Admonter

NATURE´S FAVOURITE DESIGNER

ACOUSTIC S

PROGRAM

Ball throw tested

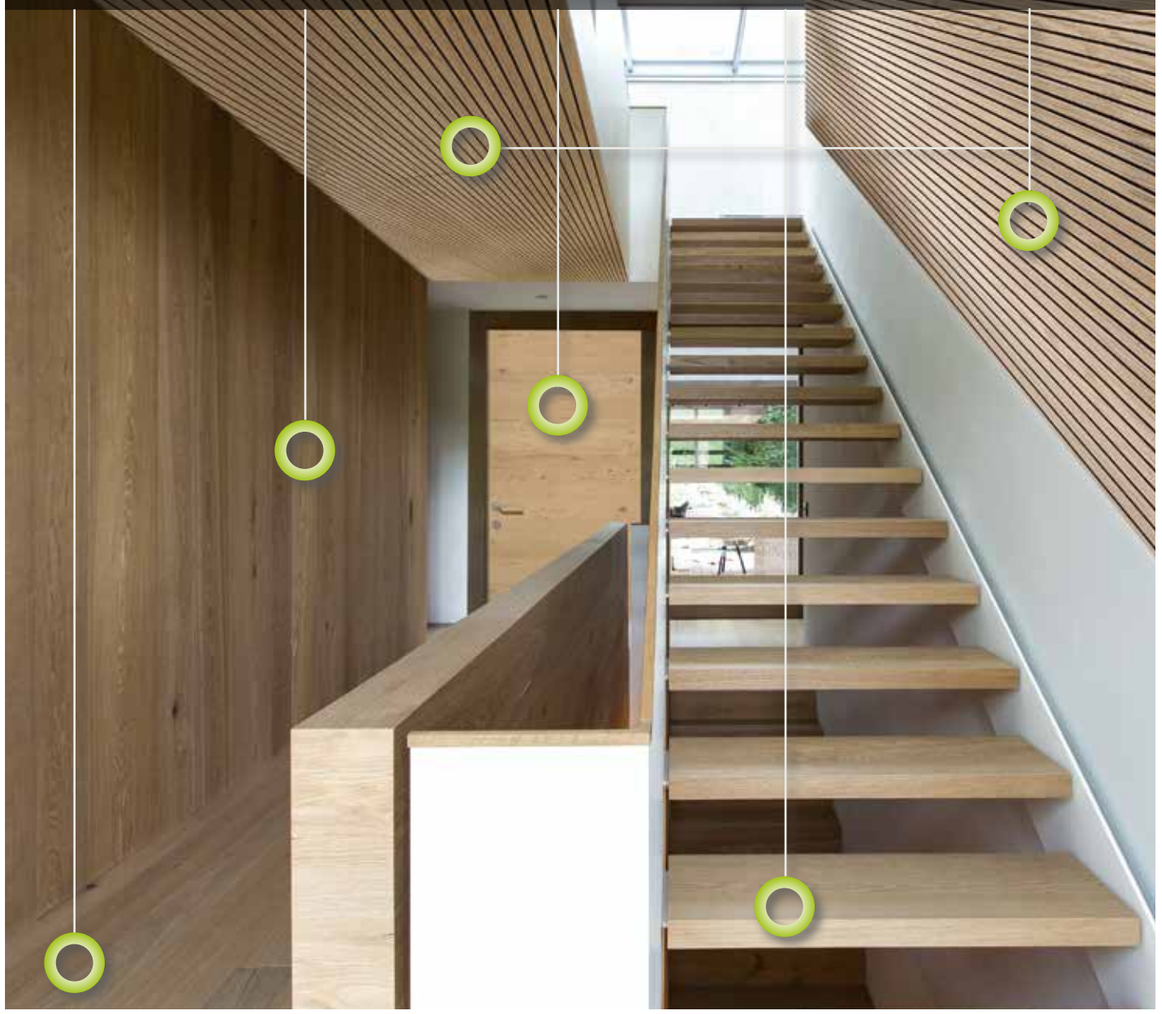
SKILFUL. ACCENTUATED. THE NEW ACOUSTIC ELEMENTS SKILFULLY OPTIMISE THE ACOUSTIC PROPERTIES OF A SPACE.

The natural ecological structure and low weight per unit area make it ideal for new construction as well as reno-vation.
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; the rest is seen with the ears!

Admonter relies on overall concepts and offers in addition plates for the furniture, wall and Ceiling cladding, stairs and interior doors - everything from high-quality real wood, of course.

FLOORS ELEMENTS DOORS STAIRS ACOUSTICS



ACOUSTICs: Oak white finger-jointed

OAK WHITE FINGER-JOINTED

Observatory in Salzburg, Austria

ACOUSTICS

ADMONTER ACOUSTICs in comparison

Product	Product image	Sound absorption	Ball proof impact	Fire classification	Product-weight/m²
ACOUSTICs Premium					approx. 4 kg
ACOUSTICs Linear			*not tested*		approx. 10 kg
ACOUSTICs Dot					approx. 9 kg

Legend:

- maximum sound absorption
- Ball-proof impact resistance handball certifi. EN 13964
  Ball-proof impact res. hockeyball certificated DIN 18032-3
- Fire classification: D-s2, d0
- Fire classification: possible up to C-s2, d0

ACOUSTICS

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.

PLANNING

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.

PROCESSING

- Efficient and simple machining with conventional woodworking 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
- See the installation instructions for details
- The substructure must have the matching capacity to carry heavy additional loads (e.g. for lamps with high dead weight).

Patent protected product

PATENT PATENTIERT PATENT

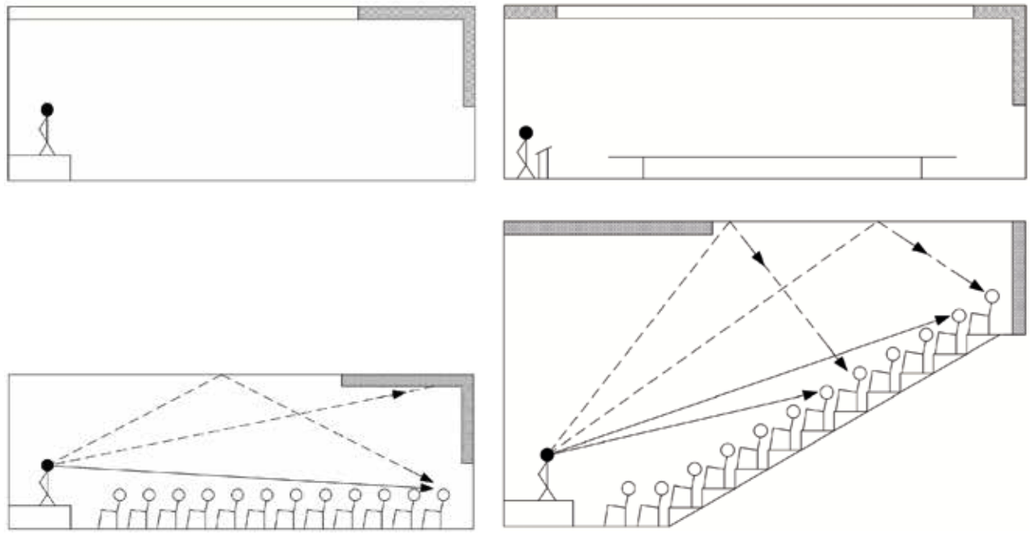
ONLINE CALCULATION TOOL

Use our free service to simulate
your individual room acoustic calculation:
https://service.admonter.at/raumakustik/en.html

PRACTICAL EXAMPLE – EXPLANATION

Sound is absorbed by Admonter ACOUSTIC's solutions, providing the room with pleasant room acoustics that contributes to significantly improved speech intelligibility.
Reflective surfaces in rooms such as ceilings, walls, partition walls, room dividers, glass elements, etc. must be equipped with sound-absorbing components to minimise noise and reverberation. The decorative Admonter ACOUSTICs range allows this to be easily implemented in new buildings and during renovation and refurbishment.

LAYOUT AND CONFIGURATION SUGGESTIONS ACCORDING TO ÖNORM B 8115-3



Source: ON-B 8115-3:2005
https://shop.austrian-standards.at/action/de/public/details/206071/OENORM_B_8115-3_2005_11_01

ONLINE CALCULATION TOOL

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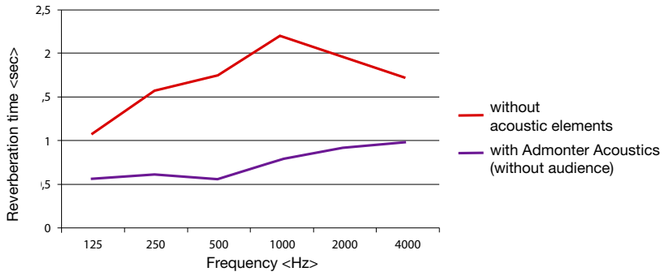
https://service.admonter.at/raumakustik/en.html


ACOUSTICS: Oak extra white | Salzburg AG


ACOUSTICS: Oak extra white | Salzburg AG

PRACTICAL EXAMPLE – **D.K.Z. SEMINAR ROOM**

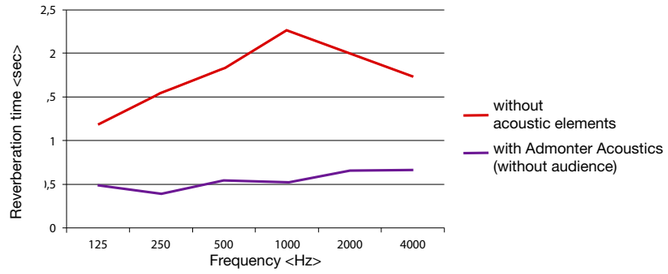
- 180 m³ room volume
- 30 m² Admonter ACOUSTICs
- Room acoustics optimised for lectures and conferences with 20 people



- The graph shows the reverberation times, with and without acoustic elements, as measured for the room acoustics based on the example of the seminar room at the company D.K.Z. in Italy.

