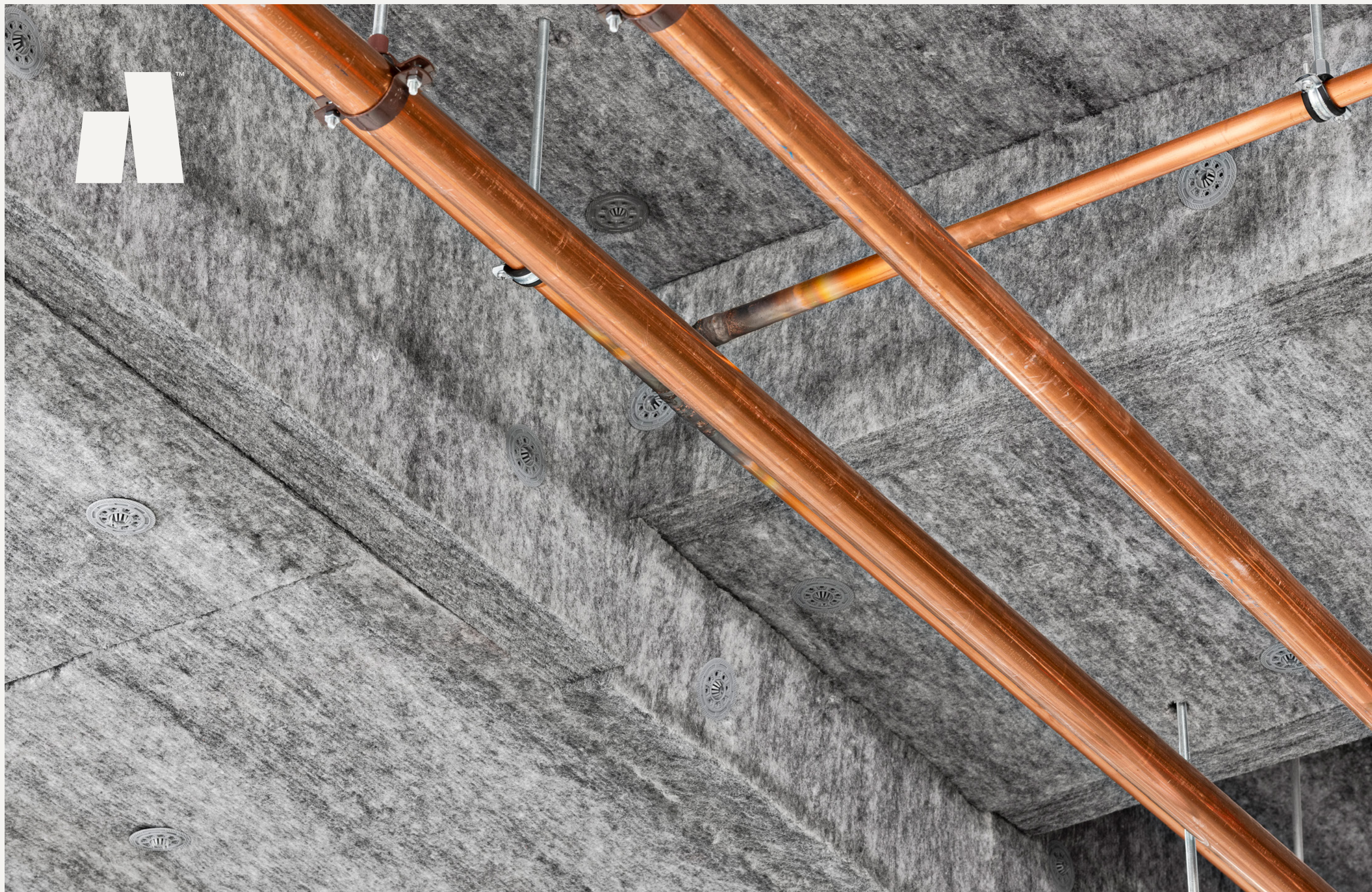




Acoustic Soffit Liner (ASL)

● Acoustic Soffit Liner (ASL)
in Flint

Victorian Heart Hospital

Quick facts



Thermal and acoustic performance

Available in a range of thermal and acoustic ratings. Improving energy efficiency and controlling noise in buildings.



