

MBS
Architectural

Autex 3D Tiles
TECHNICAL DATA

Your Ceiling Specialist

Every material. One source.

PARTNERING WITH THE WORLD'S LEADING CEILING *MANUFACTURERS*

Great design is in the detail, and the details are our speciality. We offer the broadest range of premium products from a single source. Our proprietary systems provide the platform for your unique design, giving you complete freedom and customisation to create truly stunning projects.

MBS Architectural can supply any of the products featured in this brochure, and be your one point of contact throughout the project lifecycle - from design conception to installation on site.

Reach out to get your hands on product samples, or discuss your project in more detail - **03 9580 7800 / hello@mbsarchitectural.com.au**



Product overview

A side-step from the traditional acoustic ceiling tile, 3D Ceiling Tiles are made from 100% polyester fibre and moulded to form abstract, three-dimensional shapes.

The 3D Ceiling Tile is designed to be direct fixed or fit within a standard ceiling grid; lightweight and semi-rigid for easy installation.

Sustainable material

- Carbon neutral product
- Zero carbon manufacturing
- Recycled content - 55% recycled material
- Low VOC and CDPH compliant - 0.0035 mg/m³ (7 days)
- Zero waste manufacturing initiative
- Sustainable supply chain and anti-modern slavery

Environmental certifications

- EPD – compliant with ISO 14025 and ISO 15804
- Declare – Red List free (third party verified)
- ISO 14001 Certified Environmental Management
- Health Product Declaration
- CDPH Standard



Certifying your green building

Autex Acoustics products meet criteria for WELL, LEED, Green Star, and BREEAM building rating systems, helping you achieve certification for your project. For support and guidance on available rating system points please visit www.autexglobal.com, or speak with your Autex Acoustics account manager.

Specification

(Ceiling) treatment shall be 3D Ceiling Tiles from thermally moulded, felted polyester material containing not less than 55% recycled material as manufactured by Autex. www.autexglobal.com

Tile (S-5.__), colour (__), sound absorption: Class C, NRC 0.75. Fire rating ISO 9705:

Classification: Group 1-S, EN13501-1:2007+A1:2009: B - s1, d2, ASTM E-84-14 Class A, FS:0 - SD:10

Install as per Autex Acoustics recommendations.



Product specifications

Product name 3D Ceiling Tiles S-5.26, S-5.28, S-5.34, S-5.53
Composition 100% polyester fibre (PET)
Required grid size 600 mm x 600 mm with 24 mm tee

Installation

Designed to fit a 600 mm x 600 mm grid with a 24 mm tee. Install as per Autex Acoustics recommendations. Install instructions are included in each pack or available on the website.

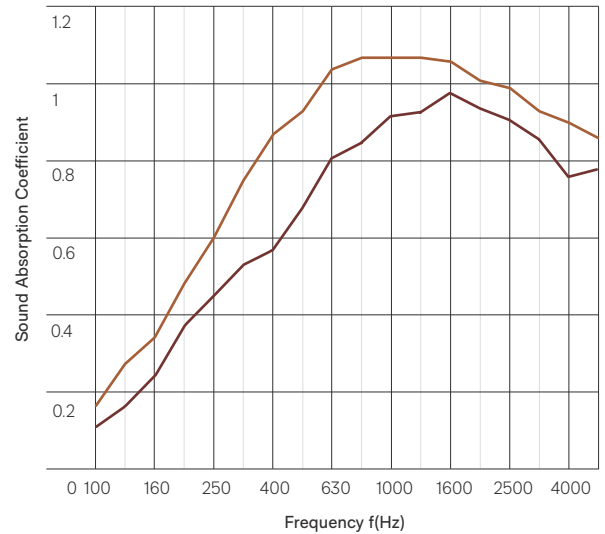
| Product name | S-5.26 | S-5.28 | S-5.34 | S-5.53 |
|-----------------|---------------------|---------------------|---------------------|---------------------|
| Tile dimensions | 595 mm x 595 mm | 595 mm x 595 mm | 595 mm x 595 mm | 595 mm x 595 mm |
| Tile tolerance | (+0.5 mm) (+0.5 mm) | (+0.5 mm) (+0.5 mm) | (+0.5 mm) (+0.5 mm) | (+0.5 mm) (+0.5 mm) |
| Depth | 83 mm | 62 mm | 64 mm | 63 mm |
| Depth tolerance | (+0.5 mm) | (+0.5 mm) | (+0.5 mm) | (+0.5 mm) |
| Weight | 1680 gsm | 1680 gsm | 1680 gsm | 1680 gsm |

Acoustic performance

3D Ceiling Tiles are specifically designed to reduce and control reverberated noise and echo in building interiors. To increase acoustic performance, use Autex AAB 35-25 polyester acoustic insulation as an infill. Refer to www.autexglobal.com.

