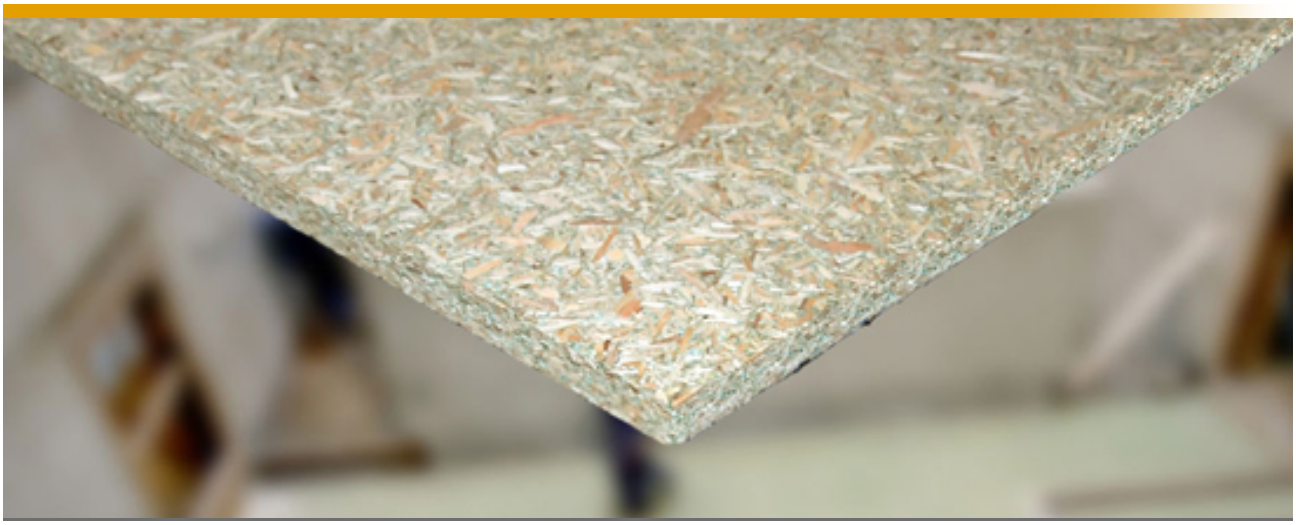
SPANO
Wood Based Solutions



SpanO-SB5®

Product class	Standard reference	Producer
P5	EN 312	SPANO

Solution

MOISTURE RESISTANT
Wood Based Solutions

CONSTRUCTION/FLOORING
Wood Based Solutions

Scope

Extremely rigid, multifunctional construction chipboard with larger chips for bearing loads in humid conditions.
Alternative to OSB.

Description

High-density chipboard with large chips, sanded surface and particularly screwable core glued with high quality MUF glue. Has high ridigity and bending strength.

The specific composition of coarse chips and the special MUF gluing provide SpanO-SB5® with a number of additional strengths:

- The board undergoes minimal expansion and swelling under high humidity conditions. The swelling percentage of SpanO-SB5® after immersion in water for 24 hours is considerably lower than for an OSB board. Therefore, SpanO-SB5® can, while it awaits further finishing, easily be stored unfinished in various weather conditions for a number of weeks.

- Good bending strength in both directions through the combined use of a layer of large area chips and a high quality UMF glue recipe.

- After production the surface of the board is sanded to a uniform thickness, allowing for a high-quality finish. The board is easy to saw and has low formaldehyde emission (E1 class).

Use of the product

The board can be applied in service class 2 (restrictions in temperature and ambient humidity) and can only be used in biological hazard classes 1 and 2 of EN 335-3. During and especially after installation the boards must be optimally protected from any direct contact with water. They must be stacked flat, on a pallet or using a sufficient number of cross members. Boards should not be stored vertically, unless ground contact

can be avoided. The board will expand or shrink under variable humidity conditions, albeit to a lesser extent than the Standard E1. Consequently, an expansion space should be provided for at all times. Use suitable sawing, milling and drilling tools.

