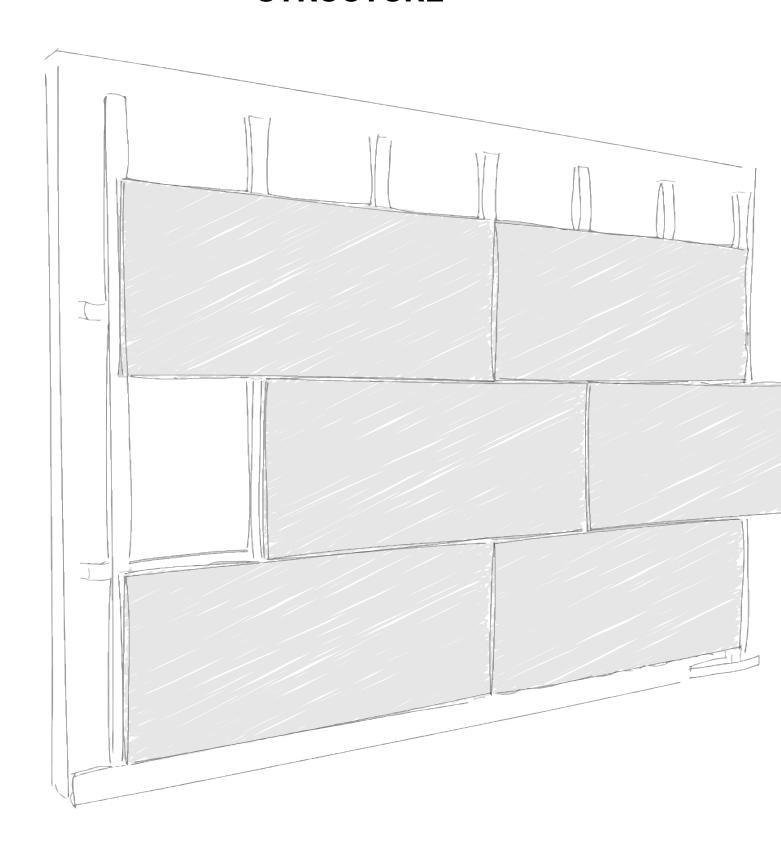
ACOUSTIC | DESIGN Installation

# WALL COVERINGS HIDDEN METAL STRUCTURE







## Item specifications

CELENIT sound absorbing wall covering 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;  $\lambda_D$ : ... W/mK;  $R_D$ : ... m²K/W; compressive stress  $\sigma_{10}$ :  $\geq$  ... kPa; water vapour transmission  $\mu$ : S; reaction to fire: Euroclass B-s1, d0 or A2-s1, d0 (EN 13501-1 standard); sound absorption:  $\alpha_w$  ... / NRC ...; durability: class C; light reflection: S0.7 o S0.70 (painted white S0.715); 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









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



D for all thicknesses



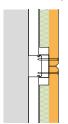
The boards are supplied with dimensions 1200x600 mm with rock wool 1200x500 mm, for direct application to the structure

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

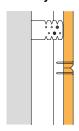
Available for CELENIT ACOUSTIC boards or CELENIT ACOUSTIC MINERAL boards with rock wool thickness until 40 mm.

### System with fixed spacer



- The system with fixed spacer allows to have a single structure.
- Spacers anchored to the wall 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

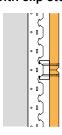


- The system with adjustable bracket allows to have a single structure.
- The bracket allows adjustable air-gap.
- Spacers anchored to the wall with suitable fixings depending on the type of the support.
- Maximum distance between bracket 80 cm.
- The boards will be fixed directly to the C profiles according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

### **Double structure**

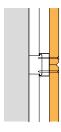
Available for CELENIT ACOUSTIC boards or CELENIT ACOUSTIC MINERAL boards with rock wool thickness 18 - 25 mm.

### System with clip steel profile



- Clip steel profile anchored to the wall with suitable fixings depending on the type of the support.
- 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).