Sound Absorption Coefficients according to ISO 354.
 University of Auckland Testing Service
 3D Ceiling Tiles without AAB 35-25 - Test No: T1012-3
 3D Ceiling Tiles with AAB 35-25 - Test No: T1012-5

| Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|--------------------------------------|------|------|------|------|------|------|------|
| ● 3D Ceiling Tiles without AAB 35-25 | 0.15 | 0.45 | 0.65 | 0.90 | 0.90 | 0.80 | 0.75 |
| ● 3D Ceiling Tiles with AAB 35-25 | 0.25 | 0.60 | 0.95 | 1.05 | 1.00 | 0.90 | 0.90 |



The graph above presents third octave sound absorption coefficients in accordance with ISO 354 measurement of sound absorption in a reverberation room. The table below presents the practical sound absorption coefficients in accordance with ISO 11654. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz and rounded to the nearest 0.05.

Product specifications

Product name 3D Ceiling Tiles S-5.37
Composition 100% polyester fibre (PET)
Required grid size 600 mm x 600 mm with 24 mm tee

Installation

Designed to fit a 600 mm x 600 mm grid with a 24 mm tee. Install as per Autex Acoustics recommendations. Install instructions are included in each pack or available on the website.

| Product name | S-5.37 |
|-----------------|---------------------|
| Tile dimensions | 595 mm x 595 mm |
| Tile tolerance | (+0.5 mm) (+0.5 mm) |
| Depth | 142 mm |
| Depth tolerance | (+0.5 mm) |
| Weight | 1680 gsm |



Acoustic performance

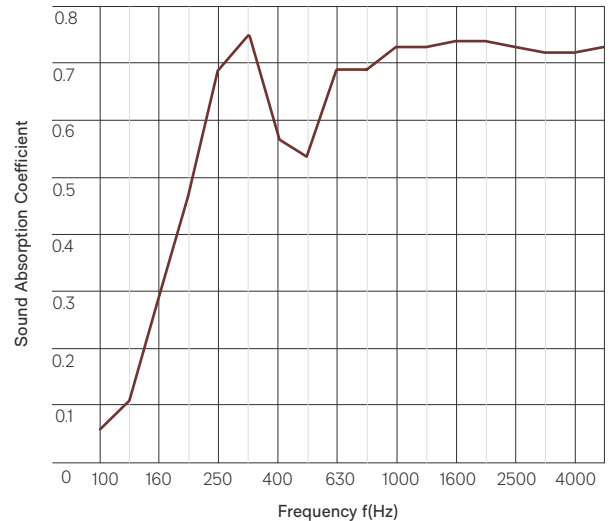
3D Ceiling Tiles are specifically designed to reduce and control reverberated noise and echo in building interiors. To increase acoustic performance, use Autex AAB 35-25 polyester acoustic insulation as an infill. Refer to www.autexglobal.com.

| Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 | NRC |
|----------------------------------|------|------|------|------|------|------|------|
| ● 3D Ceiling Tiles S-5.37 142 mm | 0.15 | 0.65 | 0.60 | 0.70 | 0.75 | 0.70 | 0.65 |

*These designs don't typically support the AAB application.

The graph above presents third octave sound absorption coefficients in accordance with ISO 354 measurement of sound absorption in a reverberation room. The table below presents the practical sound absorption coefficients in accordance with ISO 11654. The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz and rounded to the nearest 0.05.

Sound Absorption Coefficients according to ISO 354.
University of Auckland Testing Service
3D Ceiling Tiles S-5.37 142 mm - Test No: T1316-4



Product specifications

Fire ratings

3D Ceiling Tiles is a product made from Workstation as the base material. Workstation has been evaluated using the following test methods:

ISO 9705: 1993

Classification: Group 1-S

Smoke production rate:

<5.0m²/s

As required by NZBC C/VM2

AS ISO 9705 - 2003

Classification: Group 1 (SMOGR_{arc}): <100m²/s²

Assessed using methodology

AS ISO 9705:2003

in accordance with AS 5637:2015,

as required by BCA Specification C110-4

FAR 4055

EN13501-1:2007

(6mm Workstation)

B - s1, d2

Report WF 336913

ASTM E-84-14

Class A, FS:0 - SD:10

Report RJ3297

Water vapour sorption

ASTM C1104 / C1104M-13a

Test conditions: 49°C, 95%RH

Water vapour absorbed and

adsorped after 4 days:

0.4% by weight.