SpanO-SB5® is ideally suited for applications in the construction and wood skeleton construction sector but can also be applied for roof elements, partitions, packaging, stand erection and renovation. SpanO-SB5® can also be used for structural floors (zie SpanO-SB5® Flooring), walls and roofs.

In service class 2, corrosion resistant fittings must be used, e.g., galvanised steel. Nails or screws should be kept at least 8 mm away from the edge of the board.

SpanO-SB5® can not be used for heavy duty loadbearing applications in humid conditions, (P7 product class according EN312), therefore SpanO-SB7® must be used.

Dimensions and stock range

Thickness: 11 to 22 mm. Width and length: 2030 - 2100 to 5720 length and 2440 - 2620 to 6350 length, a central cut can be provided. Spano has high-capacity saws that support all sawing dimensions. In principle, all thicknesses and lengths/widths are available within the press capabilities. Contact our agent or mail to sales@spano.be.

Stock range

Dimensions SpanO-SB5®	Quantities per pack			
Thickness	**12**	**15**	**18**	**22**
125x250	75	60	50	40
119,6x280	75			

Technical specifications

General characteristics + standard	Unit	Average values			
Thickness EN 324-1	mm	12	15	18	22
Density EN 323	Kg/m³	740	700	700	680
Moisture content EN 322	%	6-10	6-10	6-10	6-10
Water vapour permeability	µ	± 45	± 55	± 55	± 55
Technical characteristics + standard		5/95 Percentile values			
Bending strength EN 310	N/mm²	18	16	16	14
Internal bond EN 319	N/mm²	0,45	0,45	0,45	0,40
Modulus of elasticity EN 310	N/mm²	2550	2400	2400	2150
Swelling/24h EN 317	%	11	10	10	10
Internal bond after cyclic test EN 321 option 1	N/mm²	0,25	0,22	0,22	0,20
Swelling after cyclic test EN 321 option 1	%	12	12	12	11

General specifications

Nº	Property	Test method	Requirement
1a	Tolerances on nominal dimensions	EN 324-1	
	- Thickness (sanded) within and between boards		± 0,3 mm
	- Thickness (unsanded) within and between boards		- 0,3 mm + 1,7 mm
	- Length and width		± 5 mm
2a	Edge straightness tolerance	EN 324-2	1,5 mm per m

3a	Squareness tolerance	EN 324-2	2 mm per m
4	Moisture content	EN 322	5% to 13%
5a	Tolerance on the mean density within a board	EN 323	± 10 %
6b	Formaldehyde release according to EN 13986		
	- Class E 1		
	Perforator value	EN 120	Content ≤ 8mg/100g oven dry board (d)
	Steady state emission value (c)	ENV 717-1	Release ≤ 0,124 mg/m³ air

(a) These values are characterized by a moisture content in the material corresponding to a relative humidity of 65% and a temperature of 20 °C.

(b) The perforator values apply to boards with moisture contents H of 6,5 %. In the case of particleboards with different moisture content (in the range of 3 % ≤ H ≤ 10 %) the perforator value shall be multiplied by a factor F which can be calculated from the following equation:
F = - 0,133 H + 1,86

(c) Required for initial type testing other than for established products where initial type testing may also be done on the basis of existing data with EN 120 or ENV 717-1 testing, either from factory production control or from external inspection.

(d) Experience has shown that to ensure compliance with these limits, the rolling average of the EN 120 values found from the internal factory production control over a period of ½ year should not exceed 6,5 mg HCHO/100 g panel mass.

The board meets the specifications of EN 312 - P5 - option 1 - cyclic test, in which the board is immersed in water, frozen and finally dried. This cycle is repeated three times, after which the test specimens are tested for swelling and internal bond strength. The board is CE marked and checked daily by the in-house lab.

CE