Autex Acoustics®

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 fibre 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
AU Patent 2016250499
GB Patent 2,545,789
NZ Patent app 725770

Specification

Acoustic absorption system shall be Frontier™ Acoustic Fins (_) as compiled by Autex www.autexglobal.com

Acoustic absorber Frontier™ Acoustic Fins (2400/custom) mm length x (300 mm nominal/Axis 150 mm) depth x (12/24) mm gauge, spaced at (_) mm centres. Colour (_), sound absorption: 100/200 mm centres Class B, 300 mm centres Class C, Fire rating 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, d2.

Supplied with Frontier Connector Clips, Frontier Channel, Frontier Fins. Fix with 6 g countersink fastener appropriate for the substrate. Install as per Frontier Install Instructions.

Colour options

- Falling Water
- Galaxy
- Pinnacle
- Petronas
- Empire
- Flatiron
- Savoye
- Pavilion
- Ironbank
- Zenith
- Rosada
- Opera
- Senado
- Acros
- Bosco
- Lotus
- Tree House
- Gherkin
- Muralla
- Cavalier
- Beehive
- Parthenon
- Sargazo

Product specifications

Product name	Frontier™ Acoustic Fins
Composition	Fin: 100% polyester fibre (PET); aluminium channel
Fin length	2400 mm
Tolerance	(+/- 0.5 mm)
Thickness	24 mm
Tolerance	(+/- 6%)

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

Acoustic performance

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

Frequency (Hz)	125	250	500	1000	2000	4000	NRC
Frontier 24 mm (300 mm deep 100 mm centres)	0.35	0.70	0.95	1.25	1.35	1.30	1.05
Frontier 24 mm (300 mm deep 200 mm centres)	0.25	0.55	0.70	1.10	1.30	1.30	0.90
Frontier 24 mm (300 mm deep 300 mm centres)	0.20	0.45	0.60	1.00	1.25	1.20	0.85

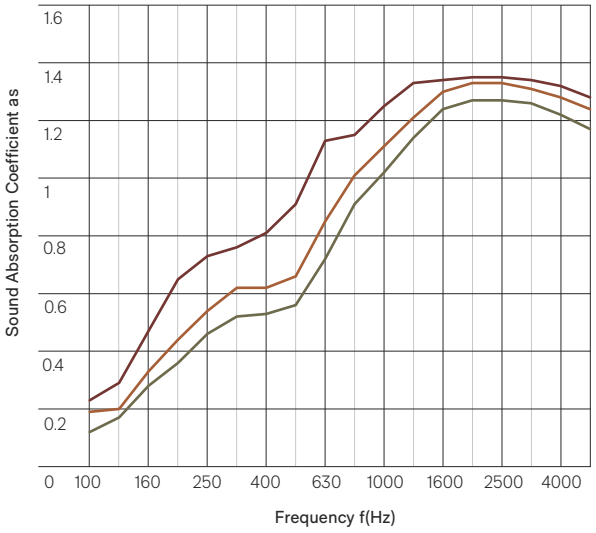
Table presents the practical sound absorption coefficients as according to ISO 11654. Graph presents third octave sound absorption coefficients (according to ISO 354 measurement of sound absorption in a reverberation room). The NRC rating is determined as the arithmetic average of the absorption coefficients measured by one-third octave bands centred 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 24 mm
(300 mm deep 100mm centres) - test no: T1812-4

Frontier Fins 24mm
(300 mm deep @ 200 mm centres) - test no: T1812-5

Frontier Fins 24 mm
(300 mm deep @ 300 mm centres) - test no: T1812-6



Product specifications

Product name	Frontier™ Acoustic Fins
Composition	Fin: 100% polyester fibre (PET); aluminium channel
Dimensions	Fin length: 2400 mm
Tolerance	(+/- 0.5 mm)
Thickness	12 mm
Tolerance	(+/- 6%)

