Polyx Catalogue

100% PET board and wool felt made by a process of tumbling and needle-punching fibres.

Polyx

Board

Polyx™ panels are a result of a meticulous production process that involves the fusion of cutting-edge technology and artistic craftsmanship. Through a sequence of precision-driven steps, we transform raw PET material into an acoustic marvel.

Specifications

Material: 100% PET Polyester
Standard Dimension: 1220mm x 2440mm
Board Thickness: 12mm, 24mm
Eco-Friendly Test: Oeko-Tex® Standard 100
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustics Test: ISO 354 : 2003 NRC = 0.35 - 0.75

How is Polyx™ Made?

Material Selection
The process begins with selecting high-quality 100% PET fibers. PET is known for its durability and eco-friendliness

Tumbling
The PET fibers undergo a tumbling process, where they are mixed and blended together. This helps create a uniform distribution of fibers with varying melting points.

Needle-Punching
In this step, the blended fibers are fed into a machine equipped with special needles. These needles interlock and entangle the fibers, creating a dense and cohesive fibrous structure.

Baking
The needle-punched fibrous sheet is then baked in an oven at controlled temperatures. This process melts the low-melting-point fibers, which fuse with the high-melting-point fibers. As the panel cools, the fibers solidify, forming a sturdy and effective acoustic material.

Polyx

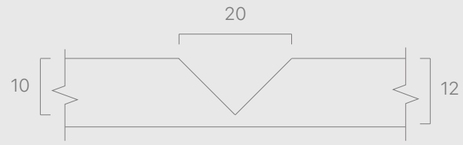
Grooved

The defining feature of these panels is their unique bevelled edge design. With a distinct angled profile, these panels not only serve as a design focal point but also play a crucial role in enhancing sound diffusion.

9mm Polyx™ Grooved
Ministry of Health, Singapore

Specifications

Material: 100% PET Polyester
Standard Dimension: 1220mm x 2440mm
Standard Thickness: 12mm, 24mm
Groove Angle: 45°
Eco-Friendly Test: Oeko-Tex® Standard 100
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustics Test: ISO 354 : 2003 NRC = 0.35 - 0.75



12mm Grooved Section Drawing

How to Install

Prepare Your Space
Clear the area around the wall where you intend to install the panels. Make sure the wall surface is clean, dry, and free from dust or debris.

Plan Panel Placement
Determine the layout and placement of the panels on the wall.

Apply Mounting Adhesive
Apply the adhesive around the edges and at key points on the back of the panel.

Position the Panels
Start at one corner or edge and align the panel with the markings. Press firmly but gently to secure the panel in place.

Create a Pattern
As you install subsequent panels, consider creating a pattern or arrangement that suits your aesthetic preferences. The bevelled edges of the panels can create interesting visual effects when arranged in various ways.

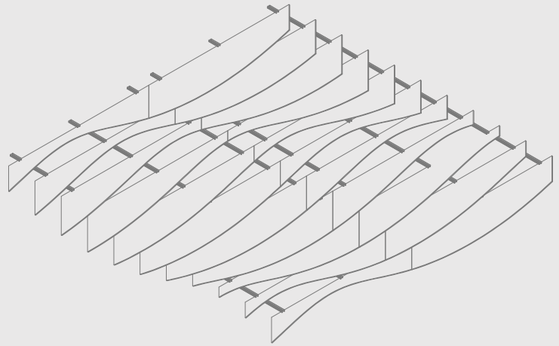
Polyx

Baffle

Polyx™ Baffles are acoustic panels hang vertically on the ceiling to absorb echoes. Our polyester baffles come in a basic black and white polyester wool finish, or a luxurious coloured felt finish. We recommend hanging each Polyx™ Baffle approximately 300mm away from one another for good sound absorption.

Specifications

Material: 100% PET Polyester
Standard Thickness: 12mm, 24mm
Standard Length: 2440mm
Standard Height: 150mm, 300mm, 600mm
Eco-Friendly Test: Oeko-Tex® Standard 100
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustics Test: ISO 354 : 2003 NRC = 0.35 - 0.75



12mm Wave Baffle Isometric View

How to Install

Install Ceiling Batten
Install ceiling battens to the ceiling using appropriate screws or anchors. Make sure it is level and securely fastened. This channel will serve as the main support structure for hanging the baffles.

Slot Baffles into U-Channels
Slot the U-channels with threaded rods onto the polyester wave baffles. These U-channels should be oriented horizontally, with the threaded rods facing downward. Make sure they are securely attached to the baffles.

Secure the Baffles
Once all the baffles are hung, secure them in place by tightening the nuts on the threaded rods. This will prevent the baffles from moving or swinging.

Check Alignment
Step back and check the alignment and spacing of the baffles. Make any necessary adjustments to ensure they are levelled.

Polyx

Felt

Polyx™ felt offers a unique product diversity with 100% PET felts as well as traditional BWF wool felts. Wool felt is among the earliest textiles created by humans. The unprocessed wool undergoes a wet-felting procedure that include the matting, compacting, and pressing of the fibres.

Specifications

Material: 100% PET Polyester, 100% Natural Wool
Standard Dimension: 1450 - 1840mmW
Felt Thickness: 3mm, 5mm
Eco-Friendly Test: Oeko-Tex® Standard 100
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustics Test: ISO 354 : 2003 NRC = 0.47 - 0.62

How to Install

Prepare the Wall
The wall should be clean, dry, and smooth. You may need to sand any rough spots and remove any debris or loose paint.

Mark Guidelines
Use a pencil or chalk and a level to draw guidelines on the wall. These will help you align the felt sheets correctly.

Test Fit
Before applying any adhesive, position a sheet of felt on the wall to see how it fits. Make any necessary adjustments to your guidelines.