PRACTICAL EXAMPLE - **CONFERENCE ROOM**

- 48 m³ room volume
- 15 m² Admonter ACOUSTICs



- The graph shows the reverberation times, with and without acoustic elements, as measured for the room acoustics based on the example of the conference room at the company D.K.Z. in Italy.

ACOUSTICs **PREMIUM**

Masterful. Accentuated.

Highest sound absorption with lowest weight per unit area thanks to patented design.

- **CE marking** according to EN 13964
- **Profile**: all-round groove with MDF tongue for continuous installation
- **Reaction to fire** according to EN 13501: D-s2, d0
- **Sound absorption class** according to EN 11654: A
- **Sound absorption coefficient** according to EN 11654: α_w 1,00
- Acoustically open area: 17,5%

PRODUCT STRUCTURE

- 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)

- **Surface weight** / element: approx. 4,4 kg/m²
- **Surface**: untreated or natural oiled
- Can also be used on radii and bends
- **Free of pollutants** and respirable fibres
- **Vapour diffusive**
- **Ambient area**: 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 fastening with clips or clinched nails through the MDF tongue
- See the installation instructions for details

Legend:

maximum sound absorption

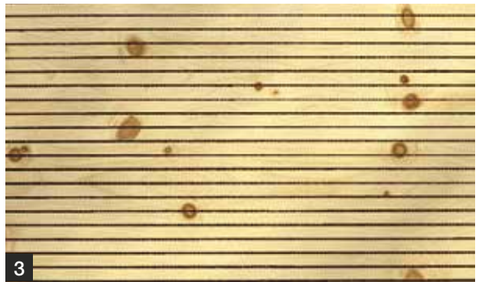
Fire classification: D-s2, d0

Ball-proof impact resistance handball

Ball-proof impact resistance certificated EN 13964, Annex D: Handball class 2A
The specifications as defined in the installation instructions must be followed.

PRODUCTS PREMIUM

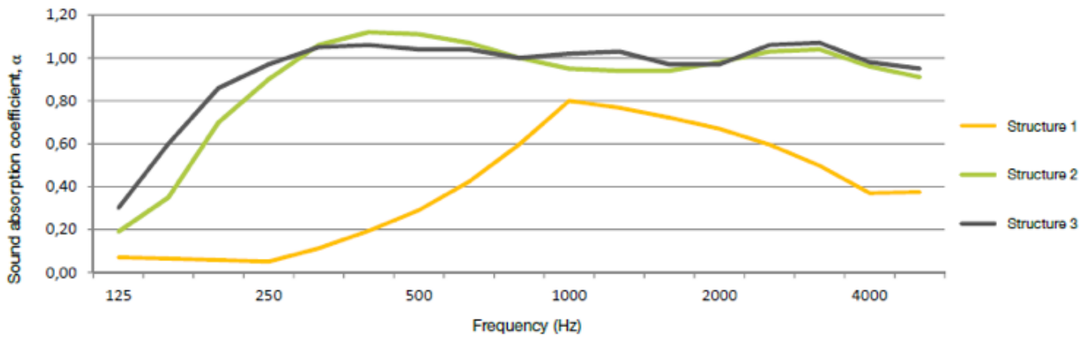
	TYPE OF WOOD	*GRADING*	*THICKNESS mm approx.*	*WIDTH mm approx.*	*LENGTH mm approx.*
1	**Spruce**	basic	33	200	2390
2	**Larch**	basic	33	200	2390
3	**Stone-Pine**	basic	33	200	1800 / 2100 / 2390
4	**Oak**	basic	33	200	2390
5	**Oak finger-jointed**	noblesse	33	200	2390
6	**Retro hacked H2**	hacked	36	200	1800 / 2100 / 2390
7	**Reclaimed Wood H3**	hacked	38	200	1800 / 2100 / 2390



Available with surface:
raw, natural oiled, white oiled
or individual shades
Exception waste wood chopped H3:
only raw.
Other types of wood on request!

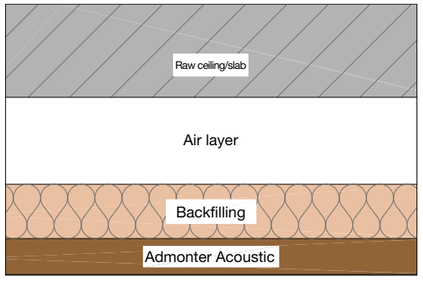
INFORMATION ACOUSTICs Premium

SOUND ABSORPTION GRADE **WITH BACKFILLING**



	Frequency [Hz]	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
10 mm Air layer (Structure 2*)	α_s according to 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_p according to EN 11654	0,20			0,90			1,00			0,95			1,00			0,95	
	SSA*								0,98									
	NRC*								1,00									
80 mm Air layer (Structure 3*)	α_s according to 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_p according to EN 11654	0,35			0,95			1,00			1,00			1,00			1,00	
	SSA*								1,00									
	NRC*								1,00									

*NRC and SAA calculation based on ASTM C423



	Air layer	Backfilling	Total construction height
Construction 1	15 mm	-	approx. 48 mm
Construction 2	10 mm	50 mm	approx. 93 mm
Construction 3	80 mm	50 mm	approx. 163 mm

ONLINE CALCULATION - TOOL

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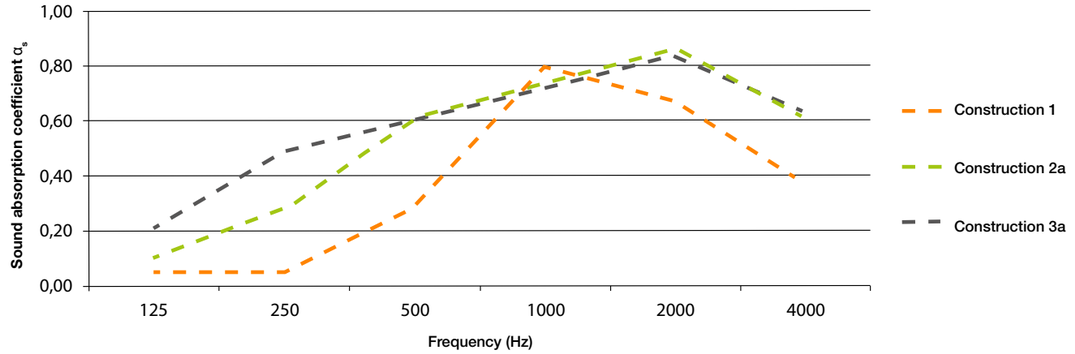
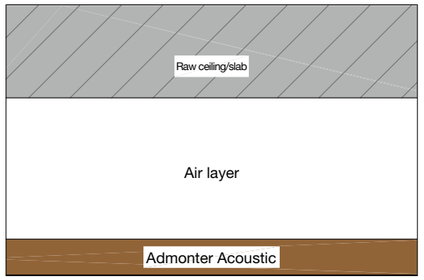
SOUND ABSORPTION GRADE **WITHOUT** BACKFILLING



