

SWISS KRONO OSB/4 EN300 - characteristic values

Identification:

- from 10 to < 25mm: **SWISS KRONO OSB/4 EN300 F******
- from 25 to 30mm: **SWISS KRONO OSB/4 EN300 MAGNUMBOARD (MB)**

For non-load bearing, high load bearing and stiffening applications in dry and humid conditions

d	Strand direction						
	Major axis			Minor axis			
	Thickness range [mm]						
	10 - 18	>18 - < 25	25 - 30	10 - 18	>18 - < 25	25 - 30	
Strength values [N/mm²]							
Stresses on board							
Bending	$f_{m,k}$	28.0	23.0	27.5	14.0	12.5	19.0
Shear	$f_{v,k}$	1.5			1.5		
Plate loading							
Bending	$f_{m,k}$	19.5	17.0	10.9*	13.5	12.5	8.0*
Tensile force	$f_{t,k}$	12.0	10.5	11.5	8.0	7.5	11.0
Compression	$f_{c,k}$	14.0	12.5	14.5	11.0	10.5	14.5
Shear	$f_{v,k}$	8.0	7.0	7.0	8.0	7.0	7.0
Stiffness values [N/mm²]							
Stresses on board							
Bending modulus of elasticity	E_m^a	6500	7500	3000	3500		
Shear modulus	G_r^a	100	70	100	90		
Plate loading							
Tensile force modulus of elasticity	E_t^a	3500			2500		
Compression modulus of elasticity	E_c^a	3500			2500		
Shear modulus	G_v^a	1000	1100	1000	1100		
The characteristic stiffness values E_{05} and G_{05} are calculated as follows: $E_{05} = 0.9 \times E$ and $G_{05} = 0.9 \times G$							
* This value is not covered for thicknesses > 25 mm							
General and building physics values							
Bulk density acc. to EN 323	m	620kg/m ³					
Max. deviations in board thickness [mm] **sanded		± 0.4	± 0,8 ± 0,3**	± 0.4	± 0,8 ± 0,3**		
Tolerance in length and width		± 3mm					
Thermal conductivity acc. to EN 13986	λ	0.13W/mK					
Water vapour resistance	s_d	≥ 2.0m (from 12 to 30mm) - dry ($\mu \times d$)					
Air tightness acc. to EN 12114 at 50 Pa		0.12[m ³ /m ² h]					
Thickness swelling acc. to EN 317		≤ 9%	≤ 8%	≤ 8%	≤ 8%		
Coefficient of expansion for 1% change in wood moisture content		0.015%					
Waste code		03 01 05					
Emissions class		E1 – 100% Formaldehyde-free binders < 0.03 ppm					
VOC-emission / DIBt-Certificate: G-160-18-0001		Compliance with the Health Protection Requirements for Building Structures in acc. with Annex 8 of the German Model Administrative Regulation on Technical Construction Requirements (MVVTB 2017/1)					
EPD as per ISO 14025 and EN 15804		EPD-KRO-20200203-IBD1-EN					
Service classes acc. to EN 1995-1-1		1 + 2					
Reaction to fire acc. to EN 13501-1		D-s2, d0					
Declaration of Performance No. acc. to CPR		SKDE_OSB-4_CPR_2022_058					