

FRONTIERTM

ACOUSTIC CEILING AND WALL SYSTEM

BE MORE ATTUNED TO YOUR SPACE

Frontier™ offers targeted sound absorption, endless configurations, and stress-free installation without compromising acoustic performance.

Frontier is an innovative acoustic system designed for targeted sound absorption for today's ever-changing open-plan workspaces, retail, education and hospitality applications. Formed by just three elements including Autex Mounting Clips, Autex Frontier Extrusions, and Acoustic Fins or Rafts, Frontier allows designers to mix and match colours and styles, create endless configurations, and enjoy quick and stress-free installations.

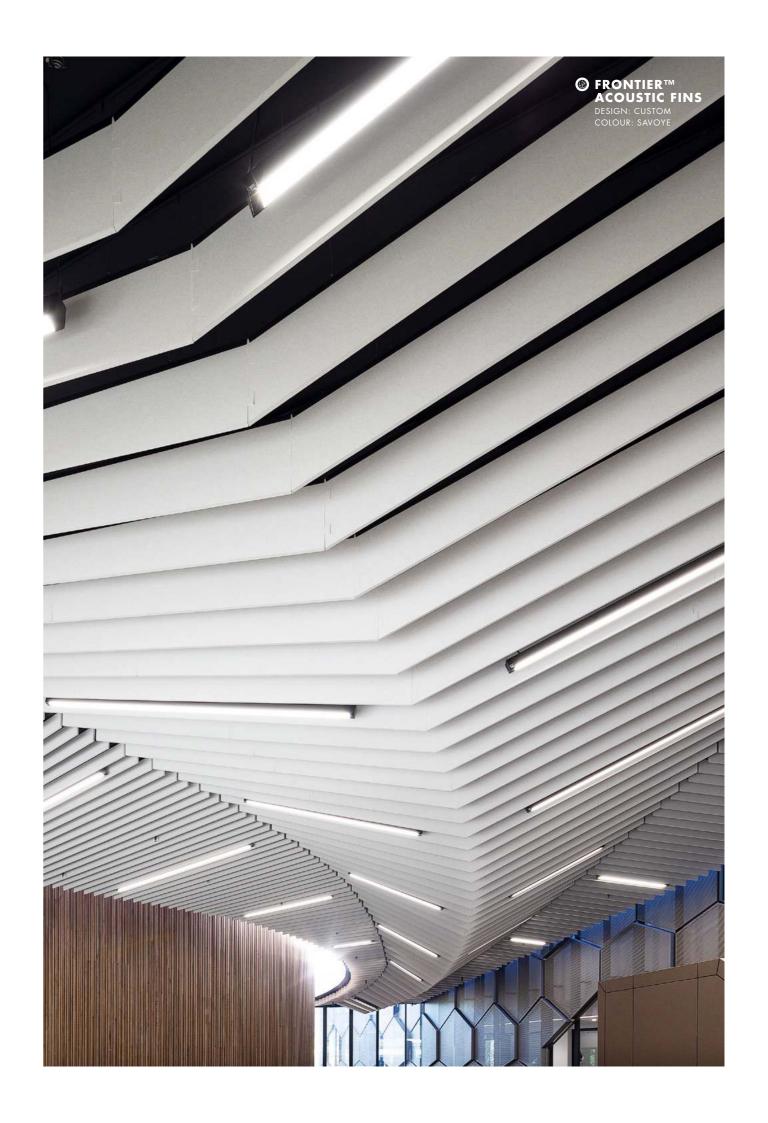
Whether specifying Fin or Raft styles, Frontier offers incredible acoustic performance that can be 'tuned' for the space. Multiuse aluminium channels and clips allow for adjustment on-site, further enhancing the surrounding environment.

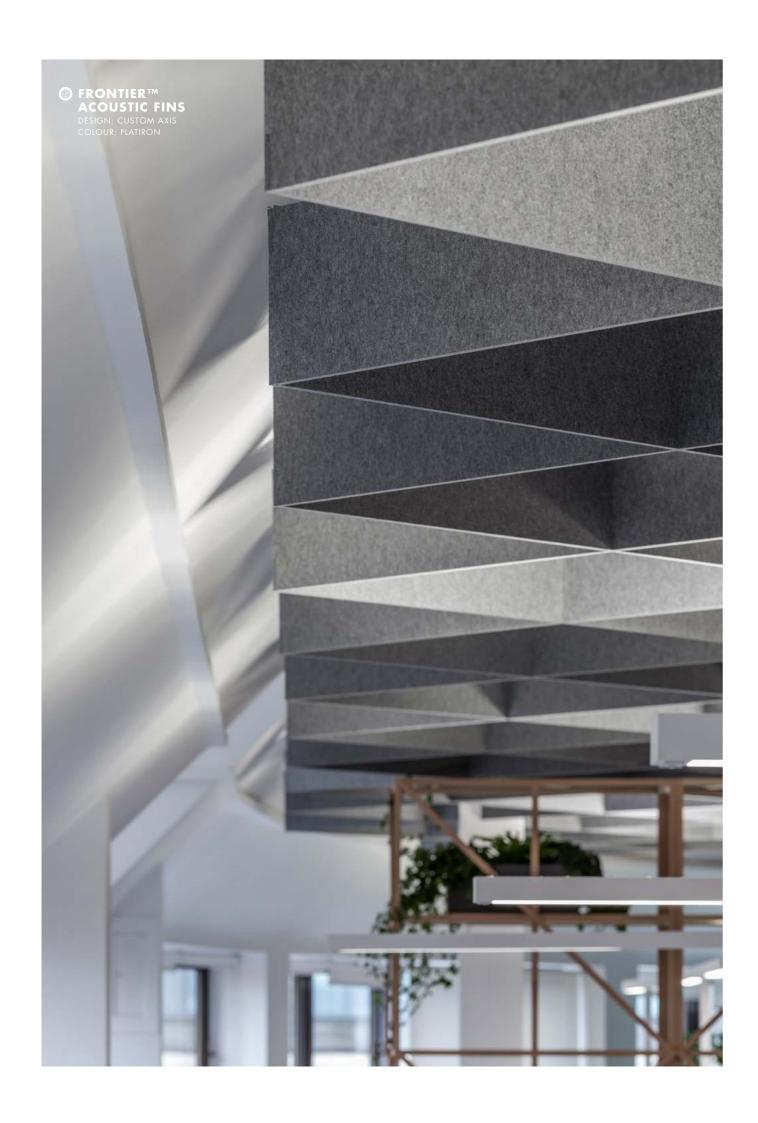
FRONTIER

FEATURES AND BENEFITS

- Choose from 17 colours and nine styles, including Fins or Raft for a bold, dimensional statement.
- Create a more comfortable and personalised experience by tuning the acoustic effect. Simply move the Fins or Rafts closer together or further apart.
- Mount Fins or Rafts flush to the ceiling to 'blend in', fix them to rails or suspend them using extension rods.
- Frontier can be configured to fit the space perfectly.

Fins and Rafts are made with our high-performing, highly-compressed polyester material, which uses advanced fibre locking technology, instead of adhesives or other materials which can be harmful to the environment.





FRONTIER

THE SYSTEM

Increase productivity on-site, saving installation time and material costs.



AUTEX FRONTIER EXTRUSIONS

Multiuse aluminium channels along with a system of components, act as a support for Acoustic Fins or Rafts and allow easy installation and adjustments on site.



AUTEX MOUNTING CLIPS

The exclusive Frontier connector clip 'clicks' in place to enable Fins or Rafts to be attached directly to the ceiling channel, leaving no exposed fasteners or adhesives.



CHOOSE ACOUSTIC FIN OR RAFT STYLES

Enjoy the freedom to create new and interesting ceiling and wall features with Fins or Rafts. Choose Fins for simple and stylish arrangements, or Rafts to add dimensional shape and volume.



ARRANGEMENT VERSATILITY

Arrange and space out Fins or Rafts in countless configurations. Install in standard or custom sequences, or bring your vision to life working side-by-side with Autex in-house acoustic design experts and account managers.



EASY ASSEMBLY

Frontier goes together quickly and efficiently, saving time on site. Dismantle or remove the system from its setting and reassemble or reposition just as easily and quickly.



