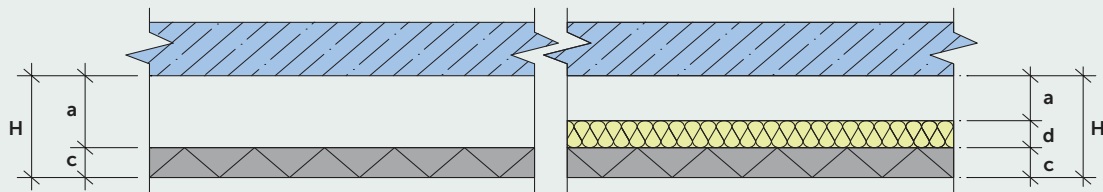


ACOUSTICS

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 standart EN ISO 354,
Extended sound absorption coefficient α_w and sound absorption class according to standart EN ISO 11654:1997



H – height; a – air gap; d – mineral wool; c – CEWOOD panel

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.

Offices, public spaces



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

Schools, kindergartens, universities



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.

Sport facilities, swimming pools, spa



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.

ACOUSTICS

Music halls, theaters, cinemas



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

Recording studios, TV and radio stations



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

Industrial premises, warehouses, 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 panels on lath construction

Description	Total height H, mm	Air gap a, mm	Mineral wool d, mm	CEWOOD panel c, mm	Frequencies, Hz						Absorption coefficient, α_w	Absorption class
					125	250	500	1000	2000	4000		
35 mm CEWOOD panel, 30 mm mineral wool, 70 mm air gap	135	70	30	35	0,35	0,70	1,00	0,90	0,85	0,90	0,90	A
35 mm CEWOOD panel, without mineral wool, 100 mm air gap	135	100	0	35	0,15	0,35	0,70	0,70	0,70	0,85	0,65	C
25 mm A2 CEWOOD panel, 30 mm mineral wool, 70 mm air gap	125	70	30	25	0,35	0,70	1,00	0,90	0,80	0,90	0,90	A
25 mm A2 CEWOOD panel, without mineral wool, 100 mm air gap	125	100	0	25	0,15	0,35	0,65	0,60	0,65	0,80	0,60	C
25 mm CEWOOD panel, 30 mm mineral wool, 70 mm air gap	125	70	30	25	0,35	0,70	1,00	0,90	0,85	0,90	0,90	A
25 mm CEWOOD panel, without mineral wool, 100 mm air gap	125	100	0	25	0,15	0,30	0,65	0,60	0,65	0,80	0,60	C

CEWOOD panels in suspended ceiling systems (T-24 profiles)

Description	Total height H, mm	Air gap a, mm	Mineral wool d, mm	CEWOOD panel c, mm	Frequencies, Hz						Absorption coefficient, α_w	Absorption class
					125	250	500	1000	2000	4000		
35 mm CEWOOD panel, 50 mm mineral wool, 150 mm air gap	235	150	50	35	0,55	0,85	0,95	0,85	0,85	0,95	0,90	A
25 mm CEWOOD panel, 50 mm mineral wool, 150 mm air gap	225	150	50	25	0,55	0,80	0,95	0,90	0,85	0,95	0,90	A
15 mm CEWOOD panel, 50 mm mineral wool, 150 mm air gap	215	150	50	15	0,50	0,80	0,95	0,90	0,85	0,90	0,90	A
15 mm CEWOOD panel, 20 mm mineral wool, 180 mm air gap	215	180	20	15	0,35	0,70	0,90	0,90	0,85	0,90	0,90	B
25 mm CEWOOD panel, 20 mm mineral wool, 180 mm air gap	225	180	20	25	0,35	0,70	0,90	0,90	0,85	0,90	0,90	A
35 mm CEWOOD panel, 20 mm mineral wool, 180 mm air gap	235	180	20	35	0,45	0,70	0,90	0,85	0,85	1,00	0,90	A
35 mm CEWOOD panel, without mineral wool, 200 mm air gap	235	200	0	35	0,30	0,50	0,60	0,60	0,75	0,90	0,65	C
25 mm CEWOOD panel, without mineral wool, 200 mm air gap	225	200	0	25	0,25	0,45	0,55	0,55	0,70	0,85	0,60	C
15 mm CEWOOD panel, without mineral wool, 200 mm air gap	215	200	0	15	0,20	0,45	0,55	0,55	0,65	0,80	0,60	D

