



Horizon™ panels are manufactured by Autex Industries Ltd and Autex Australia Pty Ltd under ISO 9001 and ISO 14001 certified Environmental and Quality Management Systems. 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
AU Patent 2016250499

GB Patent 2,545,789
NZ Patent app 725770

Specification

Product Name Horizon™

Description 100% polyester lightweight semi-rigid panel.

Metric

Dimensions Available in 6 geometric shapes.
Please refer to Horizon Datasheet for individual dimensions

Tolerance Available in 6 geometric shapes.
Please refer to Horizon Datasheet for individual Tolerance

Thickness 24mm

Tolerance (+/- 6%)

Weight 3600gsm

Physical Description / Properties

Boiling point N/A

Melting point: 250°C

Vapour pressure: N/A

Specific gravity: Polyester 1.38

Flash point: N/A

Explosive limits: N/A

Solubility in water Not soluble

Alkalinity: pH 7.8

Relative vapour density: N/A

Acoustic Performance

Horizon is specifically designed to reduce and control reverberation and echo noise in building interiors. For a copy of the full acoustic report please contact your Autex account manager.

Frequency (Hz)	125	250	500	1000	2000	4000	Per Unit
● Horizon Oval (Fixed on clips)	0.3	1.0	2.4	3.3	3.3	3.2	2.5
● Horizon Oval (24mm Suspended 200mm)	0.8	2.1	2.9	3.3	3.8	3.9	3.0
● Horizon Oval (24mm Suspended 400mm)	1.4	2.0	2.7	3.7	4.3	4.4	3.1
● Horizon Oval (24mm Suspended 800mm)	1.1	1.7	2.8	4.1	4.8	4.8	3.4



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Frequency (Hz)	125	250	500	1000	2000	4000	Per Unit
● Horizon Rectangle (Fixed on clips)	0.3	1.0	2.4	3.3	3.3	3.2	2.5
● Horizon Rectangle (24mm Suspended 200mm)	0.8	2.1	2.9	3.3	3.8	3.9	3.0
● Horizon Rectangle (24mm Suspended 400mm)	1.4	2.0	2.7	3.7	4.3	4.4	3.1
● Horizon Rectangle (24mm Suspended 800mm)	1.1	1.7	2.8	4.1	4.8	4.8	3.4

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Frequency (Hz)	125	250	500	1000	2000	4000	Per Unit
● Horizon Square (Fixed on clips)	0.2	1.5	1.3	1.7	1.7	1.6	1.3
● Horizon Square (24mm Suspended 200mm)	0.2	1	1.5	1.7	2.1	2.1	1.6
● Horizon Square (24mm Suspended 400mm)	0.5	1	1.3	1.8	2.2	2.3	1.6
● Horizon Square (24mm Suspended 800mm)	0.7	0.8	1.4	2.1	2.5	2.4	1.7

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Frequency (Hz)	125	250	500	1000	2000	4000	Per Unit
● Horizon Right Angle Triangle (Fixed on clips)	0.1	0.2	0.6	1.0	1.0	0.9	0.7
● Horizon Right Angle Triangle (24mm Suspended 200mm)	0.1	0.5	0.7	0.8	1	1.1	0.8
● Horizon Right Angle Triangle (24mm Suspended 400mm)	0.1	0.5	0.6	0.9	1.1	1.2	0.8
● Horizon Right Angle Triangle (24mm Suspended 800mm)	0.2	0.3	0.7	1.0	1.2	1.2	0.8

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Frequency (Hz)	125	250	500	1000	2000	4000	Per Unit
● Horizon Circle (Fixed on clips)	0.1	0.4	1.0	1.3	1.4	1.3	1.0
● Horizon Circle (24mm Suspended 200mm)	0.2	0.8	1.2	1.3	1.6	1.6	1.2
● Horizon Circle (24mm Suspended 400mm)	0.4	0.8	1.1	1.5	1.8	1.8	1.3
● Horizon Circle (24mm Suspended 800mm)	0.4	0.6	1.1	1.6	1.9	1.9	1.3



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Frequency (Hz)	125	250	500	1000	2000	4000	Per Unit
● Horizon Hexagon (Fixed on clips)	0.1	0.4	0.8	1.0	1.1	1.0	0.8
● Horizon Hexagon (24mm Suspended 200mm)	0.1	0.5	0.7	0.9	1.1	1.2	0.8
● Horizon Hexagon (24mm Suspended 400mm)	0.2	0.4	0.7	1.0	1.3	1.3	0.9
● Horizon Hexagon (24mm Suspended 800mm)	0.2	0.4	0.7	1.1	1.4	1.4	0.9

Service

For further information about Horizon, please contact your Autex account manager or visit our website.

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). Horizon contains a minimum of 60% previously recycled polyester fibre.

Suitable Applications

Suspended or wall mounted acoustic panels.

Fire Ratings

Horizon 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

Australian Group Number:
Group 1 (SMOGRARC):
less than 100m²/s²

Tested using methodology AS ISO 9705:2003 in accordance with AS 5637:2015, as required by BCA Specification C110-4.
FAR 4055

BS EN 13501-1:2018

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:65
RJ4479-1

VOC Emissions

Autex 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)
Horizon does not promote the growth of moulds and mildew.

Colour Fastness To Light

Horizon is suitable for indoor use only. Light fastness is dependent on use and exposure. Horizon has been evaluated to the following standard:
ISO 105-B02:2014
Rating: 6 (Highest = 7)

Mechanical Testing

To support the load and seismic calculations of your project's design, we have undertaken extensive destructive testing of Autex ceiling system components. For detailed mechanical testing information please contact your Autex account manager.

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.

Finish

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. Horizon is made from 24mm Cube as the base material. Custom printed Cube requires the services of a specialist cleaning company. Refer to the Horizon Care 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.

Horizon 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.

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

● **Autex Industries Ltd**

702-718 Rosebank Rd
Private Bag 19988
Avondale 1746, Auckland
New Zealand
Freephone 0800 428 839
Phone +64 9 828 9179
Fax +64 9 828 5810

● **Autex Australia Pty Ltd**

166 Bamfield Road
PO Box 5099
West Heidelberg, Melbourne
VIC 3081, Australia
Freephone 1800 678 160
Phone +61 3 9457 6700
Fax +61 3 9457 1020

● **Autex Acoustics Ltd**

Unit J4, Lowfields Way,
Lowfields Business Park,
Elland, West Yorkshire
Hx5 9Da
United Kingdom
Phone +44 0 1422418899

● **Autex Acoustics LLC**

1630 Dan Kipper Dr,
Riverside, CA 92507
United States of America
Phone +1 424 203 1813

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