







### THE ACOUSTIC ROOM DESIGN

Whether a room is perceived as acoustically pleasant largely depends on the reverberation time. The reverberation time indicates the period of time that a sound event requires in order to be inaudible. Through the proper use of sound-absorbing materials, the room acoustics can be specifically tailored to the purpose of the room. The natural ecological texture and low weight per unit area make it ideal for new construction as well as renovation. But it would not do the Admonter name justice if design were to take a back seat in these sophisticated acoustic elements. The Admonter Acoustic elements open up new possibilities for acoustic and visual interior design.

### PLANNING

Admonter ACOUSTICs absorb up to 100 % of the incident sound and thus meet the high requirements for visual and functional room design. By varying the overall construction height (distance to the ceiling and type of damping), acoustic properties matching the respective requirements can be created. In order to achieve the optimal auditory effect for the individual spatial situation, it is recommended to consult a designer with expert acoustic knowledge or an acoustician at an early stage.

#### Feature - benefit advantages of wooden acoustic panels

 4 acoustic products For every area of use	 For climate ceilings Room cooling possible	 Services Made to measure cuts	 Calculation tool Easy precalculation
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Features wooden acoustic panels	Benefit
Acoustic products made of natural wood (available in different wood species – also Reclaimed wood)	Large choice – differentiation from the competition
Acoustic in combination with conventional air-conditioned ceiling systems	Not only better acoustics, but also combinable with room cooling systems is possible
4 Acoustic products for diverse areas of application	We are offering a suitable acoustic product in natural wood for every area of application
Acoustic online calculation tool for pre-dimensioning with before and after comparison	Simple pre-calculation and materialisation in combination with a clean documentation



ONLINE

#### CALCULATION - TOOL

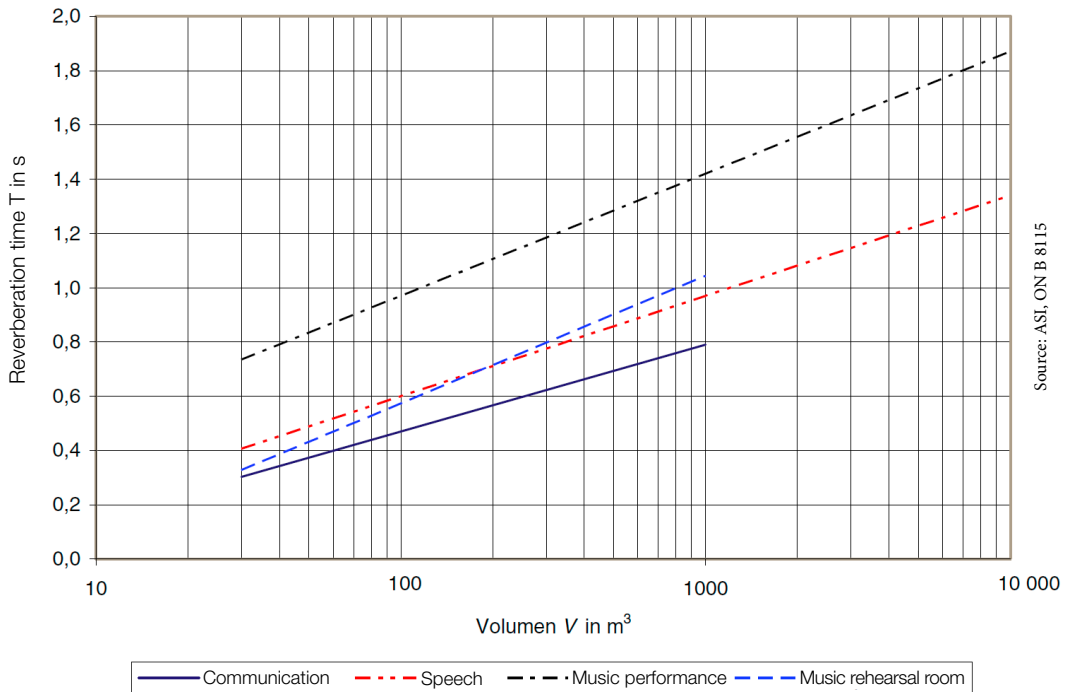
Use this service for your individual acoustic room design calculation:  
[service.admonter.at/raumakustik/en.html](http://service.admonter.at/raumakustik/en.html)



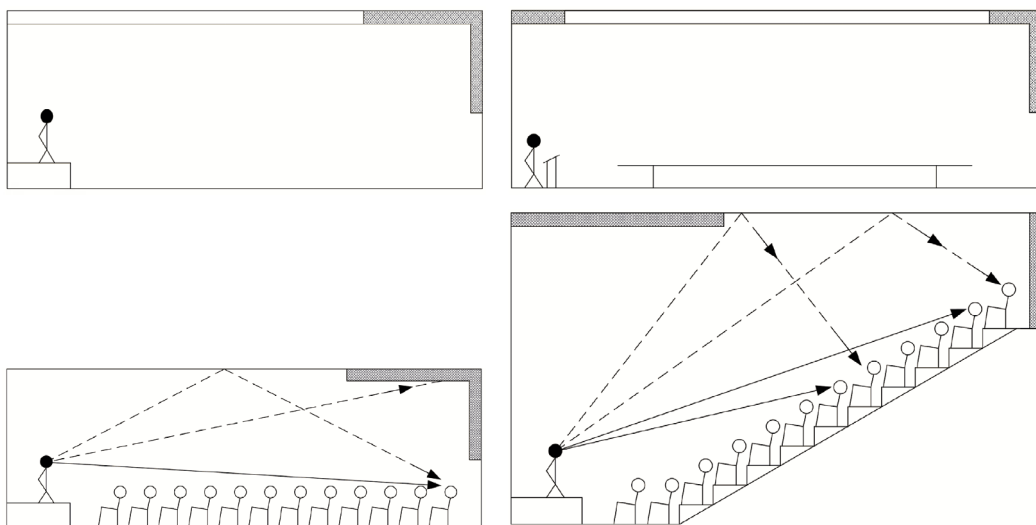
## Practical example - Explanation

Sound is absorbed by Admonter ACOUSTIC's solutions, they give the room pleasant room acoustics and lead to significantly improved speech intelligibility. To minimise noise and reverberation in rooms, reflective surfaces such as ceilings, walls, partitions, room dividers, glass elements, etc., must be equipped with sound-absorbing components. With the decorative Admonter ACOUSTICS, this can be easily implemented in new buildings and renovations.

The respective reverberation time of a room recommended according to ÖNorm B 8115-3, depending on its volume and the intended use:







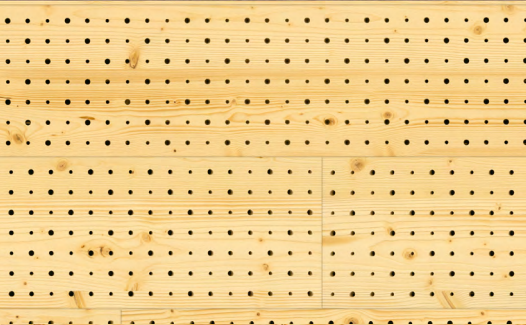















## Proposed arrangements based on Önorm B 8115-3



Source: ON-B 8115-3:2005



Product	Product image	Soundabsorption	Ball proof impact	Fire classification	Product weight/m <sup>2</sup>
<b>Wooden acoustic panels Premium</b> 		 A	 Ball-proof impact resistance handball certifi. EN 13964: 2014	 D-s2, d0	 approx. 4 kg
<b>Wooden acoustic panels Dot</b>		 D	 Ball-proof impact resistance hockeyball certifi. DIN 18032-3	 Hardwood: D-s2, d0 Softwood: C-s2, d0 <sup>*)</sup>	 approx. 9 kg
<b>Wooden acoustic panels Linear</b>		 A	Examination still pending	 C-s2, d0 <sup>*)</sup>	 approx. 10kg
<b>Wooden acoustic panels Geo</b>		 C/D <sup>**)</sup>	 Ball-proof impact resistance handball certifi. DIN 18032-3: 2018	 D-s2, d0	 approx. 8 kg

\*) only with factory-made texture treatment and mechanical fastening possible  
 \*\*) depending on the construction





# Natural wooden Acoustic panels PREMIUM Admonter

Wooden Acoustic panels



## PREMIUM Skilfully. Emphasised.

The natural ecological texture and low weight per unit area make it ideal for new construction as well as renovation. But it would not do the Admonter name justice if design were to take a back seat in these sophisticated acoustic elements.