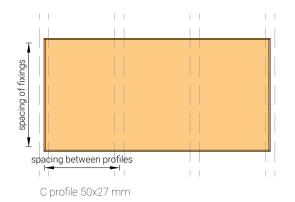
### System with double C profiles

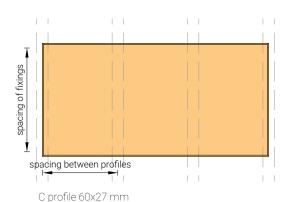


- Fixed spacer anchored to the wall with suitable fixings depending on the type of the support.
- Secondary C profiles with a maximum distance of 60 cm, fixed to the primary C profiles with a clip book
- The boards will be fixed directly to the C profiles according to the fixing schemes (page 10).

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

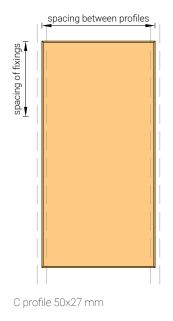


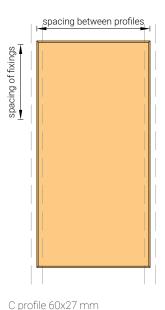


### Only for CELENIT ACOUSTIC panels

- 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 ficed every 500 mm.
- Secondary C profile dimensions 50x27x0.6 mm; also available section 60x27 mm.
- C profile will be mounted vertically
- System anchored to the ceiling with suitable fixings depending on the type of the support.

## Parallel installation to the structure

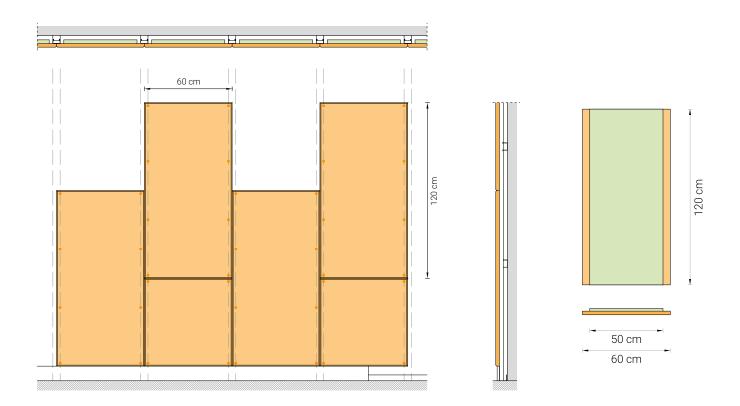




### Available for CELENIT ACOUSTIC MINERAL boards or CELENIT ACOUSTIC boards

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

# Single structure with fixed spacers and C profiles





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



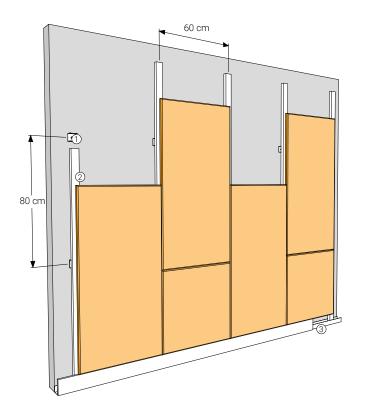
Galvanized steel C profile Dimensions 27x50x27 mm or 27x60x27 mm, thickness 0.6 mm, rounded edge



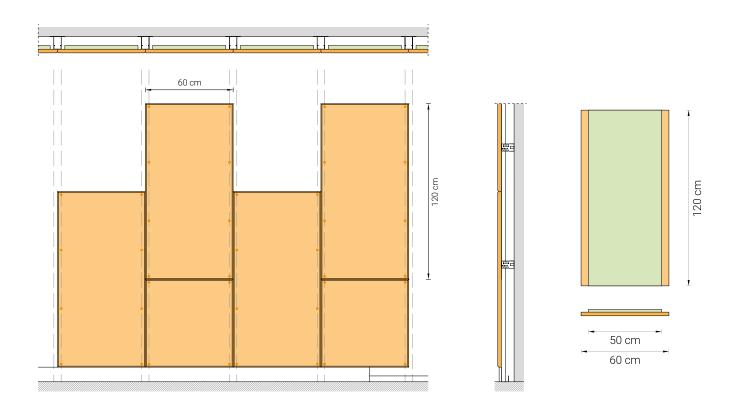
U-shaped perimeter guide Dimensions 28x30x28 mm Thickness 0.6 mm

