

The image shows a modern office interior. The walls are covered in vertical wood slats. In the foreground, there is a white desk on the left and a black leather office chair with a chrome frame in the center. To the right, a black leather sofa is partially visible. In the background, a metal shelving unit holds a green plant and some books. A dark grey banner is overlaid on the upper part of the image, containing the text 'SLIMLINE TREND-COLLECTION' in white.

SLIMLINE
TREND-COLLECTION

akustik*plus*

//

IMPROVING
ROOM ACOUSTICS
FOR YOUR
WELL-BEING."

akustik*plus*



TREND-COLLECTION

SELECTED

ACOUSTIC PANELS

MADE BY PROFESSIONALS.

akustikplus is your partner when it comes to high-quality acoustic products for contemporary interior design.

With professional quality, Made in Germany, we produce acoustic solutions that have been combining functionality and design in an exemplary manner for years.

Within a smart product portfolio and simple installation, we offer the right solution for every customer.

In order to make selecting the right room acoustics as easy as possible, we like to introduce you our most popular acoustic panels in the **slimline TREND COLLECTION**.

This well selected product range contains exclusive surfaces at attractive prices.

Be inspired by high-quality acoustic elements.

We look forward to your project!

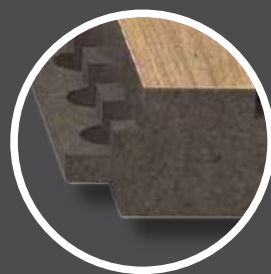




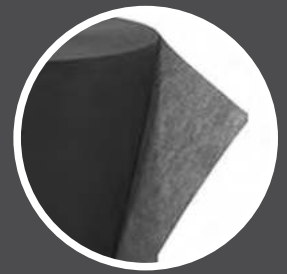
acoustic
drilling



high quality
surfaces



tongue and groove
system



acoustic
fleece

“
WHY
SLIMLINE
BY
akustikplus?”

**HIGH QUALITY
DESIGN**

"BEST MATERIALS."



**TOP
PRICE-PERFORMANCE RATIO**

"PROFESSIONAL QUALITY AT ATTRACTIVE PRICES."



**HIGHLY EFFECTIVE
SOUND ABSORPTION**

"VERIFIED BY INDEPENDENT INSTITUTIONS."



**SIMPLE & EASY
HANDLING & INSTALLATION**

"NEARLY INTUITIVE ON WALL AND CEILING."



**BEST QUALITY
BY PROFESSIONALS**

"MADE IN GERMANY."



**FAST
AVAILABILITY**

"ALL PRODUCTS IN STOCK."



ROOM ACOUSTICS

Long story short

WHAT IS THE PROBLEM?

Room acoustics addresses the impact of the structural conditions of a room on the acoustic events taking place in it.

Emphasis is placed on the design of the perceptibility of acoustic events in concert halls, offices, classrooms and other rooms.

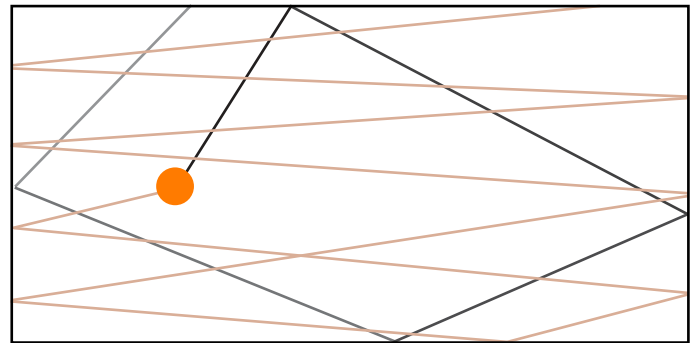
Room acoustics play an increasingly important role in numerous everyday situations and has to be included in the planning process already.

Sound in the form of speech or music is partially reflected when it hits a surface.

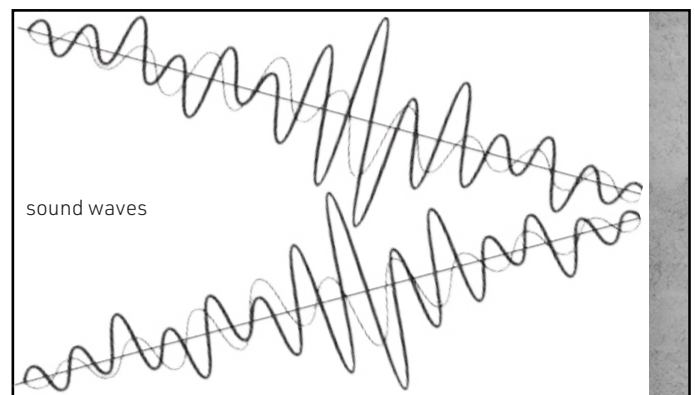
The harder or smoother a surface, the stronger the reflection of sound.

This creates an audible reverberation, deteriorating the acoustics in the room as a result.

A prolonged reverberation time worsens speech intelligibility and has a negative effect on well-being and health.



Multiple reflections without absorption (diffuse sound image).

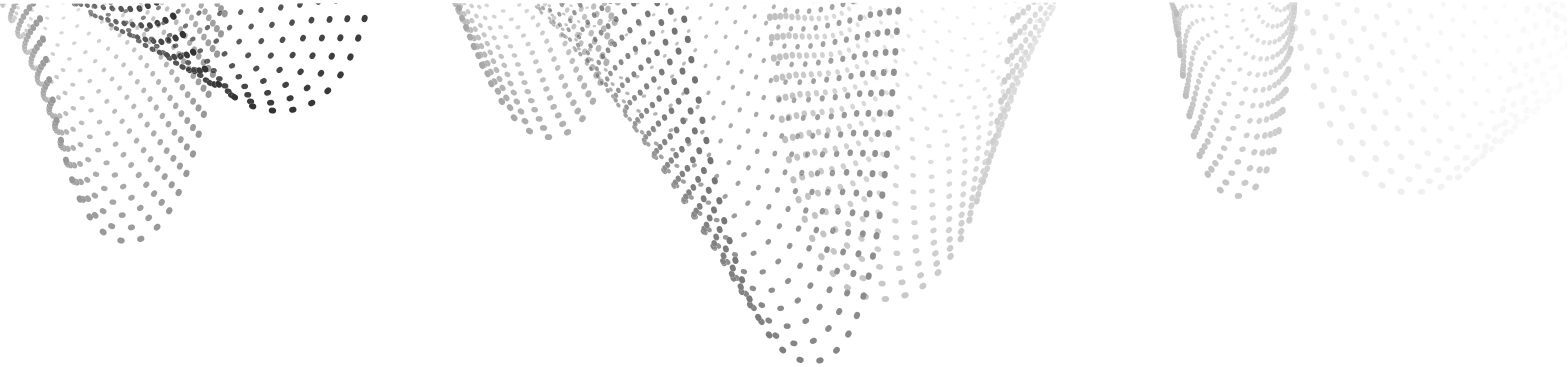


Sound reflection on hard surfaces (e.g. wall).



WITHOUT
AKUSTIKPLUS!"

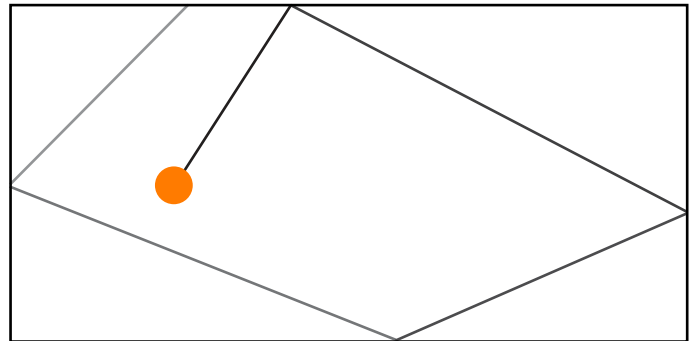




WHAT IS THE SOLUTION?

Physical effect:

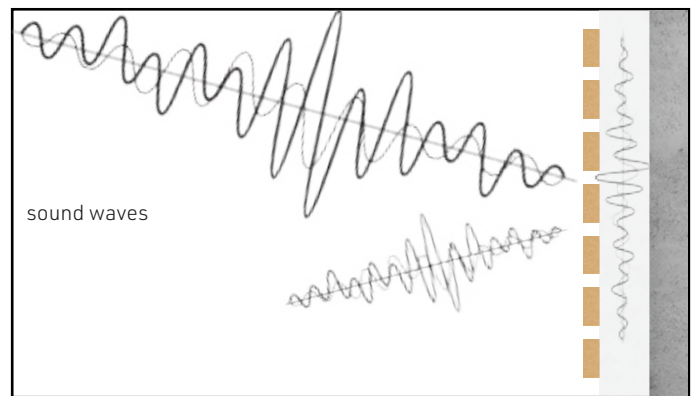
It has been proven that the sound in a room is attenuated by the installation of sound-absorbing wall and ceiling coverings. As a result, a large portion of the sound energy is attenuated by the absorbers. The reduction in reverberation time also lowers the sound level and thus the perceived loudness.



Reflection with absorption.

Behavioral psychological effect – Lombard effect:

Improved speaking and listening conditions at low reverberation levels result in people automatically lowering their own voice. Conversely, when speech intelligibility is poor, people raise their voice. In other words, the change in the behavior of the users additionally affects the reduction of the sound level in the room. Noise level reduction of up to 10 dB can be achieved with an acoustically well engineered interior.



Sound reflection on absorbing surfaces (e.g. acoustic panel).

“
WITH
AKUSTIKPLUS!”



ROOM ACOUSTICS

Proven Quality

We let ourselves be measured!

Room acoustics is not magic, but rather pure physics. All our products are tested for their acoustic effectiveness.

Acoustic measurements are necessary and relevant in this respect, since contemporary construction projects have specific requirements for room acoustics. DIN

18041 is the acoustic quality standard.

The sound absorption coefficients can be found on the respective product pages for transparency towards our customers. These can vary depending on the overall structure. Two contemporary construction variants are shown below:



30 mm soundproofing
(PET fleece / mineral wool)
+
16 mm acoustic panel
=
46 mm total construction



30 mm cavity (open)
+
30 mm soundproofing
(PET fleece / mineral wool)
+
16 mm acoustic panel
=
76 mm total construction

How accurate is the evaluation of acoustic parameters of a room?

One valid parameter used to evaluate the acoustics of a room is the so-called reverberation time. This is the time required for the sound in a room to decay by 60 dB exactly after an acoustic event - i.e., the sound becomes mostly imperceptible.

Our acoustic measurements are carried out by independent and certified test institutes.

For more detailed values, please refer to the data sheets in the download section of our website.

Where can our acoustic panels be installed?

slimline acoustic panels are suitable for both wall and ceiling installation. Handling them is easy and their further processing is simple. Installation is therefore almost intuitive.

Acoustic panels should always be placed where sound is reflected from a (hard) surface. This can be on the front and back, sides or ceiling of a room.



sample view 1:
Installation on the front of the room.



sample view 2:
Installation on the side walls of the room.



sample view 3:
Ceiling mounting in the room.

Where do you need good room acoustics?



LIVING AREAS

Acoustics also play an important role in the home. This applies to everything from the living and dining area to the hobby room and home office. People often get used to poor acoustics as part of their everyday lives. Only after optimization or in the case of health problems does a deficit become apparent.

PUBLIC BUILDINGS

Whether in bars, restaurants, hotels, or congress centers - acoustics are essential in rooms where people come together and communicate. Improved acoustics lead to less noise, facilitate communication, create a more pleasant conversational atmosphere, and thus have a positive impact on the quality of stay.

