Timberix Catalogue

Eco-friendly timber acoustic panels.
Comes in grooved and perforations
as small as 500 microns.

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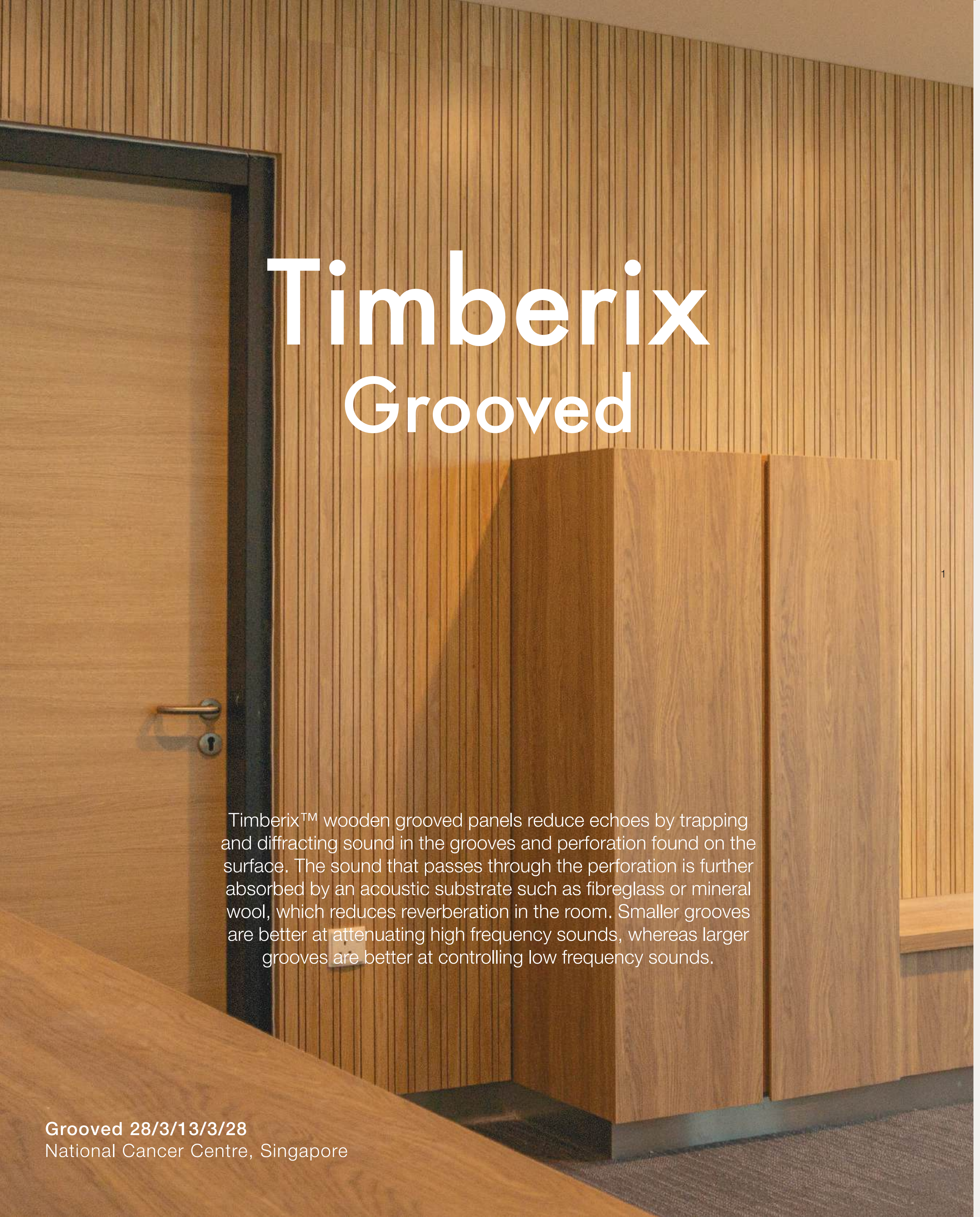
United States | United Kingdom | Switzerland | Dubai | South Africa | Singapore | Oceania



Timberix
Grooved

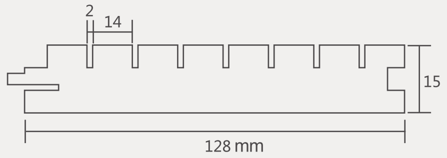
Timberix™ wooden grooved panels reduce echoes by trapping and diffracting sound in the grooves and perforation found on the surface. The sound that passes through the perforation is further absorbed by an acoustic substrate such as fibreglass or mineral wool, which reduces reverberation in the room. Smaller grooves are better at attenuating high frequency sounds, whereas larger grooves are better at controlling low frequency sounds.

