A FULL SLAB SHOULD BE FILLED WITH A SLAB SECTION

Areas of insulation that do not require a full slab can be filled using a slab section where the section is cut slightly oversize to give a tight fit and fixed at 600mm intervals in the centre of the section.

✓ **Slab cut and snug fit**

✗ **Loose fit for cut slab section**



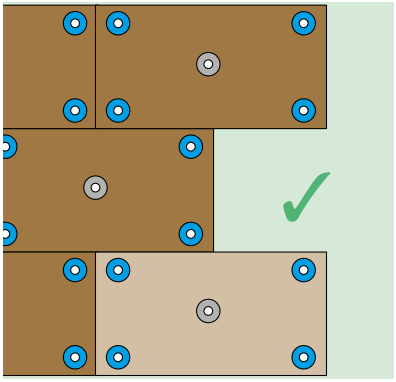
challenge.
create.
care.

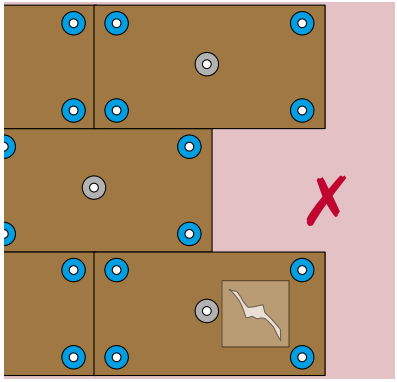
MAINTENANCE

REPAIRS

In the event of small repairs being needed on site, Knauf Insulation recommends the replacement of full slabs wherever possible.

✓ **Full slab replacement after damage** ✗ **Small patched repair**





MAINTENANCE

PRE-INSTALLATION STORAGE ON SITE

Earthwool Soffit Linerboards are supplied in polythene packs or shrink wrapped pallets which are designed for short term protection only. For longer term protection on site the product should either be stored indoors or under cover and off the ground. Earthwool Soffit Linerboards should not be left permanently exposed to the elements

If the main hood is removed or damaged, the remaining packs or slabs should be kept under cover indoors or protected by a weatherproof cover to protect the slabs from the elements.

In coastal locations where weather is more extreme and bird damage is more common, use additional covering or store indoors.

KNAUFINSULATION

CONTACTS

Customer Service (sales)
Tel: 01744 766 766
sales.uk@knaufinsulation.com

Technical Support Team
Tel: 01744 766 666
technical.uk@knaufinsulation.com

Literature
info.uk@knaufinsulation.com

Knauf Insulation Ltd PO Box 10, Stafford Road, St.Helens, Merseyside, WA10 3NS. UK

For more information please visit **www.knaufinsulation.co.uk**

All rights reserved, including those of photomechanical reproduction and storage in electronic media. Extreme caution was observed when putting together and processing the information, texts and illustrations in this document. Nevertheless, errors cannot quite be ruled out. The publisher and editors cannot assume legal responsibility or any liability whatever for incorrect information and the consequences thereof. The publisher and editors will be grateful for improvement suggestions and details of possible errors pointed out.

challenge.
create.
care.

KINE4295GID-V1120