

Declaration of Performance

SKDE_OSB-3_CPR_2022_057

- English Version -

1. Unique identification code of the product type:

SWISS KRONO OSB/3 EN300 8 mm
SWISS KRONO OSB/3 EN300 9 mm
SWISS KRONO OSB/3 EN300 10 mm
SWISS KRONO OSB/3 EN300 12 mm
SWISS KRONO OSB/3 EN300 15 mm
SWISS KRONO OSB/3 EN300 18 mm
SWISS KRONO OSB/3 EN300 22 mm
SWISS KRONO OSB/3 EN300 25 mm
SWISS KRONO OSB/3 EN300 30 mm
SWISS KRONO OSB/3 EN300 40 mm

(Special thicknesses on request):

SWISS KRONO OSB/3 EN300 11 mm
SWISS KRONO OSB/3 EN300 13 mm
SWISS KRONO OSB/3 EN300 14 mm
SWISS KRONO OSB/3 EN300 16 mm
SWISS KRONO OSB/3 EN300 17 mm
SWISS KRONO OSB/3 EN300 19 mm
SWISS KRONO OSB/3 EN300 20 mm
SWISS KRONO OSB/3 EN300 21 mm
SWISS KRONO OSB/3 EN300 23 mm
SWISS KRONO OSB/3 EN300 24 mm
SWISS KRONO OSB/3 EN300 27 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)

SWISS KRONO TEX GmbH & Co. KG
Wittstocker Chaussee 1
16909 Heiligengrabe
Germany
Tel.: +49(0)33962/69-740
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							
Characteristics	Performance	Thickness range t (mm)					Harmonised technical specification
		6 to 10	> 10 to < 18	18 to 25	> 25 to 32	> 32 to 40	
Bending strength	Bending strength - major axis	Technical class OSB/3 acc. to EN 300			16	14	EN 13986:2015-06
	Bending strength - minor axis	Technical class OSB/3 acc. to EN 300			8	7	
Bending strength (E-modulus)	Modulus of elasticity in bending - major axis	Technical class OSB/3 acc. to EN 300			3500	3500	
	Modulus of elasticity in bending - minor axis	Technical class OSB/3 acc. to EN 300			1400	1400	
Durability (swelling in thickness)	Thickness swelling after immersion for 24 h (%)	≤ 15	≤ 15	≤ 15	≤ 15	≤ 15	
Durability (moisture resistance)	Bending strength after cyclic test - major axis (N/mm ²)	9	8	7	6	6	
Formaldehyde release	E1 (100 % formaldehyde free binders)						
Reaction to fire		Min. thickness (mm)	Class (without flooring) ^g		Class (flooring) ^h		
	Without gap behind OSB ^{a b e f}	9	D-s2,d0		D _{fi,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 _{fi,s1}		
	With open air gap behind OSB ^{d e f}	18	D-s2,d0		D _{fi,s1}		
	Without limitations ^{e f}	3	E		E _{fi}		
	^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 .							

	^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/m ³ .									
	^e This class also applies, with the exception of floor coverings, to laminated and both phenolic and melamine resin-coated boards.									
	^f A vapour barrier at least 0.4 mm thick with a density of up to 22 g/m ² may be installed between the wood-based material and the substrate if there is no air gap between them.									
	^g Class according to Table 1 of the annex to Decision 2000/147/EC.									
	^h Class according to Table 2 of the annex to Decision 2000/147/EC.									
Water vapour permeability	Thickness range d (mm)		6 to < 12		12 to 40					
	sd-value (m) = (μ x d [m]) - dry		NPD		≥ 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)				
	10	24	16 to 18	27	31 to 36	31				
	11	25	19 to 21	28	37 to 40	32				
	12	25	22 to 25	29						
	13 to 15	26	26 to 30	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 12369-1								
	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		
	> 6 to 10	≥ 600	18.0	9.0	9.9	7.2	15.9	12.9	6.8	1.0
	> 10 to 18	≥ 600	16.4	8.2	9.4	7.0	15.4	12.7	6.8	1.0
	> 18 to 25	≥ 600	14.8	7.4	9.0	6.8	14.8	12.4	6.8	1.0

Thickness (mm)	Stiffness values (N/mm ²)							
	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		
> 6 to 10	4930	1980	3800	3000	3800	3000	1080	50
> 10 to 18	4930	1980	3800	3000	3800	3000	1080	50
> 18 to 25	4930	1980	3800	3000	3800	3000	1080	50
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, 12.10.2022

(Place and date of issue)