EVEN EASIER TO DISASSEMBLE

Frontier uses no adhesives. Each component can be removed quickly at the end of life, minimising negative impacts on the environment at the time of disposal.

FRONTIER SYSTEM COMPONENTS

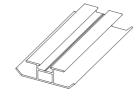
PACK COMPONENTS



RAFNEXFrontier 12mm Extrusion



RAFNEX24Frontier 24mm Extrusion



RAFNEXRTFrontier Raft Extrusion



RAFTCC Autex Mounting Clip



RAFCCTAutex Frontier Channel Connector

ACCESSORIES



RAFWCP Autex Removable W-Clip



RAFHDCC

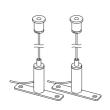
Autex Heavy Duty Frontier Channel
Connector with 4x M5 Grub Screws



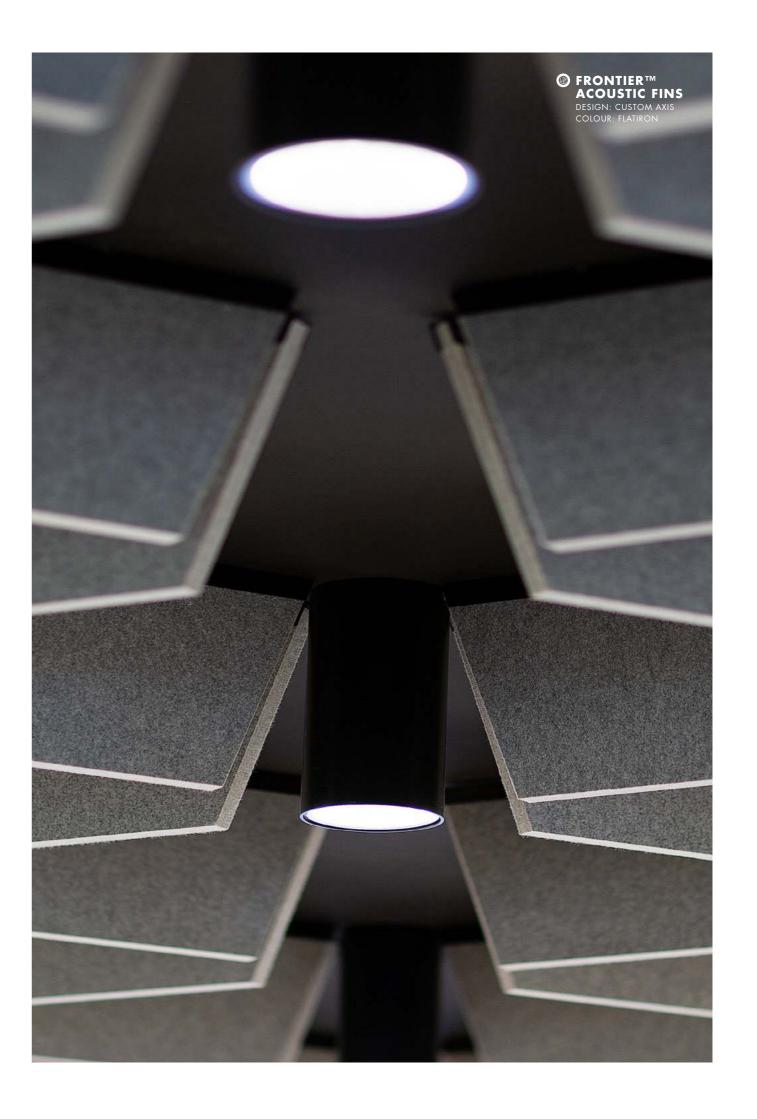
RAFM6GC Velda Grid Connector with M6 Thread