Apply Adhesive
Apply the adhesive to the back of the felt sheet. Follow the adhesive manufacturer's guidelines for best results. Use a paint roller or spatula to spread the adhesive evenly.

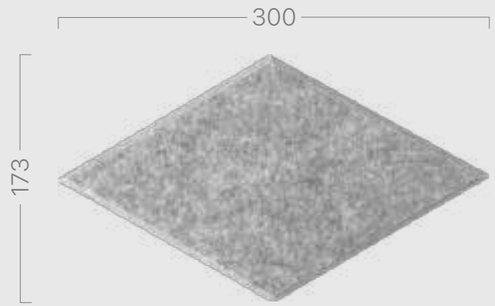
Install Felt
Start at one corner of the wall and align the felt sheet with your guidelines. Press the felt into place, working your way across the sheet to remove any air bubbles. Use a clean roller or spatula to apply pressure evenly.

Shapes

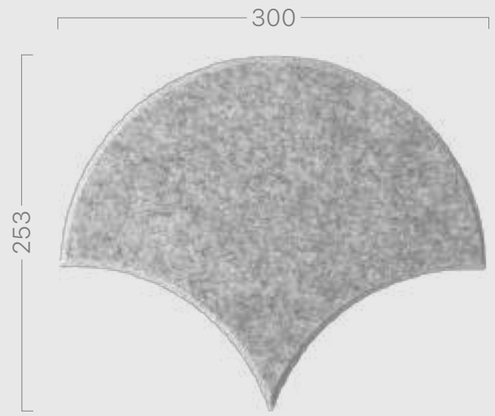
Our state-of-the-art CNC cutting technology ensures that every panel is precision-cut to an exact dimension with a tolerance of +/- 0.5mm. This guarantees a perfect fit for an accurate installation on site.

Specifications

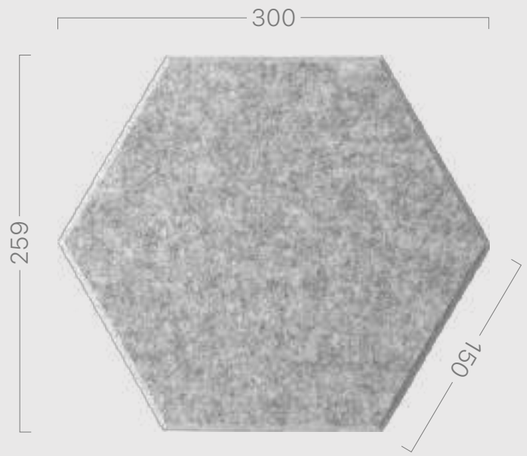
Material: 100% PET Polyester
Standard Thickness: 12mm, 24mm
Eco-Friendly Test: Oeko-Tex® Standard 100
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustics Test: ISO 354 : 2003 NRC = 0.35 - 0.75



