

# THERMAL AND ACOUSTIC SOFFIT LINER (ASL)

## INSTALL INSTRUCTIONS

GreenStuf<sup>®</sup> Thermal and Acoustic Soffit Liner is engineered to improve the thermal performance and energy efficiency of the building envelope and assist in the control of reverberant noise. Thermal and Acoustic Soffit Liner is intended to be direct-fixed to masonry soffit and ceiling constructions, including composite steel floor systems.

These installation instructions are of a general nature and designed to assist suitably experienced tradesmen install Thermal and Acoustic Soffit Liner to a high standard in typical use situations. For further installation support, please contact your GreenStuf account manager before you start.

## TECHNICAL

**Manufacturer's Documents:** GreenStuf recommends that all persons engaged in installing Thermal and Acoustic Soffit Liner have full knowledge of the product and installation procedures as set out in the most recent edition of the manufacturer's instructions and related documents. GreenStuf documents relating to work in this section are:

- Thermal and Acoustic Soffit Liner Datasheet
- GreenStuf Manufacturer's Guarantee
- Thermal and Acoustic Soffit Liner Install Instructions
- Insulation and Downlights Facts Sheet

Copies of the above literature are available on request or from the GreenStuf website.

**AS/NZS 4859.1 Labelling Compliance:** Thermal and Acoustic Soffit Liner is supplied in compliance with AS/NZS 4859.1 labelling requirements.

The initial performance of this product may be reduced if it is stored for too long in its compressed packaging. Should this product be found to be compressed at installation, it will recover to its nominal thickness and R-Value within 72 hours following installation.

The total R-Value of the building system depends on the building materials, design and installation and may be less than, greater than, or equal to the R-Value of this product.

**Other Trades:** Prior to installation, consultation with other trades such as HVAC, plumbing and electrical should be made to ensure an order of works that best suits the site is established.

**Transportation, Storage & Handling:** Thermal and Acoustic Soffit Liner must be handled with care. Transport and store Thermal and Acoustic Soffit Liner on a flat, clean and dry surface. Avoid abrasion, delamination or distortion and protect edges from being crushed. Avoid harsh rubbing, bending panels and do not drop panels on their corners as this can cause damage to the panel. The work area should be clean and tidy and free from dirt and contaminants that could soil the panels.

Do not accept damaged product. If product or packaging arrives damaged ensure you note the condition on the freight documents and contact GreenStuf immediately. Goods signed as received in 'good condition' will not be the responsibility of GreenStuf.

**Inspection:** Before starting the installation, check again that the materials have been supplied as ordered and are free from damage or faults. Check that all product is supplied from one batch. Due to batch to batch variation, we do not recommend joining different batch lots as this could result in colour variation.

Any variations must be reported to GreenStuf prior to commencing the installation. No claims will be accepted where the job continues with obvious faults, and no consultation with GreenStuf has taken place. If you cut or install the product, you have accepted the quality.

**Safety Instructions:** GreenStuf 100% polyester insulation is completely safe and user-friendly; therefore, no protective clothing or specialist equipment is required to handle this product.

GreenStuf is a non-irritant, non-toxic, and non-allergenic insulation. This ensures no skin, throat or lung irritation during or post-installation.

**CAUTION:** Electric cables and equipment partially or completely surrounded with any bulk thermal insulation may overheat and fail.



Care must be taken to ensure this risk is avoided. Guidance is set out in AS/NZS 3000:2018 Wiring Rules. Ensure you understand your responsibility before you begin the installation.



**Lights and Electrical Appliances:** Regardless of the type of thermal insulation being used, there can be significant fire risk associated with some lighting and appliances, especially halogen type bulbs as these can produce very high temperatures and may require clear ventilation space to operate safely. Careful selection, as well as correct installation of the light fitting/appliance and any surrounding insulation, is critical. Minimum clearances to all bulk insulation may be required for selected lighting or appliance/s. This must be checked with the lighting/appliance manufacturer prior to installation. Any appliance, including recessed type lights and transformers, should not be covered or surrounded with insulation unless allowed by the manufacturer. If in doubt, leave a clear 50mm space between the fitting/appliance and the edge of the insulation. Refer to a registered electrician for further guidance.