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



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

ACOUSTICS: Oak Lapis | Ford Schmidt, Salzburg

OAK LAPIS

Ford Schmidt, Salzburg

Hotel Bergwiesenglück

OAK EXTRA WHITE

Salzburg AG, Salzburg

LARCH WHITE

Mountain restaurant Rettenbachgletscher

ACOUSTICS

ACOUSTICS: Oak Lapis | Ford Schmidt, Salzburg

ACOUSTICs: Oak Lapis | Hotel Bergwiesenglück

ACOUSTICs: Larch white | Mountain restaurant Rettenbachgletscher

ACOUSTICs: Oak stone
copyright: Das Martell | Photo: Daniel Sobietzki

ACOUSTICs: Oak stone
copyright: Das Martell | Photo: Daniel Sobietzki

ACOUSTICs: Oak stone
copyright: Das Martell | Photo: Daniel Sobietzki

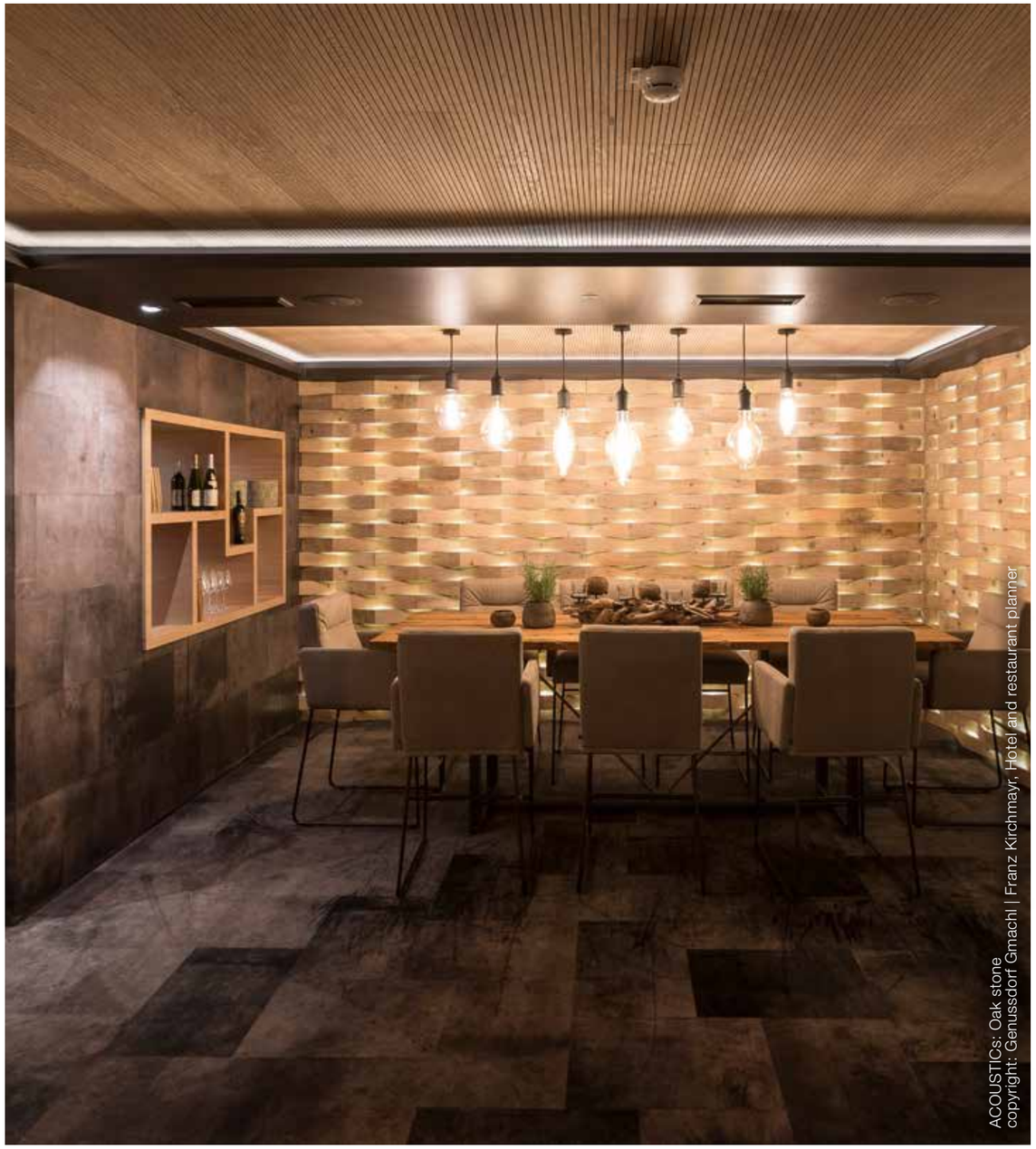
OAK STONE

Das Martell, Salzburg / Austria

ACOUSTICS

ACOUSTICs: Oak stone
copyright: Genussdorf Gmachl | Franz Kirchmayr, Hotel and restaurant planner

ACOUSTICs: Oak stone
copyright: Genussdorf Gmachl | Franz Kirchmayr, Hotel and restaurant planner



ACOUSTICs: Oak stone
copyright: Genussdorf Gmachl | Franz Kirchmayr, Hotel and restaurant planner

OAK STONE

Genussdorf Gmachl, Bergheim

ACOUSTICS

ACOUSTICS INSPECTION OPENING WITH HIGH-PERFORMANCE MAGNET

DISCREETLY CONCEALED.

The ACOUSTICs inspection opening with high-performance magnet provides the perfect solution to hide important elements (electrical box, water connection, etc.).

Please refer to the installation instructions for the inspection panel for basic handling, important information and installation at https://www.admonter.eu/en/downloads/ (For small and medium opening versions.)

Dimension 12 x 12 mm:
6 pcs. / pachage (for small and medium opening variants)

■ **Fig.1:** : If the substructure is made from galvanized sheet steel profiles in accordance with EN 14195:2015, two additional CD profiles „P“ are installed parallel to the existing substructure at the edge of the opening. The distance between these two CD profiles corresponds to 3 acoustic element widths „E“, whereby the centre is measured from the profile.

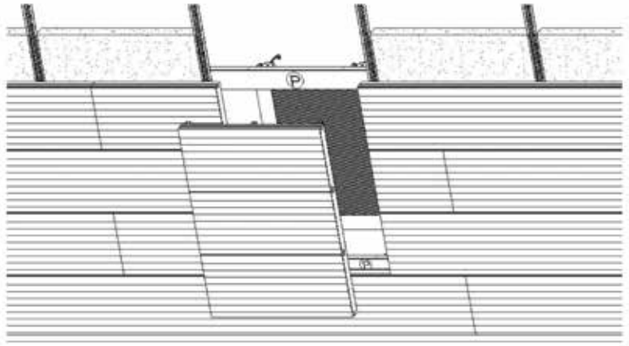


Fig. 1

■ If substructure is made of wood (sorting class S10 or C24 in accordance with ÖNORM DIN 4074-1:2004), two hat profiles „H“ must be machined into the 2 UK level so that the inspection panel sits flush with the remaining acoustic elements **(Fig. 2).**

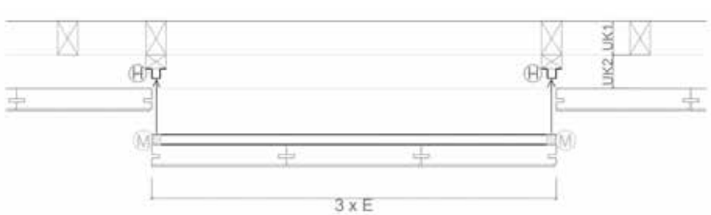


Fig. 2

■ **Fig.3**: The three acoustic elements „E“ that form the inspection panel are glued together using the MDF tongues.
The Admonter Acoustic system clamps are not needed for this. Three pre-cut hat profiles are glued directly to the honeycomb over the width with PUR glue. The acoustic fleece must be removed carefully beforehand at these locations. On the front, a cube-shaped magnet „M“ is pressed in on each side of the hat profiles.

Attach two loops of a tear-resistant cord to opposite corners to allow its re-removal before inserting the finished inspection panel.

An additional mechanical catch or latch to secure the panel is essential if the panel is installed above people!

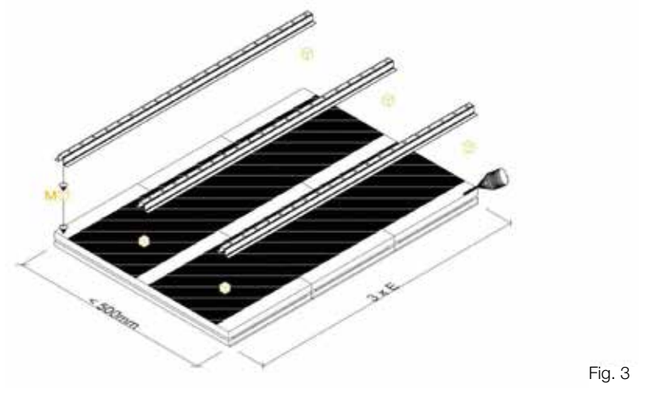
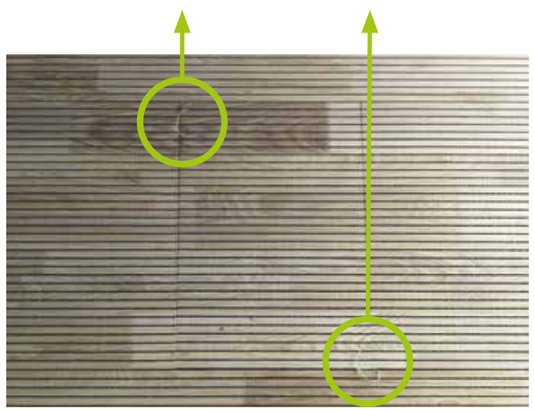


Fig. 3

RREVISION OPENING – EXPLANATION

■ For example: **attaching transparent cord** through the hat profile to open the inspection panel



■ **Essential counterpart to the magnet** (metal substructure or metal plate milled into the wooden substructure)

ACOUSTICs **DOT**

We present the sound choice for best acoustics.

Advantages:
- combinable with **GALLERIA**
- Ideal for low and medium-frequency range
- Suitable for use in **sports or multi-purpose halls**

- **CE marking** according to EN 13986
- **Profile**: all-round groove with MDF tongue for continuous installation
- **Fire classification** according to EN 13501: Hardwood D-s2, d0 / Softwood C-s2, d0 with mechanical attachment to substructure
- **Sound absorption class** according to EN 11654: D
- **Sound absorption coefficient** α_w 0,40 (L) max. absorption ≤ 250 Hz
- Acoustically open area: 4,1%

- **Surface weight** / element: approx. 8,56 kg/m² (Spruce)
- **Texture**: untreated or natural oiled
- **Free of pollutants an**d respirable fibres
- **Vapour diffusive**
- **Ambient area**: SWP2/2NS humidity 25 - 80%

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

PROCESSING
- Efficient and simple machining with conventional woodworking machines
- Galleria is grooved all around with a foreign spring for endless layin
- the attachment takes place by means of a profile claw on the corresponding substructure
- See the installation instructions Galleria for details

Legend:

maximum sound absorption

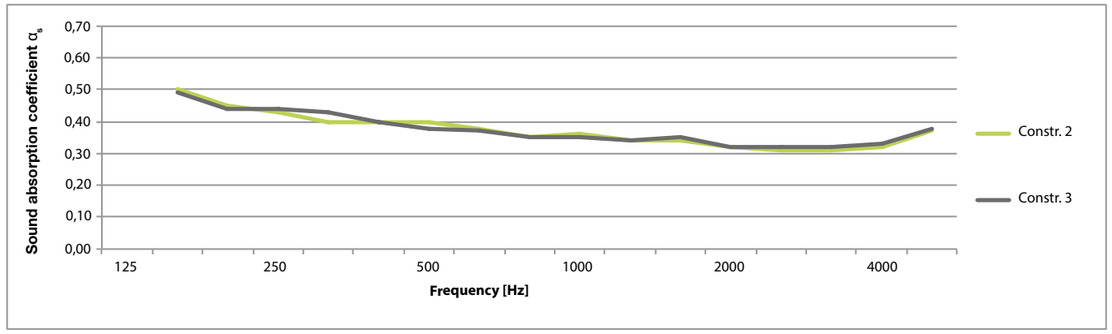
Ball-proof impact resistance hand- or hockeyball

Fire classification: D-s2, d0

Fire classification: up to C-s2, d0 possible

Ball-proof impact resistance certificated DIN 18032-3 (wall)
With **hand- and hockeyball** unconditionally passed.