Grooved 28/3/13/3/28
National Cancer Centre, Singapore

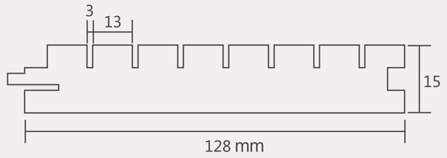
Pattern 14-2

Pattern 13-3

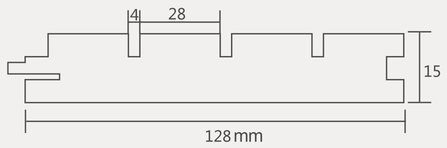
Pattern 28-4



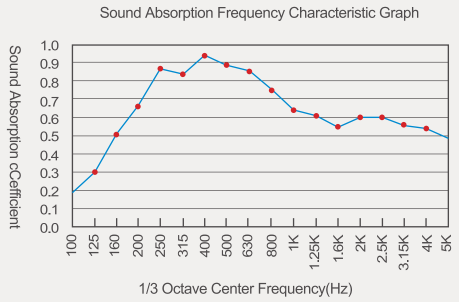
(Pattern 14-2) Perforation Rate:7.5%

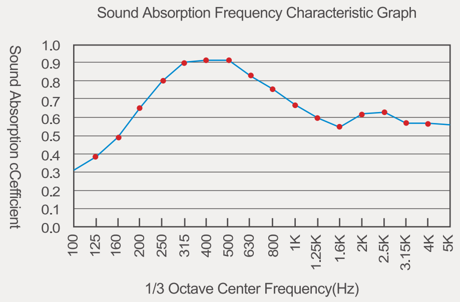


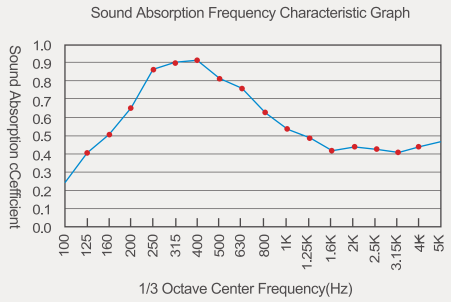
(Pattern 13-13) Perforation Rate:12%



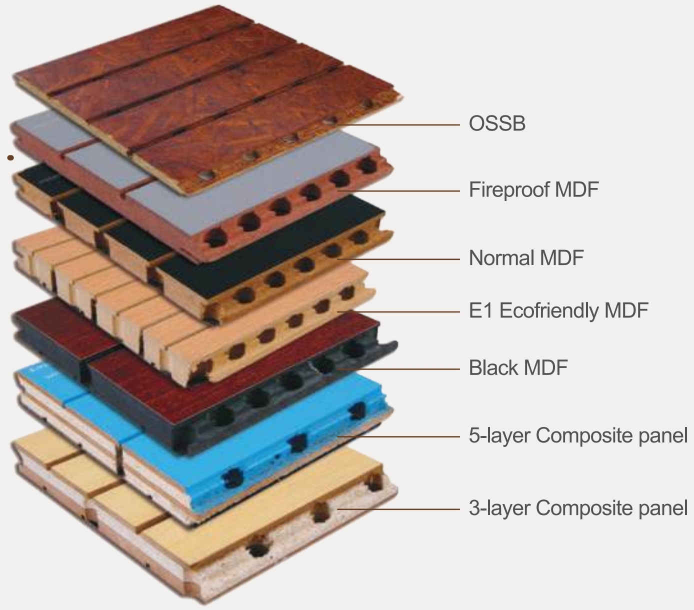
(Pattern 28-4) Perforation Rate:7%





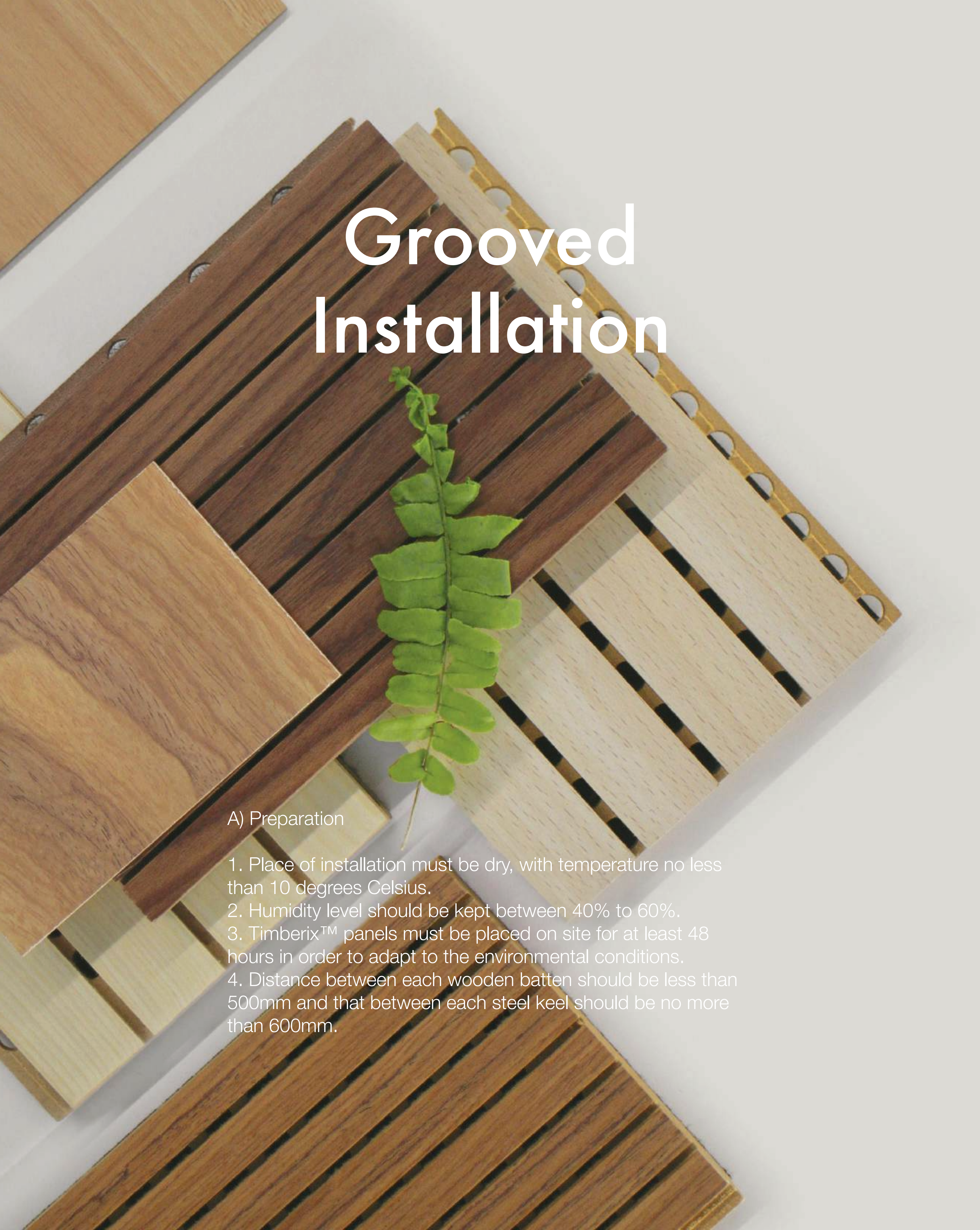


Our wooden grooved acoustic panel is made up of a series of slats and grooves. Each panel has a machined tongue and groove joint for a seamless joinery. Timberix™ wooden grooved panels come in 4 different patterns: 13-3, 14-2, 28-4, 59-5. The first number refers to the slat size (mm) and and second number refers to the groove size (mm). The surface comes in 4 types of finishing: paint, melamine, PP, and veneer. The base material can be made of MDF, fire-resistant MDF, eco-friendly MDF, black MDF, 3-layer composite, 5-layer composite or OSB.



