



# CORE&TECHNICAL

Products

## OSB 3 ECOBOARD

Load-bearing OSB for use in humid conditions

### DESCRIPTION

Sonae Arauco OSB 3 ECOBOARD is a high-performance wood-based panel, structured with three layers of long wood strands arranged at right angles to each other, bonded with formaldehyde-free resin applied under high temperature and pressure. In the outer layers, the particles are arranged lengthwise in relation to the length of the board; in the inner layer, they are at right angles to the length of the board. It is available in multiple formats with a tongue and groove profile on all 4 sides or with butt edges, with a Contiface surface (treated, not sanded) or in a sanded surface version.

OSB 3 ECOBOARD offers excellent results in the construction sector and can be used as a multipurpose panel for structural purposes and for load-bearing in roof, wall and floor areas. It can be used as an airtight layer or vapour barrier in a vapour permeable construction, so that the use of additional foil is unnecessary.

OSB 3 ECOBOARD panels are governed under building law with characteristic values according to EN 1995-1-1 (Eurocode 5), presenting high strength and stability.

**For further information on available sizes and thicknesses, please see our Offer & Service Brochure.**

### APPLICATIONS

OSB 3 ECOBOARD is a wood-based panel type OSB/3 according to EN 300 and EN 13986, suitable for load-bearing purposes and can be applied in service class 2 (restrictions in temperature and ambient humidity).

The product is recommended for demanding applications, such as floor construction, wall cladding, structural wall elements, roof panelling, housing, industrial and formwork construction and industrial packaging.

### RECOMMENDATIONS

Boards must be stacked on a hard, level surface and protected from direct contact with water. Expansion and contraction in wood products is directly related to moisture content and must be considered during design and construction.

Wood based panels are biodegradable and can be recycled, follow local regulation for the disposal of residues.

### ALSO AVAILABLE



TONGUE & GROOVE

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### PROPERTIES



DURABILITY



VERSATILITY



LOW EMISSIONS



MOISTURE  
RESISTANT



LOAD BEARING



COMPLIANT WITH  
CHEMVERBOTSV



FLOORING



PANELLING



FOR  
CONSTRUCTION



INDUSTRIAL  
PACKAGING

**SONAE  
ARAUCO**  
Taking wood further

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### General Characteristics

PROPERTY	TEST	UNIT	THICKNESS RANGE (mm)				
			6 - 10	>10 - <18	18 - 25	>25 - 32	>32 - 40
Tolerance on thickness (un-sanded)	EN 324-1	mm	± 0,8	± 0,8	± 0,8	± 0,8	± 0,8
Tolerance on length and width	EN 324-1	mm	± 3,0	± 3,0	± 3,0	± 3,0	± 3,0
Edge straightness tolerance	EN 324-2	mm/m	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5
Squareness tolerance	EN 324-2	mm/m	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
Tolerance on mean density	EN 323	%	± 15	± 15	± 15	± 15	± 15
Moisture content	EN 322	%	2 - 12	2 - 12	2 - 12	2 - 12	2 - 12

### TECHNICAL INFORMATION

PROPERTY	TEST	UNIT	THICKNESS RANGE (mm)				
			6 - 10	>10 - <18	18 - 25	>25 - 32	>32 - 40
Density*	EN 323	Kg/m <sup>3</sup>	≥ 600	≥ 600	≥ 600	≥ 600	≥ 600
Bending strength – major axis	EN 310	N/mm <sup>2</sup>	≥ 22	≥ 20	≥ 18	≥ 16	≥ 14
Bending strength – minor axis	EN 310	N/mm <sup>2</sup>	≥ 11	≥ 10	≥ 9	≥ 8	≥ 7
Modulus of elasticity – major axis	EN 310	N/mm <sup>2</sup>	≥ 3500	≥ 3500	≥ 3500	≥ 3500	≥ 3500
Modulus of elasticity – minor axis	EN 310	N/mm <sup>2</sup>	≥ 1400	≥ 1400	≥ 1400	≥ 1400	≥ 1400
Internal bond	EN 319	N/mm <sup>2</sup>	≥ 0,34	≥ 0,32	≥ 0,30	≥ 0,29	≥ 0,26
Thickness swelling 24 hours	EN 317	%	≤ 15	≤ 15	≤ 15	≤ 15	≤ 15
Internal bond after cyclic test	EN 321	N/mm <sup>2</sup>	≥ 0,18	≥ 0,15	≥ 0,13	≥ 0,10	≥ 0,08
Bending strength after cyclic test	EN 321	N/mm <sup>2</sup>	≥ 9	≥ 8	≥ 7	≥ 6	≥ 6
Formaldehyde emission class			E1**				

\* Value to be used only as a reference

\*\* Compliant with limit of ChemVerbotsV (E05)

OSB 3 ECOBOARD boards meet the specifications of EN 300, type OSB/3, and are CE marked. For more information regarding the technical properties check the Product Declaration of Performance (DoP).

### CERTIFICATIONS

Please pay attention to certified products:



The mark of  
responsible forestry  
FSC® C009049



FSC® and PEFC™ -certified products are available on request and availability.

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### ADDITIONAL INFORMATION

PROPERTY	UNIT	THICKNESS (mm)	BENDING $f_m$		TENSION $f_t$		COMPRESSION $f_c$		PANEL SHEAR $f_v$	PANEL SHEAR $f_v$
			or 0	⊥ or 90	or 0	⊥ or 90	or 0	⊥ or 90		
Strength	N/mm <sup>2</sup>	6 – 10	18,0	9,0	9,9	7,2	15,9	12,9	6,8	1,0
		> 10 – 18	16,4	8,2	9,4	7,0	15,4	12,7		
		> 18 – 25	14,8	7,4	9,0	6,8	14,8	12,4		

PROPERTY	UNIT	THICKNESS S (mm)	BENDING $E_m$		TENSION $E_t$		COMPRESSION $E_c$		PANEL SHEAR $G_v$	PANEL SHEAR $G_v$
			or 0	⊥ or 90	or 0	⊥ or 90	or 0	⊥ or 90		
Stiffness	N/mm <sup>2</sup>	6 – 25	4930	1980	3800	3000	3800	3000	1080	50