green ACOUSTICS

WOODYSORBER

GROOVED ACOUSTIC PANEL GA SERIES

The majority middle and low frequency sound absorption and noise reduction materials

PRODUCT INTRODUCTION

Grooved acoustic panel is the common sound absorption materials in modern buildings. According to the principle of acoustic science, the structure of the product is a groove on the surface and a through hole on the back is basing on scientific calculation and acoustic theories. The panel has excellent noise reduction and sound absorption performance, especially for medium and low frequencies（the peak value of sound absorption is biased towards middle and low frequencies). Meanwhile, the natural wood grain and diverse finish provide good visual effects for everyone.

SPECIFICATIONS

Name Grooved Acoustic Panel	**Size** W 133/197mm*L 2440mm*T 12/15/18mm, other customized
Model GA59-5/40-3/28-4/18-3/14-2/13-3/9-2/ 5-3/Art, other customized	**Base Materials** A grade MGO board/Red fire-resistant MDF/Standard MDF/Black HDF/ Pine eco-friendly MDF/other customized
Finish Veneer/Melamine/HPL /PU Paint	**Back** Black Fire-resistant Sound Absorbing Fleece / Soundtex Sound Absorbing Fleece

Fire Performance
Fire-resistant panels can reach class A under ASTM-E84 1 or under BS476 part 7 standard

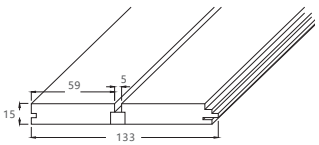
Eco Performance
All materials meet the national and international environmental protection standard E1/E0

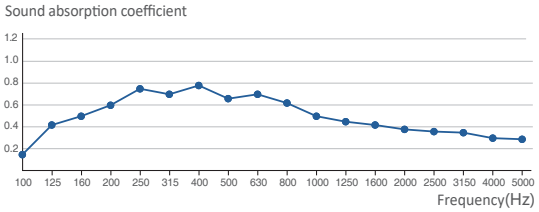
ACOUSTIC PARAMETERS

GA59-5

Class C

Open area: 5.5%



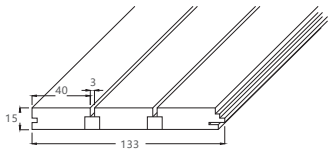


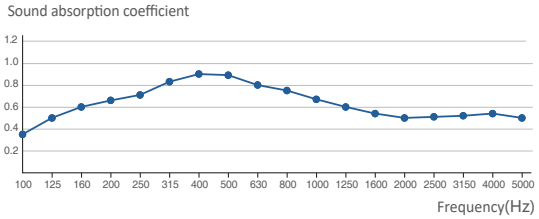
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.15	0.42	0.50	0.60	0.75	0.70	0.78	0.66	0.70	0.62	0.50	0.45	0.42	0.38	0.36	0.35	0.30	0.29

GA40-3

Class C

Open area: 5.0%



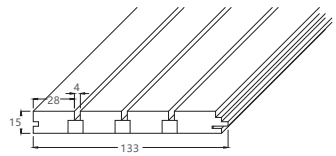


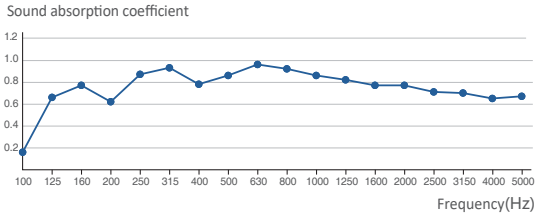
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.35	0.50	0.60	0.66	0.71	0.83	0.90	0.89	0.80	0.75	0.67	0.60	0.54	0.50	0.51	0.52	0.54	0.50

