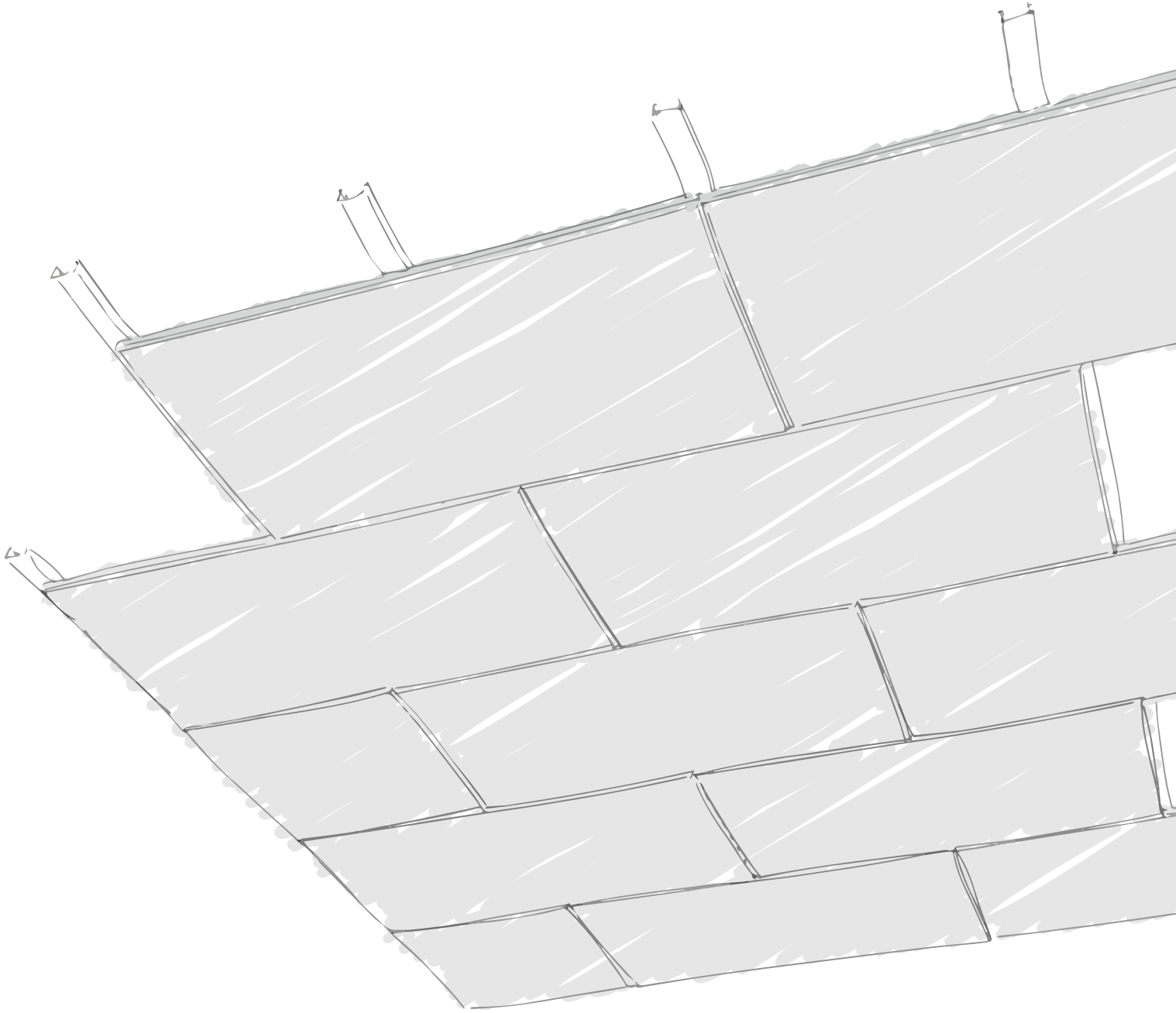




FALSE CEILINGS HIDDEN METAL STRUCTURE





f Emma "mangiava un gelato macedonio, che veniva con
la mano sinistra in una conchiglia di verme, gli occhi
semichiusi, il cucchiaino tra i denti."

Gustave Flaubert

d "Mamma! What sweets are we going to have?" Natasha again
cried boldly... "Ice pudding, but you won't get any," said Maria
Dmitrievna... Natasha only desisted when she had been told that
there would be pineapple ice.

Leo Tolstoy

"La noia spogliò i cibi del loro sapore.
Alla fine della cena furono serviti dei gelati chiamati boudoirs. Erano
che questo tipo di gelato consisteva piccoli frutti amati, delicatamente mes-
sopra il gelato, che venivano serviti in un piccolo bicchiere, senza accompagnarlo
forma a piramide."

Marcel Proust

De ladies were surprised that when
they eating, delicate apples were being
the plate in always of their good face.

Leo Tolstoy

"Qui piaciuti gliel del loro conchiglia macedonia
Rosa e tutti, e venne di un gelato macedonio, con una
che non aveva un pezzo macedonio macedonia
suscita, con un cucchiaino tra i denti."

Gustave Flaubert

"Questi gelati chiamati boudoirs
consistevano in piccoli frutti amati, delicatamente mes-
sopra il gelato, che venivano serviti in un piccolo bicchiere,
senza accompagnarlo con una forma a piramide."

Marcel Proust

De ladies were surprised that when
they eating, delicate apples were being
the plate in always of their good face.

Leo Tolstoy

A long, low table with a white top and a colorful, multi-colored base (blue, green, purple, orange, red). The table is covered with text and small illustrations, likely related to the museum's theme of ice cream or sweets. The text is in Italian and includes phrases like "GUSTAVO FLAUBERT", "LEO TOLSTOJ", and "MARCEL PROUST".

Item specifications

CELENIT sound absorbing false ceiling with hidden metal structure, model ACOUSTIC ..., with thermal and acoustic insulation, eco-friendly and sound absorbing boards - CELENIT ... product range, CELENIT ... item No. ... - made of mineralized ... fir wood wool bound with white Portland cement, it complies with EN 13168 and EN 13964 standards, it can be coupled with rock wool (ACOUSTIC MINERAL product range); dim.: ... x ... mm; th.: ... mm; texture: ...; straight edges (code: D) or chamfered edges (code: S4); weight: ... kg/m²; λ_D : ... W/mK; R_D : ... m²K/W; compressive stress σ_{10} : \geq ... kPa; water vapour transmission μ : 5; reaction to fire: Euroclass B-s1, d0 or A2-s1, d0 (EN 13501-1 standard); sound absorption: α_w ... / NRC ...; durability: class C; light reflection: 50.7 or 74.0% (painted white 05/15); release of formaldehyde:

class E1; it does not contain asbestos. Wood wool boards must be certified by ANAB-ICEA and natureplus for eco-compatibility of materials and manufacturing process, PEFC™ or FSC® for the sustainability of wood raw material, ICEA for the content of recycled material and for the attestation of LEED credits, EPD for the environmental statement. C profiles 60x27 or C 50x27 with ... mm spacing, suspended by fixed spacers/adjustable brackets or supported by clip profiles/C profiles, suspended by hangers. Fixings per boards: ...; screws diameter: 3.5 mm; fixings scheme: ... x ... mm.

Products



CELENIT ACOUSTIC range
ABE - AB

CELENIT ACOUSTIC A2 range
ABE/A2 - AB/A2

Boards made of mineralized wood wool bound with white Portland cement



Straight edges
D for all thicknesses



Chamfered edges
S4 for all thicknesses



Shiplap edges
RD10 for thicknesses 25 - 35 mm
RD20 for thicknesses 25 - 35 mm



CELENIT ACOUSTIC MINERAL range
L2ABE25 - L2AB25 - L2ABE25C

CELENIT ACOUSTIC MINERAL A2 range
L2ABE25/A2 - L2AB25/A2 - L2ABE25C/A2

Boards made of mineralized wood wool bound with white Portland cement coupled to a layer of rock wool



Straight edges
D for all thicknesses



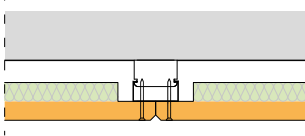
Chamfered edges
S4 for all thicknesses

The boards are supplied with dimensions 1200x600 mm with rock wool 1200x500 mm, for direct application to the structure. Except for **L2ABE25C** and **L2ABE25C/A2** which are supplied with rock wool 1200x600 mm and sufficient compression strength to avoid crushing during the laying. They can be screwed directly to the structure, either with orthogonal or parallel installation.

Adhered application

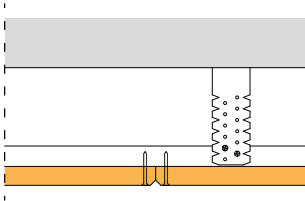
Available for CELENIT ACOUSTIC boards or CELENIT ACOUSTIC MINERAL boards with rock wool thickness until 40 mm.

System with fixed spacer



- The system with fixed spacer allows to have a single structure, replacing the primary structure and containing the lowering.
- Spacers anchored to the ceiling with suitable fixings depending on the type of the support.
- Maximum distance between spacers 80 cm.
- The boards will be fixed directly to the C profiles according to the fixing schemes (page 10).

System with adjustable bracket

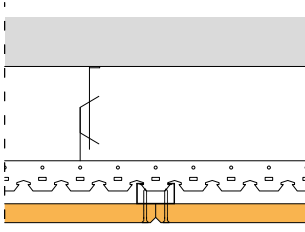


- The system with adjustable bracket allows to have a single structure, replacing the primary structure and containing the lowering.
- The bracket allows adjustable air-gap.
- Spacers anchored to the ceiling with suitable fixings depending on the type of the support.
- Maximum distance between bracket 80 cm.
- The boards will be fixed directly to the C profiles according to the fixing schemes (page 10).
- Maximum suspensions 10 cm, insulation excluded.

Suspended application

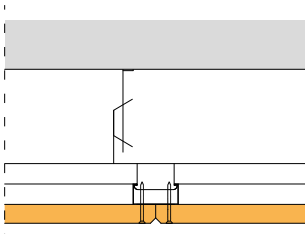
Available for CELENIT ACOUSTIC boards or CELENIT ACOUSTIC MINERAL boards with rock wool thickness 18 - 25 mm.

System with clip steel profile



- Lowering elements (hanger or steel wire) anchored to the ceiling with suitable fixings depending on the type of the support.
- Maximum distance between lowering elements 80 cm.
- C profiles fixed on clip steel profile, with a maximum distance of 60 cm.
- The boards will be fixed directly to the C profiles according to the fixing schemes (page 10).
- Minimum suspensions 15 cm, insulation and profiles excluded.

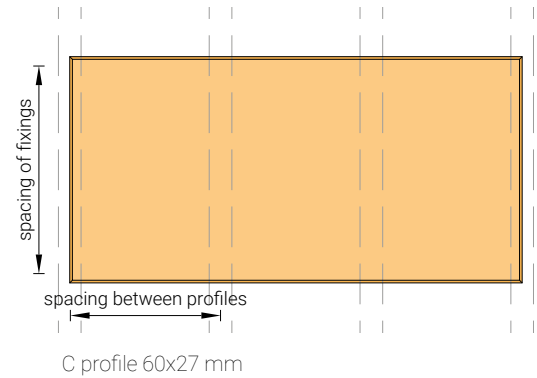
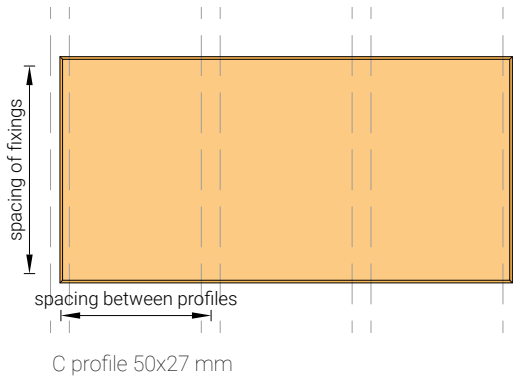
System with double C profiles



- Lowering elements (hanger or steel wire) anchored to the ceiling with suitable fixings depending on the type of the support.
- Maximum distance between lowering elements 80 cm.
- Secondary C profiles with a maximum distance of 60 cm, fixed to the primary C profiles with a clip hook.
- The boards will be fixed directly to the C profiles according to the fixing schemes (page 10).
- Minimum suspensions 15 cm, insulation and profiles excluded.