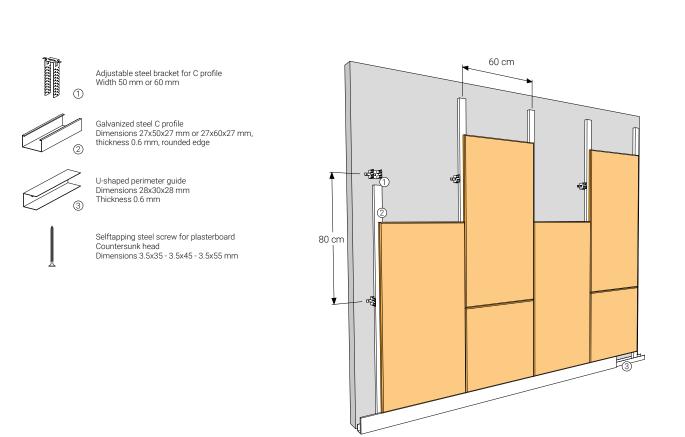


Selftapping steel screw for plasterboard Countersunk head Dimensions 3.5x35 - 3.5x45 - 3.5x55 mm

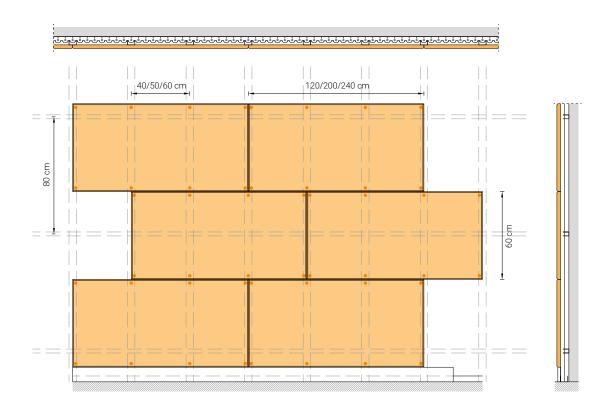


# Single structure with adjustable brackets and C profiles





## Double structure with clip steel profiles and C profiles





Primary galvanized steel clip profile for C profile Dimensions 43x28 mm, thickness 0.6 mm, rounded edge



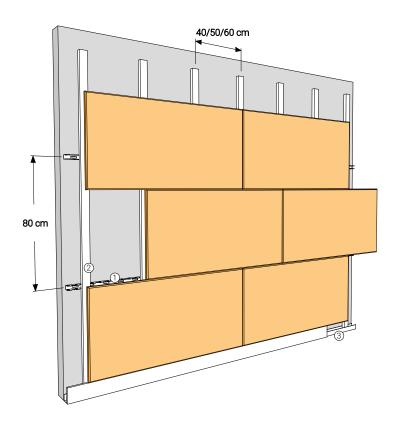
Galvanized steel C profile Dimensions 27x50x27 mm or 27x60x27 mm, thickness 0.6 mm, rounded edge



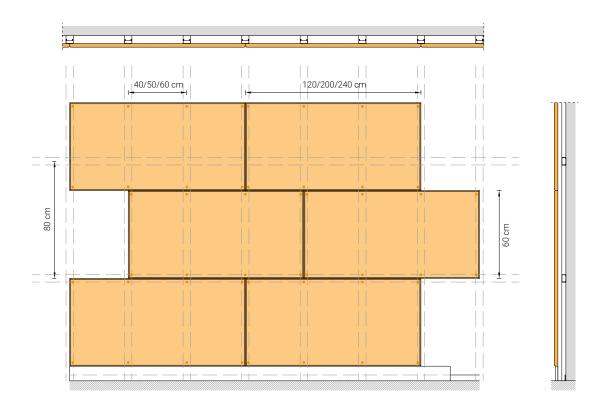
U-shaped perimeter guide Dimensions 28x30x28 mm Thickness 0.6 mm