Microbial resistance

ASTM G21-15

Growth rating: 0 (No growth)

3D Ceiling Tiles do not promote the growth of moulds and mildew.

Colour fastness to light

3D Ceiling Tiles are suitable for indoor use only. Lightfastness

is dependent on use and

exposure. 3D Ceiling Tiles

have been evaluated to the

following standard:

ISO 105-B02:2014

Rating: 6 (Highest = 7)

Colour fastness to rubbing

ISO 105-X12:2016

Dry rating: 4-5 (Highest = 5)

Wet rating: 4-5 (Highest = 5)

Pattern repeat

Non-woven. No pattern

repeat, but the product has a directional grain. Product may vary from samples and batch to batch due to fibre blending and lay-up, which is an inherent feature of this product.

Fabric care

Blot spills from fabric quickly.

Wipe with a damp cloth. Avoid

rubbing and using excessive

amounts of water as this will

affect the finish. Use carpet

or upholstery shampoo as

directed. Blot with a clean, dry

cloth after each application of

the solution.

Custom printed 3D Ceiling Tiles require the services of a specialist cleaning company. Refer to the 3D Ceiling Tiles Care and Maintenance Guide for more information.

Service

For further information about 3D Ceiling Tiles or any other Autex Acoustics product, please contact your account manager or visit our website.



Light reflectance values by colour

3D Ceiling Tiles are suitable for indoor use only. LRVs were measured in accordance with BS 8493:2008+A1:2010

| | | | |
|------------------|----|-------------|----|
| Civic | 57 | Avocado | 11 |
| Silver | 23 | Blush | 10 |
| Porcelain | 22 | Blazing Red | 8 |
| Fawn | 20 | Bark | 5 |
| Granny Smith | 20 | Stately | 3 |
| Stonewash | 19 | Charcoal | 3 |
| Brilliant Orange | 15 | Bark | 1 |
| Electric Blue | 12 | | |

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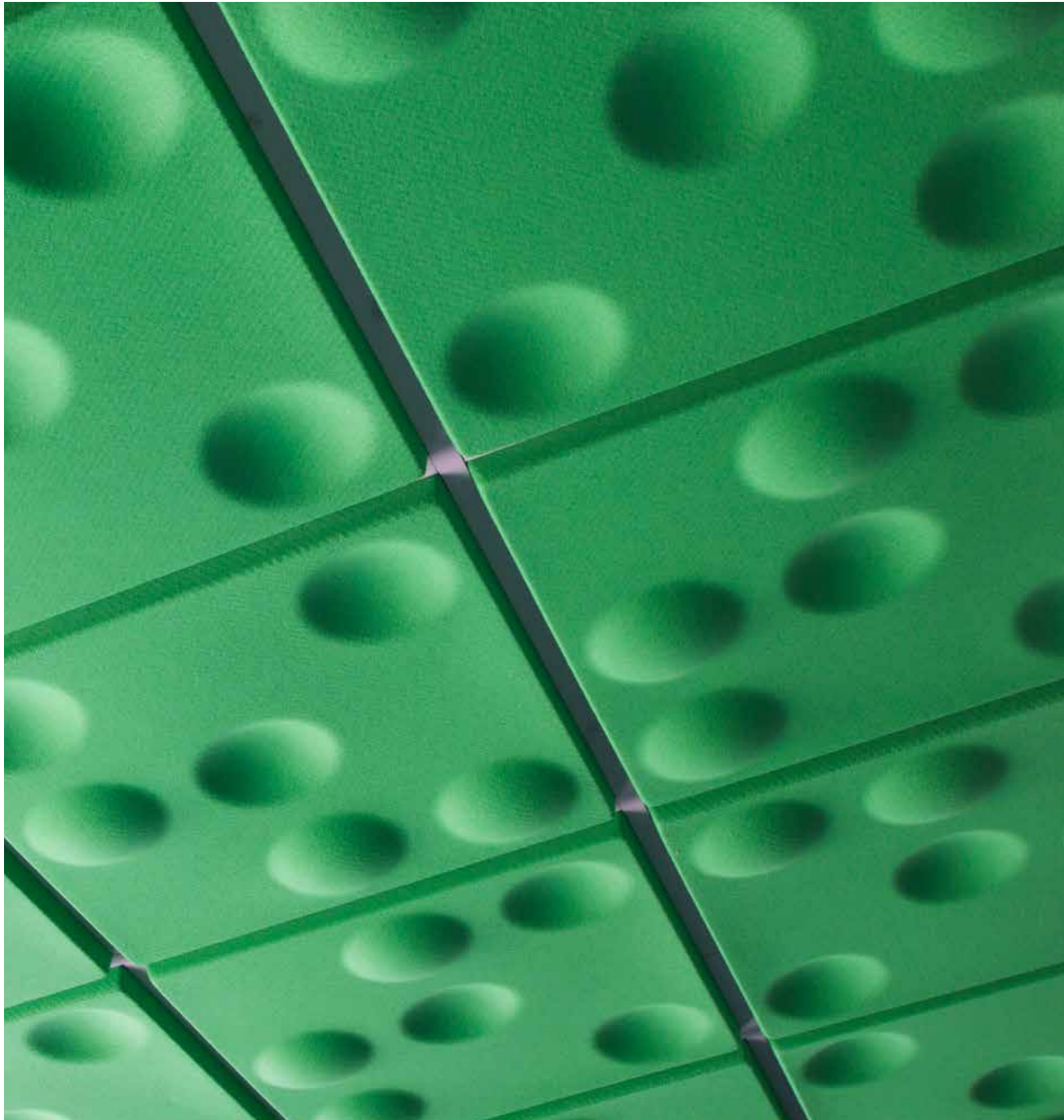
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3D Ceiling Tiles