Specifications

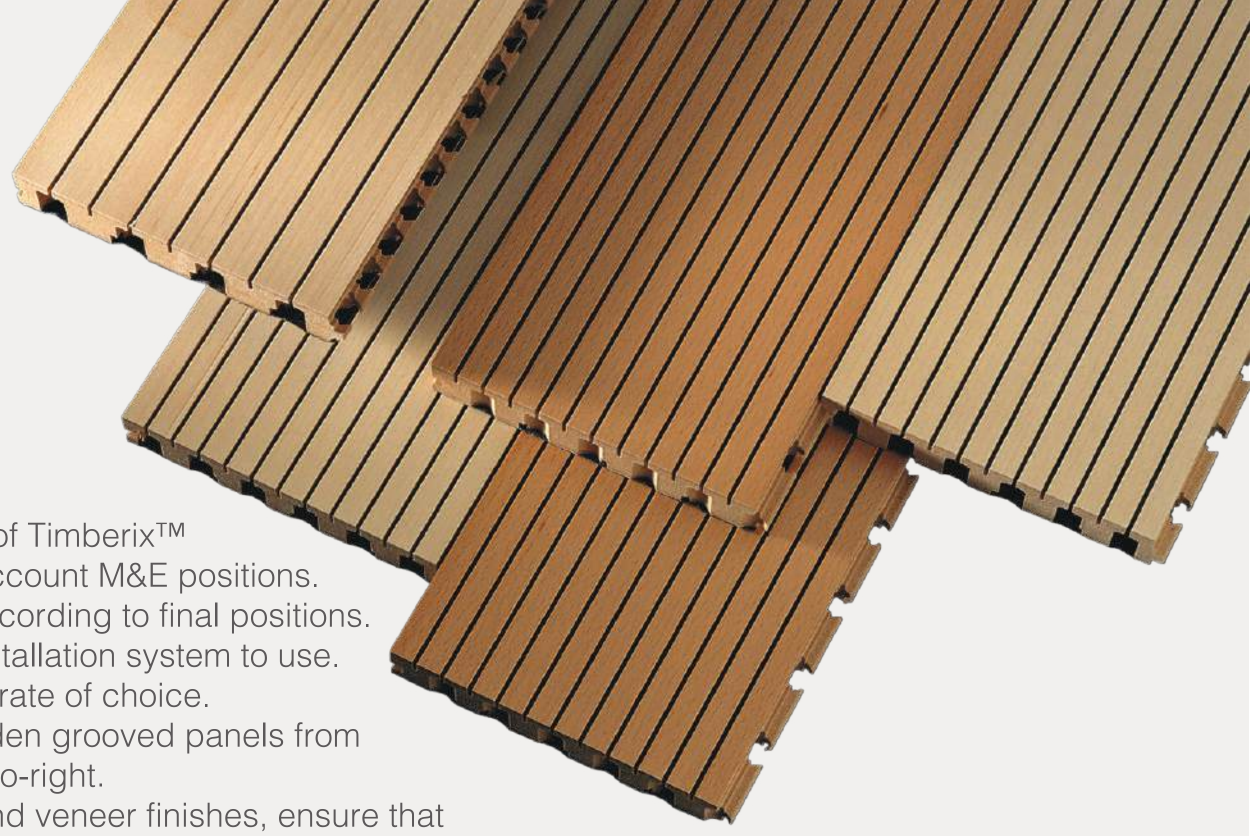
1. Structure: Base Material, Finishing & Fleece
2. Material: E1 MDF, FR MDF, MgO Composite Board, etc.
3. Finishing: Paint, Melamine, PP, Veneer, etc.
4. Standard Dimension: 2420*192mm, 2420*128mm
5. Standard Thickness: 12mm, 15mm,18mm
6. Standard Pattern: 13-3,14-2, 28-4, 59-5
7. Eco-Friendly Test: EN 13986 = E1
8. Fire-Rated Test: EN 13501-1 = Class B s1, d0



Grooved Installation

A) Preparation

1. Place of installation must be dry, with temperature no less than 10 degrees Celsius.
2. Humidity level should be kept between 40% to 60%.
3. Timberix™ panels must be placed on site for at least 48 hours in order to adapt to the environmental conditions.
4. Distance between each wooden batten should be less than 500mm and that between each steel keel should be no more than 600mm.