The Admonter Acoustic elements open up new possibilities for acoustic and visual interior design. The eye sees only a part thereof; the rest is seen with the ears!

Proven 100% sound absorption!

### CONSTRUCTION

- Solid wood top sheet (cutting geometry: 15 mm web – 3 mm slot)
- 30 mm honeycomb core
- Dimension approx. 33 x 200 x 2390 mm
- Acoustic fleece rear lining (simultaneous trickle protection)
- installation guide please find on [admonter.com/downloads](http://admonter.com/downloads)

### TECHNICAL INFORMATION

- **CE-marking** according to EN 13964
- **Profile** circumferentially grooved with MDF tongue for continuous installation
- **Fire behaviour** according to EN 13501: D-s2,d0
- **Sound absorption class** according to EN 11654: A
- **Sound absorption coefficient** according to EN 11654 $\alpha_w$  1.00
- **Acoustically open area** 17.5
- **Weight per unit area** approx. 4.4 kg/m<sup>2</sup>
- **Surface** raw or natural oiled
- Can also be used on **radii and bends**
- **Free of harmful substances** and respirable fibres
- **Vapour diffusion open**
- **Climatic range** Room temperature 10 - 30°C  
Humidity 25 - 65%  
(short-term exceeding or undershooting possible)

### PROCESSING

- Efficient and simple machining with conventional wood-working machines
- Concealed, tool-free installation by means of the Admonter ACOUSTICS fastening system or
- Direct fastening with clips or clinched nails through the MDF tongue
- Download see installation guide natural wood acoustics

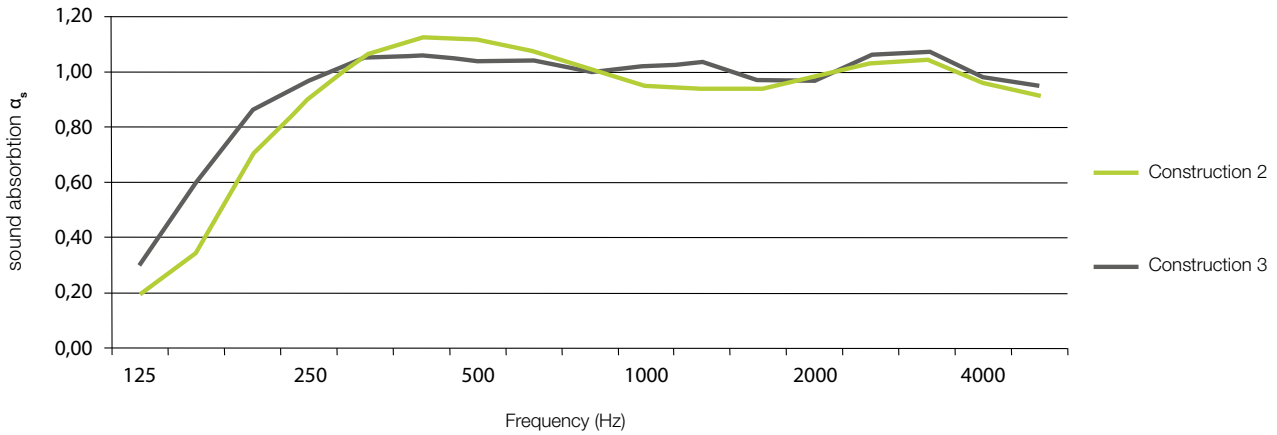
### COLOUR RANGE



Type of wood	Grading	Length (mm)	Width (mm)	Thickness (mm)	Texture	Finish
Spruce	basic	2390	200	33	brushed	untreated / natural oiled / white natural oiled
Larch	naturelle	2390	200	33	brushed	untreated / natural oiled / white natural oiled / Alba
Stone-Pine	basic	1800 / 2100 / 2390	200	33	brushed	untreated / natural oiled / white natural oiled
Oak	basic	2390	200	33	brushed	untreated / nat. oiled / stone nat. oiled / white nat. oiled
Oak finger-jointed	noblesse	2390	200	33	brushed	untreated / nat. oiled / stone nat. oiled / white nat. oiled
Reclaimed Wood hacked H3	-	1800 / 2100	200	38	hacked	untreated
Reclaimed Wood hacked H4	-	1800 / 2100	200	38	hacked	untreated
Fir rift/semi-rift finger-jointed	noblesse	2390	200	35	brushed	untreated / natural oiled / white natural oiled



## Premium - sound absorption with backfilling

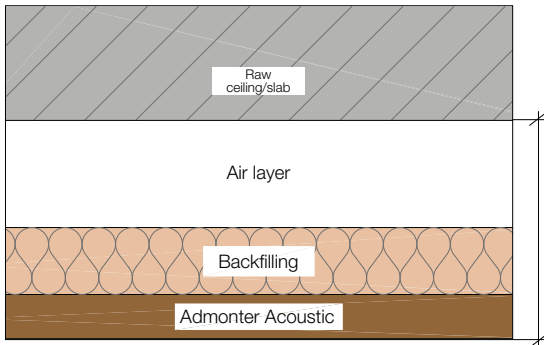


	Frequency [Hz]	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Construction 2*	α <sub>s</sub> accord. EN 354	0,19	0,35	0,70	0,90	1,06	1,12	1,11	1,07	1,00	0,95	0,94	0,94	0,98	1,03	1,04	0,96	0,91
	α <sub>p</sub> accord. EN 11654	0,20			0,90			1,00			0,95			1,00			0,95	
Construction 3*	α <sub>s</sub> accord. EN 354	0,30	0,60	0,86	0,97	1,05	1,06	1,04	1,04	1,00	1,02	1,03	0,97	0,97	1,06	1,07	0,98	0,95
	α <sub>p</sub> accord. EN 11654	0,35			0,95			1,00			1,00			1,00			1,00	

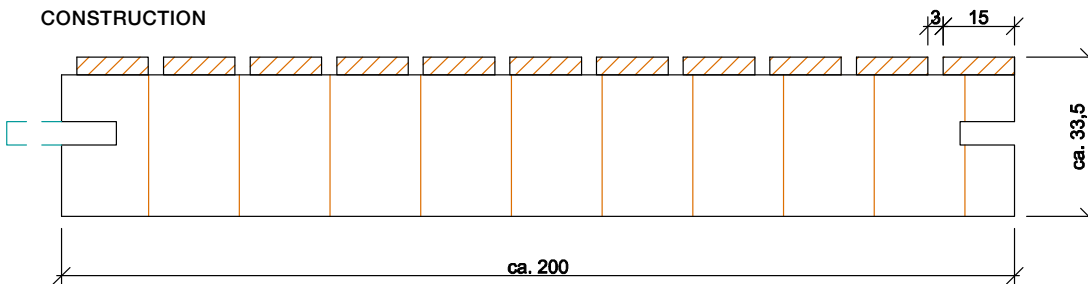
\*Sound absorption class accord. EN 11654: A