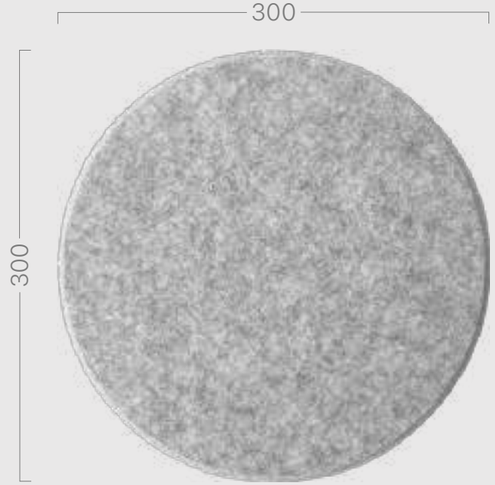
Diamond
300mm x 173mm



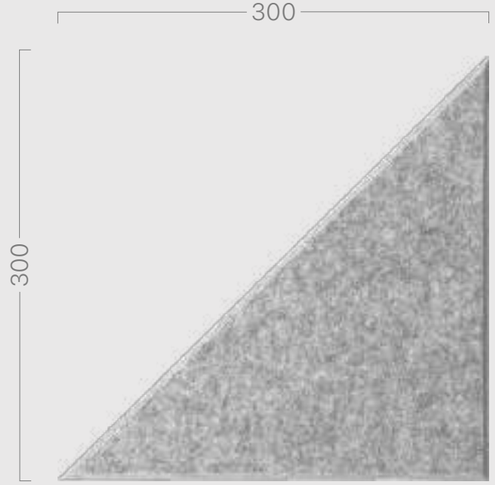
Scale
300mm x 253mm



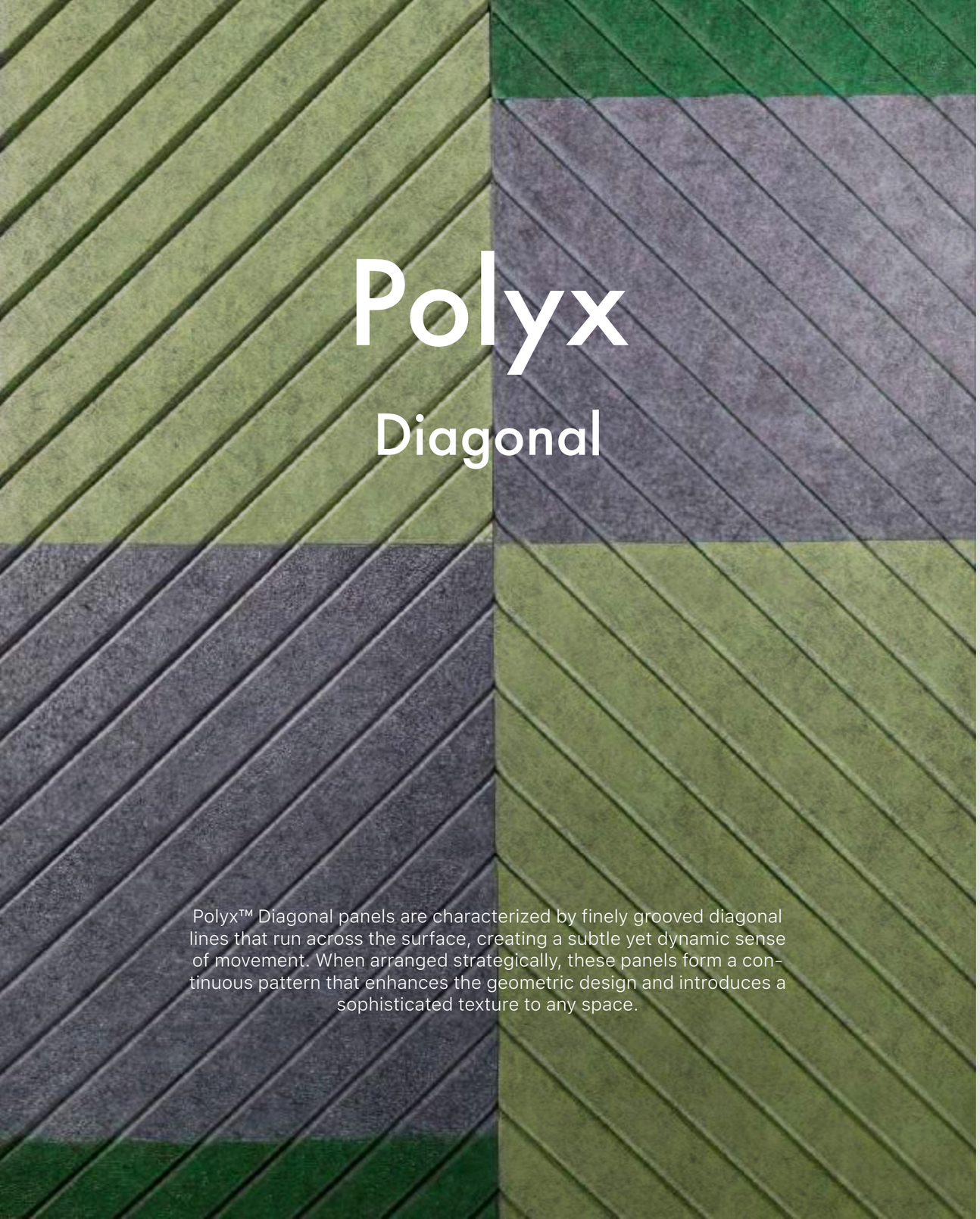
Hexagon
300mm x 300mm



Circle
300mm x 300mm



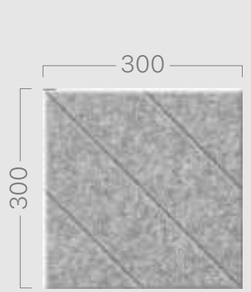
Triangle
300mm x 300mm



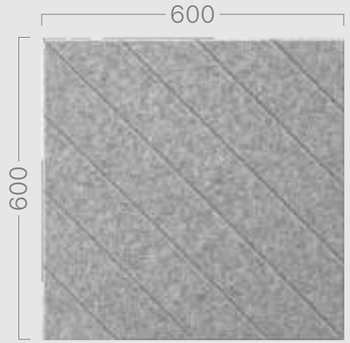
Polyx

Diagonal

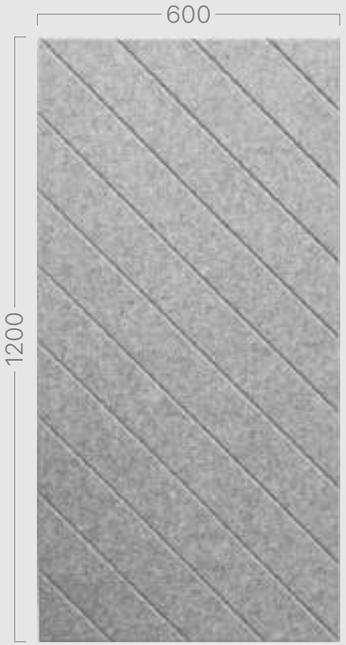
Polyx™ Diagonal panels are characterized by finely grooved diagonal lines that run across the surface, creating a subtle yet dynamic sense of movement. When arranged strategically, these panels form a continuous pattern that enhances the geometric design and introduces a sophisticated texture to any space.



Diagonal 300
300mmW x 300mmH



Diagonal 600
600mmW x 600mmH



Diagonal 1200
600mmW x 1200mmH

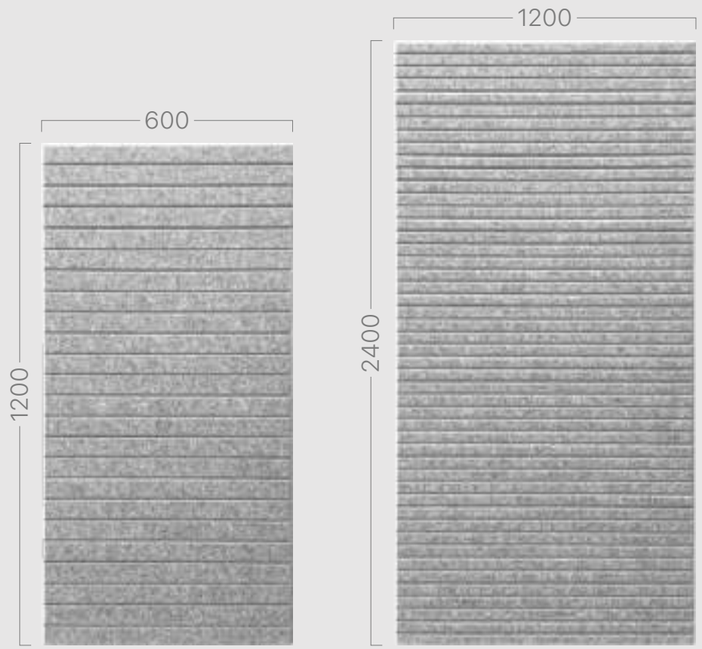
Specifications

Material: Polyester Board
Standard Dimension: 300mmW x 300mmH, 600mmW x 600mmH, 600mmW x 1200mmH
Standard Thickness: 12mm, 24mm
Slat Width: 150mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Horizon 50

Polyx™ Horizon panels feature a series of horizontal grooves that run across the surface, creating a sleek and continuous linear effect. The horizontal orientation of the grooves emphasizes the width of the space, adding a sense of expansiveness and calm.