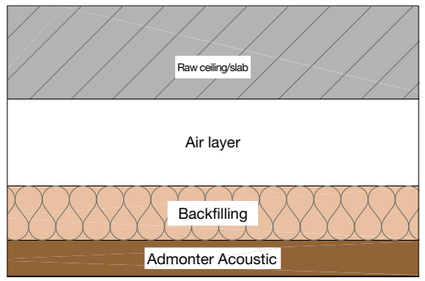
SOUND ABSORPTION GRADE **WITH** BACKFILLING



	Frequency [Hz]	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
10mm Air layer (Constr 2)	α_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
	α_p accord. EN 11654	0,30		0,40			0,40			0,35			0,30			0,35		
	SAA *)	0,37																
	NRC *)	0,40																
90mm Air layer (Constr 3)	α_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	0,33	0,38
	α_p accord. EN 11654 **)	0,30		0,45			0,40			0,35			0,35			0,35		
	SAA *)	0,37																
	NRC *)	0,40																

*) NRC and SAA calculation based on ASTM C423

**Data source:
Reverberation room measurement according to EN 354 & EN 11654
Laboratory for Building Physics, TU Graz; Notified Body Nr.: 2064)
Sound absorption class according to EN 11654: D
Sound absorption coefficient according to EN 11654: αW 0,40 (L)
max. absorption ≤ 250 Hz



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

ONLINE CALCULATION - TOOL

Use this service for your individual acoustic room design calculation:
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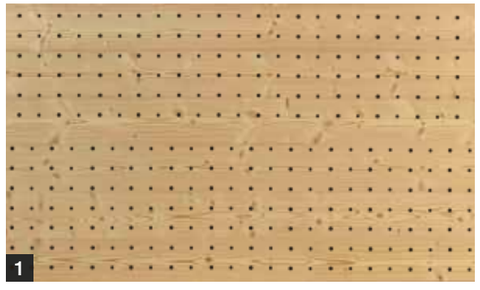
PRODUCTS DOT

	TYPE OF WOOD	*TOP LAYER THICKNESS*	*THICKNESS mm approx.*	*WIDTH mm approx.*	*LENGTH mm approx.*
1	**Spruce AGED brushed**	5	19	244	2400
2	**Reclaimed Wood Larch**	5	19	244	1824 - 2400
3	**Reclaimed Wood hacked H2**	6	19	244	1824 - 2400
4	**Reclaimed Wood Extreme**	5	19	244	1824 - 2400
5	**Oak brushed**	3,6	19	244	2400
6	**Spruce strongly brused**	6	19	244	2400
7	**Reclaimed Wood sunbaked**	7-9	19	244	1824 - 2400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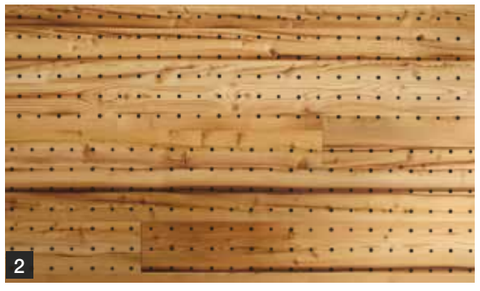
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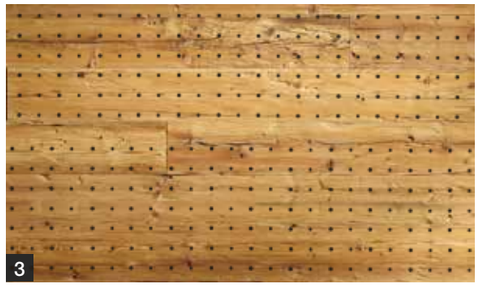
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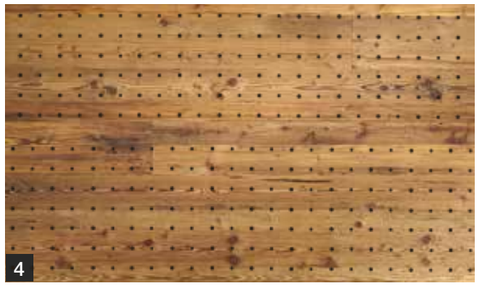
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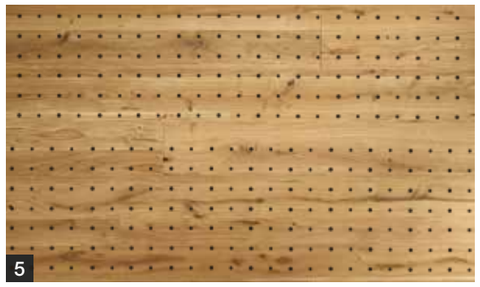
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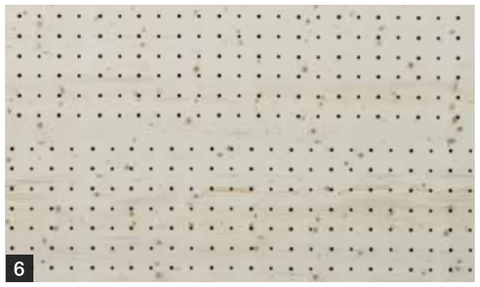

6


7

Available with surface:
raw or natural oiled
Exception of old wood suntanned: only raw

Other types of wood on request!

ACOUSTICs: Oak | Bavaria Boutique Hotel

ACOUSTICs: Oak nature | Gastagwirt Salzburg

ACOUSTICs **LINEAR**

Solid wood structure with pronounced, linear acoustic absorption behaviour.

- **CE marking** according to EN 13964
- **Profile**: all-round groove for continuous installation
- **Fire classific.** accord. to EN 13501, C-s2, d0 for below types of wood
- **Sound absorption class** according to EN 11654: A
- **Sound absorption coefficient** α_w 1,00
- Acoustically open area: 9 %

- **Surface weight** / Element: approx. 10 kg/m²
- **Texture**: untreated or natural oiled
- **Free of pollutants an**d respirable fibres
- **Vapour diffusive**
- **Ambient area**: room temperature 10 - 30°C / humidity 25 - 65% / (short-term exceeding or undershooting possible)

PRODUCT STRUCTURE

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

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 substructure

Available in the wood species

- Larch brushed
- Larch AGED brushed
- Reclaimed Wood Larch brushed
- Oak brushed
- Oak finger-jointed brushed
- Spruce brushed and Spruce AGED brushed.

Dimensions, other types of wood and delivery time special projects related on request.

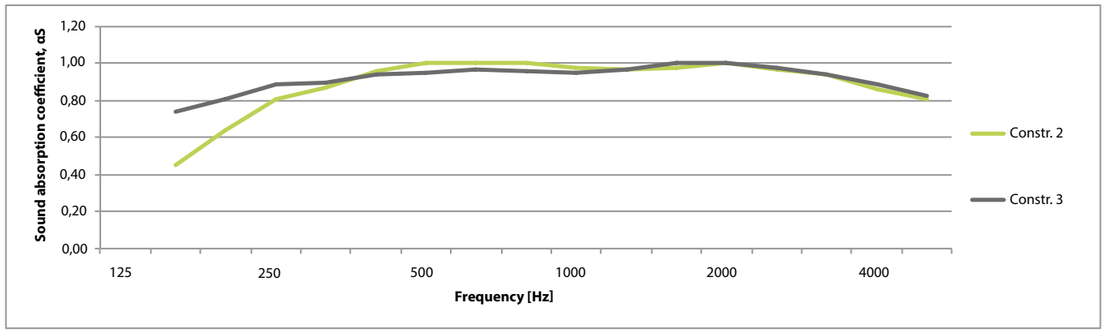
Legend:

absorption power

Fire classification: bis C-s2, d0 possible

Structure Acoustic Linear

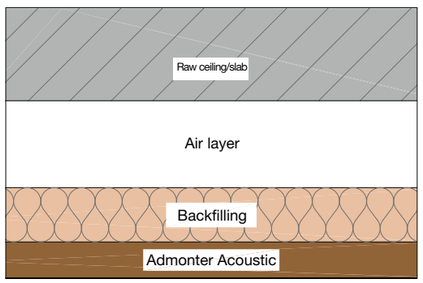
SOUND ABSORPTION GRADE **WITH** BACKFILLING



	Frequency [Hz]	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000
Construc-tion 2	α_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
	α_p accord. EN 11654	0,30			0,80			1,00			1,00			1,00			0,85	
Construc-tion 3*	α_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
	α_p accord. EN 11654	0,40			0,85			0,95			0,95			1,00			0,90	

*Sound absorption class according to EN 11654: A
*Sound absorption coefficient according to EN 11654: α_w 1,00

***Data source:**
Reverberation room measurement according to EN 354 & EN 11654
Laboratory for Building Physics, TU Graz; Notified Body Nr.: 2064)