Recycled + recyclable

ASL is manufactured using a minimum of 50% previously recycled polyester fibre (from PET plastic) and is reusable and recyclable at the end of its useful life via Autex's Takeback Programme.



Group 1 fire rating

Independently tested and assessed to Group 1 in accordance with AS5637.1:2015 of the Australian Building Code.



Durability

ASL is backed by a 50-year product warranty. ASL is not affected by moisture and maintains its performance over time.



Fast installation

A specialised blend allows easy working and cutting on site. Also available pre-punched with no taping required at the joints, significantly reducing installation time.



Quality

Autex operates under accredited ISO 9001 quality control process.



Safe to touch

ASL is 100% polyester and completely safe to handle. It does not require foils or films.



No harmful chemicals

ASL also contributes to safer indoor air quality as it does not contain any added chemicals such as formaldehyde-based binders or fibres that can be breathed into your lungs.



Moisture resistant

ASL is suitable for high humidity areas and microbial resistant.



Made in Australia

Proudly locally manufactured.



Product overview

Autex Acoustic Soffit Liner (ASL) is designed as a high-performing acoustic and thermal lining for all types of soffits, slabs, and ceiling applications. Made in Australia from 100% polyester fibre, ASL is a carbon-neutral product that is entirely recyclable at end of life via the Autex Acoustics Takeback Programme.



Applications

ASL contributes to the energy efficiency of a building when installed to the underside of masonry and metal pan floors and ceilings. ASL will also help lower noise levels by controlling reverberation times in enclosed spaces and reducing noise spill to external areas. To ensure building code compliance, architects and building designers are advised to consult an engineer, or the relevant Australian standards, before specifying. For information and assistance, please contact your local specification manager.

Product Format

Product	Nominal thickness (mm)	NRC	R-Value (m²/Kw)	Sheet size
ASL R1.3	50 mm	0.85	R1.3	2400 mm x 1200 mm
ASL R2.0	75 mm	0.95	R2.0	2400 mm x 1200 mm
ASL R2.5	100 mm	1.00	R2.5	2400 mm x 1200 mm
ASL R3.0	140 mm	1.00	R3.0	2400 mm x 1200 mm
ASL R3.4	150 mm	1.00	R3.4	2400 mm x 1200 mm

ASL is made to order. Standard sheet size is 1200mm x 2400mm (+/- 10mm). Custom sizes are available, subject to minimum order quantities. Perforated and non-perforated foil faced options are also available. ASL can be supplied pre-punched on application. Contact your local Specification Manager for lead times and pricing.

Technical

To ensure compliance, architects and building designers are advised to consult an appropriately qualified and experienced professional engineer and relevant Australian standards, before specifying thermal and acoustic insulation products.

Fire Rating

AS ISO 9705: 2003

Australian Group Number: Group 1
SMOGRARC: less than 100m²/s2

Assessed using methodology AS ISO 9705:2003 in accordance with AS56371:2015.

Maximum service temperature

ASL can be used in environments with maximum normal operating temperatures as follows:
ASL (un-faced) up to 160°C
ASL (e-foil faced) up to 90°C

Thermal

Thermal values determined in accordance with the methods described in ASNZS4859.1 20018. Thermal Insulation for buildings.

Acoustics

Sound absorption coefficients tested in accordance with ISO 354 Measurement of sound absorption in a reverberation room.

Moisture

ASL is not affected by moisture. Exposure to an atmosphere of 50°C at 90% relative humidity for four days showed moisture absorption by weight of less than 0.03%.

VOC emissions

Autex Acoustics polyester has been tested for chemical emission as follows. VOC concentration: 0.01 mg/m³ (7 days)
GREENGUARD VOC Limit: 0.25 mg/m³ (7 days).

Hazardous building materials

Autex Acoustics products are considered as non-hazardous and non-dangerous goods.