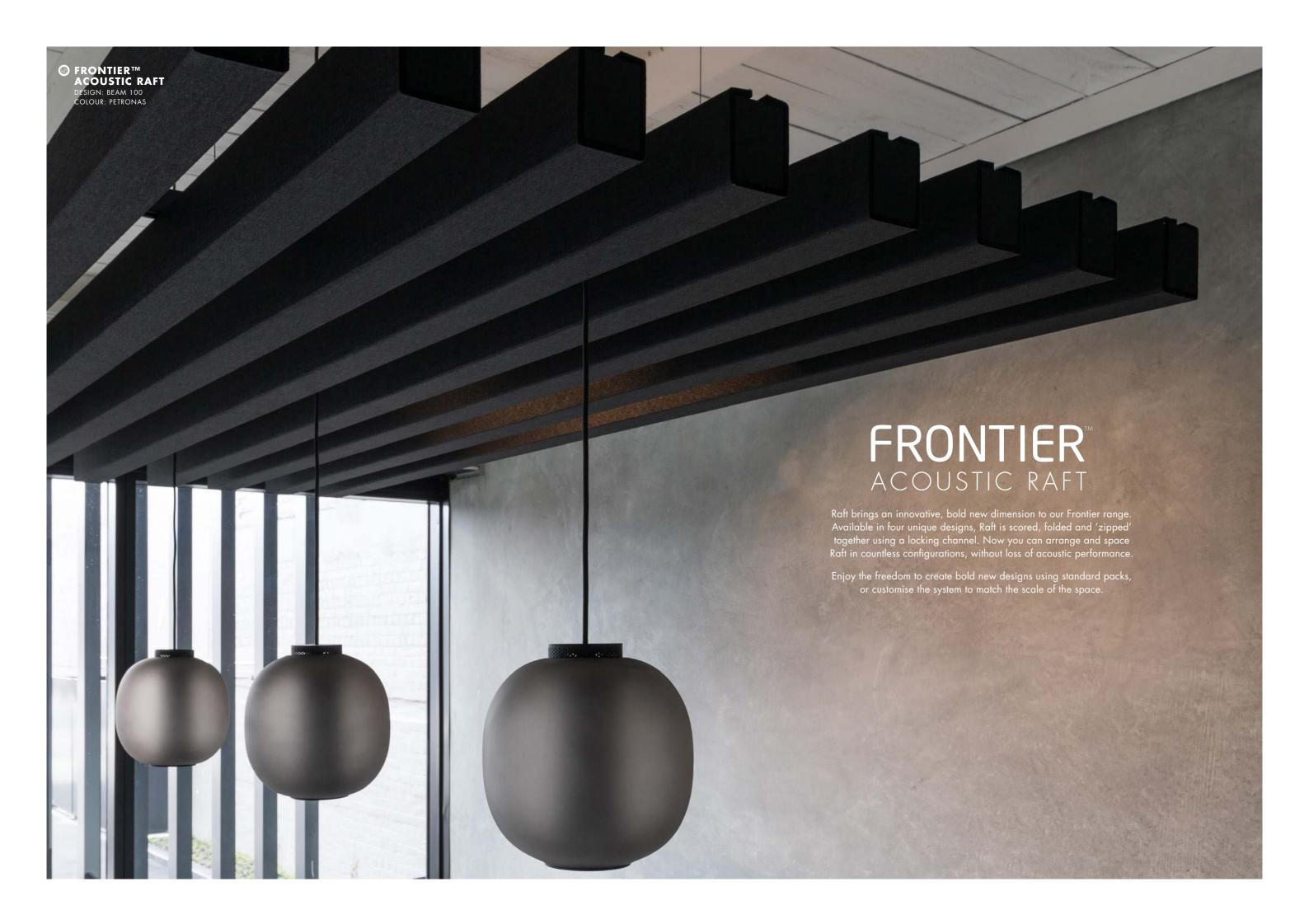


RAFM6MP Velda Magnet Pot with M6 Thread and Cable Adaptor



RAHVASAutex Adjustable Suspension Set - Channel

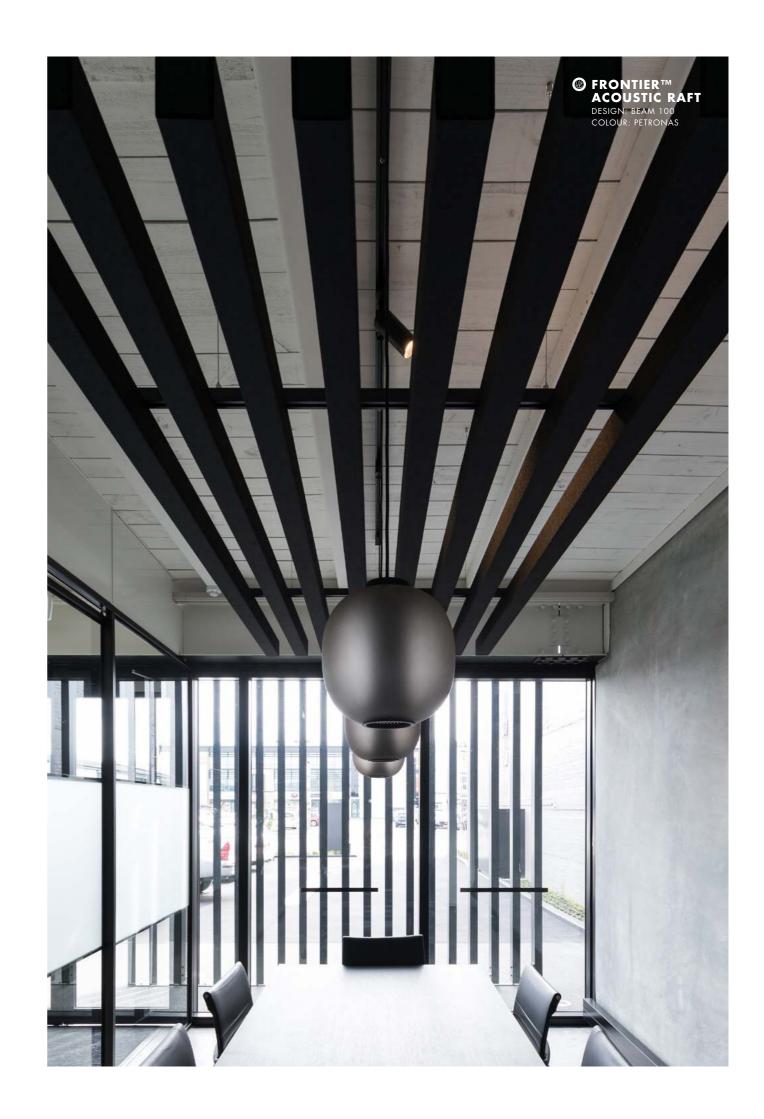


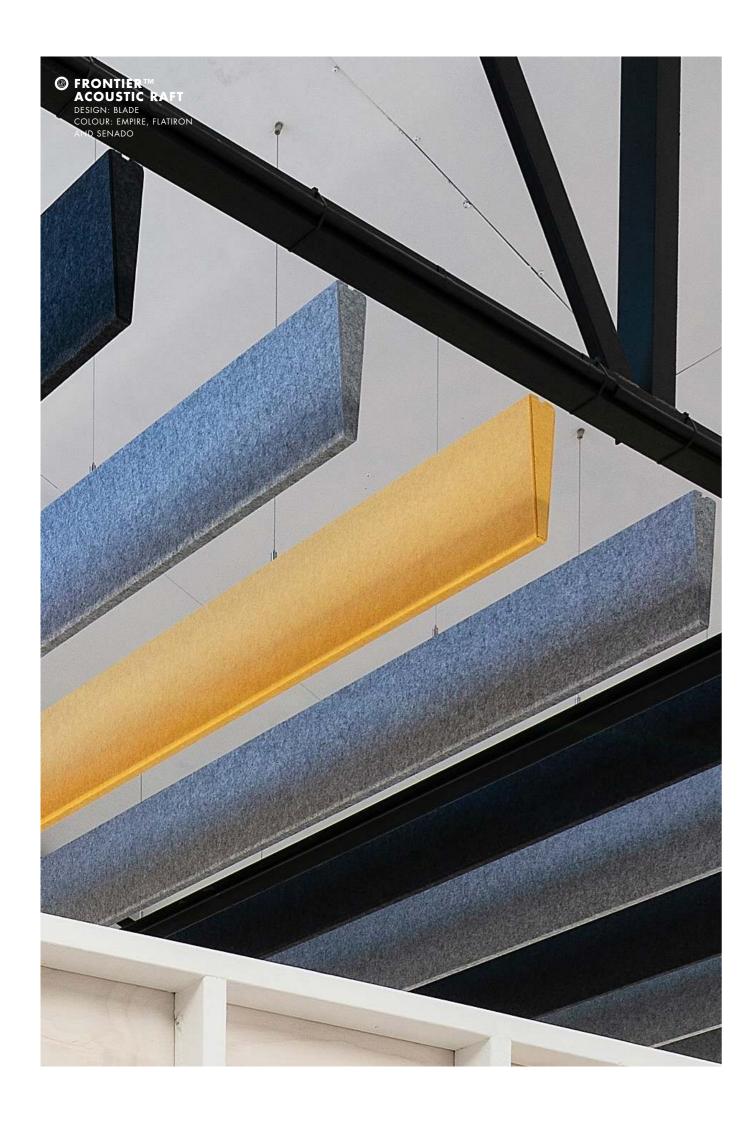


FRONTIER ACOUSTIC RAFT

FEATURES AND BENEFITS

- Delivers a solid appearance, yet, due to its scored and layered construction, each style is hollow and lightweight.
- Made from highly-absorbent, compressed material, Rafts hold their shape. They won't bend or warp after installation.
- Create long and linear ceiling features with quick, secure joins.
 Remove the weight and tasks related to finishing elements that would occur with solid wood or steel beams.
- Adjust on-site, allowing for targeted sound absorption and personalisation of the space.
- Disassemble quickly and remove at the end of life.





FRONTIER ACOUSTIC RAFT

APPLICATIONS

- Suitable for a variety of spaces, including offices, education, retail, hospitality and commercial interior applications.
- Can be installed either fixed or suspended from ceilings or mounted to walls.

SPECIFICATION

Acoustic absorber Frontier Acoustic Raft (Blade: 2400 \times 257 \times 70), (Beam 100: 2400 \times 92 \times 70mm), (Beam 250: 2400 \times 232 \times 70 mm), (Trapezoid: 2400 \times 160 \times 225mm), Colour (_),

Fire Rating ISO 9705: 1993: Group 1-S,

AS ISO 9705 - 2003: Group 1,

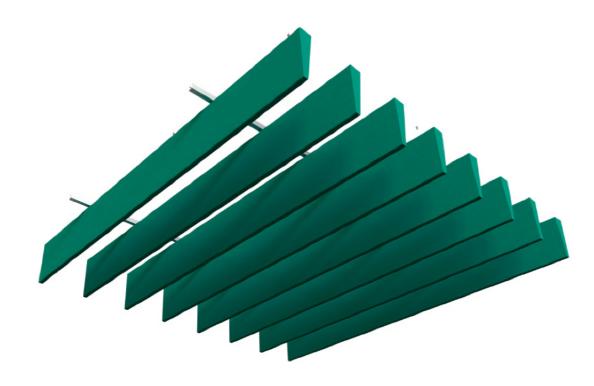
EN13501-1: 20074A1: 2009: B-s2,d2

ASTM E-84-15a: Class A, FS:0 - SD:45.

Seismic bracing as per local building code requirements.

Supplied with Autex suspension kits for suspension or Frontier $^{\text{\tiny{TM}}}$ clips for direct fixing, fix with countersunk fastener appropriate for the substrate. Install as per Frontier Install Instructions.