Horizon 50
600mmW x 1200mmH

Horizon 50L
1200mmW x 2400mmH

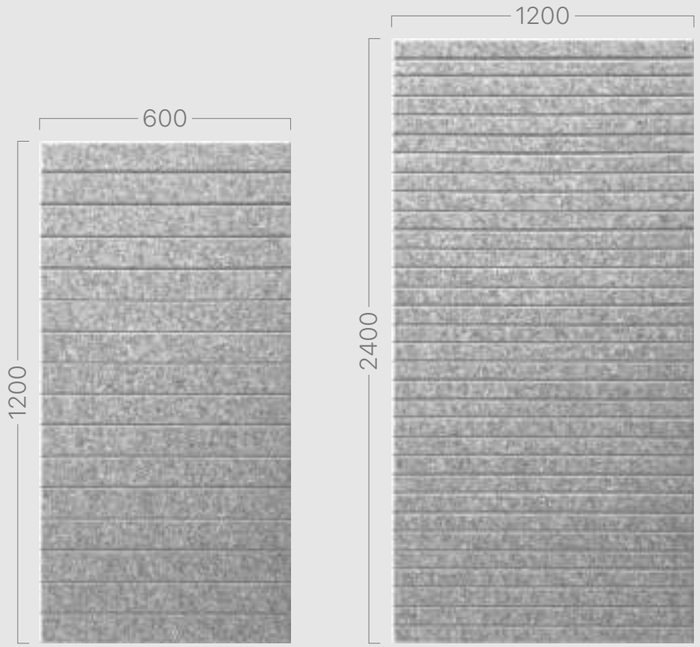
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 50mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Horizon 75

Polyx™ Horizon panels feature a series of horizontal grooves that run across the surface, creating a sleek and continuous linear effect. The horizontal orientation of the grooves emphasizes the width of the space, adding a sense of expansiveness and calm.



Horizon 75
600mmW x 1200mmH

Horizon 75L
1200mmW x 2400mmH

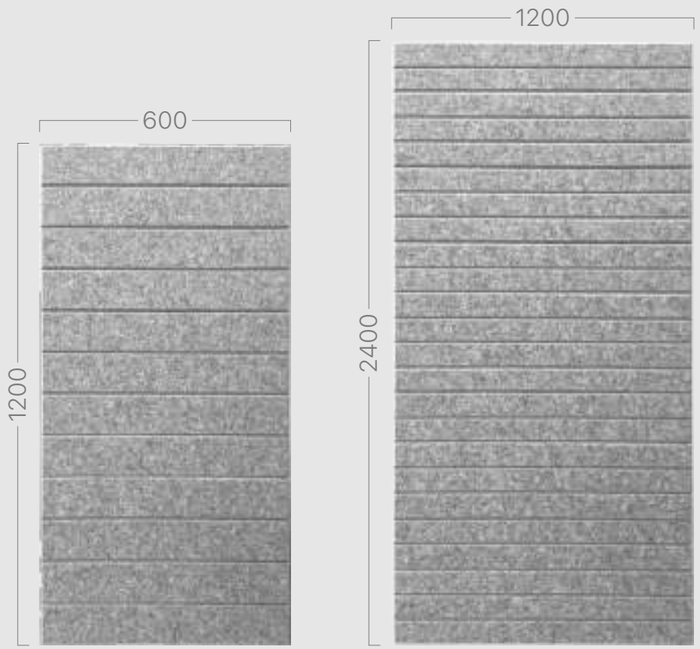
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 75mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Horizon 100

Polyx™ Horizon panels feature a series of horizontal grooves that run across the surface, creating a sleek and continuous linear effect. The horizontal orientation of the grooves emphasizes the width of the space, adding a sense of expansiveness and calm.



Horizon 100
600mmW x 1200mmH

Horizon 100L
1200mmW x 2400mmH

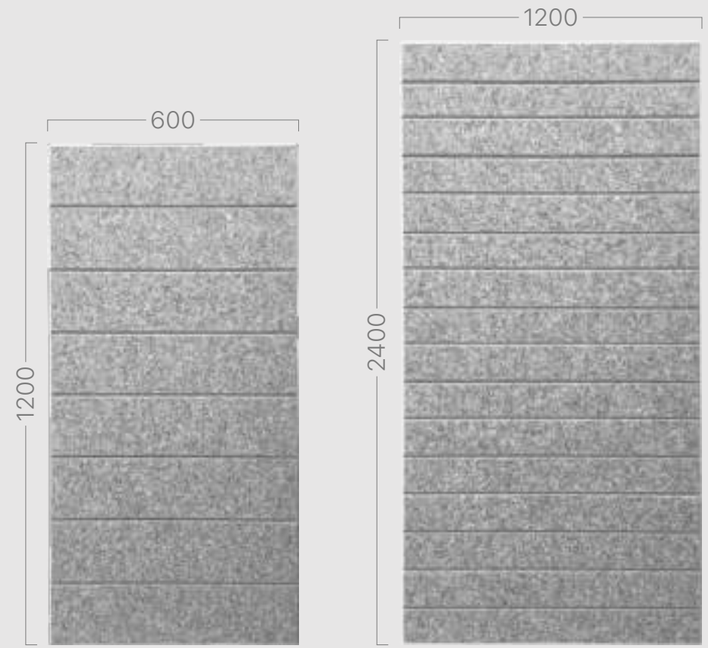
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 100mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Horizon 150

Polyx™ Horizon panels feature a series of horizontal grooves that run across the surface, creating a sleek and continuous linear effect. The horizontal orientation of the grooves emphasizes the width of the space, adding a sense of expansiveness and calm.