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



## **Double structure with double C profiles**





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



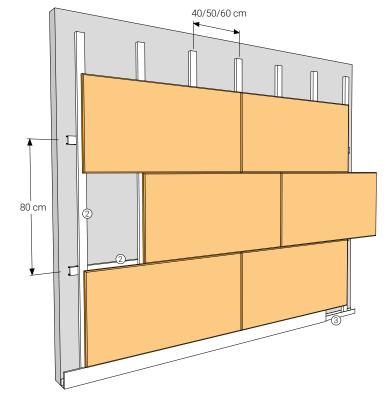
Galvanized steel C profile Dimensions 27x50x27 mm or 27x60x27 mm, thickness 0.6 mm, rounded edge



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



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



C 27x60x27 profiles must be used for wall coverings ball-impact resistant by adjusting the size of the fixed spacers and the hangers (see pages 15-16).

## **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

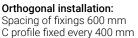
C profile fixed every 600 mm

Orthogonal installation:

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





2400x600 mm - 10 screws

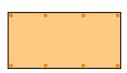
Orthogonal/parallel installation:
Spacing of fixings 600 mm
C profile fixed every 600 mm

Board thickness [mm]	Dimensions [mm]	Screws per board [No.]	Screws per m <sup>2</sup> [No./m <sup>2</sup> ]	Spacing between profile [mm]	Screw dimensions [mm]
15	600x600	9	25.0	300	2 5.25
15	1200x600	12	16.7	400	3.5x35
	600x600	4	11.2	600	
25	1200x600	8	11.2	400 *	3.5x45
25	2000x600	10	8.4	500	
	2400x600	10	7.0	600	
	600x600	4	11.2	600	
35	1200x600	8	11.2	400 *	2 5455
	2000x600	10	8.4	500	3.5x55
	2400x600	10	7.0	600	

<sup>\*</sup> 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 thikness 25 mm

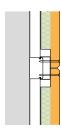


1200x600 mm - 8 screws **Parallel installation:** Spacing of fixings 400 mm C profile fixed every 600 mm

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

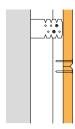
## **Indicative quantities**

### Application with fixed spacers and C profiles



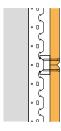
Туре	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
	E0.20			2.10 pcs/m <sup>2</sup> C profiles every 600 mm
Galvanized steel fixed spacer for C profile	50x30 (30x60)	-	800 *1	2.50 pcs/m <sup>2</sup> C profiles every 500 mm
				3.10 pcs/m <sup>2</sup> C profiles every 400 mm
	0707		600	1.70 m/m²
C profile	27x50x27 (27x60x27)	3000/4000	500	2.00 m/m <sup>2</sup>
			400	2.30 m/m <sup>2</sup>
U-shaped perimeter guide	28x30x28	3000/4000	-	Perimeter *2

### Application with adjustable brackets and C profiles



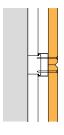
Туре	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
A.P	F0			2.10 pcs/m <sup>2</sup> C profiles every 600 mm
Adjustable steel bracket for C profile	50 (60)	-	800 *1	2.50 pcs/m <sup>2</sup> C profiles every 500 mm
				3.10 pcs/m <sup>2</sup> C profiles every 400 mm
	0707		600	1.70 m/m²
C profile	27x50x27	3000/4000	500	2.00 m/m <sup>2</sup>
	(27x60x27)		400	2.30 m/m <sup>2</sup>
U-shaped perimeter guide	28x30x28	3000/4000	-	Perimeter *2

### Application with clip steel profiles and C profiles



Туре	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
Primary galvanized steel clip	40x28	4000	800	1.15 m/m <sup>2</sup>
profile for C profile	4UXZ8	4000	600	1.70 m/m <sup>2</sup>
	27x50x27 (27x60x27)	3000/4000	600	1.70 m/m <sup>2</sup>
C profile			500	2.00 m/m <sup>2</sup>
			400	2.30 m/m <sup>2</sup>
U-shaped perimeter guide	28x30x28	3000/4000	-	Perimeter *2