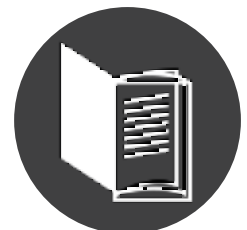


OFFICES

Our acoustic solutions are customized to suit the diversity of workplaces. Our products focus on contemporary office design and innovative work environments. Whether as a striking design element or as a discreet enhancement - our extensive product portfolio offers the right solution for every need.

EDUCATIONAL INSTITUTIONS

The relevance of room acoustics in educational institutions is scientifically substantiated and practically proven. Inadequate acoustic design of rooms impairs cognitive performance and receptivity, safety (missed alarm signals), health and well-being.



ART & CULTURE

Our products are perfect for projects where acoustics is central to the design and a high-quality appearance is required.

All the way from the world-famous *Elbphilharmonie* in Hamburg to the spectacular *Andermatt Concert Hall* in the Alps: we are proud to be at home in concert halls all over the world.

SURFACES

Authentic design

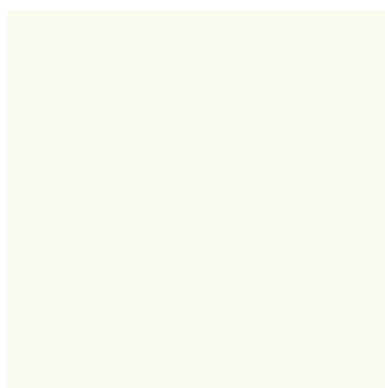
Choosing a suitable surface contributes significantly to the final appearance of our acoustic elements and thus adds an individual touch to the project.

The **TREND COLLECTION** embodies authentic and timeless design.

Choose from natural **wood decors**, a subtle **white tone** or a striking **real wood veneer** - it's up to you!

Create your own project and no longer compromise on design.

Discover a selection of our melamine and veneer surfaces below.



PREMIUM WHITE

W1000 ST9 - MELAMINE

A popular shade of white, which has a very high-quality effect thanks to its particularly opaque properties. The surface is characterized by a warm and neutral character and suits almost all wood surfaces perfectly.

The ST9 *Smoothtouch Matte* texture complements the surface with a natural feel similar to a finely lacquered surface.



SORANO OAK NATURAL LIGHT

H1334 ST9 - MELAMINE (WOOD REPRODUCTION)

Natural and timeless. Sorano oak means visual understatement and has thus been a classic among oak surfaces for years. The decor may be combined arbitrarily and used universally.

H1334 features an expressive veneer character in combination with the ST9 *Smoothtouch Matte* texture.



VICENZA OAK GRAY

H3158 ST19 - MELAMINE (WOOD REPRODUCTION)

The gray colored Vicenza oak impresses with a modern surface design. The color of the decor matches almost all uni colors and can therefore be perfectly integrated into interior concepts.

The surface ST19 *Deepskin Excellent* rounds off the haptic with a high-quality and natural feel.



All surfaces shown here are illustrative material.
An authoritative surface selection is only possible
with original samples!



SILVER FIR

SOLID WOOD

If you like it natural, you will love the solid silver fir. The bright appearance of silver fir gives rooms peace and security. Silver fir is trendy thanks to its natural character and enjoys great popularity.

The finger-jointed solid top layer visually blends in very well with modern architectural trends. Exposed concrete and glass are thus optimally complemented.

A finish with rolling varnish (dull matte) protects the surface from external stress.



EUROPEAN OAK

REAL WOOD VENEER

Uncompromising natural design. More nature for the interior. The grains, sometimes subtle, sometimes striking, form a high-quality and coherent overall picture. Light plays of color give the veneer liveliness and radiate soothing energy.

Our **TREND-COLLECTION** offers the veneer in the mixmatch joining technique, which underlines the naturalness of the material.

A UV-cured roller varnish (dull matt) protects the veneer from external stress and ensures that there are fewer light reflections and a soft feel on the real wood surface.

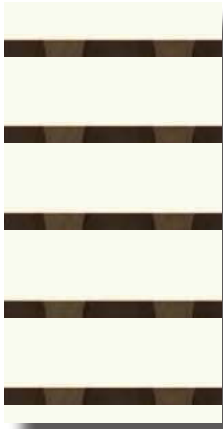
TREND-COLLECTION PRODUCT VARIANTS



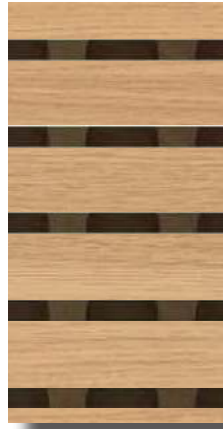
USE THE LISTED
ARTICLE NUMBERS
FOR FASTER ORDER
PROCESSING."



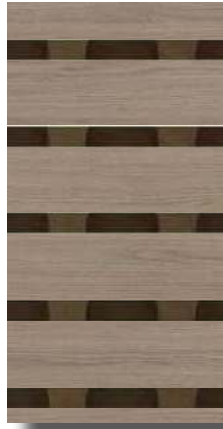
16/3



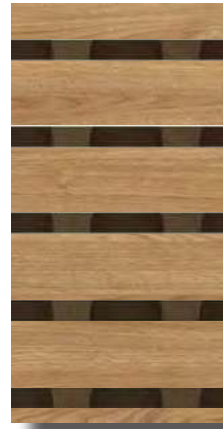
PREMIUM WHITE
9010-20-16/3-0004



SORANO OAK NATURAL LIGHT*
9010-20-16/3-0005

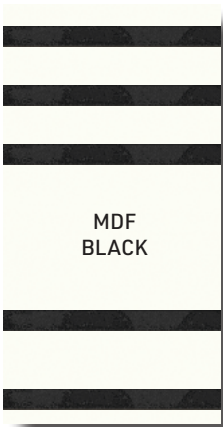


VICENZA OAK GRAY*
9010-20-16/3-0008



EUROP. OAK VENEER**
9010-20-16/3-0006

STRIPES



PREMIUM WHITE
9010-20-STR-0005



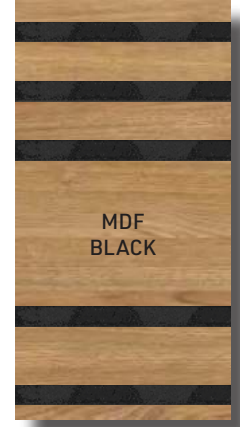
SORANO OAK NATURAL LIGHT*
9010-20-STR-0001



VICENZA OAK GRAY*
9010-20-STR-0004

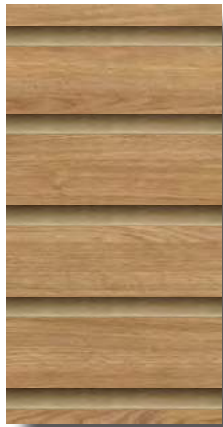


EUROP. OAK VENEER**
9010-20-STR-0002



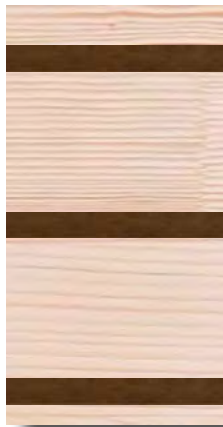
EUROP. OAK VENEER**
9010-20-STR-0003

INVISIBLE 16/3



EUROP. OAK VENEER**
9010-20-16/3-0007

GREEN 24/4



SILVER FIR SOLID WOOD***
9010-30-24/4-0002

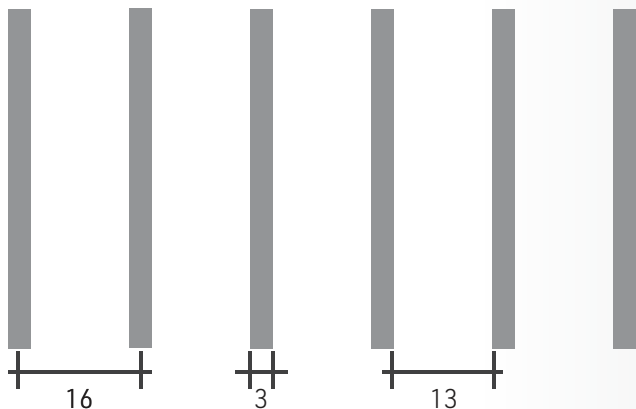


EUROP. OAK VENEER**
9010-30-24/4-0003

*wood reproduction
**real wood veneer incl. roller varnish (UV-cured | dull matte)
joining technique: mixmatch
***roller varnish (UV-cured | dull matte)

SLIMLINE 16/3

LINEAR
STRAIGHT
CONSEQUENT



SLOTTED 16/3

The **slimline** in the popular slotted 16/3 cuts an extremely nice figure in both horizontal and vertical installation situations. In addition, the acoustic panel impresses with very good absorption coefficients thanks to the optimal counterbores. Linear slotting and consistent design:

Depending on the installation situation and surface design, the slotting has a striking or discreet effect.

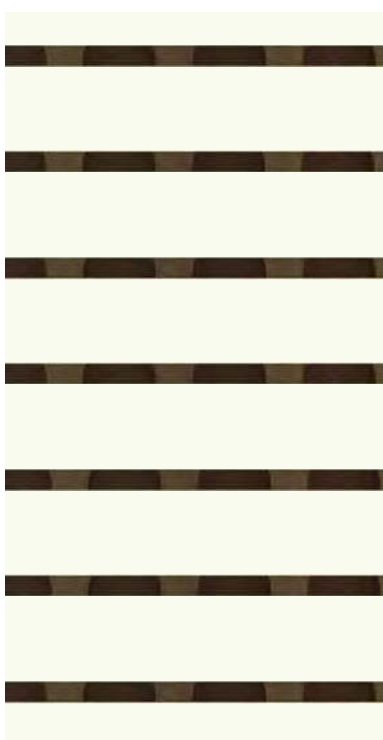
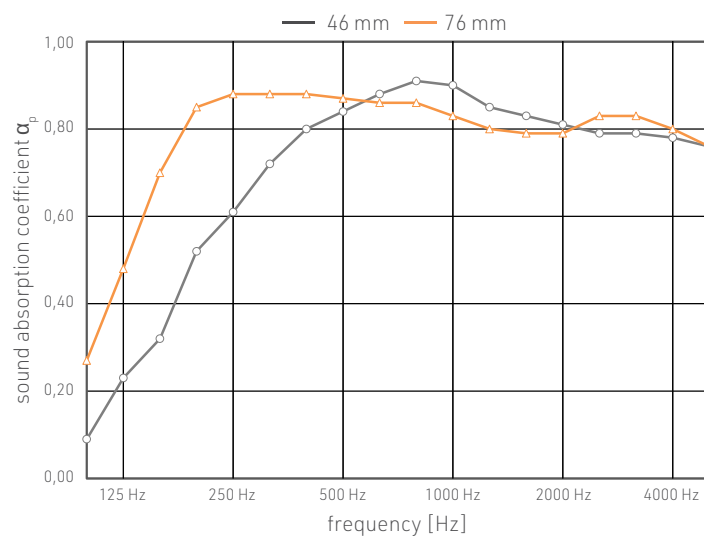
Thanks to the consistent strip-widths, the acoustic panels give the interior concept a calm character and a modern design.





