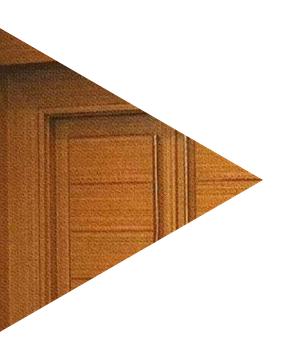






Wooden Panel Acoustical Systems



For World-class sound absorption & reverberation control, Tranquil Ecowood Wooden Panels offer the best solution.

These panels are a wide range of perforated, grooved wooden wall & ceiling panels.

These are available in a standard range of veneers and laminate surfaces. Their design is durable and offer invisible interlocking and concealed fixing systems to ensure a seamless fit.



Grooved Acoustic Panel is a kind of slit resonance absorption material which is made from high density panel with grooves on the surface and perforated holes at the back side. It has strong selection on the sound spectrum and particular great performance on the middle and low frequency. It has better sound absorbing effect on medium and high frequency if there is Ecowool (sound absorption cotton) filled at the back side cavity.

SPECIFICATION

- ► Structure: Core Material, Surface & Back Surface
- Core Options: Fire Rated MDF, Non Fire Rated MDF, 5 Layer Composite Panel & 3 Layer Composite Panel.
- ▶ Surface: Melamine, Veneer, HPL, Painted, Metal sheet, Artificial Veneer etc.
- ► Back Surface: Black Fleece
- Dimension: 2440*128mm, 2440*192mm
- Density: Fire rated MDF 820 Kg / m 3
- ▶ NRC: Upto 0.90
- ► Thickness: 12/15/15mm
- ► Performance: Sound Absorption/Noise Reduction
- ► Eco-Friendly: Class El
- Fireproofing: Class Bl
- Installation: Easy to be Installed by Wood Batten System or Lightweight Steel Keel System.

FEATURES

- ► Excellent Sound Absorption & Reverberation Control
- ► Fire Rated & Low Formaldehyde
- ► High Impact & Durable
- Black Felt Backing
- Invisible Interlocking & Concealed Fixing System



LINEAR GROOVED PANELS

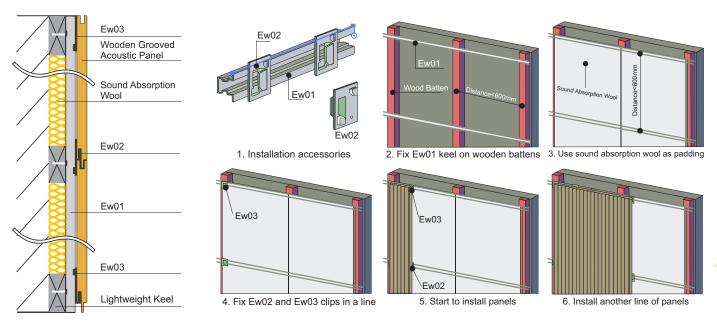
STANDARD MODEL

2 strips 1 Groove: 59/5 60/4

4 strips 3 Grooves: 28/4 29/3

8 strips 7 Grooves: 13/3 14/2

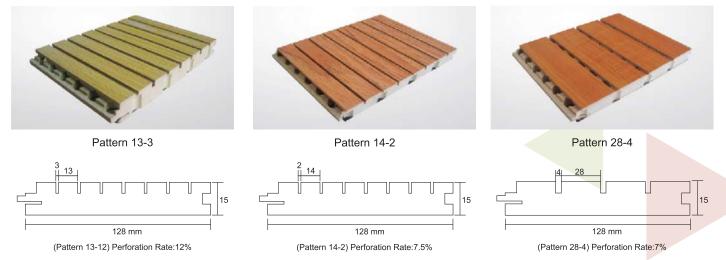
FIXING DETAILS



Cross-section Structure

Installation: Lightweight Steel Keel System

LINEAR GROOVED PATTERNS





ABSORPTION COEFFICIENT

One third octave Frequency	Random Incidence Sound Absorption Coefficient	Standard Deviation
100	0.15	0.01
125	0.20	0.03
160	0.42	0.04
200	0.57	0.03
250	0.67	0.01
315	0.78	0.06
400	0.94	0.03
500	0.97	0.03
630	0.93	0.05
800	0.81	0.01
1000	0.71	0.01
1250	0.60	0.01
1600	0.49	0.01
2000	0.41	0.01
2500	0.39	0.01
3150	0.41	0.01
4000	0.51	0.02
5000	0.57	0.03

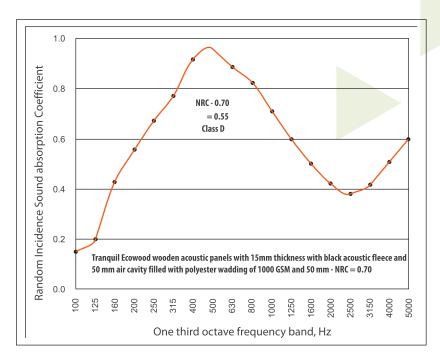


Table 1 and figure 02: Values and Plot for Random incidence sound absorption coefficient of Tranquil Ecowood Wooden Acoustic panels of 15 mm thickness with black acoustic fleece and 50 mm air cavity filled with polyester wadding of 1000 GSM and 50 mm at one third octave frequencies

