

PROPERTIES	VALUES										REMARKS	MEASURED ACCORDING TO STANDARD			
Moisture content	4-12%											EN 322			
Density	550-800 kg/m <sup>3</sup>											EN 323			
Number of plies – according to panel thickness  Markings: „I and „–“ 1,5 mm plies	Nominal thickness (t) [mm]	Number of plies		Example of panel assembly							Standard thickness of veneer is 1,5 mm				
	4	3		-											
	6,5	5		-   -											
	9	7		-   -   -											
	12	9		-   -   -   -											
	15	11		-   -   -   -   -											
	18	13		-   -   -   -   -   -											
	21	15		-   -   -   -   -   -   -											
	24	17		-   -   -   -   -   -   -   -											
	27	19		-   -   -   -   -   -   -   -   -											
	30	21		-   -   -   -   -   -   -   -   -   -											
35	25		-   -   -   -   -   -   -   -   -   -   -												
Tolerances on length and width of the panel	± 3,5 mm											EN 315 EN 324-1			
Thickness tolerance	Nominal thickness (t) [mm]	Unsanded panels			Sanded panels							EN 315 EN 324-1			
		Thickness tolerance within one panel [mm]	Tolerances on nominal thickness [mm]	Thickness tolerance within one panel [mm]	Tolerances on nominal thickness [mm]										
		≥ 3 ≤ 12	1,0	+(0,8+0,03t) -(0,4+0,03t)	0,6	+(0,2+0,03t) -(0,4+0,03t)									
		> 12 ≤ 25	1,5		0,8	+(0,0+0,05t) -(0,4+0,05t)									
		> 25 ≤ 30				+(0,0+0,03t) -(0,4+0,03t)									
> 30				+(0,0+0,03t) -(0,4+0,03t)											
For sanded panels:															
Thickness (t) [mm]	4	5-8	9-11	12-14	15-18	19-21	22-24	25	26	27-28	29-30	31	32-34	35-38	39-40
Tolerance [mm]	+0,3 -0,5	+0,4 -0,6	+0,5 -0,7	+0,6 -0,8	+0,7 -0,9	+0,8 -1,0	+0,9 -1,1	+1,0 -1,2	+1,3 -1,7	+1,4 -1,8	+1,5 -1,9	+0,9 -1,3	+1,0 -1,4	+1,1 -1,5	+1,2 -1,6
Tolerance for straightness of edges and squareness	1 mm/m											EN 315 EN 324-2			
Bending strength	30-100 MPa										Depending on type of wood used for particular plywood plate	EN 310			
Tensile strength	30-60 MPa														
Compression strength	25-50 MPa														
Modulus of elasticity in bending	3500-10000 MPa														

PROPERTIES	VALUES		REMARKS	MEASURED ACCORDING TO STANDARD
Dimensional changes associated with changes in relative humidity	do 0,5%			EN 318
Formaldehyde emission class	Emission class A $\leq 3,5$ mg HCHO/m <sup>2</sup> ·h; Standard formaldehyde emission acc. to CARB Phase 1 ( $\leq 0,8$ mg/m <sup>2</sup> ·h) or 2 ( $\leq 0,5$ mg/m <sup>2</sup> ·h)		Hygienic class E1	EN ISO 717-2
Bonding quality	Mean shear strength $f_v$ [N/mm <sup>2</sup> ]	Mean apparent cohesive wood failure [%]		EN 314-2
	$0,2 \leq f_v < 0,4$ $0,4 \leq f_v < 0,6$ $0,6 \leq f_v < 1,0$ $1,0 \leq f_v$	$> 80$ $> 60$ $> 40$ no requirement		
Reaction to fire class	<b>D-s2,d0</b> <b>D</b> – products which can resist in a long time reaction of a small flame, without significant propagation of flame. They can resist thermal reaction of single flaming object with sufficient thermal emission <b>s2</b> – all quantity of smoke and increase factor of smoke emission are limited <b>d0</b> – there are not flaming drops/particles		Thickness $\geq 9$ mm Density $\geq 400$ kg/m <sup>3</sup>	EN 13986 EN 13501-1
	F – products for which is not given reaction to fire class		Thickness $\leq 9$ mm	
Water vapour resistance factorsj	Mean density [kg/m <sup>3</sup> ]	Resistance factor on water vapour penetration $\mu$		EN 13986 EN 12524
		for high air moisture content	for low air moisture content	
	300	50	150	
	500	70	200	
	700	90	220	
1000	110	250		
Sound absorption coefficient	Frequency range 250 Hz do 500 Hz	Frequency range 1000 Hz do 2000 Hz		EN 13986
	0,10	0,30		
Airborne sound insulation	The sound transmission loss $R$ of a single wood-based panel, measured in dB, is related to the mean surface mass $m_s$ in kg/m <sup>2</sup> according to the following equation: $R = 13 \times \lg(m_s) + 14$ (which is only valid for frequency range of 1 kHz to 3 kHz at a surface mass $> 5$ kg/m <sup>2</sup> )			EN 13986 EN ISO 140-3 EN ISO 717-1
Thermal conductivity	Mean density [kg/m <sup>3</sup> ]	Thermal conductivity $\lambda$ [W / (m °K)]		EN 13986 EN 12664
	300	0,09		
	500	0,13		
	700	0,17		
	1000	0,24		