

GERMANY



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OSB... OR PARTICLE- BOARD?

Wood at its best

 **SWISS KRONO**

OSB ... OR PARTICLEBOARD?

Oriented Strand Board (OSB) is the most used structural board for timber frame buildings in a lot of countries in the world. OSB more and more replaces plywood and chipboard. But what are the advantages of SWISS KRONO OSB compared with chipboard?

Raw material

Chipboard is made of small wood particles. Very often recycled wood contaminated with PCP, Lindane or other heavy metals is used. Most particle boards are glued with a high content of glue including formaldehyde. Formaldehyde causes cancer.

SWISS KRONO OSB is made of 100 % fresh pine wood from thinnings of PEFC certified sustainable forests. The strands are glued together with a low content of formaldehyde-free binders. Because of this SWISS KRONO OSB can also be used for food packaging.



Lower weight – more strength

Following some facts to compare OSB with Particleboard

About 20 % lower thickness:

In the same span distance an 18 mm OSB can replace a 22 mm particle board

About 50 % more strength:

The bending E-modulus of SWISS KRONO OSB/3 is 4930 N/mm².

Particleboard has between 3000 to 3500 N/mm².

About 15 % less weight:

The density of SWISS KRONO OSB is about 600 kg/m³. Particleboard has about 700 kg/m³.

30 % less load on a construction:

The area weight of a 18 mm SWISS KRONO OSB is 10.8 kg/m². A 22 mm Chipboard weights 15.4 kg/m².

Minimum Thickness of SWISS KRONO OSB/3

	attic floor 100 kg/m ²	residential used floor + flooring 220 kg/m ²	residential used floor + dry screed 335 kg/m ²	residential used floor + screed 415 kg/m ²
Single span distance (mm)				
450	15 mm	18 mm	18 mm	22 mm
600	18 mm	22 mm	22 mm	25 mm
750	22 mm	25 mm	25 mm	30 mm
Multiple span distance (mm)				
450	15 mm	15 mm	15 mm	18 mm
600	15 mm	18 mm	22 mm	22 mm
750	18 mm	22 mm	25 mm	25 mm

18 mm and 22 mm SWISS KRONO OSB/3 may be used as subfloor on floor joists spaced maximum c/c 600 mm, provided that the imposed load is maximum 3,0 kN/m² uniformly distributed load and 2,0 kN concentrated load.



SWISS KRONO OSB complies with the Building Code of Australia:

1. BCA 2014 Volume 1 Clause BP1.1 "Structure" (a), (b) i, ii, iii for flooring, roof decking and wall sheathing (see conditions a), b), d), e)).
2. BCA 2014 Volume 2 Clause P2.1.1 "Structure" (a), (b) i, ii, iii for flooring, roof decking and wall sheathing (see conditions a), b), d), e)).
Timber structures supporting the panel must be designed and constructed in accordance with AS1684.2:2010 and AS1684.3:2010 as applicable (for all conditions and limitations pls. check the certificate of conformity).