The profiles can be anticorrosion treated on demand for high relative humidity applications: swimming pools, saunas, kitchens, changing rooms of gym and health centers.

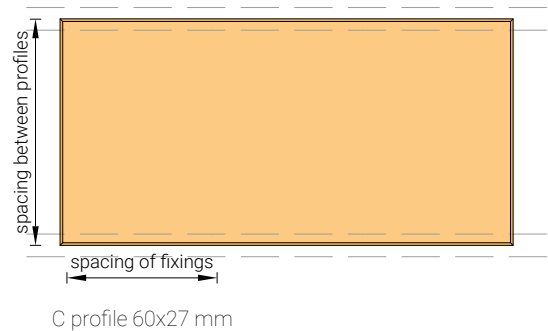
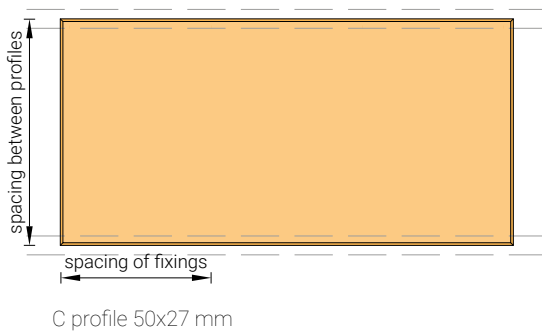
Orthogonal installation to the structure



Only for CELENIT ACOUSTIC panels

- Secondary C profile fixed according to panel length. Generally C profile are fixed every 400 mm or 600 mm; for boards length 2000 mm C profiles can be fixed every 500 mm.
- Secondary C profile dimensions 50x27x0.6 mm; also available section 60x27 mm.
- System anchored to the ceiling with suitable fixings depending on the type of the support.

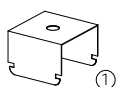
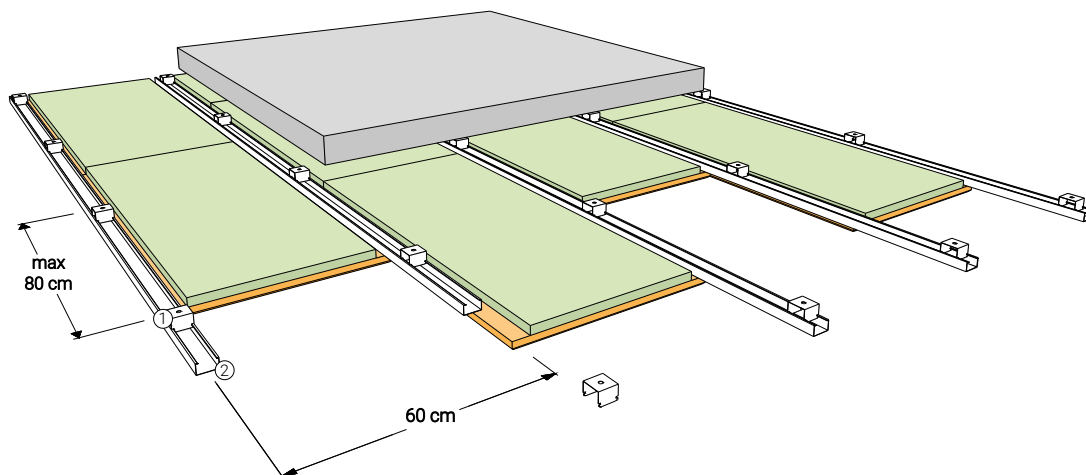
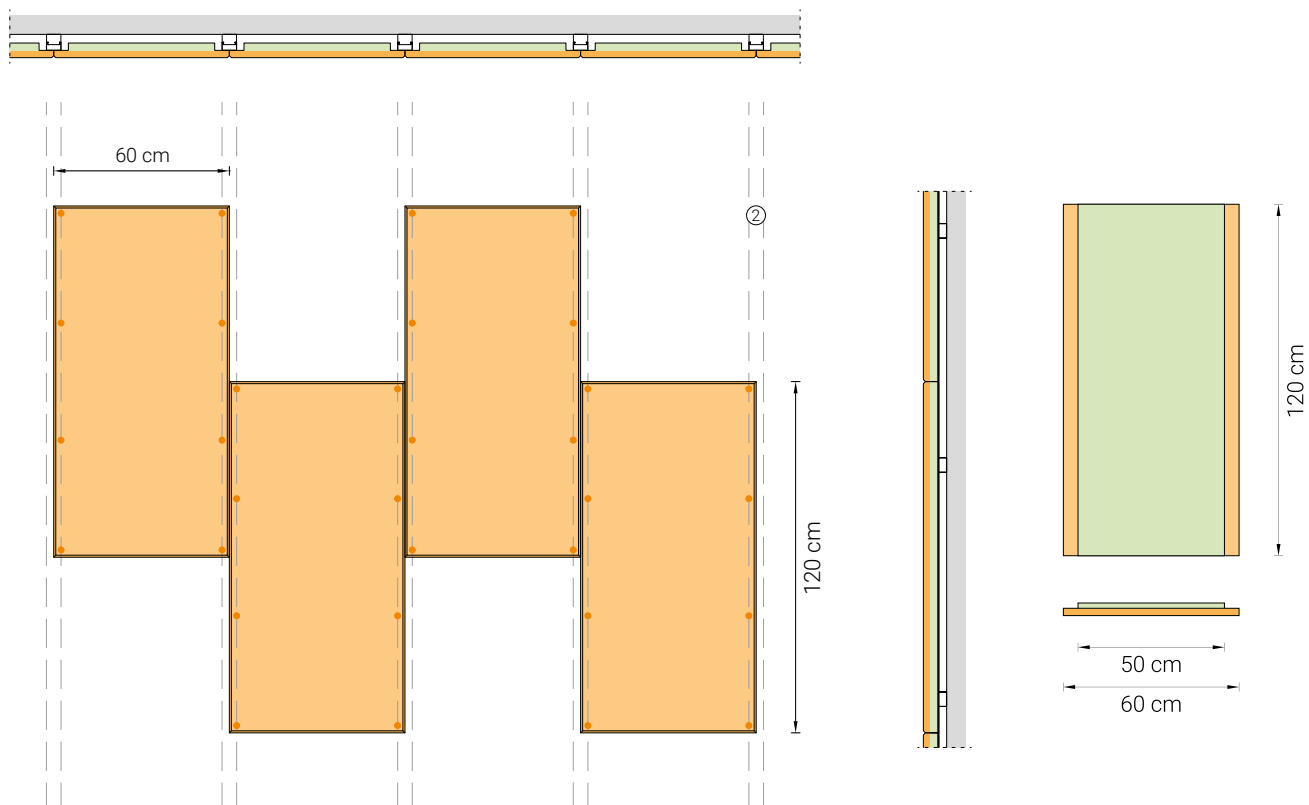
Parallel installation to the structure



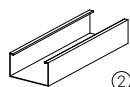
Available for CELENIT ACOUSTIC MINERAL boards or CELENIT ACOUSTIC boards

- System generally used for adhered application, to containing the lowering.
- Secondary C profile fixed every 600 mm.
- Secondary C profile dimensions 50x27x0.6 mm; also available section 60x27 mm.
- System anchored to the ceiling with suitable fixings depending on the type of the support.

Adhered application system with fixed spacers and C profiles



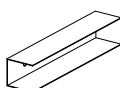
Galvanized steel fixed spacer for C profile
Dimensions 50x30 mm or 60x30 mm,
rounded edge



Galvanized steel C profile
Dimensions 27x50x27 mm
or 27x60x27 mm,
thickness 0.6 mm, rounded
edge

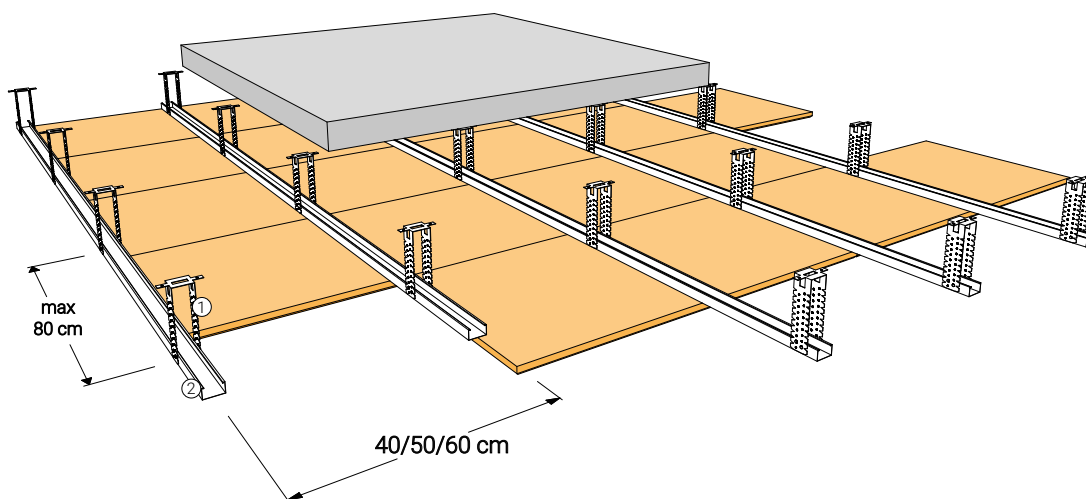
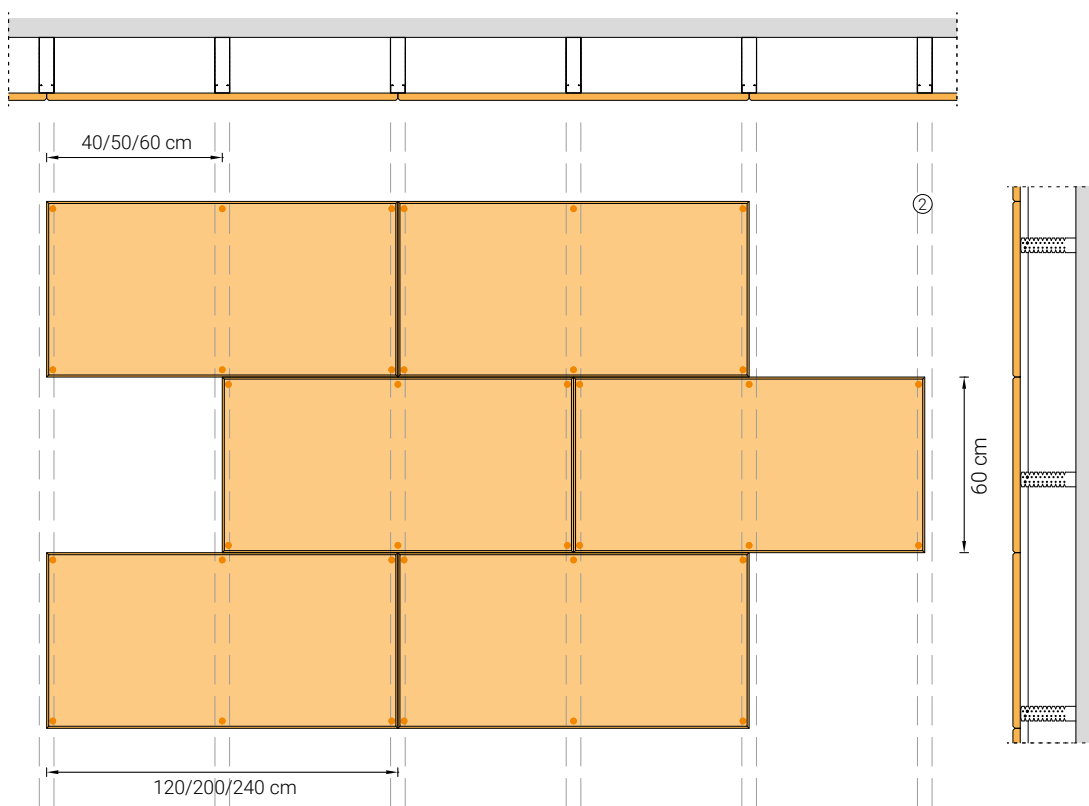