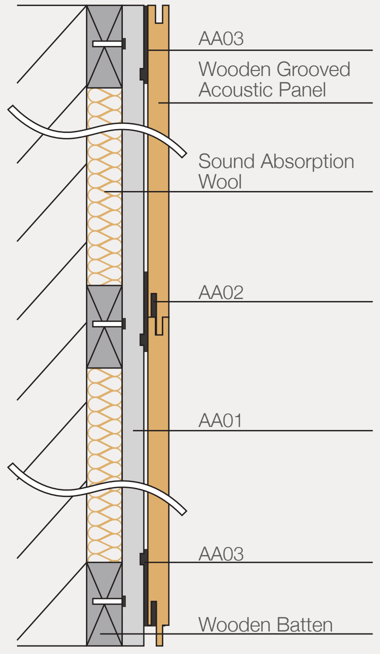


B) Installation

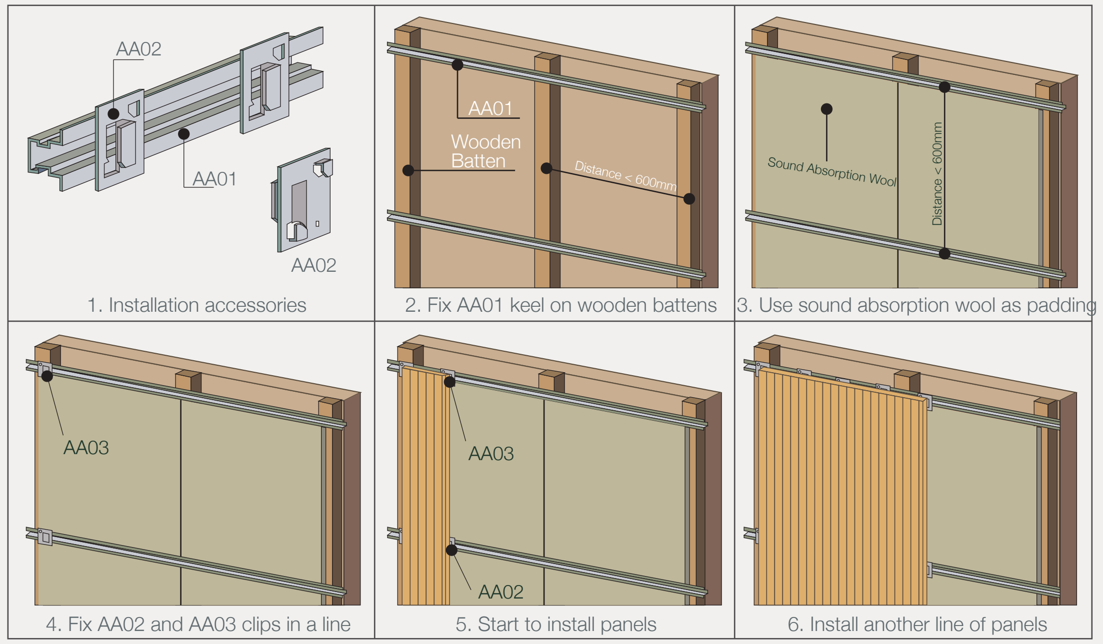
1. Mark out placement of Timberix™ panels, and take into account M&E positions.
2. Cut panels to size according to final positions.
3. Decide on type of installation system to use.
4. Install acoustic substrate of choice.
5. Join Timberix™ wooden grooved panels from top-to-bottom, and left-to-right.
6. For wood laminate and veneer finishes, ensure that wooden grooved panels are installed with matching grain directions.
7. Clean surface of the Timberix™ panels with compressed air and gently wipe with dry cloth.

C) Installation System

1. Steel keel system
2. Wooden batten system



Cross-section Structure



1. Installation accessories
2. Fix AA01 keel on wooden battens
3. Use sound absorption wool as padding
4. Fix AA02 and AA03 clips in a line
5. Start to install panels
6. Install another line of panels

Installation: Steel Keel System

Timberix Grooved 13/3
Ang Mo Kio Show Flat, Singapore

Media Hall

Location
Ang Mo Kio Show Flat, Singapore

Client
Private

Architect
W Architects

Main Contractor
Tong Hai Yang Construction

The media hall located at Ang Mo Kio in Singapore was designed to achieve acoustics specifications of Sound Transmission Class (STC) 55, Impact Isolation Class (IIC) 50, and Reveberation Time to decay 60 Decibels (RT60) time of 0.8 seconds.

The client has shortlisted Timberix to achieve the required RT60 time.

Timberix grooved panels with grooves 13/3 in oak veneer finish were installed onto the walls of the media hall. The acoustic panels were installed with 50mm insulation and 50mm air cavity, which reduces the mid-low frequency sounds.