### Application with double C profiles



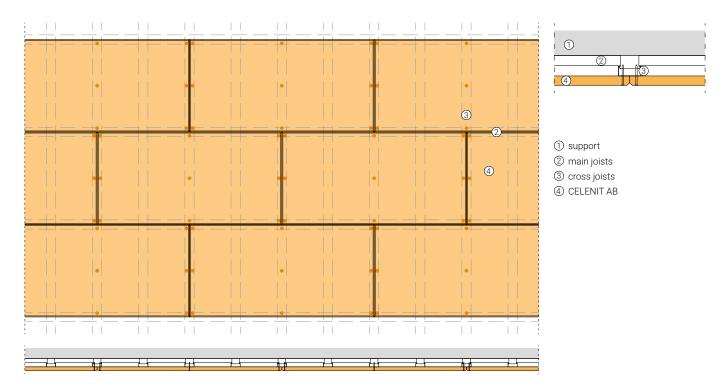
Туре	Section [mm]	Length [mm]	Spacing [mm]	Indicative quantities
	27x50x27		900	1.11 m/m <sup>2</sup>
Primary C profile	(27x60x27)	3000/4000	800	1.15 m/m <sup>2</sup>
	(Z/XOUXZ/)		600	1.70 m/m <sup>2</sup>
Galvanized steel fixed spacer for C profile	50x30 (30x60)	-	-	_ <b>*3</b>
			600	1.70 m/m <sup>2</sup>
Secondary C profile	27x50x27 (27x60x27)	3000/4000	500	2.00 m/m <sup>2</sup>
			400	2.30 m/m <sup>2</sup>
U-shaped perimeter guide	28x30x28	3000/4000	-	Perimeter *2

<sup>\*1</sup> The spacing between the hangers (spacers/ brackets) 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 The quantities of fixed spacer to use is equal to the number of crosses between primary structure and secondary structure

# **False wall with CELENIT AB** 25 mm thick, **ball impact resistant** according to DIN 18032/Part 3 standards

Type of board	Structure	Certificate * No. / Date	Standard	Results
Thickness: 25 mm Dimensions: 1200x600 mm	C metal section 27x60x27 mm Distance between centers of cross joists: 300 mm Distance between centers of main joists: 600 mm Number of screws per board: 9	324044 27.04.2015	DIN 18032-3	Visual examination Pass

<sup>\*</sup> 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 300 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 600 mm. The boards are fixed on the underside to the cross joists using self-tapping screws, diameter 3.5 mm and spacing 300×600 mm (9 screws per board).

#### Test results

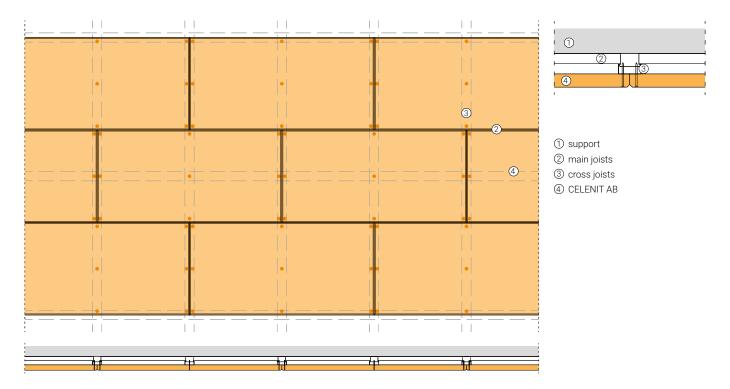
Impacts	Impact angle	Nominal velocity [m/s]	Visual examination *
30	90°		Pass
12	45°	23.5 ± 1.2	Pass
12	45° (opposite direction)		Pass

<sup>\*</sup> After firing the shots in accordance with clause 7 "Auswertung" of standard DIN 18032-3:1997, the strength, function and safety of the wall elements are not adversely affected and their appearance has not changed.