Selftapping steel screw for plasterboard
Countersunk head
Dimensions 3.5x35 - 3.5x45 - 3.5x55 mm

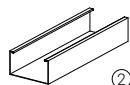


U-shaped perimeter guide
Dimensions 28x30x28 mm
Thickness 0.6 mm

Adhered application system with adjustable brackets and C profiles



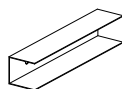
Adjustable steel bracket for C profile
Width 50 mm or 60 mm



Galvanized steel C profile
Dimensions 27x50x27 mm
or 27x60x27 mm,
thickness 0.6 mm, rounded
edge

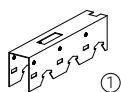
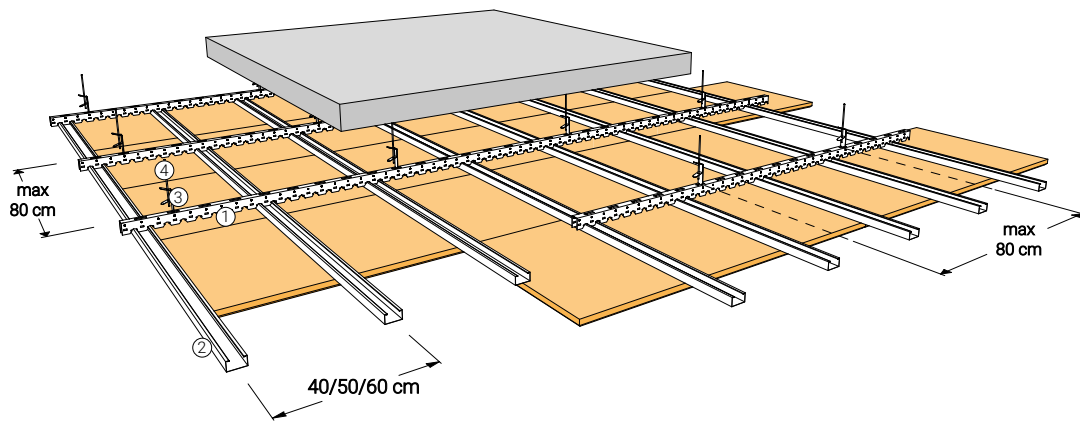
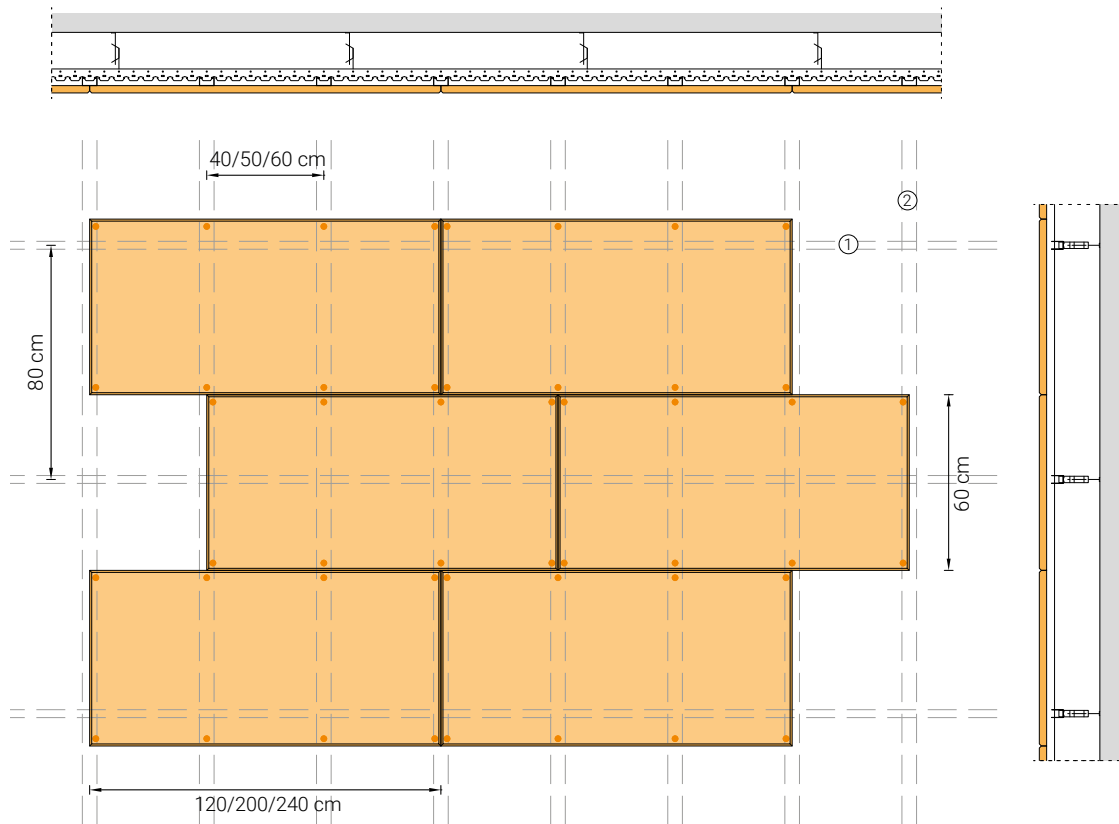


Selftapping steel screw for plasterboard
Countersunk head
Dimensions 3.5x35 - 3.5x45 - 3.5x55 mm



U-shaped perimeter guide
Dimensions 28x30x28 mm
Thickness 0.6 mm

Suspended application system with clip steel profiles and C profiles



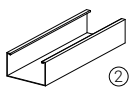
① Primary galvanized steel clip profile for C profile
Dimensions 28x40 mm, thickness 0.6 mm, rounded edge



③ Adjustable hanger for clip profile



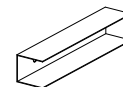
Selftapping steel screw for plasterboard
Countersunk head
Dimensions 3.5x35 - 3.5x45 - 3.5x55 mm



② Galvanized steel C profile
Dimensions 27x50x27 mm or 27x60x27 mm, thickness 0.6 mm, rounded edge

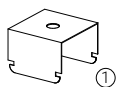
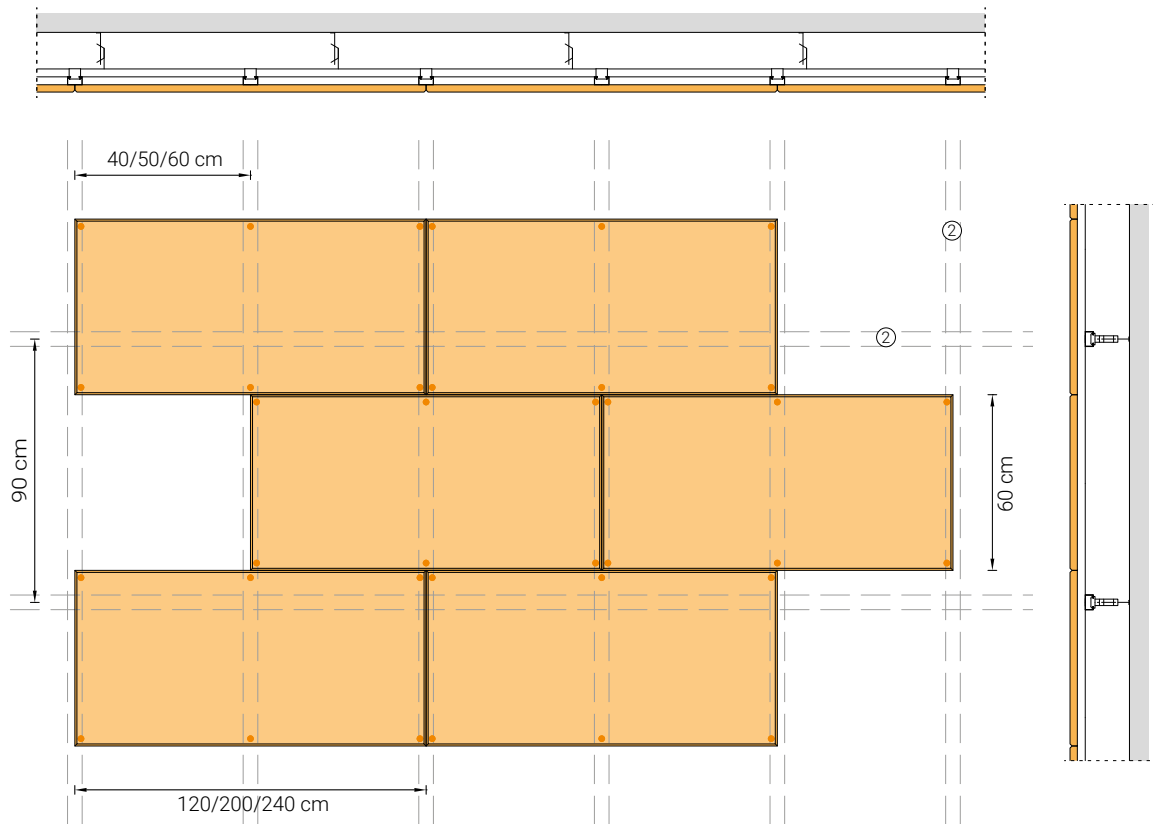


④ Hanger with metal ring
diameter 4 mm



U-shaped perimeter guide
Dimensions 28x30x28 mm
Thickness 0.6 mm

Suspended application system with double C profiles



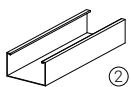
Galvanized steel fixed spacer for C profile
Dimensions 50x30 mm or 60x30 mm,
rounded edge



Adjustable hanger for C profile



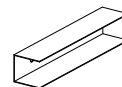
Selftapping steel screw for plasterboard
Countersunk head
Dimensions 3.5x35 - 3.5x45 - 3.5x55 mm



Galvanized steel C profile
Dimensions 27x50x27 mm or 27x60x27
mm, thickness 0.6 mm, rounded edge



Hanger with metal ring
diameter 4 mm



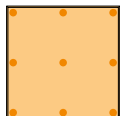
U-shaped perimeter guide
Dimensions 28x30x28 mm
Thickness 0.6 mm

C 27x60x27 profiles must be used for false ceiling ball-impact resistant by adjusting the size of the fixed spacers and the hangers (see pages 12-13).