\*Sound absorption accord. EN 11654: α<sub>w</sub> 1,00

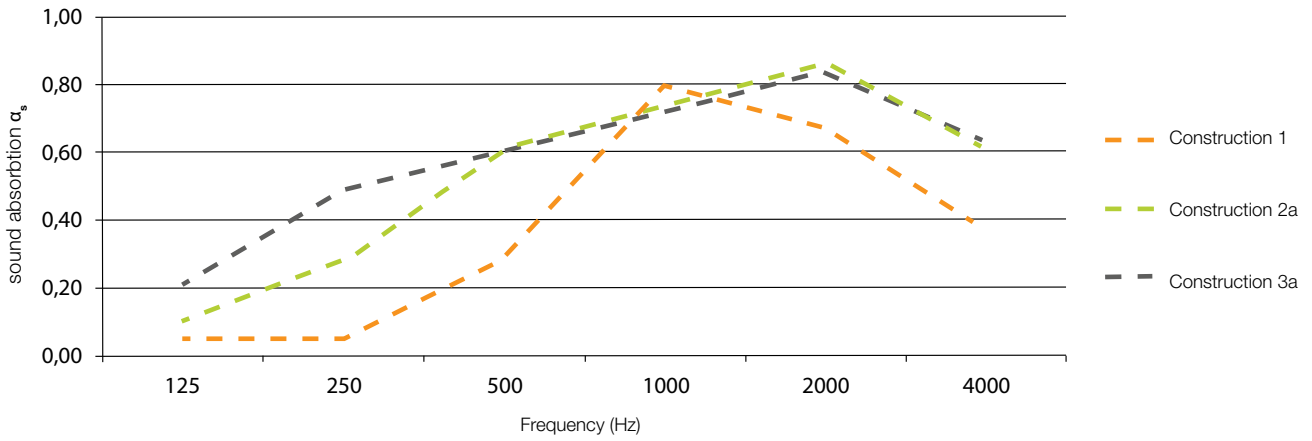
\*Source: Hallraummessung accord. EN 354 & EN 11654  
Labor für Bauphysik, TU Graz; Notified Body Nr.: 2064)



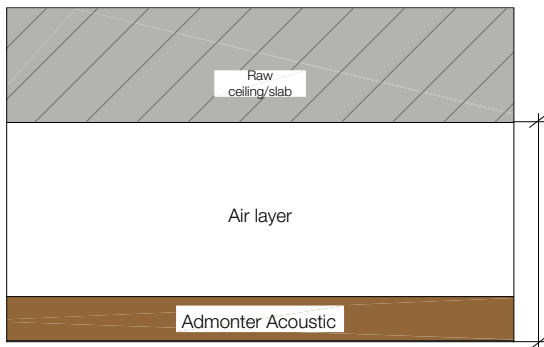
	Air layer	Backfilling	Total constr. height
Aufbau 2	10mm	50mm	approx. 93mm
Aufbau 3	80mm	50mm	approx. 163mm



## sound absorbtion without Backfilling

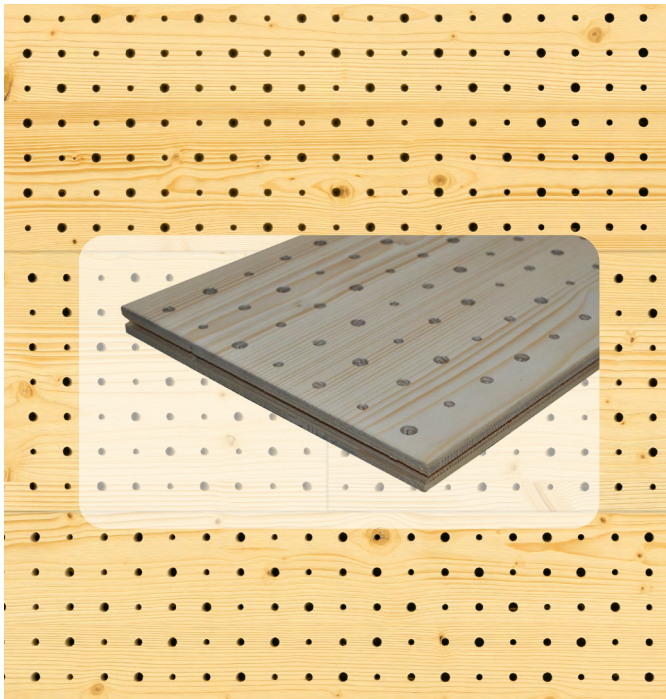


	Frequency [Hz]	125	250	500	1000	2000	4000
Construction 1	$\alpha_s$ accord. EN 354	0,05	0,05	0,29	0,80	0,67	0,37
Construction 2a	$\alpha_s$ accord. EN 354	0,10	0,28	0,61	0,74	0,86	0,61
Construction 3a	$\alpha_s$ accord. EN 354	0,21	0,49	0,61	0,72	0,84	0,63



	Air layer	Backfilling	Total constr. height
Construction 1	15mm	-	approx. 48mm
Construction 2a	60mm	-	approx. 93mm
Construction 3a	120mm	-	approx. 153mm





## DOT

Admonter acoustic elements "swallow" up to 100% of the incident sound. Of course, the acoustic elements, which are 100% made in Austria, are also free of harmful substances and respirable fibres as well as open to vapour diffusion, thus contributing to healthy living. The DOT version also offers an interesting look.

- Suitable for use in sports or multi-purpose halls
- Can be combined with GALLERIA
- Optimal for low and medium frequency range

### CONSTRUCTION

- 3-layer Galleria Element
- Perforation of different diameters
- Acoustic fleece rear lining (simultaneous trickle protection)
- Dimension approx. 1824 - 2400 x 244 x 19 mm

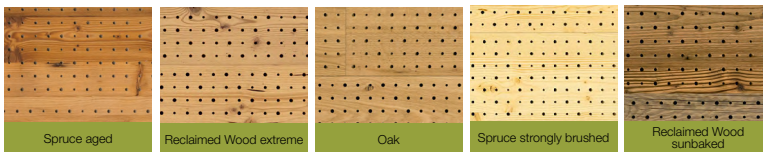
### TECHNICAL INFORMATION

- **CE-marking** according to EN 13986
- **Profile** circumferentially grooved with MDF tongue for continuous installation
- **Fire behaviour** according to EN 1350
  - Hardwood D-s2, d0
  - Softwood C-s2, d0 with mechanical fastening on substructure and factory surface treatment
- **Sound absorption class** according to EN 11654: D
- **Sound absorption coefficient**  $\alpha_w$  0,40 (L) (max. Absorption with  $\leq 250$  Hz)
- **Acoustically open area** 4,1%
- **Weight per unit area** approx. 8,56 kg/m<sup>2</sup> (Spruce)
- **Surface** raw or natural oiled
- **Free of harmful substances** and respirable fibres
- **Vapour diffusion open**
- **Climatic range** SWP/2 NS (Humidity 25-80%)

### PROCESSING

- Efficient and simple machining with conventional wood-working machines
- DOT is grooved all around with a foreign spring for endless laying the attachment takes place by means of a profile claw on the corresponding subtexture
- Download see installation guide natural wood acoustics

