

Autex Acoustics

Cube™

Data Sheet

Product overview

Cube™ is a versatile acoustic panel designed for a variety of interior applications. Available in 1/2" and 1" thicknesses, Cube panels are lightweight and semi-rigid—made from 100% polyester fiber. Cube panels are customizable with Print, Mold & 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/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

(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 4' x 8' x (_)" (nom.) depth, color (_), sound absorption 1/2": Class D, NRC 0.45 – with 1" air gap: Class C, NRC 0.70.1": Class D, NRC 0.70 – with 1" 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, 1/2" BS EN 13501-1:2018: B - s2, d0, 1" BS EN 13501-1:2018: B - s2, d2.

Install as per Autex Acoustics recommendations.

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



Product specifications

Product name Cube™

Composition 100% polyester fiber

Panel dimensions 4' x 8'

 $\begin{array}{lll} \mbox{Tolerance} & (+0.2") \times (+0.4") \\ \mbox{Thickness} & 1/2" & 1" \\ \mbox{Tolerance} & (+/- 6\%) & (+/- 6\%) \end{array}$

Thermal performance

(Internally tested by Autex Lab)

Cube 1/2" R0.41 (@59°F) Cube 1" R0.82 (@59°F)

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: <5.0m2/s As required by NZBC C/VM2

AS ISO 9705 - 2003

Classification: Group 1 (SMOGRArc): <100m2/s2 Assessed using methodology AS ISO 9705 - 2

Assessed using methodology AS ISO 9705 - 2003 in accordance with AS 56371:2015, as required by BCA Specification C1.10-4 FI 4974 FAR 4055

BS EN 13501-1:2018

Wall applications Classification: B-s2,d0

 $(Cube^{^{\mathrm{TM}}} 1/2")$

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

Ceiling applications Classification: B-s2,d0

(Cube[™] 1/2")

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

Wall applications Classification: B-s2,d2

(Cube[™]1")

Tested using BS EN ISO 11925-22020 and BS EN I3823-2020 and classified in accordance with BS EN I3501-12018, as required by BS EN I5102-2007 + A12011. EUI-21-000135-G-A

Ceiling applications Classification: B-s2,d2

(Cube™ 1")

Tested using BS EN ISO 11925-22020 and BS EN IS8232020 and classified in accordance with BS EN 13501-12018, as required by BS EN 139642014.

EUI-21-000135-G-B

ASTM E-84-15a

Class A, FS:0 - SD:45 (Cube™ 1/2") RJ4479-2 Class A, FS:0 - SD:65 (Cube™ 1")

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

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 molds and mildew.

Color 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)

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 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

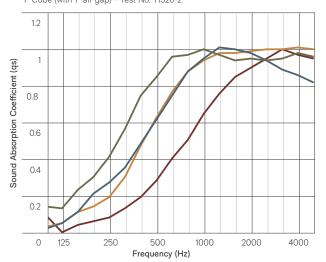
Cube is specifically designed to reduce and control reverberated and echo noise in building interiors.

	Frequency (Hz)	125	250	500	1000	2000	4000	NRC
•	1/2" Cube	0.05	0.10	0.30	0.65	0.90	0.95	0.45
•	1/2" Cube (with 1" air gap)	0.05	0.30	0.60	0.95	0.95	0.85	0.70
•	1" Cube	0.05	0.20	0.60	0.90	1.00	1.00	0.70
•	1" Cube (with 1" 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 centered 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

1/2" Cube - Test No. T0712-3 1/2" Cube (with 1" air gap) - Test No. T0712-6 1" Cube - Test No. T1961-1 1" Cube (with 1" air gap) - Test No. T1326-2



Light reflectance values by color

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

Pavilion	80
Opera	49
Savoye	46
Rosada	45
Senado	44
Acros	40
Falling Water	34
Parthenon	33
Beehive	33
Bosco	29
Flatiron	24
Zenith	23

Galaxy	15
Lotus	14
Ironbank	13
Cavalier	12
Muralla	9
Gherkin	8
Empire	5
Sargazo	4
Pinnacle	3
Tree House	3
Petronas	2

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