GreenStuf has been tested and assessed as complying with the requirements of IEC 60695-11-5 Needle-flame test.

For more information, please refer to our Downlights Factsheet.

**Product Format:** Thermal and Acoustic Soffit Liner is supplied as standard 1200mm (+5/-0mm) x 2400mm (+10/-0mm) sheets in Flint (light grey) colour. Custom sizes and colours may be available on request but are subject to minimum order quantities.

Thermal and Acoustic Soffit Liner is non-woven and some colour blending variation is typical batch to batch and throughout each production lot. This is an inherent feature of the product and not considered a manufacturing fault.

**Insulation Fasteners:** Thermal and Acoustic Soffit Liner is intended to be installed using mechanical fixings. These can be either shot fired insulation anchors (such as Hilti) or the insulation pin style of insulation anchor with a one way washer or dome. The fastener length must be equal to the thickness of the Thermal and Acoustic Soffit Liner insulation panels to avoid compression and pillowing of the insulation sheet.

Use fixings in accordance with the manufacturer's technical information and instructions.

**Adhesives:** In certain applications, Thermal and Acoustic Soffit Liner can be direct fixed using adhesives. GreenStuf recommends a contact-type adhesive or full curing panel adhesive for applying Thermal and Acoustic Soffit Liner to most common substrates. Prior to commencing work, we recommend contacting your adhesive supplier with samples of the GreenStuf products you are installing and the specification of the substrates you are installing to.

It is the installer's responsibility to ensure that any adhesive is fit for the intended purpose. It also is the installer's responsibility to ensure that the substrate is fit for the application of adhesives and GreenStuf product. For information regarding adhesive suppliers, please contact your GreenStuf account manager.

**Installation Tools:** A typical installation will require:

- Appropriate access equipment to ensure safe working conditions are maintained
- Measuring and marking out tools
- Insulation fastening system (i.e. insulation anchors and associated equipment)
- Pointed SDS chisel bit and battery drill, or appropriate hot-knife to create insulation anchor penetrations
- Cutting board, straight edge and insulation knife/saw/cutter to assist in trimming Thermal and Acoustic Soffit Liner sheets
- Knife and/or scissors for cutting and fitting foil tap (if required)



**Insulation Anchor Penetrations:** When using shot fired insulation anchors, we recommend that penetrations are created for each insulation anchor point prior to the installation of each sheet. This will help ensure good take of the anchor in the substrate and a tight and neat install of the Thermal and Acoustic Soffit Liner sheet.

Penetrations for the insulation anchors and fixings can be formed using a hot-knife, insulation knife or a pointed chisel type drill bit. When using a battery/power drill, ensure the drill clutch is engaged to minimise the risk of twist-up should the bit bind in the fibres. Bring the drill to full speed before starting the penetration and use light pressure throughout the cut.



**Cutting Thermal and Acoustic Soffit Liner:** Mechanical cutters such as a straight knife cutting machine are ideal for cutting and trimming Thermal and Acoustic Soffit Liner. Insulation knives and insulation saws can also be used to trim panels to size. Heavy-duty snap-off blade knives are useful for cutting holes for services. All cutting tools must be sharp to help ensure an easy, neat and tidy cut.

Always cut slightly oversize to ensure a tight friction fit.

Caution should be taken with all cutting tools and equipment. Follow the manufacturer's use and safety instructions, as well as site and individual safe working practices and requirements.



**Clearances:** Cut Thermal and Acoustic Soffit Liner to fit neatly around fire collars, pipes and penetrations. Do not cover the face of fire collars as these must be exposed to activate in a fire situation.

Leave specified and required clearances to light fittings, ancillary equipment and electrical accessories.

**Installation:** GreenStuf<sup>®</sup> ASL should always be installed in accordance with these installation instructions and as per

the specification detail and customer requirements. If there is conflicting information, you must seek clarification from all appropriate parties before proceeding with the work.

It is important that the installation is planned before cutting and installing any product.

Thermal and Acoustic Soffit Liner sheets are supplied as standard 1200mm (+5/-0mm) x 2400mm (+10/-0mm). We recommend all panels are checked prior to installation. We recommend you "measure twice and cut once".