GA28-4

Class C

Open area: 8.0%



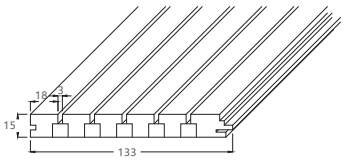


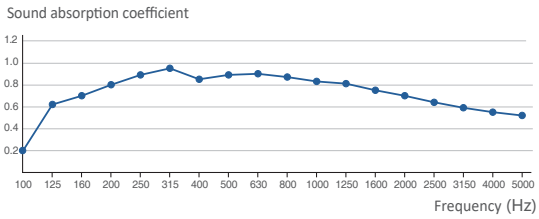
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.16	0.66	0.77	0.62	0.87	0.93	0.78	0.86	0.96	0.92	0.86	0.82	0.77	0.77	0.71	0.70	0.65	0.67

GA18-3

Class C

Open area: 9.0%



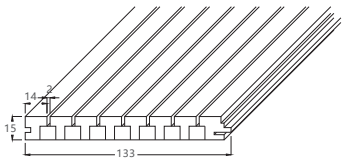


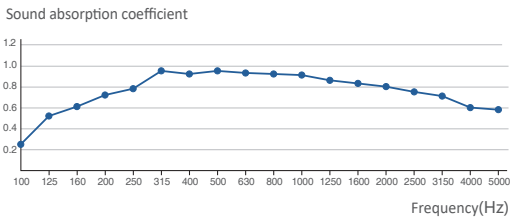
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.20	0.62	0.70	0.80	0.89	0.95	0.85	0.89	0.90	0.87	0.83	0.81	0.75	0.70	0.64	0.59	0.55	0.52

GA14-2

Class A

Open area：8.0%



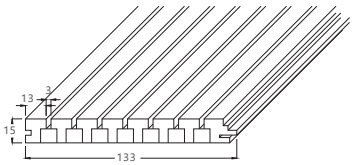


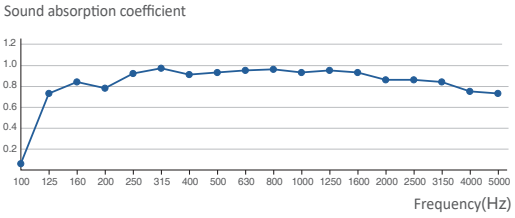
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.25	0.52	0.61	0.72	0.78	0.95	0.93	0.95	0.93	0.92	0.91	0.86	0.83	0.80	0.75	0.71	0.60	0.58

GA13-3

Class A

Open area：12.0%



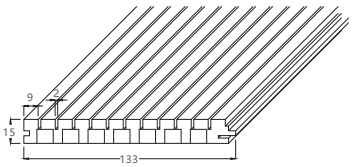


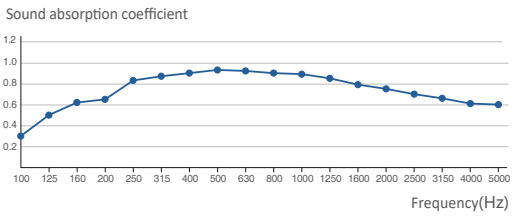
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.06	0.73	0.84	0.78	0.92	0.97	0.91	0.93	0.95	0.96	0.93	0.95	0.93	0.86	0.86	0.84	0.75	0.73

GA9-2

Class C

Open area：12.0%



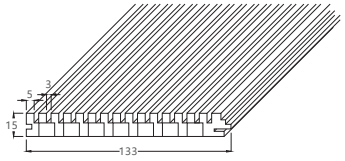


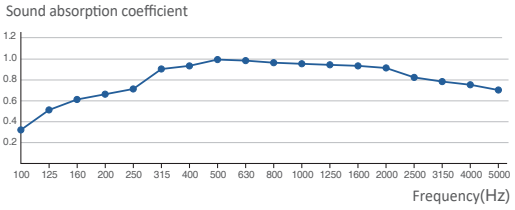
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.30	0.50	0.62	0.65	0.83	0.87	0.90	0.93	0.92	0.90	0.89	0.85	0.79	0.75	0.70	0.66	0.61	0.60