Horizon 150
600mmW x 1200mmH

Horizon 150L
1200mmW x 2400mmH

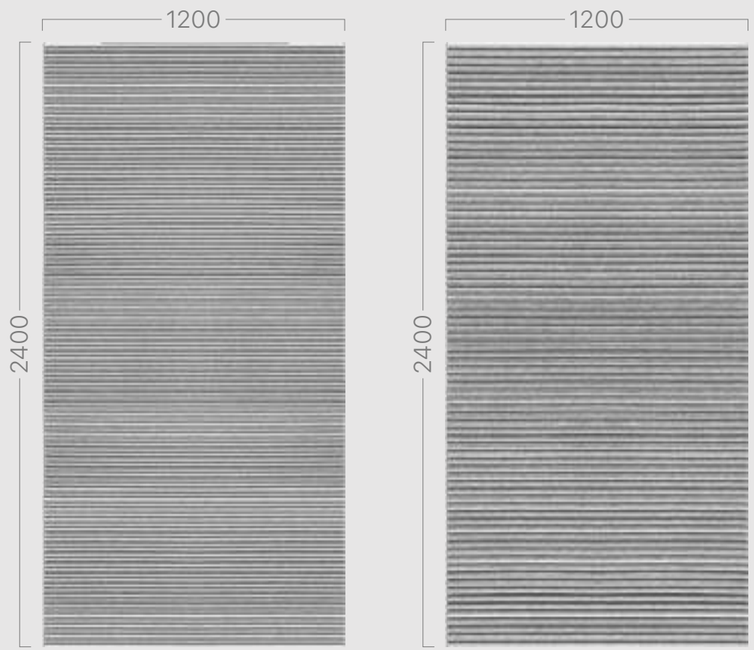
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 150mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Horizon 20L & 30L

Polyx™ Horizon panels feature a series of horizontal grooves that run across the surface, creating a sleek and continuous linear effect. The horizontal orientation of the grooves emphasizes the width of the space, adding a sense of expansiveness and calm.



Horizon 20L
1200mmW x 2400mmH

Horizon 30L
1200mmW x 2400mmH

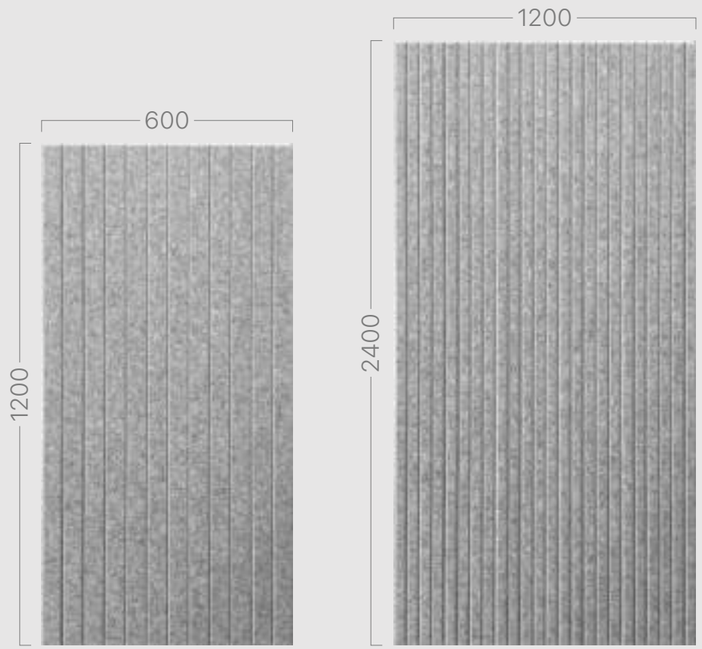
Specifications

Material: Polyester Board
Standard Dimension: 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 20mm, 30mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Vertical 50

Polyx™ Vertical panels are designed with vertically aligned grooves that create a striking sense of height and structure. The vertical orientation of the grooves naturally draws the eye upward, enhancing the perceived height of any space and adding a dynamic visual element.



Vertical 50
600mmW x 1200mmH

Vertical 50L
1200mmW x 2400mmH

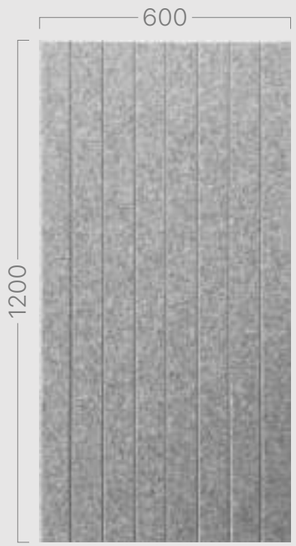
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 50mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

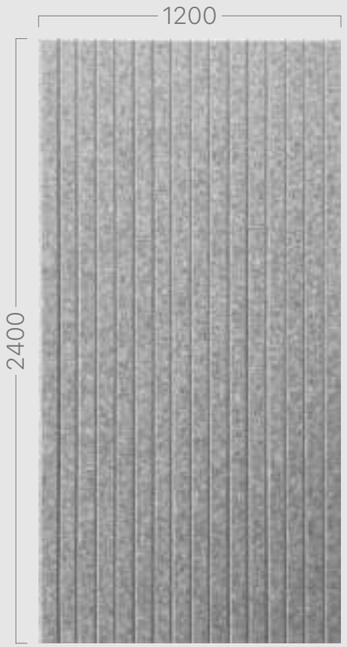
Polyx

Vertical 75

Polyx™ Vertical panels are designed with vertically aligned grooves that create a striking sense of height and structure. The vertical orientation of the grooves naturally draws the eye upward, enhancing the perceived height of any space and adding a dynamic visual element.



