



WOOD WOOL ACOUSTIC PANELS

OVERVIEW

WWW.GREENACOUSTICS.CO.ZA

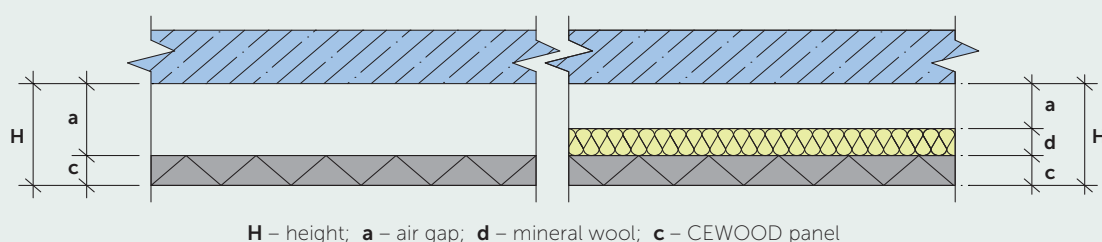
SALES@GREENACOUSTICS.CO.ZA

ACOUSTICS

CEWOOD acoustic panels are a natural product made in Latvia. Panels are friendly both to environment and human health, they're 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 α_p octave band according to standard EN ISO 354,
 Extended sound absorption coefficient α_w and sound absorption class according to standard EN ISO 11654:1997



H mm	a mm	d mm	c mm	120 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	Absorption coefficient α_w	Absorption 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	C
85	10	50*	25	0.40	0.79	0.78	0.76	0.73	0.70	0.80	B
225	100	100*	25	0.79	0.72	0.73	0.81	0.78	0.72	0.80	B
225	150	50*	25	0.52	0.81	0.74	0.87	0.77	0.73	0.80	B
55	0	30**	25	0.25	0.55	1.00	0.95	0.85	0.85	0.85	B
75	0	50**	25	0.35	0.70	1.00	0.95	0.85	0.95	0.90	A
75	50	0	25	0.10	0.25	0.55	0.65	0.55	0.65	0.50	D
65	0	50**	15	0.30	0.65	1.00	0.85	0.75	0.80	0.85	B
65	50	0	15	0.10	0.20	0.50	0.65	0.55	0.65	0.50	D

* mineral wool, approx. 30 kg/m³; ** mineral wool, approx. 90 kg/m³.

A 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 3 mm wide wood wool and with higher density, better ensure the sound absorption at the 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.

ACOUSTICS

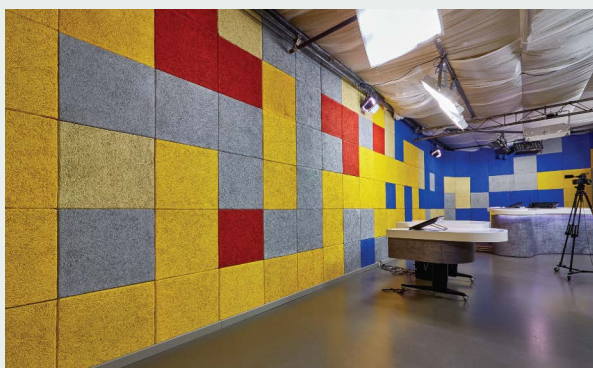
Acoustic panels are widely used in both interiors of public and residential buildings. They are very suitable for hanging ceiling constructions and wall decoration. Due to their natural composition and outstanding features, they are widely used in premises with increased acoustic load, where sound insulation and noise absorption play an important role.

Public and office spaces



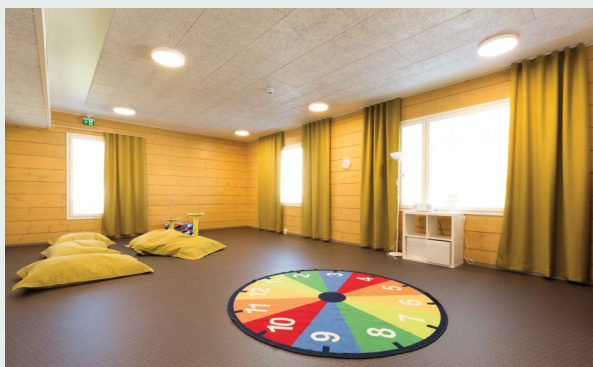
In open type offices, meeting rooms and public spaces CEWOOD panels provide sound absorption, noise reduction and improve the working environment.

Recording studios, radio and TV studios



Acoustic panels provide professional soundproofing for maximum noise isolation and reduce the reflection of the sound.

