Declaration of Performance

KDE_OSB-3_CPR_2016_039

- 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 GmbH
Wittstocker Chaussee 1
16909 Heiligengrabe
Germany
Tel.: +49(0)33962/69-740
Email: info@kronoply.de
Web: www.swisskrono.de

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**						
		Thickness range (mm)					DIN EN 13986:2004 +A1:2015
		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	
	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)	Internal bond after cyclic test (N/mm²)	≥ 0.18	≥ 0.15	≥ 0.13	≥ 0.10	≥ 0.08	
Formaldehyde realease	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	$D_{fl,s1}$			
	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/m³ or products of class D-s2, d2 with a bulk density of at least 400 kg/m³.						
	[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/m³.						

	[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.
	[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/m² 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 value (μ)	200 (moist) / 300 (dry)											
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/m³) and characteristic strength values (N/mm²) 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/mm²)							
	t_{min}	Bending		Tensile force		Compression		Shear perpendicular to the board plane	Shear in the board plane
		f_m		f_t		f_c		f_v	f_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	NPD		
Embedding strength	NPD		

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:

.....	.....
(Hendrik Hecht, Managing Director)	(Uwe Jöst, Managing Director)

Heiligengrabe, 07.03.2016

(Place and date of issue)