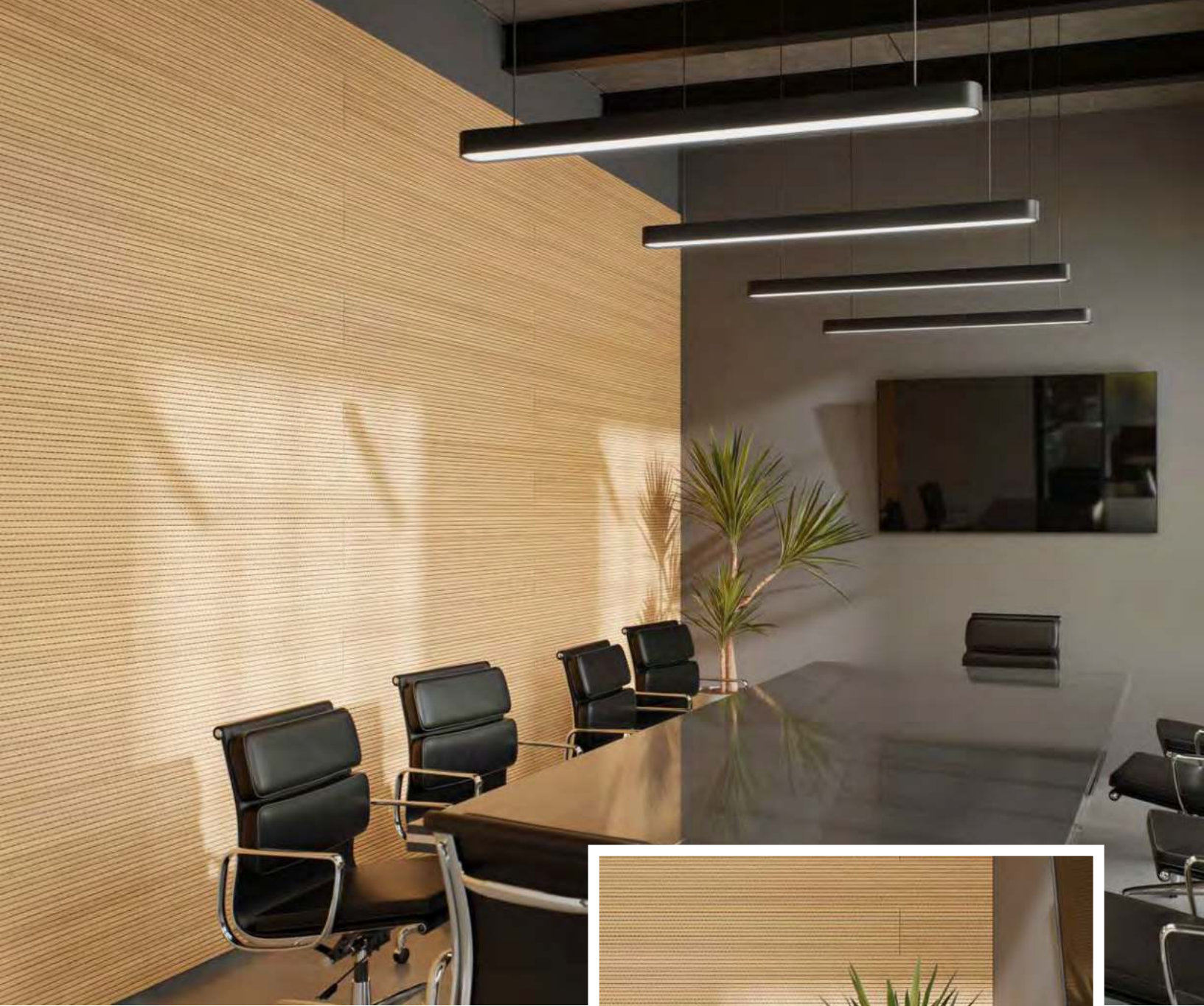


total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,60	0,85
500	0,85	0,85
1000	0,90	0,85
2000	0,80	0,80
4000	0,80	0,80
α_w	0,85	0,85
absorption class	B	B



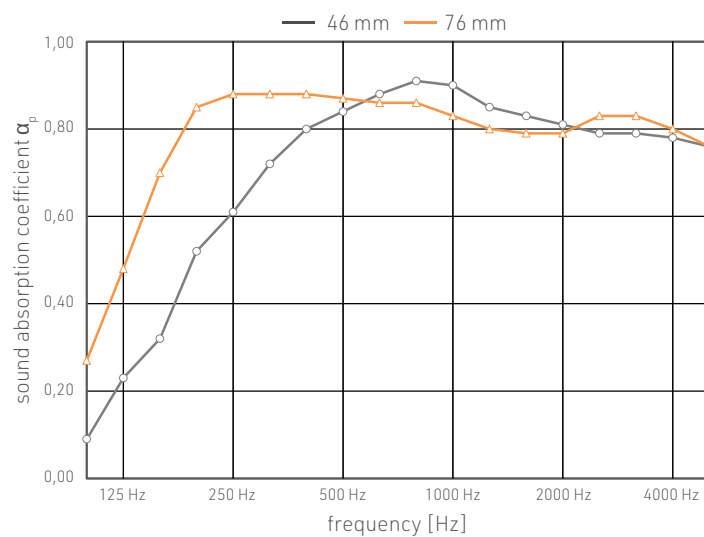
slimline 16/3 Premium White

- dimensions:** 2.784 x 192 mm
- thickness:** approx. 16 mm
- slotting:** 16/3
- core board:** MDF B2
- surface:** Premium White (W1000 ST9)
Melamine
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling





total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,60	0,85
500	0,85	0,85
1000	0,90	0,85
2000	0,80	0,80
4000	0,80	0,80
α_w	0,85	0,85
absorption class	B	B



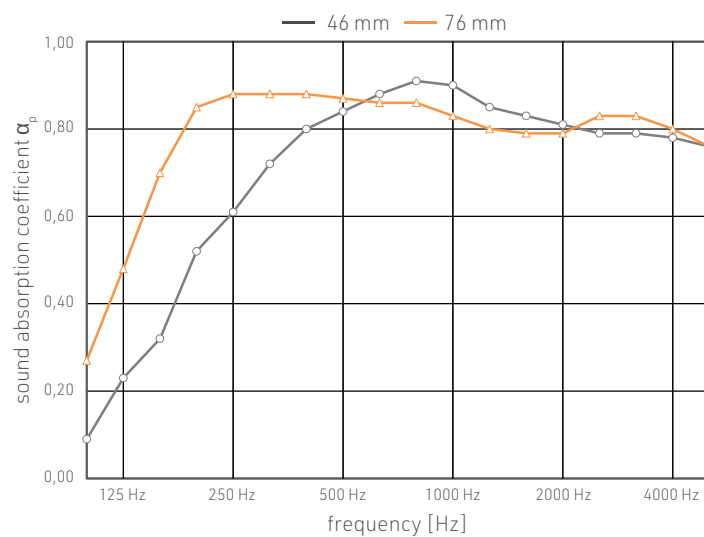
slimline 16/3 Sorano Oak Natural Light

dimensions:	2.784 x 192 mm
thickness:	approx. 16 mm
slotting:	16/3
core board:	MDF B2
surface:	Sorano Oak Natural Light (H1334 ST9) Melamine (wood reproduction)
edges:	longitudinal : tongue and groove transverse: industrial saw cut
mounting:	vertical horizontal wall ceiling



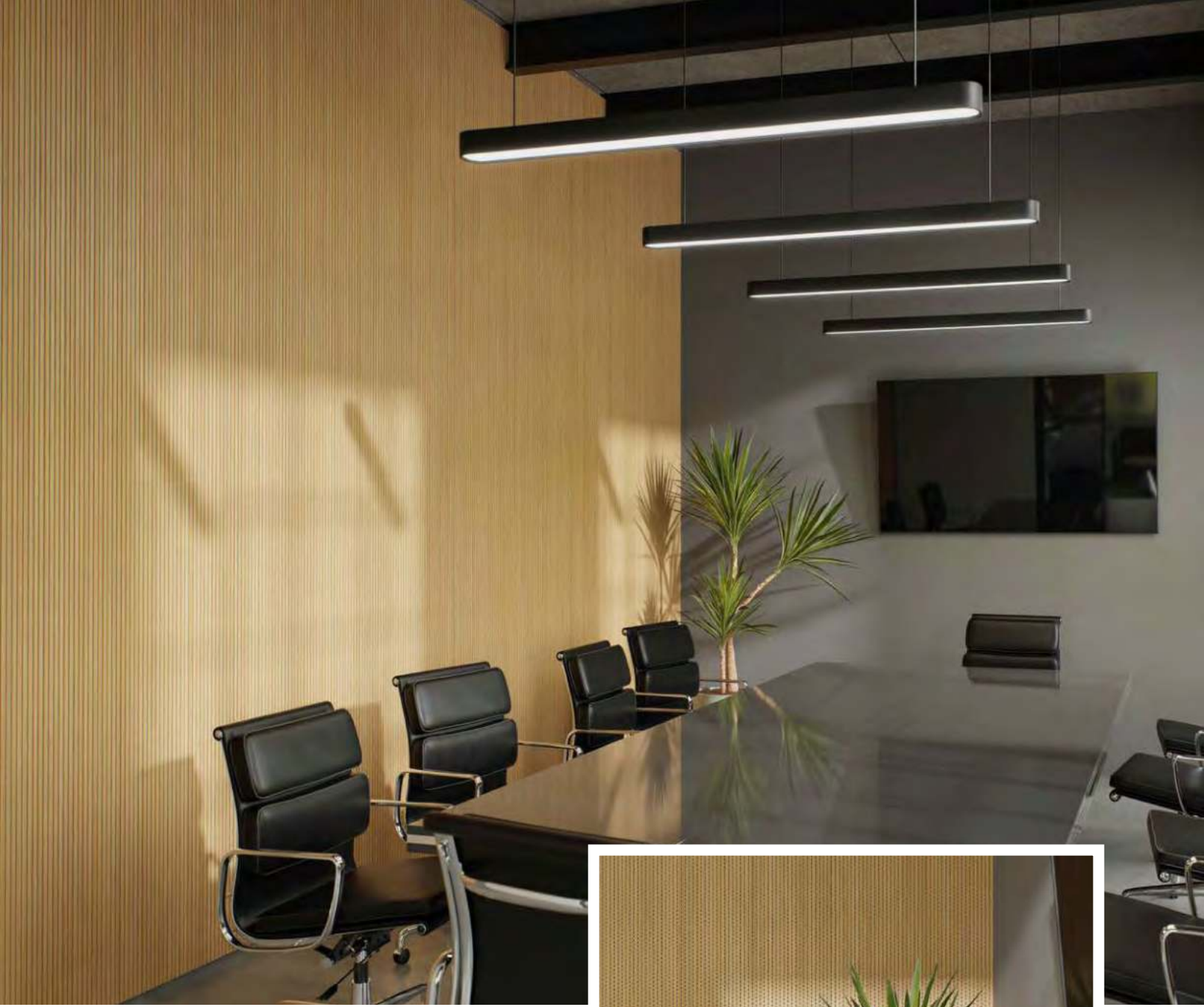


total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,60	0,85
500	0,85	0,85
1000	0,90	0,85
2000	0,80	0,80
4000	0,80	0,80
α_w	0,85	0,85
absorption class	B	B