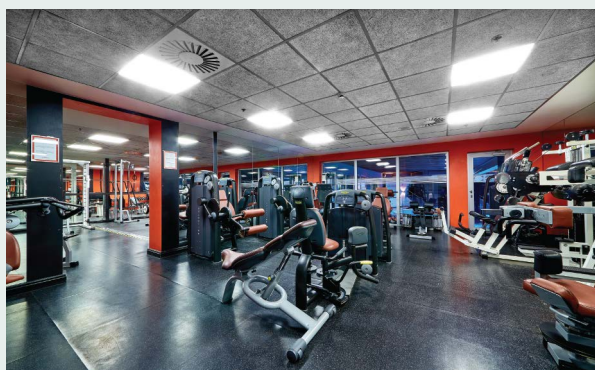
Schools and kindergardens



Thanks to the acoustic properties, CEWOOD panels are widely used in educational institutions. They improve the acoustic comfort of the premises and provide a favorable microclimate.

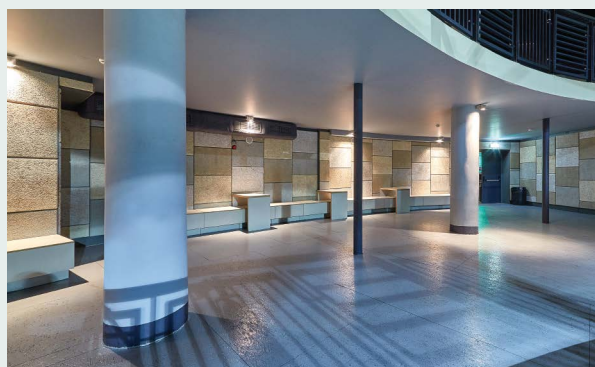
ACOUSTICS

Spa, swimming pools and fitness centers



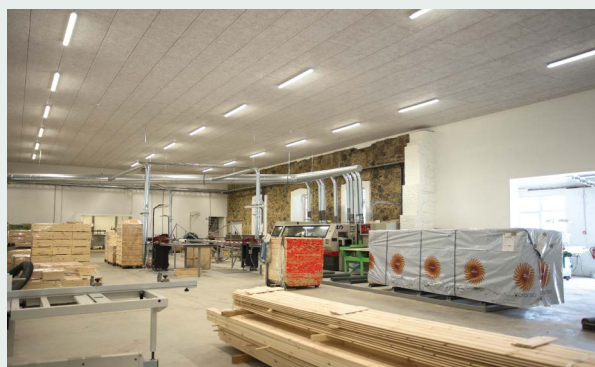
The acoustic panels not only provide sound insulation but also absorb excess moisture in the rooms and do not change their properties in high humidity rooms.

Concert halls, theaters, cinema



In the public entertainment rooms, the acoustic panels finishing provides the highest level regulation of sound penetration, according to the highest industry standards.

Industrial and production premises, parking lots

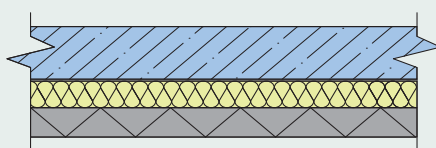


The acoustic panels are great noise reduction solution for production premises and parking lots, because it allows to reduce the noise and increases the noise comfort level.

ACOUSTICS

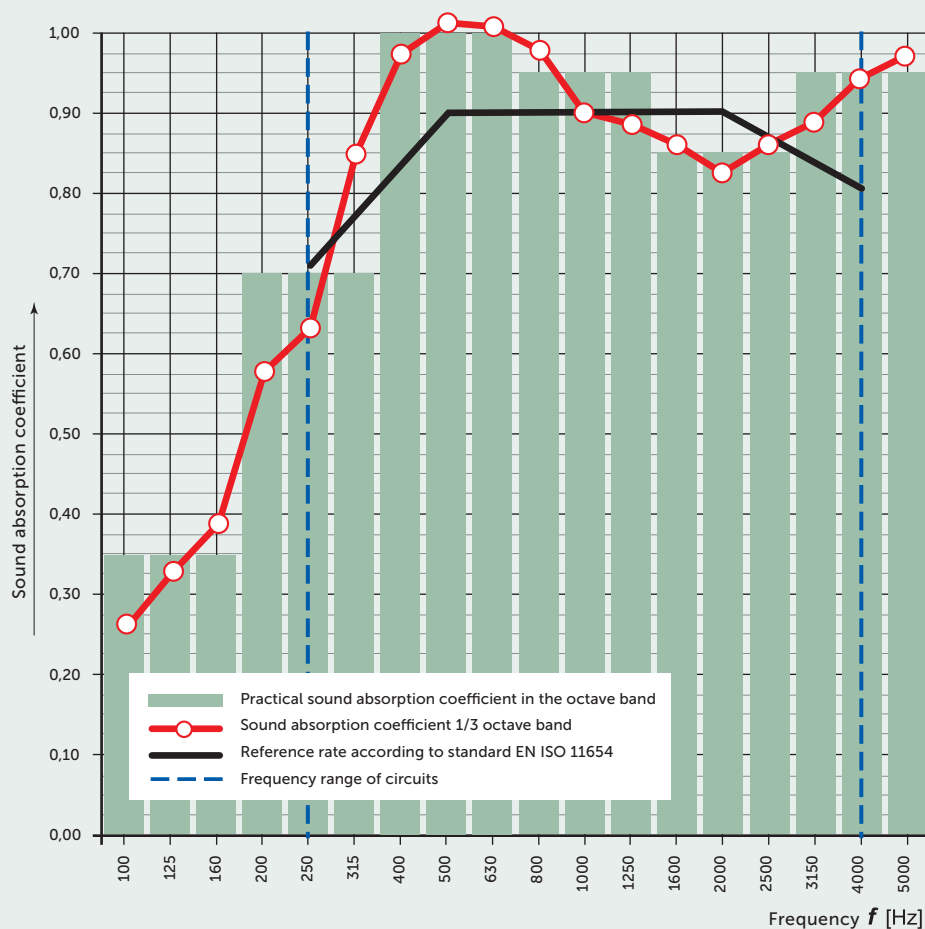
CEWOOD panel 25 mm (CW-W25)

