Autex Acoustics®

Groove™ Data Sheet

Product overview

Groove™ is a semi-rigid acoustic panel, router cut with a series of precise, angular designs that bend and distort light. Available in 1/2" and 1" thicknesses, Groove panels are lightweight—made from 100% polyester fiber. Choose a single color for a tone-on-tone effect, or combine two colors with Groove Duet™ to create a two-tone effect.

Sustainable material

- Carbon neutral product
- Zero carbon manufacturing
- Recycled content
  - >79% 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 autexglobal.com, or speak with your Autex Acoustics account manager.

Specification

(Wall/Ceiling) treatment shall be Groove from thermally bonded high density polyester containing not less than 79% recycled material as manufactured by Autex Acoustics autexglobal.com

Panel 47.25" x 110" 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.

If Groove is to be specified for use other than as a ceiling or wallcovering, please seek guidance from your Autex Acoustics account manager.

Product specifications

Product name	Groove	
Composition	100% polyester fiber	
Panel dimensions	47.25" x 110"	
Tolerance	0.2" - 0.4"	
Thickness	1/2"	1"
Tolerance	(+/- 6%)	(+/- 6%)

For Groove Duet panels that have a layer of velour Vertiface® laminated to the face, the stated nominal thickness will increase by 1/8".

Thermal performance

(Internally tested by Autex Lab)

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

Installation

Install as per Autex Acoustics recommendations. Install instructions are included in each pack, or available on the website. In situations where product is being installed near fire protection systems (e.g. sprinklers or fire alarms) relevant building codes, standards and design rules must be adhered to. Please consult the project engineer and relevant expert such as a fire protection engineer. If Groove is to be specified for use other than as a wallcovering, please seek guidance from your Autex Acoustics account manager.

Acoustic performance

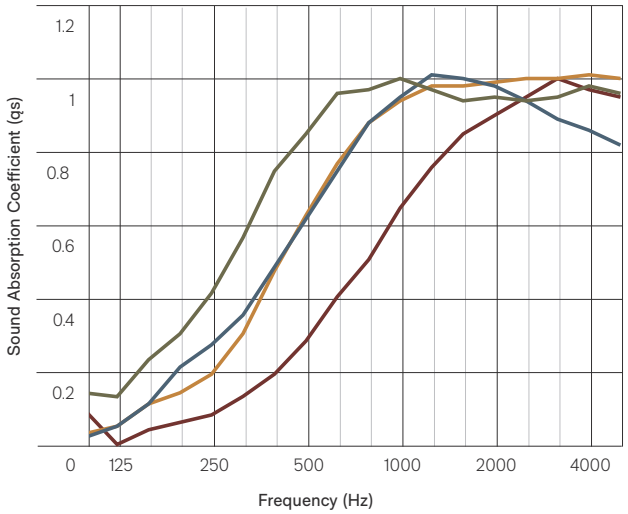
Groove is specifically designed to reduce and control reverberated and echo noise in building interiors. Groove is made from Cube as the base material.

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

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



Light reflectance values by color

Groove 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

Product specifications

Fire ratings
Groove is made from Cube as the base material. 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 - 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 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

Wall applications
Classification: B-s2,d0
(Cube 1")
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.
7191343095-MEC24/03-JV

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

Ceiling applications
Classification: B-s2,d0
(Cube 1")
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.
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 Groove 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 Groove 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)
Groove does not promote the growth of molds and mildew.

Color fastness to light
Groove is suitable for indoor use only. Light fastness is dependent on use and exposure. Groove 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 Groove requires the services of a specialist cleaning company. Refer to the Autex Acoustics Care and Maintenance Guide for more information.

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

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