

## Autex Acoustics

## Lattice™

## Data Sheet

# Product overview

Lattice™ is a range of hanging sculptures built from a grid of acoustic fins. Covering a greater surface area than traditional parallel fin systems, Lattice effectively absorbs echo and reverberation in interior spaces. Lattice is made from 100% polyester fiber and is lightweight and structurally sound—holding form over its lifetime.

### Sustainable material

- · Carbon neutral product
- · Zero carbon manufacturing
- · Recycled content
- >60% recycled material

- · Low VOC and CDPH compliant
  - <0.092 mg/m3 (7 days)
- · Zero waste manufacturing initiative
- Sustainable supply chain and anti-modern slavery

# Environmental certifications

- EPD compliant with ISO 14025 and EN 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

Suspended acoustic absorption system shall be Lattice made from thermally bonded polyester containing not less than 60% recycled material as manufactured by Autex. www.autexglobal.com

Suspended acoustic absorber Lattice Eclipse/Torus/Trapezium, color (\_), sound absorption Class A, NRC 1.00 – if direct fixed to ceiling: Class A, NRC 1.00. Fire ttrating ASTM E-84-14: Class A, FS:0 - SD:45, ISO 9705: Classification: Group 1-S, AS ISO 9705 – 2003, Classification: Group 1, BS EN 13501-1:2018: B - s2, d0.

Lattice to be supplied unassembled with  $4 \times 39$ " galvanised cables,  $4 \times 61$  ceiling mounts,  $4 \times 61$  velda" cable clips,  $4 \times 61$  alloy tube inserts. Install as per Lattice (Eclipse, Torus, Trapezium) Install Instructions.

Suspended acoustic absorber 57:1" x 57:1" x 11.54" (nom. depth), color (\_). Fire rating ASTM E-84-15a: Class A, FS:0 - SD:45, ISO 9705: Classification: Group 1-S, AS ISO 9705 - 2003. Classification: Group , BS EN 13501-1:2018: B - s2, d0.

Lattice to be supplied unassembled with 8 x 39" galvanised cables, 8 x ceiling mounts, 8 x "Velda" cable clips. Install as per Lattice Install Instructions.



## Product specifications

Product name Lattice™ Eclipse

Composition 100% polyester fiber (PET) Assembled size 47.1" x 92.4" x 13.3"

Tolerance  $(+/-0.02") \times (+/-0.02") \times (+/-0.02")$ 

#### Installation

Install as per Autex Acoustics recommendations. Install instructions are included in each pack or available on the website.

### Acoustic performance

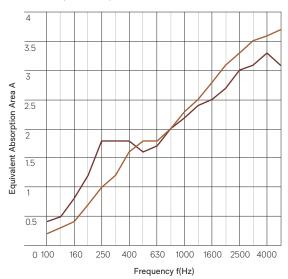
Lattice Eclipse is specifically designed to reduce and control reverberated noise and echo in building interiors.

	Frequency (Hz)	125	250	500	1000	2000	4000	Metric sabin per unit
•	Lattice Eclipse (1/2" direct fix)	0.60	1.60	1.70	2.20	2.80	3.20	2.10
•	Lattice Eclipse (1/2" suspended 7.87")	0.30	1.0	1.80	2.30	3.10	3.60	2.05

All results are reported in metric sabin - per unit. Equivalent sound absorption area according to ISO 354 measurement of sound absorption in a reverberation room. Average absorption (sabins per unit) calculated at one-third octave bands centered 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

Lattice Eclipse 1/2" direct fix - test no: T1420-1 Lattice Eclipse 1/2" suspended 7.87" - test no: T1409-7



## **Product specifications**

Product name Lattice™ Torus

Composition 100% polyester fiber (PET)

**Assembled size** 57.1" x 57.1" x 11.5"

Tolerance  $(+/-0.02") \times (+/-0.02") \times (+/-0.02")$ 

Thickness 1/2"
Tolerance (+/-6%)Weight  $7.54 \text{ oz/ft}^2$ 

## Installation

Install as per Autex Acoustics recommendations. Install instructions are included in each pack or available on the website.



## Acoustic performance

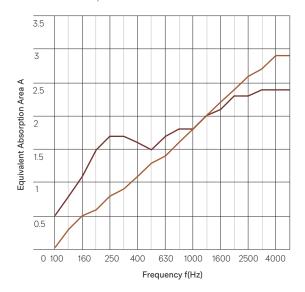
Lattice Torus is specifically designed to reduce and control reverberated noise and echo in building interiors.

	Frequency (Hz)	125	250	500	1000	2000	4000	Metric sabin per unit
•	Lattice Torus (1/2" direct fix)	0.80	1.70	1.60	1.90	2.80	2.30	1.85
•	Lattice Torus (1/2" suspended 7.87")	0.30	0.80	1.30	1.80	3.10	2.40	1.60

All results are reported in metric sabin - per unit. Equivalent sound absorption area according to ISO 354 measurement of sound absorption in a reverberation room. Average absorption (sabins per unit) calculated at one-third octave bands centered 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

Lattice Torus 1/2" direct fix - test no: T1420-2 Lattice Torus 1/2" suspended 7.87" - test no: T1420-3



## **Product specifications**

Product nameLattice™ TrapeziumComposition100% polyester fiber (PET)Assembled size47.1" x 92.4" x 13.3"

Tolerance  $(+/-0.02") \times (+/-0.02") \times (+/-0.02")$ 

Thickness 1/2"
Tolerance (+/-6%)Weight  $7.54 \text{ oz/ft}^2$ 

#### Installation

Install as per Autex Acoustics recommendations. Install instructions are included in each pack or available on the website.