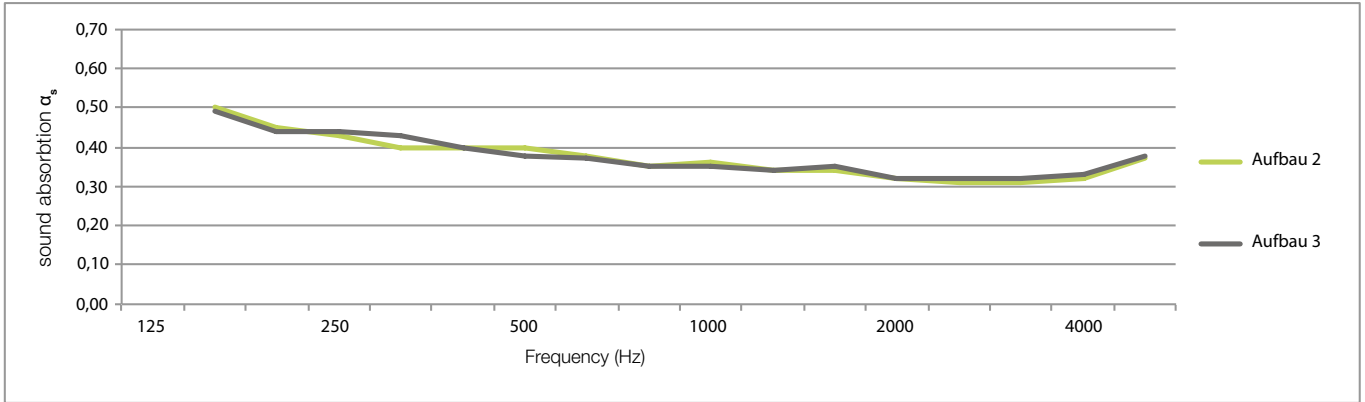
### COLOUR RANGE



Typee of wood	Grading	Length (mm)	Width (mm)	Thickness (mm)	Texture	Finish
Spruce aged brushed	basic	2400	244	19	brushed	untreated / natural oiled / white natural oiled
Reclaimed Wood H2	-	1824 / 2400	244	19	hacked	untreated / natural oiled
Reclaimed Wood extreme	-	1824 / 2200 / 2400	244	19	brushed	untreated / natural oiled
Oak	rustic	2400	244	19	brushed	untreated / nat. oiled / stone nat. oiled / white nat. oiled
Spruce strongly brushed	basic	2400	244	19	brushed	untreated / natural oiled / white natural oiled
Reclaimed Wood sunbaked	-	1824 / 2400	244	19	brushed	untreated



## Sound absorption with Backfilling



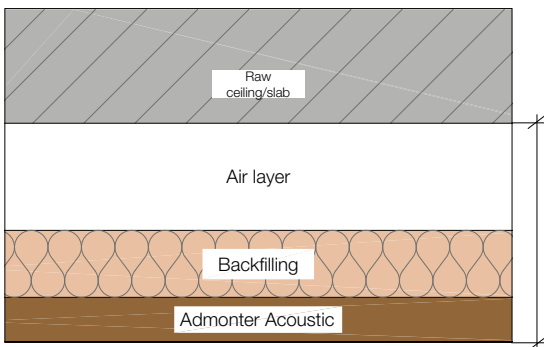
	Frequency [Hz]	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Construction 2	$\alpha_s$ accord. EN 354	0,32	0,50	0,43	0,43	0,40	0,39	0,41	0,38	0,35	0,36	0,33	0,34	0,32	0,31	0,31	0,32	0,37
	$\alpha_p$ accord. EN 11654	0,30			0,40			0,40			0,35			0,30				0,35
Construction 3*	$\alpha_s$ accord. EN 354	0,40	0,49	0,42	0,44	0,43	0,38	0,38	0,37	0,35	0,35	0,34	0,35	0,32	0,32	0,32	0,32	0,38
	$\alpha_p$ accord. EN 11654	0,30			0,45			0,40			0,35			0,35				0,35

\*Sound absorption class accord. EN 11654: D

\*Sound absorption accord. EN 11654:  $\alpha_w$  0,40 (L)

max. Absorption with  $\leq 250$  Hz

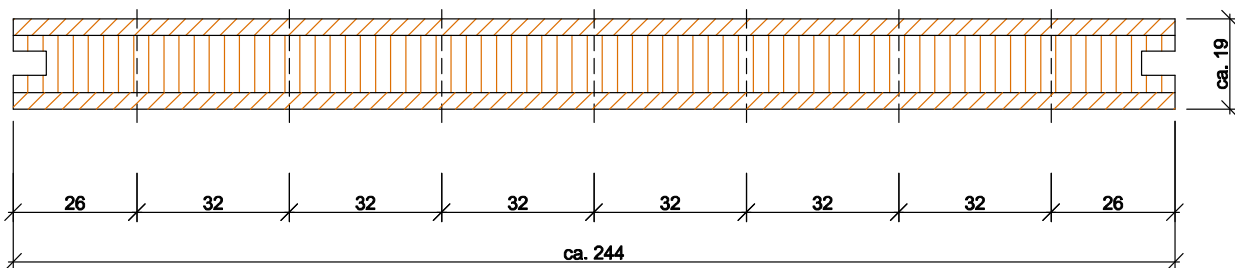
\*Source: Hallraummessung accord. EN 354 & EN 11654 Labor für Bauphysik, TU Graz; Notified Body Nr.: 2064



	Air layer	Backfilling	Total constr. height
Construction 2	10 mm	50 mm	approx. 79 mm
Construction 3	90 mm	50 mm	approx. 159 mm

Total construction height

### CONSTRUCTION







## LINEAR

In addition to harmonious design and optimal combinability with the Admonter product groups, the Admonter Acoustic Linear offers healthy living with up to 100% sound absorption.

Pleasantly quiet, almost like a walk through nature. In addition, Admonter Acoustic products are PEFC and EPD certified and bear the Austrian Eco-label.

### CONSTRUCTION

- Solid wood 3-layer
- Cutting geometry: 13 mm web – 3 mm slot) back with hole
- Acoustic fleece rear lining (simultaneous trickle protection)

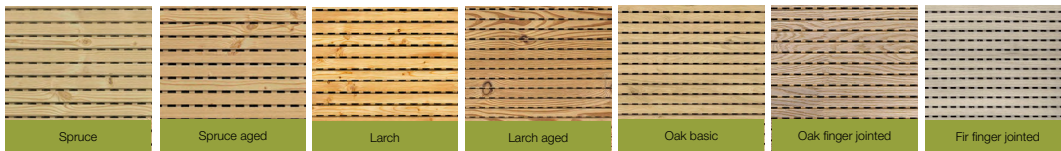
### TECHNICAL INFORMATION

- **CE-marking** according to EN 13964
- **Profile all-round** 4-sided profile only endless installation
- **Fire behaviour** according to EN 13501: C-s2, d0 for below mentioned wood species only with factory surface treatment and mechanical fastening
- **Sound absorption class** according to EN 11654: A
- **Sound absorption coefficient**  $\alpha_w$  1,00
- **Acoustically open area** 9 %
- **Weight per unit area** approx. 11,14 kg/m<sup>2</sup>
- **Surface** raw or natural oiled
- **Free of harmful substances** and respirable fibres
- **Vapour diffusion open**
- **Climatic range:** Room temperature 10 - 30°C  
Humidity 25 - 65%  
(short-term exceeding or undershooting possible)

### PROCESSING

- Efficient and simple machining with conventional woodworking machines
- Concealed, tool-free installation by means of the Admonter ACOUSTICS fastening system or
- Direct attachment with clamps or compressed nails through the groove cheek on wooden subtexture
- Download see installation guide natural wood acoustics

