

# 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 Classification: EN 13501 -1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 0.30 - 0.70

## 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.

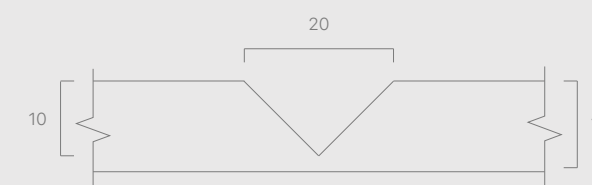


# Polyx Grooved

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.

## 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 Classification: EN 13501 -1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 0.30 - 0.70



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

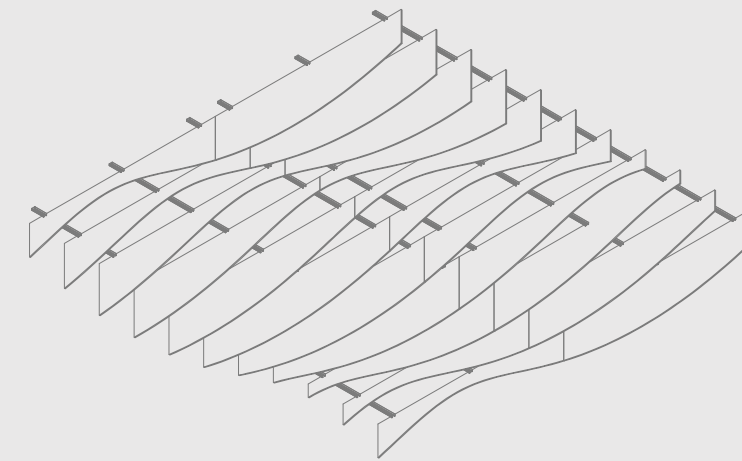
As you install subsequent panels, consider creating a pattern or arrangement that suits your aesthetic preferences. The bevelled edges of the panels can create interesting visual effects when arranged in various ways.

# 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 Classification: EN 13501 -1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 0.80 - 0.95



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

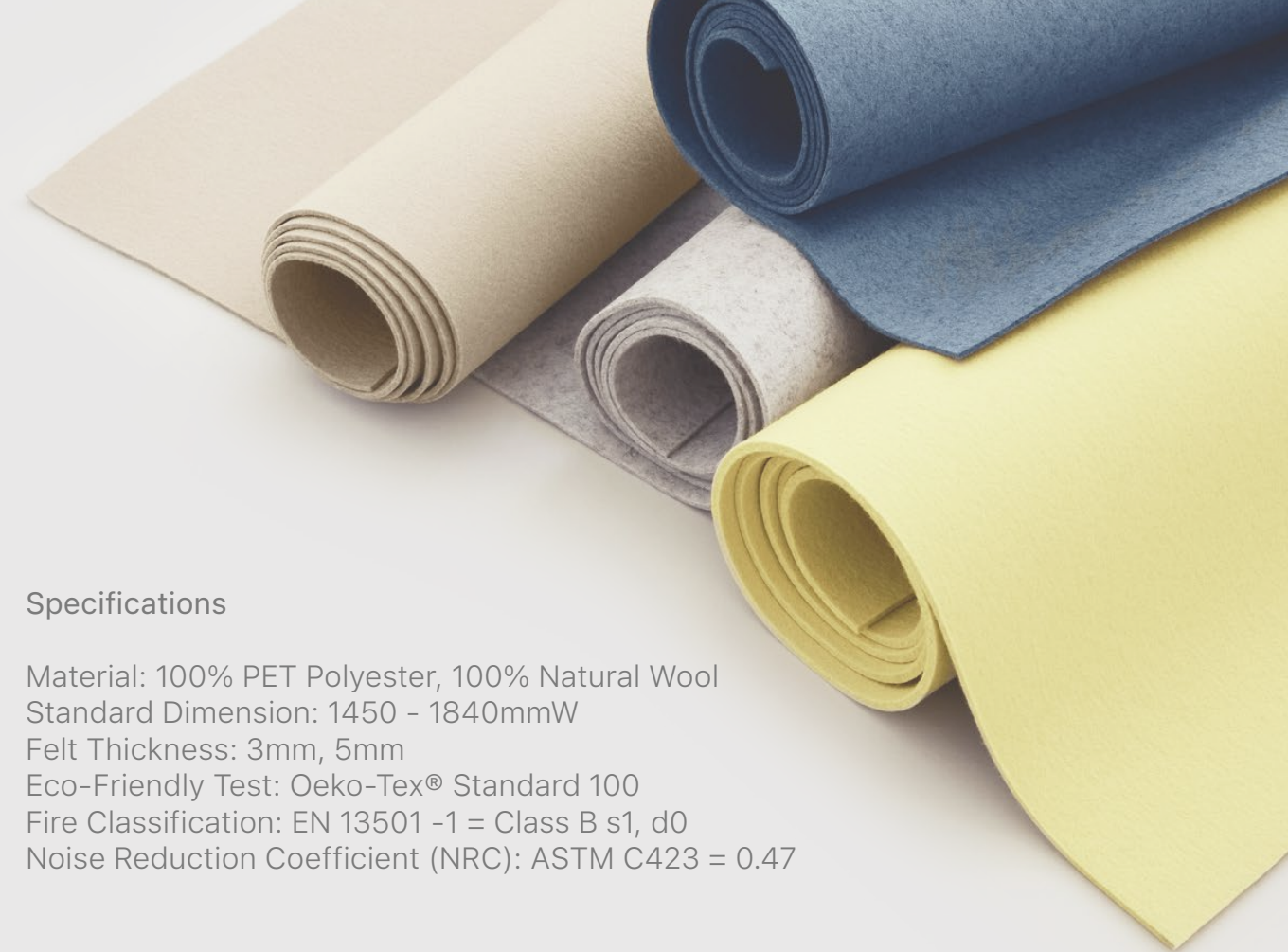
Once all the baffles are hung, secure them in place by tightening the nuts on the threaded rods. This will prevent the baffles from moving or swinging.

### 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 Classification: EN 13501 -1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 0.47

## 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

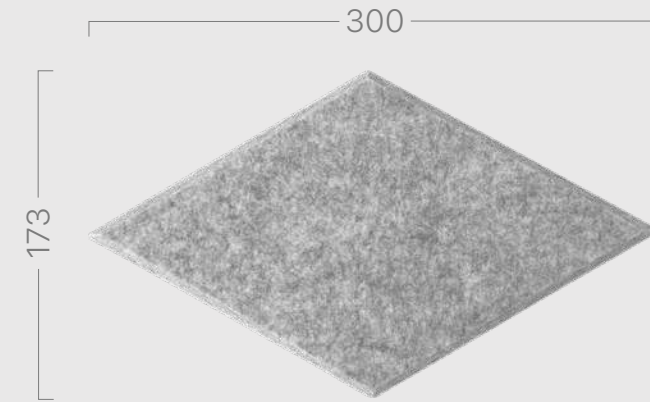
Start at one corner of the wall and align the felt sheet with your guidelines. Press the felt into place, working your way across the sheet to remove any air bubbles. Use a clean roller or spatula to apply pressure evenly.