Vertical 75
600mmW x 1200mmH



Vertical 75L
1200mmW x 2400mmH

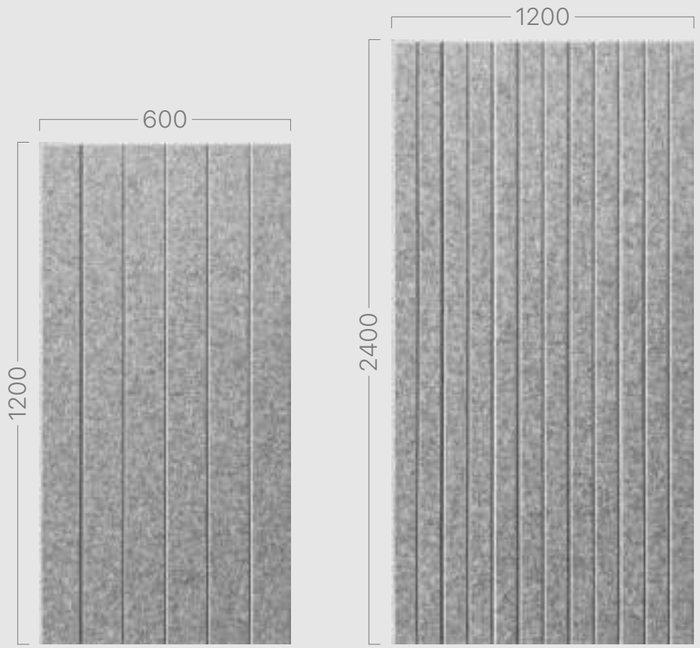
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 75mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Vertical 100

Polyx™ Vertical panels are designed with vertically aligned grooves that create a striking sense of height and structure. The vertical orientation of the grooves naturally draws the eye upward, enhancing the perceived height of any space and adding a dynamic visual element.



Vertical 100
600mmW x 1200mmH

Vertical 100L
1200mmW x 2400mmH

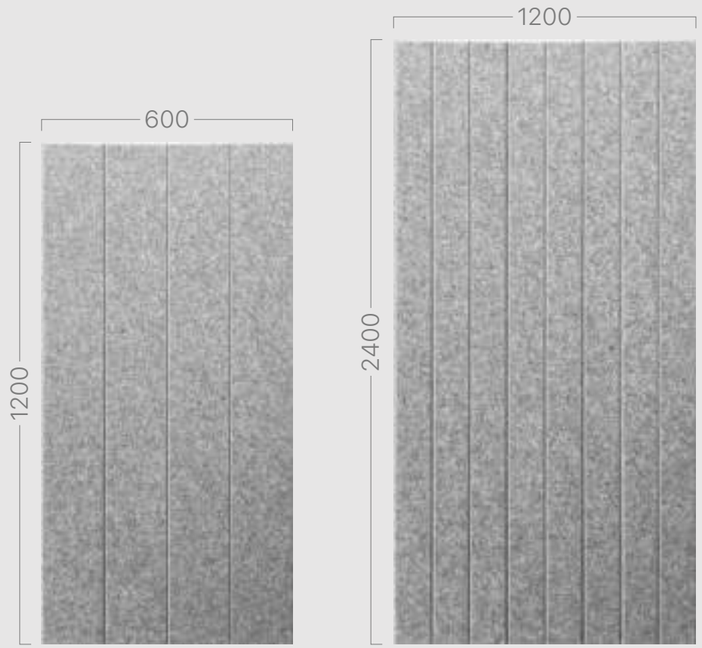
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 100mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Vertical 150

Polyx™ Vertical panels are designed with vertically aligned grooves that create a striking sense of height and structure. The vertical orientation of the grooves naturally draws the eye upward, enhancing the perceived height of any space and adding a dynamic visual element.



Vertical 150
600mmW x 1200mmH

Vertical 150L
1200mmW x 2400mmH

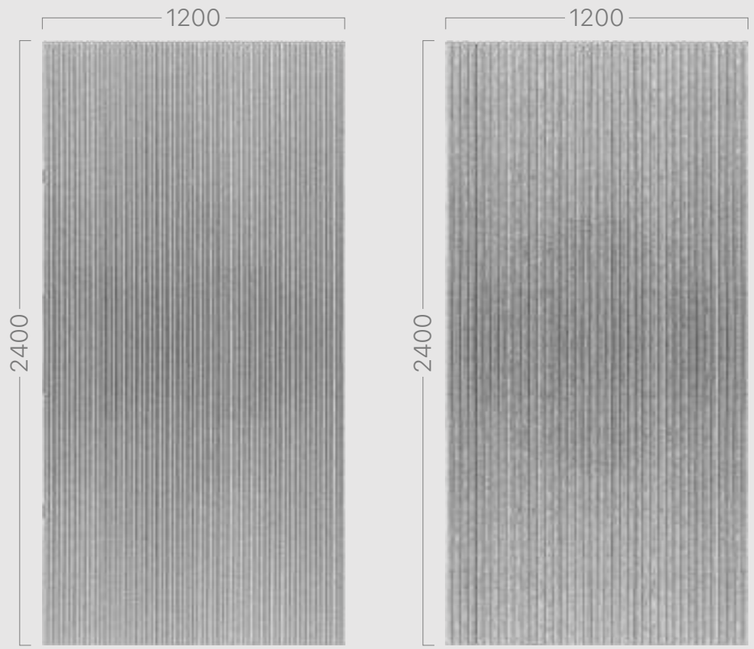
Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH, 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 150mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Vertical 20L & 30L

Polyx™ Vertical panels are designed with vertically aligned grooves that create a striking sense of height and structure. The vertical orientation of the grooves naturally draws the eye upward, enhancing the perceived height of any space and adding a dynamic visual element.