## Acoustic performance

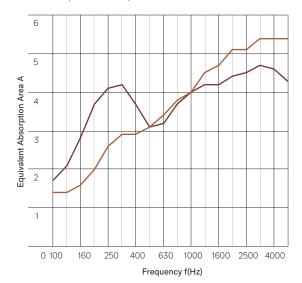
Lattice Trapezium is specifically designed to reduce and control reverberated noise and echo in building interiors.

	Frequency (Hz)	125	250	500	1000	2000	4000	Metric sabin per unit
•	Lattice Trapezium (1/2" direct fix)	2.20	4.0	3.40	4.0	4.40	4.60	3.90
•	Lattice Trapezium (1/2" suspended 7.87")	1.50	2.50	3.20	4.10	5.0	5.40	3.70

All results are reported in metric sabin - per unit. Equivalent sound absorption area according to ISO 354 measurement of sound absorption in a reverberation room. Average absorption (sabins per unit) calculated at one-third octave bands centered 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

Lattice Trapezium 1/2" direct fix - test no: T1326-16
Lattice Trapezium 1/2" suspended 7.87" - test no: T1326-14



## Product specifications

#### Fire ratings

Lattice is made from Cube<sup>™</sup> as the base material. Cube (12 mm) has been evaluated using the following test methods:

#### ISO 9705: 1993

Classification: Group 1-S Smoke production rate: <5.0m<sup>2</sup>/s As required by NZBC C/VM2

#### AS ISO 9705 - 2003

Classification: Group 1
(SMOGRArc): <100m<sup>2</sup>/s<sup>2</sup>
Assessed using methodology AS ISO 9705 - 2003 in accordance with AS 5637;2015, as required by BCA Specification C1:10-4 FI 4974
FAB 4055

#### BS EN 13501-1:2018

Ceiling applications Classification: B-s2,d0 (Cube™ 1/2")

Tested using BS EN ISO 11925-2:2020 and BS EN I38232020 and classified in accordance with BS EN I3501-12018, as required by BS EN 13964:2014. EUI-20-000268-B

### ASTM E-84-15a

Class A, FS:0 - SD:45

### Water vapor sorption

ASTM C1104 / C1104M-13a Test conditions: 49°C, 95%RH Water vapor absorbed and adsorped after 4 days: 0.4% by weight

### Microbial resistance

ASTM G21-15 Growth rating: 0 (No growth) Lattice does not promote the growth of molds and mildew.

### Color fastness to light

Lattice is suitable for indoor use only. Light fastness is dependent on use and exposure. Lattice has been evaluated to the following standard: ISO 105-B02:2014 Rating: 6 (Highest = 7

#### Color 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 product has directional grain. Product may vary from samples and batch to batch due to fiber 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 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 solution.

Custom printed Lattice requires the services of a specialist cleaning company. Refer to the Lattice Care and Maintenance Guide for more information.

#### Service

For further information about Lattice, Cube or any other Autex Acoustics product, please contact your account manager or visit our website.

# Light reflectance values by color

Lattice is suitable for indoor use only. LRVs were measured in accordance with BS 8493:2008+A1:2010

Acros	40
Beehive	33
Canyon	19
Caspian	6
Cavalier	12
Empire	5
Falling Water	34
Flatiron	24
Gherkin	8
Highland	19
Muralla	9

Opera	49
Parthenon	33
Pavilion	80
Petronas	2
Pinnacle	3
Sargazo	4
Savoye	46
Senado	44
Terrace	24
Tree House	3

#### New Zealand

702-718 Rosebank Road, Private Bag 19988 Avondale 1746, Auckland T 0800 428 839 T +64 9 828 9179

www.autexacoustics.co.nz

#### Australia

285 Swan Street, Richmond, VIC 3121 T 1800 678 160 T +61 3 9450 6700 www.autexacoustics.com.au

## United Kingdom

Unit J4, Lowfields Way, Lowfields Business Park, Elland, West Yorkshire HX5 9DA T +44 0 142 241 8899

www.autexacoustics.co.uk

#### United States

1630 Dan Kipper Drive, Riverside, CA 92507 T +1 424 203 1813 www.autexacoustics.com

Autex is an ISO certified organisation encompassing Quality (ISO 9001), Environmental (ISO 14001), and Health and Safety (ISO 45001). Brand names and logos are registered or unregistered trademarks owned or used under license by Autex Industries Limited or other members of the Autex Group. © Copyright 2023 Autex Industries Ltd. All rights reserved. It is the user's responsibility to determine if the product and information presented in this document is 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 Autex account manager.