GA5-3

Class C

Open area：19.0%



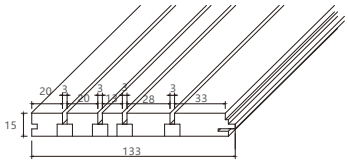


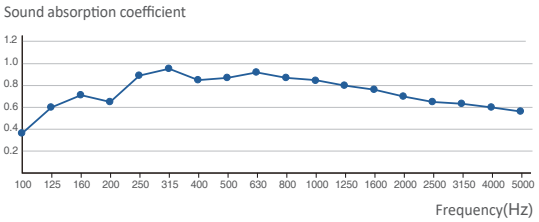
Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.32	0.51	0.61	0.66	0.71	0.90	0.93	0.99	0.98	0.96	0.95	0.94	0.93	0.91	0.82	0.78	0.75	0.70

Random Pattern
GA-Art

Class C

Open area: 7.5%





Frequency	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Sound absorption coefficient	0.36	0.60	0.71	0.65	0.89	0.95	0.85	0.87	0.92	0.87	0.85	0.80	0.76	0.70	0.65	0.63	0.60	0.56

BASE MATERIAL CATEGORY

A grade MGO board

Red fire-resistant MDF

Black HDF

Pine eco-friendly MDF

Standard MDF

FINISHES

Natural Veneer

WY-NV01S
White Oak Straight Grain

WY-NV02M
White Oak Mountain Grain

WY-NV04M
Maple Mountain Grain

WY-NV06M
Walnut Mountain Grain

WY-NV07M
Cherry Mountain Grain

WY-NV08M
Ash Crown (wire-brushed)

WY-NV09M
Ash Crown (wire-brushed, dyeing)

WY-NV12
Carbonized Bamboo (vertical)

WY-NV14
Eucalyptus

WY-NV18
Figured Maple (glossy)

Engineered Veneer

WY-EV01S
Ash Crown

WY-EV02S
Whitewash White Oak

WY-EV04S
White Oak B

WY-EV05M
White Oak C

WY-EV12M
White Maple B

WY-EV15M
Cherry B

WY-EV18M
Walnut C

WY-EV20S
Chinese Ash

WY-EV21
Silver Pear A

WY-EV29S
Teak B

* Due to the limited layout, please refer to the wood veneer, melamine and HPL color chart for more finishes.

Melamine

WY-01
European maple

WY-02
Classic white oak

WY-03
Natural gray oak

WY-07
Silver line

WY-08
Noble walnut

WY-10
Elegant walnut

WY-H070
Beech

WY-H080
Maple

WY-H160
Cherry

WY-H208
Ashtree

WY-H267
Oak

WY-H557
Osmanthus

HPL

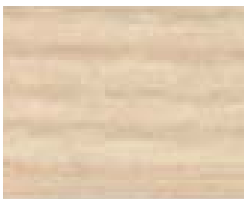
0756
Natural Maple

7012
Amber Maple

9281
Ash Riftwood

9005
Fineline

0860
Blond Afromosia



8843
Natural Ash

9348
Subtropical Light Oak

0870
Dawn Cherry

0874
Hazelnut Cherry

9222
Grayed Maple

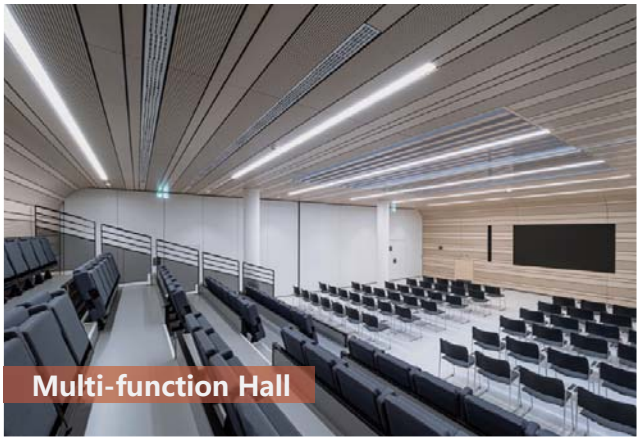
* Due to the limited layout, please refer to the wood veneer, melamine and HPL color chart for more finishes.