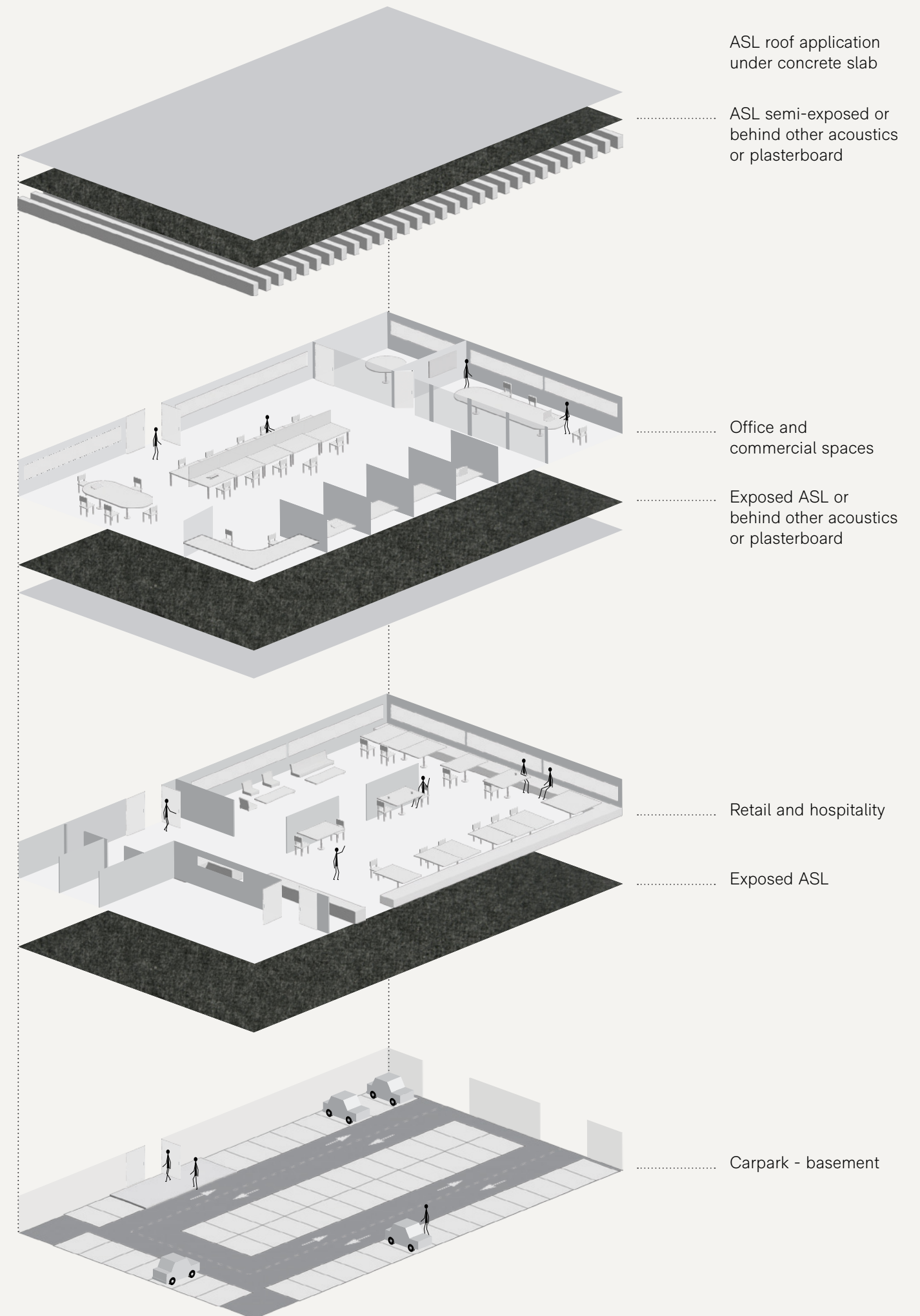
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Thermal performance

The National Construction Code of Australia (NCC) sets out minimum performance requirements for energy efficiency requirements. Compliance can require specialist design considerations. Architects and building designers are advised to consult an appropriately qualified person, or the relevant Australian standards, before specifying thermal and acoustic insulation products.