One third octave Frequency	Random Incidence Sound Absorption Coefficient	Standard Deviation
100	0.20	0.04
125	0.19	0.05
160	0.41	0.04
200	0.54	0.03
250	0.70	0.03
315	0.75	0.02
400	0.87	0.01
500	1.00	0.05
630	0.99	0.01
800	0.97	0.01
1000	0.97	0.02
1250	0.92	0.02
1600	0.85	0.01
2000	0.78	0.01
2500	0.75	0.01
3150	0.80	0.01
4000	0.83	0.01
5000	0.83	0.01

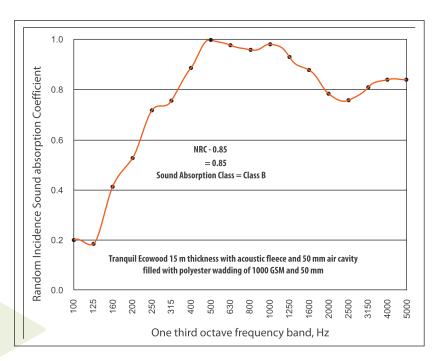


Table 1 and figure 02: Values and Plot for Random incidence sound absorption coefficient of Tranquil Ecowood Wooden Acoustic panels of 15 mm thickness with black acoustic fleece and 50 mm air cavity filled with polyester wadding of 1000 GSM and 50 mm at one third octave frequencies



APPLICATIONS



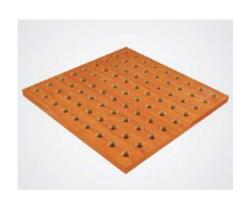




Tranquil Perforated Acoustic Panel is made of high quality MDF board and has outstanding environmental, flame retardant and waterproof functions. The various colors and finish choices can satisfy all the customer's acoustic and decoration requirements. Compared with the grooved acoustic panel, the perforated panel has the better impact against effect. The highest fire retardant grade can reach A2(GB) grade, and the best environmental protection can reach EI (GB) grade

SPECIFICATION

- Width: 600mm 11200mm 11220mm
- Length: 800mm 11200mm 12400mm 12440mm
- ► Thickness: 12mm | 15mm | 18mm
- ► Allowance: Width=±1mm, Length=±1mm, Thickness=±0.2mm



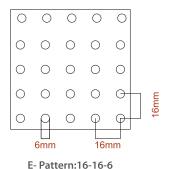
E-Shaped holes

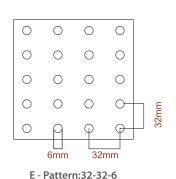
E: 32/12 E: 32/10

E: 16/8 E: 16/6

E: 16/4 E: 16/3

E: 5/1.5



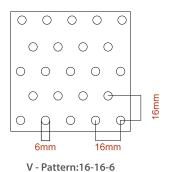


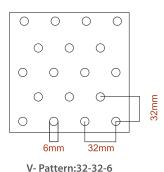
V-Shaped holes

V: 32/12 V: 32/10

V: 16/8 V: 16/6

V: 16/4





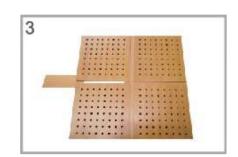


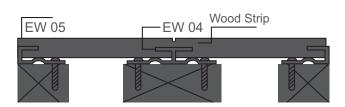
INSTALLATION

Installation System I (with gap)









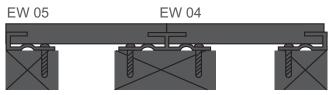
Cross-section Structure

Installation System II (without gap)

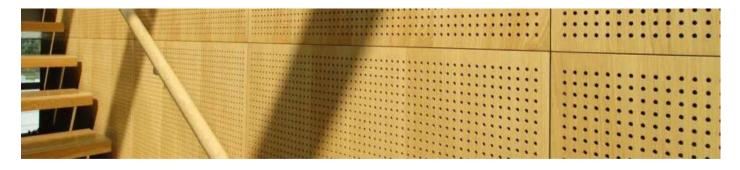








Cross-section Structure





MICRO PERFORATED ACOUSTIC PANELS

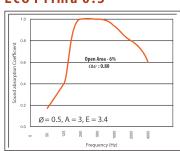
Tranquil Ecowood Micro Perforated Panel is a new generation product which merges great acoustics and up to date design. These panels can be used for both wall linings and ceilings planking. There are two types of perforations available with 0.5mm and 1mm holes. Perforated surface panel with 0.5mm holes is 6% whereas for the panel with 1mm is 9%. Good acoustics properties are guaranteed surface are almost invisible and the panel looks like a homogeneous veneer without holes. This makes it a perfect surface as an acoustic element and at the same visually comfort component, making it a right choice for public spaces and private house interiors.

SPECIFICATION

- Perforation: 0.5mm & 1.00mm
- MDF: Fire Rated or Moisture Resistant MDF
- Surface Finishing: Veneer, HPL, Colored
- Thickness: 16mm & Custom
- Sizes: 600*600,1200*600,1200*1200
- Installation: Aluminium Profile System of Ecowood Tiles.