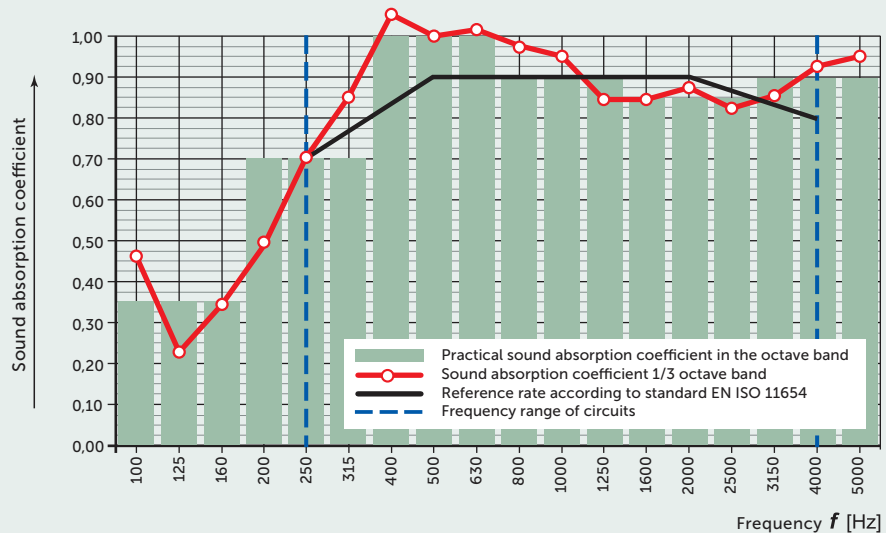
ACOUSTICS
CEWOOD panels – different constructions

Description	Total height H, mm	Air gap a, mm	Mineral wool d, mm	CEWOOD panel c, mm	Frequencies, Hz						Absorption coefficient, α_w	Absorption class
					125	250	500	1000	2000	4000		
25 mm CEWOOD panel, without mineral wool, 60 mm air gap	85	60	0	25	0,10	0,30	0,55	0,60	0,50	0,60	0,55	D
25 mm CEWOOD panel, without mineral wool, 200 mm air gap	225	200	0	25	0,25	0,50	0,55	0,50	0,60	0,65	0,55	D
50 mm CEWOOD panel, without mineral wool, 200 mm air gap	250	200	0	50	0,40	0,60	0,55	0,65	0,70	0,70	0,65	C
25 mm CEWOOD panel, with 50 mm mineral wool, 10 mm air gap	85	10	50*	25	0,40	0,79	0,78	0,76	0,73	0,70	0,80	B
25 mm CEWOOD panel, with 100 mm mineral wool, 100 mm air gap	225	100	100*	25	0,79	0,72	0,73	0,81	0,78	0,72	0,80	B
25 mm CEWOOD panel, with 50 mm mineral wool, 150 mm air gap	225	150	50*	25	0,52	0,81	0,74	0,87	0,77	0,73	0,80	B
25 mm CEWOOD panel, with 30 mm mineral wool, without air gap	55	0	30**	25	0,25	0,55	1,00	0,95	0,85	0,85	0,85	B
25 mm CEWOOD panel, with 50 mm mineral wool, without air gap	75	0	50**	25	0,35	0,70	1,00	0,95	0,85	0,95	0,90	A
25 mm CEWOOD panel, without mineral wool, 50 mm air gap	75	50	0	25	0,10	0,25	0,55	0,65	0,55	0,65	0,50	D
15 mm CEWOOD panel, with 50 mm mineral wool, without air gap	65	0	50**	15	0,30	0,65	1,00	0,85	0,75	0,80	0,85	B
15 mm CEWOOD panel, without mineral wool, 50 mm air gap	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.