Timberix
Perforated

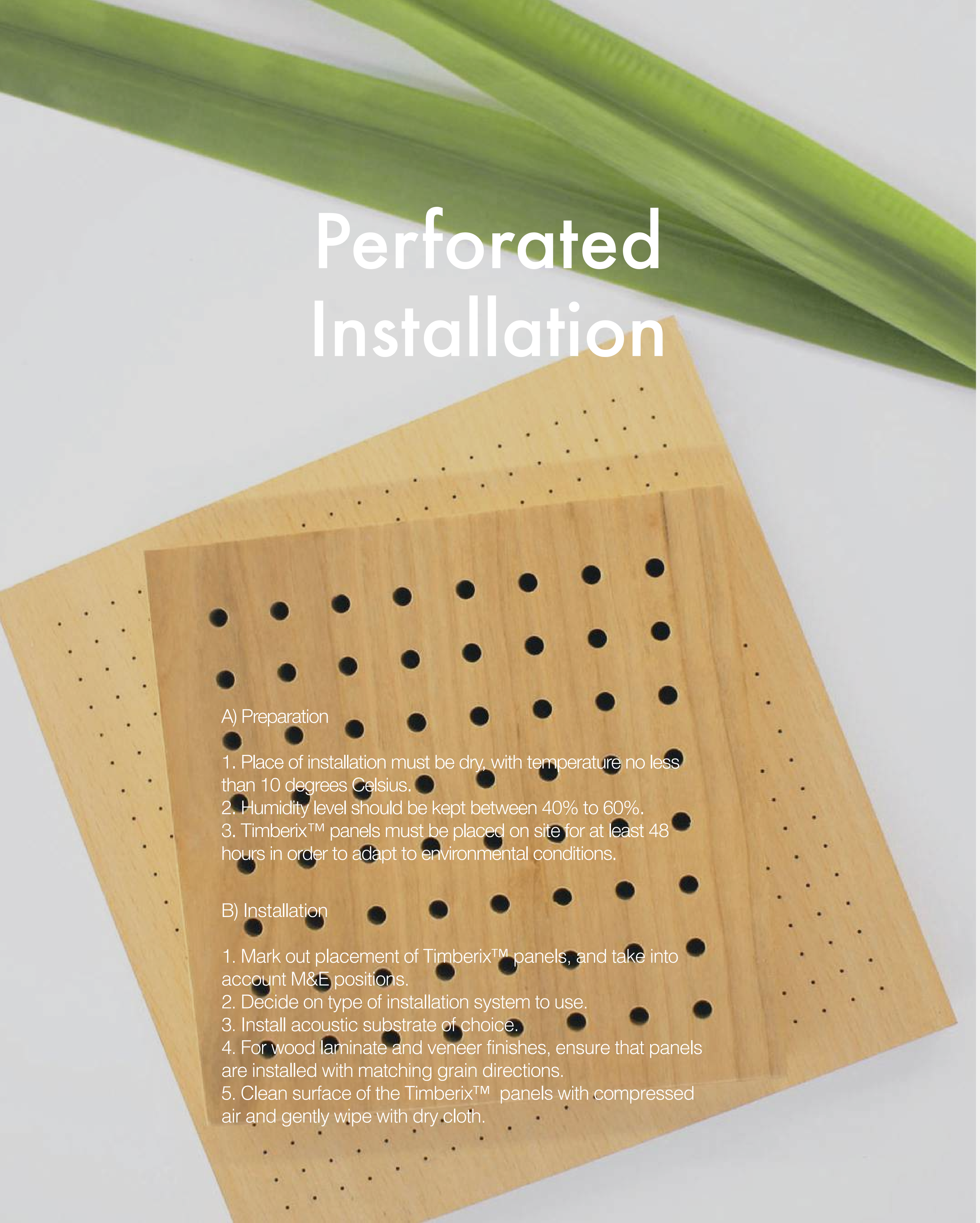
Timberix™ wooden perforated panels is made with a 2-layer perforation structure, which traps and diffracts sound in the holes. The sound that passes through the perforation is further absorbed by an acoustic substrate such as fibreglass or mineral wool, which reduces reverberation in the room. The perforation comes in many sizes ranging from 1mm to 25mm. Smaller holes are better at attenuating low frequency sounds, whereas larger holes are better at reducing high frequency sounds.

Specifications

1. Structure: Basic Material, Finishing & Fleece
2. Material: E1 MDF, FR MDF, MgO Composite, etc.
3. Front Surface: Melamine, PP, Wood Veneer, Paint, etc.
4. Standard Dimension: 600mm x 600mm, 600mm x 1200mm, 1200mm x 1200mm, 1200mm x 2400mm
5. Standard Thickness: 12mm, 15mm, 18mm
6. Distances of Two Holes: 8/8mm, 16/16mm and 32/32mm
7. Diameter of Holes: 1, 2, 3, 4, 5, 6, 8,10, 12mm, etc.
8. Standard Pattern: E8/8/3, E16/16/6, E16/16/8, E32/32/6, E32/32/8, V8/8/3, V16/16/6, V16/16/8, V32/32/6, V32/32/8
9. Microperforated Pattern: E4/4/1, E8/8/1, V4/4/1, V8/8/1, V1.8/1.8/0.5, V3.6/1.8/0.5
9. Hole Arrangement: Linear (E), Staggered (V)
10. Eco-Friendly Test: EN 13986 = E1
11. Fire-Rated Test: EN 13501-1 = Class B s1, d0