- 3D Ceiling Tiles S-5.26 in Silver, Civic and Brilliant Orange
- Campbells Bay School, New Zealand



Whimsical, sculpted ceilings

A side-step from the traditional acoustic ceiling tile, 3D Ceiling Tiles offer both form and function—lending their abstract, three-dimensional shape to the architectural pursuit of a ceiling that begs you to look up.

Made from 100% polyester fibre, 3D Ceiling Tiles are lightweight and structurally sound, designed to be direct fixed or fit within a standard ceiling grid. As sculptural acoustic art, 3D Ceiling Tiles hold their own—a statement design feature and high-performance acoustic treatment in one fell swoop.

To find out more about 3D Ceiling Tiles
visit www.autexglobal.com

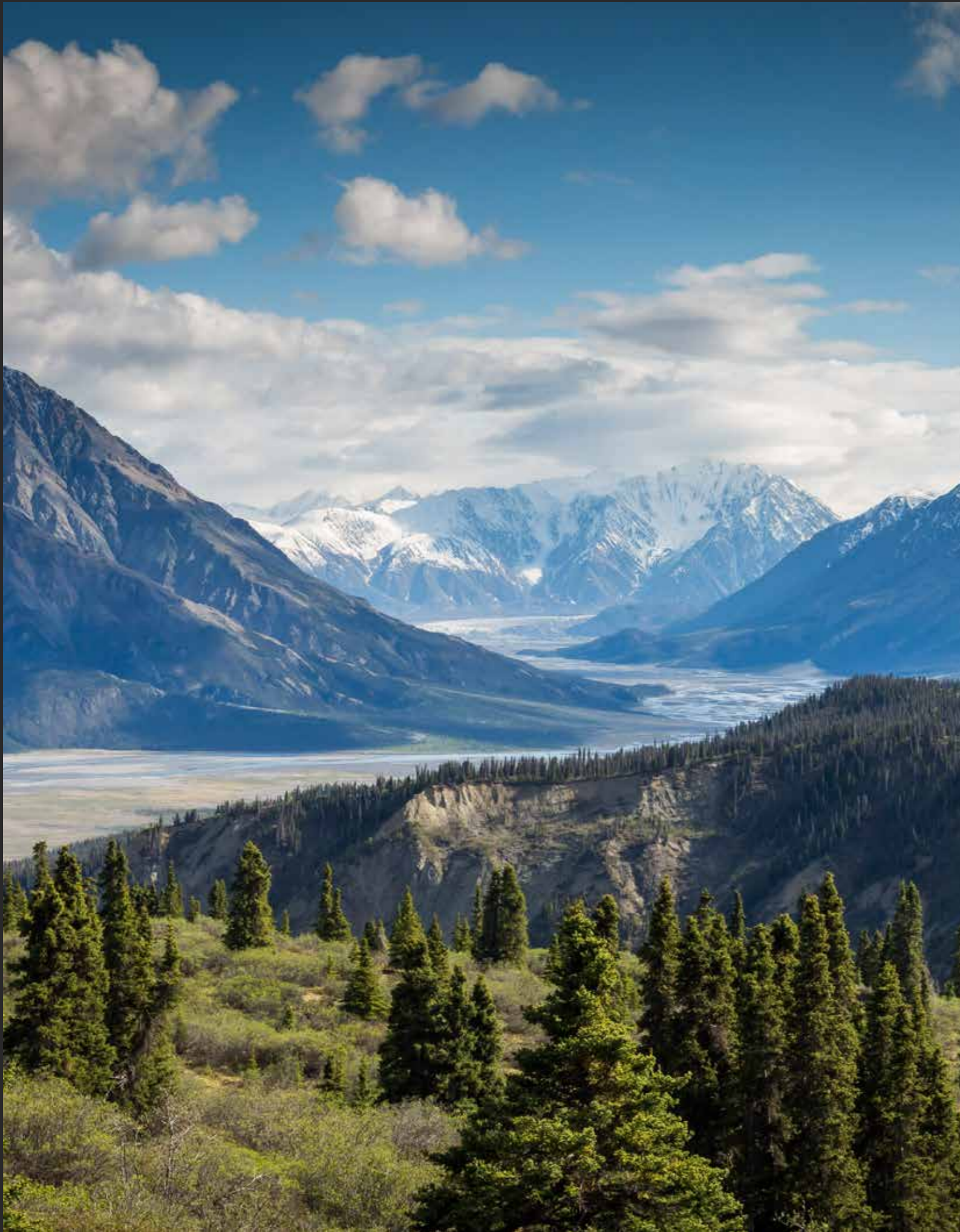


Features and benefits

- Delivers excellent acoustic performance
- Designed to fit traditional ceiling grids
- Available in five designs

Applications

- Decorative and functional acoustic tiles for residential, office, education, retail, hospitality, and commercial interiors
- Control noise in interior environments and create unique sculptural features



The Autex Acoustics[®] sustainability pillars

Our sustainability strategy provides the foundation and direction for our sustainability mission and goals. Our sustainability strategy is split into five pillars.



Climate change - We aim to maintain our position as a net-zero carbon organisation and offer carbon neutral products. Autex Acoustics began carbon accounting in 2017 and we continue to measure and monitor our GHG emissions which help inform carbon reduction initiatives. Remaining carbon emissions are mitigated using certified carbon credits.



Purpose and profit - Our goal is to positively impact our environment, our people, and the next generation. Autex Acoustics has committed a fund to support restorative social and environmental programmes.



Closing the loop - We aim to increase the uptake of product stewardship in the construction industry and expand our product takeback schemes to help build a more circular economy. We avoid waste through reducing material inputs to our products and designing for reuse/disassembly. We reuse waste from our manufacturing operations to make more product. We incorporate recycled PET waste into new product and use recyclable cardboard as packaging.



Wellbeing - We aim to ensure all current and future Autex Acoustics products avoid harmful chemicals. Our products are simple and designed without any toxic ingredients to support human and environmental health. Autex Acoustics products have a profound impact on the acoustic environment of building interiors and wellbeing of occupants.



Supply chain - We aim to eliminate any unethical practices in our supply chain to encourage good working conditions throughout our supplier network. Autex Acoustics carefully selects the best suppliers to ensure we deliver quality products that have a responsible social and environmental track record. As an organisation that relies on a global supply chain, we recognise the pressing—and ongoing—need to eliminate unethical practices within our own supply chain, particularly with regards to modern slavery.