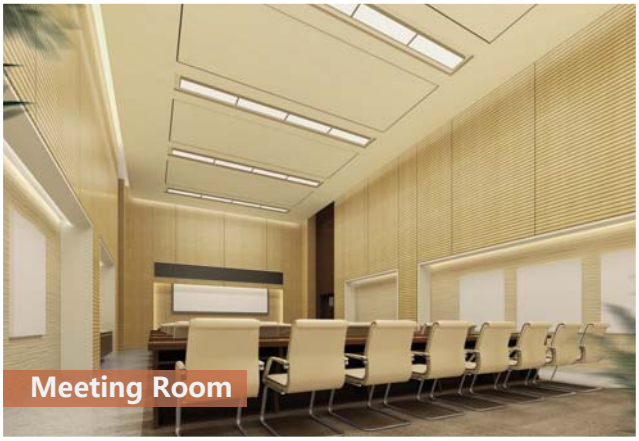
APPLICATION

Multi-function hall, opera house, conference room, cinema, auditorium, TV station, piano room, gymnasium and other places with strict acoustic requirements.

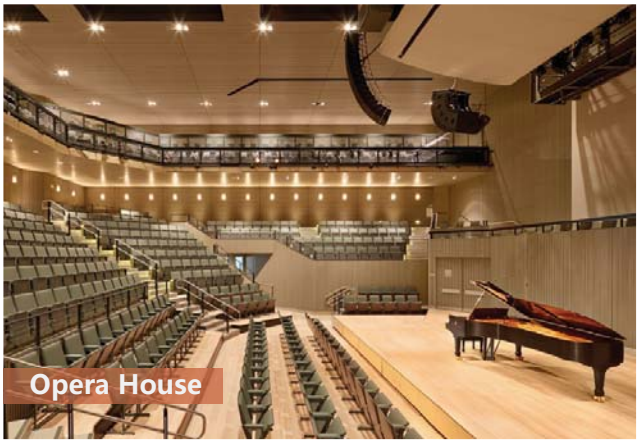

Multi-function Hall

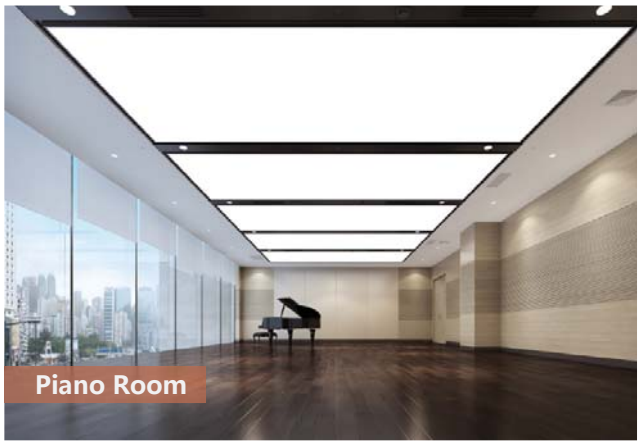

Conference Hall


Multi-function Hall


Meeting Room


Lecture Hall

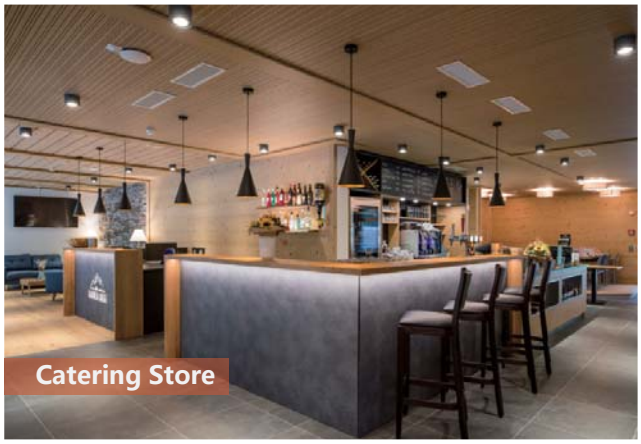

Opera House


Piano Room


Hotel


Office

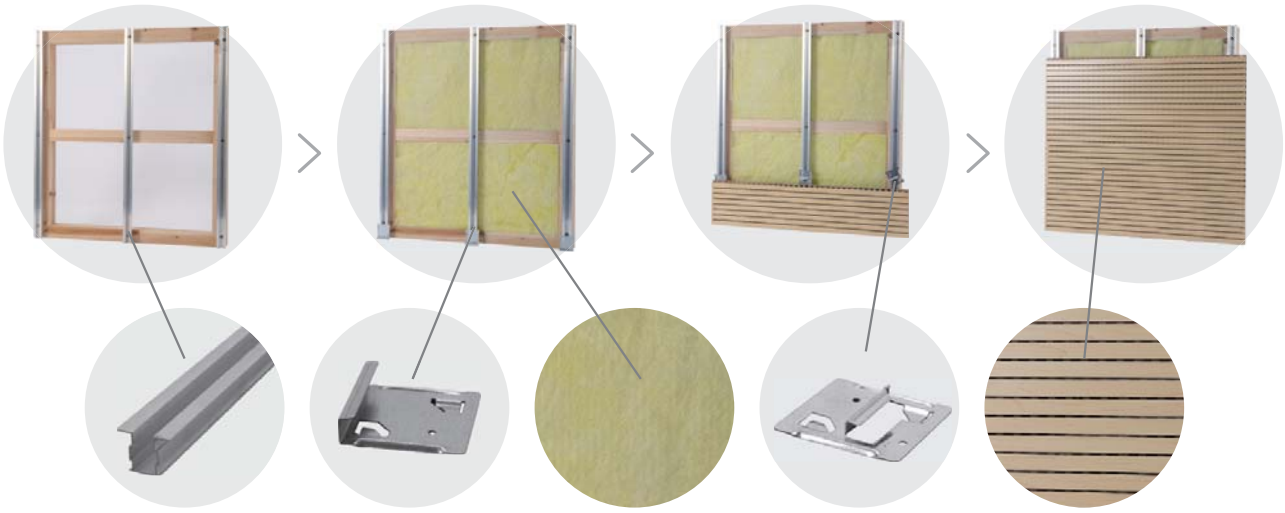

Shopping Mall


Catering Store


(Indoor) Basketball Court

INSTALLATION GUIDE

WALL INSTALLATION METHOD



WY-GA01
Keel

WY-GA02
Side-clip

Acoustic wool

WY-GA03
Clip

Groove acoustic panel

Preparation before installation and requirements of the installation site

01 The installation site must be dry and reach the specified temperature and humidity standards at least 24 hours before installation. The minimum temperature required by the installation site is 15 degrees, and the maximum humidity change value after installation should be controlled within the range of 40%-60%.

02 Before installation, the packaging box must be opened for at least 48 hours, so that the product can achieve the same environmental characteristics as the installation site.

03 To install the wood keel or steel keel as per design drawing and construction drawing. The configuration for the keel should be the same as the wood acoustic panel. The recommended distance is 300~600mm.

04 The gap between the keel should be filled with acoustic wool, which needs to be installed and treated in advance according to the design, and will not affect the installation of the acoustic panel.

STEEL KEEL AND CLIPS INSTALLATION METHOD

1.Fix keel WY-GA01 on the wooden battens by gunnail and screw.

2.Clip WY-GA02, WY-GA03 insert into keel WY-GA01, pls make sure the wood acoustic panel be fixed.