Our wooden perforated acoustic panel is made up of a series of perforations. Each panel has a machined groove joint for either a seamless or gap joinery. Timberix™ perforated panels come in 10 standard patterns and the microperforated panels come in 6 standard patterns. The first alphabet refers to the hole arrangement (E is linear and V is staggered), the second pair of numbers refer to the distance between the two holes, and the last number refers to the hole diameter. The surface comes in 4 types of finishing: paint, melamine, PP, and veneer. The base material can be made of MDF, fire-resistant MDF, eco-friendly MDF, black MDF, 3-layer composite, 5-layer composite or OSB.

Microperforated V3.6/1.8/0.5
67 Pall Mall, Singapore



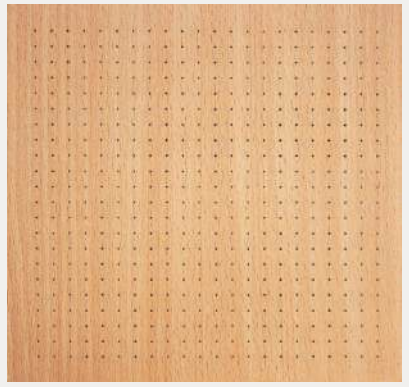
Perforated Installation

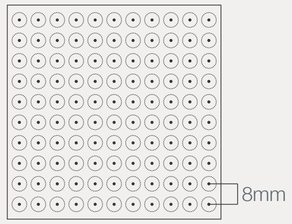
A) Preparation

1. Place of installation must be dry, with temperature no less than 10 degrees Celsius.
2. Humidity level should be kept between 40% to 60%.
3. Timberix™ panels must be placed on site for at least 48 hours in order to adapt to environmental conditions.

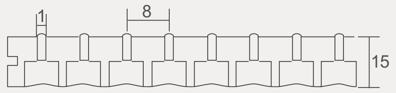
B) Installation

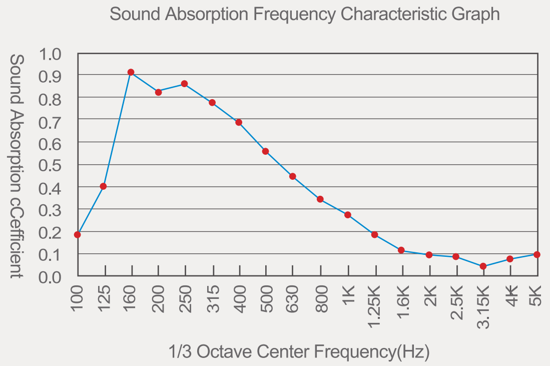
1. Mark out placement of Timberix™ panels, and take into account M&E positions.
2. Decide on type of installation system to use.
3. Install acoustic substrate of choice.
4. For wood laminate and veneer finishes, ensure that panels are installed with matching grain directions.
5. Clean surface of the Timberix™ panels with compressed air and gently wipe with dry cloth.

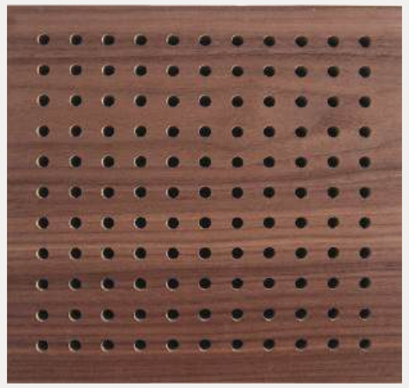


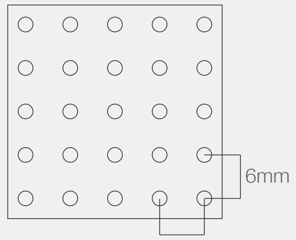


Pattern:
8-8-1 Micro Holes

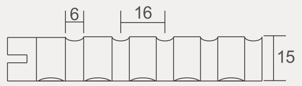


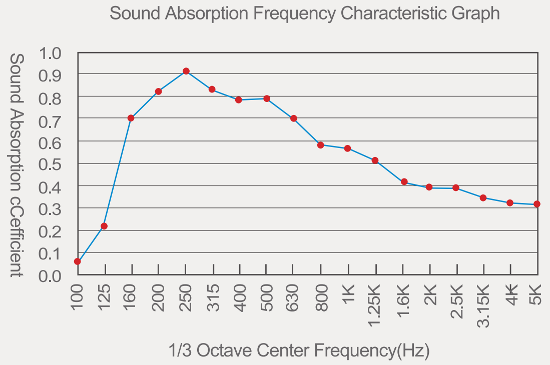






Pattern: 16-16-6



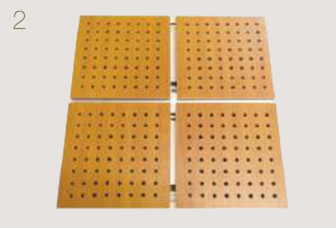


C) Installation System

Wooden panels expand and contract with changes in humidity and temperature. We strongly recommend using Installation System I (with gap) to prevent buckling of panels.