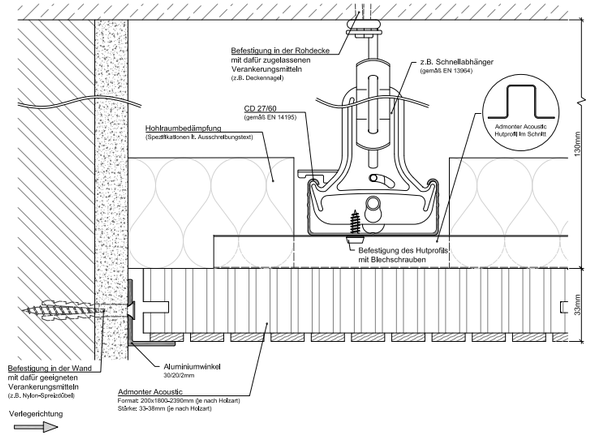


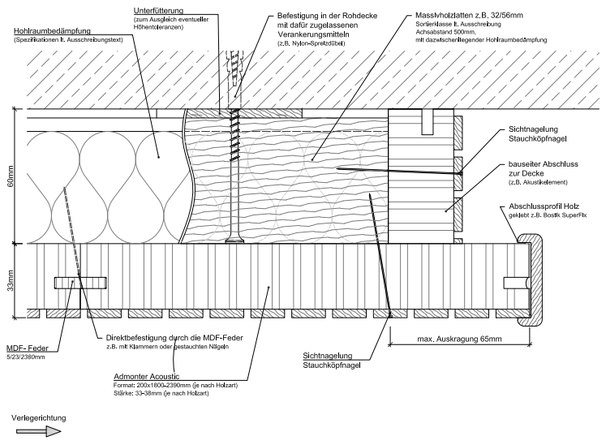
	Air layer	Backfilling	Total constr. height
Construction 2	10 mm	50 mm	ca. 79 mm
Construction 3	90 mm	50 mm	ca. 159 mm

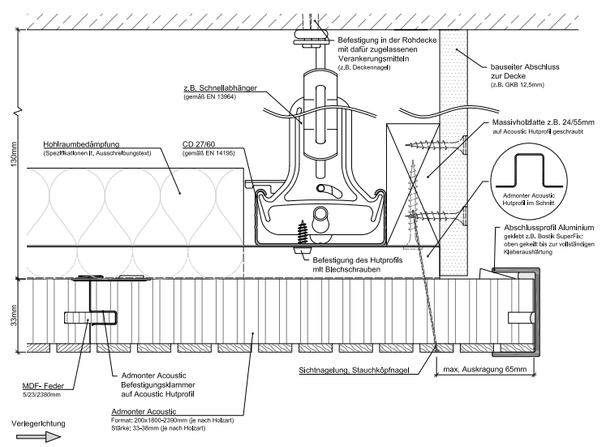
ONLINE CALCULATION - TOOL

Use this service for your individual acoustic room design calculation:
https://service.admonter.at/raumakustik/en.html

DESIGN VARIATIONS





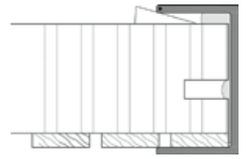


ACOUSTICs ACCESSORIES

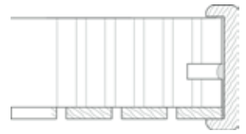
Harmonious acoustic and visual interior design. Unbelievably appealing to the eye, remarkably noise-optimising and ideal for new construction thanks to cleverly devised structural elements.

END PROFILE

Length approx. 3000 mm - U-profile
Aluminium eloxed

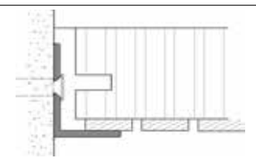


Length approx. 3000 mm - U-profile
same type of wood



WALL END PROFILE

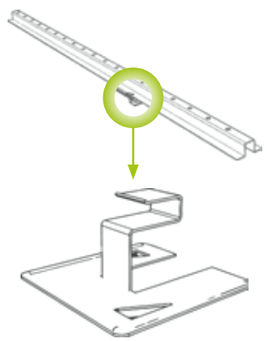
Length approx. 3000 mm - L-profile
Aluminium eloxed



MATERIAL FOR INSTALLATION

System hat profile (Length 2400 mm)

Profile clamp (250 pieces / carton)
You need: approx. 8 clamps & 2 lm. hat profile / m²



SAMPLING

30 cm samples with fixed false tongue in order to show the construction; wood species, surface treatment and surface texture according to availability!

CEILING INSTALLATION PREMIUM

Substructure with sheet steel profiles (CD 60/27 mm)

