



# Horizon™

# Technical Product Overview

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 in this guarantee. This guarantee excludes damage caused by daily wear and tear, contamination (including moisture, dust, or stains), fading or discoloration from sunlight exposure, and any issues resulting from incorrect installation or improper maintenance.

## Panel Fixing System Patent

US Patent 10113312 B2

## Specification

|                     |                                                              |
|---------------------|--------------------------------------------------------------|
| <b>Product Name</b> | Horizon™                                                     |
| <b>Description</b>  | 100% polyester lightweight semi-rigid panel.                 |
| Imperial            |                                                              |
| Dimensions          | Please refer to Horizon Data Sheet for individual dimensions |
| Thickness           | 1"                                                           |
| Tolerance           | (+/- 6%)                                                     |
| Weight              | 12oz/ft²                                                     |

## 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 Oval is specifically designed to reduce and control reverberation and echo noise in building interiors.

| Frequency (Hz)                     | 125 | 250 | 500 | 1000 | 2000 | 4000 | Metric sabin per unit |
|------------------------------------|-----|-----|-----|------|------|------|-----------------------|
| Horizon Oval<br>(Fixed on clips)   | 0.3 | 1.0 | 2.5 | 3.3  | 3.3  | 3.1  | 2.5                   |
| Horizon Oval<br>(1" suspended 8")  | 0.7 | 2.1 | 2.9 | 3.2  | 3.8  | 3.9  | 3.0                   |
| Horizon Oval<br>(1" suspended 16") | 1.5 | 2.0 | 2.6 | 3.7  | 4.2  | 4.3  | 3.2                   |
| Horizon Oval<br>(1" suspended 32") | 1.0 | 1.8 | 2.8 | 4.1  | 4.8  | 4.8  | 3.4                   |

### Acoustic Performance

Horizon Rectangle is specifically designed to reduce and control reverberation and echo noise in building interiors.

| Frequency (Hz)                          | 125 | 250 | 500 | 1000 | 2000 | 4000 | Metric sabin per unit |
|-----------------------------------------|-----|-----|-----|------|------|------|-----------------------|
| Horizon Rectangle<br>(Fixed on clips)   | 0.3 | 1.0 | 2.5 | 3.3  | 3.3  | 3.1  | 2.5                   |
| Horizon Rectangle<br>(1" suspended 8")  | 0.7 | 2.1 | 2.9 | 3.2  | 3.8  | 3.9  | 3.0                   |
| Horizon Rectangle<br>(1" suspended 16") | 1.5 | 2.0 | 2.6 | 3.7  | 4.2  | 4.3  | 3.2                   |
| Horizon Rectangle<br>(1" suspended 32") | 1.0 | 1.8 | 2.8 | 4.1  | 4.8  | 4.8  | 3.4                   |

### Acoustic Performance

Horizon Square is specifically designed to reduce and control reverberation and echo noise in building interiors.

| Frequency (Hz)                       | 125 | 250 | 500 | 1000 | 2000 | 4000 | Metric sabin per unit |
|--------------------------------------|-----|-----|-----|------|------|------|-----------------------|
| Horizon Square<br>(Fixed on clips)   | 0.2 | 0.5 | 1.3 | 1.7  | 1.7  | 1.6  | 1.3                   |
| Horizon Square<br>(1" suspended 8")  | 0.2 | 1.0 | 1.5 | 1.7  | 2.0  | 2.1  | 1.6                   |
| Horizon Square<br>(1" suspended 16") | 0.5 | 1.0 | 1.3 | 1.8  | 2.2  | 2.3  | 1.6                   |
| Horizon Square<br>(1" suspended 32") | 0.7 | 0.8 | 1.4 | 2.1  | 2.5  | 2.4  | 1.7                   |

### Acoustic Performance

Horizon Triangle is specifically designed to reduce and control reverberation and echo noise in building interiors.

| Frequency (Hz)                         | 125 | 250 | 500 | 1000 | 2000 | 4000 | Metric sabin per unit |
|----------------------------------------|-----|-----|-----|------|------|------|-----------------------|
| Horizon Triangle<br>(Fixed on clips)   | 0.1 | 0.2 | 0.6 | 1.0  | 1.0  | 0.9  | 0.7                   |
| Horizon Triangle<br>(1" suspended 8")  | 0.1 | 0.5 | 0.7 | 0.8  | 1.0  | 1.1  | 0.8                   |
| Horizon Triangle<br>(1" suspended 16") | 0.1 | 0.5 | 0.6 | 0.9  | 1.1  | 1.2  | 0.8                   |
| Horizon Triangle<br>(1" suspended 32") | 0.2 | 0.3 | 0.7 | 1.0  | 1.2  | 1.2  | 0.8                   |



Acoustic Performance

Horizon Circle is specifically designed to reduce and control reverberation and echo noise in building interiors.

| Frequency (Hz)                       | 125 | 250 | 500 | 1000 | 2000 | 4000 | Metric sabin per unit |
|--------------------------------------|-----|-----|-----|------|------|------|-----------------------|
| Horizon Circle<br>(Fixed on clips)   | 0.1 | 0.4 | 1.0 | 1.3  | 1.4  | 1.3  | 1.0                   |
| Horizon Circle<br>(1" suspended 8")  | 0.2 | 0.8 | 1.2 | 1.3  | 1.6  | 1.6  | 1.2                   |
| Horizon Circle<br>(1" suspended 16") | 0.4 | 0.8 | 1.1 | 1.5  | 1.8  | 1.8  | 1.3                   |
| Horizon Circle<br>(1" suspended 32") | 0.4 | 0.6 | 1.1 | 1.6  | 1.9  | 1.9  | 1.3                   |

Acoustic Performance

Horizon Hexagon is specifically designed to reduce and control reverberation and echo noise in building interiors.

| Frequency (Hz)                        | 125 | 250 | 500 | 1000 | 2000 | 4000 | Metric sabin per unit |
|---------------------------------------|-----|-----|-----|------|------|------|-----------------------|
| Horizon Hexagon<br>(Fixed on clips)   | 0.1 | 0.4 | 0.8 | 1.0  | 1.1  | 1.0  | 0.8                   |
| Horizon Hexagon<br>(1" suspended 8")  | 0.1 | 0.5 | 0.7 | 0.9  | 1.1  | 1.2  | 0.8                   |
| Horizon Hexagon<br>(1" suspended 16") | 0.2 | 0.4 | 0.7 | 1.0  | 1.3  | 1.3  | 0.9                   |
| Horizon Hexagon<br>(1" suspended 32") | 0.2 | 0.4 | 0.7 | 1.1  | 1.4  | 1.4  | 0.9                   |

Service

For further information about Horizon, or any other Autex Acoustics® product, please contact your Momentum account manager or visit [momentumco.com](https://momentumco.com).

Care and Maintenance

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



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## Product Specifications

### Composition

100% polyester fiber from polyethylene terephthalate (PET). Horizon contains a minimum of 80% 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

### ASTM E-84-15a

Class A, FS:0 - SD:65  
(Cube™ 1")  
RJ447-1

### VOC Emissions

Autex Acoustics polyester has been tested for chemical emissions in accordance with ASTM D5116 and is considered a low VOC product. VOC concentration: 0.009 mg/m<sup>3</sup> (7 days)

### Water Vapor Absorption

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 molds 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 Acoustics ceiling system components. For detailed mechanical testing information please contact your Momentum 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 fiber 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. Custom printed Horizon requires the services of a specialist cleaning company. Refer to the Autex Acoustics Care and Maintenance Guide for more information.

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