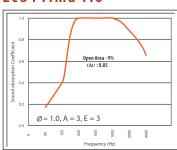


Eco Prima 0.5





Eco Prima 1.0



0.5 mm Micro Perforation



1.0 mm Micro Perforation



ECUVOOden Panel Acoustical Systems



COLOR PATTERNS



TREW 015 Bliss Walnut



TREW 042 Plateau Teak



TREW 046 Atlas Cherry



TREW 007 Oak White



TREW 012 Frosty Grey



TREW 026 Silver Grey



TREW 043 Merban



TREW 025 Brazilian Cherry



TREW 028 Portland Oak



TREW 048 Beech



TREW 101 Bright White



TREW 014 Arctic White



TREW 027 Coqnac



TREW 052 Borneo Teak



TREW 019 Tuscany Walnut



TREW 045 Dark Oak



TREW 028 Porland Oak



TREW 011 Light Cherry



TREW 020 Maple



TREW 035 Brazilian Cherry

*The product color may vary due to photographic lighting sources.



DESIGN PATTERNS

CUSTOM DESIGNS



CS 1001



CS 1002



CS 1003



CS 1004



CS 1005



CS 1006



CS 1007



CS 1008



CS 1009



CS 1010



CS 1011



CS 1012



CS 1013



CS 10014



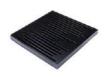
S56D Slots



S56 Slots



S32 Square

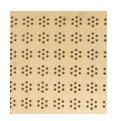


SI100 Slots Offset

PERFORATED



P616D Holes



Pf3 Holes



P616 Holes



P416 Holes



P816 Holes



P932 Holes



Pf1 Holes



P316 Holes



Pf05



DIFFUSERS.



1D Diffuser



2D Fiffuser



3D Pyramid Diffuser



Diffuser 36



Diffuser 101



Diffuser 104



Diffuser-J10



Difuser 6020



Diffuser-DF-30



Diffuser 105



Diffuser 106



Diffuser-6T



Pyramid



Radius

LINEAR



Grooves 168



Grooves 324



Grooves 816





APPLICATIONS













INTRODUCTION

Tranquil Slatted Wooden Acoustic Panels are high-performance, eco-friendly acoustic panels made from sustainably harvested, environmental friendly materials. Each panel is handcrafted, which not only adds to the visual sense of decoration but also creates a quieter and more comfortable environment. These are slender pieces of wood with spaces between them that bring the beauty of nature to your space, elevating it. The Slatted Wooden Panels are fashionable do-it-yourself (DIY) wall panels made of medium-density fbre board (MDF) that can be easily mounted on a wall to add texture and elegance to the space. These panels are fie resistant, have a wwood finish, and e extremely sound absorbing. Concert halls, conference rooms, reception backdrops, hotel lobbies, corridors, residences, meeting rooms, recording stations, studios, schools, shopping malls, and offices are just a few examples of where it can be used.

PRODUCT ADVANTAGES

- ▶ Stable product quality and zero complaints.
- ▶ Standard products, available for stock.
- Functional products with sound absorption, strong decorative.
- Wide range of applications: suitable for both house and industry decoration.
- Applicable website sales and distributor channel sales

SPECIFICATION

- ► Size: 2400x400x21mm / 2400x160x21mm / 2400x600x21mm
- Weight: About 8.5kgs/M²
- Fire Rating: Class B
- ▶ Material: 100% Polyester fiber acoustic panel +E0,E1,E2 grade HDF wood slat/ solid wood
- ▶ Wood Surface: Any wood venner / HPL board / any melamine color
- ▶ Application: Hotel lobby, Corridor, Room decoration, Residences conference hall, Recording rooms, etc

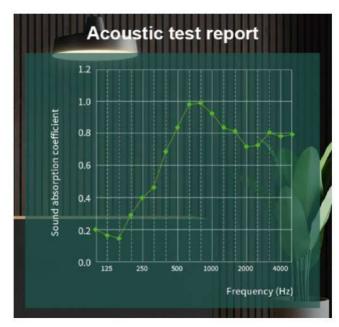






FUNCTION DISPLAY

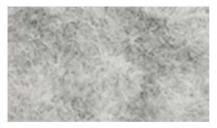




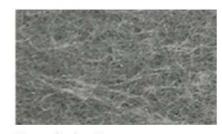
MATERIAL ANALYSIS



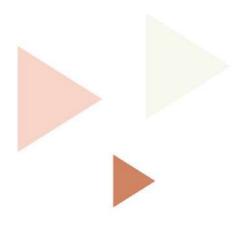
COLOR CHART Polyester Color Swatches

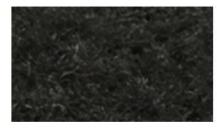






Moonlight Grey





Black



WOOD FINISH



TRES-01



TRES-02



TRES-03



TRES-04



TRES-05



TRES-06

Fireproof Finish



TRES-07



TRES-08



TRES-09

Melamine Finish



TRES-10



TRES-11



TRES-12



APPLICATIONS