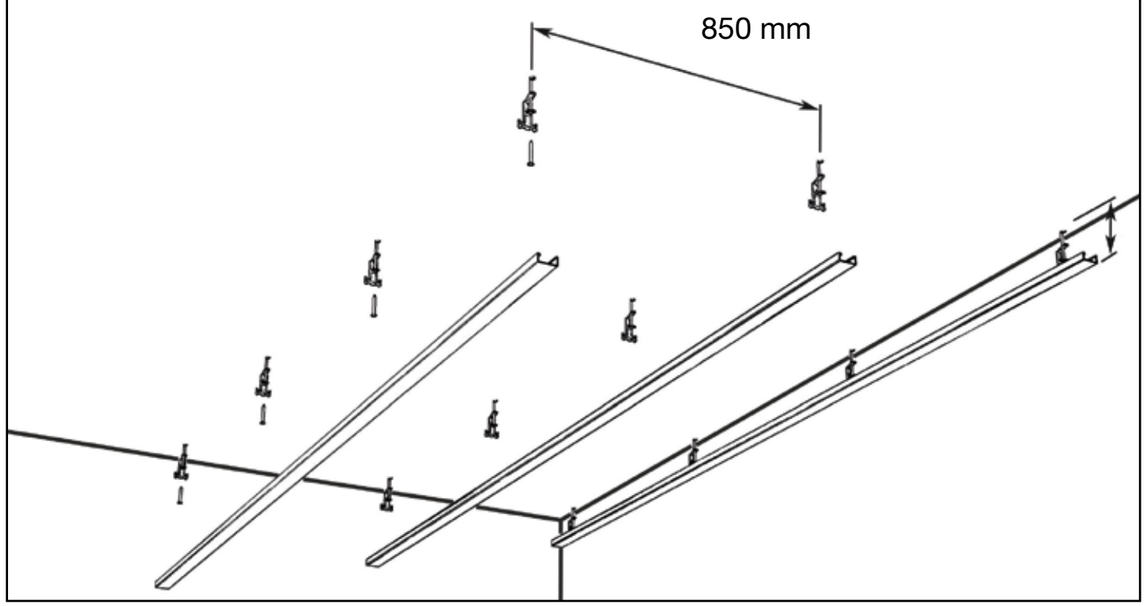


Fig. 1a

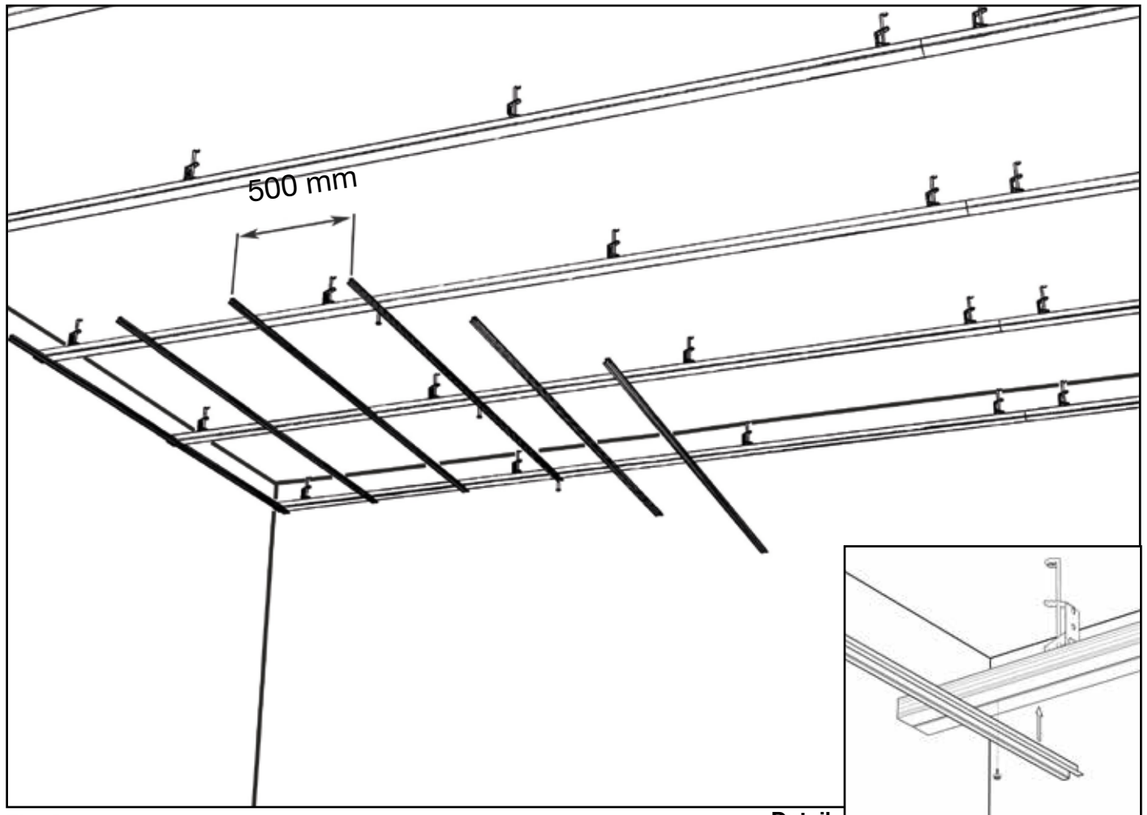


Fig. 2a

Detail

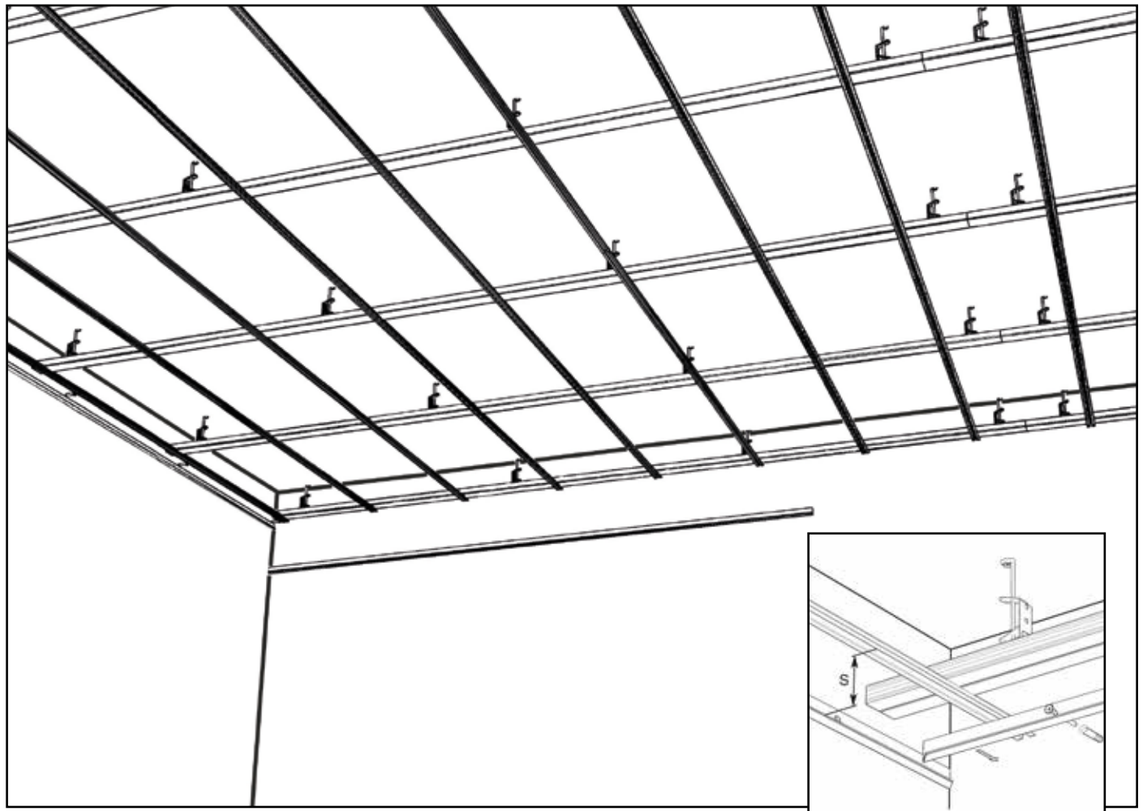


Fig. 3a

Detail

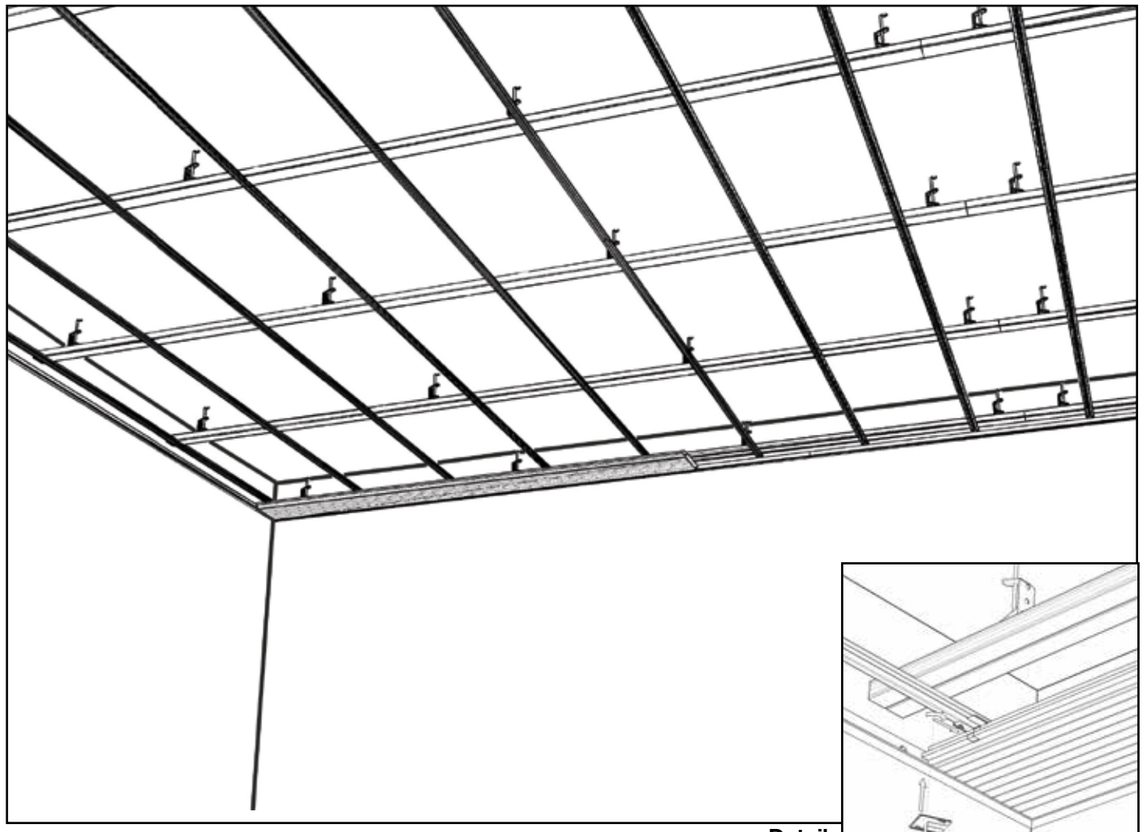


Fig. 4a

Detail

CEILING INSTALLATION **PREMIUM / DOT / LINEAR**

Substructure with wooden slats (cross section >= 27/50 mm)