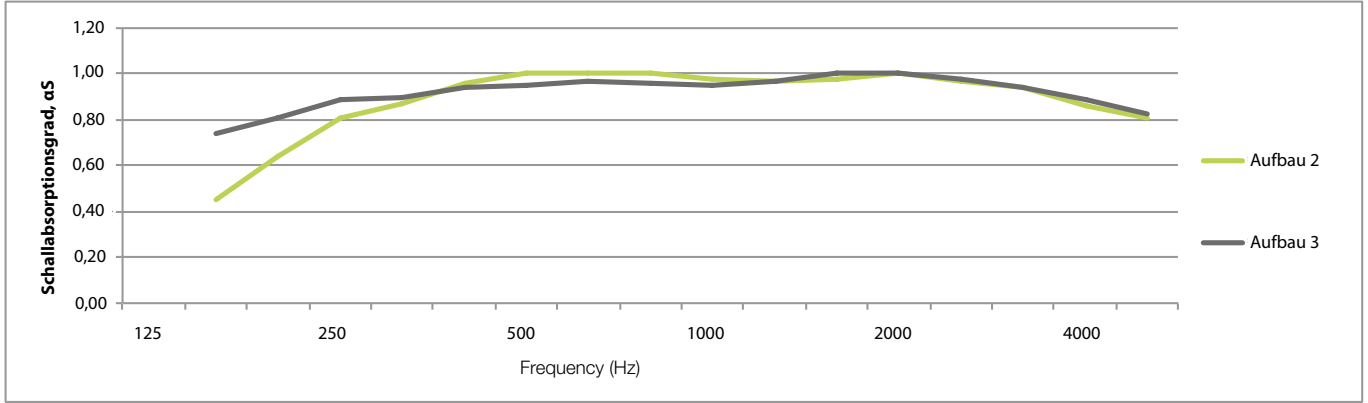
### COLOUR RANGE



Typee of wood	Grading	Length (mm)	Width (mm)	Thickness (mm)	Texture	Finish
Spruce	basic	2400	240	19	brushed	untreated / natural oiled / white natural oiled
Spruce aged	basic	2400	240	19	brushed	untreated / natural oiled / white natural oiled
Larch	naturelle	2400	240	19	brushed	untreated / natural oiled / white natural oiled
Larch aged	naturelle	2400	240	19	brushed	untreated / natural oiled / white natural oiled
Oak	basic	2400	240	19	brushed	untreated / nat. oiled / stone nat. oiled / white nat. oiled
Oak finger-jointed	noblesse	2400	240	19	brushed	untreated / nat. oiled / stone nat. oiled / white nat. oiled
Fir rift/semi-rift finger-jointed	noblesse	2400	240	20	brushed	untreated / natural oiled / white natural oiled



## Sound absorption with Backfilling

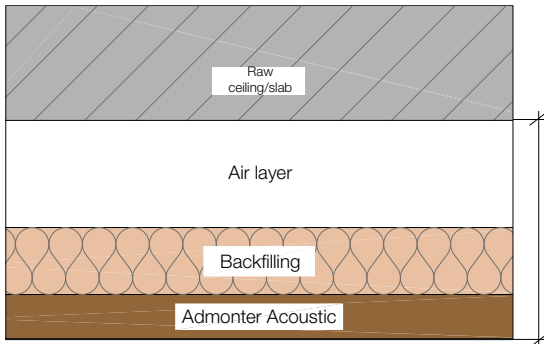


	Frequency [Hz]	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Construction 2	$\alpha_s$ accord. EN 354	0,26	0,48	0,64	0,83	0,87	0,96	1,00	1,00	1,00	1,00	0,97	0,98	1,00	0,99	0,94	0,86	0,81
	$\alpha_p$ accord. EN 11654	0,30			0,80			1,00			1,00			1,00			0,85	
Construction 3*	$\alpha_s$ accord. EN 354	0,35	0,74	0,81	0,91	0,88	0,94	0,95	0,97	0,96	0,95	0,97	1,00	1,00	1,00	0,94	0,89	0,83
	$\alpha_p$ accord. EN 11654	0,40			0,85			0,95			0,95			1,00			0,90	

\*Sound absorption class accord. EN 11654: A

\*Sound absorption accord. EN 11654:  $\alpha_w$  1,00

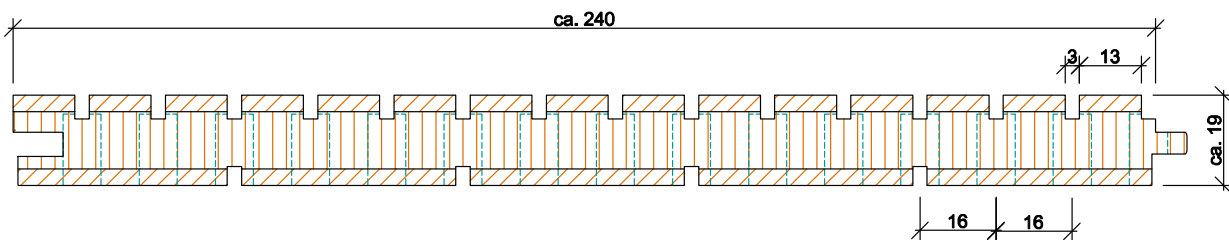
\*Source: Hallraummessung accord. EN 354 & EN 11654  
Labor für Bauphysik, TU Graz; Notified Body Nr.: 2064)



	Air layer	Backfilling	Total constr. height
Construction 2	10 mm	50 mm	approx. 79 mm
Construction 3	90 mm	50 mm	approx. 159 mm

Total construction height

### CONSTRUCTION



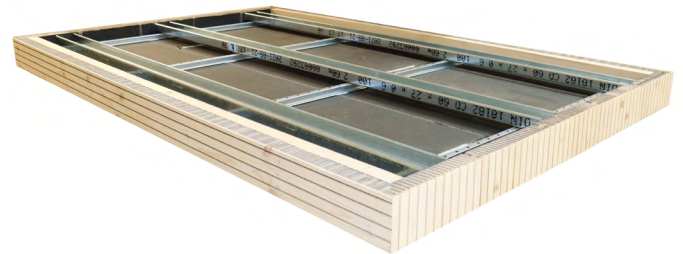


## PREMIUM CEILING SAIL

Simple installation, noticeably better room acoustics and a noble design - these are the features of the Admonter Acoustic Premium pre-assembled ceiling sails.

- As the upper side is also acoustically effective, this results in a higher surface-related absorption capacity.
- Ideal for use with thermal component activation (ceiling heating/cooling), as there is no area-related shielding.
- Relatively quick retrofitting possible in finished rooms
- Can be placed freely in the room to achieve the best acoustic solution on site

Calculation with the Admonter acoustic calculation tool  
<https://service.admonter.at/raumakustik/de.html>



- **CE-marking** according to EN 13964
- **Reaction to fire** according to EN 13964: F
- **Surface weight** Type A approx. 23 kg, Type B approx. 12kg
- **Finish** brushed natural oiled
- **Free of pollutants** and respirable fibres
- **Vapour diffusive**
- **Climatic range** Room temperature 10 - 30°C  
Humidity 25 - 65%  
(short-term exceeding or undershooting possible)

### CONSTRUCTION

- Solid wood top sheet (cutting geometry: 15 mm web – 3 mm slot)
- 30 mm honeycomb core
- Dimensions Type A = 2200 x 995 x 80mm, Type B = 1000 x 795 x 80mm
- Acoustic fleece laminated on the back (simultaneous trickle protection)
- no on-site processing necessary, as assembled and glued at the factory
- Ready for ceiling mounting