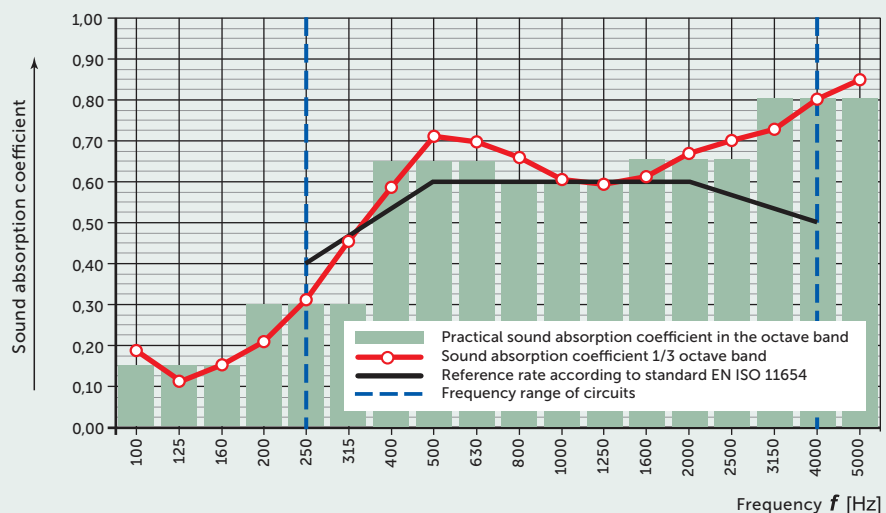
ACOUSTICS

Frequency f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50	-	-
63	-	-
80	-	-
100	0,46	-
125	0,22	0,35
160	0,34	-
200	0,49	-
250	0,70	0,70
315	0,85	-
400	1,03	-
500	0,99	1,00
630	1,01	-
800	0,97	-
1000	0,95	0,90
1250	0,85	-
1600	0,85	-
2000	0,87	0,85
2500	0,82	-
3150	0,84	-
4000	0,93	0,90
5000	0,95	-
6300	-	-
8000	-	-
10000	-	-

CEWOOD panels on lath construction
25 mm CEWOOD panel, 30 mm mineral wool, 70 mm air gap

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

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

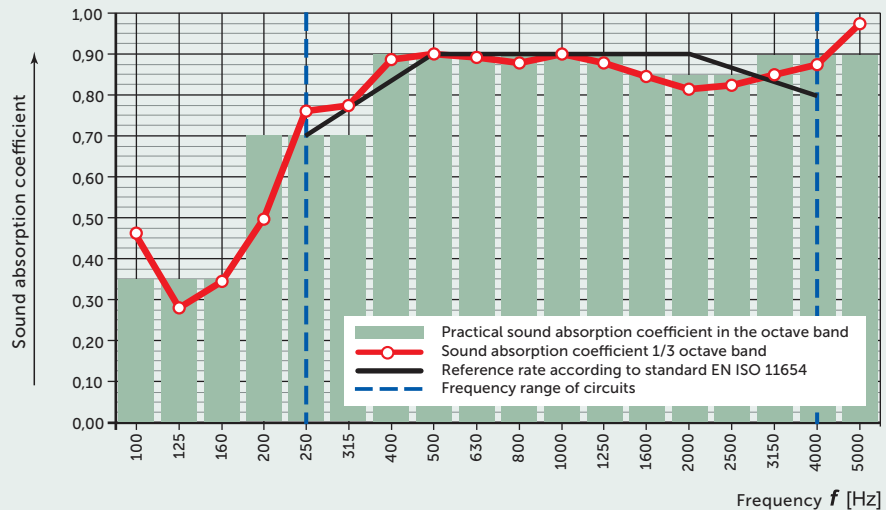
Frequency f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50	-	-
63	-	-
80	-	-
100	0,19	-
125	0,11	0,15
160	0,14	-
200	0,21	-
250	0,31	0,30
315	0,45	-
400	0,58	-
500	0,71	0,65
630	0,69	-
800	0,66	-
1000	0,60	0,60
1250	0,59	-
1600	0,61	-
2000	0,67	0,65
2500	0,70	-
3150	0,73	-
4000	0,80	0,80
5000	0,85	-
6300	-	-
8000	-	-
10000	-	-