Vertical 20L
1200mmW x 2400mmH

Vertical 30L
1200mmW x 2400mmH

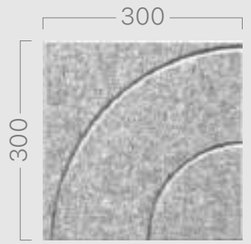
Specifications

Material: Polyester Board
Standard Dimension: 1200mmW x 2400mmH
Standard Thickness: 12mm, 24mm
Slat Width: 20mm, 30mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

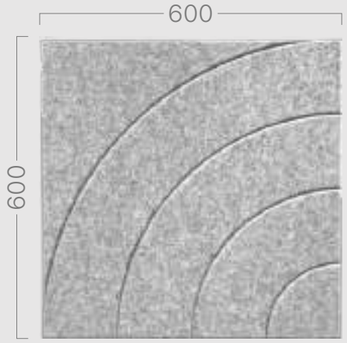
Polyx

Loop

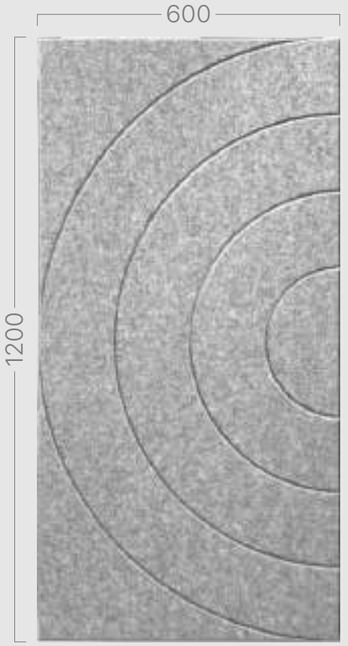
Polyx™ Loop panels feature circular grooves across the surface, adding depth and rhythm to their design. By arranging the panels in various orientations, you can create a repetitive pattern of intersecting circular and linear grooves, resulting in a richly textured, geometric aesthetic.



Loop 300
300mmW x 300mmH



Loop 600
600mmW x 600mmH



Loop 1200
600mmW x 1200mmH

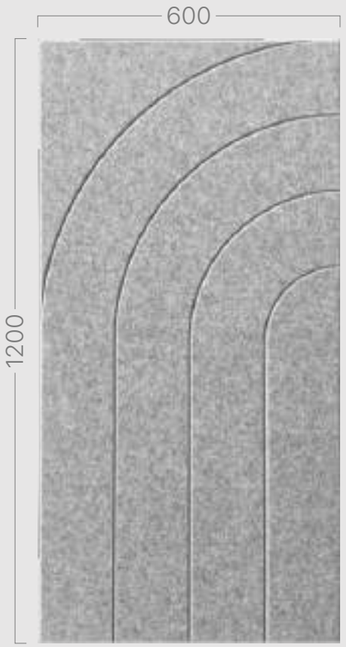
Specifications

Material: Polyester Board
Standard Dimension: 300mmW x 300mmH, 600mmW x 600mmH, 600mmW x 1200mmH
Standard Thickness: 12mm, 24mm
Slat Width: 150mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx

Circuit

Polyx™ Circuit panels feature a unique design characterized by interconnected curved and linear grooves that evoke the intricate patterns of electronic circuits. The interplay of curved and linear grooves creates a complex, flowing pattern that adds a sense of movement to any space.



Circuit
600mmW x 1200mmH

Specifications

Material: Polyester Board
Standard Dimension: 600mmW x 1200mmH
Standard Thickness: 12mm, 24mm
Slat Width: 150mm
Bevel Dimension: 20mmW x 10mmH
Bevel Angle: 45°
Eco-Friendly Test: EN 13986 = E1
Fire-Rated Test: EN 13501-1 = Class B s1, d0
Acoustic Test: ISO 354 = NRC 0.65 with 12mm Polyx™ and 100mm Air Gap

Polyx™ 12mm Baffles
SeaWorld, Abu Dhabi

SeaWorld, Abu Dhabi

Location
Yas Island, Abu Dhabi,
United Arab Emirates

Client
SeaWorld

Architect
AECOM

Consultant
Aspen Creations

Main Contractor
ALEC

Acoustics Contractor
Kinetics Middle East

At SeaWorld, Abu Dhabi, we've taken the legacy a notch higher with Polyx acoustic baffles. Covering an expansive 12,000m2, these 100% PET baffles not only control reverberation but also ensure that the magic of marine life is coupled with impeccable sound quality.

The space features 12mm Polyx™ polyester baffles, intricately CNC cut into wave patterns, enhancing both aesthetics and acoustics. These baffles play a pivotal role in ensuring an exceptional auditory experience for visitors, harmonizing the blend of design and sound at Flamingo Point.

