

Technical Data Sheet



CETRIS® AKUSTIC FINISH

CETRIS® AKUSTIC FINISH is a cement-bonded particleboard with pre-drilled holes and smooth surface treated with a primer coat and surface finish. It is produced by pressing a mixture of wood chips (19% of weight), Portland cement (69% of weight), water (10% of weight), hydrating additives (2% of weight), cutting, drilling regular holes and application of the basic primer and a final coat. Hue can be chosen according to RAL and NCS colour charts. The selection should exclude shades of pearl, reflective, metallic and with low opacity (we recommended consultation with the manufacturer). The basic dimensions of the board are 1,250x625 mm with thickness of 8 and 10 mm. In addition to the existing high mechanical parameters, introduction of the evenly spaced holes improves the noise transmission properties. Compared to other acoustic walling materials, the CETRIS® AKUSTIC FINISH is used as a sound absorbing lining, and with the use of CETRIS® AKUSTIC particleboard, it provides extra high resistance against mechanic perforation (e.g. with a ball) and resistance against moisture; in addition to these properties the particleboard retains a high-class response to fire features (A2 -s1,d0). These parameters predetermine this new type of CETRIS® board to be used primarily in sport facilities, areas with variable temperature and moisture levels and buildings with special requirements. CETRIS® Boards do not contain either asbestos or formaldehyde; they are resistant to insects and mold exposure. The boards can be worked with conventional woodworking tools.

Technical specifications:

basic size:	1,250 × 625 mm
board thicknesses:	8 or 10 mm (thicknesses of 12, 14, and 16 mm available upon request)
Bulk density:	1,150-1,500 kg/m ³
area density:	th. 8 mm – 10 kg/m ² , th. 10 mm – 12.5 kg/m ²
Surface:	smooth
surface finish:	primer coat and final coat
service:	drilled holes – 12 mm diameter, hole spacing: 30–32 mm
Hue:	as per the RAL or NCS colour charts (please, consult colour suitability with the manufacturer)

Table of basic physical and mechanical properties of CETRIS® AKUSTIC cement-bonded particleboards:	Limit values according to standard	Mean values - real
Bulk density acc. to EN 323:	min. 1,000 kg/m ³	1,350-1,500 kg/m ³
Class of ball impact resistance according to EN 13964 - th. 8 mm		Class 3A (velocity 4m/s)
- th. 10 mm		Class 2A (velocity 8m/s)
The mean absorption coefficient		0.61 – 0.69 (according to composition)
Reaction to fire acc. to EN 13 501-1		B-s1,d0
Index of flame propagation along the surface acc. to the Czech standard ČSN 73 0863		i = 0 mm/min
Thickness swelling when stored in water for 24 hours	max. 1.5 %	max. 0.28 %
Thickness swelling after cycling in a humid environment according to EN 321	max. 1.5 %	max. 0.31 %
Linear expansion with changes in humidity from 35% to 85% at 23 °C according to EN 13 009		max. 0.122 %
Water absorption by the board when stored in water for 24 hours		max. 16 %
pH of the board material		12,5
Mass activity Ra 226	150 Bq/kg	22 Bq/kg
Mass activity index	I = 0.5	I = 0.21
Mass balanced humidity at 20° and a relative humidity of 50% according to EN 634-1	9 ± 3 %	9.50%

Dimensional tolerance:

Feature	Board thickness	Requirement
Thickness of uncut board	8 mm, 10 mm	±0.7 mm
	12 mm, 14 mm	±1.0 mm
Length and width of the basic format		±5.0 mm
Precision of cutting the length and width		±3.0 mm
Edge straightness tolerance		1.5 mm/m
Rectangularity tolerance		2.0 mm/m
Tolerance of spacing of holes		2.0 mm/m

Appearance:

Parameter	I.Quality class
Deviation from the right angle	max. 2 mm/1 m of length
Permitted edge damage	max. to the depth of 3 mm
Protrusions on the surface	max.1 mm, size 10 mm
Depressions	max.1 mm, size 10 mm