Autex Acoustics®

ASL — Acoustic Soffit Liner (including ASL Reclaim)

Data Sheet

Product overview

ASL is an acoustic and thermal lining for soffits, slabs and ceiling applications made from 100% polyester fibre.

Applications

ASL will help lower noise levels by controlling reverberation times in enclosed spaces, reducing noise spill to external areas. When installed to the underside of masonry and metal pan floors and ceilings it will contribute to the energy efficiency of the building.

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.

Acoustic performance

ASL will assist in reducing reverberant noise in enclosed spaces such as carparks and basements, or where it is left directly exposed in ceiling applications. ASL acoustic performance testing has been carried out in a laboratory environment in accordance with ISO 354.

On-site results could vary depending on the system design, product handling, and quality of installation. For service, advice, and copies of the full acoustic test reports, please contact your specification manager.

Product	Thickness (mm)	Test report number	Sheet size						
			125	250	500	1000	2000	4000	NRC
ASL R1.3	50 mm	T1816-6	0.35	0.60	0.85	0.95	0.90	0.95	0.85
ASL R2.0	75 mm	T1816-4	0.40	0.85	1.00	1.00	0.95	1.00	0.95
ASL R2.5	100 mm	T1816-1	0.65	1.00	1.00	1.00	1.00	1.00	1.00
ASL R3.0	140 mm	T1816-1	0.85	1.00	1.00	1.00	1.00	1.00	1.05

Practical sound absorption coefficients calculated according to ISO 11654. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centered on 250 Hz, 500 Hz, 1000 Hz, and 2000 Hz, and rounded to the nearest 0.05. *Test report numbers as conducted by the University of Auckland.

Thermal performance

ASL declared thermal performance ratings have been laboratory tested to the requirements of ASTM C518 using the procedures of ASTM C653, including modifications specified in AS/NZS 4859.1

Product format

ASL is supplied as standard 1200 mm x 2400 mm (+/- 10 mm). Contact your specification manager for samples.

ASL is non-woven, so colour blending variation is typical batch to batch, and throughout each production lot. This is an inherent feature of the product and is not considered a manufacturing fault.

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	1.05	R3.0	2400 mm x 1200 mm

Perforated and non perforated foil faced options are available.

Sizes: ASL is made to order. Sheet size typically: 1200 mm x 2400 mm (+/- 10 mm). Custom sizes available, subject to minimum order quantities.

| Technical | The National Construction Code of Australia (NCC) and local state authorities set out minimum performance requirements for acoustic performance and energy efficiency requirements. The performance of a construction system relies on the design, materials and installation. Compliance can require specialist design considerations.
To ensure building code compliance, architects and building designers are advised to consult an engineer, or the relevant Australian standards, before specifying acoustic and thermal insulation products. For information and assistance please contact your specification manager. |

Building regulations

ASL will assist in meeting the following provisions of the NCC:

NCC Volume One - BCA Class 2-9 Buildings

Section F - Health and Amenity: Sound Transmission and Insulation. Performance requirement FP 5.1 and FP 5.4

Section J - Energy Efficiency: Performance requirement JP1

NCC Volume One - BCA Class 2-9 Buildings

Part 2.6 - Energy Efficiency: Performance requirement P 2.6.1
Part 3.8.6 - Health and Amenity, Sound Insulation: Performance requirements P 2.4.6.

Fire ratings
ASL is tested in accordance with Section C 1.10-4. NCC vol 1.

AS ISO 9705: 2003
Australian Group Number:
Group 1
SMOGRARC:
less than 100m2/s2
Assessed using methodology AS ISO 9705:2003 in accordance with AS5637.1:2015, as required by NCC specification C1.10-4.
Report: FC10711-01-3-C1.

VOC emissions
Autex Acoustics polyester has been tested by Cetec Pty Ltd (Report: RCV080408) for chemical emission as follows.
VOC concentration:
0.01 mg/m³ (7 days)
GREENGUARD VOC Limit:
0.25 mg/m³ (7 days)

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

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

Non-corrosive
Polyester is considered noncorrosive based on AS/NZS 4859.1 standard for insulation.

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%.

Vermin
ASL does not contain chemical deterrents. Birds and vermin will live and nest in all bulk-fibre insulation materials if allowed access. In high-risk areas, Autex Acoustics recommends ensuring the buildings perimeter is vermin proof.

Indoor environment quality
(IEQ)/VOC EMISSIONS Autex Acoustics polyester well exceeds the current leading worldstandards 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).

Environmental
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.

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, or visit our website autexacoustics.com.au

Service
For further information about the full range of Autex Acoustics products please contact your local specification manager or visit our website.

On-site information

The product's nominal thickness is the off-line manufactured thickness. Packaging, storage, and handling may affect out of the pack thickness. This is not considered a manufacturing fault. If thickness is critical to a particular installation, please discuss your requirements with your specification manager.

Installation

Autex Acoustics recommends that ASL be installed in accordance with the manufacturer's instructions and, where applicable, AS 3999:2015 Bulk thermal insulation - Installation. ASL is generally fixed with insulation type fasteners. Fixings should be set out at no more than 600 mm centers, and a maximum of 200 mm in from the edge of each panel. Refer to the ASL Install Instructions for further information.

MSDS

Material Safety Data Sheets (MSDS) are available on request from your specification manager or by visiting our website autexacoustics.com.au

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.