

Autex Acoustics®

Frontier[™] Acoustic Raft

Data Sheet

Product overview

Frontier™ is a modular acoustic baffle system designed to communicate with interior spaces via an adjustable channel and clip system—giving you complete control over the height, spacing, and placement of each individual component. Lightweight yet solid in appearance, Frontier Acoustic Fins and Raft are made from 100% polyester fiber and cut to form elegant 2D and 3D shapes. Frontier is designed to be 'tuned' to interior spaces, offering tailored acoustic absorption across a wide range of frequencies.

Panel fixing system patent

US Patent 10,113,312

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

Acoustic panels shall be Frontier Acoustic Raft (_) as compiled by Autex www.autexglobal.com

Acoustic absorber Frontier Acoustic Raft (Blade: 94.5" x 9.5" x 3"), (Beam 100: 94.5" x 3.5" x 3"), (Beam 250: 94.5 x 9" x 3"), (Trapezoid: 94.5" x 5.5" x 8"), 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 1, BS EN 13501-1:2018: B - s2, d0.

Seismic bracing as per local building code requirements.

A variety of fixing or suspension options are available. Install as per Frontier Install Instructions.

Product specifications

Product name Frontier™ Acoustic Raft
Composition 100% polyester fiber (PET);
aluminium channel

 $\begin{array}{lll} \mbox{Fin length} & 94.5 \mbox{"} \\ \mbox{Tolerance} & (+- 0.02 \mbox{"}) \\ \mbox{Thickness} & 1/2 \mbox{"} \\ \mbox{Tolerance} & (+/- 6\%) \\ \mbox{Weight} & 7.5 \mbox{oz/ft}^2 \end{array}$

Installation

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

Product specifications

Fire ratings

Frontier 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 97052003 in accordance with AS 5637:12015, as required by BCA Specification C1:10-4 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 13501-12018, 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

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) Frontier Acoustic Raft does not promote the growth of molds and mildew.

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 Frontier requires the services of a specialist cleaning company. Refer to the Frontier Acoustic Raft Care and Maintenance Guide for more information.

Service

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



Acoustic performance

Frontier Acoustic Raft is specifically designed to reduce and control reverberated noise and echo in building interiors.

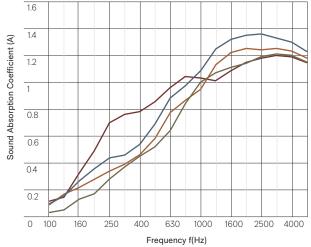
	Frequency (Hz)	125	250	500	1000	2000	4000	NRC
•	Frontier Raft 1/2" Trapezoid (8" off ceiling @ 12" center	0.25	0.65	0.85	1.05	1.15	1.15	0.95
•	Frontier Raft 1/2" Blade (8" off ceiling @ 12" center	0.20 s)	0.35	0.60	1.00	1.25	1.25	0.80
•	Frontier Raft 1/2" Beam 100 (8" off ceiling @ 6" centers	0.05	0.25	0.55	0.95	1.15	1.20	0.75
•	Frontier Raft 1/2" Beam 250 (8" off ceiling @ 12" center	0.20 s)	0.45	0.70	1.10	1.35	1.30	0.90

Table presents the practical sound absorption coefficients as according to ISO 11654. Graph presents third octave sound absorption coefficients (according to ISO354 measurement of sound absorption in a reverberation room). The NRC rating isdetermined as the arithmetic average of the absorption coefficients measured byone-third octave bands centered on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz androunded to the nearest 0.05.

Sound Absorption Coefficients According to ISO 354. University of Auckland Testing Service

Frontier Raft 1/2" Trapezoid (8" off ceiling @ 12" centers) - Test No: T1905-11 Frontier Raft 1/2" Blade (8" off ceiling @ 12" centers) - Test No: T1905-10 Frontier Raft 1/2" Beam 100 (8" off ceiling @ 6" centers) - Test No: T1945-4

Frontier Raft 1/2" Beam 250 (8" off ceiling @ 12" centers) - Test No: T1945-5



Light reflectance values by color

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

Pavilion	80
Opera	49
Savoye	46
Senado	45
Rosada	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

Autex Industries Ltd

702-718 Rosebank Rd Private Bag 19988 Avondale 1746, Auckland New Zealand Freephone 0800 428 839 Phone +64 9 828 9179 Fax +64 9 828 5810

Autex Australia Pty Ltd

166 Bamfield Road PO Box 5099 West Heidelberg, Melbourne VIC 3081, Australia Freephone 1800 678 160 Phone +61 3 9457 6700 Fax +61 3 9457 1020

Autex Acoustics Ltd

Unit J4, Lowfields Way, Lowfields Business Park, Elland, West Yorkshire Hx5 9Da United Kingdom Phone +44 0 1422418899

Autex Acoustics LLC

1630 Dan Kipper Dr, Riverside, CA 92507 United States of America Phone +1 424 203 1813

An ISO 9001, ISO 14001 and ISO 45001 certified company. The brand names and logos mentioned herein are registered or unregistered trademarks either owned or used under license by Autex Industries Limited or other members of the Autex Group. The contents of this document are protected by Copyright 2021 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.