CEWOOD panel 25 mm with 50 mm mineral wool



Mineral wool 50 mm
CEWOOD acoustic panel 25 mm

Frequency f , Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50	-	-
63	-	-
80	-	-
100	0,27	0,35
125	0,33	
160	0,39	
200	0,58	0,70
250	0,63	
315	0,85	
400	0,97	1,00
500	1,01	
630	1,01	
800	0,98	0,95
1000	0,90	
1250	0,88	
1600	0,86	0,85
2000	0,82	
2500	0,86	
3150	0,89	0,95
4000	0,94	
5000	0,97	
6300	-	-
8000	-	-
10000	-	-



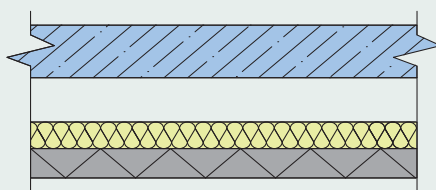
Practical sound absorption coefficient according to standard EN ISO 11654, α_w : **0,90**

Sound absorption class according to standard EN ISO 11654: **A**

ACOUSTICS

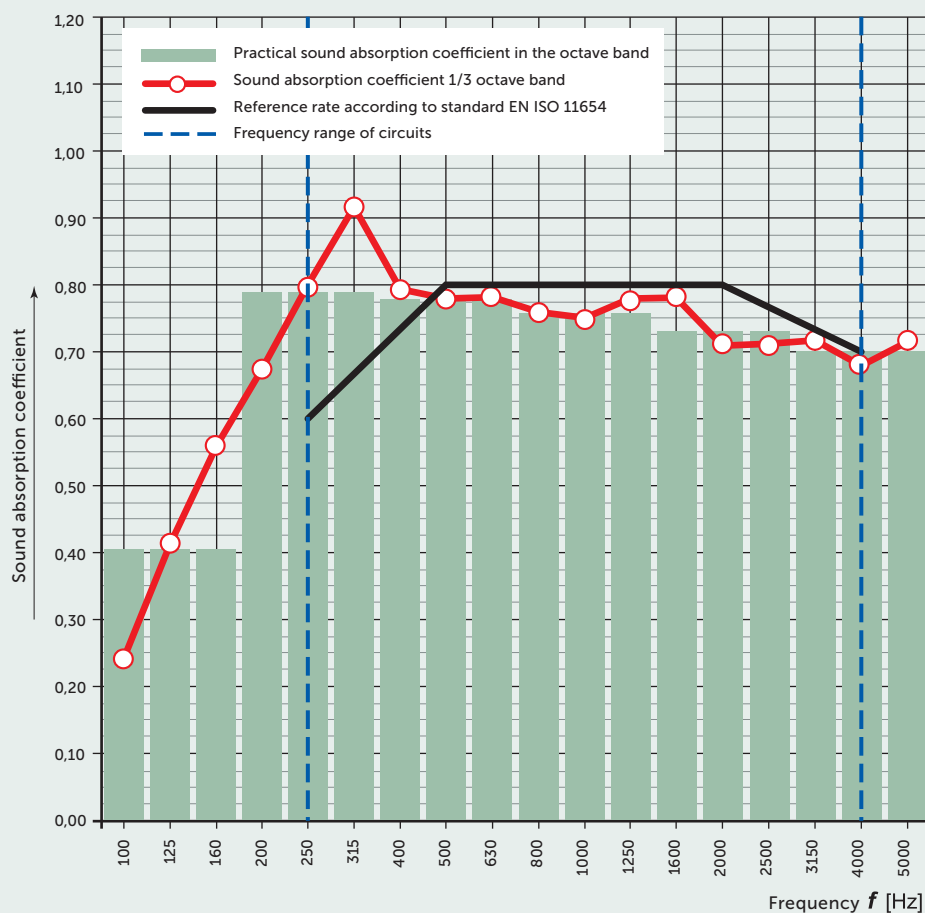
CEWOOD panel 25 mm (CW-W25)