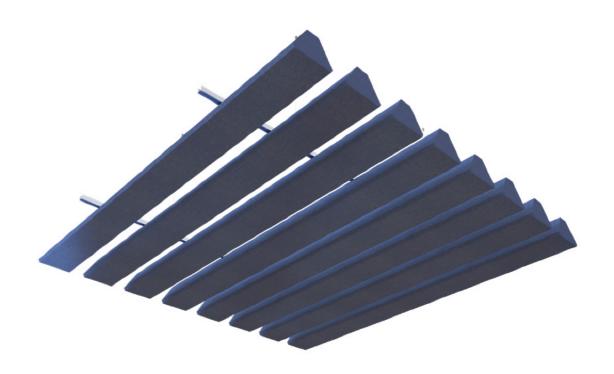
FRONTIER ACOUSTIC RAFT DESIGNS





DESIGN BLADE COLOUR LOTUS - SEE PAGE 39 FOR FULL COLOUR RANGE

FRONTIER ACOUSTIC RAFT DESIGNS





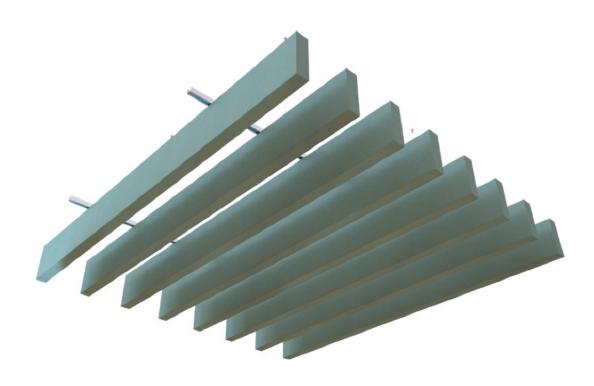
DESIGN TRAPEZOID COLOUR GALAXY - SEE PAGE 39 FOR FULL COLOUR RANGE

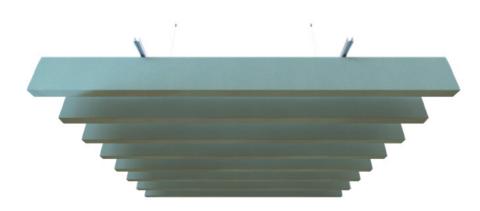
17

*Images as shown are with 2 packs.

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FRONTIER ACOUSTIC RAFT DESIGNS

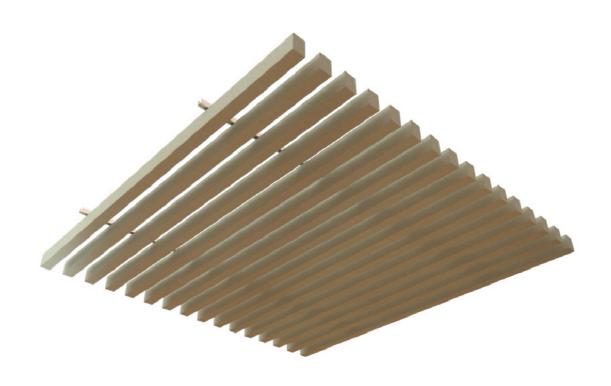


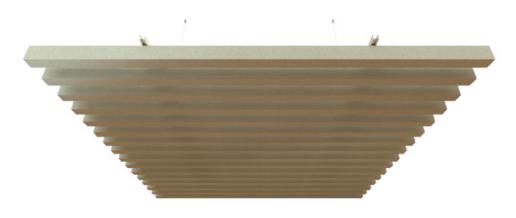


DESIGN BEAM 250 COLOUR FALLING WATER - SEE PAGE 39 FOR FULL COLOUR RANGE

*Images as shown are with 2 packs.

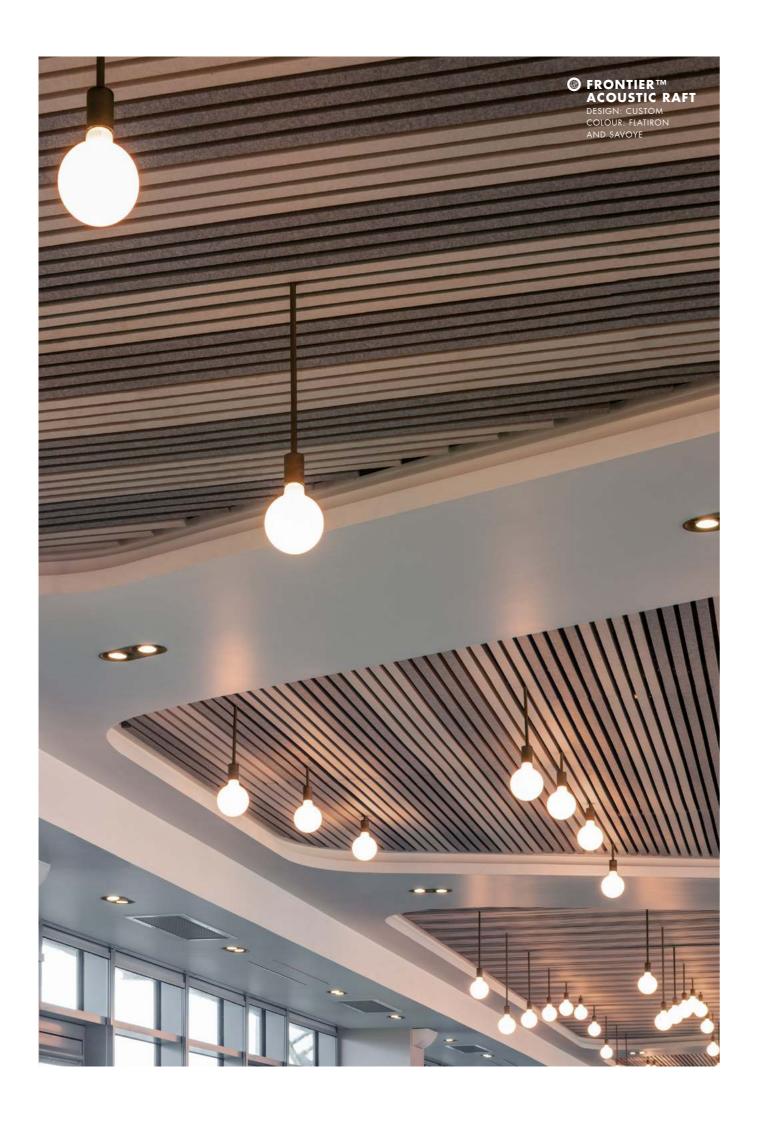
FRONTIER ACOUSTIC RAFT DESIGNS





DESIGN BEAM 100 COLOUR OPERA - SEE PAGE 39 FOR FULL COLOUR RANGE

 * lmages as shown are with 2 packs.



ABSORPTION COEFFICIENT ACCORDING TO ISO 354

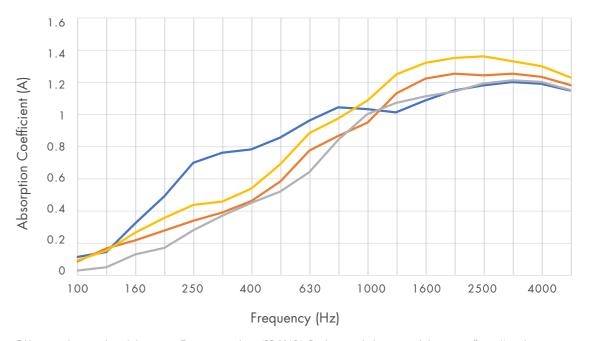


Table presents the practical sound absorption coefficients as according to ISO 11654. Graph presents third octave sound absorption coefficients (According to ISO 354 Measurement of sound absorption in a reverberation room.) The NRC rating is determined as the arithmetic average of the absorption coefficients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

DESCRIPTION	University of Auckland Test	FREQUENCY (Hz)								
	report number	125	250	500	1000	2000	4000	NRC		
Frontier™ Raft 12mm Trapezoid, 200mm off ceiling @ 300mm centres	T1905-11	0.25	0.65	0.85	1.05	1.15	1.15	0.95		
Frontier™ Raft 12mm Blade, 200mm off ceiling @ 300mm centres	T1905-10	0.20	0.35	0.60	1.00	1.25	1.25	0.80		
Frontier™ Raft 12mm Beam 100, 200mm off ceiling @ 150mm centres	T1945-4	0.05	0.25	0.55	0.95	1.15	1.20	0.75		
Frontier™ Raft 12mm Beam 250, 200mm off ceiling @ 300mm centres	T1945-5	0.20	0.45	0.70	1.10	1.35	1.30	0.90		

PRODUCT SPECIFICATIONS

Product NameFrontier™ Acoustic RaftComposition100% Polyester Fibre (PET)Channel: Aluminium

Fin Length 2400mm
Tolerance (+-0.5mm)
Thickness 12mm

Tolerance (+/-6%)Weight 2300gsm

INSTALLATION

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

ACOUSTIC PERFORMANCE

Frontier Acoustic Raft is specifically designed to reduce and control reverberated noise (echo) in

building interiors.