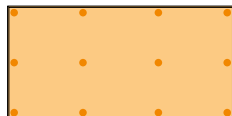
Fixings schemes

CELENIT ACOUSTIC range

• thickness 15 mm

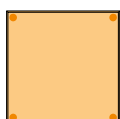


600x600 mm - 9 screws
Orthogonal installation:
Spacing of fixings 300 mm
C profile fixed every 300 mm



1200x600 mm - 12 screws
Orthogonal installation:
Spacing of fixings 300 mm
C profile fixed every 400 mm

• thicknesses 25/35 mm



600x600 mm - 4 screws
Orthogonal/parallel installation:
Spacing of fixings 600 mm
C profile fixed every 600 mm



2000x600 mm - 10 screws
Parallel installation:
Spacing of fixings 500 mm
C profile fixed every 600 mm
Orthogonal installation:
Spacing of fixings 600 mm
C profile fixed every 500 mm



1200x600 mm - 8 screws
Parallel installation:
Spacing of fixings 400 mm
C profile fixed every 600 mm
Orthogonal installation:
Spacing of fixings 600 mm
C profile fixed every 400 mm



2400x600 mm - 10 screws
Orthogonal/parallel installation:
Spacing of fixings 600 mm
C profile fixed every 600 mm

Board thickness [mm]	Dimensions [mm]	Screws per board [No.]	Screws per m ² [No./m ²]	Spacing between profile [mm]	Screw dimensions [mm]
15	600x600	9	25.0	300	3.5x35
	1200x600	12	16.7	400	
25	600x600	4	11.2	600	3.5x45
	1200x600	8	11.2	400 *	
	2000x600	10	8.4	500	
35	2400x600	10	7.0	600	3.5x55
	600x600	4	11.2	600	
	1200x600	8	11.2	400 *	
	2000x600	10	8.4	500	
	2400x600	10	7.0	600	

* C profile every 600 mm are also available, with screws spacing 300 mm and 9 screws per board (12.5 fixings/m²)

CELENIT ACOUSTIC MINERAL range

• wood wool thickness 25 mm

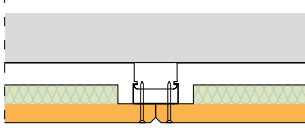


1200x600 mm - 8 screws
Parallel installation:
Spacing of fixings 400 mm
C profile fixed every 600 mm

Wood wool board thickness [mm]	Dimensions [mm]	Screws per board [No.]	Screws per m ² [No./m ²]	Spacing between profile [mm]	Screw dimensions [mm]
25	1200x600	8	11.2	600	3.5x45

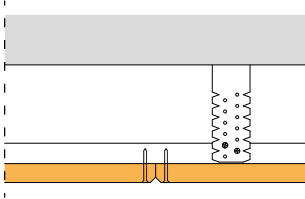
Indicative quantities

Adhered application system with fixed spacers and C profiles



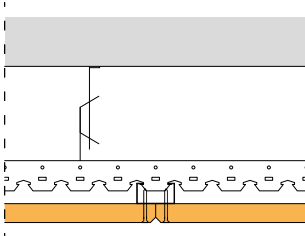
Type	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
Galvanized steel fixed spacer for C profile	50x30 (60x30)	-	800 *1	2.10 pcs/m ² C profiles every 600 mm
				2.50 pcs/m ² C profiles every 500 mm
				3.10 pcs/m ² C profiles every 400 mm
C profile	27x50x27 (27x60x27)	3000/4000	600	1.70 m/m ²
			500	2.00 m/m ²
			400	2.30 m/m ²
U-shaped perimeter guide	28x30x28	3000/4000	-	Perimeter *2

Adhered application system with adjustable brackets and C profiles



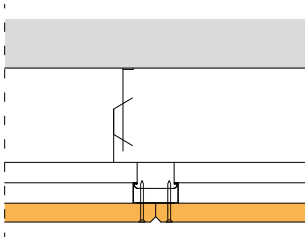
Type	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
Adjustable steel bracket for C profile	50 (60)	-	800 *1	2.10 pcs/m ² C profiles every 600 mm
				2.50 pcs/m ² C profiles every 500 mm
				3.10 pcs/m ² C profiles every 400 mm
C profile	27x50x27 (27x60x27)	3000/4000	600	1.70 m/m ²
			500	2.00 m/m ²
			400	2.30 m/m ²
U-shaped perimeter guide	28x30x28	3000/4000	-	Perimeter *2

Suspended application system with clip steel profiles and C profiles



Type	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
Hanger with metal ring	Φ 4	250/500/1000/ 1500/2000	800 *1	1.60 pcs/m ² clip profiles every 800 mm
				2.10 pcs/m ² clip profiles every 600 mm
Adjustable hanger for clip profile	-	-	800 *1	1.60 pcs/m ² clip profiles every 800 mm
				2.10 pcs/m ² clip profiles every 600 mm
Primary galvanized steel clip profile for C profile	40x28	4000	800	1.15 m/m ²
			600 *3	1.70 m/m ²
			600	1.70 m/m ²
C profile	27x50x27 (27x60x27)	3000/4000	500	2.00 m/m ²
			400	2.30 m/m ²
			-	Perimeter *2

Suspended application system with double C profiles



Type	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
Hanger with metal ring	Φ 4	250/500/1000/ 1500/2000	800 *1	1.40 pcs/m ² C profiles every 900 mm
				1.60 pcs/m ² C profiles every 800 mm
				2.10 pcs/m ² C profiles every 600 mm
Adjustable hanger for C profile	-	-	800 *1	1.40 pcs/m ² C profiles every 900 mm
				1.60 pcs/m ² C profiles every 800 mm
				2.10 pcs/m ² C profiles every 600 mm
Primary C profile	27x50x27 (27x60x27)	3000/4000	900	1.11 m/m ²
			800	1.15 m/m ²
			600	1.70 m/m ²
Galvanized steel fixed spacer for C profile	50x30 (60x30)	-	-	- *4
Secondary C profile	27x50x27 (27x60x27)	3000/4000	600	1.70 m/m ²
			500	2.00 m/m ²
			400	2.30 m/m ²
U-shaped perimeter guide	28x30x28	3000/4000	-	Perimeter *2

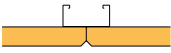
*1 The spacing between the hangers is the distance between them along the bearing profile

*2 The quantities of the U-shaped guide is equal to the perimeter of the false ceiling

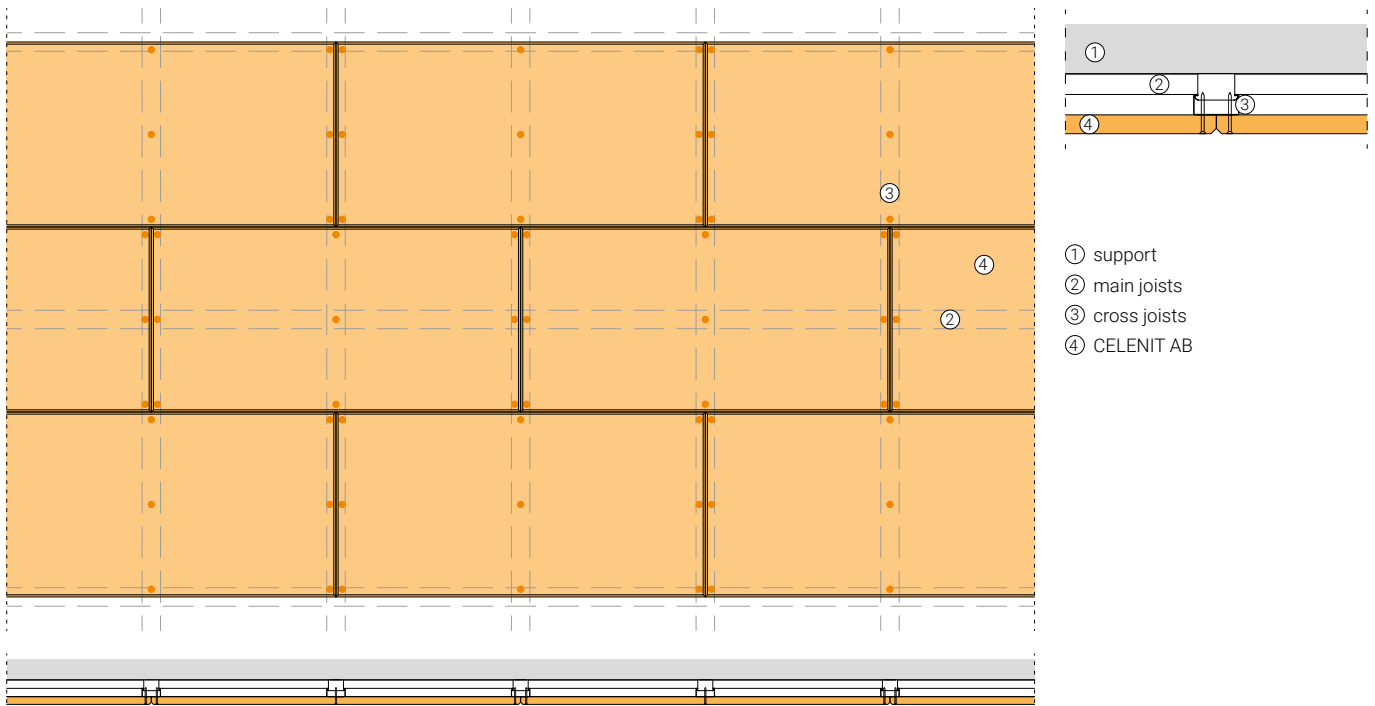
*3 Primary C profile fixed every 600 mm are required for false ceiling EI60 fire resistant (see page 14).

*4 The quantities of fixed spacer to use is equal to the number of crosses between primary structure and secondary structure

False ceiling with CELENIT AB 25 mm thick, ball impact resistant according to EN 13964/Attached D - DIN 18032/Part 3 standards

	Type of board	Structure	Certificate * No. / Date	Standard	Results
	CELENIT AB Thickness: 25 mm Dimensions: 1200x600 mm Edges: Chamfered - S4	C metal section 27x60x27 mm Distance between centers of cross joists: 600 mm Distance between centers of main joists: 900 mm Number of screws per board: 9	332601 31.03.2016	EN 13964	Class 1A
				DIN 18032-3	Visual examination Pass

* The certificate is based on tests carried out at the Giordano Institute (Bellaria - RN - Italy)



Description

CELENIT AB boards dimensions 1200x600 mm, 25 mm thick, with chamfered edges on 4 sides (code S4) with staggered laying on the short side. Boards are optionally painted and directly fixed to the cross joists made of C-shaped steel profile, section 60x27 mm and thickness 0.6 mm, placed orthogonally with a distance between centers of 600 mm. Cross joists

are supported by main joists made of C-shaped steel profile, section 60x27 mm and thickness 0.6 mm, placed orthogonally with a distance between centers of 900 mm. The boards are fixed on the underside to the cross joists using self-tapping screws, diameter 3.5 mm and spacing 300x600 mm (9 screws per board).

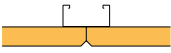
Classification: **CLASS 1A**

Test results

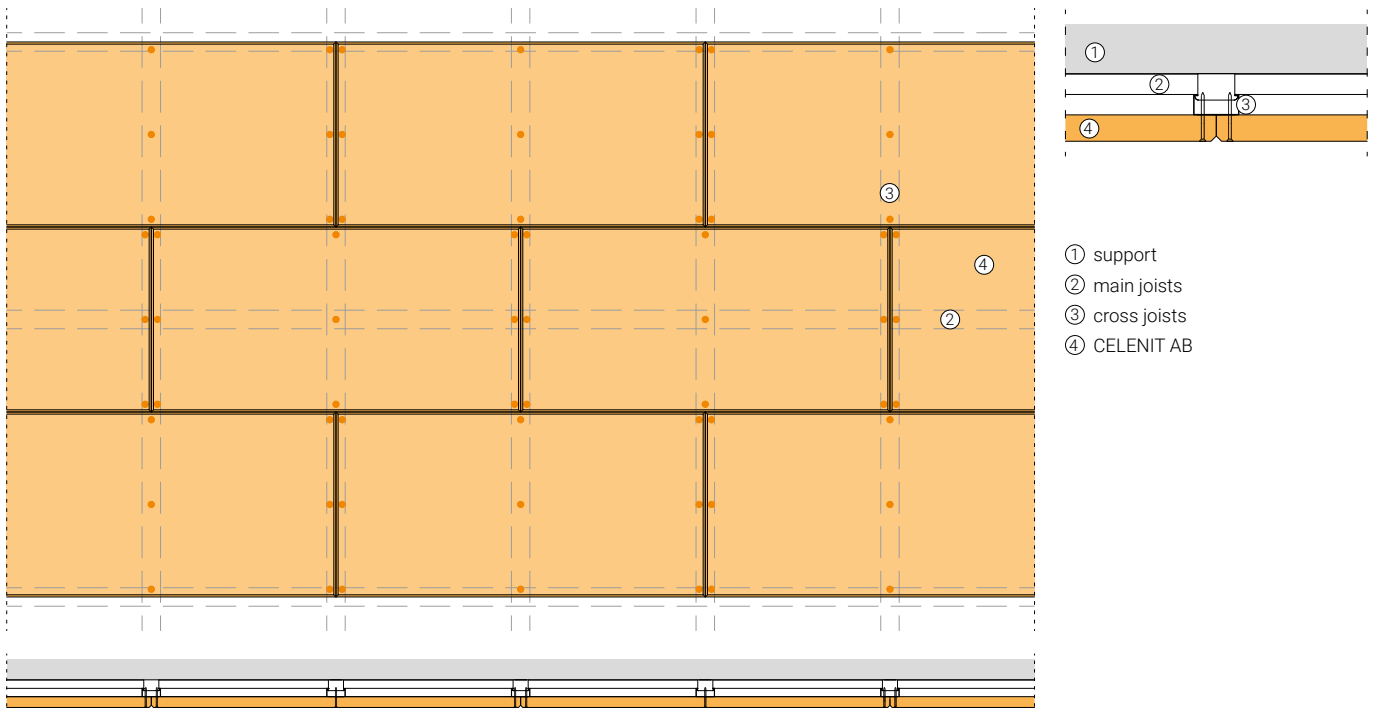
Impacts	Impact angle	Nominal velocity [m/s]	Visual examination *	Class
12	90°	16.5 ± 0.8	No deformation and/or change	1A
12	60°		No deformation and/or change	1A
12	60° (opposite direction)		No deformation and/or change	1A