Climate zones

Australia has a varied climate, leading to different locations around the country having different heating and cooling requirements. The following climate zones of Australia are prescribed by the Building Code of Australia.

- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Zone 7
- Zone 8



Image recreated from the information available on the Australian Building Codes Board Website. For detailed information the map can viewed here. abcb.gov.au/resources/climate-zone-map

R-values (regulation)

The regulations for total minimum R-value requirements, across both floors and ceilings, are outlined in the tables below. If unknown, reference the climate zone map on [page 6](#) to determine which direction the insulation needs to control heat transfer based on the building projects location.

R-value requirement tables

	Climate zone			
Roofs and ceilings: Total R-Value greater than or equal to:	1,2,3,4 and 5	6	7	8
R total greater than or equal to:	Rt 3.70	Rt 3.20	Rt 3.70	Rt 4.80
Direction of heat flow	Downward	Downward	Upward	Upward
In climate zones 1, 2, 3, 4, 5, 6 and 7, the solar absorptance of the upper surface of a roof must be no more than 0.45.				
	Climate zone			
Floors: Total R-Value greater than or equal to:	1	2 and 3	4, 5, 6 ,7	8
Without an in-slab heating or cooling system	Rt 2.00	Rt 2.00	Rt 2.00	Rt 3.50
With an in-slab heating or cooling system	Rt 3.25	Rt 3.25	Rt 3.25	Rt 4.75
Direction of heat flow:	Upward	Upward / Downward	Downward	Downward

The direction of heat flow typically follows the principle of thermal energy, moving from warmer to cooler areas. In winter, ASL insulation minimises heat loss from the warmer space above to the cooler un-conditioned subfloor below. In summer, it helps reduce heat from traveling back into the cooler, air-conditioned spaces, maintaining comfort year-round.

R-values (ASL)

ASL contributes to the total thermal resistance R-total of a system including linings and associated air-films.

The following tables outline the Total R values for ASL based on the described system.

Ceiling: 150 mm Concrete roof with exposed ceiling	Product	R total Value-m².K/W	
		Heat flow In	Heat flow Out
	ASL R3.0	3.3	3.6
	ASL R3.4	3.7	4.0

Un enclosed - Ventilated Sub Floor Application 150 mm Concreate (continuous Insulation)	Product	R total Value-m².K/W	
		Heat flow In	Heat flow Out
	ASL R1.3	1.5	1.6
	ASL R2.0	2.1	2.4
	ASL R2.5	2.6	2.9
	ASL R3.0	3.1	3.4
	ASL R3.4	3.5	3.8

Systems detailed above are for continuous insulation: Where insulation is not continuous thermal bridging occurs reducing the overall systems thermal efficiency (R total). Contact your Autex specification manager for further information.

Total R-Values are based on the sum of all components of the building system including indoor and outdoor air-films and any applicable airspaces Where thermal bridging is required to be considered it can be calculated in accordance with NZS4214:2006. Unless stated thermal data is obtained from the NCC Vol 1 set out in Spec JI.2. and AS NZ4214:2006 and manufactures published data. The above calculations are offered in good faith without warranty to help the user of this report gain a better understanding of the likely thermal performance of the overall system.

Installation

ASL is an acoustic and thermal lining for soffit, slab and ceiling applications. ASL is designed to be installed to the underside of masonry and metal pan floors and ceilings using mechanical fixings or adhesive. Installation must follow product instructions and relevant standards, these may include but are not limited to AS3999 and AS/NZS 3000:2018 Wiring Rules, as well as project specifications.

Before installation, coordinate with HVAC, plumbing, and electrical trades to establish an optimal workflow. Made from 100% polyester fibre, ASL is safe and user-friendly, typically requiring no protective gear unless site conditions demand it. It is non-irritant, non-toxic, and non-allergenic.

As ASL often serves as the final finish, a clean installation is essential. Allow appropriate clearance around services and penetrations, ensuring panels are butted together without gaps. ASL can be supplied pre-punched on application. ASL standard sheets are 1200 x 2400 mm (+/- 10 mm). Custom sizes are available on request, with minimum order quantities.