# **False wall with CELENIT AB** 35 mm thick, **ball impact resistant** according to DIN 18032/Part 3 standards

Type of board	Structure	Certificate * No. / Date	Standard	Results
Thickness: 35 mm Dimensions: 1200x600 mm	C metal section 27x60x27 mm Distance between centers of cross joists: 600 mm Distance between centers of main joists: 600 mm Number of screws per board: 9	324043 27.04.2015	DIN 18032-3	Visual examination Pass

<sup>\*</sup> 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 600 mm. The boards are fixed on the underside to the cross joists using self-tapping screws, diameter 3.5 mm and spacing 300×600 mm (9 screws per board).

#### Test results

Impacts	Impact angle	Nominal velocity [m/s]	Visual examination *
30	90°		Pass
12	45°	23.5 ± 1.2	Pass
12	45° (opposite direction)		Pass

<sup>\*</sup> After firing the shots in accordance with clause 7 "Auswertung" of standard DIN 18032-3:1997, the strength, function and safety of the wall elements are not adversely affected and their appearance has not changed.

## 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 lever mark the positions for the fixings of the fixed elements (fixed spacer, brackets, clip stell profile) and fix them.
- Design the secondary profiles position starting from the center of the ceiling to have a symmetric layout. The structure will be connected to the spacer elements or clip profiles by aligning them with a laser leveler.
- If a vapour barrier is necessary, it'll install on 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 in the backgruond 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 becouse dimensions are not suitable for this system.

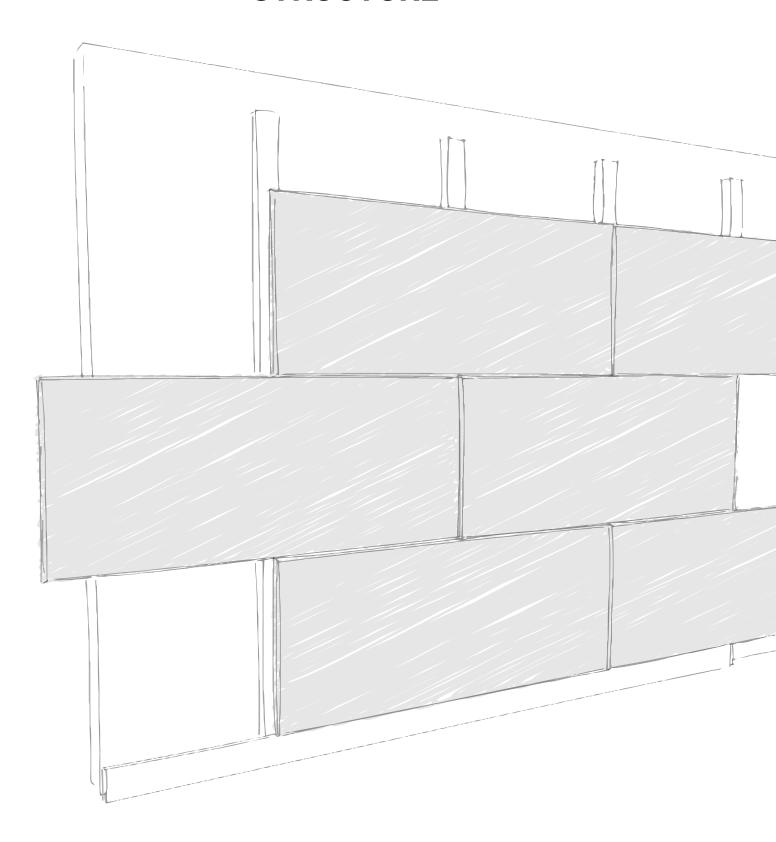
This information is to be considered correct at the time of release. Technical documentation is delivered updated, therefore, when possible, request the most recent version from our technical office. CELENIT S.p.A. reserves the right to make changes of any nature to improve the product range at any time without prior notice.





ACOUSTIC | DESIGN Installation

# WALL COVERINGS HIDDEN WOODEN STRUCTURE







## Item specifications

CELENIT sound absorbing wall coverings 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;  $\lambda_D$ : ... W/mK;  $R_D$ : ... m²K/W; compressive stress  $\sigma_{10}$ :  $\geq$  ... kPa; water vapour transmission  $\mu$ : 5; reaction to fire: Euroclass B-s1, d0 or A2-s1, d0 (EN 13501-1 standard); sound absorption:  $\alpha_w$  ... / NRC ...; durability: class C; light reflection: 50.7 o 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 ...