* As specified by clause D.6 "Evaluation" of EN 13964:2014 standard

False ceiling with CELENIT AB 35 mm thick, ball impact resistant according to EN 13964/Attached D - DIN 18032/Part 3 standards

	Type of board	Structure	Certificate * No. / Date	Standard	Results
	CELENIT AB Thickness: 35 mm Dimensions: 1200x600 mm Edges: Chamfered - S4	C metal section 27x60x27 mm Distance between centers of cross joists: 600 mm Distance between centers of main joists: 900 mm Number of screws per board: 9	332602 31.03.2016	EN 13964	Class 1A
				DIN 18032-3	Visual examination Pass

* The certificate is based on tests carried out at the Giordano Institute (Bellaria - RN - Italy)



Description

CELENIT AB boards dimensions 1200x600 mm, 35 mm thick, with chamfered edges on 4 sides (code S4) with staggered laying on the short side. Boards are optionally painted and directly fixed to the cross joists made of C-shaped steel profile, section 60x27 mm and thickness 0.6 mm, placed orthogonally with a distance between centers of 600 mm. Cross joists

are supported by main joists made of C-shaped steel profile, section 60x27 mm and thickness 0.6 mm, placed orthogonally with a distance between centers of 900 mm. The boards are fixed on the underside to the cross joists using self-tapping screws, diameter 3.5 mm and spacing 300x600 mm (9 screws per board).

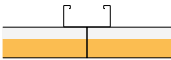
Classification: **CLASS 1A**

Test results

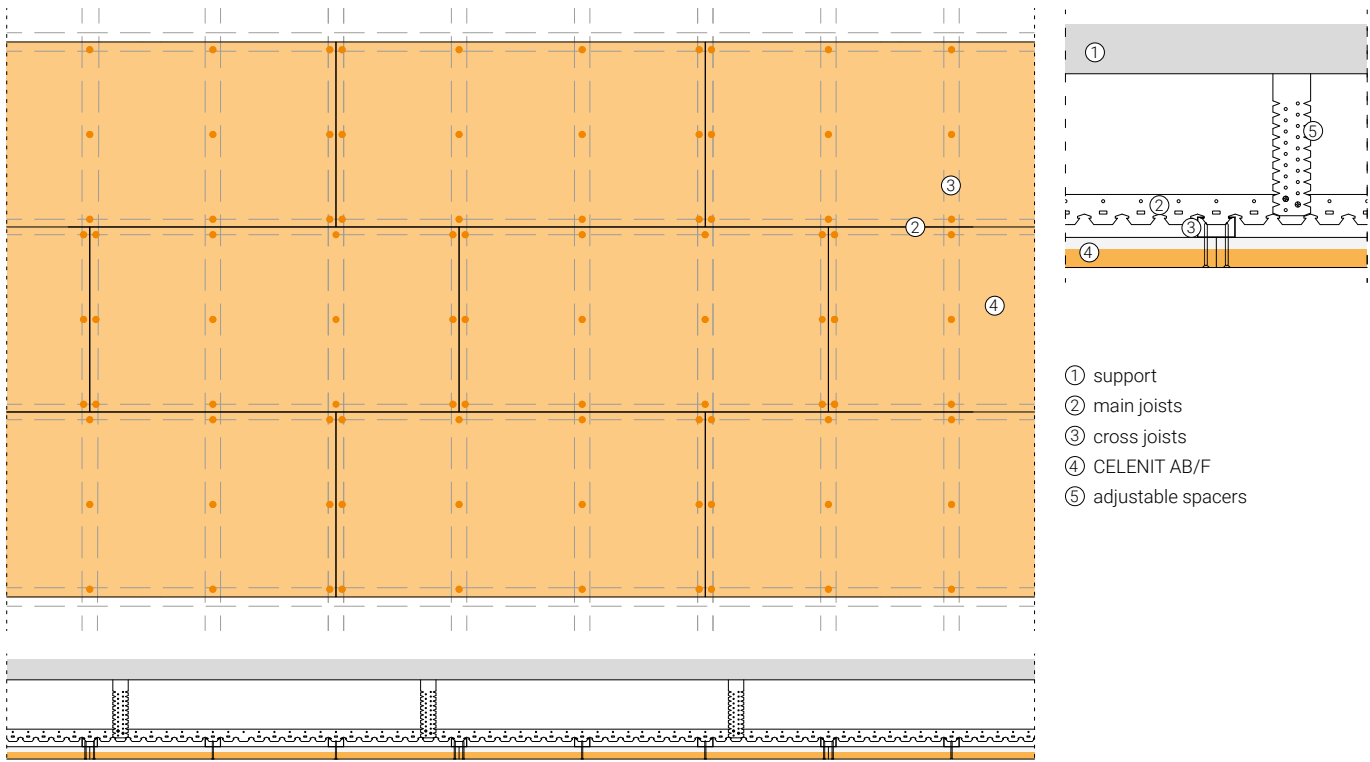
Impacts	Impact angle	Nominal velocity [m/s]	Visual examination *	Class
12	90°	16.5 ± 0.8	No deformation and/or change	1A
12	60°		No deformation and/or change	1A
12	60° (opposite direction)		No deformation and/or change	1A

* As specified by clause D.6 "Evaluation" of EN 13964:2014 standard

False ceiling with CELENIT AB/F 40 mm thick, EI60 fire resistance according to EN 13501-2:2009/Part 2 standard

	Type of board	Structure	Certificate * No. / Date	Results
	CELENIT AB/F Thickness: 40 mm Dimensions: 1200x600 mm Edges: Straight - DT	C metal section 27x50x27 mm Distance between centers of cross joists: 400 mm Distance between centers of main joists: 600 mm Distance between centers of screws: 300 mm	312748/3620FR 23.01.2014	EI 60

* The certificate is based on tests carried out at the Giordano Institute (Bellaria - RN - Italy)



Description

The FALSE CEILING EI60 FIRE RESISTANT it's made of CELENIT AB/F, composite boards consisting of a layer of mineralized thin fir wood wool bound with white Portland cement coupled to a layer of fire rated plasterboard. Boards dimensions 1200x600 mm, 40 mm thick and optionally painted. Panels are directly fixed to the metal structure with staggered laying on the short side. The system consists of:

- longitudinal main joists made of galvanized steel profile which is U-shaped for the clic-in connection with the cross joists; section 40x28 mm, thickness 0.7 mm and length 3000 mm;

- cross joists made of galvanized C-shaped steel profile, section 27x50 mm and thickness 0.6 mm;
- perimetral frame made of galvanized C-shaped steel profile, section 30x27 mm and thickness 0.6 mm;
- adjustable spacers made of shaped steel.

Panels fixed to the secondary frame with fire-resistant glue and phosphated steel self-tapping screws.

Classification: **EI60**

Access panel

These instructions apply to the installation of the access panel in a C 60x27 mm profiles system.

CELENIT inspection system consists of the application of hatches made of CELENIT AB or CELENIT ABE boards, 25 mm thick, 1200x600 or 600x600 mm with beveled edges, specifically designed for installation on C60x27 profiles system.

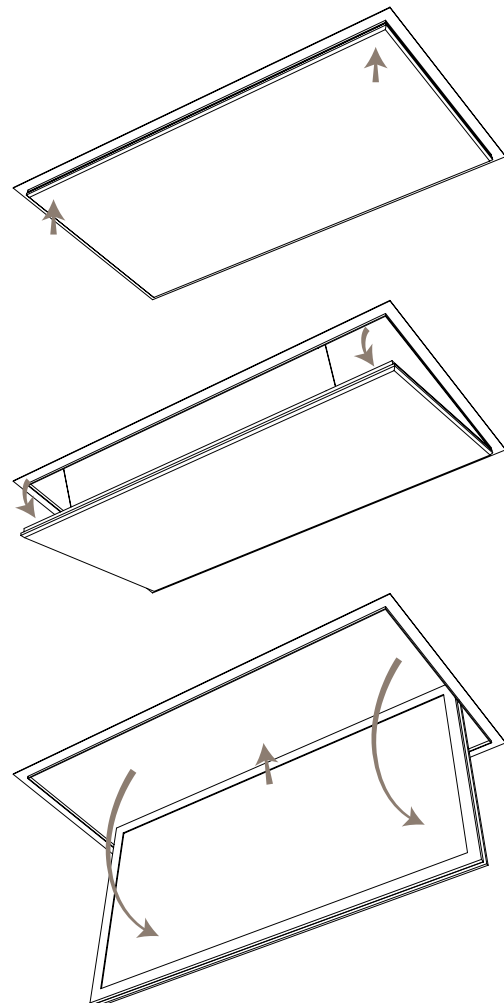
CELENIT access panel are specially designed to create the maximum aesthetic continuity of the false ceiling, while maintaining the modular system and the chamfered edges completely hides the metal frame.

To open the acces panel there is a click-clack system. For 600x600 mm board there are two click-clack closures positioned at the end of the long side, for 1200x600 mm board there are 3 closures: two in the ends and one in the middle of the long side. Each access panel also has carabiners with a steel cable 10 cm long.



Inspection

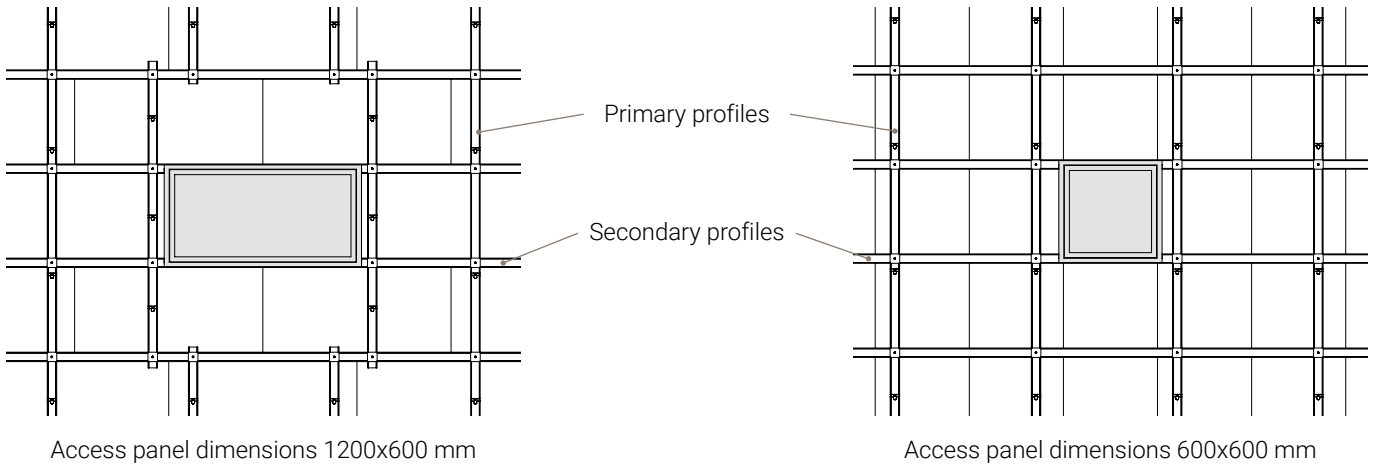
1. Press at the ends of the long side of the panel to release click-clack closures and moove the unhooked internal panel downwards until the safety cables are taut.
2. Unhook the carabiner and gently accompany the inner panel.
3. Completely remove the inner panel, not leave it hanging precariously. Keep the inner board with care so as not to damage it.