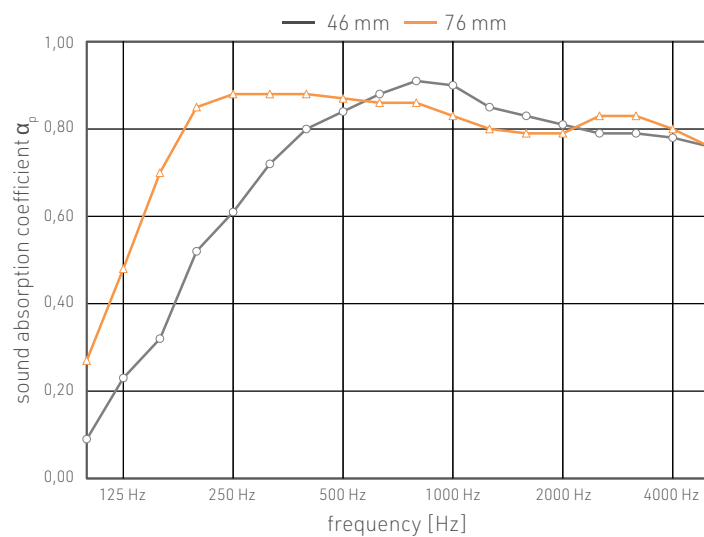
slimline 16/3 Vicenza Oak Gray

dimensions:	2.784 x 192 mm
thickness:	approx. 16 mm
slotting:	16/3
core board:	MDF B2
surface:	Vicenza Oak Gray (H3158 ST19) Melamine (wood reproduction)
edges:	longitudinal : tongue and groove transverse: industrial saw cut
mounting:	vertical horizontal wall ceiling





total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,60	0,85
500	0,85	0,85
1000	0,90	0,85
2000	0,80	0,80
4000	0,80	0,80
α_w	0,85	0,85
absorption class	B	B

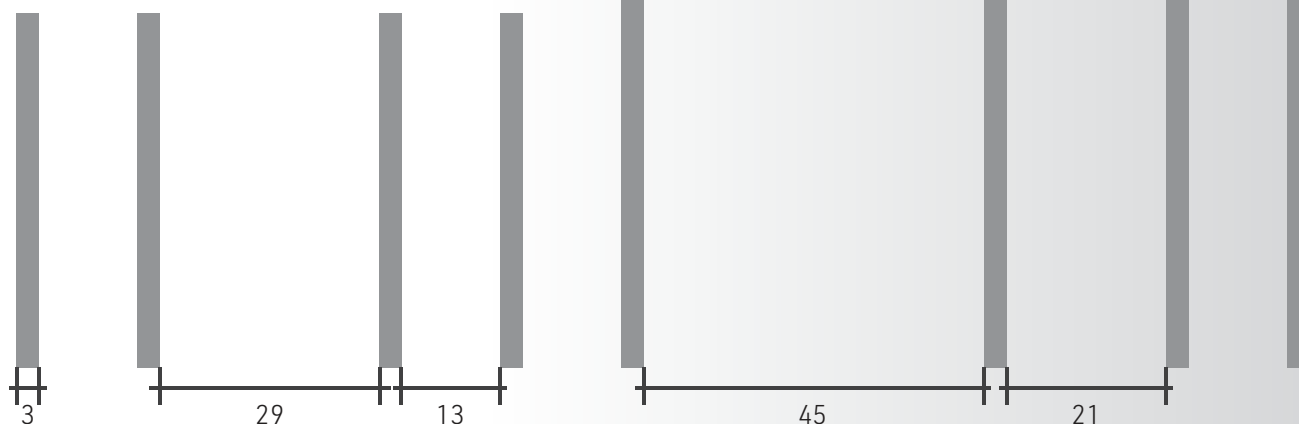


slimline 16/3 European oak veneer

- dimensions:** 2.784 x 192 mm
- thickness:** approx. 16 mm
- slotting:** 16/3
- core board:** MDF B2
- surface:** European oak
real wood veneer (mixmatch)
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling

SLIMLINE STRIPES

INNOVATIVE
INVIGORATING
IRREGULAR



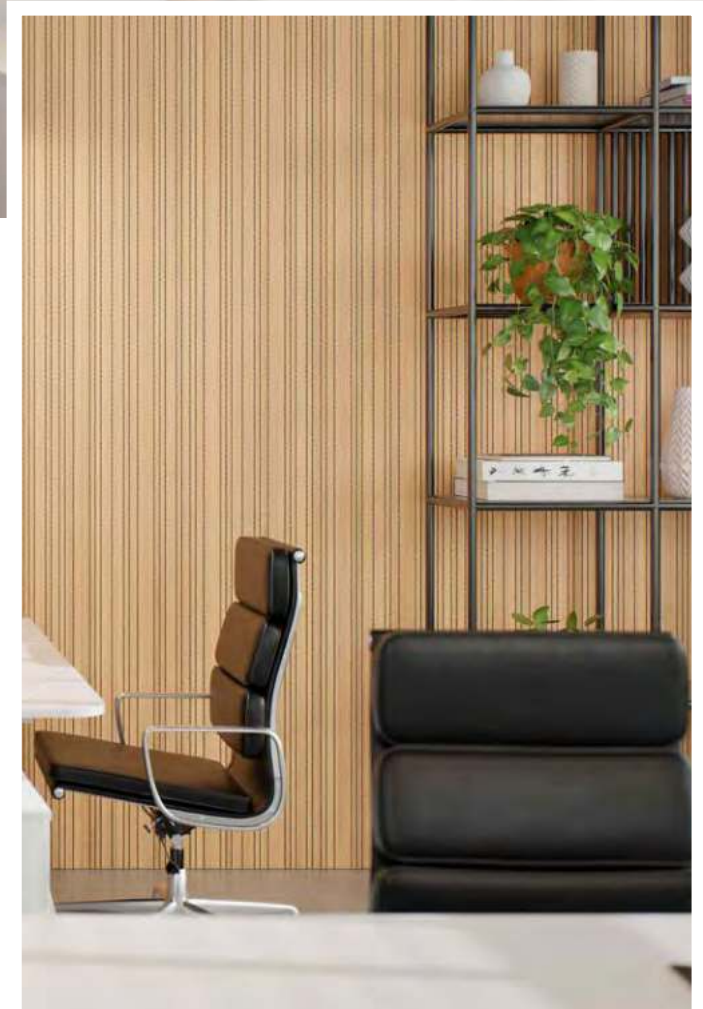
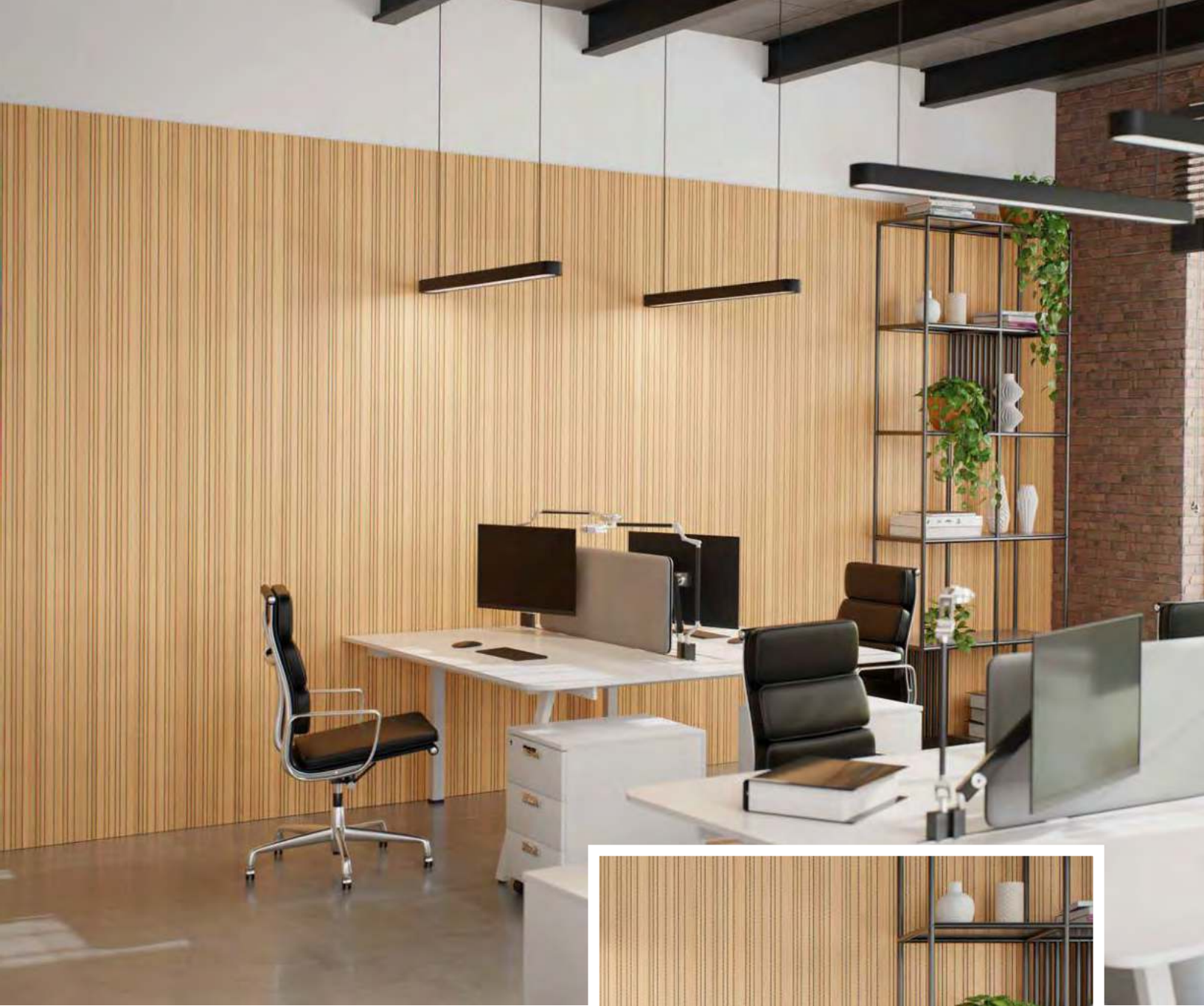
SLOTTED STRIPES

We have enriched our **slimline** product range with an irregular recurring slot pattern with the STRIPES design.

The linear louvers with identical slot spacing can have the undesirable effect of a blurred slot pattern - the so-called moiré effect - when observed over a long period of time or at closer range.

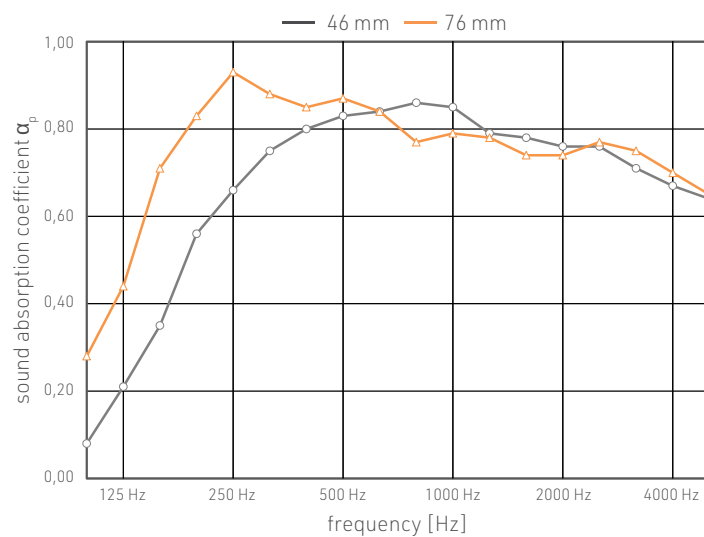
The STRIPES louvers successfully counteract this with an irregularly spaced slot. This design is a good alternative to linear slots, especially in aisles or where space is limited.