### **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









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

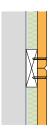




The boards are supplied with dimensions 1200x600 mm with rock wool 1200x500 mm, for direct application to the structure.

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



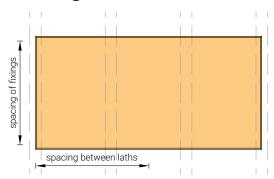
- · System used to minimize the total thickness.
- Wood laths anchored to the wall with suitable fixings depending on the type of the support, or with adjustable brackets.
- · Wood laths dimensions:
  - for CELENIT ACOUSTIC panels, recommended section (BxH) 60x40 mm or 80x40 mm
- for CELENIT ACOUSTIC 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 wall coverings with ball-impact resistant certification with CELENIT ABE boards (page 7).
- Primary structure anchored to the wall with suitable fixings depending on the type of the support, or with lovering 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).

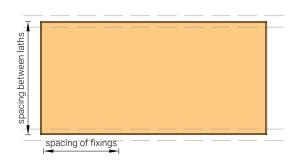
## Orthogonal installation to the structure



Only for CELENIT ACOUSTIC panels.

Board thickness [mm]	Dimensions [mm]	Spacing between laths [mm]
15	600x600	300
13	1200x600	400
	600x600	600
25 / 35	1200x600	600
25 / 35	2000x600	500
	2400x600	600

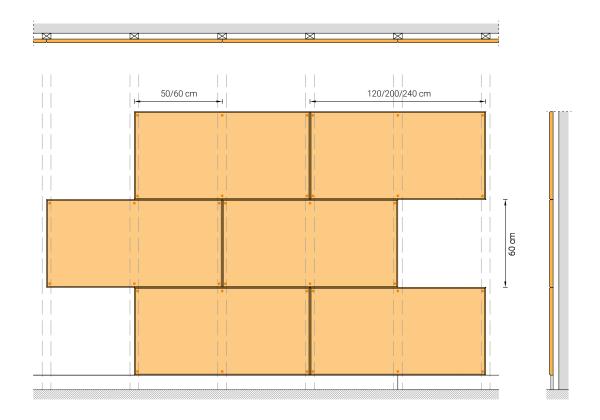
## Parallel installation to the structure



Available for CELENIT ACOUSTIC MINERAL boards or CELENIT ACOUSTIC boards.

Wood laths fixed every 600 mm (boards width).

# Orthogonal installation to the structure

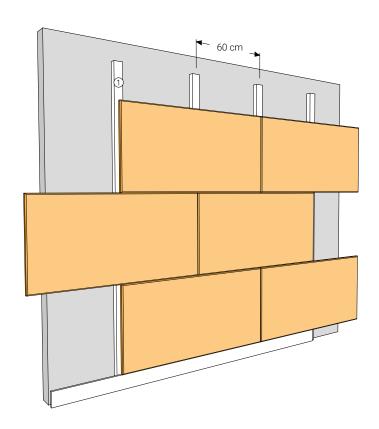




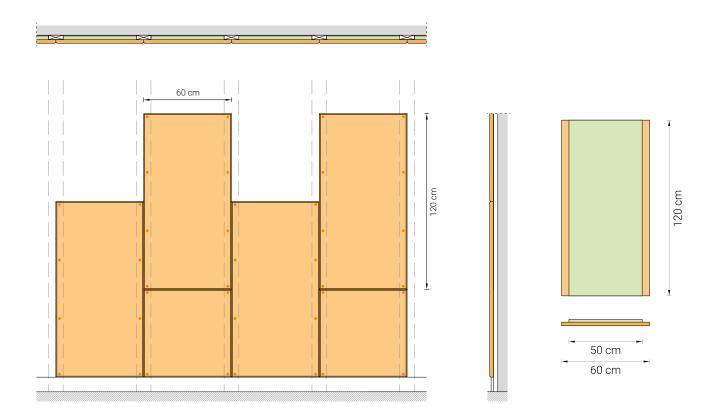
Wood laths Recommended sections (BxH): 60x40 mm or 80x40 mm