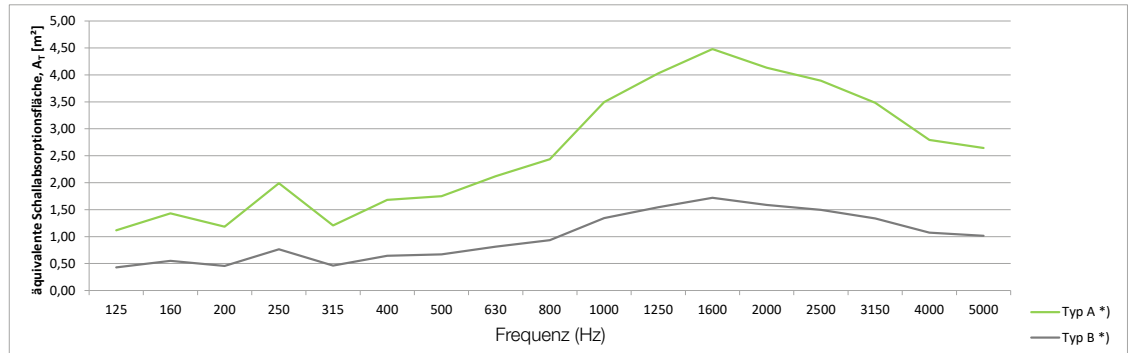
### PROCESSING

- The fixing of the pre-assembled ceiling sails is done by using approved suspension systems.
- Suitable suspension systems are for example „Anker-Fix“ quick hangers and the wire with eyelet
- Depending on the building material, the suspension system must be fastened to the ceiling by using approved or standardised anchoring elements (dowels, screws) and in accordance with the manufacturer's specifications and by experts. For further details please refer to he installation instructions.

Typ of wood	Grading	Type	Length (mm)	Width (mm)	Height (mm)	Structure	Finish
Spruce	basic	Type A	2200	995	80	brushed	natural oiled / white natural oiled
		Type B	1000	795	80		
Larch Alba	naturelle	Type A	2200	995	80	brushed	natural oiled
		Type B	1000	795	80		
Larch	naturelle	Type A	2200	995	80	brushed	natural oiled / white natural oiled
		Type B	1000	795	80		
Stone-Pine	basic	Type A	2200	995	80	brushed	natural oiled / white natural oiled
		Type B	1000	795	80		
Oak	basic	Type A	2200	995	80	brushed	natural oiled / white natural oiled / stone natural oiled
		Type B	1000	795	80		
Oak finger-jointed	noblesse	Type A	2200	995	80	brushed	natural oiled / white natural oiled / stone natural oiled
		Type B	1000	795	80		
Fir Rift-/semirift finger-jointed	noblesse	Type A	2200	995	80	brushed	natural oiled / white natural oiled
		Type B	1000	795	80		



## Schallabsorption



	Frequenz [Hz]	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Typ A *)	A <sub>T</sub> [m²]	1,12	1,43	1,19	1,99	1,21	1,68	1,75	2,12	2,44	3,49	4,03	4,48	4,13	3,89	3,48	2,79	2,64
Typ B *)	A <sub>T</sub> [m²]	0,43	0,55	0,46	0,76	0,46	0,65	0,67	0,81	0,94	1,34	1,55	1,72	1,59	1,49	1,34	1,07	1,02

A<sub>T</sub> = äquivalente Schallabsorptionsfläche je Stk. in Anlehnung an EN ISO 354

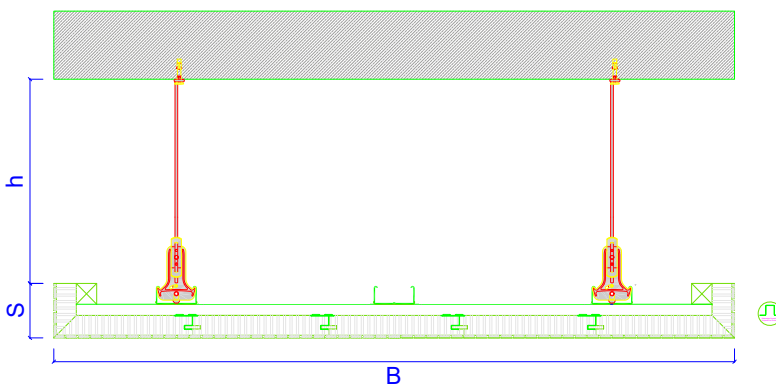
gültig für Abhängöhe h = 300 mm, ohne zusätzliche oberseitige Bedämpfung, bei Einzelmontage horizontal & parallel zur Decke

gültig für Abhängöhe h = 300 mm, ohne zusätzliche oberseitige Bedämpfung, bei Mehrfachmontage mit Reihenabstand >600 mm horizontal & parallel zur Decke

\*) Datenquelle: Admonter Alphakabine

Typ A ... 2200x995mm

Typ B ... 1000x795mm



S = 80 mm

B = 995 mm Type A  
795 mm Type B

h = 300 mm Suspension height  
without additional top-side damping

In the event of large suspension heights (> 400 mm) and/or the possibility of draughts at the installation site, suitable precautions must be taken to prevent the sail from swinging, e.g. diagonal bracing, etc. If „optional top-side damping“ is used to further increase the acoustic absorption behaviour, especially in the low-frequency range, insulation materials with the following properties should be preferred: e.g. „Floorrock® SE“ (rockwool.de), 30 mm thick. For alternative products, a length-related flow resistance of approx. 25 kPa-s/m² must be observed.

### Simple installation, noticeably better room acoustics and an elegant design - these are the hallmarks of the Admonter Acoustic Premium ceiling sail.

- As the upper side is also acoustically effective, this results in a higher surface-related absorption performance
- Ideal when using thermal component activation (ceiling heating/cooling) as there is no surface shielding
- Quick retrofitting possible in finished rooms
- Can be positioned anywhere in the room, allowing individual room acoustic requirements to be taken into account.

Calculation in the Admont acoustic calculator <https://service.admonter.at/raumakustik/de.html>

Features wooden acoustic panels	Benefit
Acoustic products made of natural wood (available in different wood species – also Reclaimed wood)	Large choice – differentiation from the competition
Acoustic in combination with conventional airconditioned ceiling systems	Not only better acoustics, but also combinable with room cooling systems is possible
Acoustic online calculation tool for pre-dimensioning	Simple pre-calculation and materialisation in combination with a clean documentation

Our floors, walls, ceilings, stairs, doors or acoustic solutions are perfectly coordinated to make your ideas come true and to give every room a very special atmosphere.







**PREMIUM and DOT  
as air conditioned cooling system**

The Admonter „ACOUSTICs Premium and DOT“ can be combined with commercially available ceiling air conditioning systems in order to regulate the room climate. When comparing this combination with Acoustics Premium sole use, there might be lightly more joint formation due to higher varying differences in humidity of the wood between summer and winter. The achieved cooling power mainly depends on the air conditioning system used.

**MECHANICS / INSTALLATION**

- Installation according to the current „Installation Instructions ACOUSTICs“
- Alternatively: mount the profile clamps directly onto the air condition profiles if applicable
- All pipework systems must not pressurise the Admonter ACOUSTICs Premium at any stage

**CLIMATE TECHNOLOGY**

- Automatic regulation (based on the room climate) of the flow temperature; the sole passive dew switch, attached on the flow temperature pipe is not sufficient.
- It is recommended to install one Fidbox per cooling circuit between the ceiling air conditioner and the acoustic element. In this way the different climates are documented, which protects the installer of the Admonter Acoustics.

Fidbox: Side with adhesive strip = up side (side with air conditioning system)

- The detailed specifications according to [admonter.com/klimadecke](http://admonter.com/klimadecke) must be met.
- \*) at minimum measurement accuracy +/- 1K and +/- 5% rH

**Exemplary calculation examples (based on h,x diagram):**

28°C room temperature; 55 % relative humidity --> require 23°C minimum heat sink temperature

30°C room temperature; 60 % relative humidity --> require 26°C minimum heat sink temperature etc.