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 f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50		-
63		-
80		-
100	0,24	0,40
125	0,41	
160	0,56	
200	0,67	0,79
250	0,80	
315	0,91	
400	0,79	0,78
500	0,78	
630	0,78	
800	0,76	0,76
1000	0,75	
1250	0,78	
1600	0,78	0,73
2000	0,71	
2500	0,71	
3150	0,72	0,70
4000	0,68	
5000	0,72	
6300	-	-
8000	-	-
10000	-	-



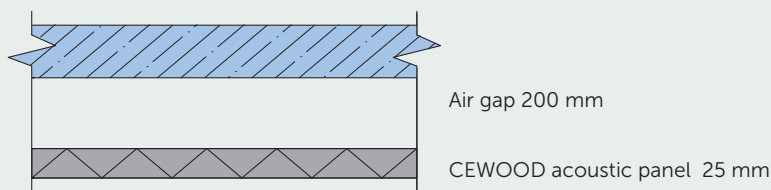
Practical sound absorption coefficient according to standard EN ISO 11654, α_w : **0,80**

Sound absorption class according to standard EN ISO 11654: **B**

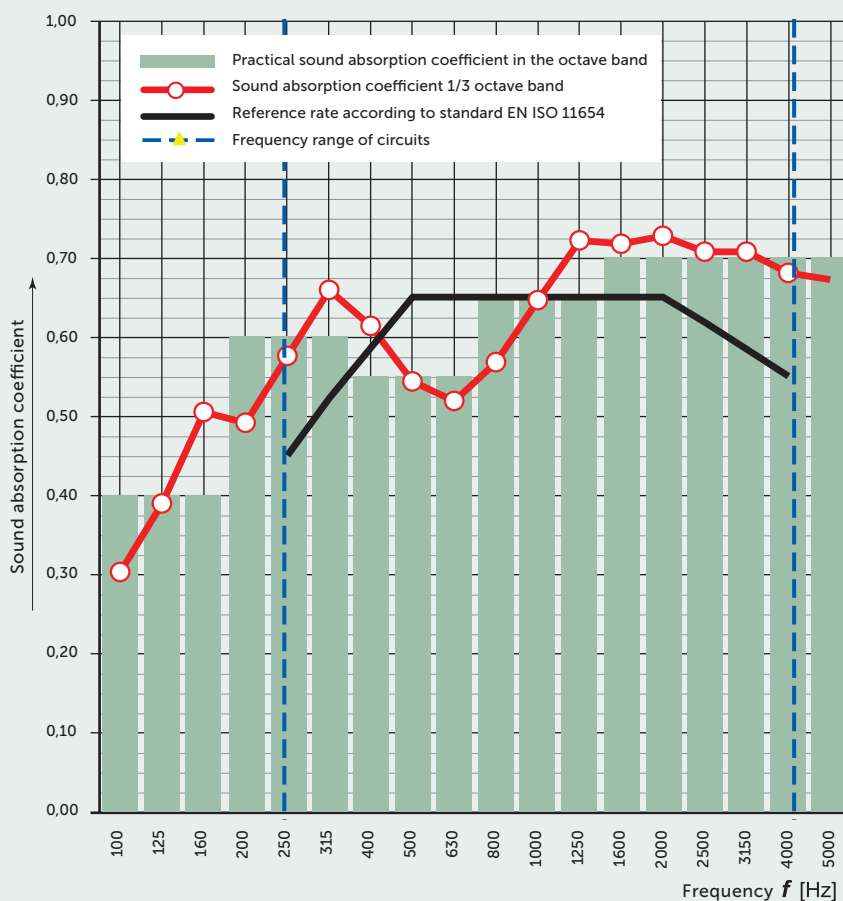
ACOUSTICS

CEWOOD panel 25 mm (CW-W25)

CEWOOD panel 25 mm with 200 mm air gap



Frequency f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50		-
63		-
80		-
100	0,30	0,40
125	0,39	
160	0,50	
200	0,49	0,60
250	0,58	
315	0,66	
400	0,61	0,55
500	0,54	
630	0,52	
800	0,57	0,65
1000	0,65	
1250	0,72	
1600	0,72	0,70
2000	0,73	
2500	0,71	
3150	0,71	0,70
4000	0,68	
5000	0,67	
6300	-	-
8000	-	-
10000	-	-



Practical sound absorption coefficient according to standard EN ISO 11654, α_w : **0,65**

Sound absorption class according to standard EN ISO 11654: **C**