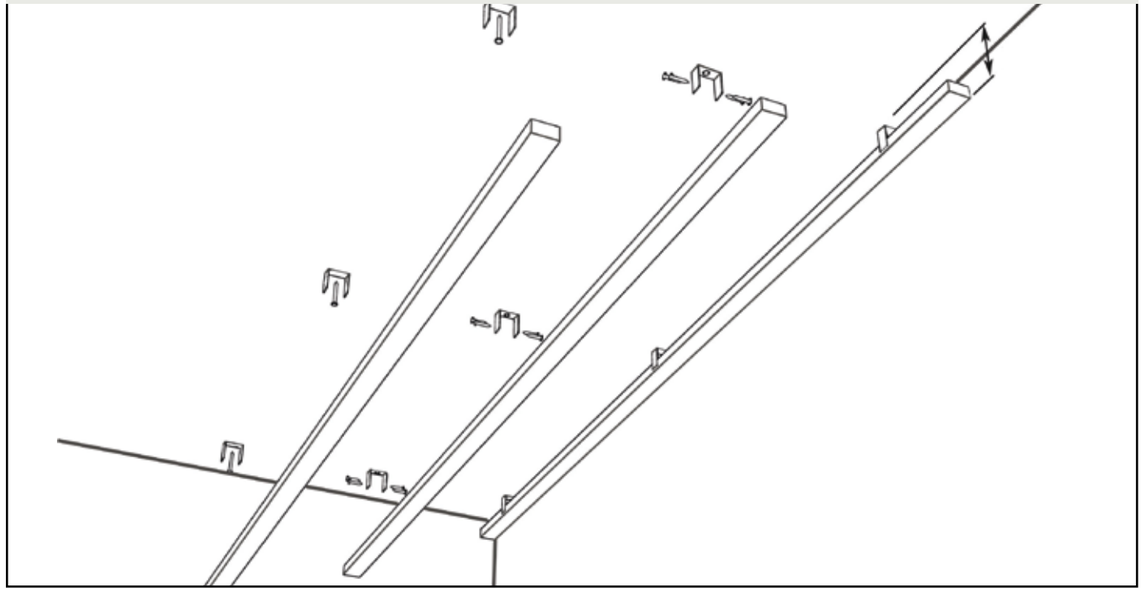
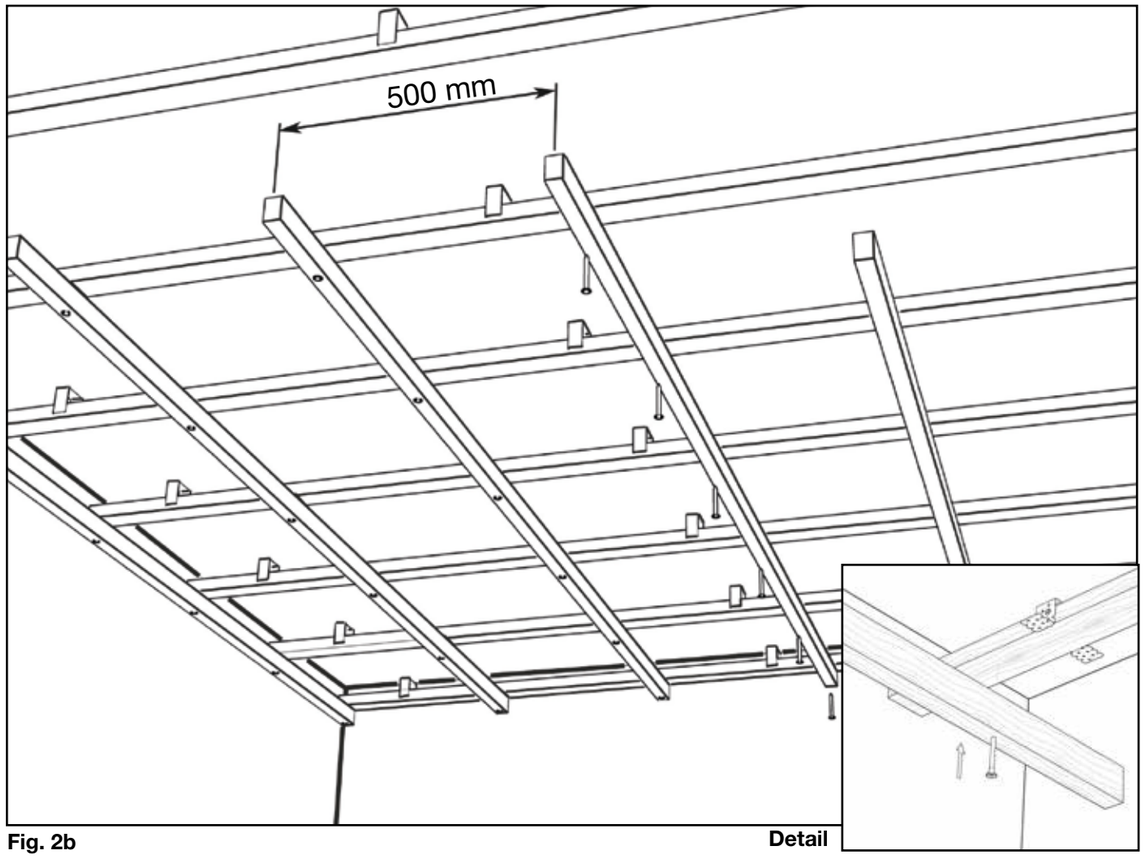
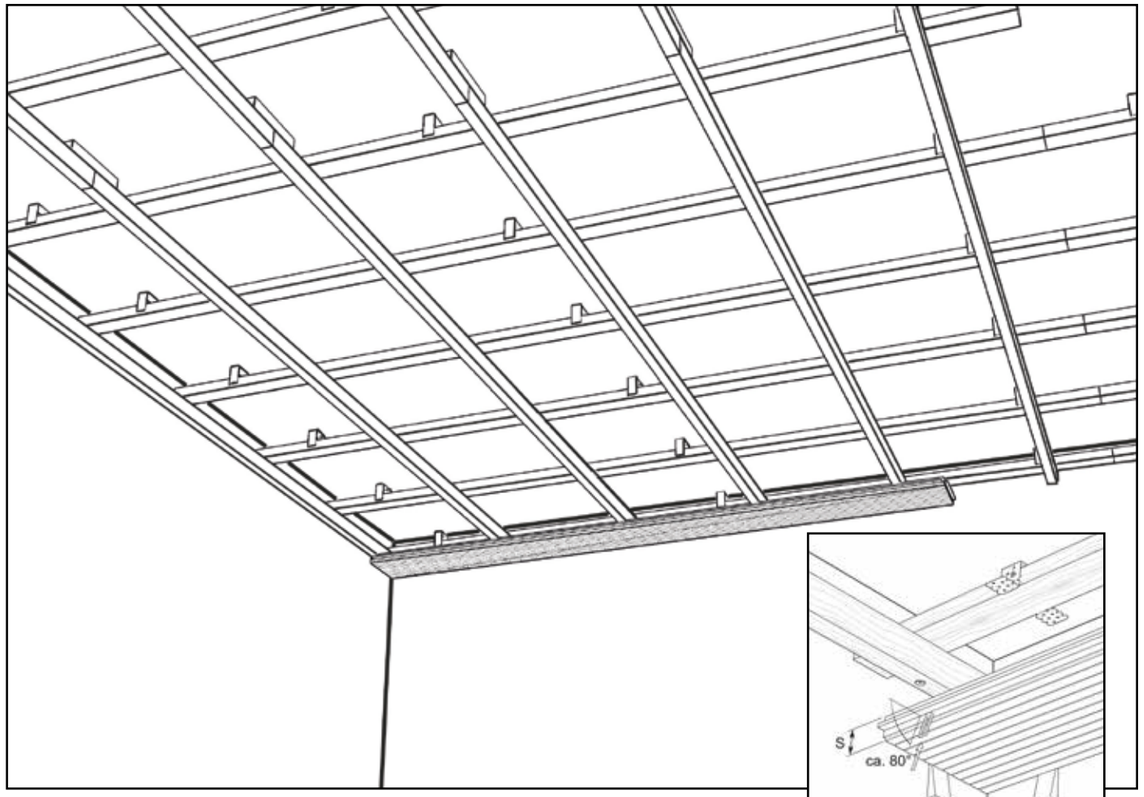