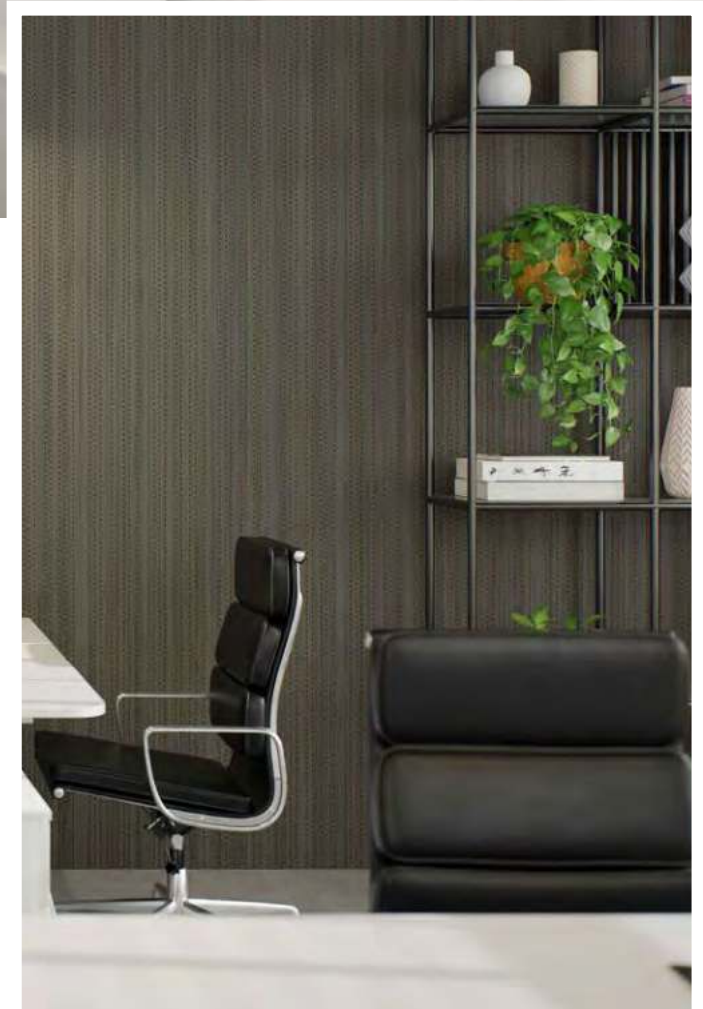


total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,65	0,90
500	0,80	0,85
1000	0,85	0,80
2000	0,75	0,75
4000	0,65	0,70
α_w	0,80	0,80
absorption class	B	B



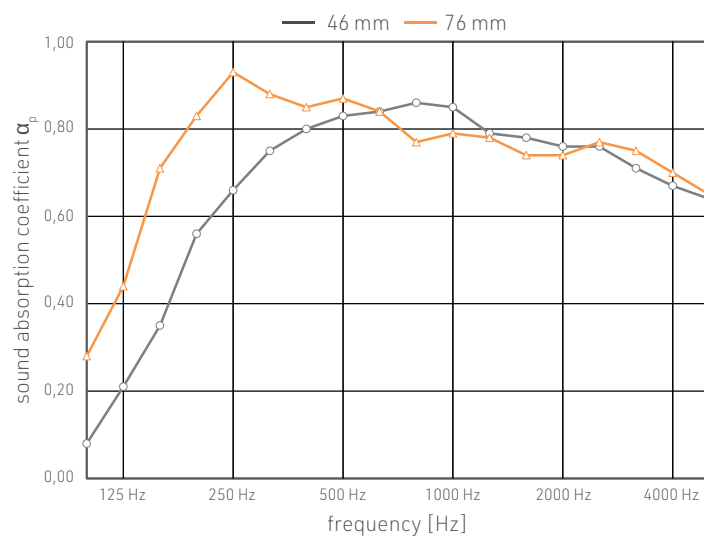
slimline STRIPES Sorano Oak Natural Light

dimensions:	2.784 x 192 mm
thickness:	approx. 16 mm
slotting:	STRIPES
core board:	MDF B2
surface:	Sorano Oak Natural Light (H1334 ST9) Melamine (wood reproduction)
edges:	longitudinal : tongue and groove transverse : industrial saw cut
mounting:	vertical horizontal wall ceiling



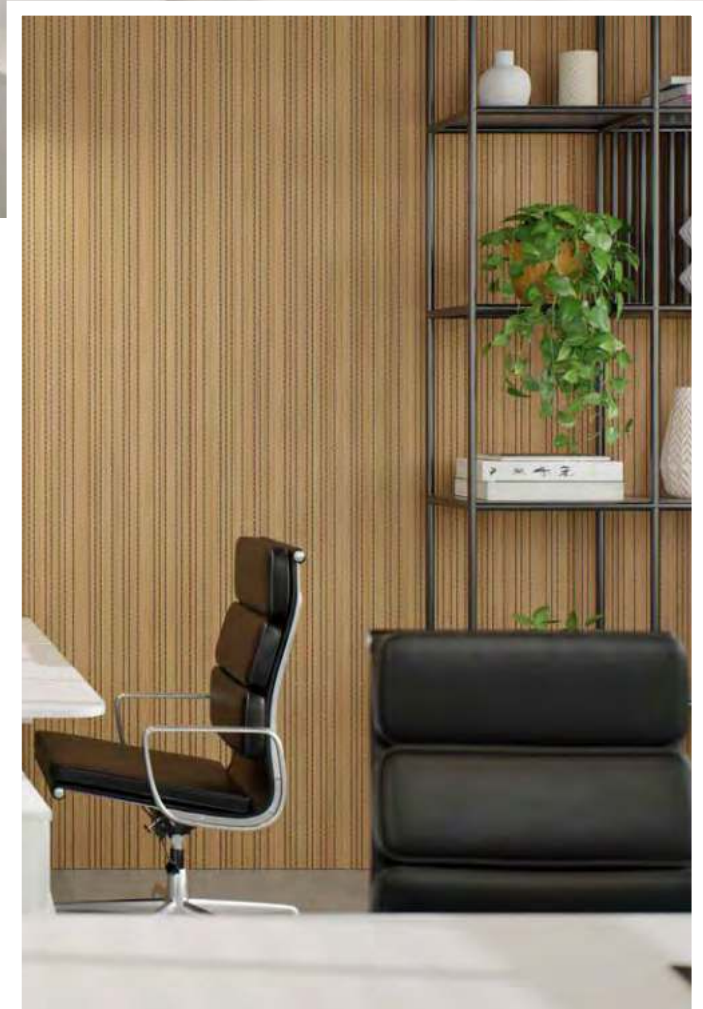


total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,65	0,90
500	0,80	0,85
1000	0,85	0,80
2000	0,75	0,75
4000	0,65	0,70
α_w	0,80	0,80
absorption class	B	B



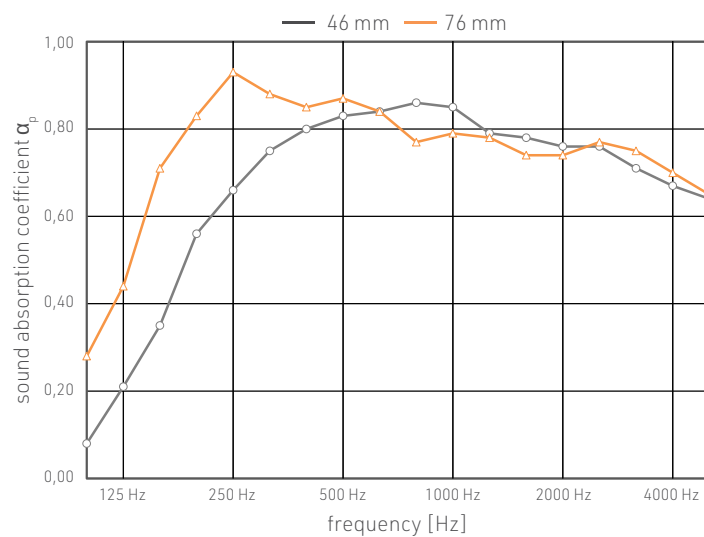
slimline STRIPES Vicenza oak gray

- dimensions:** 2.784 x 192 mm
- thickness:** approx. 16 mm
- slotting:** STRIPES
- core board:** MDF B2
- surface:** Vicenza Oak Gray (H3158 ST19)
Melamine (wood reproduction)
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling





total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,65	0,90
500	0,80	0,85
1000	0,85	0,80
2000	0,75	0,75
4000	0,65	0,70
α_w	0,80	0,80
absorption class	B	B



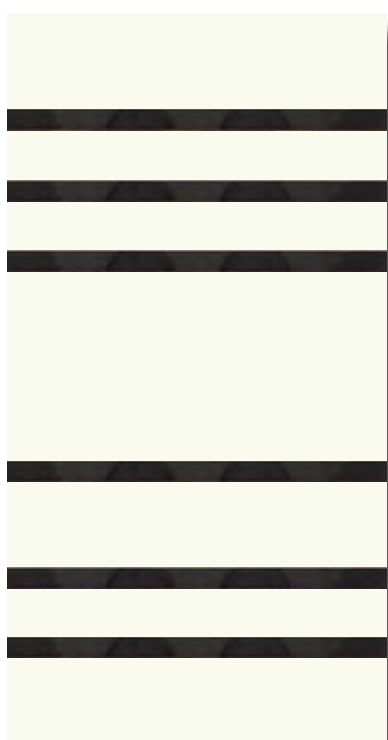
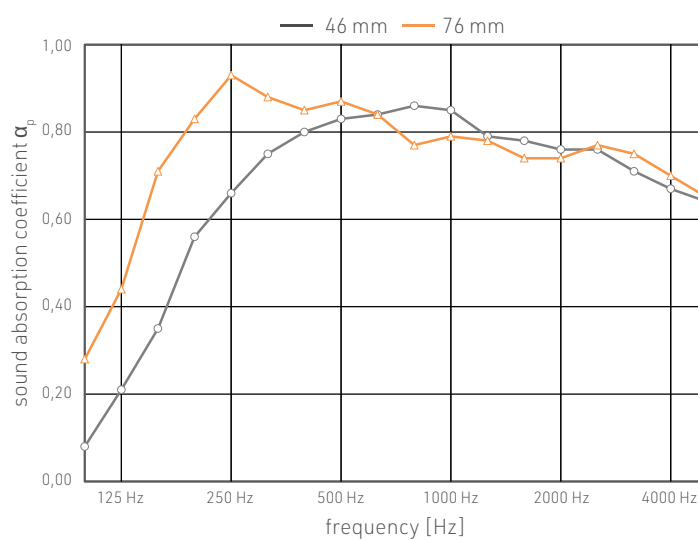
slimline STRIPES European oak veneer

- dimensions:** 2.784 x 192 mm
- thickness:** approx. 16 mm
- slotting:** STRIPES
- core board:** MDF B2
- surface:** European oak
real wood veneer (mixmatch)
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling



