

CORE&TECHNICAL

Products

PB P5 HYDRO X

Load-bearing particleboard for use in humid conditions

DESCRIPTION

Sonae Arauco PB P5 HYDRO X is a particleboard with a fine sanded surface suitable for coating with melamine paper, veneer or laminate. The board is suitable for furniture production, load bearing applications and presents good behaviour in humid environments with minimal expected expansion and swelling. PB P5 HYDRO X is also easy to mill and has low formaldehyde emission (E1 class).

Regarding reaction to fire and according to EN 13986, PB P5 HYDRO X with a thickness ≥ 9 mm and a minimum density of 600 Kg/m^3 , is classified as D-s2, d0 (Euroclasses definition by EN 13501-1).

In addition to technical performance PB P5 HYDRO X panels are sustainable and environmental products.

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

APPLICATIONS

PB P5 HYDRO X is suitable for load-bearing applications in humid conditions and can be applied in service classes 1 and 2 (restrictions in temperature and ambient humidity).

The PB P5 HYDRO X panels can be used for structural floors, walls, roofs and other demanding applications.

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.

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.

PROPERTIES



EASY TO MILL



LOAD BEARING



MOISTURE RESISTANT



SPORTS & LEISURE



HEALTH & WELLNESS



FLOORING



CONSTRUCTION

PB P5 HYDRO X

Load-bearing particleboard for use in humid conditions

GENERAL CHARACTERISTICS

| PROPERTY | TEST | UNIT | THICKNESS RANGE (mm) | | | | | | |
|-------------------------------|----------|------|----------------------|--------|--------|--------|--------|--------|--------|
| | | | ≥8-10 | >10-13 | >13-20 | >20-25 | >25-32 | >32-40 | >40-45 |
| Tolerance on thickness | EN 324-1 | mm | ± 0,3 | ± 0,3 | ± 0,3 | ± 0,3 | ± 0,3 | ± 0,3 | ± 0,3 |
| Tolerance on length and width | EN 324-1 | mm/m | ± 5 | ± 5 | ± 5 | ± 5 | ± 5 | ± 5 | ± 5 |
| 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 | % | ± 10 | ± 10 | ± 10 | ± 10 | ± 10 | ± 10 | ± 10 |
| Moisture content | EN 322 | % | 5 - 13 | 5 - 13 | 5 - 13 | 5 - 13 | 5 - 13 | 5 - 13 | 5 - 13 |

TECHNICAL INFORMATION

| PROPERTY | TEST | UNIT | THICKNESS RANGE (mm) | | | | | | |
|---------------------------------|--------|-------------------|----------------------|--------|--------|--------|--------|--------|--------|
| | | | ≥8-10 | >10-13 | >13-20 | >20-25 | >25-32 | >32-40 | >40-45 |
| Density * | EN 323 | Kg/m ³ | 720 | 710 | 670 | 650 | 630 | 620 | 620 |
| Bending strength | EN 310 | N/mm ² | ≥ 18 | ≥ 18 | ≥ 16 | ≥ 14 | ≥ 12 | ≥ 10 | ≥ 9 |
| Modulus of elasticity | EN 310 | N/mm ² | ≥ 2550 | ≥ 2550 | ≥ 2400 | ≥ 2150 | ≥ 1900 | ≥ 1700 | ≥ 1550 |
| Internal bond | EN 319 | N/mm ² | ≥ 0,45 | ≥ 0,45 | ≥ 0,45 | ≥ 0,40 | ≥ 0,35 | ≥ 0,30 | ≥ 0,25 |
| Thickness swelling 24 hours | EN 317 | % | ≤ 13 | ≤ 11 | ≤ 10 | ≤ 10 | ≤ 10 | ≤ 9 | ≤ 9 |
| Internal bond after cyclic test | EN 321 | N/mm ² | ≥ 0,25 | ≥ 0,25 | ≥ 0,22 | ≥ 0,20 | ≥ 0,17 | ≥ 0,15 | ≥ 0,12 |
| Swelling after cyclic test | EN 321 | % | ≤ 12 | ≤ 12 | ≤ 12 | ≤ 11 | ≤ 10 | ≤ 9 | ≤ 9 |
| Formaldehyde emission class | | | E1 | | | | | | |

* Value to be used only as a reference

PB P5 HYDRO X boards meet the specifications of EN 312, type P5, 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® C104607



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

www.sonaearauco.com

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