LIGHT REFLECTANCE VALUES BY COLOUR

Pavilion	78
Opera	49
Savoye	47
Senado	45
Rosada	45
Acros	42
Falling Water	36
Bosco	29
Flatiron	25

Zenith	22
Lotus	16
Galaxy	16
Iron Bank	13
Pinnacle	8
Empire	6
Tree House	3
Petronas	2

MEASURED IN ACCORDANCE WITH BS 8493:2008+A1:2010

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: <5.0m²/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 dated 16th September, 2012 and FAR 4055-3 dated 31st July, 2019

EN13501-1:2007+A1:2009

B - s2, d2

WF336911 dated 25th February 2014

ASTM E-84-15a

Class A, FS:0 - SD:45 RJ4479-2 dated 25th January, 2016

VOC EMISSIONS

Autex polyester has been tested for chemical emmisions (Report: CV170908) and is classified as low VOC. 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 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 Cube™ requires the services of a specialist cleaning company. Refer to the Frontier Acoustic Raft Cleaning and Maintenance Guide for more information.

ENVIRONMENTAL

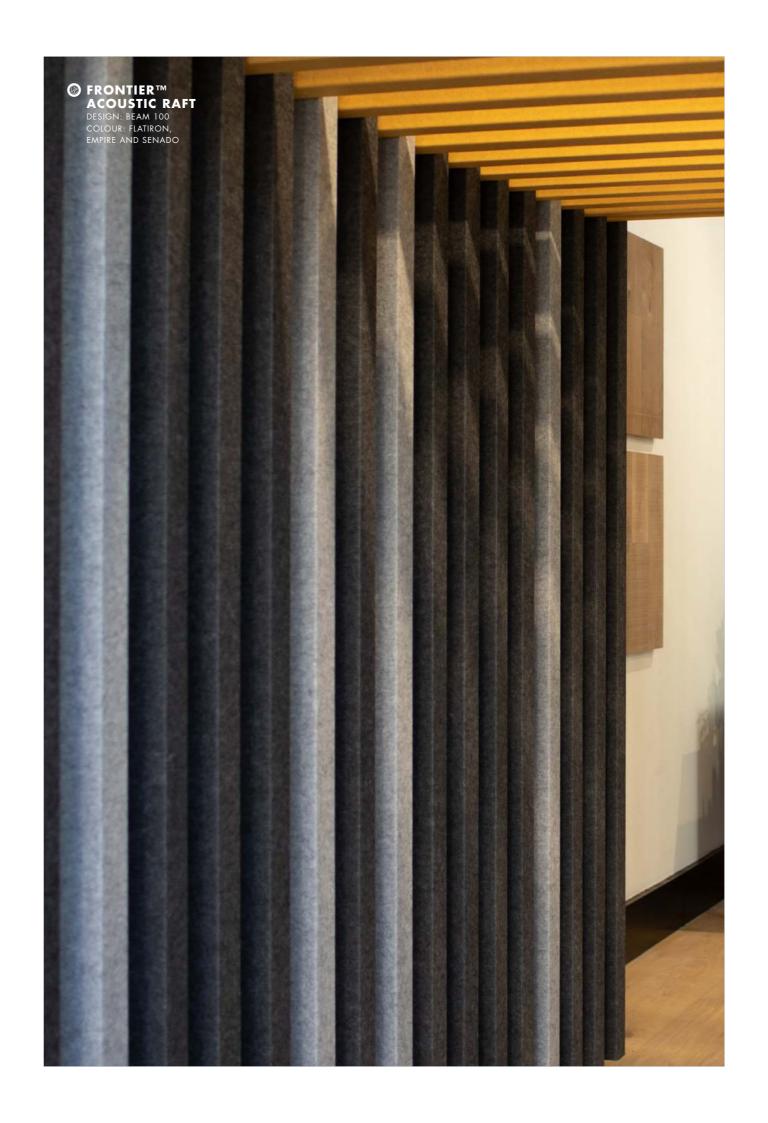
Autex is committed to best practice through our ISO 9001 and ISO 14001 certified Quality and Environmental Management Systems.

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

Autex Frontier Acoustic Raft is manufactured from 100% polyester fibres and does 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 Acoustic Raft, Autex CubeTM or any other Autex product, please contact your Autex account manager or visit our website.