## Shapes

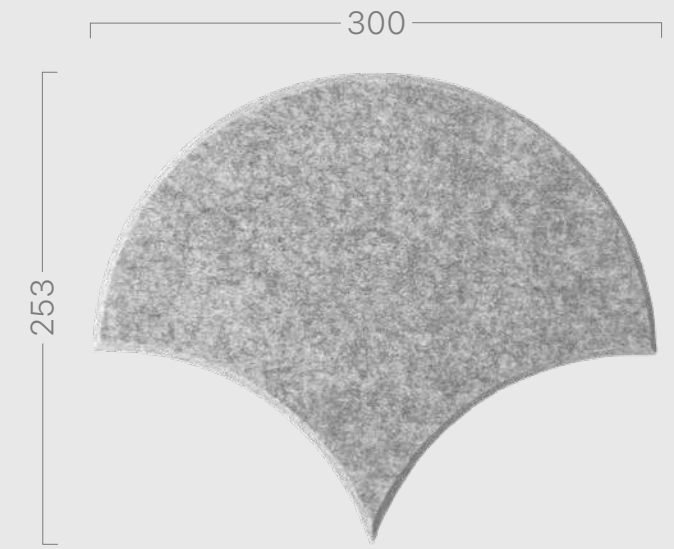
Our state-of-the-art CNC cutting technology ensures that every panel is precision-cut to an exact dimension with a tolerance of +/- 0.5mm. This guarantees a perfect fit for an accurate installation on site.

## Specifications

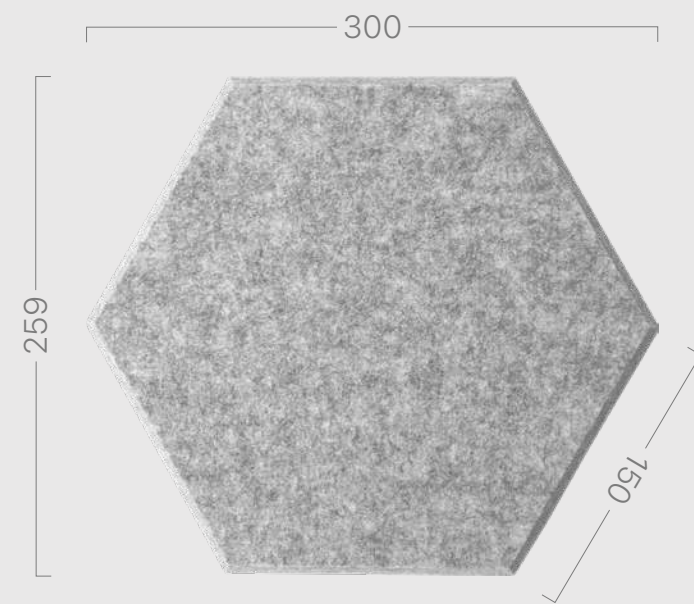
Material: 100% PET Polyester  
Standard Thickness: 12mm, 24mm  
Eco-Friendly Test: Oeko-Tex® Standard 100  
Fire Classification: EN 13501 -1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 0.30 - 0.70