Fig. 1b



Detail

Fig. 2b



Detail

Fig. 3b

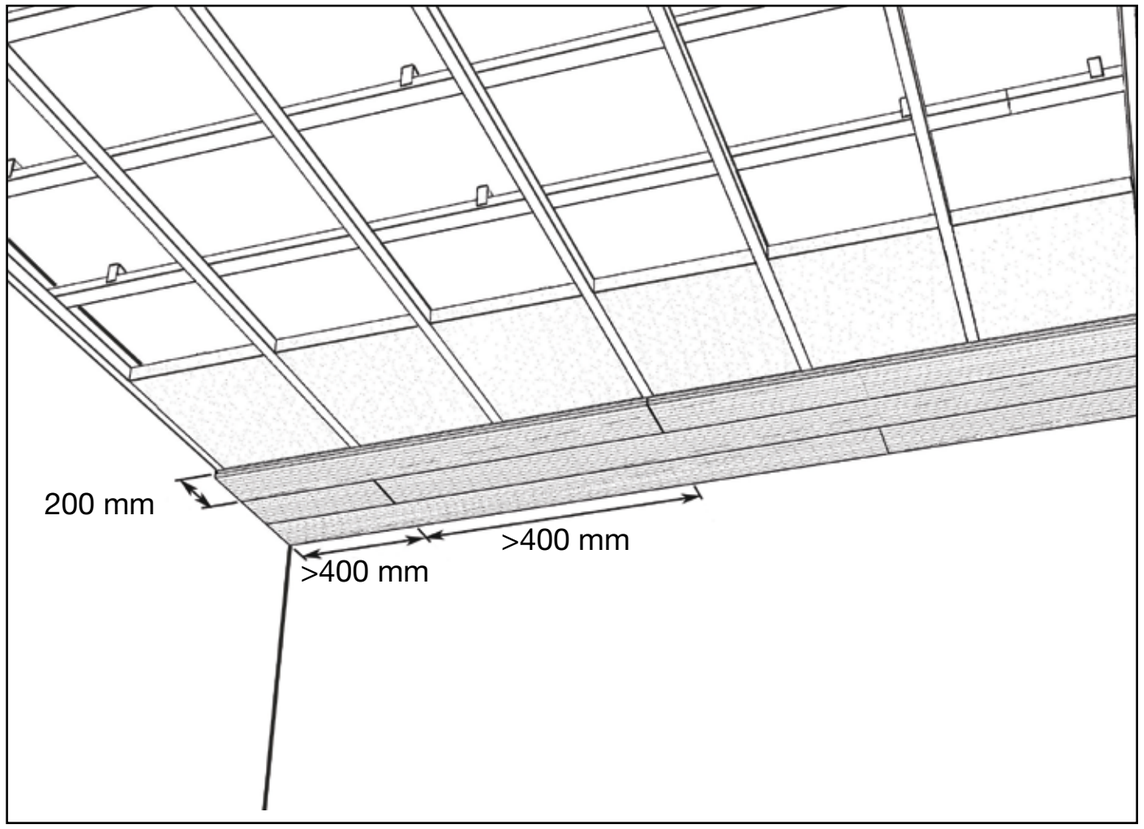


Fig. 4b

WALL MOUNTING **PREMIUM / DOT / LINEAR**

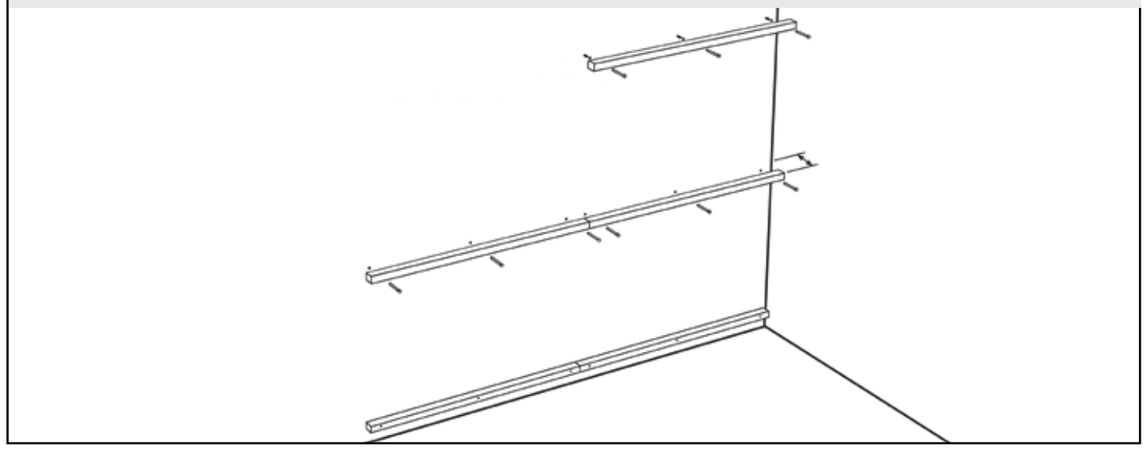


Abb. 1c

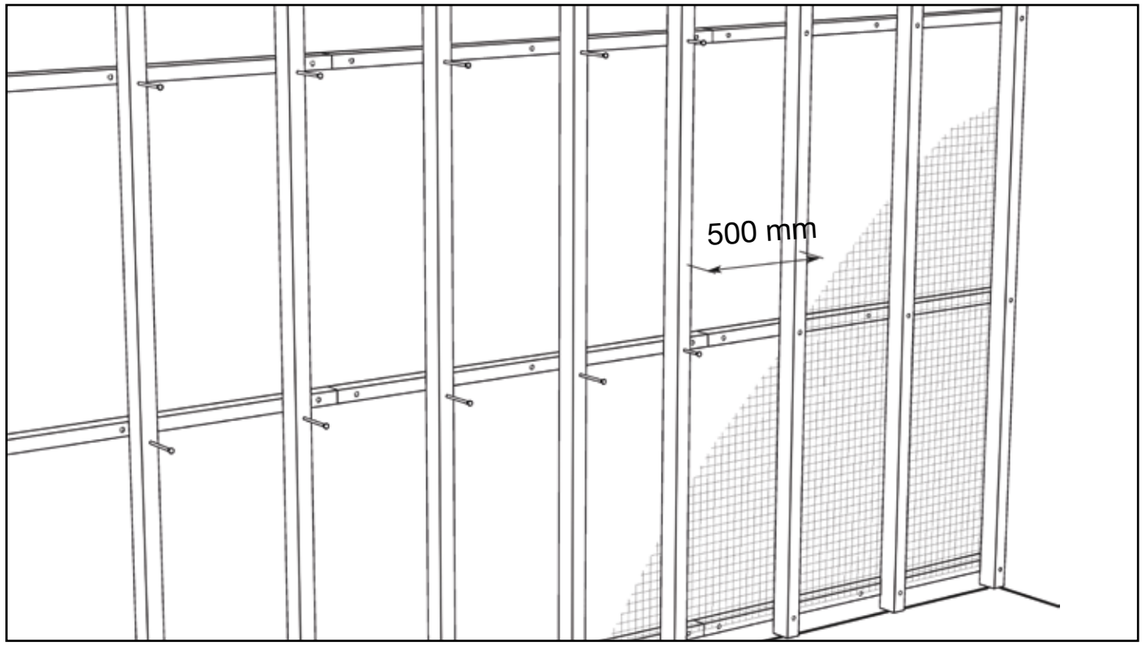
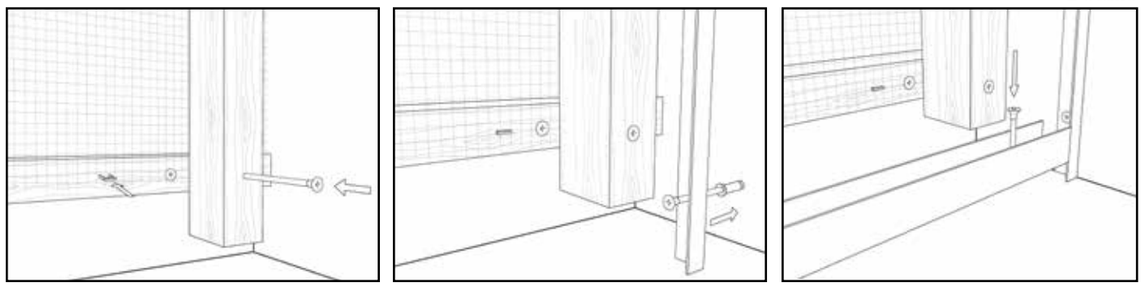


Abb. 2c

Details



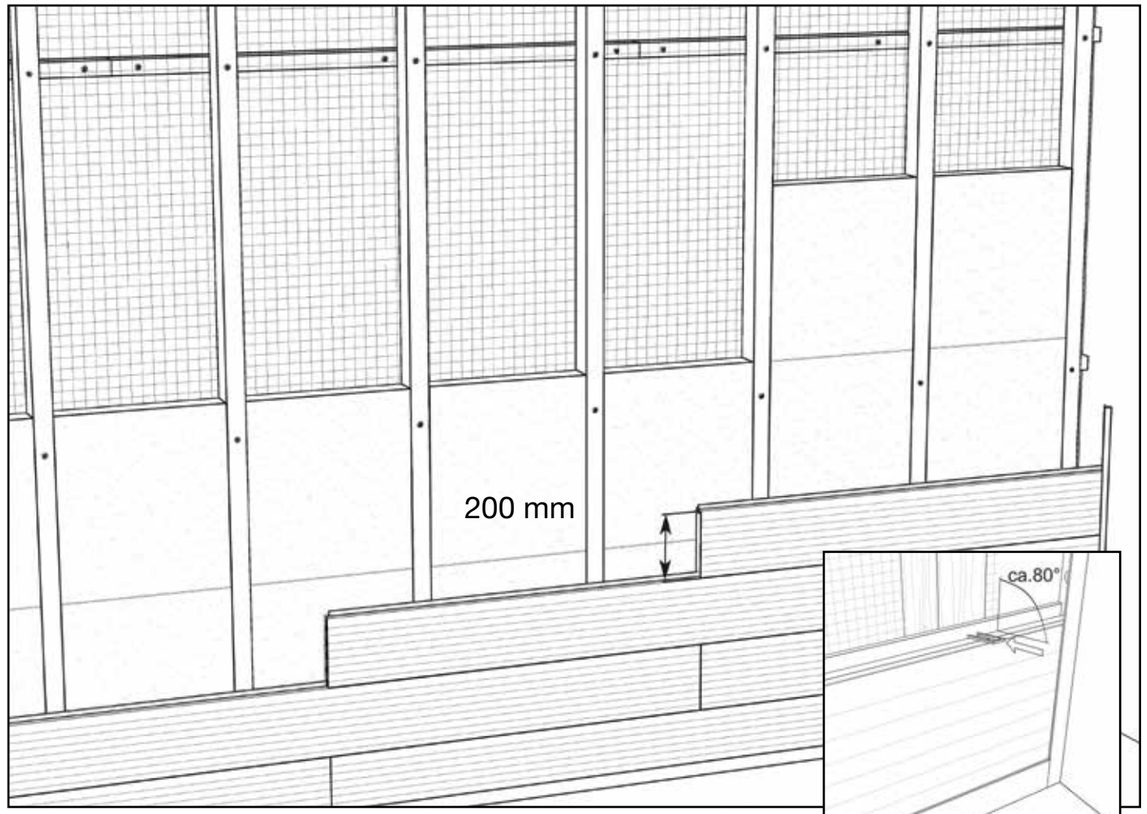


Abb. 3c **Detail**

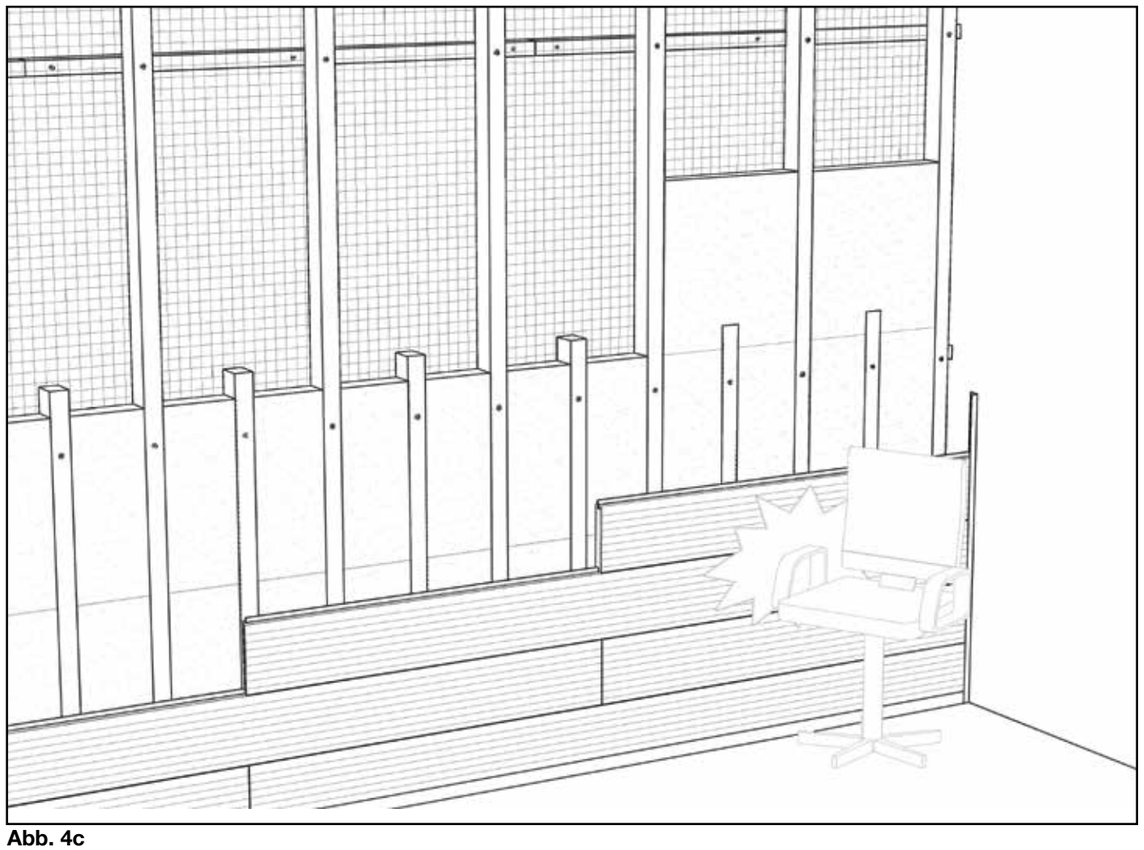


Abb. 4c

Admonter

NATURE´S FAVOURITE DESIGNER

ACOUSTIC S

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