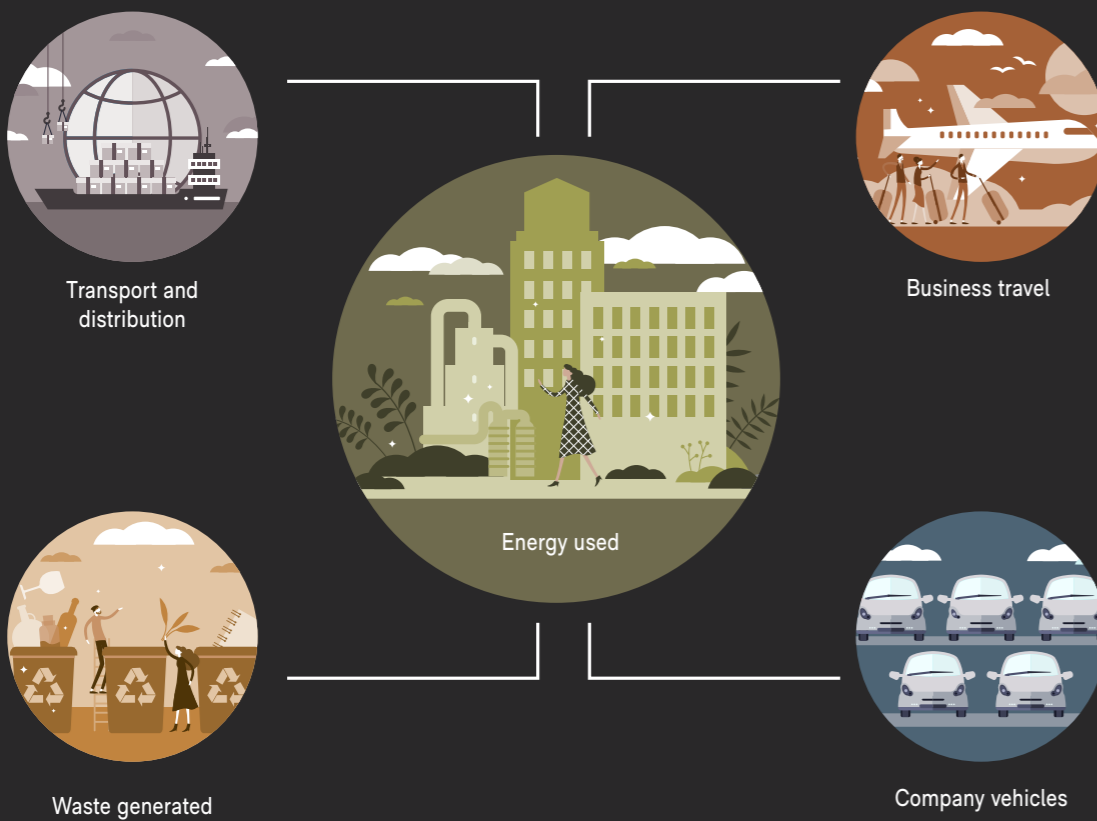
How we're fighting climate change

The climate crisis is the biggest issue of our generation. As a product designer and manufacturer, we have an opportunity to help improve the carbon impact of our industry.

Our operational carbon emissions

We are a carbon neutral business. We actively monitor the carbon emissions of our entire operation to better understand our carbon footprint and how we can further reduce emissions. We have an internal strategy to reduce our carbon emissions and have successfully delivered a number of carbon reduction initiatives within our operations. Any carbon emissions that are currently unavoidable are offset through certified carbon credits. We have a commitment to purchase only verified carbon credits that are retired on robust registers to ensure we are driving positive change.