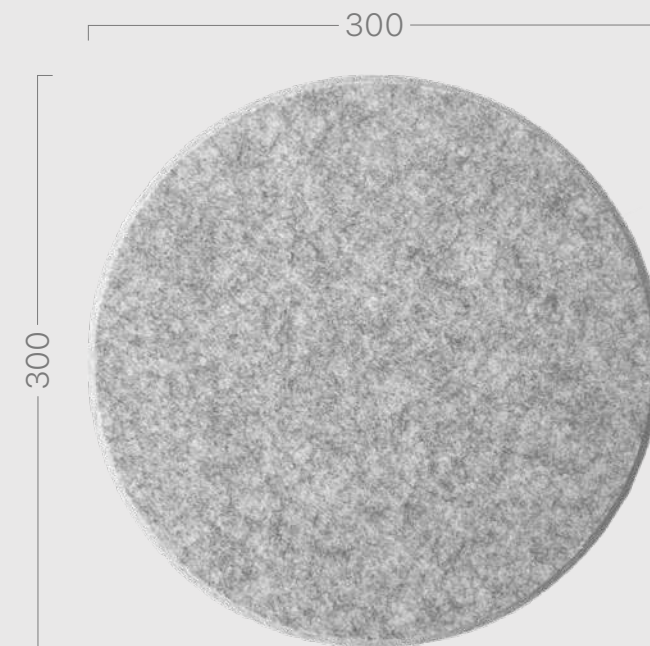
Diamond  
300mm x 173mm



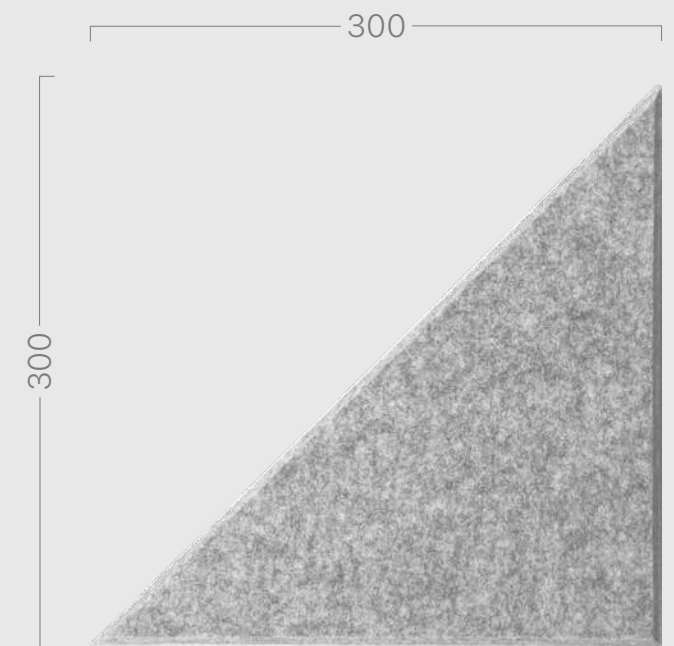
Scale  
300mm x 253mm



Hexagon  
300mm x 300mm



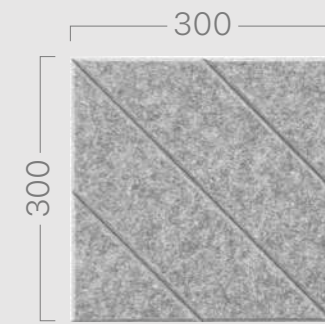
Circle  
300mm x 300mm



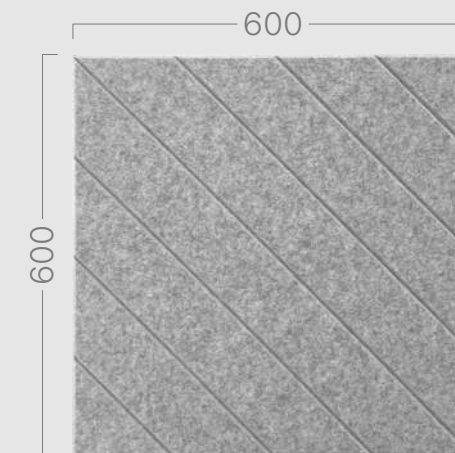
Triangle  
300mm x 300mm

# Polyx Diagonal

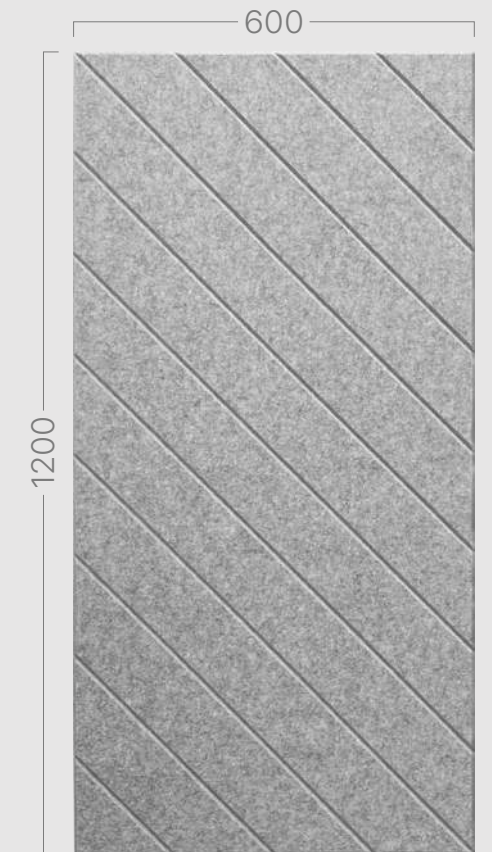
Polyx™ Diagonal panels are characterized by finely grooved diagonal lines that run across the surface, creating a subtle yet dynamic sense of movement. When arranged strategically, these panels form a continuous pattern that enhances the geometric design and introduces a sophisticated texture to any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



Diagonal 300  
300mmW x 300mmH



Diagonal 600  
600mmW x 600mmH



Diagonal 1200  
600mmW x 1200mmH

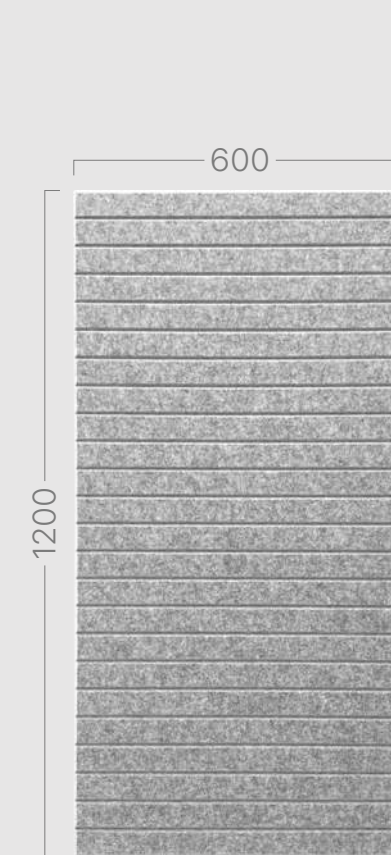
## Specifications

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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

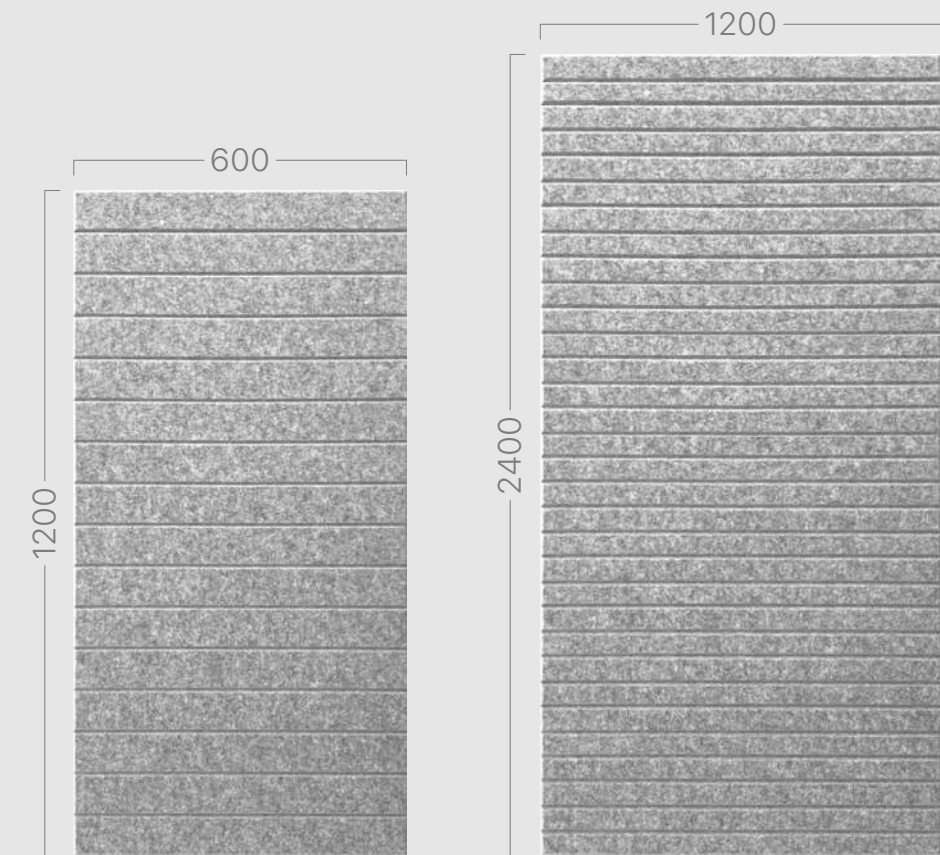
### Specifications

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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

