



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 panels shall be Frontier Acoustic Raft (┘) as compiled by Autex [www.autexglobal.com](http://www.autexglobal.com)

Acoustic absorber Frontier Acoustic Raft (Blade: 2400 x 247 x 70 mm), (Beam 100: 2400 x 87 x 70 mm), (Beam 250: 2400 x 227 x 70 mm), (Trapezoid: 2400x 137 x 200 mm), Colour (┘),

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.

Colour options

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



## Product specifications

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

## 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:  
<5.0m<sup>2</sup>/s

As required by NZBC C/VM2

#### AS ISO 9705 - 2003

Classification: Group 1

(SMOGR<sub>arc</sub>): <100m<sup>2</sup>/s<sup>2</sup>

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-s<sub>2</sub>,d<sub>0</sub>

(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

Ceiling applications

Classification: B-s<sub>2</sub>,d<sub>0</sub>

(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

RJ4479-2

### VOC emissions

Autex Acoustics polyester has been tested for chemical emissions (Report: CV170908) and is classified as low VOC. VOC concentration: 0.009 mg/m<sup>3</sup> (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 Acoustic Raft does not promote the growth of moulds 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.

### Environmental

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

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

Frontier Acoustic Raft is manufactured from 100% polyester fibre and does 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 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 12 mm Trapezoid (200 mm off ceiling @ 300 mm centres)	0.25	0.65	0.85	1.05	1.15	1.15	0.95
● Frontier Raft 12 mm Blade (200 mm off ceiling @ 300 mm centres)	0.20	0.35	0.60	1.00	1.25	1.25	0.80
● Frontier Raft 12 mm Beam 100 (200 mm off ceiling @ 150 mm centres)	0.05	0.25	0.55	0.95	1.15	1.20	0.75
● Frontier Raft 12 mm Beam 250 (200 mm off ceiling @ 300 mm centres)	0.20	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 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.

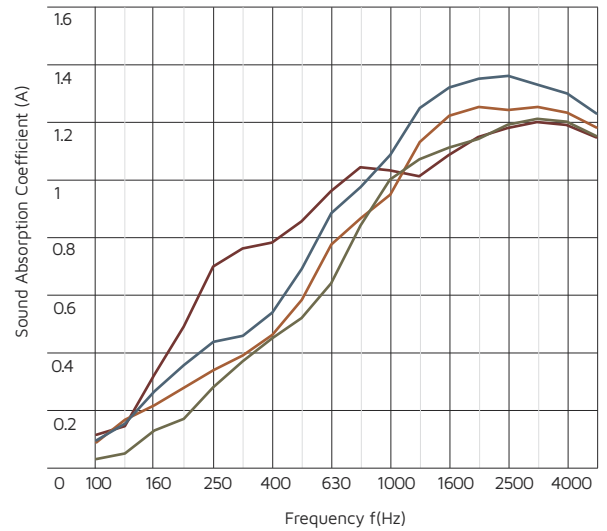
Sound Absorption Coefficients according to ISO 354.  
University of Auckland Testing Service

Frontier Raft 12 mm Trapezoid  
(200 mm off ceiling @ 300 mm centres) - Test No:T1905-11

Frontier Raft 12 mm Blade  
(200 mm off ceiling @ 300 mm centres) - Test No:T1905-10

Frontier Raft 12 mm Beam 100  
(200 mm off ceiling @ 150 mm centres) - Test No:T1945-4

Frontier Raft 12 mm Beam 250  
(200 mm off ceiling @ 300 mm centres) - Test No:T1945-5



## Light reflectance values by colour

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

Pavilion	80	Galaxy	15
Opera	49	Lotus	14
Savoye	46	Ironbank	13
Senado	45	Cavalier	12
Rosada	44	Muralla	9
Acros	40	Gherkin	8
Falling Water	34	Empire	5
Parthenon	33	Sargazo	4
Beehive	33	Pinnacle	3
Bosco	29	Tree House	3
Flatiron	24	Petronas	2
Zenith	23		



## 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.