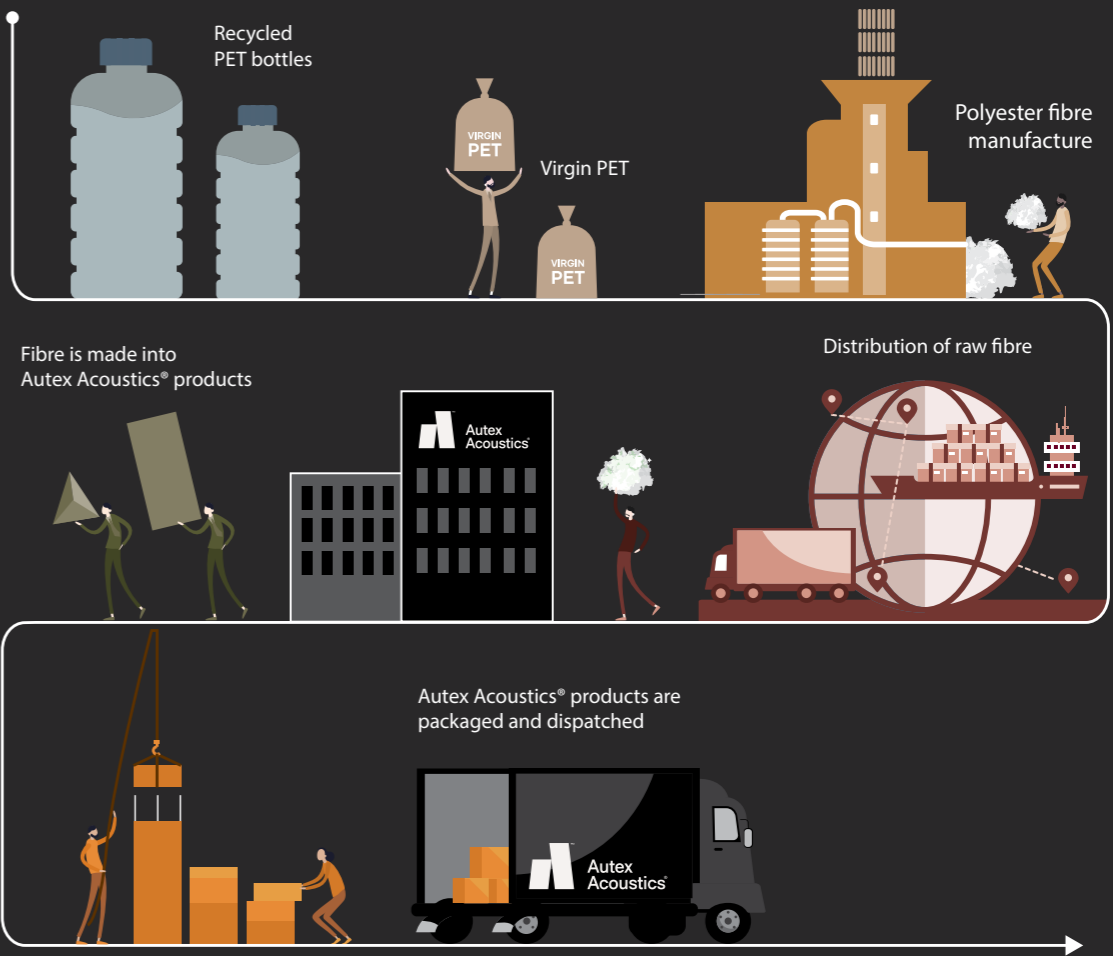
Key business activities contributing to our operational emissions



Embodied carbon of our products

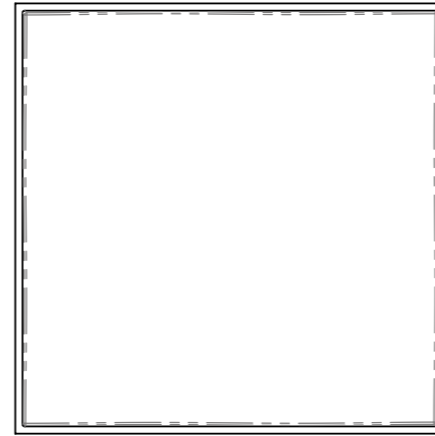
Our products are carbon neutral, and we are the first business in our industry to include the cost of carbon in our products. We consider this an investment in present and future generations, and simply a cost of doing business. We calculate the embodied carbon of our products, from the raw material to the manufacturing gate, using industry recognised ISO standards. We have reduced the carbon footprint of our products through smart design and efficient manufacturing. While the embodied carbon of our products is low, they still do have a carbon impact. We mitigate this through our Carbon Neutral Product Initiative by offsetting the equivalent emissions using certified carbon credits. These carbon credits are generated from projects focused on renewable energy, fuel switching and reforestation around the world.