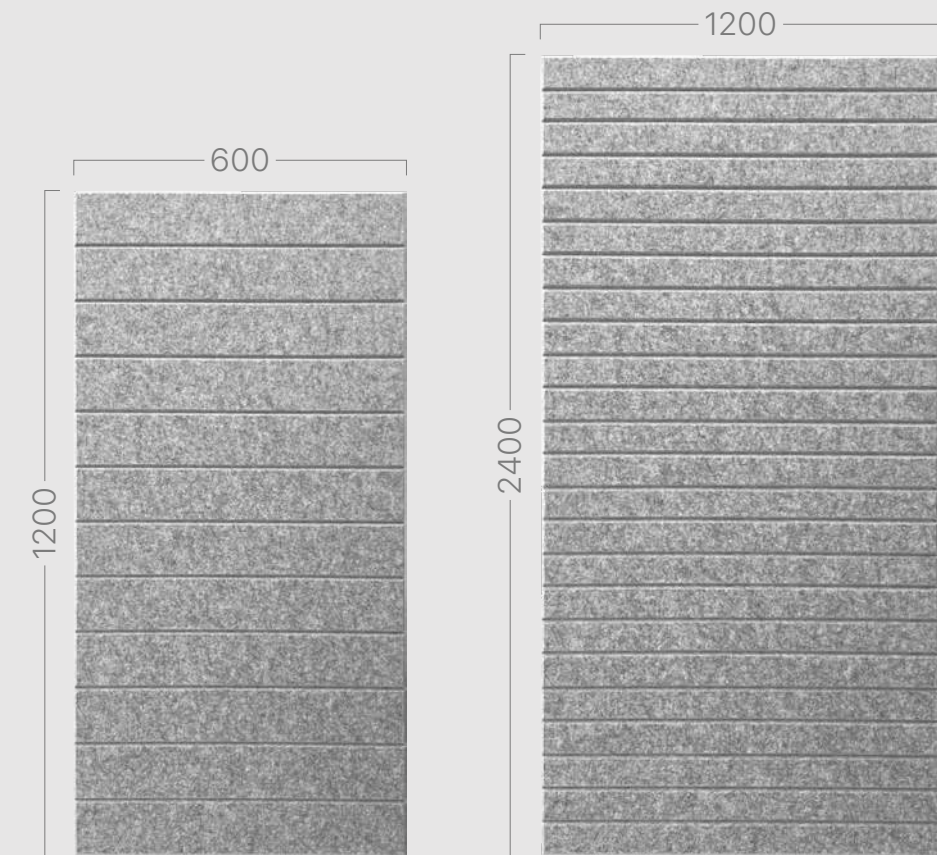
### Specifications

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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

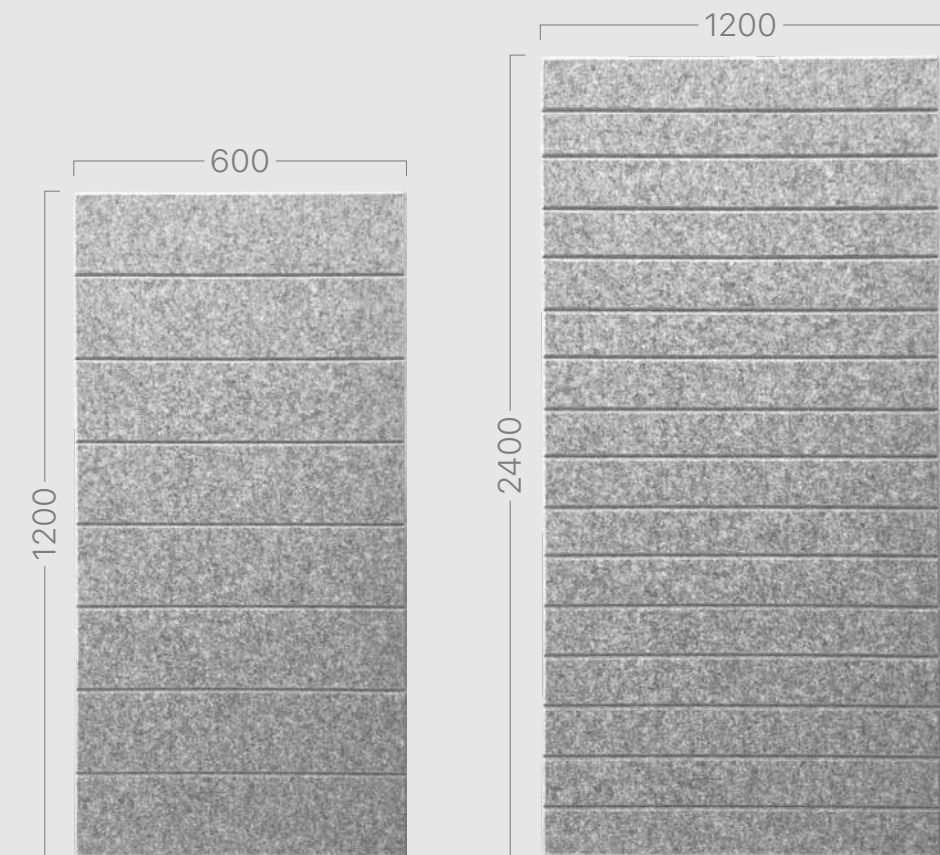
### Specifications

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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

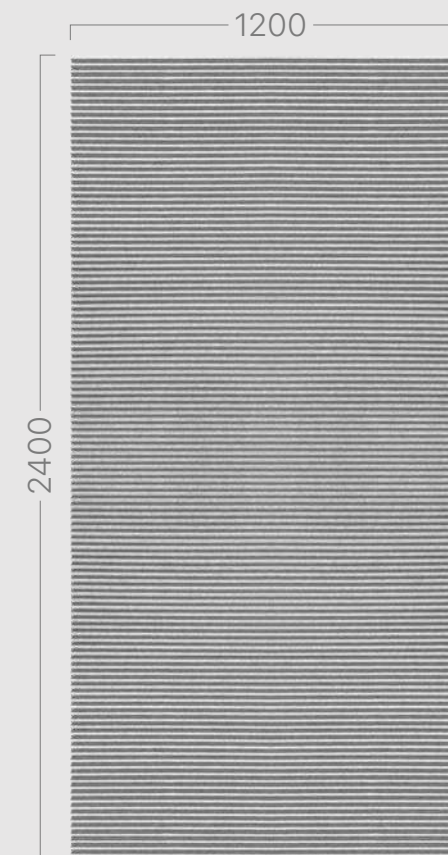
### Specifications

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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