Thermal and Acoustic Soffit Liner is generally fixed with insulation type fasteners.

Fixings should be set out at no more than 600mm centres. Each fixing should be a minimum 100mm and a maximum of 200mm from the edge of each panel.

The fastener length must be equal to the total thickness of the Thermal and Acoustic Soffit Liner insulation panels to avoid compression and pillowing of the insulation sheet. We recommend 11 fixings per standard panel (Fig. 1).

Fixing layout may vary depending on substrate. When fixing Thermal and Acoustic Soffit Liner to the underside of corrugated/profiled steel floor composite systems, fixings must be installed securely against the trough of the corrugation.

For installation speed and efficiency, we recommend that the panels are installed in staggered formation (Fig. 2).

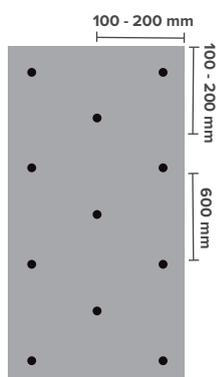


Fig. 1

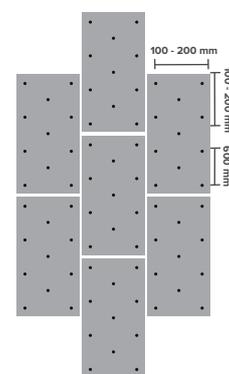


Fig. 2

Checks should be made as the install progresses and panels are trimmed to ensure a square tidy finish is maintained.

Thermal and Acoustic Soffit Liner should be installed touching the slab/substrate, but not compressed. Any uncontrolled airspace between the Thermal and Acoustic Soffit Liner and the slab/substrate may affect the installed thermal performance. Thermal and Acoustic Soffit Liner should be installed tight to adjoining sheets and surfaces to ensure no gaps. Do not compress the insulation as this will affect the thermal performance.

The soft nature of Thermal and Acoustic Soffit Liner will allow some compression and 'give' when butt joining or finishing to adjoining surfaces. However, Thermal and Acoustic Soffit Liner should be installed without visible folds and compression lines in the finish.

Thermal and Acoustic Soffit Liner should be installed with all panels joining 'width to width' and 'length to length' to avoid colour variation in the install.

Prepare the first sheet for installation by creating penetrations for the insulation anchors, taking account of fixing locations in the substrate. Install the Thermal and Acoustic Soffit Liner panel by fixing from one corner then across the width of the panel, and then down the length of the panel to ensure tight flat install. Prepare and install successive panels with tight neat joins to adjoining panels and surfaces until the install is complete.

Insulate all areas of the slab (as detailed on the plans and project specifications) leaving no gaps.

**E-Foil – Tape Joins:** When using Thermal and Acoustic Soffit Liner with E-Foil, a 50mm wide foil tape can be used to seal the panel joins and any penetrations.

Refer to the tape manufacturer’s instructions regarding climatic conditions and suitability of use. Ensure surfaces are free of dust, dirt and oils.

A suitable tape should be applied over the centre of the join and pressed firmly to the Thermal and Acoustic Soffit Liner E-Foil facing. Please make sure the tape does not stretch as this can create buckles and voids in the contact area. The tape should be wiped firmly to ensure adequate adhesion to all surfaces. Cut and fit the tape with a knife or scissors as required.



**GreenStuf® FACTORY AND COLLECTIONS**

40 Westpoint Drive,  
Hobsonville, Auckland 0618,  
New Zealand

FREEPHONE **0800 428 839**

PHONE **+64 9 828 9179**

FAX **+64 9 828 5810**

WEB **greenstuf.co.nz**

AN ISO 9001, ISO 14001 AND ISO 45001 CERTIFIED COMPANY

The brand names and logos mentioned herein are registered or unregistered trademarks either owned or used under license by Autex Industries Limited or other members of the Autex Group. The contents of this document are protected by Copyright 2024 Autex Industries Ltd. All Rights Reserved.

It is the user’s responsibility to determine if the product and information presented in this document are suitable for the intended application by engaging a suitably qualified consultant. The information contained in this document is correct to the best of our knowledge at the date of its publication. To verify that this document is the most current publication please check our website or contact your GreenStuf® account manager.