Key activities contributing to the embodied carbon of our products

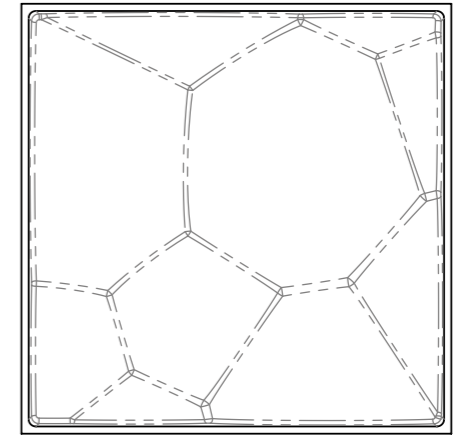




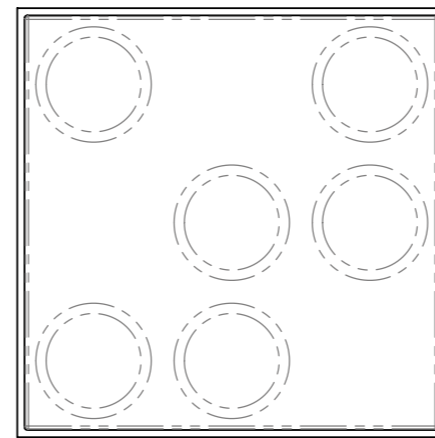
Design options



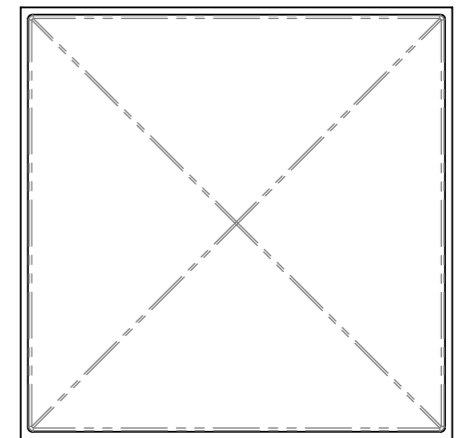
S-5.26



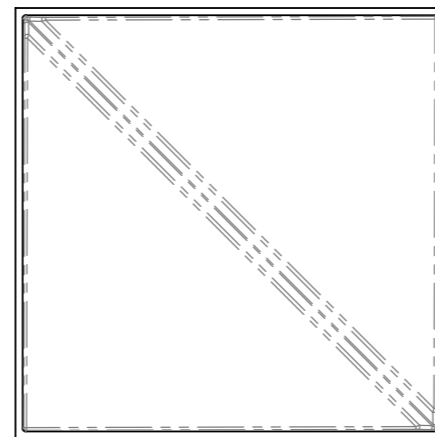
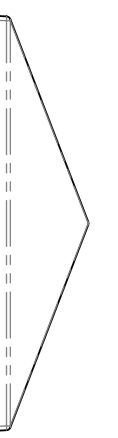
S-5.28



S-5.34



S-5.37



S-5.53







Environmental certifications

Certifying your green building

Autex Acoustics products meet criteria for WELL, LEED, Green Star, and BREEAM building rating systems, helping you achieve certification for your project. For support and guidance on available rating system points please visit www.autexglobal.com, or speak with your Autex Acoustics account manager.



Environmental Product Declaration

An Environmental Product Declaration (EPD) is a document that communicates information about the life-cycle environmental impact of a product, including embodied carbon. Our EPDs are created and verified in accordance with ISO 14025 and ISO 15804, used for construction products and services.



GreenRate – Level A

GreenRate is a multi-attribute environmental certification that scores products on a range of environmental, health, and social measures. Autex Acoustics products are certified to achieve GreenRate Level A. Level A is the highest GreenRate level and demonstrates the highest level of product sustainability.



Declare – International Living Future Institute

The ingredients in our products have been reviewed against the Living Future Challenge Red List and achieve a Third-Party Verified 'Red List Free' status.



Products achieve the highest 'LBC Red List Free' status when:

- Ingredients are 100% disclosed and are not found in the Red List
- Products are shown to meet VOC emissions limits

We assure the accuracy of our certifications by having our Declare labels independently verified by a third party expert.



Health Product Declaration

A Health Product Declaration (HPD) is a document that reports the ingredients of a product and the health effects associated with these ingredients. A Health Product Declaration has been generated for each of our products.



CDPH Standard

CDPH Standard Method (CA Section 01350) is a widely used standard to evaluate building products for low volatile organic chemicals (VOC) and formaldehyde emissions. All Autex Acoustics products meet the limits set by CDPH and the LEED building rating scheme.



ISO Certifications

ISO 14001 – Environmental Management

Autex Acoustics manufactures under environmental management processes that are ISO certified. This certification gives assurance that we manage any environmental impacts within our operations.



ISO 9001 – Quality Management

Autex Acoustics has a strict quality management system that is ISO certified. Robust quality processes from raw material through to product release help ensure our products meet expectations.



ISO 45001 – Health and Safety Management

Autex Acoustics manufacturing operations have an ISO 45001 certified Health and Safety Management System to ensure the safety and wellbeing of our people.



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