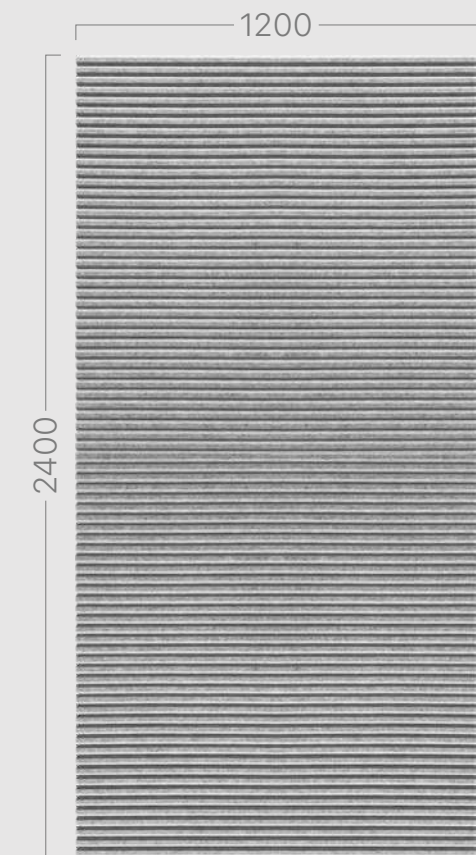
# Polyx

## 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



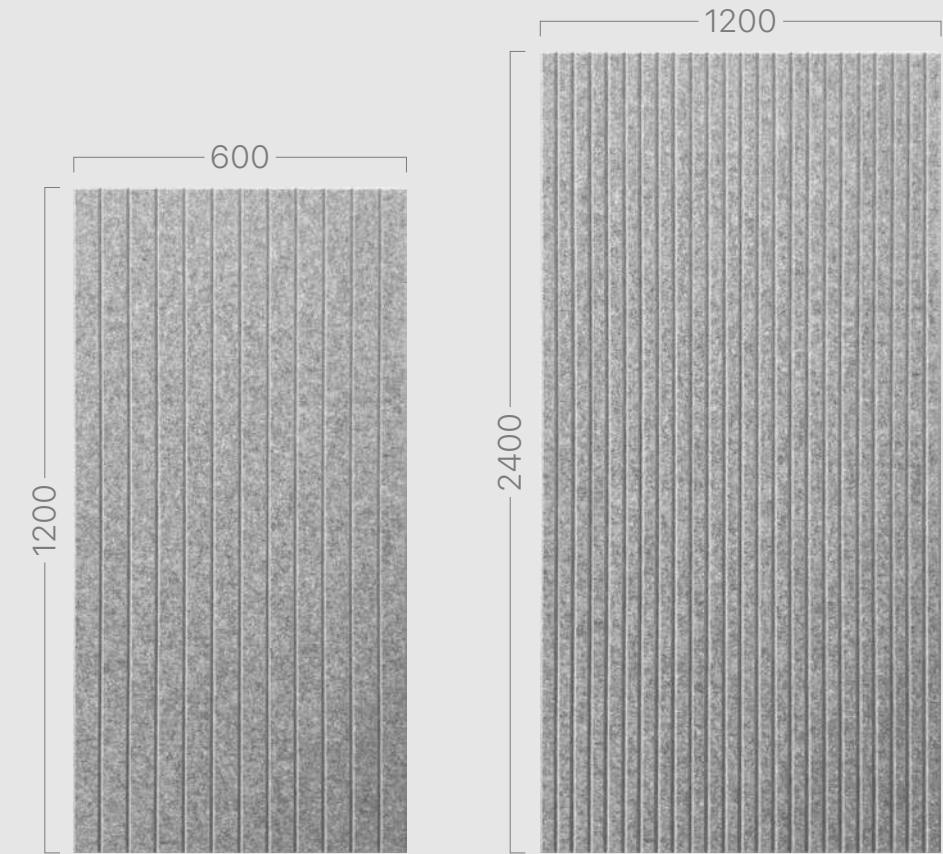
Horizon 30L  
1200mmW x 2400mmH

### 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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

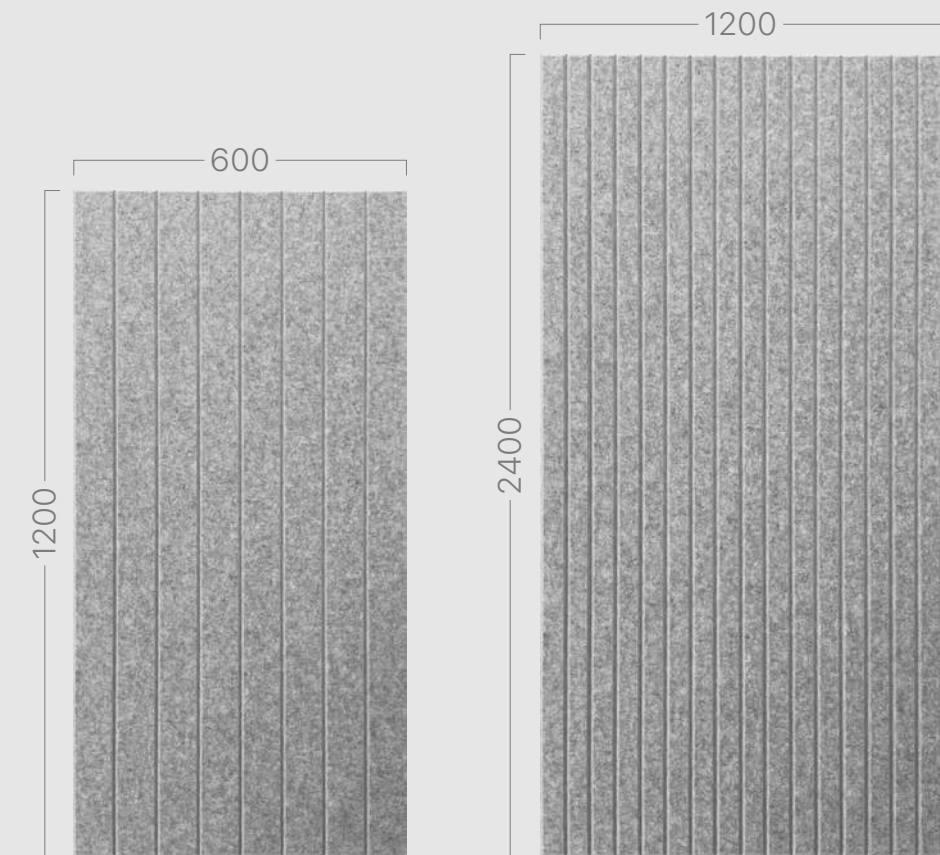
Vertical 50L  
1200mmW x 2400mmH

## 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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

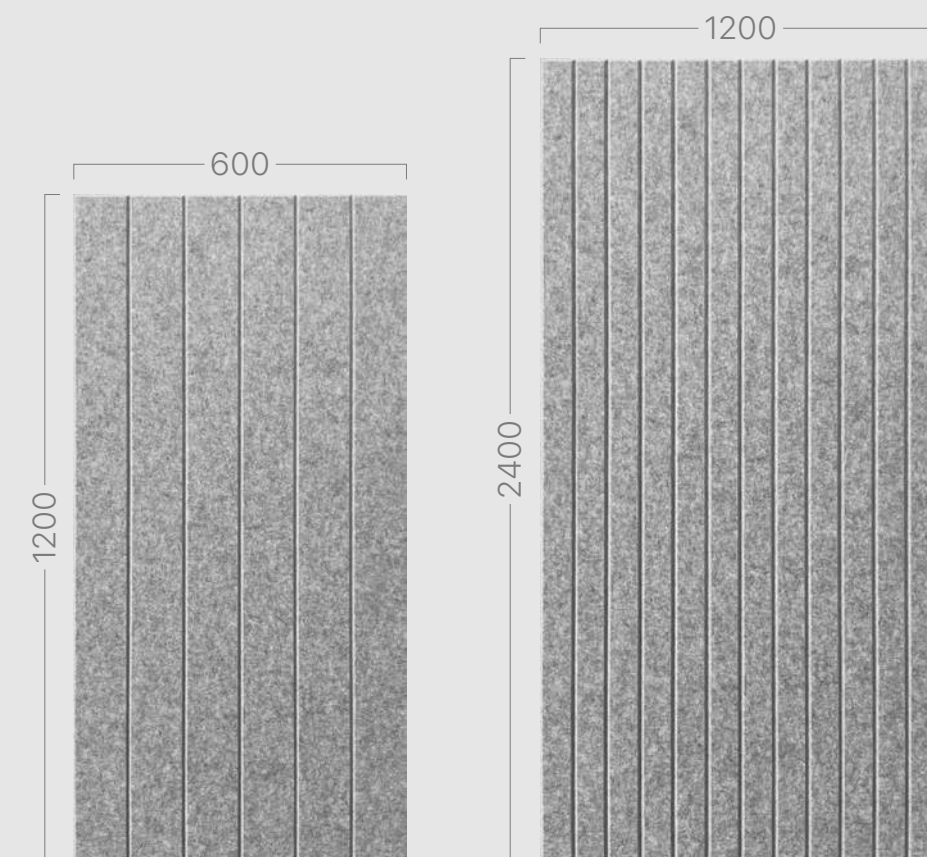
## Specifications

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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

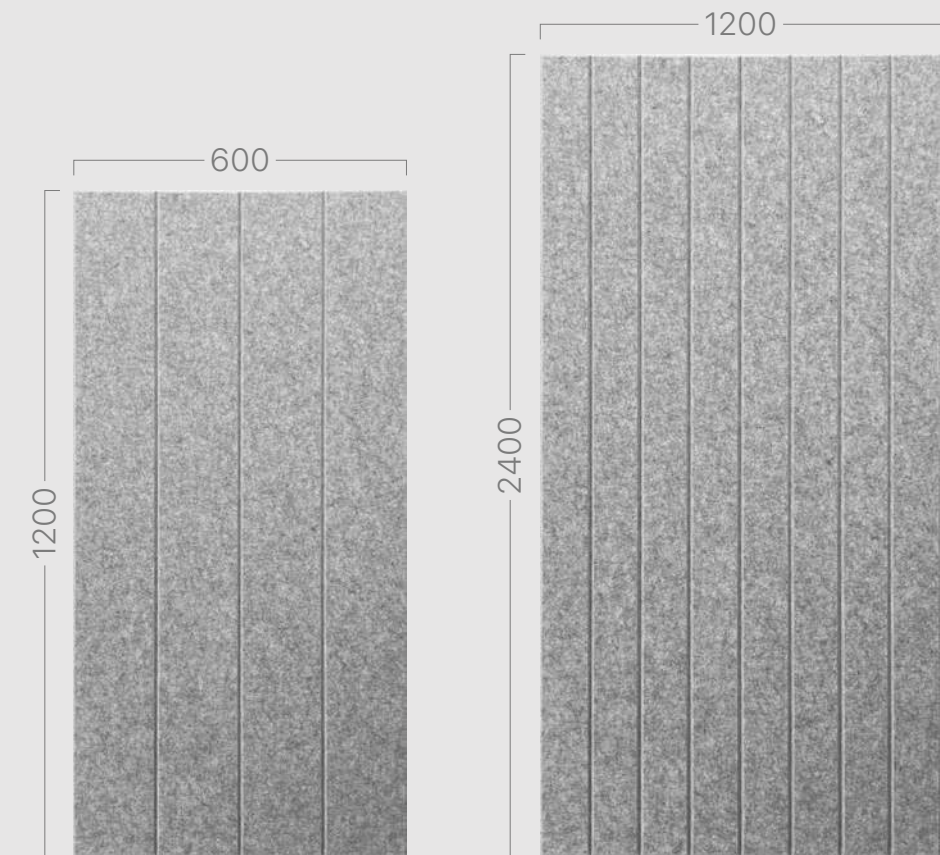
Vertical 100L  
1200mmW x 2400mmH