This installation overview is of a general nature, please refer to the product installation guide for further details, tools, cutting, and fixing details.



ASL install

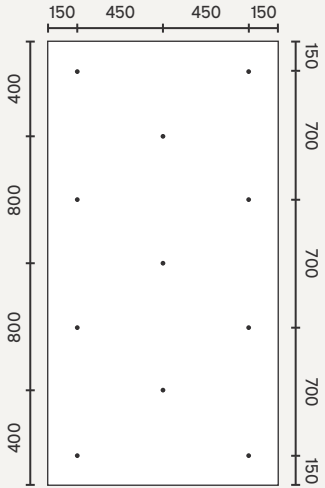


Fig. 1

(All dimensions are in mm)

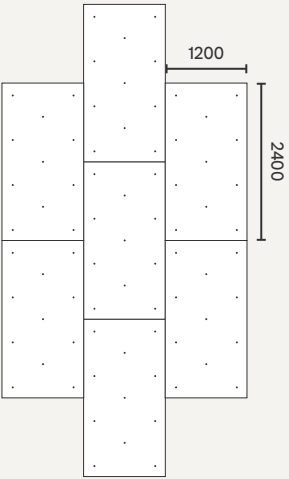


Fig. 2

Autex Acoustics recommends that all persons engaged in installing ASL 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.

Related documents are:

- ASL Data Sheet
- Manufacturer's Guarantee
- Insulation and Downlights Facts Sheet
- ASL Install Instructions
- ASL Takeback Programme

Copies of the above documents are available on request or from our website.

Takeback Programme and ASL Reclaim

At Autex Acoustics, we support circularity in the Australian construction sector and are on an ever-evolving sustainability journey. We offer a Takeback Programme where we collect uncontaminated ASL offcuts and panels at the end of their life. We feed them back into the manufacturing process to create **ASL Reclaim**, a new truly circular ASL option using recycled fibres and Autex Acoustics products at the end of their life. Each **ASL Reclaim** panel has a unique colour, depending on the materials available.



ASL Flint Reclaim shown with ASL Charcoal. Please note standard ASL Flint and Charcoal will have a consistent look from panel to panel, whereas the speckle colour variation in ASL Reclaim will change dependent on the recycled content used at the time of manufacture.

Sustainability

ASL has been assessed and has the following accreditations: Global GreenTag GreenRate Level A certified, Declare certified to be Red List chemical free and can be used in Living Building Challenge projects. These and HPD and EDP assessments are available on request. For more information, please contact your specification manager.

ASL is made from polyester fibre and contains a minimum of 50% previously recycled fibre (from PET plastic). ASL is manufactured under Autex's Zero Waste Programme where all manufacturing waste is recycled back into the production process.

Indoor environment quality (IEQ)/VOC EMISSIONS

Autex Acoustics polyester well exceeds the current leading world standards established by the Green Building Council and GREENGUARD for VOC emissions. The VOC emission limits specified in GREENGUARD standards are based on the recommended maximum exposure for airborne volatile organic chemical levels established by the US National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) and the World Health Organisation (WHO).

ASL can contribute to the acquisition of points in Greenstar, nabers and WELL certified buildings including the following categories where applicable.



ASL Specifications

Form	Panel
NRC	0.8 - 1.0
Fire rating	AS5637.1, AS ISO9705-2003. Group 1 (SMOGR _{Arc}): <100m ² /s ²
Size	1200 mm x 2400 mm, custom available (MOQ applies)
Thickness	50 mm, 75 mm, 100 mm, 140 mm, 150 mm
Application	Ceiling

How to specify

1. Pick your R value (refer to [page 7](#))
2. Pick your colour: Flint, Charcoal, Flint Reclaim
3. Specify Autex Acoustics' Takeback Programme



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Autex Acoustics® products are carbon neutral and contribute to WELL, LEED, Green Star & BREEAM certification. Contact your Autex Acoustics® specification manager to hear how we can support your low carbon goals.

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