



# CELENIT ABE/A2

## Technical data sheet



Thermal and acoustic insulation board, in Euroclass A2-s1, d0, consisting of mineralized extra-thin fir wood wool bound with white Portland cement and mineral powder. Wood wool is 1 mm wide. High quality boards for design acoustic absorption systems. It complies with EN 13168 and EN 13964 standards. The boards are certified by ANAB-ICEA for eco-compatibility of materials and manufacturing process. CELENIT ABE/A2 is PEFC™ certified. Also available with FSC® certification.

Also available with grey Portland cement [CELENIT AE/A2].

### Edges detail

D - S4 - RD  
DT - T - RDT - RST - PS - PM

### Colours

natural or painted

### Applications

false ceilings, wall coverings, baffles and acoustic rafts, design solutions

## Technical data

Standard	EN 13168 - EN 13964			<b>CE</b>
Designation code	WW-EN13168-L3-W2-T2-S2-CS(10)300-CI3			
Length x Width [mm]	2400x600 - 2000x600 - 1200x600 - 600x600			
Thickness [mm]	15	25	35	
Weight [kg/m <sup>2</sup> ]	9.4	15.3	21.7	
Declared thermal conductivity $\lambda_D$ [W/mK]	0.100			
Declared thermal resistance $R_D$ [m <sup>2</sup> K/W]	0.15	0.25	0.35	
Compressive stress at 10% deformation $\sigma_{10}$ [kPa]	≥ 300			
Water vapour transmission $\mu$	5			
Specific heat $c_p$ [kJ/kgK] <sup>1</sup>	1.81			
Reaction to fire <sup>2</sup>	Euroclass A2-s1, d0			
Chloride content [%]	≤ 0.06			
Sound absorption			$\alpha_w$ up to 0.95 - NRC up to 0.95	
Durability			Class C	
Light reflection CELENIT ABE/A2 [%]			50.7 - 74.0 (painted white 05/15)	
Light reflection CELENIT AE/A2 [%]			31.2	
Release of formaldehyde			Class E1	
Release of asbestos			it does not contain asbestos	

<sup>1</sup> Certified by the University of Bologna - LEBSC no. 809 | rev. 07.05.2009

<sup>2</sup> The reaction to fire does not change for painted products

## Logistic data

Dimensions [mm]	Pallet	15 mm	25 mm	35 mm
boards: 2400x600	boards per pallet	130	88	60
pallet: 2400x1200	m <sup>2</sup> per pallet	187.20	126.72	86.40
boards: 2000x600	boards per pallet	130	88	60
pallet: 2000x1200	m <sup>2</sup> per pallet	156.00	105.60	72.00
boards: 1200x600	boards per pallet	130	88	60
pallet: 1200x1200	m <sup>2</sup> per pallet	93.60	63.36	43.20
boards: 600x600	boards per pallet	260	176	120
pallet: 1200x1200	m <sup>2</sup> per pallet	93.60	63.36	43.20

## Certifications

ISO 9001:2015 no. 1351  
ANAB no. EDIL 2009\_004  
FSC® no. ICILA-COC-002789  
PEFC™ no. ICILA-PEFCOC-000117  
ICEA no. LEED 2015\_001  
ICEA no. REC 2015\_001





## Sound absorption

Type of board <sup>1</sup>	Test specifications <sup>2</sup>			Certificate <sup>3</sup>		Sound absorption									
	Thickness [mm]	MW [mm]	TH [mm]	No.	Date	Frequencies $\alpha_p$ [Hz]						$\alpha_w$	NRC	SAA	Class
						125	250	500	1000	2000	4000				
<b>Application in adherence</b>															
CELENIT ABE/A2	25		25	324524-A	14.05.2015	0.10	0.15	0.25	0.45	0.75	0.60	0.35 (H)	0.40	0.39	D
<b>Empty air gap</b>															
CELENIT ABE/A2	25		300	331336-A	11.02.2016	0.30	0.60	0.50	0.65	0.80	1.00	0.60 (H)	0.65	0.64	C
<b>Background filling with rock wool</b>															
CELENIT ABE/A2	25	40 (4)	65	324524-B	14.05.2015	0.25	0.65	1.00	0.95	0.80	0.90	0.85	0.90	0.89	B
CELENIT ABE/A2	25	50 (4)	200	324525-A	14.05.2015	0.45	0.95	0.95	1.00	0.85	0.90	0.95	0.95	0.93	A
CELENIT ABE/A2	25	40 (4)	300	324525-B	14.05.2015	0.50	0.90	0.95	1.00	0.85	0.90	0.95	0.95	0.93	A

<sup>1</sup> Paint doesn't affect sound absorption performances of CELENIT boards as described in the technical note provided by Istituto Giordano dated 16.07.2015. Sound absorption values are also valid for products with grey cement

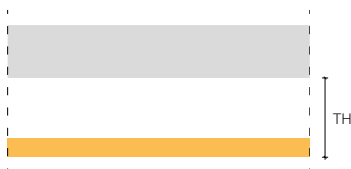
<sup>2</sup> Test specifications: "thickness" is relative to CELENIT board - "MW" is the thickness of rock wool in the background, (4) density 80 kg/m<sup>3</sup> - "TH" is the total construction height from the lower edge of ceiling to lower edge of boards

<sup>3</sup> All certificate are based on tests carried out at the Giordano Institute (Bellaria - RN - Italy) according to EN ISO 354:2003 standard

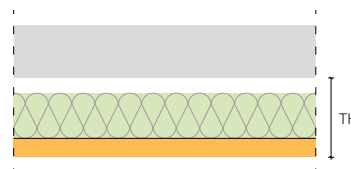
Application in adherence



Empty air gap



Background filling with rock wool



## 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](http://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.

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.

Due to their natural production process and raw materials, boards that are not painted may have an uneven color. The boards must be painted to have an even color.

