

# Frontier™ Acoustic Fins

# 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 absorption system shall be Frontier (\_) as compiled by Autex www.autexglobal.com

Acoustic absorber Frontier™ Acoustic Fins (94.5"/custom) length x (12" nominal / Axis 6") depth x (1/2"/1") gauge, spaced at (\_)"centers. Color (\_), sound absorption: 4"/8" centers Class B, 12" centers Class C, Fire rating 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.

Supplied with Frontier Connector Clips, Frontier Channel, Frontier Fins. Fix with 0.2 oz countersink fastener appropriate for the substrate. Install as per Frontier Install Instructions.



# **Product specifications**

Product nameFrontier™ Acoustic FinsCompositionFin: 100% polyester fiber (PET)

(+/-6%)

aluminium channel

Fin length 94.5"
Tolerance (+-0.02")
Thickness 1"

Tolerance

#### Installation

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

# Acoustic performance

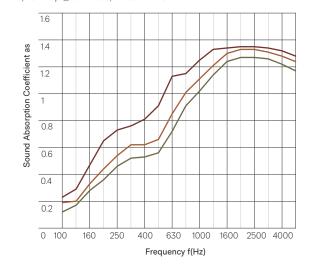
Frontier Acoustic Fins are specifically designed to reduce and control reverberated noise and echo in building interiors.

	Frequency (Hz)	125	250	500	1000	2000	4000	NRC
•	Frontier Fins 1" (11.8" deep 4" centers)	0.35	0.70	0.95	1.25	1.35	1.30	1.05
•	Frontier Fins 1" (11.8" deep 8" centers)	0.25	0.55	0.70	1.10	1.30	1.30	0.90
•	Frontier Fins 1" (11.8" deep 12" centers)	0.20	0.45	0.60	1.00	1.25	1.20	0.85

Table presents the practical sound absorption coefficients as according to ISO 11654. 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.

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

Frontier Fins 1"
(11.8" deep 4" centers) - Test No: T1812-4
Frontier Fins 1"
(11.8" deep @ 8" centers) - Test No: T1812-5
Frontier Fins 1"
(11.8" deep @ 8" centers) - Test No: T1812-6



# **Product specifications**

Product nameFrontier™ Acoustic FinsCompositionFin: 100% polyester fibre (PET)

aluminium channel Dimensions Fin length: 94.5"

 $\begin{array}{lll} \mbox{Tolerance} & (+-~0.02") \\ \mbox{Thickness} & 1/2" \\ \mbox{Tolerance} & (+/-~6\%) \\ \end{array}$ 

#### Installation

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



# Acoustic performance

Frontier Acoustic Fins are specifically designed to reduce and control reverberated noise and echo in building interiors.

	Frequency (Hz)	125	250	500	1000	2000	4000	NRC
•	Frontier Axis 1/2" (5.9" deep 12" centers)	0.20	0.50	0.75	0.65	0.90	1.05	0.70
•	Frontier Fins 1/2" (5.9" deep 4" centers)	0.30	0.65	0.80	1.20	1.45	1.60	1.00
•	Frontier Fins 1/2" (11.8" deep 8" centers)	0.30	0.60	0.70	1.00	1.30	1.50	0.90
•	Frontier Fins 1/2" (11.8" deep 12" centers)	0.25	0.50	0.60	0.80	1.10	1.25	0.75

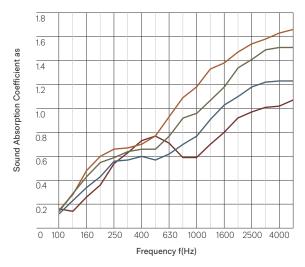
Table presents the practical sound absorption coefficients as according to ISO 11654. Graph presents third octave sound absorption coefficients (according to ISO 354 measurement of sound absorption in a reverberation room). The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centered on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz and rounded to the nearest 0.05.

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

Frontier Axis 1/2" (5.9" deep 12" centers) - Test No: T1525-12 Frontier Fins 1/2" (11.8" deep @ 4" centers) - Test No: T1525-18

Frontier Fins 1/2" (11.8" deep @ 8" centers) - Test No: T1525-16

Frontier Fins 1/2" (11.8" deep @ 12" centers) - Test No: T1525-17



### Product specifications

#### Fire rating

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: <5.0m<sup>2</sup>/s As required by NZBC C/VM2

# AS ISO 9705 - 2003

Classification: Group 1 (SMOGRArc): <100m<sup>2</sup>/s2

Assessed using methodology AS ISO 9705:2003 in accordance with AS 5637.1:2015, as required by BCA Specification C1.10-4 FI 4974 FAR 4055

#### BS EN 13501-1:2018

Wall applications Classification: B-s2,d0

(Cube<sup>™</sup> 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<sup>™</sup> 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<sup>™</sup> 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. EUI-21-000135-G-A

Ceiling applications

Classification: B-s2,d2 (Cube<sup>™</sup> 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

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.

#### Microbial resistance

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

#### Color fastness to light

Frontier is suitable for indoor use only. Light fastness is depenent on use and exposure. Frontier 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 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 Frontier requires the services of a specialist cleaning company. Refer to the Frontier Care and Maintenance Guide for more information.

#### Service

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



# Light reflectance values by color

Frontier Acoustic Fins 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	

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