CEWOOD panels on lath construction
25 mm CEWOOD panel, without mineral wool, 100 mm air gap

 Practical sound absorption coefficient according to standart EN ISO 11654, α_w : **0,60**

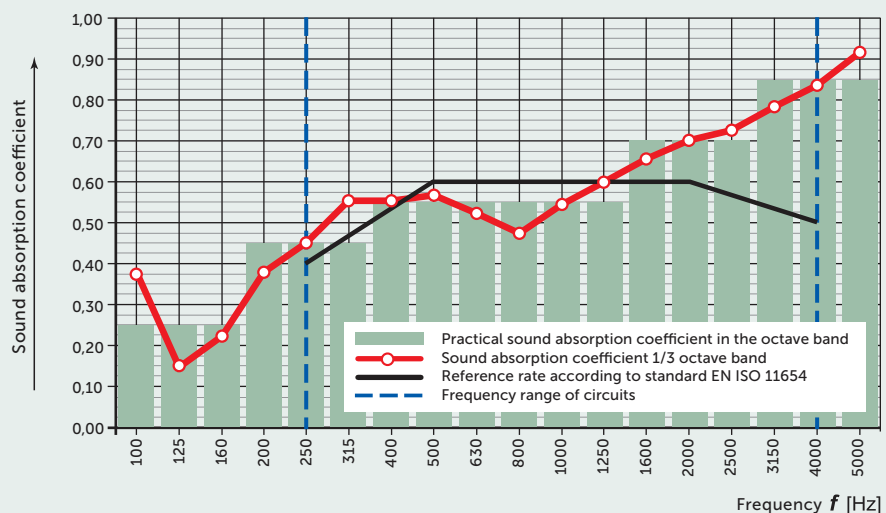
 Sound absorption class according to standart EN ISO 11654: **C**

ACOUSTICS

Frequency f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50	-	-
63	-	-
80	-	-
100	0,46	-
125	0,28	0,35
160	0,34	-
200	0,50	-
250	0,76	0,70
315	0,78	-
400	0,89	-
500	0,90	0,90
630	0,89	-
800	0,88	-
1000	0,90	0,90
1250	0,88	-
1600	0,85	-
2000	0,82	0,85
2500	0,82	-
3150	0,85	-
4000	0,87	0,90
5000	0,97	-
6300	-	-
8000	-	-
10000	-	-

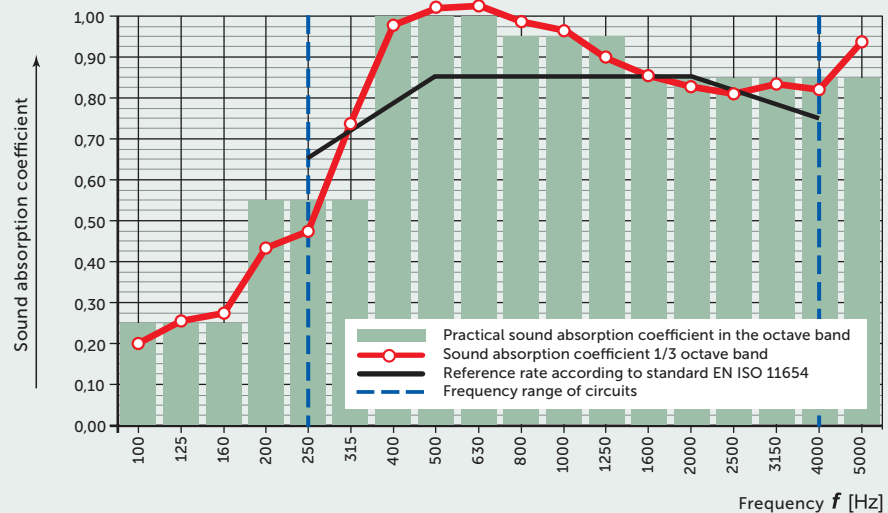
CEWOOD panels in suspended ceiling systems (T-24 profiles)
25 mm CEWOOD panel, 20 mm mineral wool, 180 mm air gap