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



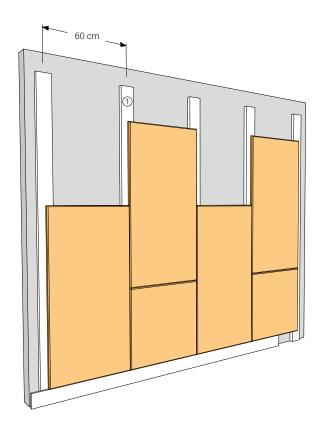


- Wood laths
  Wood laths dimensions:

   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



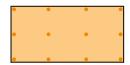
## **Fixings schemes**

### **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

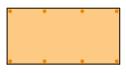
Orthogonal/parallel installation:
Spacing of fixings 600 mm

Wood laths fixed every 600 mm

Board thickness [mm]	Dimensions [mm]	Screws per board [No.]	Screws per m <sup>2</sup> [No./m <sup>2</sup> ]	Screw dimensions [mm]
15	600x600	9	25.0	4 Ev2E
15	1200x600	12	16.7	4.5x35
	600x600	4	11.2	
25	1200x600	6	8.4	4.5x45
25	2000x600	10	8.4	4.5x45
	2400x600	10	7.0	
	600x600	4	11.2	
35	1200x600	6	8.4	4 Ev60
	2000x600	10	8.4	4.5x60
	2400x600	10	7.0	

### **CELENIT ACOUSTIC MINERAL range**

• wood wool thikness 25 mm



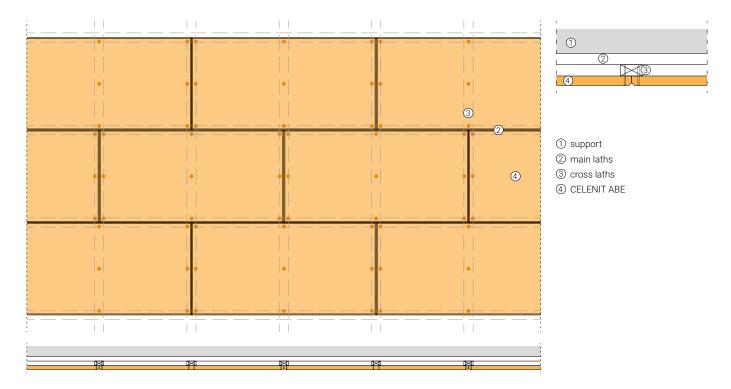
1200x600 mm - 8 screws **Parallel installation:** Spacing of fixings 400 mm Wood laths fixed every 600 mm

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

# **False wall with CELENIT ABE** 35 mm thick, **ball impact resistant** according to DIN 18032/Part 3 standards

Type of board	Structure	Certificate * No. / Date	Standard	Results
Thickness: 35 mm Dimensions: 1200x600 mm	Wooden battens size 60x30 mm Distance between centers of cross laths: 600 mm Distance between centers of main laths: 600 mm Number of screws per board: 9	324042 27.04.2015	DIN 18032-3	Visual examination Pass

<sup>\*</sup> 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 600 mm. The boards are fixed on the underside to the cross wood laths using self-tapping screws, diameter 3.5 mm and spacing 300×600 mm (9 screws per board).

#### Test results

Impacts	Impact angle	Nominal velocity [m/s]	Visual examination <sup>1</sup>
30	90°		Pass
12	45°	23.5 ± 1.2	Pass
12	45° (opposite direction)		Pass

<sup>\*</sup> After firing the shots in accordance with clause 7 "Auswertung" of standard DIN 18032-3:1997, the strength, function and safety of the wall elements are not adversely affected and their appearance has not changed.

## 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 wall to have a symmetric layout. Wood laths will be fixed directly to the wall with suitable screw or 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 on the last laths 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 becouse dimensions are not suitable for this system.

This information is to be considered correct at the time of release. Technical documentation is delivered updated, therefore, when possible, request the most recent version from our technical office. CELENIT S.p.A. reserves the right to make changes of any nature to improve the product range at any time without prior notice.