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

Acoustic performance

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

Frequency (Hz)	125	250	500	1000	2000	4000	NRC
Frontier 12 mm (150 mm deep 100 mm centres)	0.20	0.50	0.75	0.65	0.90	1.05	0.70
Frontier 12 mm (300 mm deep 100 mm centres)	0.30	0.65	0.80	1.20	1.45	1.60	1.00
Frontier 12 mm (300 mm deep 200 mm centres)	0.30	0.60	0.70	1.00	1.30	1.50	0.90
Frontier 12 mm (300 mm deep 300 mm centres)	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 centred on 250 Hz, 500 Hz, 1000 Hz and 2000 Hz and rounded to the nearest 0.05.

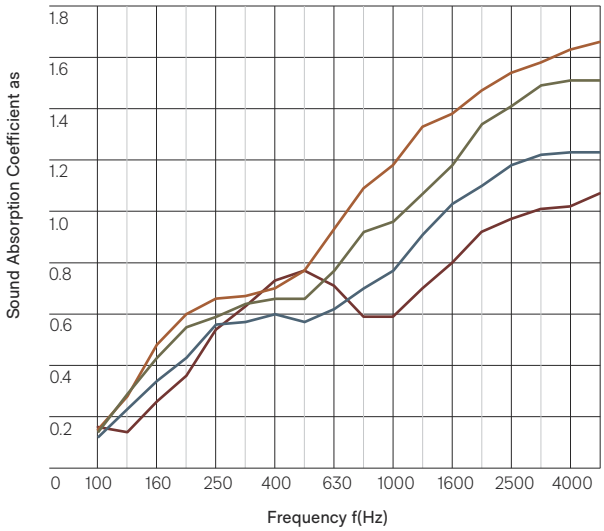
Sound Absorption Coefficients according to ISO 354. University of Auckland Testing Service

Frontier™ Fins 12 mm
(150 mm deep 100 mm centres) - test no: T1525-11

Frontier™ Fins 12 mm
(300 mm deep @ 100 mm centres) - test no: T1525-18

Frontier™ Fins 12 mm
(300 mm deep @ 200 mm centres) - test no: T1525-16

Frontier™ Fins 12 mm
(300 mm deep @ 300 mm centres) - 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: <5.0m2/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 BCA Specification C1.10-4
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

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

Wall applications
Classification: B-s2,d2 (Cube™ 24 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-21-000135-G-A

Ceiling applications
Classification: B-s2,d2 (Cube™ 24 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-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")
RJ4479-1

VOC emissions
Autex Acoustics polyester has been tested for chemical emissions in accordance with ASTM D5116 and is considered a low VOC product. VOC concentration: 0.009 mg/m3 (7 days).

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.

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

Colour 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)

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

Environmental
Autex Acoustics is committed to best practice through our ISO 14001 certified Environmental Management Systems.

Frontier contains a minimum of 60% recycled polyester fibre (from PET bottle-flake). Off-cuts and manufacturing waste is re-used or recycled wherever possible.

Frontier is manufactured from 100% polyester fibre and do not contain formaldehyde binders. Autex Acoustics polyester fibre supports safer indoor air quality and will not become a potential airborne pollutant.

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 colour

Frontier Acoustic Fins are 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

Caring for the environment

Frontier is manufactured using 100% polyester fibre and contains a minimum of 60% recycled fibre (from PET plastics). Our products are designed to be recycled at the end of their life too.

We have continual improvement programmes in which we implement a range of initiatives to mitigate the environmental 'hotspots' that we have identified. Our products are GreenRate Level A, Health Product Declaration (HPD), and CDHP Standard certified.

Frontier is DeclareSM certified to be Red List free and can be used in Living Building Challenge projects. Autex has a high functioning Environmental Management System (ISO 14001) to enhance our environmental performance and contribute to sustainable development.

Telarc. Registered
Environment ISO 14001

Red List Free

Declare.

GREENTAG CERTIFIED
trust brands

hpdc MEMBER

whiteboards and pinboards