## 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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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

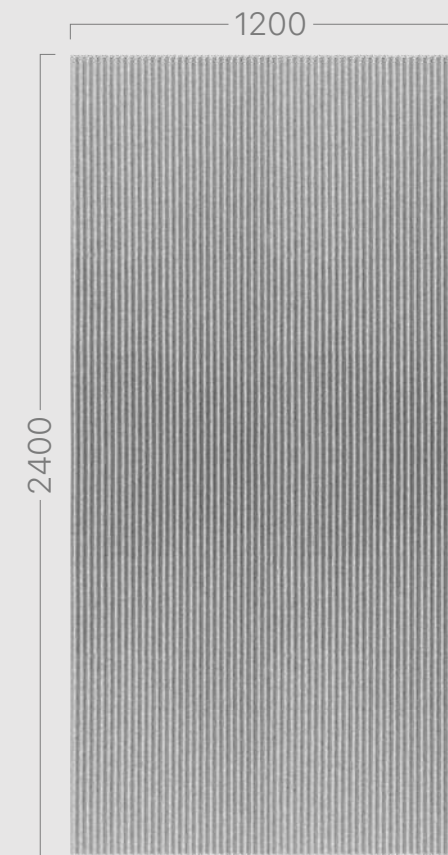
## Specifications

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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

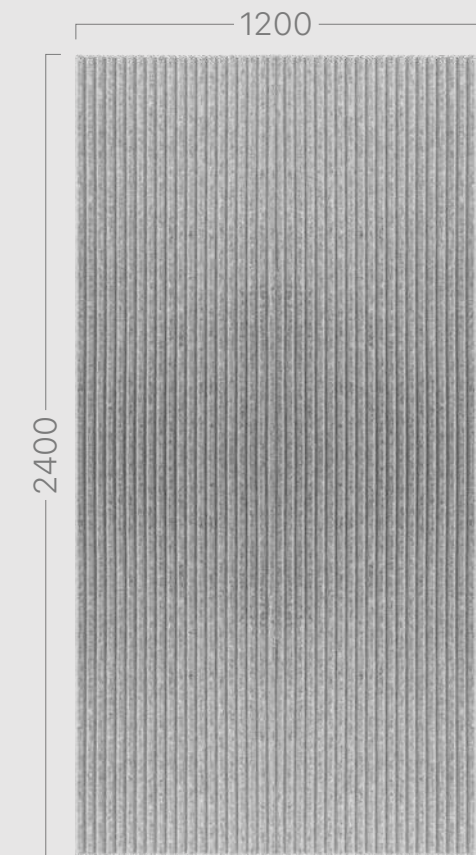
# Polyx

## 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



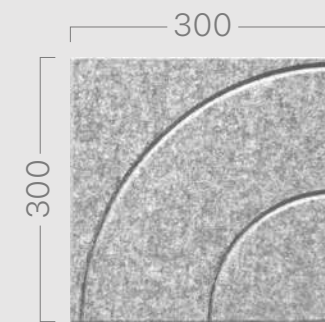
Vertical 30L  
1200mmW x 2400mmH

### Specifications

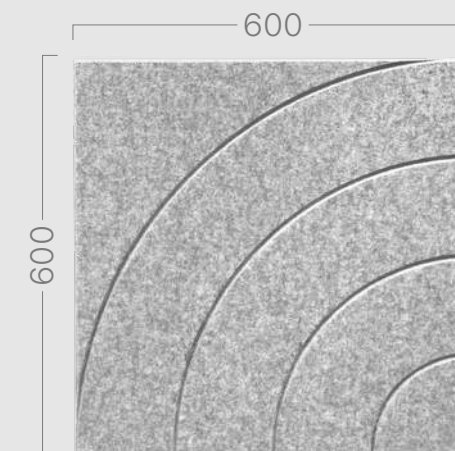
Material: Polyester Board  
Standard Dimension: 1200mmW x 2400mmH  
Standard Thickness: 12mm, 24mm  
Slat Width: 20mm, 30mm  
Bevel Dimension: 20mmW x 10mmH  
Bevel Angle: 45°  
Eco-Friendly Test: EN 13986 = E1  
Fire Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# Polyx Loop