Frequency f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50	-	-
63	-	-
80	-	-
100	0,37	-
125	0,14	0,25
160	0,22	-
200	0,38	-
250	0,45	0,45
315	0,55	-
400	0,56	-
500	0,57	0,55
630	0,52	-
800	0,47	-
1000	0,55	0,55
1250	0,61	-
1600	0,66	-
2000	0,71	0,70
2500	0,73	-
3150	0,78	-
4000	0,84	0,85
5000	0,92	-
6300	-	-
8000	-	-
10000	-	-

CEWOOD panels in suspended ceiling systems (T-24 profiles)
25 mm CEWOOD panel, without mineral wool, 200 mm air gap


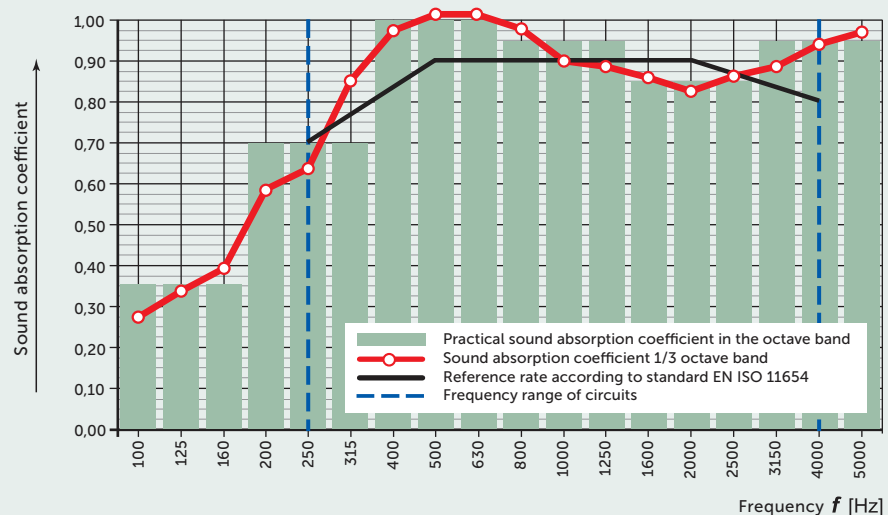
ACOUSTICS

Frequency f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50	-	-
63	-	-
80	-	-
100	0,20	-
125	0,25	0,25
160	0,27	-
200	0,43	-
250	0,47	0,55
315	0,73	-
400	1,00	-
500	1,05	1,00
630	1,06	-
800	0,99	-
1000	0,96	0,95
1250	0,90	-
1600	0,85	-
2000	0,83	0,85
2500	0,81	-
3150	0,84	-
4000	0,82	0,85
5000	0,93	-
6300	-	-
8000	-	-
10000	-	-

CEWOOD panels – different constructions
25 mm CEWOOD panel, with 30 mm mineral wool, without air gap

 Practical sound absorption coefficient according to standart EN ISO 11654, α_w : **0,85**

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

Frequency f, Hz	α_s 1/3 oct.	α_p 1 oct.
[Hz]	[dB]	[dB]
50	-	-
63	-	-
80	-	-
100	0,27	-
125	0,33	0,35
160	0,39	-
200	0,58	-
250	0,63	0,70
315	0,85	-
400	1,10	-
500	1,09	1,00
630	1,09	-
800	1,00	-
1000	0,90	0,95
1250	0,88	-
1600	0,86	-
2000	0,82	0,85
2500	0,86	-
3150	0,89	-
4000	0,94	0,95
5000	0,97	-
6300	-	-
8000	-	-
10000	-	-

CEWOOD panels – different constructions
25 mm CEWOOD panel, with 50 mm mineral wool, without air gap

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

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