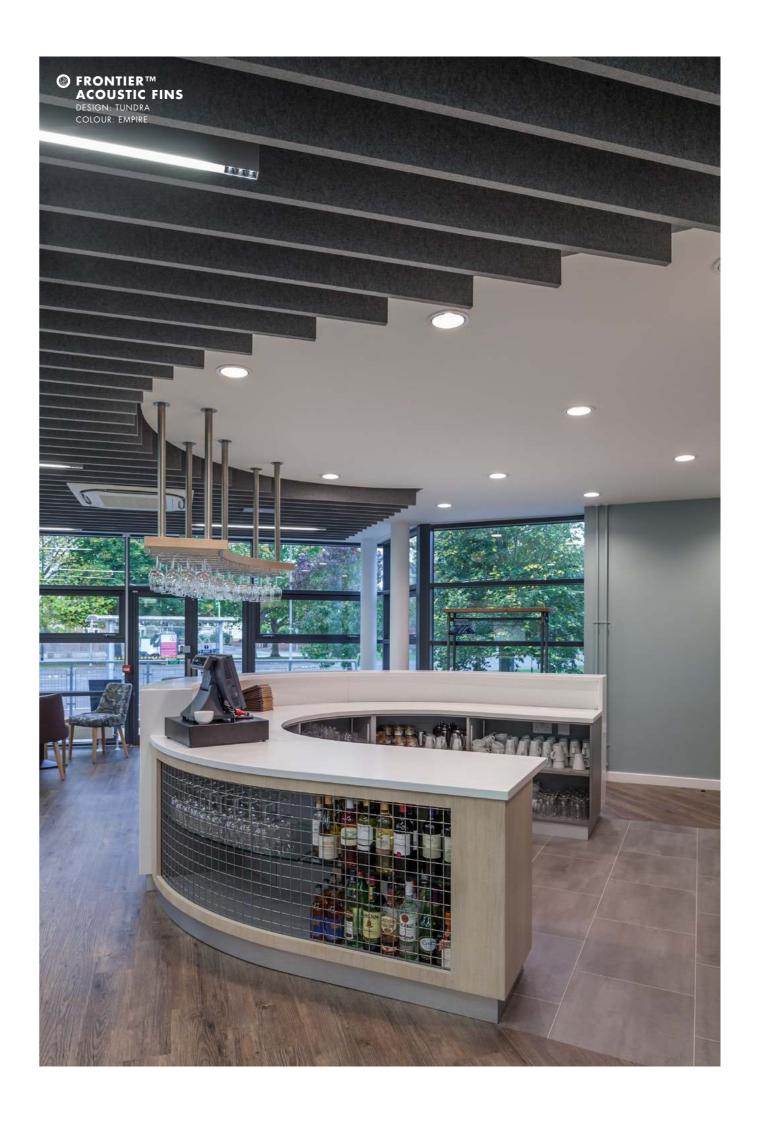


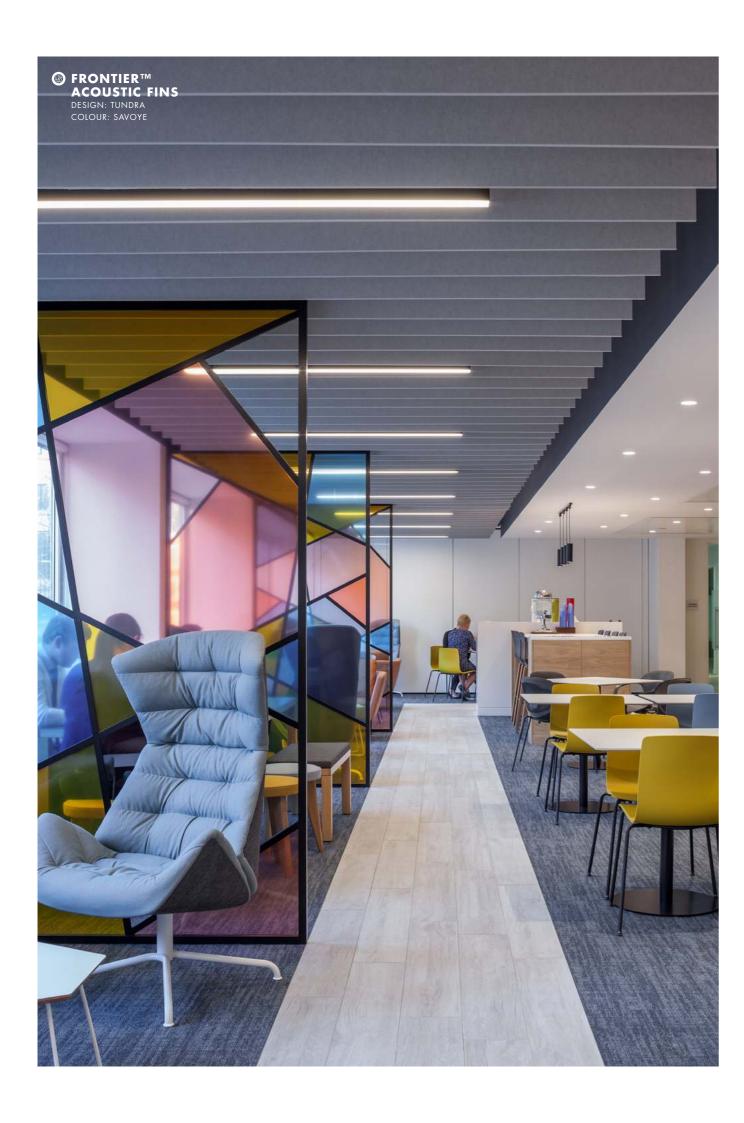


FRONTIER ACOUSTIC FINS

FEATURES AND BENEFITS

- Delivers excellent acoustic performance
- Suitable for wall and ceiling applications
- Supplied in kits including acoustic fins and fixing hardware
- Can be subtle or a feature design for small or large spaces
- Low VOC beneficial for IEQ
- Not made from fibreglass or mineral fibre and does not contain formaldehyde, crystalline silica or other carcinogens, common to traditional fibrous absorbers
- Cleanable and easily demountable
- Includes high recycled content and designed for disassembly
- Highly durable so you're assured of long-term stability and performance





FRONTIER ACOUSTIC FINS

APPLICATIONS

- Suitable for offices, education, retail, hospitality and commercial interiors
- Fix or suspend acoustic ceiling and wall system
- Creates breakout zones in large open plan areas
- Hides ceiling services

SPECIFICATION

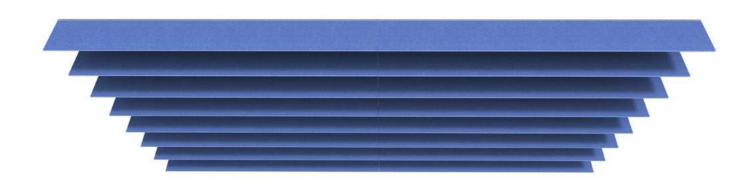
Acoustic absorption system shall be Frontier (_) as compiled by Autex www.autexindustries.com

Acoustic absorber Frontier™ Acoustic Fins (2400/custom) mm length x (300mm nominal / Axis 150mm) depth x (12/24)mm gauge, spaced at (_)mm centres. Colour (_), sound absorption: 100/200mm centres Class B, 300mm centres Class C, Fire Rating ISO 9705: 1993: Group 1-S, AS ISO 9705 – 2003: Group 1, EN13501-1:2007+A1:2009: B - s2, d2, ASTM E-84-15a -12mm: Class A, FS:0 - SD:45.

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

FRONTIER ACOUSTIC FIN DESIGNS

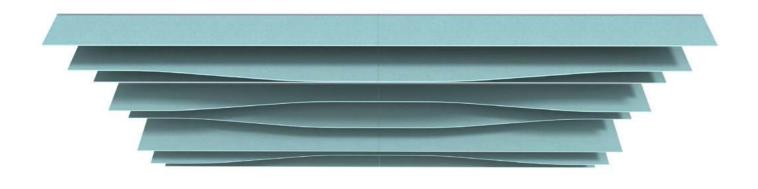
FRONTIER ACOUSTIC FIN DESIGNS



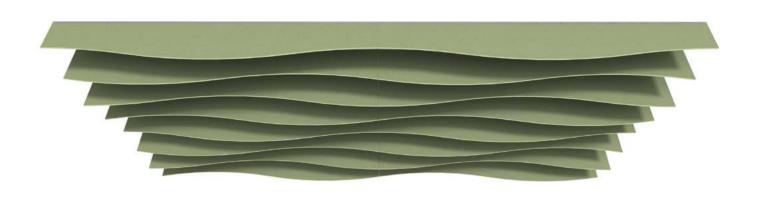
DESIGN TUNDRA COLOUR GALAXY - SEE PAGE 39 FOR FULL COLOUR RANGE