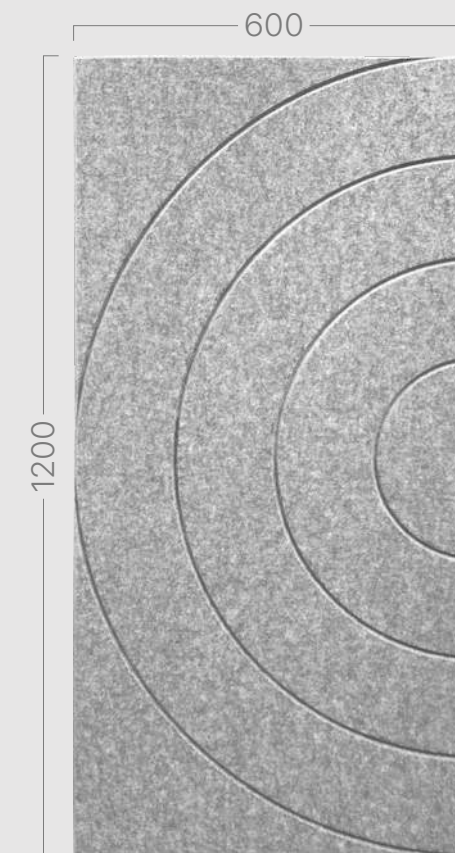
Polyx™ Loop panels feature circular grooves across the surface, adding depth and rhythm to their design. By arranging the panels in various orientations, you can create a repetitive pattern of intersecting circular and linear grooves, resulting in a richly textured, geometric aesthetic.



Loop 300  
300mmW x 300mmH



Loop 600  
600mmW x 600mmH



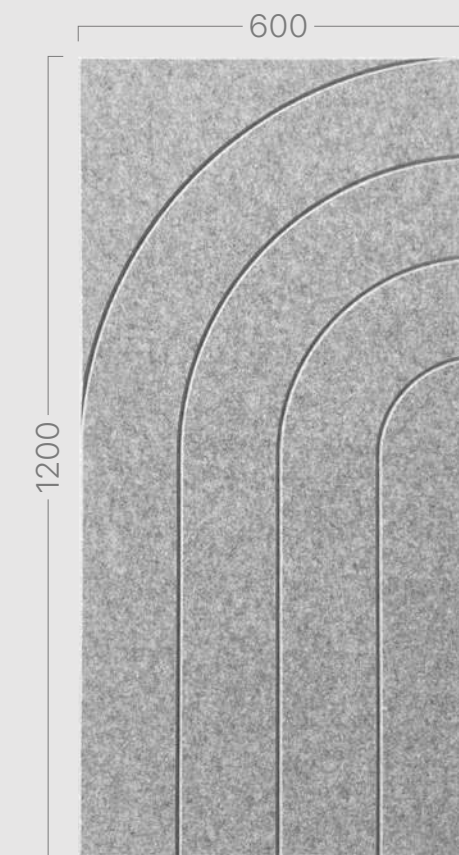
Loop 1200  
600mmW x 1200mmH

## 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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation

# 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 Classification: EN 13501-1 = Class B s1, d0  
Noise Reduction Coefficient (NRC): ASTM C423 = 1.05, Board 12 with Insulation



Polyx™ 12mm Baffles  
SeaWorld, Abu Dhabi

**SeaWorld, Abu Dhabi**

**Location**  
Yas Island, Abu Dhabi,  
United Arab Emirates

**Client**  
SeaWorld

**Architect**  
AECOM

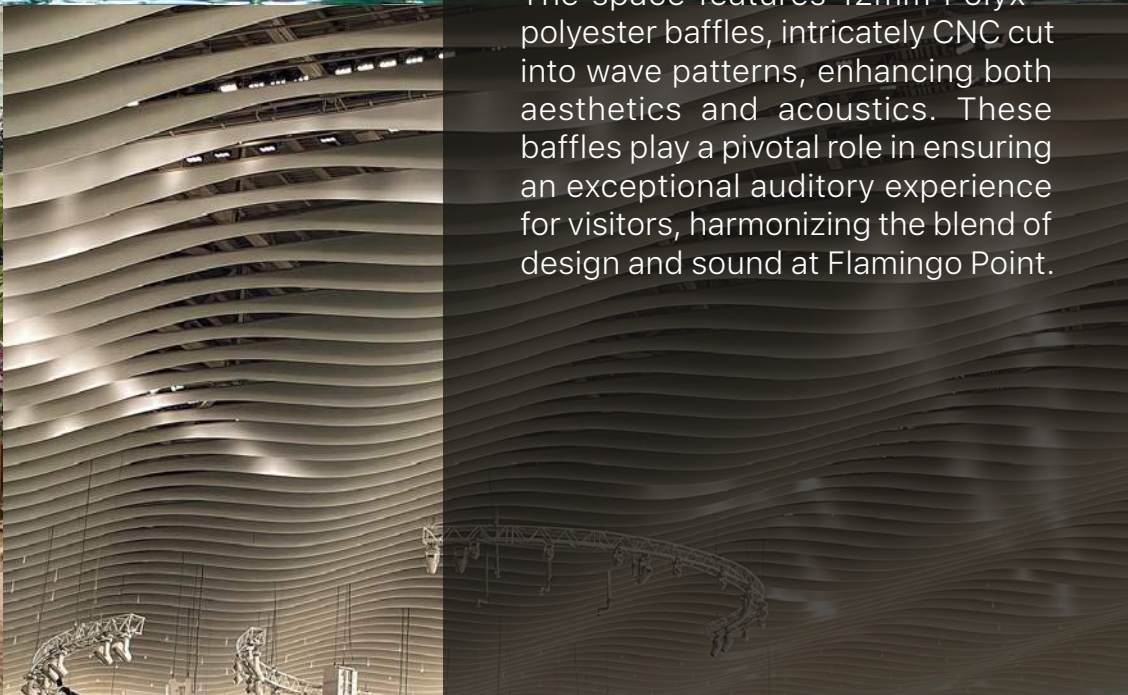
**Consultant**  
Aspen Creations

**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 12,000m<sup>2</sup>, 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.



