Product overview

Cube™ is a versatile acoustic panel designed for a variety of interior applications. Available in 12 mm and 24 mm thicknesses, Cube panels are lightweight and semi-rigid—made from 100% polyester fibre. Cube panels are customisable with Print, Mould & Press, Precision Cut, Groove, and Peel 'n' Stick, and require no edging or capping.

Sustainable material

- Carbon neutral product
- Zero carbon manufacturing
- Recycled content
  - >60% recycled material
- Low VOC and CDPH compliant
  - <0.092 mg/m^3 (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

(Wall) treatment shall be Cube™ from thermally bonded high density polyester containing not less than 60% recycled material as manufactured by Autex www.autexglobal.com

Panel 1220 x 2440 x (_)mm (nom.) depth, colour (_), sound absorption 12 mm: Class D, NRC 0.45 – with 24 mm air gap: Class C, NRC 0.70. 24 mm: Class D, NRC 0.70

– with 24 mm air gap: Class C, NRC 0.80. Fire rating ASTM E-84-15a: Class A, FS:0 - SD:45, ISO 9705: Classification: Group 1-S, AS ISO 9705 – 2003 Classification: Group 1, 12 mm BS EN 13501-1:2018: B - s2, d0, 24 mm BS EN 13501-1:2018: B - s2, d0.

If Cube is to be specified for use other than as a wallcovering, please seek guidance from your account manager..

Product specifications

Product name	Cube™
Composition	100% polyester fibre
Panel dimensions	1220 mm x 2440 mm
Tolerance	(+ 5 mm) x (+ 10 mm)
Thickness	12 mm 24 mm
Tolerance	(+/- 6%) (+/- 6%)

Thermal performance
(Internally tested by Autex Lab)

Cube 12 mm	R0.41 (@15°C)
Cube 24 mm	R0.82 (@15°C)

Installation

Install as per Autex Acoustics recommendations.
Install instructions are included in each pack or available on the website. If Cube is to be specified for use other than as a wallcovering, please seek guidance from your account manager.

Product specifications

Fire ratings
Cube has been evaluated using the following test methods.

ISO 9705: 1993
Classification: Group 1-S
Smoke production rate: <5.0m^2/s
As required by NZBC C/VM2

AS ISO 9705 - 2003
Classification: Group 1
(SMOGRArc): <100m^2/s2
Assessed using methodology AS ISO 9705 - 2003 in accordance with AS 5637.1:2015, as required by NCC Specification 7: Fire Hazard properties: S7C4
FI 4974
FAR 4055

BS EN 13501-1:2018
Wall applications
Classification: B-s2,d0
(Cube™ 12 mm)
Tested using BS EN ISO 11925-2:2020 and BS EN 13823:2020 and classified in accordance with BS EN 13501-1:2018, as required by BS EN 15102:2007 + A1:2011. EUI-20-000268-A

Wall applications
Classification: B-s2,d0
(Cube™ 24 mm)
Tested using BS EN ISO 11925-2:2020 and BS EN 13823:2020 and classified in accordance with BS EN 15102:2007 + A1:2011.
7191343095-MEC24/03-JV

Ceiling applications
Classification: B-s2,d0
(Cube™ 12 mm)
Tested using BS EN ISO 11925-2:2020 and BS EN 13823:2020 and classified in accordance with BS EN 13501-1:2018, as required by BS EN 13964:2014.
EUI-20-000268-B

Ceiling applications
Classification: B-s2,d0
(Cube™ 24 mm)
Tested using BS EN ISO 11925-2:2020 and BS EN 13823:2020 and classified in accordance with BS EN 13964:2014.
7191343095-MEC24/03-JV

ASTM E-84-15a
Class A, FS:0 - SD:45
(Cube™ 1/2")
RJ4479-2
Class A, FS:0 - SD:65
(Cube™ 1")
RJ4479-1

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

Impact resistance
ISO 7892:1988

Hard body impact
There is no surface damage or penetration to Cube when subjected to hard body impacts. When adhered to 10 mm plasterboard, the system can resist a 9 joule impact. This is equivalent to the impact of a 0.5 kg object dropped from a 2 m height. A small indentation might be observed when subjected to an impact equivalent to the impact of a 0.5 kg object dropped from a 0.5 m height.

Soft body impact
There is no surface damage or penetration to Cube when subjected to soft body impacts. When adhered to 10 mm plasterboard, the system can resist a 70 joule impact. This is equivalent to the impact of a 50 kg object dropped from a 150 mm height.

Microbial resistance
ASTM G21-15
Growth rating: 0 (No growth) Cube does not promote the growth of moulds and mildew.

Colour fastness to light
Cube is suitable for indoor use only. Light fastness is dependent on use and exposure. Cube has 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 product has 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 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 Cube requires the services of a specialist cleaning company. Refer to the Cube Care and Maintenance Guide for more information.

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

Acoustic performance

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

	Frequency (Hz)	125	250	500	1000	2000	4000	NRC
●	12 mm Cube	0.05	0.10	0.30	0.65	0.90	0.95	0.45
●	12 mm Cube (with 25 mm air gap)	0.05	0.30	0.60	0.95	0.95	0.85	0.70
●	24 mm Cube	0.05	0.20	0.60	0.90	1.00	1.00	0.70
●	24 mm Cube (with 25 mm air gap)	0.15	0.40	0.85	0.95	0.95	0.95	0.80

Graph presents third octave sound absorption coefficients (according to ISO 354 measurement of sound absorption in a reverberation room). 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.
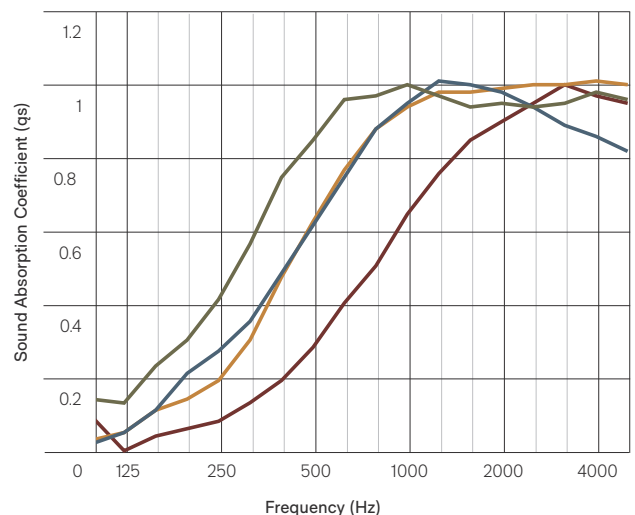
Absorption Coefficient According to ISO 354
University of Auckland Testing Service
Cube (12 mm) - Test No. T0712-3
Cube (12 mm with 25 mm air gap) - Test No. T0712-6
Cube (24 mm) - Test No. T1961-1
Cube (24 mm with 25 mm air gap) - Test No. T1326-2

Light reflectance values by colour

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

Colour	LRV	Colour	LRV
Acros	40	Opera	49
Beehive	33	Parthenon	33
Canyon	19	Pavilion	80
Caspian	6	Petronas	2
Cavalier	12	Pinnacle	3
Empire	5	Sargazo	4
Falling Water	34	Savoye	46
Flatiron	24	Senado	44
Gherkin	8	Terrace	24
Highland	19	Tree House	3
Muralla	9		

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