DESIGN SIERRA COLOUR LOTUS - SEE PAGE 39 FOR FULL COLOUR RANGE

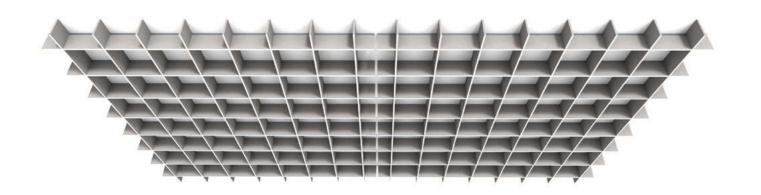


DESIGN DUNE COLOUR FALLING WATER - SEE PAGE 39 FOR FULL COLOUR RANGE

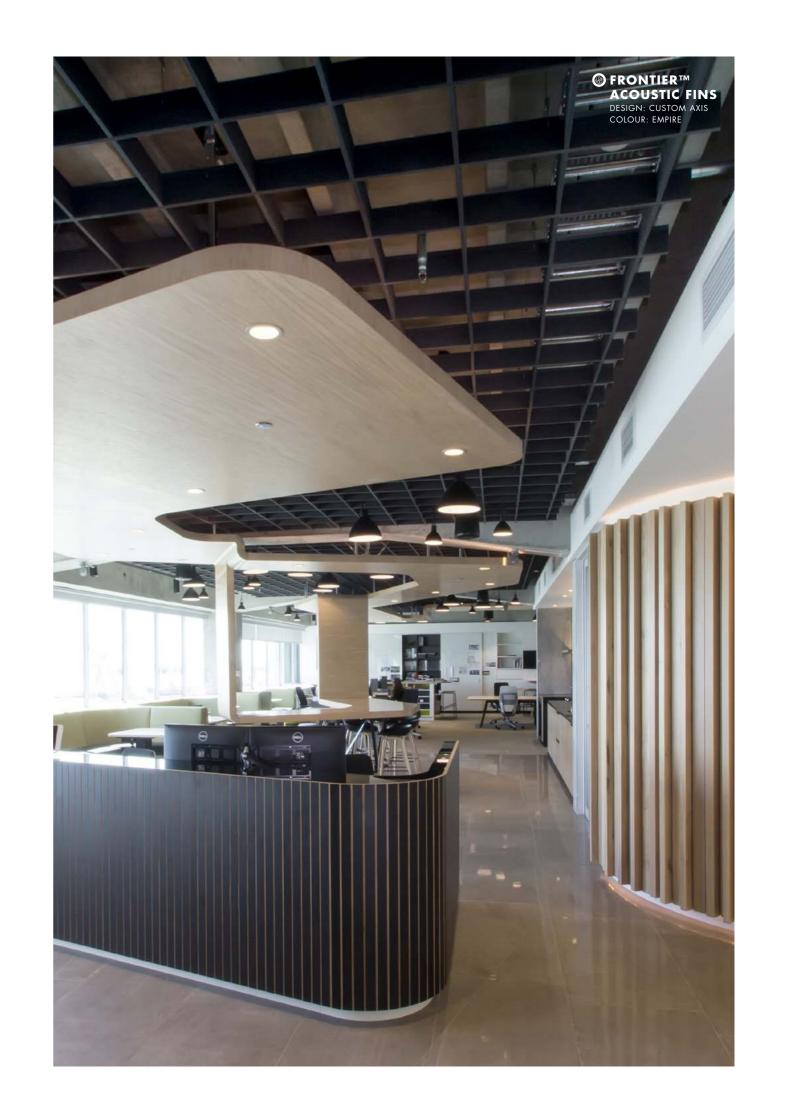


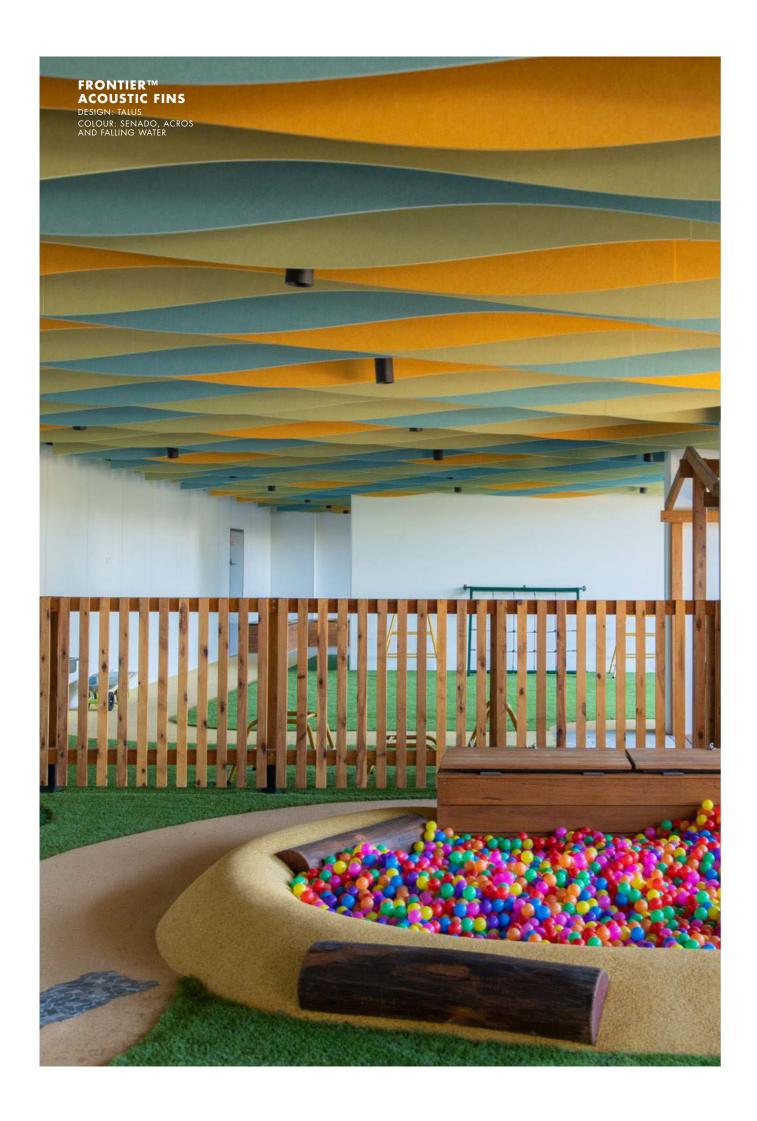
DESIGN TALUS **COLOUR** ACROS - SEE PAGE 39 FOR FULL COLOUR RANGE

FRONTIER ACOUSTIC FIN DESIGNS



DESIGN AXIS (12MM ONLY) COLOUR SAVOYE - SEE PAGE 39 FOR FULL COLOUR RANGE





ABSORPTION COEFFICIENT ACCORDING TO ISO 354

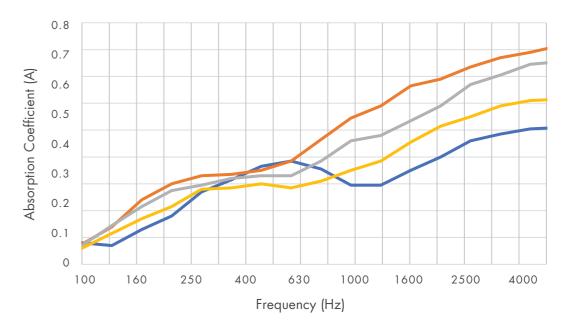


Table presents the practical sound absorption coefficients as according to ISO 11654. Graph presents third actave sound absorption coefficients (According to ISO 354 Measurement of sound absorption in a reverberation room.) The NRC rating is determined as the arithmetic average of the absorption coefficients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

DESCRIPTION	University of Auckland Test								
	report number	125	250	500	1000	2000	4000	NRC	
Frontier™ Axis 12mm 150mm deep 300mm centres	T1525-11	0.20	0.50	0.75	0.65	0.90	1.05	0.70	
Frontier™ 12mm 300mm deep 100mm centres	T1525-18	0.30	0.65	0.80	1.20	1.45	1.60	1.00	
Frontier™ 12mm 300mm deep 200mm centres	T1525-16	0.30	0.60	0.70	1.00	1.30	1.50	0.90	
Frontier™ 12mm 300mm deep 300mm centres	T1525-17	0.25	0.50	0.60	0.80	1.10	1.25	0.75	

PRODUCT SPECIFICATIONS

Product Name Frontier™ Acoustic Fins

Composition Fin: 100% Polyester Fibre (PET)
Aluminium Channel

Dimensions Fin Length: 2400mm

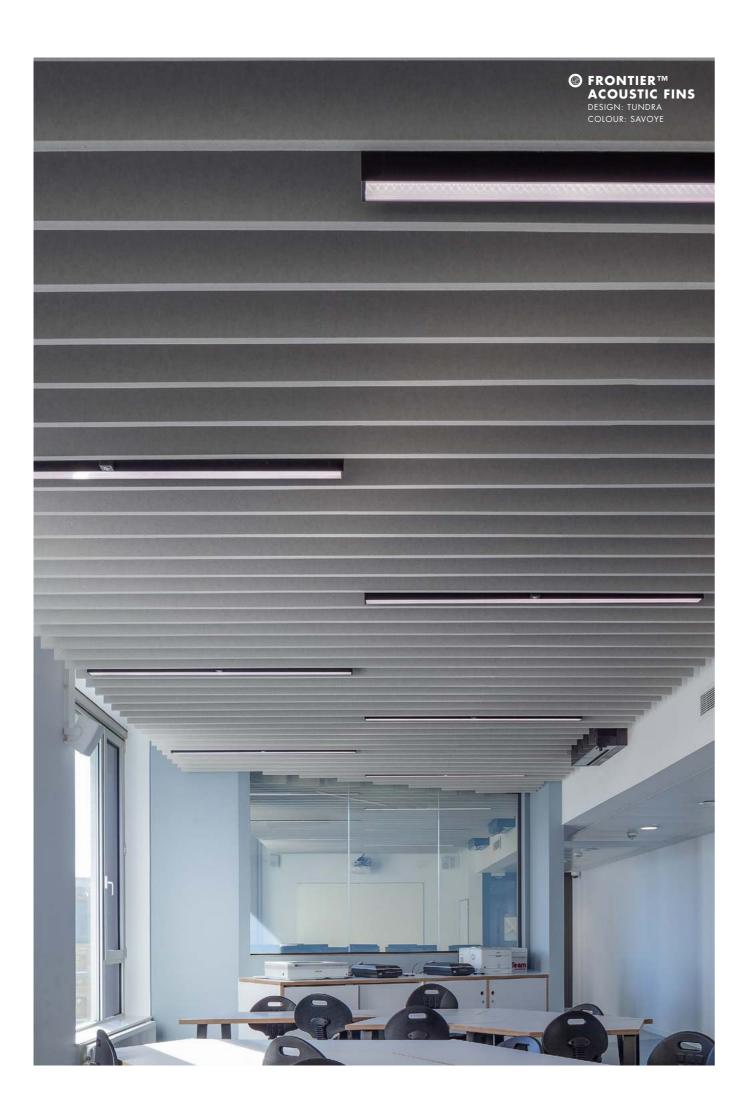
Dimensions Fin Length: 2400mm
Tolerance (+-0.5mm)
Thickness 12mm
Tolerance (+/-6%)
Weight 2300 gsm