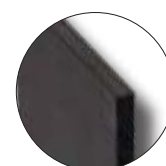


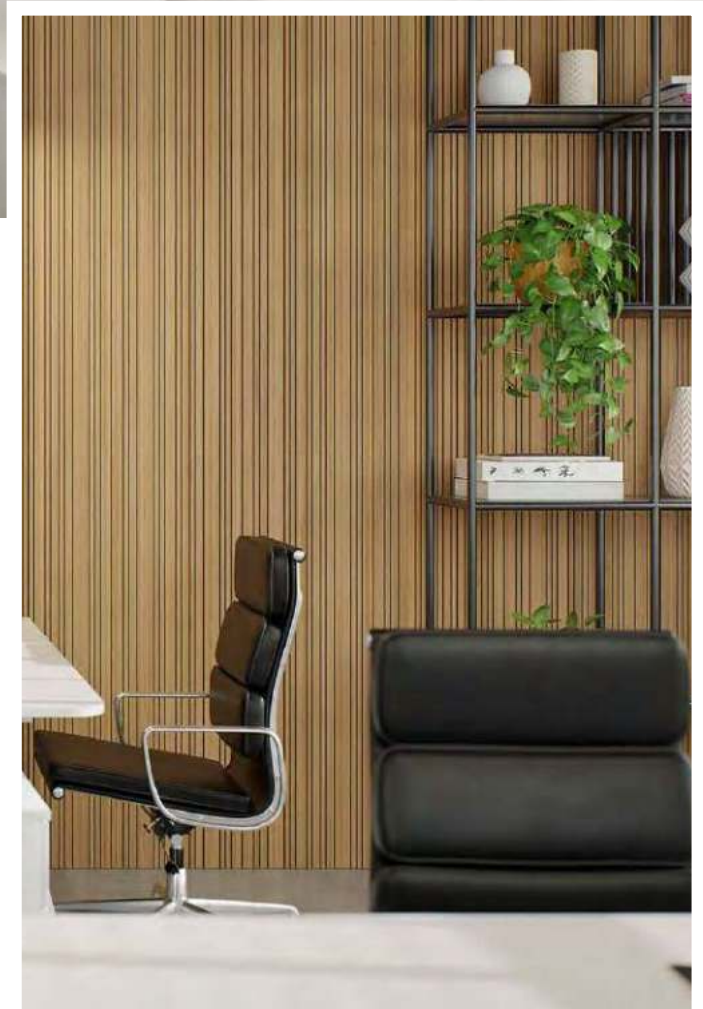
total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,65	0,90
500	0,80	0,85
1000	0,85	0,80
2000	0,75	0,75
4000	0,65	0,70
α_w	0,80	0,80
absorption class	B	B



slimline STRIPES Premium White

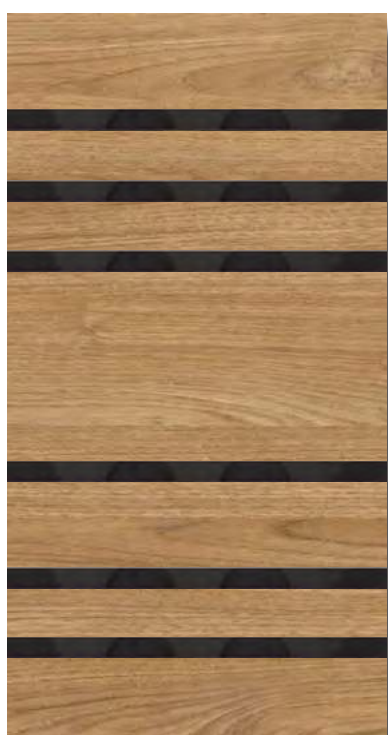
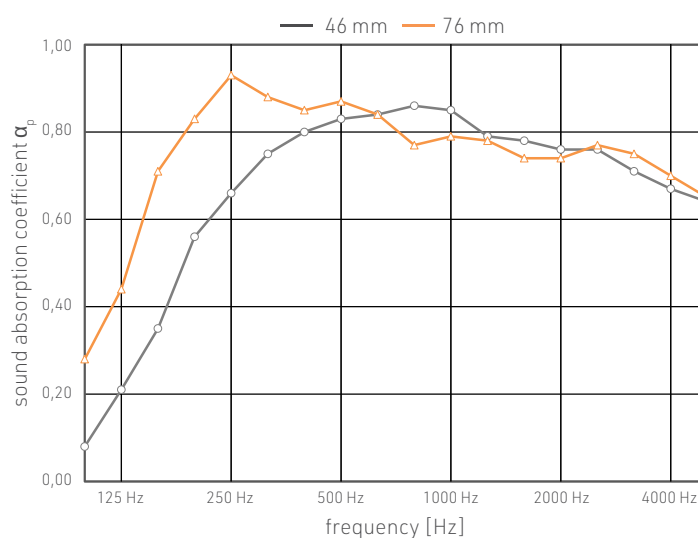
- dimensions:** 2.784 x 192 mm
- thickness:** approx. 16 mm
- slotting:** STRIPES
- core board:** MDF B2 (black)
- surface:** Premium White (W1000 ST9)
Melamine
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling





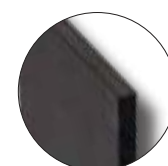


total construction	46 mm	76 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	16 mm	16 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,65	0,90
500	0,80	0,85
1000	0,85	0,80
2000	0,75	0,75
4000	0,65	0,70
α_w	0,80	0,80
absorption class	B	B



slimline STRIPES European oak veneer

- dimensions:** 2.784 x 192 mm
- thickness:** approx. 16 mm
- slotting:** STRIPES
- core board:** MDF B2 (black)
- surface:** European oak
real wood veneer (mixmatch)
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling



SLIMLINE INVISIBLE 16/3

INVENTIVE
OBLIQUE
DISCREET

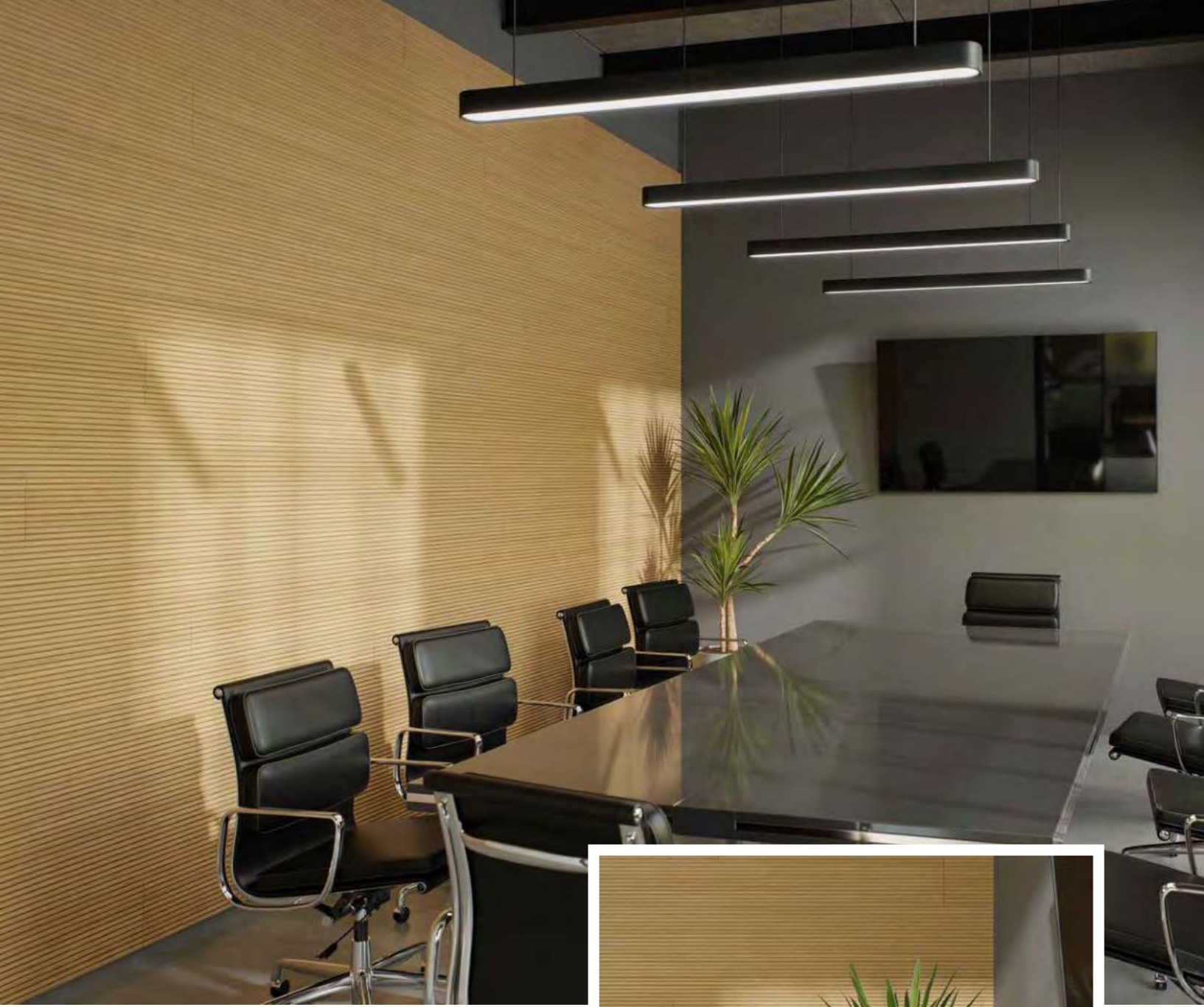


SLOTTED INVISIBLE 16/3

The most innovative acoustic panel!
This version of **slimline** INVISIBLE elegantly combines proven acoustic functionality and visual esthetics. The slot of the panel has a **45-degree** angle. This creates a particularly homogeneous view.

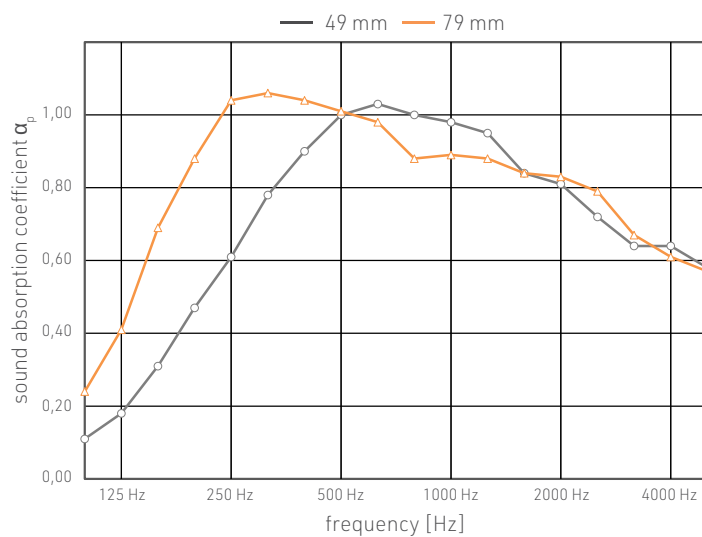
The acoustically effective holes on the back are almost invisible to the viewer from the front. The absorber technology is only visible from an acute angle. The panel thus provides a modern and discreet appearance in combination with efficient sound absorption.







total construction	49 mm	79 mm
cavity (open)	-	-
PET-fleece	30 mm	60 mm
acoustic panel	19 mm	19 mm
frequency [Hz]	α_p	α_p
125	0,20	0,50
250	0,65	0,90
500	0,80	0,85
1000	0,85	0,80
2000	0,75	0,75
4000	0,65	0,70
α_w	0,80	0,80
absorption class	B	B



slimline INVISIBLE 16/3 European oak veneer

dimensions:	2.784 x 192 mm
thickness:	approx. 19 mm
slotting:	INVISIBLE 16/3
core board:	MDF B2
surface:	European oak real wood veneer (mixmatch)
edges:	longitudinal : tongue and groove transverse: industrial saw cut
mounting:	vertical horizontal wall ceiling



integrated wood-wool absorber



tongue and groove system



acoustic slots



natural surfaces



WHY
SLIMLINE GREEN
BY
akustikplus?"



