



**Autex
Acoustics®**

Horizon™

Manufacturer's Guarantee

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

Specification

Product Name	Horizon™
Description	100% polyester lightweight semi-rigid panel.
	Imperial
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	1"
Tolerance	(+/- 6%)
Weight	12oz/ft ²

Physical Description / Properties

Boiling Point	N/A
Melting Point:	482°F
Vapor 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 Vapor 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 (1" Suspended 8")	0.8	2.1	2.9	3.3	3.8	3.9	3.0
● Horizon Oval (1" Suspended 16")	1.4	2.0	2.7	3.7	4.3	4.4	3.1
● Horizon Oval (1" Suspended 32")	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 (1" Suspended 8")	0.8	2.1	2.9	3.3	3.8	3.9	3.0
● Horizon Rectangle (1" Suspended 16")	1.4	2.0	2.7	3.7	4.3	4.4	3.1
● Horizon Rectangle (1" Suspended 32")	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 (1" Suspended 8")	0.2	1	1.5	1.7	2.1	2.1	1.6
● Horizon Square (1" Suspended 16")	0.5	1	1.3	1.8	2.2	2.3	1.6
● Horizon Square (1" Suspended 32")	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 (1" Suspended 8")	0.1	0.5	0.7	0.8	1	1.1	0.8
● Horizon Right Angle Triangle (1" Suspended 16")	0.1	0.5	0.6	0.9	1.1	1.2	0.8
● Horizon Right Angle Triangle (1" Suspended 32")	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 (1" Suspended 8")	0.2	0.8	1.2	1.3	1.6	1.6	1.2
● Horizon Circle (1" Suspended 16")	0.4	0.8	1.1	1.5	1.8	1.8	1.3
● Horizon Circle (1" Suspended 32")	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 (1" Suspended 8")	0.1	0.5	0.7	0.9	1.1	1.2	0.8
● Horizon Hexagon (1" Suspended 16")	0.2	0.4	0.7	1.0	1.3	1.3	0.9
● Horizon Hexagon (1" Suspended 32")	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 fiber from polyethylene terephthalate (PET). Horizon contains a minimum of 60% previously recycled polyester fiber.

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™ 1")

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™ 1")

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
RJ447-1

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 Vapor Sorption

ASTM C1104 / C1104M-13a
Test conditions: 49°C, 95%RH
Water vapor 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.

Color 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.

Color 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 fiber 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 fiber (from PET bottle-flake). Off-cuts and manufacturing waste are re-used or recycled wherever possible.

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

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