FALSE CEILINGS | HIDDEN METAL STRUCTURE

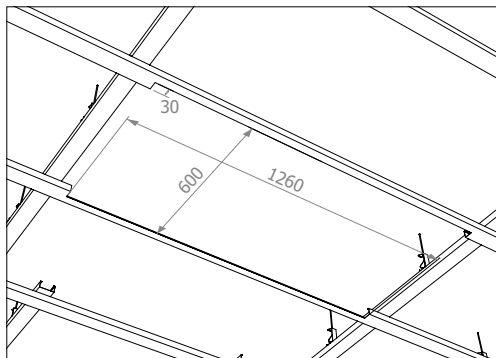
Installation system

Place primary profiles in such a way that in correspondence of the access panel are no profiles that prevent the inspection.

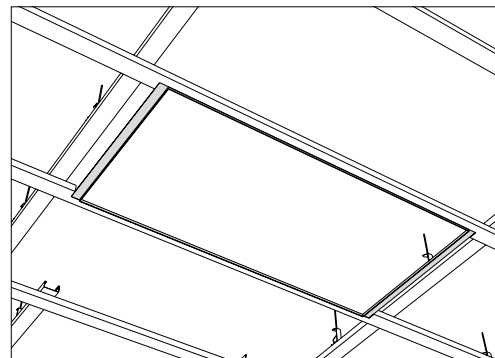


Installation instructions

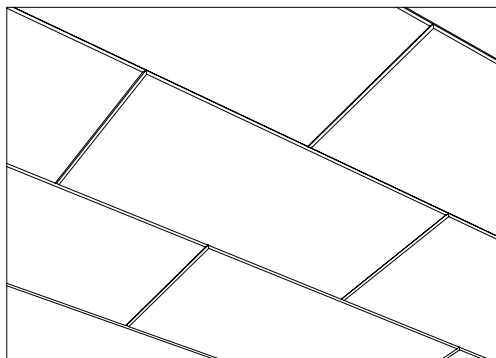
Suspended false ceiling with double C60x27 profiles system. Spacing between secondary profiles 60 cm.
For more information see the installation instruction in the application data sheet of false ceilings with hidden metal structure.
The boards will be fixed directly to the secondary C profiles with the long side parallel to profiles.



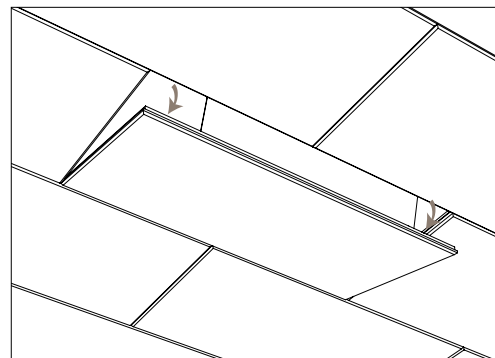
1. Partially cut the secondary profiles as shown to place the access panel structure.
Dimensions of the cut: 1260x30 mm for access panel 1200x600 mm; 660x30 mm for access panel 600x600 mm.



2. Lay the hatch structure between the two C60x27 profiles. Check that the internal frame of the access panel is perfectly "squared" with the secondary structure of the false ceiling, then fix it with selftapping steel screw.



3. Install the false ceiling panels, paying close attention to the combination of the boards around the access panel.



4. To open the access panel press at the ends of the long side of the panel to release click-clack closures.

Storage, use and maintenance

The boards must be stored on a pallet placed on a flat surface, protected from rain and direct sunlight. Pallets must be handled with care on site. Bumping the corners of the pallets can cause damage to the boards. For more information see the "Storage, use and maintenance" information available in the download area of the website www.celenit.com.



CELENIT boards are dimensionally stable (EN 13168), however, they must be installed after acclimating to the same room they are going to be installed in, as well as after all concrete works are finished and the doors, windows, heating and ventilation systems have been installed.

Room temperature must be kept constant before and after installation. Do not suddenly change the temperature of the room after installation.

General installation instructions

- The boards have one side that should be visible (front of the board) and another side that should be placed against the structure (back of the board). The back of the board usually has the CELENIT logo or shows calibration marks. The front may be painted and/or has worked edges. In the absence of paint or edges, the front can be identified according to the pallet layout: the front of the boards faces the top and the back faces the pallet.
- With the aid of a laser level mark the positions for the fixings of the hangers (hangers, brackets or fixed spacer) and fix the elements.
- Design the secondary profiles position starting from the center of the ceiling to have a symmetric layout. The primary structure will be connected to the spacer elements by aligning them with a laser leveler.
- Fix the secondary structure to the primary (see page 11).
- If a vapour barrier is necessary, it'll install under the secondary profile with butyl double-sided adhesive tape. The tape also acts as a seal for the fixings of CELENIT boards.
- Fix the boards to the structure according to fixing schemes at page 10. Take maximum care while handling the panels. Corners and paint are easy to damage. Use clean gloves when installing the panels. Please find more information on stocking, use and maintenance at www.celenit.com.
- We recommend boards with chamfered edges and staggered laying on the short side to ensure a nicer visual effect. The installation of boards with straight edge may be possible anyway.
- It is possible to insert mineral wool panels or wood fiber panels on top of CELENIT panels to improve acoustic and thermal performances while laying CELENIT boards.
- After the installation please follow the recommendations in the section "Storage, use and maintenance" at www.celenit.com.

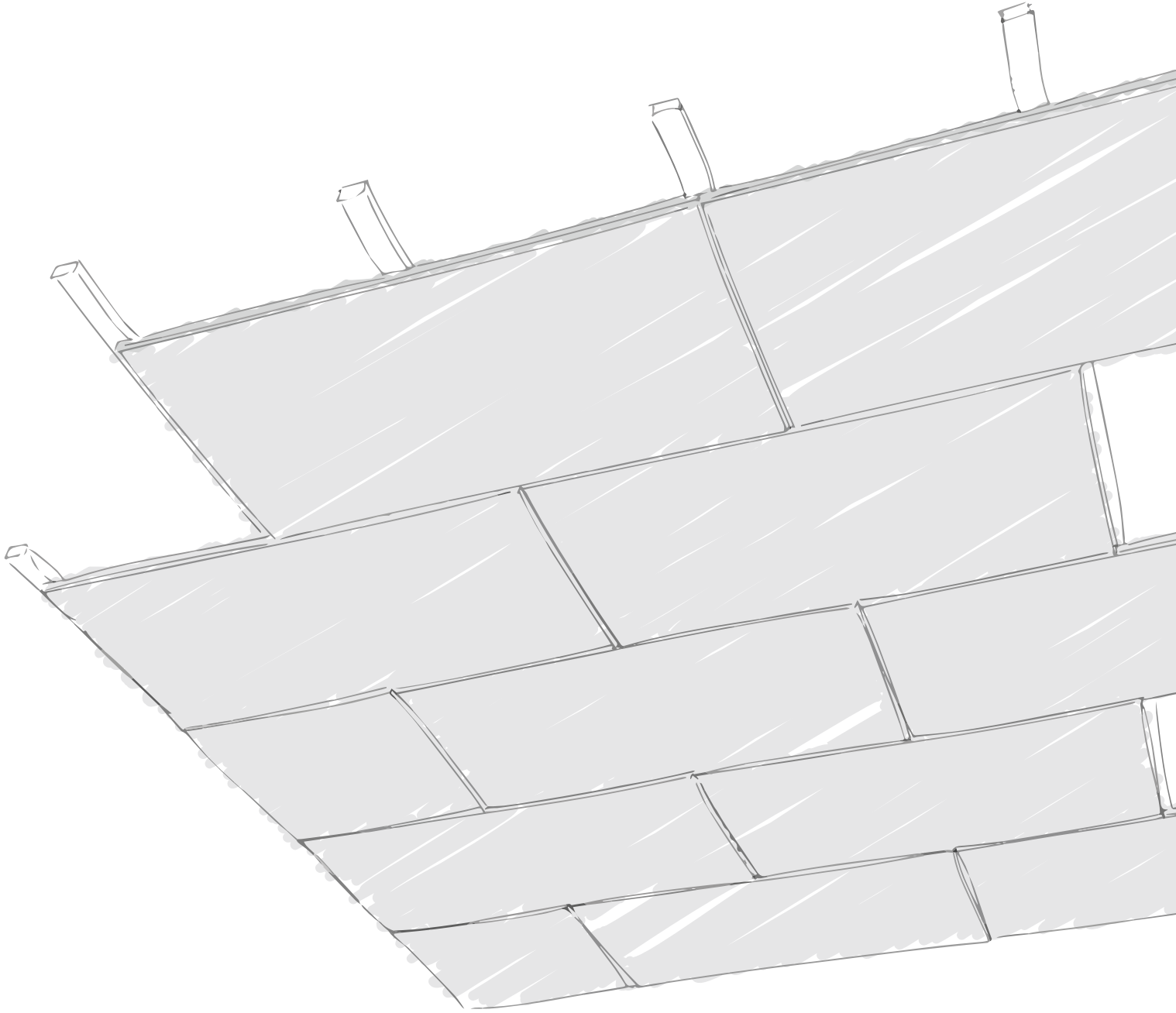
Important remarks

15 mm panels are not recommended for outdoor applications (with a roof protection) or in presence of high humidity.

CELENIT boards with DT edges code are not available because dimensions are not suitable for this system.



FALSE CEILINGS HIDDEN WOODEN STRUCTURE





TINGLADO Pamplona, ES
design: Koa Arquitectura | photo: Koa Arquitectura

Item specifications

CELENIT sound absorbing false ceiling with hidden wooden structure, model ACOUSTIC ..., with thermal and acoustic insulation, eco-friendly and sound absorbing boards - CELENIT ... product range, CELENIT ... item No. ... - made of mineralized ... fir wood wool bound with white Portland cement, it complies with EN 13168 and EN 13964 standards, it can be coupled with rock wool (ACOUSTIC MINERAL product range); dim.: ... x ... mm; th.: ... mm; texture: ...; straight edges (code: D) or chamfered edges (code: S4); weight: ... kg/m²; λ_D : ... W/mK; R_D : ... m²K/W; compressive stress σ_{10} : \geq ... kPa; water vapour transmission μ : 5; reaction to fire: Euroclass B-s1, d0 or A2-s1, d0 (EN 13501-1 standard); sound absorption: α_w ... / NRC ...; durability: class C; light reflection:

50.7 or 74.0% (painted white 05/15); release of formaldehyde: class E1; it does not contain asbestos. Wood wool boards must be certified by ANAB-ICEA and natureplus for eco-compatibility of materials and manufacturing process, PEFC™ or FSC® for the sustainability of wood raw material, ICEA for the content of recycled material and for the attestation of LEED credits, EPD for the environmental statement. Wood laths dimensions ... x ... mm; spacing between primary laths: ... mm; spacing between secondary laths: ... mm; fixings per boards: ...; screws diameter: 3.5 mm; screws spacing: ... x ... mm.