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™ 9mm Grooved  
MOH Holdings, Singapore





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

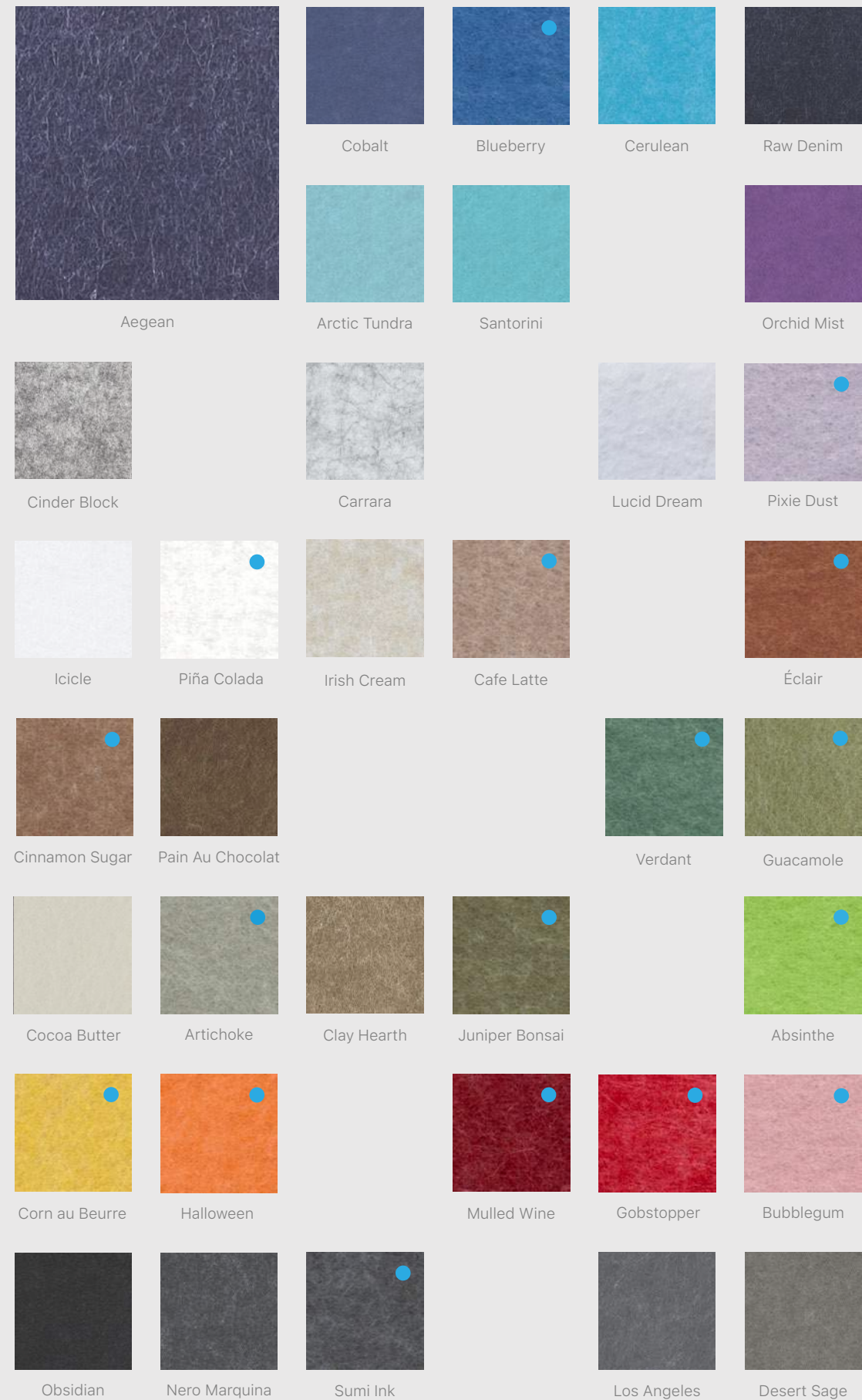
Lien Foundation is a Singapore-based philanthropic organisation that seeks to inspire social change and improve the lives of seniors, children with special needs and those who are born into low-income homes.

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

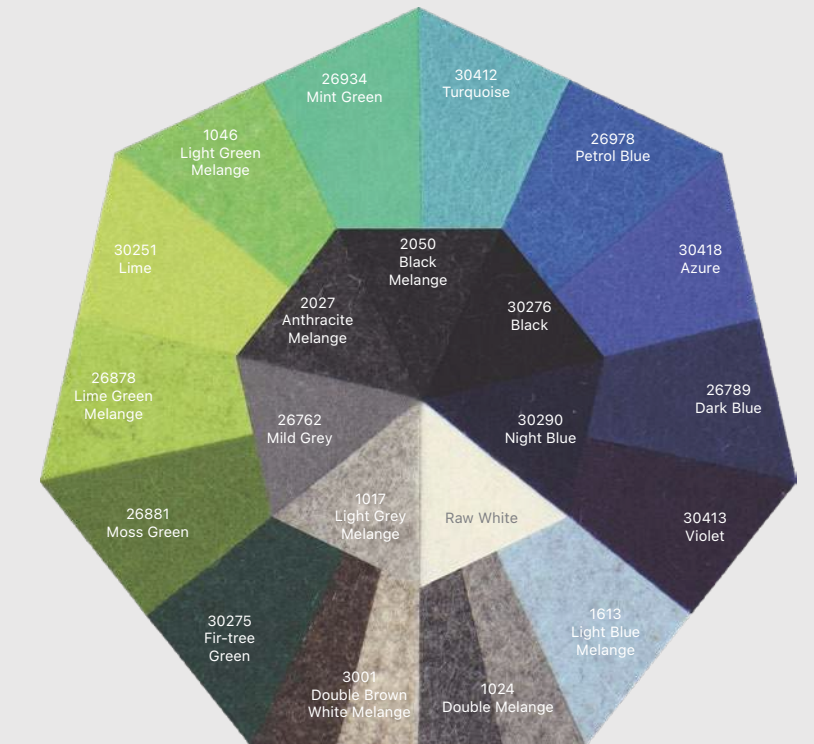
- 30245 Cherry
- 30185 Terracotta
- 30244 Orange
- 26956 Mandarin
- 1116 Pumpkin Melange
- 119 Yellow
- 26874 Mustard Melange
- 30248 Bordeaux
- 1044 Mulberry Melange
- 27084 Ruby
- 26971 Lavender
- 27047 Rosy
- 30352 Magenta
- 30277 Chocolate
- 2023 Dark Brown Melange
- 30361 Camel
- 1019 Beige Brown 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
- 2027 Anthracite Melange
- 26762 Mild Grey
- 1017 Light Grey Melange
- 30275 Fir-tree Green
- 3001 Double Brown White Melange
- 1024 Double Melange
- 1613 Light Blue Melange
- 26789 Dark Blue
- 30413 Violet



● New Signature Colors