

Declaration of Performance

SKDE_OSB-4_CPR_2024_063

- English Version -

1. Unique identification code of the product type:

SWISS KRONO OSB/4 premium EN300 12 mm
SWISS KRONO OSB/4 premium EN300 15 mm
SWISS KRONO OSB/4 premium EN300 18 mm
SWISS KRONO OSB/4 premium EN300 22 mm
SWISS KRONO OSB/4 premium EN300 25 mm
SWISS KRONO OSB/4 premium EN300 30 mm

(Special thicknesses on request):

SWISS KRONO OSB/4 premium EN300 13 mm
SWISS KRONO OSB/4 premium EN300 14 mm
SWISS KRONO OSB/4 premium EN300 16 mm
SWISS KRONO OSB/4 premium EN300 17 mm
SWISS KRONO OSB/4 premium EN300 19 mm
SWISS KRONO OSB/4 premium EN300 20 mm
SWISS KRONO OSB/4 premium EN300 21 mm
SWISS KRONO OSB/4 premium EN300 23 mm
SWISS KRONO OSB/4 premium EN300 24 mm

2. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

Load-bearing boards for use in humid conditions

3. Name, registered trade name or trademark and contact address of the manufacturer as required under Article 11(5)

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Wittstocker Chaussee 1
16909 Heiligengrabe
Germany
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Email: dehe.sales.osb@swisskrono.com
Web: www.swisskrono.com

4. System or systems for assessing and verifying constancy of performance of the construction product as set out in CPR, Annex V: **System 2+**

5. In case the declaration of performance concerns a construction product covered by a harmonised standard:

HFB Engineering GmbH, Zschortauer Strasse 42, 04129 Leipzig, Germany -
notified body no. 1034.

6. Declared performance:

Essential characteristics						Harmonised technical specification
Characteristics	Performance					
Durability (swelling in thickness)		Thickness range t (mm)				EN 13986:2015-06
		12 to < 18	18 to 25	30		
	Thickness swelling after immersion for 24 h (%)	≤ 9	≤ 8	≤ 9		
Durability (moisture resistance)		Thickness range (mm)				
		12 to < 18	18 to 25	30		
	Bending strength after cyclic test - major axis (N/mm ²)	14	13	6		
Formaldehyde release	E1 (100% formaldehyde free binders)					
Reaction to fire		Min. thickness (mm)	Class (without flooring) ^e	Class (flooring) ^h		
	Without gap behind OSB ^{a b e f}	9	D-s2,d0	D _{fl,s1}		
	With closed or open air gap no wider than 22 mm behind OSB ^{c e f}	9	D-s2,d2	-		
	With closed air gap behind OSB ^{d e f}	15	D-s2,d0	D _{fl,s1}		
	With open air gap behind OSB ^{d e f}	18	D-s2,d0	D _{fl,s1}		
	Without limitations ^{e f}	3	E	E _{fl}		
^a Installed without air gap directly on products of class A1 or A2-s1, d0 with a bulk density of at least 10 kg/m ³ or products of class D-s2, d2 with a bulk density of at least 400 kg/m ³ .						
^b A substrate consisting of thermally insulating cellulose of class E or better may be included if it is installed directly behind the wood-based material; however, this does not apply to floor coverings.						
^c Installed with air gap behind it. The product on the other side of the air gap must be of class A2-s1, d0 or better with a bulk density of at least 10 kg/m ³ .						

	<p>^d Installed with air gap behind it. The product on the other side of the air gap must be of class D-s2, d2 or better with a bulk density of at least 400 kg/m³.</p> <p>^e This class also applies, with the exception of floor coverings, to laminated and both phenolic and melamine resin-coated boards.</p> <p>^f A vapour barrier at least 0.4 mm thick with a density of up to 22 g/m² may be installed between the wood-based material and the substrate if there is no air gap between them.</p> <p>^g Class according to Table 1 of the annex to Decision 2000/147/EC.</p> <p>^h Class according to Table 2 of the annex to Decision 2000/147/EC.</p>									
Water vapour permeability	Thickness range d (mm)		12 to 30							
	sd-value (m) = (μ x d [m]) - dry		≥ 2.0 m							
Airborne sound	Frequency range 1 kHz to 3 kHz			Frequency range 1 kHz to 3 kHz				Frequency range 1 kHz to 3 kHz		
	Thickness (mm)	R (dB)		Thickness (mm)	R (dB)		Thickness (mm)	R (dB)		
	12	25		18 to 20	28		30	31		
	13 to 14	26		21 to 24	29					
	15 to 17	27		25	30					
Sound absorption	Frequency range 250 Hz to 500 Hz				Frequency range 1000 Hz to 2000 Hz					
	0.10 dB				0.25 dB					
Thermal conductivity	0.13 W/mK									
Strength and stiffness for load bearing use	Thickness (mm)	Bulk density (kg/m ³) and characteristic strength values (N/mm ²) for calculating and designing timber structures acc. to EN 1995-1-1								
	t _{min}	Bulk density	Bending		Tensile force		Compression		Shear perpendicular to the board plane	Shear in the board plane
		ρ	f _m		f _t		f _c		f _v	f _r
			0	90	0	90	0	90		
	12 to < 18	≥ 620	24.0	16.0	10.5	9.5	16.0	14.0	9.5	1.5
	18 to 25	≥ 620	24.0	16.0	10.5	9.5	16.0	14.0	9.5	1.5
	30	≥ 620	23.0	12.5	10.5	7.5	16.0	12.5	7.0	1.5

Thickness (mm)	Stiffness values (N/mm ²)									
	t _{min}	Bending		Tensile force		Compression		Shear perpendicular to the board plane	Shear in the board plane	
		E _m		E _t		E _c		G _v	G _r	
		0	90	0	90	0	90		0	90
12 to < 18	7200	3000	4200	3200	6000	6000	1000	70	90	
18 to 25	7200	3000	4200	3200	6000	6000	1000	70	90	
30	6500	3000	3500	2500	3500	2500	1100	70	90	
Load duration factor	Modification factors for the duration of load and moisture content k_{mod}									
	Load duration factor			Service class						
				1	2					
	Constant			0.40	0.30					
	Long			0.50	0.40					
	Moderately long			0.70	0.55					
	Brief			0.90	0.70					
	Very brief			1.10	0.90					
	Values for calculating the deformation coefficients k_{def} under a constant or nearly constant load									
	Service class									
1		2								
1.5		2.25								
Biological durability	NPD									
Pentachlorophenol content	No use of PCP-containing components									
Bracing load	Acc. to EN 1995-1-1, Ch. 9.2									
Embedding strength	Acc. to EN 1995-1-1, Ch. 8									
Air tightness	≤ 0,12 m ³ /m ² h									

7. The product's performance as declared in section 1 of this document corresponds to the performance as declared in section 6.

The manufacturer given in section 3 takes full responsibility for preparing this declaration of performance.

Signed for the manufacturer and on behalf of the manufacturer by:



.....
(Robert Schneider, Managing Director)



.....
(Daniel Zahl, Sales Director OSB, MDF)

Heiligengrabe, 01.07.2024

(Place and date of issue)