Products



CELENIT ACOUSTIC range
ABE - AB

CELENIT ACOUSTIC A2 range
ABE/A2 - AB/A2

Boards made of mineralized wood wool bound with white Portland cement



Straight edges
D for all thicknesses



Chamfered edges
S4 for all thicknesses



Shiplap edges
RD10 for thicknesses 25 - 35 mm
RD20 for thicknesses 25 - 35 mm



CELENIT ACOUSTIC MINERAL range
L2ABE25 - L2AB25 - L2ABE25C

CELENIT ACOUSTIC MINERAL A2 range
L2ABE25/A2 - L2AB25/A2 - L2ABE25C/A2

Boards made of mineralized wood wool bound with white Portland cement coupled to a layer of rock wool



Straight edges
D for all thicknesses

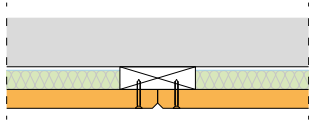


Chamfered edges
S4 for all thicknesses

The boards are supplied with dimensions 1200x600 mm with rock wool 1200x500 mm, for direct application to the structure.

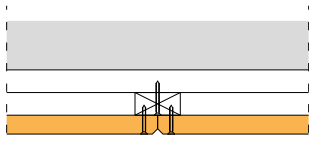
Except for **L2ABE25C** and **L2ABE25C/A2** which are supplied with rock wool 1200x600 mm and sufficient compression strength to avoid crushing during the laying. They can be screwed directly to the structure, either with orthogonal or parallel installation.

Single structure



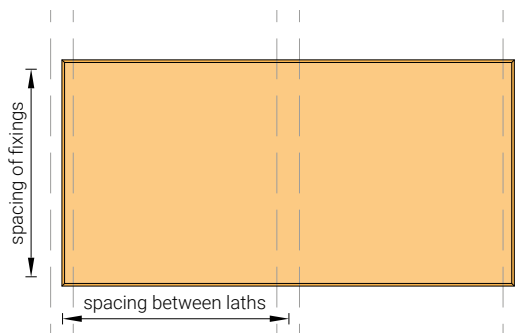
- System used to minimize the total lowering.
- Wood laths anchored to the ceiling with suitable fixings depending on the type of the support, or with adjustable brackets.
- Wood laths dimensions:
 - for CELENIT ACOUSTIC panels, recommended section (BxH) 60x40 mm or 80x40 mm
 - for CELENIT ACOUSTIC MINERAL panels, max. width 95 mm, min. height 30 mm
- Boards fixed directly to the wood laths according to the fixing schemes (page 7).

Double structure



- The system is compatibles to false ceiling with ball-impact resistant certification with CELENIT ABE boards (page 7).
- Primary structure anchored to the ceiling with suitable fixings depending on the type of the support, or with lowering elements.
- Wood laths dimensions:
 - for CELENIT ACOUSTIC panels, recommended section (BxH) 60x40 mm or 80x40 mm
 - for CELENIT ACOUSTIC MINERAL panels, max. width 95 mm, min. height 30 mm
- Boards fixed directly to the wood laths according to the fixing schemes (page 7).

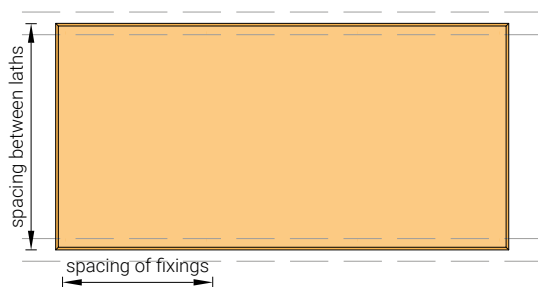
Orthogonal installation to the structure



Only for CELENIT ACOUSTIC panels.

Board thickness [mm]	Dimensions [mm]	Spacing between laths [mm]
15	600x600	300
	1200x600	400
25 / 35	600x600	600
	1200x600	600
	2000x600	500
	2400x600	600

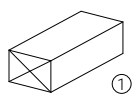
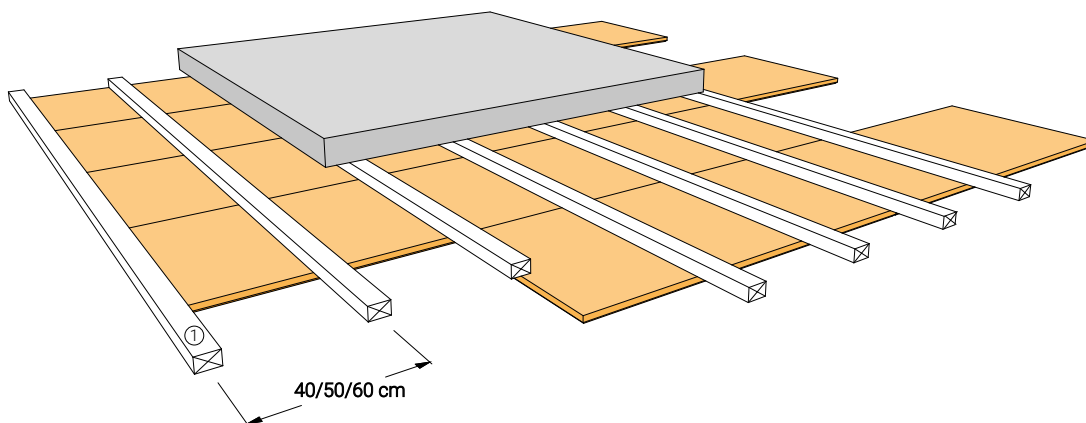
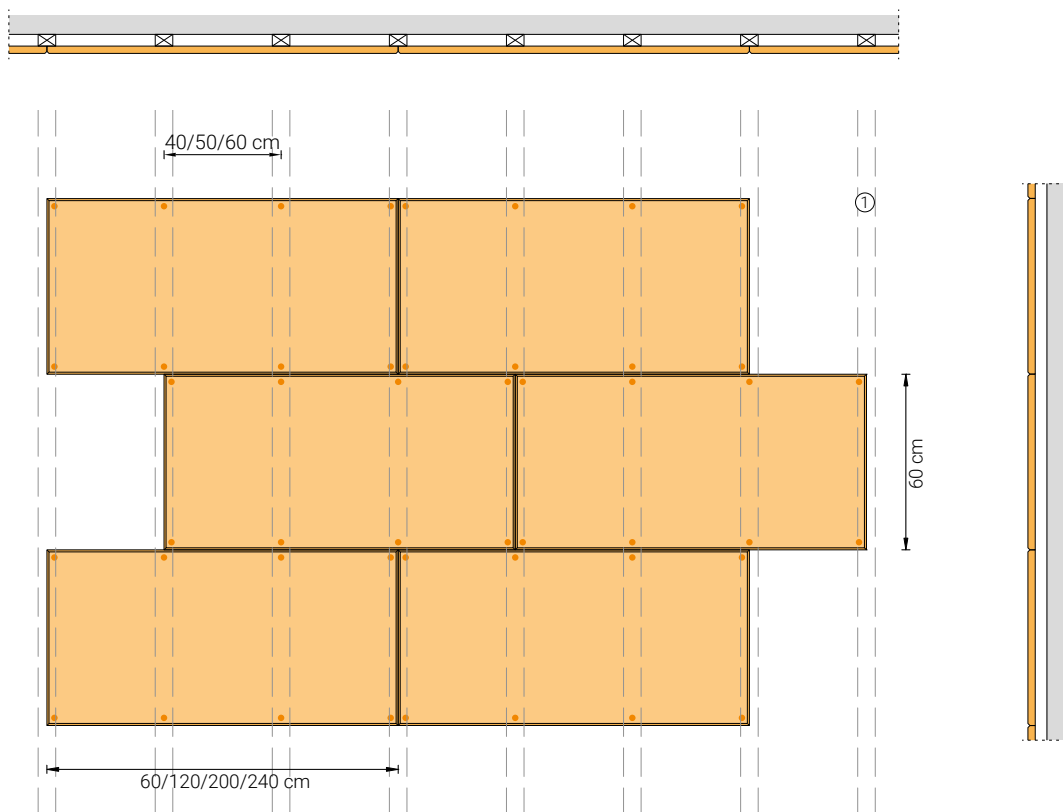
Parallel installation to the structure



Available for CELENIT ACOUSTIC MINERAL boards or CELENIT ACOUSTIC boards.

Wood laths fixed every 600 mm (boards width).

Orthogonal installation to the structure

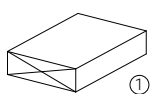
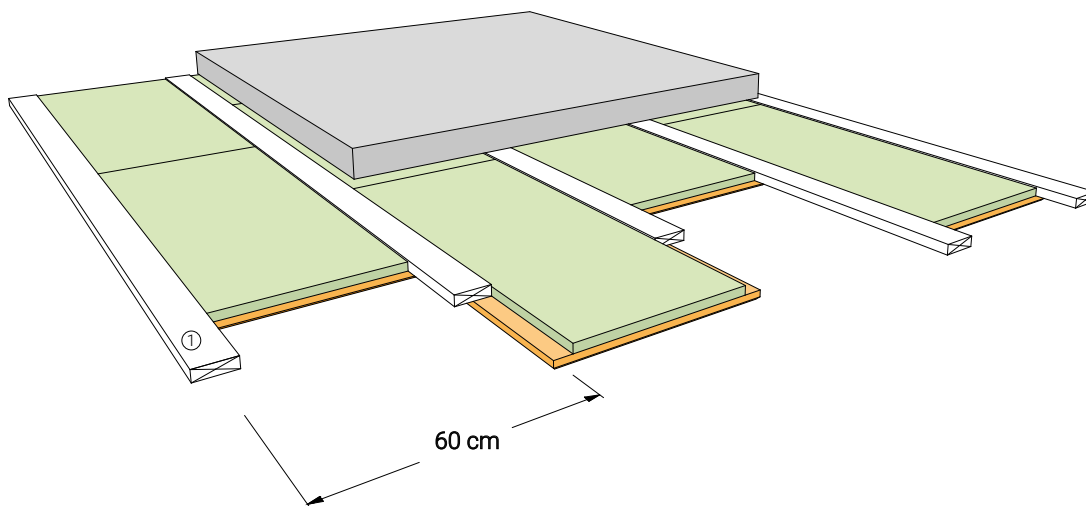
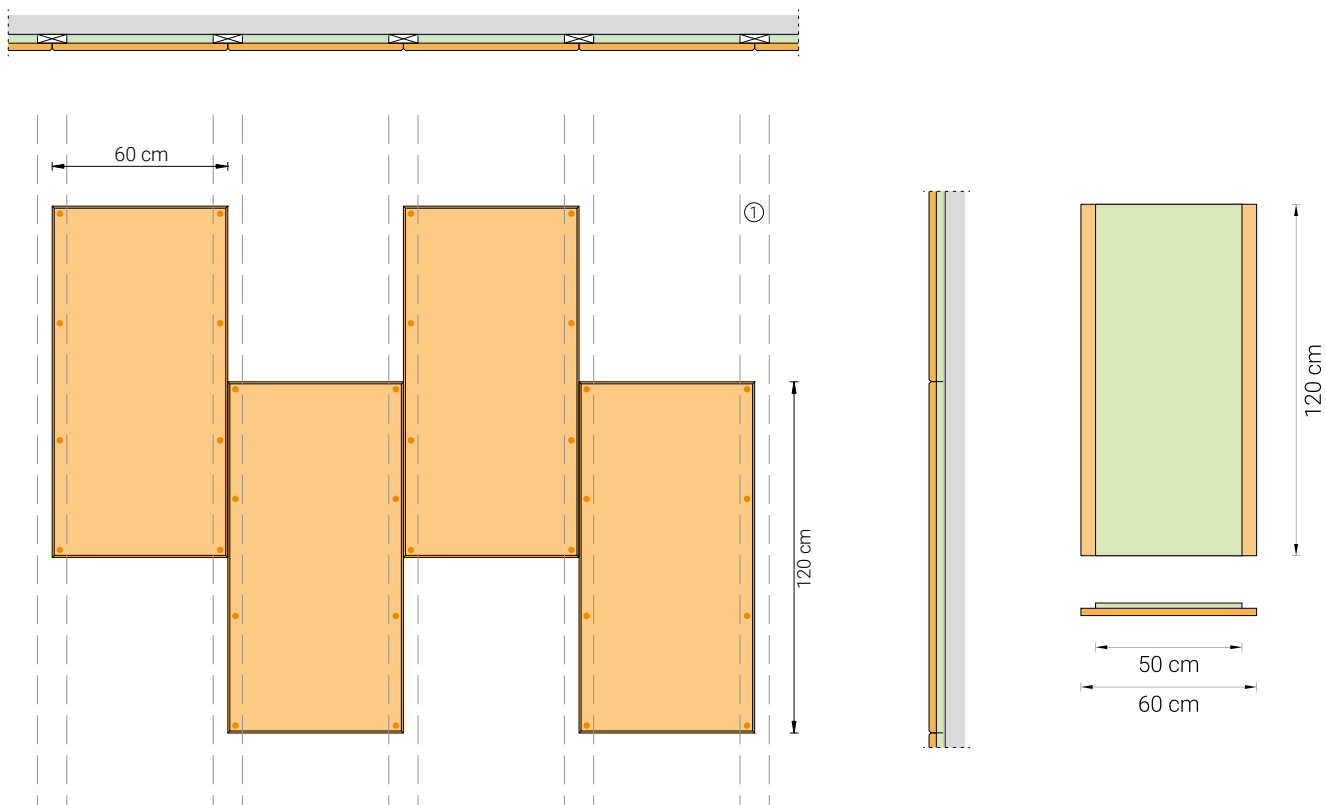