NATURAL DESIGN

"MORE NATURE FOR THE INTERIOR."



TOP PRICE-PERFORMANCE RATIO

"PROFESSIONAL QUALITY AT ATTRACTIVE PRICES."



SUSTAINABLE MATERIALS

"IN EACH PHASE OF THE PRODUCT-LIFECYCLE."



INTEGRATED WOOD-WOOL ABSORBER

"BEST ACOUSTICS IN THE PRODUCT."



BEST QUALITY BY PROFESSIONALS

"MADE IN GERMANY."



QUICK AVAILABILITY

"ALL PRODUCTS IN STOCK"



SLIMLINE GREEN 24/4

SUSTAINABLE
VALUABLE
NATURALLY



SLOTTED GREEN 24/4

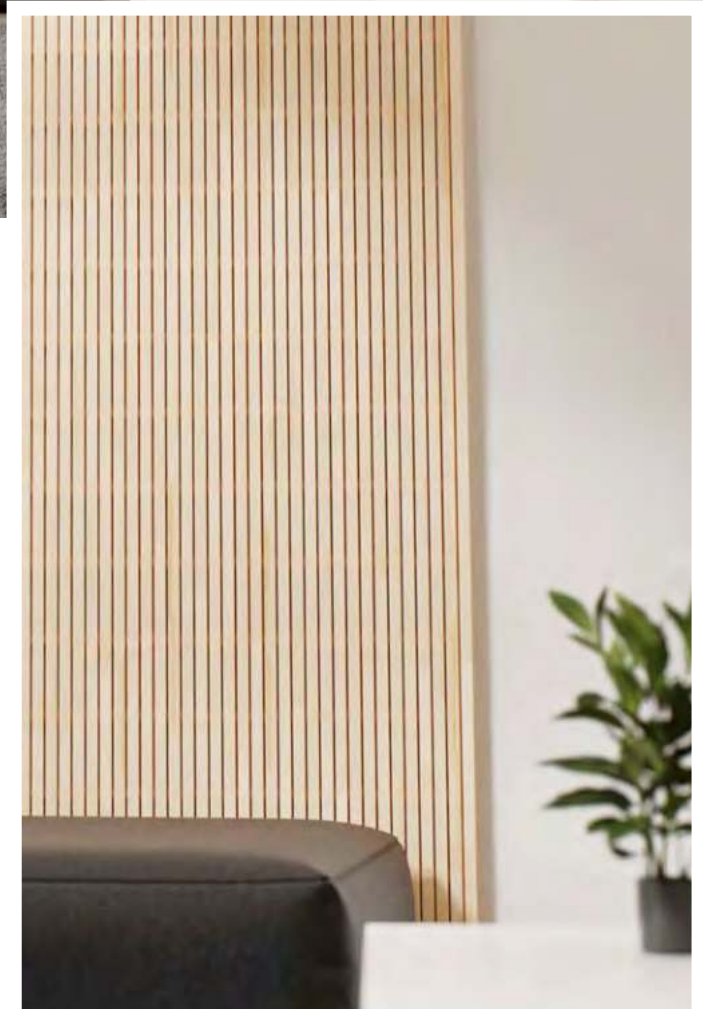
GREEN is an innovative and ecologically sustainable product variant that we have added to our popular **slimline** acoustic panels.

We offer a tailor-made solution for projects in which, in addition to good room acoustics, sustainable finishing materials are a priority.

GREEN stands for intelligent use of resources, embodies sustainability and brings nature back into interior design. Its natural look blends harmoniously with almost all visible elements, enhances interior concepts and is an exemplary companion to modern architectural trends.

“

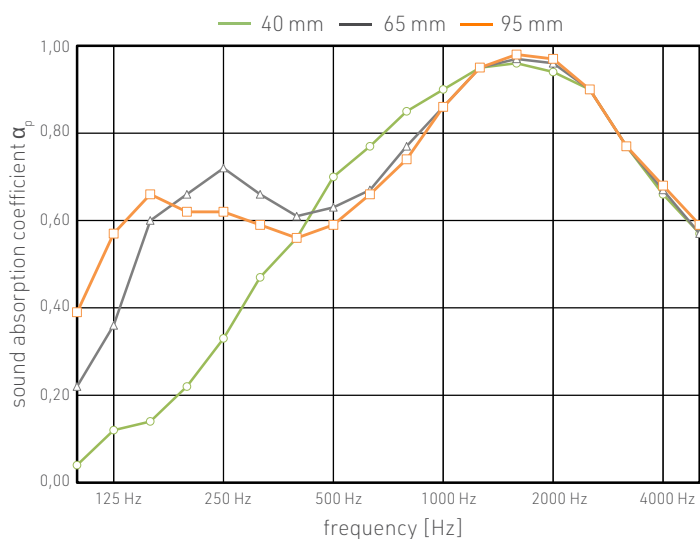
Architecture is always
an expression of values.”





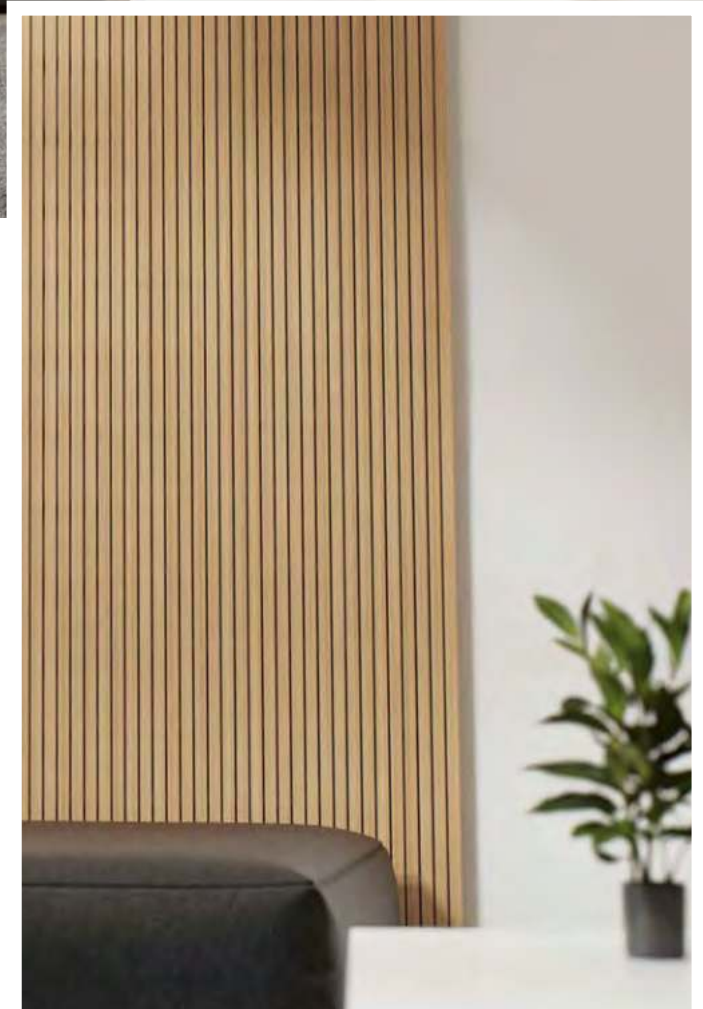
total construction	40 mm*	65 mm	95 mm
cavity (open)	5 mm	-	-
PET-fleece	-	30 mm	60 mm
acoustic panel	35 mm	35 mm	35 mm
frequency [Hz]	α_p	α_p	α_p
125	0,10	0,40	0,55
250	0,35	0,70	0,60
500	0,70	0,65	0,60
1000	0,90	0,85	0,85
2000	0,95	0,95	0,95
4000	0,65	0,65	0,70
α_w	0,65	0,75	0,70
absorption class	C	C	C

*Direct wall/ceiling mounting incl. clip.



slimline GREEN 24/4 solid

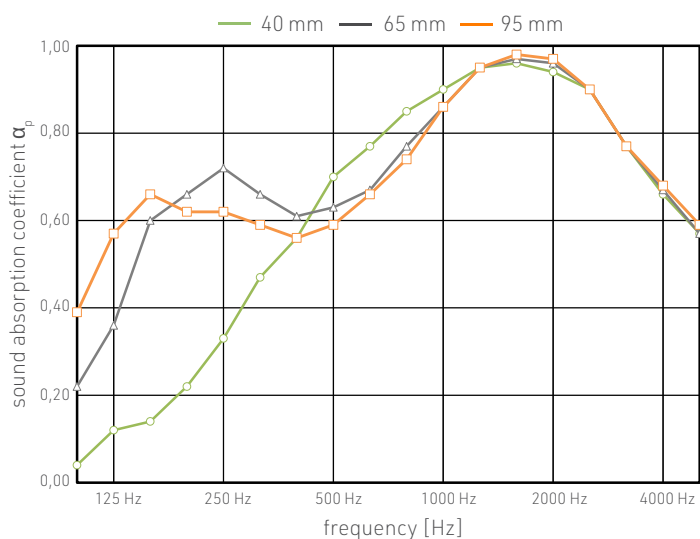
- dimensions:** 2.940 x 192 mm
- thickness:** approx. 35 mm
- slotting:** 24/4
- front:** silver fir (solid wood)
- surface:** rolling varnish (dull matt)
- middle layer:** wood wool absorber and crossbar
- rear side:** carrier bar (plywood)
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling





total construction	38 mm*	63 mm	93 mm
cavity (open)	5 mm	-	-
PET-fleece	-	30 mm	60 mm
acoustic panel	33 mm	33 mm	33 mm
frequency [Hz]	α_p	α_p	α_p
125	0,10	0,40	0,55
250	0,35	0,70	0,60
500	0,70	0,65	0,60
1000	0,90	0,85	0,85
2000	0,95	0,95	0,95
4000	0,65	0,65	0,70
α_w	0,65	0,75	0,70
absorption class	C	C	C

*Direct wall/ceiling mounting incl. clip.



slimline GREEN 24/4 veneer

- dimensions:** 2.940 x 192 mm
- thickness:** approx. 33 mm
- slotting:** 24/4
- front:** European oak real wood veneer (mixmatch)
- surface:** rolling varnish (dull matt)
- middle layer:** wood wool absorber and crossbar
- rear side:** carrier bar (plywood)
- edges:** longitudinal : tongue and groove
transverse: industrial saw cut
- mounting:** vertical | horizontal
wall | ceiling

MOUNTING

fast and easy on the wall and ceiling

EASY INSTALLATION

EASY HANDLING

CLIP-TECHNOLOGY

Traditional fastening systems such as battening, counter-battening or commercially available rails from dry-wall construction can be used to mount the slimline acoustic panels.

The individual panels can either be fastened through the groove with mounting brackets or the specially hardened steel mounting clips shown here can be used.

The system is equally suitable for both wall and ceiling mounting.

The acoustic panels can be installed either in the masonry bond or without offset. The installation system in the masonry bond makes it possible to install the panels with virtually no offsets.

Depending on the size of the wall or ceiling surface, we recommend laying the narrow joints with a spacing of 2 – 3 mm to prevent material-related dimensional changes in the longitudinal direction.

Please refer to the installation and processing instructions on our website.

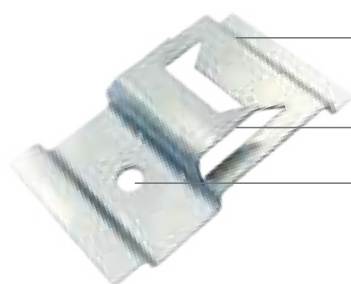


Detail horizontal mounting with mounting clip.



Detail of vertical mounting with mounting clip.

