Autex Acoustics®

Frontier™ Acoustic Fins

Manufacturers Guarantee

Frontier™ Acoustic Fins are manufactured by Autex Industries Ltd and Autex Australia Pty Ltd under an ISO 9001 certified Quality Management System. The product is guaranteed to be free from manufacturing defects and carries a Manufacturer's Guarantee for a period of no less than ten years to meet all of the performance properties stated within this guarantee.

Panel fixing system patent

US Patent 10,113,312	GB Patent 2,545,789
AU Patent 2016250499	NZ Patent app 725770

Specification

Product Name	Frontier™ Acoustic Fins
Description	100% polyester complete modular acoustic fins

	Metric	
Fin Width	2440mm	
	12mm: Pack Covers 5.0m²	
	24mm: Pack Covers 2.5m²	
Thickness	12mm	24mm
Tolerance	*(+/- 6%)*	*(+/- 6%)*

Physical Description / Properties

Boiling Point:	N/A
Melting Point:	250ºC | 482ºF
Vapour Pressure:	N/A
Specific Gravity:	Polyester 1.38
Flash point:	N/Aw
Explosive limits:	N/A
Solubility in water:	Not soluble
Alkalinity:	pH 7.8
Relative Vapour Density:	N/A

Acoustic Performance

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

Frequency (Hz)	125	250	500	1000	2000	4000	NRC
Frontier™ Axis 12mm (150mm deep 300mm centres)	0.20	0.50	0.75	0.65	0.95	1.05	0.70
Frontier™ 12mm (300mm deep 100mm centres)	0.30	0.65	0.80	1.20	1.45	1.60	1.00
Frontier™ 12mm (300mm deep 200mm centres)	0.30	0.60	0.70	1.00	1.30	1.50	0.90
Frontier™ 12mm (300mm deep 300mm centres)	0.25	0.50	0.60	0.80	1.10	1.25	0.75

Acoustic Performance

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

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

Care and Maintenance

Maintain in accordance with the Care and Maintenance Guide available for this product.

Product Specifications

Composition
100% Polyester Fibre from polyethylene terephthalate (PET). Made from Autex Cube™ contains a minimum of 80% previously recycled polyester fibre.

Suitable applications
Suspended or direct fix with patented aluminium channels and connector clips.

Fire Rating
Frontier™ is a value-added product made from Autex 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^2/s
As required by NZBC C/VM2

AS ISO 9705 - 2003
Classification: Group 1 (SMOGRArc): <100m^2/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™ 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

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

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

Ceiling applications
Classification: B-s2,d0
(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.
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

VOC Emissions
Autex polyester has been tested for chemical emissions in accordance with ASTM D5116 and is considered as a low VOC product.VOC concentration: 0.009 mg/m^3 (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 dependent 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 Cube require the services of a specialist cleaning company.
Refer to the Frontier Cleaning and Maintenance Guide for more information.

Environmental
Autex is committed to best practice through our ISO 9001 and ISO 14001 certified Quality and Environmental Management Systems.

Autex Frontier contains a minimum of 45% recycled polyester fibre (from PET bottle-flake). Off-cuts and manufacturing waste is re-used or recycled wherever possible.

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

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

autexglobal.com