

CORE & TECHNICAL

Products

MDF HYDRO X E05/CARB2

Medium density fiberboard for use in humid conditions

DESCRIPTION

Sonae Arauco MDF HYDRO X E05/CARB2 is a moisture resistant board for general purposes, indicated for applications in humid conditions (EN 622, type MDF.H) and easy to mill.

MDF HYDRO X CARB2/EPA has low formaldehyde emission, certified according to the rules of the official California Air Resource Board (CARB) and compliant with REACH Regulation.

Regarding reaction to fire and according to EN 13986, MDF HYDRO X E05/CARB2, with a thickness ≥ 9 mm and a minimum density of 600 Kg/m³, is classified as D-s2, d0 (Euroclasses definition by EN 13501-1).

In addition to technical performance MDF HYDRO X E05/CARB2 panels are sustainable and environmental friendly products.

Please check offer & service brochure for information on sizes and thicknesses available.

APPLICATIONS

MDF HYDRO X E05/CARB2 is the best choice for use in areas with a temporary high humidity environment. Due to the wood fibres and special resins used in its production, the product presents a very good dimensional stability and low swelling.

The density of surfaces also gives the possibility of using a wide range of finishing techniques: lacquering, coating, veneering, foil wrapping and covering. Ideal for manufacturing kitchen and bathroom furniture, doors and windows sills and other interior applications when higher levels of humidity are expected.

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.

Pigments added during manufacturing of this product in exceptional cases may interfere with certain types of adhesives, a test before you apply them should therefore be conducted.

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

PROPERTIES



VERSATILITY



EASY TO MILL



IMPROVED
DIMENSIONAL
STABILITY



MOISTURE
RESISTANT



EPA TSCA TITLE
VI & CARB 2
CERTIFIED



COMPLIANT WITH
REACH REGULATION



KITCHENS



BATHROOMS



RESTAURANTS & HOTELS



HEALTH &
WELLNESS



DOORS



CONSTRUCTION

MDF HYDRO X E05/CARB2

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GENERAL CHARACTERISTICS

PROPERTY	TEST	UNIT	THICKNESS RANGE (mm)						
			2,5	>2,5 - 4	>4 - 6	>6 - 9	>9 - 12	>12 - 19	>19 - 30
Tolerance on thickness	EN 324-1	mm	± 0,2	± 0,2	± 0,2	± 0,2	± 0,2	± 0,2	± 0,3
Tolerance on length and width	EN 324-1	mm/m	± 2	± 2	± 2	± 2	± 2	± 2	± 2
Edge straightness tolerance	EN 324-2	mm/m	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5	≤ 1,5
Squareness tolerance	EN 324-2	mm/m	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
Tolerance on mean density	EN 323	%	± 7	± 7	± 7	± 7	± 7	± 7	± 7
Moisture content	EN 322	%	4 - 11	4 - 11	4 - 11	4 - 11	4 - 11	4 - 11	4 - 11

TECHNICAL INFORMATION

PROPERTY	TEST	UNIT	THICKNESS RANGE (mm)						
			2,5	>2,5 - 4	>4 - 6	>6 - 9	>9 - 12	>12 - 19	>19 - 30
Density *	EN 323	Kg/m ³	860	840	820	780	770	780	730
Bending strength	EN 310	N/mm ²	≥ 27	≥ 27	≥ 27	≥ 27	≥ 26	≥ 24	≥ 22
Modulus of elasticity	EN 310	N/mm ²	≥ 2700	≥ 2700	≥ 2700	≥ 2700	≥ 2500	≥ 2400	≥ 2300
Internal bond	EN 319	N/mm ²	≥ 0,70	≥ 0,70	≥ 0,70	≥ 0,80	≥ 0,80	≥ 0,75	≥ 0,75
Thickness swelling 24 hours	EN 317	%	≤ 35	≤ 30	≤ 18	≤ 12	≤ 10	≤ 8	≤ 7
Internal bond after cyclic test	EN 321	N/mm ²	≥ 0,35	≥ 0,35	≥ 0,35	≥ 0,30	≥ 0,25	≥ 0,20	≥ 0,15
Swelling after cyclic test	EN 321	%	≤ 50	≤ 40	≤ 25	≤ 19	≤ 16	≤ 15	≤ 15
Formaldehyde emission class	E05 / CARB Phase 2								

* Value to be used only as a reference

MDF HYDRO X E05/CARB2 boards meet the specifications of EN 622, type MDF.H, and are CE marked. For more information regarding the technical properties check the Product Declaration of Performance (DoP).

MDF HYDRO X E05/CARB2 product range is also available in a natural version, without green pigmentation, maintaining the same technical performance and reference properties.

CERTIFICATIONS

Please pay attention to certified products:



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

www.sonaearauco.com

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