Wood laths
Recommended sections (BxH): 60x40 mm or 80x40 mm



Self-tapping screw for wood
White zinc-plated
Countersunk head with cross, fully threaded,
professional lubricant covering
Dimensions 4.5x35 - 4.5x45 - 4.5x60

Parallel installation to the structure



Wood laths
 Wood laths dimensions:
 • with CELENIT ACOUSTIC panels the recommended sections (BxH) are 60x40 mm or 80x40 mm
 • with CELENIT ACOUSTIC MINERAL panels, width max. 95 mm, height min. 30 mm

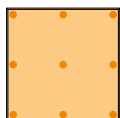


Self-tapping screw for wood
 White zinc-plated
 Countersunk head with cross, fully threaded, professional lubricant covering
 Dimensions 4.5x35 - 4.5x45 - 4.5x60

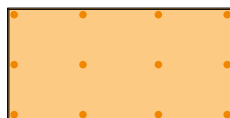
Fixings schemes

CELENIT ACOUSTIC range

• thickness 15 mm

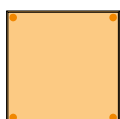


600x600 mm - 9 screws
Orthogonal installation:
 Spacing of fixings 300 mm
 Wood laths fixed every 300 mm



1200x600 mm - 12 screws
Orthogonal installation:
 Spacing of fixings 300 mm
 Wood laths fixed every 400 mm

• thicknesses 25/35 mm



600x600 mm - 4 screws
Orthogonal/parallel installation:
 Spacing of fixings 600 mm
 Wood laths fixed every 600 mm



2000x600 mm - 10 screws
Parallel installation:
 Spacing of fixings 500 mm
 Wood laths fixed every 600 mm
Orthogonal installation:
 Spacing of fixings 600 mm
 Wood laths fixed every 500 mm



1200x600 mm - 6 screws
Parallel installation:
 Spacing of fixings 600 mm
 Wood laths fixed every 600 mm
Orthogonal installation:
 Spacing of fixings 600 mm
 Wood laths fixed every 600 mm



2400x600 mm - 10 screws
Orthogonal/parallel installation:
 Spacing of fixings 600 mm
 Wood laths fixed every 600 mm

Board thickness [mm]	Dimensions [mm]	Screws per board [No.]	Screws per m ² [No./m ²]	Screw dimensions [mm]
15	600x600	9	25.0	4.5x35
	1200x600	12	16.7	
25	600x600	4	11.2	4.5x45
	1200x600	6	8.4	
	2000x600	10	8.4	
	2400x600	10	7.0	
35	600x600	4	11.2	4.5x60
	1200x600	6	8.4	
	2000x600	10	8.4	
	2400x600	10	7.0	

CELENIT ACOUSTIC MINERAL range


• wood wool thickness 25 mm



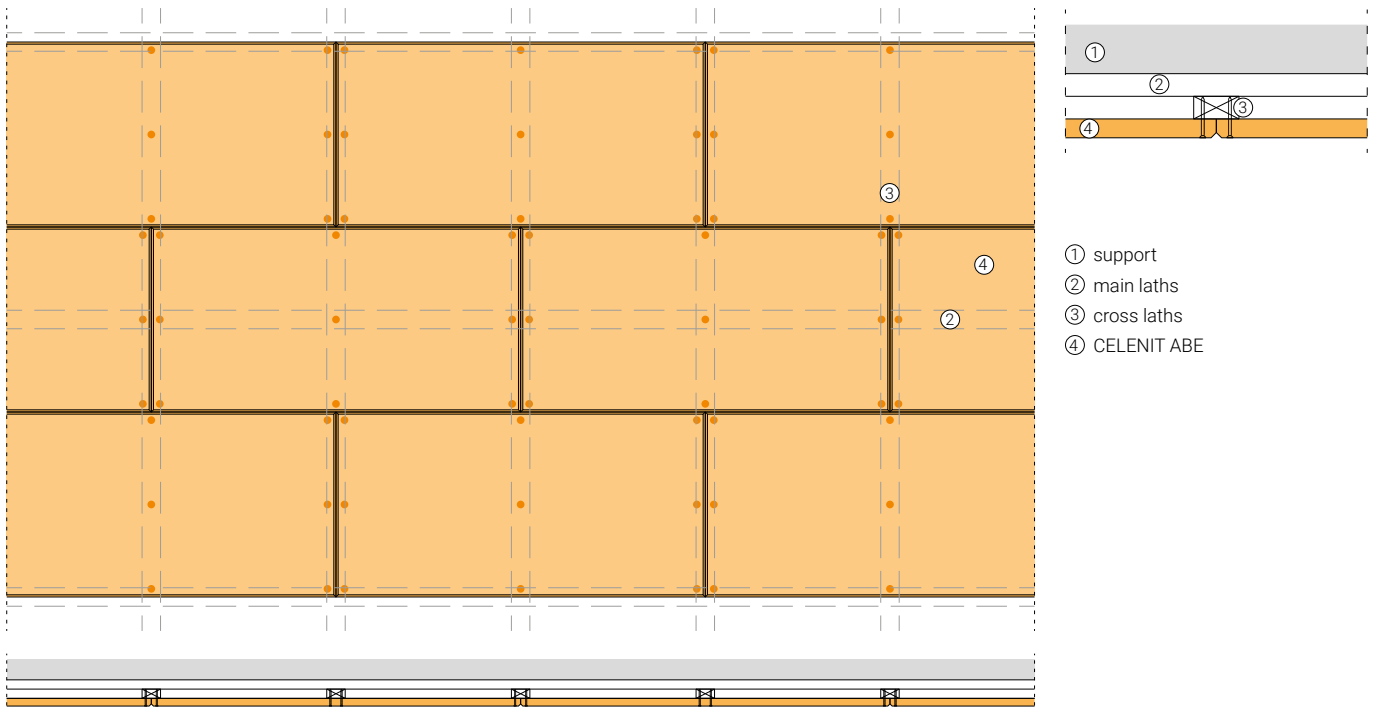
1200x600 mm - 8 screws
Parallel installation:
 Spacing of fixings 400 mm
 Wood laths fixed every 600 mm

Wood wool board thickness [mm]	Dimensions [mm]	Screws per board [No.]	Screws per m ² [No./m ²]	Screw dimensions [mm]
25	1200x600	8	11.2	4.5x45

False ceiling with CELENIT ABE 25 mm thick, ball impact resistant according to EN 13964/Attached D - DIN 18032/Part 3 standards

	Type of board	Structure	Certificate * No. / Date	Standard	Results
	CELENIT ABE Thickness: 25 mm Dimensions: 1200x600 mm Edges: Chamfered - S4	Wooden battens size 60x30 mm Distance between centers of cross laths: 600 mm Distance between centers of main laths: 900 mm Number of screws per board: 9	332600 31.03.2016	EN 13964	Class 1A
				DIN 18032-3	Visual examination Pass

* The certificate is based on tests carried out at the Giordano Institute (Bellaria - RN - Italy)



Description

CELENIT ABE boards dimensions 1200x600 mm, 25 mm thick, with chamfered edges on 4 sides (code S4) with staggered laying on the short side. Boards are optionally painted and directly fixed to the cross wood laths, section 60x30 mm, placed orthogonally with a distance between centers of 600 mm. Cross wood laths are supported by main wood laths,

section 60x30 mm, placed orthogonally with a distance between centers of 900 mm. The boards are fixed on the underside to the cross wood laths using self-tapping screws, diameter 3.5 mm and spacing 300x600 mm (9 screws per board).

Classification: **CLASS 1A**

Test results

Impacts	Impact angle	Nominal velocity [m/s]	Visual examination *	Class
12	90°	16.5 ± 0.8	No deformation and/or change	1A
12	60°		No deformation and/or change	1A
12	60° (opposite direction)		No deformation and/or change	1A

* As specified by clause D.6 "Evaluation" of EN 13964:2014 standard

Storage, use and maintenance

The boards must be stored on a pallet placed on a flat surface, protected from rain and direct sunlight. Pallets must be handled with care on site. Bumping the corners of the pallets can cause damage to the boards. For more information see the "Storage, use and maintenance" information available in the download area of the website www.celenit.com.



CELENIT boards are dimensionally stable (EN 13168), however, they must be installed after acclimating to the same room they are going to be installed in, as well as after all concrete works are finished and the doors, windows, heating and ventilation systems have been installed.

Room temperature must be kept constant before and after installation. Do not suddenly change the temperature of the room after installation.

General installation instructions

- The boards have one side that should be visible (front of the board) and another side that should be placed against the structure (back of the board). The back of the board usually has the CELENIT logo or shows calibration marks. The front may be painted and/or has worked edges. In the absence of paint or edges, the front can be identified according to the pallet layout: the front of the boards faces the top and the back faces the pallet.
- Fix the bearing laths starting from the center of the ceiling to have a symmetric layout. Wood laths will be fixed directly to the ceiling with suitable screw or louvered with adjustable brackets. With the aid of a laser lever fix the wood laths to the brackets with no. 2 screws per side.
- Fix the secondary structure to the primary with no. 2 screws per intersection.
- If a vapour barrier is necessary, it'll install under the secondary profile with butyl double-sided adhesive tape. The tape also acts as a seal for the fixings of CELENIT boards.

- Fix the boards to the structure according to fixing schemes at page 7. Take maximum care while handling the panels. Corners and paint are easy to damage. Use clean gloves when installing the panels. Please find more information on stocking, use and maintenance at www.celenit.com.
- We recommend to fix the screws the screws to the wood laths with an inclination of about 5°-6° to give more tightness to the screws on the support.
- We recommend boards with chamfered edges and staggered laying on the short side to ensure a nicer visual effect. The installation of boards with straight edge may be possible anyway.
- It is possible to insert mineral wool panels or wood fiber panels on top of CELENIT panels to improve acoustic and thermal performances while laying CELENIT boards.
- After the installation please follow the recommendations in the section "Storage, use and maintenance" at www.celenit.com.

Important remarks

15 mm panels are not recommended for outdoor applications (with a roof protection) or in presence of high humidity.

CELENIT boards with DT edges code are not available because dimensions are not suitable for this system.