ACOUSTIC PERFORMANCE

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

INSTALLATION

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



ABSORPTION COEFFICIENT ACCORDING TO ISO 354

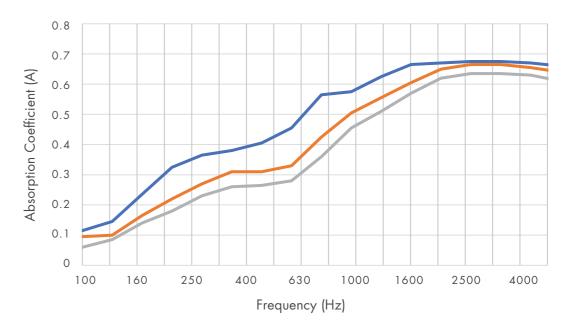


Table presents the practical sound absorption coefficients as according to ISO 11654. Graph presents third actave sound absorption coefficients (According to ISO 354 Measurement of sound absorption in a reverberation room.) The NRC rating is determined as the arithmetic average of the absorption coefficients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

DESCRIPTION	University of Auckland Test	FREQUENCY (Hz)							
	report number	125	250	500	1000	2000	4000	NRC	
Frontier™ 24mm 300mm deep 100mm centres	T1812-4	0.35	0.70	0.95	1.25	1.35	1.30	1.05	
Frontier™ 24mm 300mm deep 200mm centres	T1812-5	0.25	0.55	0.70	1.10	1.30	1.30	0.90	
Frontier™ 24mm 300mm deep 300mm centres	T1812-6	0.20	0.45	0.60	1.00	1.25	1.20	0.85	

PRODUCT SPECIFICATIONS

Product Name Frontier™ Acoustic Fins
Composition Fin: 100% Polyester Fibre (PET)
Aluminium Channel

Fin Length 2400mm
Tolerance (+-0.5mm)
Thickness 24mm
Tolerance (+/-6%)
Weight 4600 gsm

ACOUSTIC PERFORMANCE

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

INSTALLATION

Install as per Autex recommendations.

Install instructions are included in each pack or available on the website.

LIGHT REFLECTANCE VALUES BY COLOUR

Pavilion	78
Opera	49
Savoye	47
Senado	45
Rosada	45
Acros	42
Falling Water	36
Bosco	29
Flatiron	25

MEASURED IT, ACCORDANCE WITH 65 8493;2008+A1;2010

FIRE RATING

Frontier" is a value goded product mapp from Autox Cubo" as the base impterial. Cubo" has been evaluated using the following test methods.

ISO 9705: 1993

Cassification: Group 1-S

Smoke Production Rate: <5.0m²/s

As required by NZBC C/VM2

AS ISO 9705 - 2003

Classification: Group 1 (SMOGRArd): <100m²/s²

Assessed using methodology ASISO 9705:2003 in decordance with ASIS637.1:2015, as required by 3CA Specification CTL 104 FI 4974 dated 161 September, 2012 and 5AR 4955:3 dated 315 July, 2019

EN13501-1:2007+A1:2009

B - s2, d2 (CubaTM 12mm) WF336911 dated 25h Francery 2014

ASTM E-84-15a

Class A, FS:0 - SD:45 (Cuba[™] 1/2"). RJ:4792 dated 25th January, 2016

Class A, FS:0 - SD:65 (CubeTM 1") RJ44791 dated 25t January, 2016

VOC EMISSIONS

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

WATER VAPOUR SORPTION

ASTM C1104 / C1104M-13a Test conditions: 49°C, 95%RH Water vacour absorbed and adsorbed after 4 days:

0.4% by weight.

MICROBIAL RESISTANCE

ASTM G21-15

Growth Rating: 0 (No growth)

Frontie™ 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.

Zenith	22
Latus	16
Galaxy	16
Iron Bank	13
Pinnacle	8
Empire	6
Tree House	3
Petronas	2

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 out 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 spil s from fabric quickly. Wipe with a damp clath. Avoid rupping 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 specia ist 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 flore (from PET bottle-flake). Officuts and manufacturing waste is reused or recycled wherever possible.

Autex Frontier M 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.

FRONTIER" COLOUR OPTIONS



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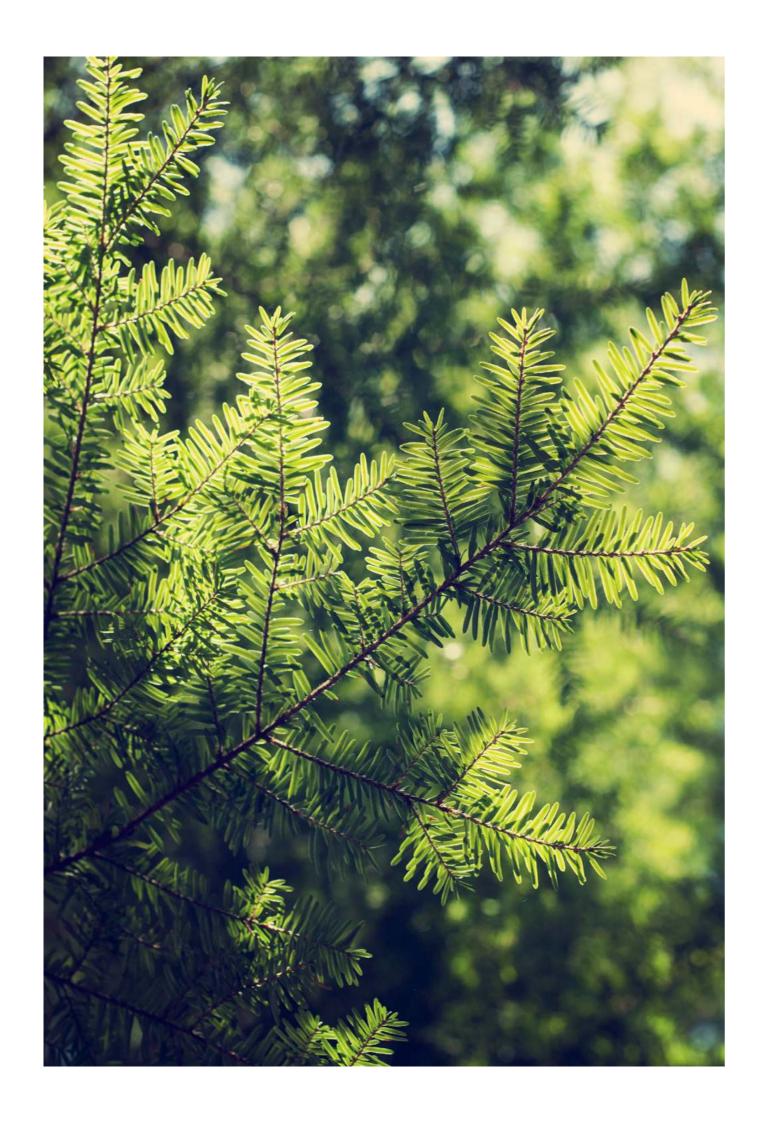
FRONTIER CUSTOMISATION

We know that no two projects are exactly the same, so why should the products or services going into them be? This is why we are proud of our ability to customise any of our products to suit your needs.

Being manufacturers, engineers and creatives, we have the capacity to transform, cut, mould, or build our products to create acoustic solutions truly unique to you and your space.

If you have an idea, let's work together to make it happen. If you want to customise Frontier™ for your next project, get in touch with your Autex account manager or visit our website www.autexindustries.com/contact-us





CARING FOR THE ENVIRONMENT

Frontier™ is manufactured using 100% polyester fibre and contains a minimum of 45% previously recycled fibre (from PET plastics). Many of our products are designed to be recycled at the end of their life too.

We use Life Cycle Analysis (LCA) to understand the environmental impacts of our products and set targets to reduce these. All our products have been verified as low VOC and are free from chemical binders making them great for indoor environmental quality (IEQ). 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, LCARate Gold and PHD level platinum certified.

FrontierTM is made from CubeTM which is Declare 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.