With Admonter **Acoustics GEO**, you have the option of choosing between **two different decorative slot geometries**. Four different types of wood bring **additional Admonter charm** to your property, whereby floors and walls are also available in the **same type of wood or surface and structure** with the **Admonter room concept**. **Integrated absorber** with low weight per unit area and **easy installation**: Acoustic GEO is the surprisingly inexpensive **Acoustic variant from Admonter with 100% sound absorption for healthy living spaces**.

**TECHNICAL INFORMATION**

- **CE-marking** according to EN 13964
- **Fire behaviour** according to EN 13501: D-s2, d0
- **Sound absorption class** according EN 11654: C & D
- **Sound absorption coefficient** 11654:  $\alpha_w$  0,55 to 0,70
- **Weight per unit area** 8 kg/m<sup>2</sup>
- **Surface** raw or natural oiled
- **Profile** all-round tongue & groove for continuous installation
- **Free of harmful substances** and respirable fibres
- **Vapour diffusion open**
- **Climatic range:** Room temperature 10 - 30°C  
Humidity 25 - 65%  
(short-term exceeding or undershooting possible)

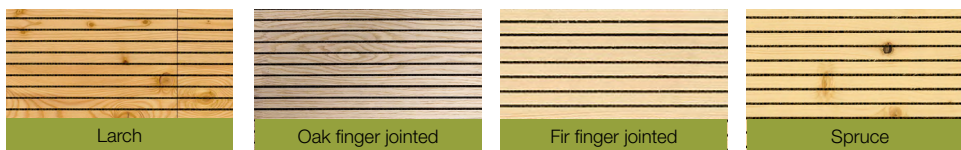
**CONSTRUCTION**

- Multi-layer construction with solid wood top layer in 3.6mm thickness
- Integrated soft fibre absorber
- Dimension 33 x 415 x 2400mm
- Cut geometries with 4mm slot milling
- Dimensionally stable due to crosswise gluing

**PROCESSING**

- Efficient and simple processing with conventional woodworking machines
- Direct fastening with staples or screws in the slotted groove on wood or CD steel sheet profiles
- Details see installation guide natural wood acoustic panels Geo

**Colour range**





## Acoustics GEO 20-40/07

Slot milling: 4mm

Web width: 20/25/27/30/35/40mm

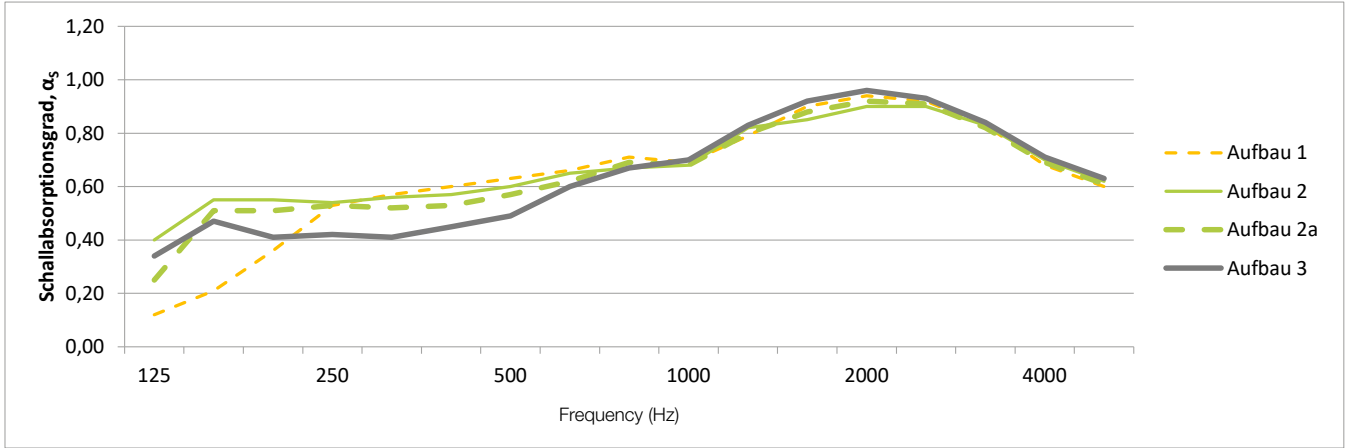
Acoustically open area: 7%



Grading picture	Type of wood	Item number	Grading	Length (mm)	Width (mm)	Thickn. (mm)	Finish
	Larch	134833	naturelle	2400	415	33	raw
		134824	naturelle	2400	415	33	natural oiled
		134827	naturelle	2400	415	33	white natural oiled
	Oak finger jointed	134844	noblesse	2400	415	33	raw
		134957	noblesse	2400	415	33	natural oiled
		134954	noblesse	2400	415	33	stone natural oiled
		134951	noblesse	2400	415	33	white natural oiled
	Fir finger jointed	134933	noblesse	2400	415	33	raw
		134948	noblesse	2400	415	33	natural oiled
		134945	noblesse	2400	415	33	white natural oiled
	Spruce	134936	basic	2400	415	33	raw
		134963	basic	2400	415	33	natural oiled
		134960	basic	2400	415	33	white natural oiled



## Sound absorption



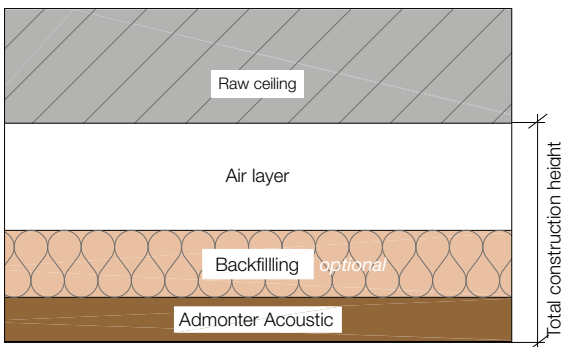
Frequency [Hz]		125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	$\alpha_w$	Absorber class
Construction 1*)	$\alpha_s$ according to EN 354	0,13	0,24	0,40	0,55	0,57	0,59	0,63	0,70	0,75	0,79	0,93	0,97	0,78	0,64	0,48	0,35	0,33		
	$\alpha_s$ according to EN 11654	0,15		0,50				0,65		0,80			0,80		0,80		0,40		0,60	C
Construction 2*)	$\alpha_s$ according to EN 354	0,35	0,50	0,50	0,52	0,57	0,55	0,57	0,62	0,70	0,75	0,92	0,95	0,77	0,65	0,46	0,33	0,35		
	$\alpha_s$ according to EN 11654	0,35		0,50				0,55		0,80			0,80		0,80		0,40		0,60	C
Construction 2a*)	$\alpha_s$ according to EN 354	0,26	0,54	0,48	0,55	0,54	0,52	0,57	0,60	0,71	0,76	0,94	0,95	0,76	0,65	0,47	0,36	0,35		
	$\alpha_s$ according to EN 11654	0,35		0,50				0,55		0,80			0,80		0,80		0,40		0,60	C
Construction 3*)	$\alpha_s$ according to EN 354	0,33	0,45	0,39	0,41	0,41	0,47	0,54	0,63	0,72	0,82	0,97	0,95	0,79	0,64	0,48	0,36	0,33		
	$\alpha_s$ according to EN 11654	0,35		0,40				0,55		0,85			0,80		0,80		0,40		0,55 (M-H)	D

Data source:

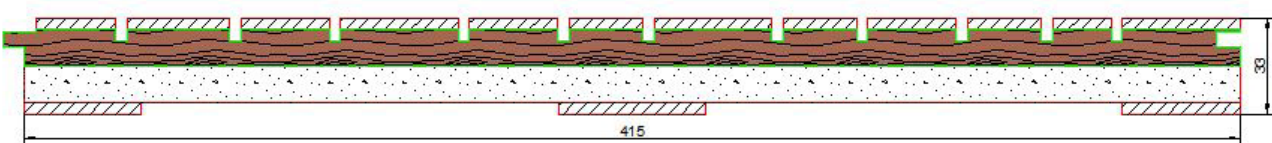
\*) Reverberation chamber measurement according to EN 354 & EN 11654; Laboratory for Building Physics, Graz University of Technology; Notified Body No.: 2064  
\*\*) Alpha cabin based on EN 354; Admonter Holzindustrie AG

	Air layer	Backfilling**)	Total constr. height
Construction 1	19mm	-	approx. 51mm
Construction 2	-	50mm**)	approx. 82mm
Construction 2a	50mm	-	approx. 82mm
Construction 3	80mm	50mm**)	approx. 162mm

\*\*) Backfill (cavity damping): 50mm rock wool panels; length-related spec. flow resistance  $\geq 6 \text{ kPa}\cdot\text{s}/\text{m}^2$  (e.g. Rockwool Sonorock or equivalent)



Feature Natural wood Acoustic panels Geo	Benefit
4 types of wood	Large variety of wood types exclusively from real natural woods
Different variants of slot/web geometry	Harmonious symmetrical geometry or asymmetrical geometry in wood slat look
Wide range of complementary products with the same characteristics	Implementation of room concepts on floor, wall and ceiling
Suitable for damp locations	Use in swimming pools possible
CE conformity with property-suitable properties in fire behaviour and sound absorption class	Balanced price-performance ratio for the realisation of public projects
Balanced ratio of format and weight as well as selection of different fastening options	Mounting effectiveness through the use of universal screws for wood and metal-UK or clamps for wood-UK, without additional profile claws
Use of natural wood from PEFC controlled sources, without pollutants	Harmlessness with regard to Healthy living and sustainable forestry (e.g. cooperation with the Austrian Eco-label)





## Acoustics GEO 16-16/12

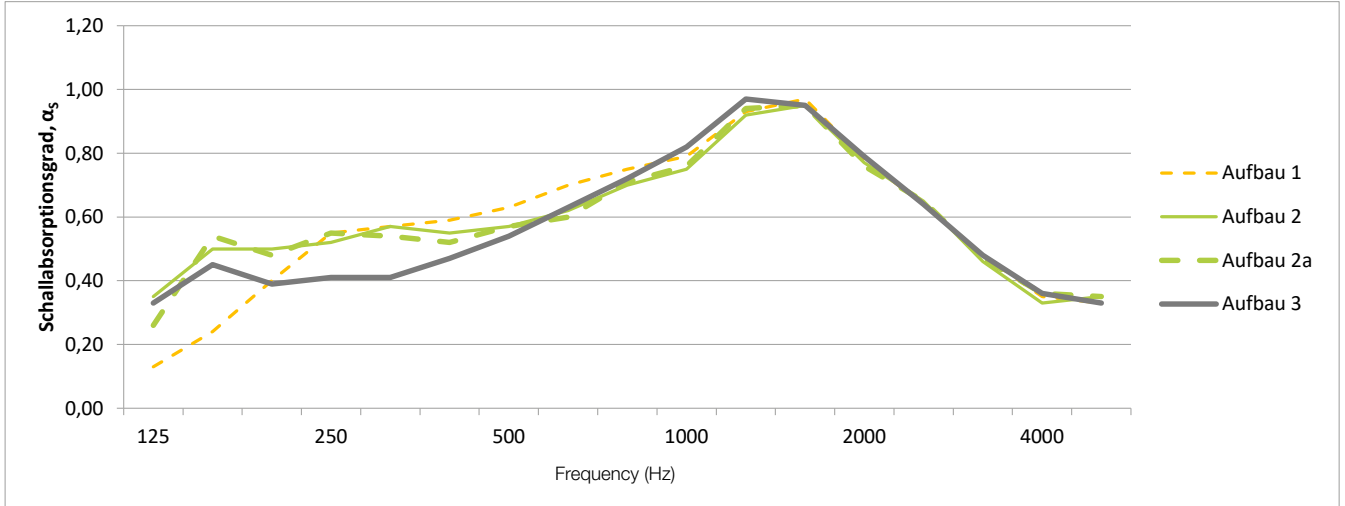
Slot milling: 4mm  
Web width: 16mm  
Acoustically open area: 12%



Grading picture	Type of wood	Item number	Grading	Length (mm)	Width (mm)	Thickn. (mm)	Finish
	Larch	134828	naturelle	2400	415	33	raw
		134825	naturelle	2400	415	33	natural oiled
		134826	naturelle	2400	415	33	white natural oiled
	Oak finger jointed	134845	noblesse	2400	415	33	raw
		134958	noblesse	2400	415	33	natural oiled
		134956	noblesse	2400	415	33	stone natural oiled
		134952	noblesse	2400	415	33	white natural oiled
	Fir finger jointed	134934	noblesse	2400	415	33	raw
		134949	noblesse	2400	415	33	natural oiled
		134946	noblesse	2400	415	33	white natural oiled
	Spruce	134935	basic	2400	415	33	raw
		134964	basic	2400	415	33	natural oiled
		134961	basic	2400	415	33	white natural oiled



Sound absorption



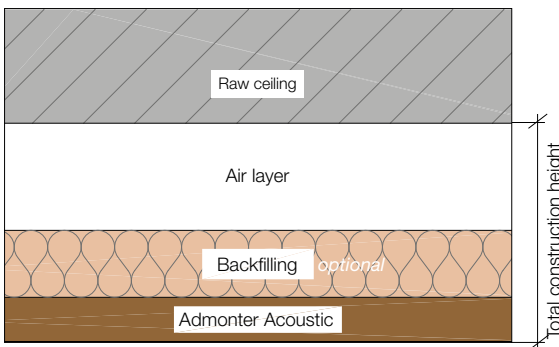
Frequency [Hz]		125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	$\alpha_w$	Absorber class
Construction 1 <sup>*)</sup>	$\alpha_s$ according to EN 354	0,12	0,21	0,36	0,53	0,57	0,60	0,63	0,66	0,71	0,69	0,79	0,90	0,94	0,92	0,83	0,68	0,60		
	$\alpha_s$ according to EN 11654	0,15			0,50			0,65			0,75		0,90				0,70		0,70	C
Construction 2 <sup>*)</sup>	$\alpha_s$ according to EN 354	0,40	0,55	0,55	0,54	0,56	0,57	0,60	0,65	0,67	0,68	0,82	0,85	0,90	0,90	0,83	0,70	0,62		
	$\alpha_s$ according to EN 11654	0,45			0,55			0,60			0,70		0,90				0,70		0,65 (H)	C
Construction 2a <sup>*)</sup>	$\alpha_s$ according to EN 354	0,25	0,51	0,51	0,53	0,52	0,53	0,57	0,62	0,69	0,68	0,80	0,88	0,92	0,91	0,82	0,69	0,61		
	$\alpha_s$ according to EN 11654	0,30			0,50			0,55			0,70		0,90				0,70		0,65 (H)	C
Construction 3 <sup>*)</sup>	$\alpha_s$ according to EN 354	0,34	0,47	0,41	0,42	0,41	0,45	0,49	0,60	0,67	0,70	0,83	0,92	0,96	0,93	0,84	0,71	0,63		
	$\alpha_s$ according to EN 11654	0,35			0,40			0,50			0,75		0,95				0,75		0,60 (H)	C

Data source:

<sup>\*)</sup> Reverberation chamber measurement according to EN 354 & EN 11654; Laboratory for Building Physics, Graz University of Technology; Notified Body No.: 2064  
<sup>\*\*) Alpha cabin based on EN 354; Admonter Holzindustrie AG</sup>

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