Installation System I (with gap)

1


2


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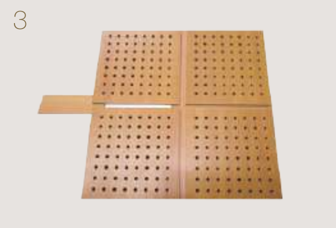
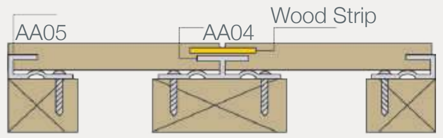
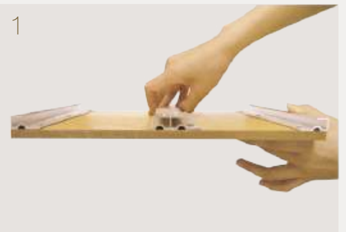




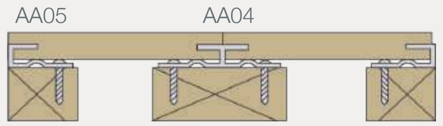
Cross-section Structure

Installation System II (without gap)

1


2


3

Cross-section Structure

Timberix Microperforated V3.6/1.8/0.5
Wakuda, Singapore

Restaurant

Location
Bayfront Ave, Tower 2, Singapore

Client
Marina Bay Sands

Architect
Kyriiacou Architects

Main Contractor
Kingsmen Projects

Wakuda is a Japanese restaurant by chef Tetsuya Wakuda who owns 2 Stars Michelin restaurant Waku Ghin. The restaurant opened its doors in the iconic Marina Bay Sands Hotel in April 2022. Timberix™ microperforated V3.6/1.8/0.5 acoustic panels were installed to manage reverberations for a comfortable Japanese omakase dining experience.

These microperforated panels have approximately 500,000 perforations per square metre. They attenuate sound through resonance absorption and the acoustic substrate behind the panels.

As a bespoke project, Timberix collaborated with Japanese artist Jun Inoue to have his artwork painted on the acoustic panels. The panels were flown to Japan to be painted before installing them in the restaurant. The original artwork on the Timberix panels is titled "The Ingredients That Arrived".

Timberix™ Melamine

0.1mm Thick
Low-Pressure Laminate


Akureyri Maple Crown


Umea Oak Straight


Tottori Oak Crown


Almeria Walnut Crown


Machala Rosewood Crown


Ibarra Walnut Crown


Punto Fijo Walnut Crown


Maiduguri Walnut Crown


Suva Oak Straight

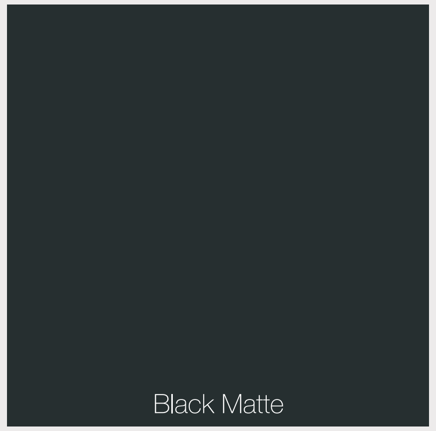

Teresina Oak Crown


Malabo Rosewood Crown


Djenne Walnut Crown


Nizwa Walnut Crown


Bejaia Walnut Crown


Black Matte


White Matte

Timberix™ Veneer

0.6mm Thick
Natural or Reconsituted


Sakai Bamboo Straight


Rijeka Oak Crown


Kouvola Oak Straight


Tromso Oak Straight


Malmo Birch Figured


Tarakan Bamboo Straight


Yllas Sycamore Figured


Cuenca Anigre Straight


Esmeraldas Oak Crown


Nueva Loja Oak Crown


Makurdi Walnut Crown


Tarija Rosewood Crown


Gokarna Oak Crown


Nabeul Eucalyptus Straight


Black Glossy Paint


Ivory White Glossy Paint