

SWISS KRONO OSB/3 EN300 - Characteristic values acc. to EN 13986

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

	d	Strand direction					
		Major axis			Minor axis		
		Thickness range [mm]					
		6 - 10	>10 - 18	>18 - 25	6 - 10	>10 - 18	>18 - 25
Strength values [N/mm²]							
Stresses on board							
Bending	$f_{m,k}$	18.0	16.4	14.8	9.0	8.2	7.4
Compression	$f_{c,90,k}$	10.0			10.0		
Shear	$f_{v,k}$	1.0			1.0		
Plate loading							
Bending	$f_{m,k}$	9.9	9.4	9.0	7.2	7.0	6.8
Tensile force	$f_{t,k}$	9.9	9.4	9.0	7.2	7.0	6.8
Compression	$f_{c,k}$	15.9	15.4	14.8	12.9	12.7	12.4
Shear	$f_{v,k}$	6.8			6.8		
Stiffness values [N/mm²]							
Stresses on board							
Bending modulus of elasticity	E_m^a	4930			1980		
Shear modulus	G_r^a	50			50		
Plate loading							
Tensile force modulus of elasticity	E_t^a	3800			3000		
Compression modulus of elasticity	E_c^a	3800			3000		
Shear modulus	G_v^a	1080			1080		
^a The characteristic stiffness values E_{05} and G_{05} are calculated as follows: $E_{05} = 0.85 \times E$ and $G_{05} = 0.85 \times E$							
General and building physics values							
Bulk density acc. to EN 323	m	600 kg/m ³					
Max. deviations in board thickness		± 0.8 mm (ContiFinish®) ± 0.3 mm (sanded)					
Tolerance in length and width		± 3 mm					
Perpendicularity acc. to EN 324-2		2 mm/m					
Thermal conductivity acc. to EN 13986	λ	0.13 W/mK					
Water vapour permeability value	μ	200 (moist) / 300 (dry)					
Waste code		03 01 05					
Air tightness at 50 Pa		0,14 [m ³ /hm ²]					
Thickness swelling acc. to EN 317		≤ 15 %					
Coefficient of expansion for 1% change in wood moisture content		0.03 %					
Emissions class		E1 – 100 % Formaldehyde-free binders (< 0.03 ppm)					
Environmental Product Declaration as per ISO 14025 an EN 15084		EPD-KRO-20150067-IBD2-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		KDE_OS3-3_CPR_2016_039					