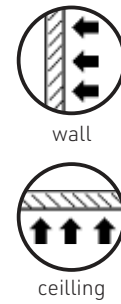
packing unit: 200 pcs./pu
consumption: 10 pcs./m² (recom.)
dimensions: 42 x 45 mm
material: stainless steel



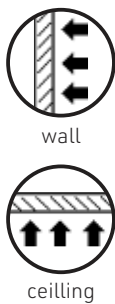
hardened steel, extremely stable

no slipping thanks to mounting tips

compatible with any screw head



Horizontal installation in the classic masonry bond.



Vertical assembly without offset with all-round gap.



Manufacturing processes may cause minimal color differences between packaging units.

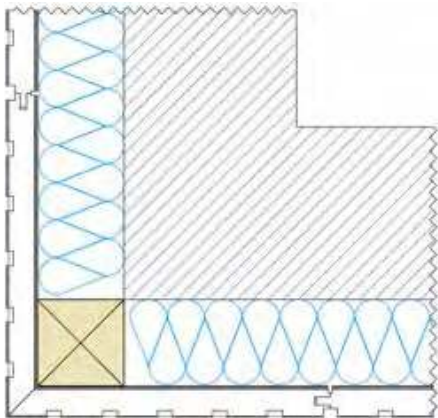
It's advisable, especially for large areas, to **mix panels** from several packages and **distribute** them **in the room** to achieve a particularly homogeneous overall appearance.

MOUNTING additional work

It is not always possible to install the slats in a row without cutouts for connections or windows, angles and closures. Below we would like to give an overview of possible additional work.

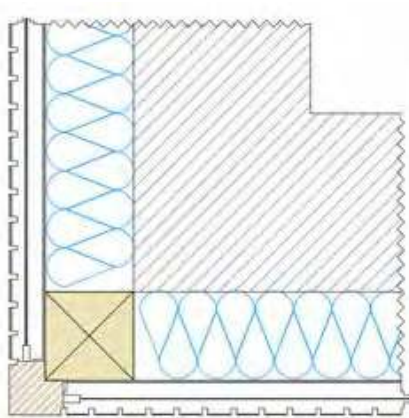
solutions for corners

siter cut



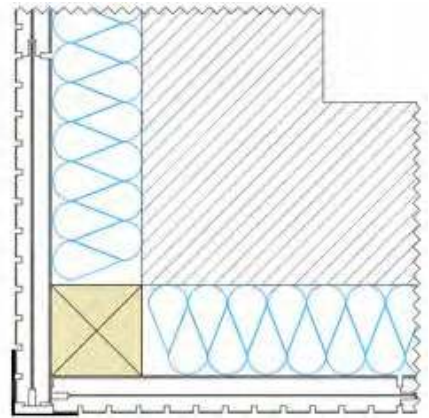
A miter cut has a high-quality and homogeneous effect. The respective butted slats are clipped and classically joined at a 45-degree angle.

solid wood finish



A solid wood edge is robust and durable. This can either contrast with the wall paneling or be kept analogous to the slimline surface.

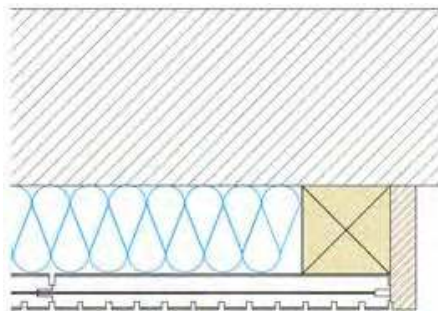
metal bracket



Simple and visually appealing. The corner solution by means of a metal L-profile brings contrast and optimally protects the cut edges.

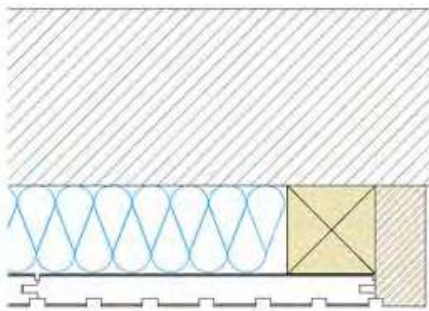
solutions for end strips

decorative strip (narrow)



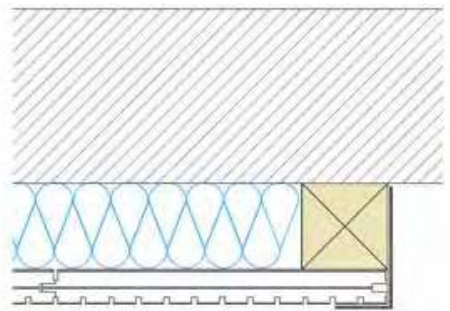
narrow bars width
=
narrow decorative strip

decor strip (broad)



wide bars
=
wide decorative strip

metal bracket



Clean finish with the L profile.



Make sure that the end of the profile is flush with the last visible slot.

NOTES

fitting and processing

Our acoustic elements are suitable for indoor use only. Prior to installation, ensure that the mounting surface is dry and the humidity in the room is reduced to a minimum.

As a result of the slotting, a change in the room climate, especially humidity, can lead to material-related dimensional changes.

Substructures and expansion joints must be adapted to accommodate this swelling and shrinkage behavior. Sufficient rear ventilation of the acoustic elements must also be ensured for climate balance.

You can find detailed information in the respective documents in the download area of our website.



conditioning

Conditioning requires special attention. Conventional wood materials are hygroscopic, i.e., they absorb humidity and release it afterwards. This behavior manifests itself in dimensional changes, which must be taken into account during the installation process. The storage and processing conditions of the elements should match the climate in which they will later be used as much as possible. It is recommended that the products be conditioned for a few days in the future premises under the intended conditions of use prior to installation. These recommendations must also be observed on construction sites.

(further) processing

Our products are derived from wood-based materials coated with decorative surfaces. These can be processed unproblematically like wood-based materials, meaning that the general safety rules and processing principles for wood-based materials must be applied. We will be happy to support you with professional advice.



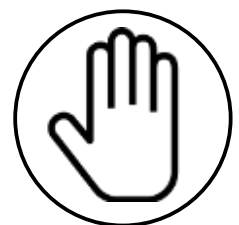
transport and storage

Transport and storage of acoustic elements must be carried out in the original packaging or on flat and stable pallets. If the packaging is removed, the acoustic elements must be stored on full-surface and flat protective plates.

Direct contact with the ground and/or sunlight should be avoided. The top element should always be covered with a protective panel of at least the same size. The acoustic elements must be stored in closed and dry storage rooms under normal climatic conditions (approx. 18 – 25 °C and 50 – 65 % relative humidity).

handling

The acoustic elements must be checked for visible damage after removal of the packaging and before processing! Special care is required during transport and handling, as the elements may lose stability due to the slotting unlike homogeneous board materials. Avoid moving the decor sides against each other or pulling them over each other.



NOTES

ABC of acoustics

Absorber class

Acoustically effective products are assigned to one of the absorber classes A, B, C, D or E according to a procedure defined in DIN EN 11654.

These classes are based on the respective evaluated sound absorption coefficient. The selection of the class depends on the acoustic requirements of a room because the materials of the different absorber classes supplement or optimize the sound absorption already present in rooms as a function of frequency. Our products are available in the following absorber classes:

- A:** most highly absorbent
sound absorption coefficient α_w : 0.90 - 1.0
- B:** highly absorbent
sound absorption coefficient α_w : 0.80 - 0.85
- C:** high absorbent
sound absorption coefficient α_w : 0,60 - 0,75

The materials and the extent to which acoustic elements are required depends on the use of a room. Considering that balanced room acoustics also require the reflection of sound waves, sound-reflecting acoustic panels are also produced and categorized as unclassified.

Alpha-P / α_p (Practical sound absorption coefficient)

To determine an α_p -value, 3 consecutive α_s -values are rounded to one α_p -value each. An absorber measured from 100 to 5000 Hz thus has 6 different α_p -values (125, 250, 500, 1000, 2,000 and 4,000 Hz).

Alpha-W / α_w (Weighted sound absorption coefficient)

To calculate α_w , α_s values measured in thirds and α_p values converted to octaves are used. A so-called reference curve provides the basis for the calculation. This is shifted vertically in prescribed steps (0.05) until the sum of the undershoots of the octave values is 0.10 max. The α_w is then read off at 500 Hz.

Reverberation chamber and reverberation chamber method

A reverberation chamber describes a special laboratory room whose walls reflect a high proportion of the sound waves emitted. They usually achieve this through very smooth surfaces. This results in particularly long reverberation times in the entire frequency range in reverberation rooms. This reverberation time can be measured and compared with the values obtained when acoustic absorbers are integrated in the same room.

This so-called reverberation room method is used to determine the frequency-dependent sound absorption coefficient. The sound absorption of a material or product can be calculated from the change in the reverberation time in the room.

Reverberation time

The reverberation time indicates the time required for a sound wave to become inaudible. It has a direct influence on speech intelligibility in a room. As a rule, speech intelligibility decreases as the reverberation time increases or lengthens. Acoustic elements adjust and optimize the reverberation time in the respective rooms.

Sound absorption coefficient

The sound absorption coefficient α of a material indicates how much of the total incident sound is absorbed. $\alpha = 0$ means that no absorption takes place. The entire sound is therefore reflected. At $\alpha = 0.5$, only 50% of the sound energy is reflected. Accordingly, the other 50% is absorbed. An optimum is represented by $\alpha = 1$ since the complete sound is absorbed here.

Sound insulation vs. sound attenuation

When we speak of sound attenuation or sound absorption, we mean the absorption of airborne sound by materials such as our acoustic elements. In this process, the impinging sound is converted into thermal energy. In building acoustics, on the other hand, the term „sound insulation“ is used to refer to the impediment of sound propagation in adjacent rooms, houses, etc. The term „soundproofing“ is used in the context of building acoustics.

SERVICE partner in acoustics



„SUBMIT A REQUEST!“

We are an international company and have a worldwide network. In many regions of Germany and countries in Europe, we work together with local dealers and sales partners. You can of course send your inquiries by mail to or call our headquarters.



„ORDER A SAMPLE!“

Various designs from our **TREND COLLECTION** shown here are available on request in a high-quality sample box. As a rule, we only charge a small nominal fee for the samples, which will of course be charged should an order be placed afterwards.



„SCHEDULE AN APPOINTMENT!“

We support you in every phase of the planning and implementation of your projects. Whether on the phone, at your location or directly in the respective premises - we are there for you. Likewise, we offer training courses regarding acoustics and professional consulting sessions.



„VISIT OUR WEBSITE!“

On our website www.akustik-plus.com you will find detailed product information. Here you will find data sheets, references, current information and background knowledge regarding room acoustics. A network map gives you an overview of partners in your area.





WE ARE LOOKING
FORWARD TO
YOUR PROJECT"

akustik*plus*

IMPRINT

Editor:

akustik plus Behringen GmbH & Co. KG
Im Straßfeld 2
99820 Hörsselberg-Hainich
Germany

Photo credits::

akustik*plus*, Adobe Stock

date of publication:

September 2022 | 1. edition

Notes:

Errors, misprints and technical changes reserved.
Please visit our website for the most current version of this brochure.
Our general terms and conditions apply.

YOUR WAY TO US

akustik plus Behringen GmbH & Co. KG
Im Straßfeld 2
D - 99820 Hörselberg-Hainich

Phone: +49 (0) 36254 8659-0
Fax: +49 (0) 36254 8659-55
Mail: info@akustik-plus.com



www.akustik-plus.com

akustik*plus*