3.The installation sequence is from left to right and from bottom to top.

4.If want to adjust the panels, pls adjust the clips WY-GA02, WY-GA03.

5.Leave a 3mm natural gap between the head of panel, keep all the gap in the same line. Staggered installation is not recommended.

Correct

Not recommend

WOOD BATTENS INSTALLATION METHOD

01 Use the wood battens level the wall > **02** Filled with fiberglass acoustic wool (T 25-100mm, D 32kg/m^{3}or 48kg/m^3) > **03** Fix the panels on the wood battens by gun nail

CEILING INSTALLATION METHOD

01 Fix the tee grid system onto the ceiling

02 Fix the WY-GA02 clip onto the tee grid

03 Clip in the acoustic panel into WY-GA02 clip

04 Fix the WY-GA03 clip onto acoustic panel

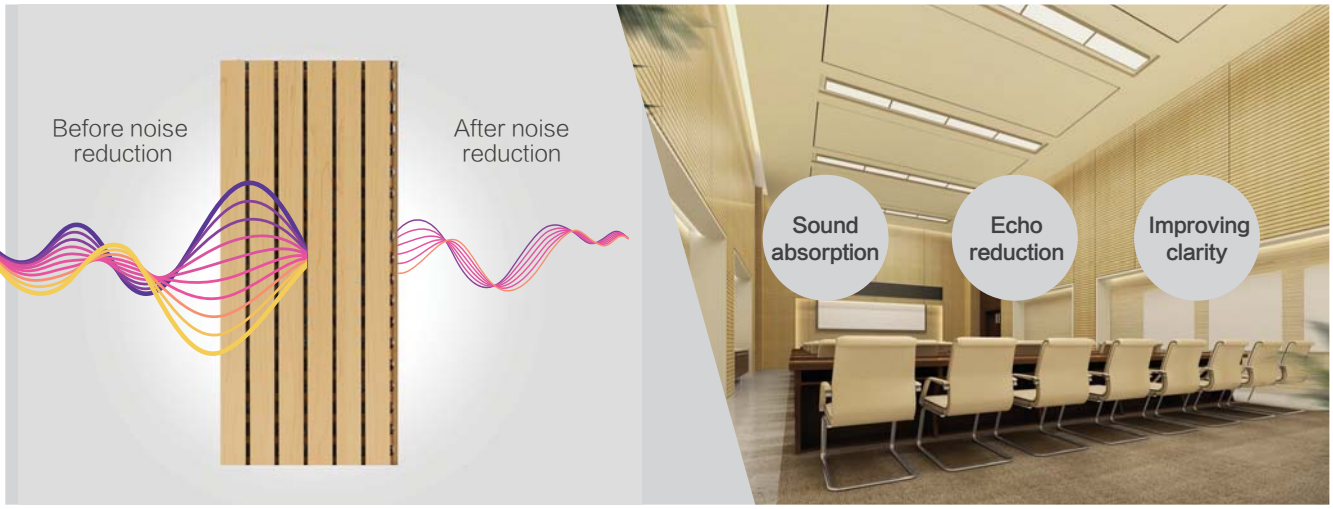
05 Fix the acoustic panel together one by one

06 Fix completed

Why choose Woodysorber?

1 **Large-scale direct factory, nearly 20 years experience in acoustic materials producing.**
Leading in production equipment, technology and processing craft.

2 **Excellent sound absorption and noise reduction performance, especially in middle and low frequencies.**
Super sound absorption performance.



3 The colors are trendy and the materials are exquisite.

A variety of finishes and substrates are flexibly matched, which is suitable for various types of spaces.

4 Standardized module design, simple installation methods.

Wooden slat or keel structure, the installation is simple and fast.

5 Fire resistant test report

The fireproof performance reaches to class B1 flame retardant or non-combustible class A.

6 Environmental protection test report

Environmental protection performance reaches to E1 or E0 class, which has no harm to human health.

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