

## SOUND ABSORPTION VALUES

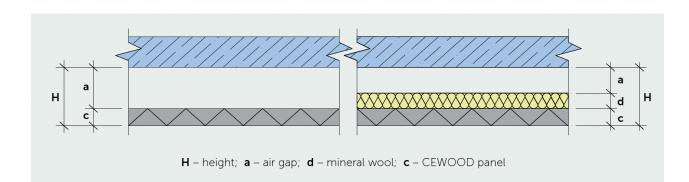
11654:1997

Cewood acoustic panels are a natural product made in Europe. The panels are friendly both to the environment and

human health. They are made from premium quality wood wool by adding white cement and water.

Cewood panels are comfortable and resistant. They help to maintain a pleasant microclimate characteristic to wood in the facilities.

Practical sound absorption coefficient in the αp octave band according to standard EN ISO 354, Extended sound absorption coefficient αw and sound absorption class according to standard EN ISO



H mm	a mm	d mm	c mm	120 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Absorp- tion coeffi- cient a <sub>w</sub>	Absorp- tion class
85	60	0	25	0.10	0.30	0.55	0.60	0.50	0.60	0.55	D
225	200	0	25	0.25	0.50	0.55	0.50	0.60	0.65	0.55	D
250	200	0	50	0.40	0.60	0.55	0.65	0.70	0.70	0.65	С
85	10	50	25	0.40	0,79	0,78	0.76	0.73	0.70	0.80	В
225	100	100	25	0.79	0.72	0.73	0.81	0.78	0.72	0.80	В
225	150	50	25	0.52	0.81	0.74	0.87	0.77	0.73	0.80	В

Particularly effective usage of the panels is sound-absorbing structures in large rooms for reducing the space's sound reverberation time and improving the working environment. Cewood panels can be used for making plate-shaped screens with a pronounced absorbing nature for reducing the noise emission of equipment in the range of high-tone frequencies. An even more effective acoustic solution is to create three-dimensional finishing elements, such as pyramids, which exhibit a much higher absorption coefficient value, thanks to sound diffraction around the edges.

Panels, made from 3mm wide wood wool and with higher density, better ensure sound absorption at low frequencies. In turn, panels made from 1 mm and 1.5 mm wide wood wool have better absorption properties in the high-frequency range. The optimal sound absorption solution can be achieved by combining Cewood panels with a mineral wool insulation layer.





## CEWOOD panel 25 mm (CW-W25) CEWOOD panel 25 mm with 50 mm mineral wool and 10 mm air gap Air gap 10 mm Mineral wool 50 mm CEWOOD acoustic panel 25 mm Frequency α, $a_{p}$ Practical sound absorption coefficient in the octave band f, Hz √3 oct. 1 oct. Sound absorption coefficient 1/3 octave band [dB] 1,10 Reference rate according to standard EN ISO 11654 63 1,00 80 100 0.24 0,90 125 0.41 0,40 160 0,56 0.80 200 0,67 250 0,80 0,79 Sound absorption coefficient 0,70 315 0,91 400 0,79 500 0,78 0,78 0,60 630 0,78 800 0,76 0,50 1000 0,75 0,76 1250 0,78 0,40 2000 0,71 0.30 2500 0,71 3150 0,72 0,20 4000 0.68 0,70 5000 0.72 6300 0,10 8000 10000 0.00 160 200 250 100 125 3150 1000 Frequency f [Hz] Practical sound absorption coefficient according to standart EN ISO 11654, $\mathbf{Q_w}$ : 0,80 Sound absorption class according to standart EN ISO 11654: B



## SOUND ABSORPTION VALUES