Polyx™ 9mm Grooved
MOH Holdings, Singapore

MOH Holdings

Location
1 Maritime Square,
Singapore 099253

Client
Ministry of Health Holdings

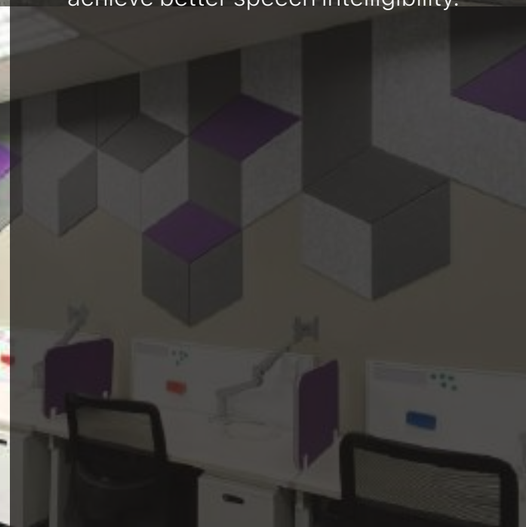
Product
9mm Polyester Board

Architect
SQFT Architects

Acoustic Contractor
Aural-Aid Pte Ltd

MOH Holdings (MOHH) is the holding company of Singapore's public healthcare clusters – National University Health System, National Healthcare Group and Singapore Health Services.

12mm thick Polyx™ boards CNC cut to shape with bevelled edges were installed for their new office at 1 Maritime Square, Singapore. The panels help absorb echoes and achieve better speech intelligibility.



Polyx™ 12mm Baffle
SIM University, Singapore

SIM University

Location
41 Namly Avenue, Singapore

Client
SIM University

Architect
D' Perception Pte Ltd

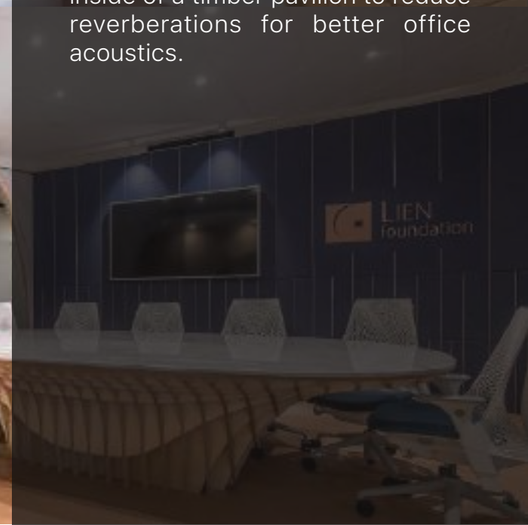
Main Contractor
Furntex Design & Contracts Pte Ltd

Acoustic Contractor
Aural-Aid Pte Ltd

SIM University, now known as the Singapore University of Social Sciences (SUSS), is a publicly funded university in Singapore. It was established in 2005 as an autonomous university under the Singapore Institute of Management (SIM) Group.

12mm Polyx™ Baffles are installed on the ceiling of the newly renovated SIM Office. The baffles are designed to absorb and diffuse sound waves, reducing echo and improving the overall acoustic performance of the space. This is particularly beneficial in office environments where speech intelligibility and noise control are important.

Polyx™ 12mm
Lien Foundation, Singapore



Lien Foundation

Location
435 Orchard Road, Wisma Atria, Singapore

Client
Lien Foundation

Architect
Produce

Contractor
Superstructure

Lien Foundation is a Singapore-based philanthropic organisation that seeks to inspire social change and improve the lives of seniors, children with special needs and those who are born into low-income homes.

Polyx™ was installed for their office located in Wisma Atria.

12mm Polyx™ polyester boards were CNC cut into facets using design for manufacturing and assembly methods (DfMA) and cladded on the inside of a timber pavilion to reduce reverberations for better office acoustics.

Polyx™ | 1220mm x 2440mm | 100% Polyester | EN 13501-1 = Class B s1, d0

BWF™ | Spectre 1 | 100% Wool Felt | EN 13501-1 = Class B s1, d0

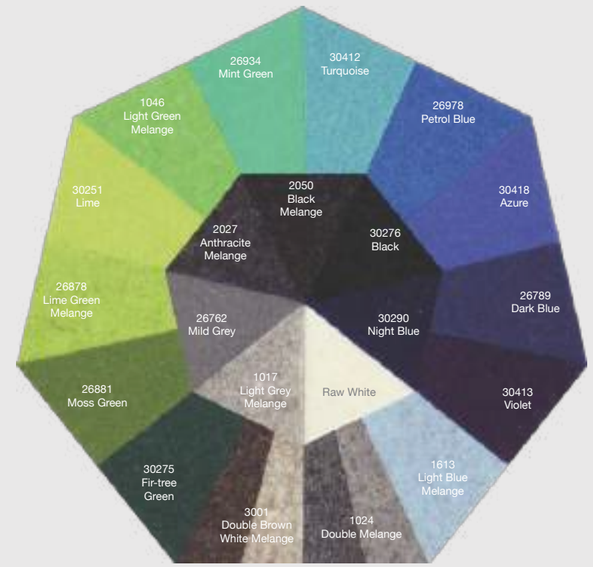
Colours

30245 Cherry
30185 Terracotta
30244 Orange
26956 Mandarin
1116 Pumpkin Melange
119 Yellow
26874 Mustard Melange
30248 Bordeaux
1044 Mulberry Melange
27084 Ruby
26971 Lavender
27047 Rosy
30352 Magenta
30277 Chocolate
2023 Dark Brown Melange
30361 Camel
1019 Beige Brown Melange
1028 Light Brown Melange
27009 Taupe

BWF™ | Spectre 2 | 100% Wool Felt | EN 13501-1 = Class B s1, d0

Colours

30412 Turquoise
26978 Petrol Blue
30418 Azure
26789 Dark Blue
30413 Violet
1613 Light Blue Melange
1024 Double Melange
3001 Double Brown Melange
30275 Fir-tree Green
26881 Moss Green
26878 Lime Green Melange
30251 Lime
1046 Light Green Melange
26934 Mint Green
2050 Black Melange
30276 Black
30290 Night Blue
Raw White
1017 Light Grey Melange
26762 Mild Grey



New Signature Colors