



TIANMA  
LVJIAN

天马绿建(南通)木结构科技有限公司  
Tianma Lvjian (Nantong) Wooden Structure Technology Co., Ltd.  
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Declaration of Performance  
NO.TL-DOP-250401

1.	Unique Identification code of product type	Birch Plywood, uncoated, based on phenol-formaldehyde resin		
2.	Intended use(s): Technical class(es): Thickness range:	Plywood for Internal use as a non-structural component in humid conditions 4 - 8 mm: 3 (EN 636-2) 9 - 40 mm: 3 (EN 636-2NS) 4 mm - 40 mm		
3.	Manufacturer (Adress)	Tianma Lvjian (Nantong) Wooden Structure Technology Co.,Ltd. No.82 Jianghai Rd, Nantong, Jiangsu, China		
4.	System of Assessment and Verification of Constancy of Performance (AVCP)	System 4		
5.	Harmonized standard	EN 13986:2004+A1:2015		
	Notified body	OTC Bulgaria Ltd. (notified body 2787) Certificate N°: VCP-12112, valid till 14.03.2027.		
6.	Declared performances			
	Essential characteristics	Performance	Harmonized technical specification	
	Bending strength (acc. to EN 636) in length direction ( $f_{m,0}$ ) / width direction ( $f_{m,90}$ ) class	5,0 - 9,0 mm F 50/30 12,0 - 15,0 mm F 50/30 18,0 mm F 40/40 21,0 - 40,0 mm F 40/35	EN 13986:2004 +A1:2015	
	Modulus of elasticity in bending (stiffness in bending acc. to EN 636) in length direction ( $E_{m,0}$ ) / width direction ( $E_{m,90}$ ) class	5,0 - 9,0 mm E 100/40 12,0 - 15,0 mm E 80/60 18,0 mm E 80/70 21,0 - 40,0 mm E 80/60		
	Characteristic strength values in bending $f_{m,05}$ (0/90) ( $f_{m,0}$ / $f_{m,90}$ ) N/mm <sup>2</sup>	5,0 - 9,0 mm 50/30 12,0 - 15,0 mm 50/30 18,0 mm 40/40 21,0 - 40,0 mm 40/30		
	Characteristic strength values in tension, compression $f_{t,c,05}$ (0/90) ( $f_{t,c,0}$ / $f_{t,c,90}$ ) N/mm <sup>2</sup>	5,0 - 9,0 mm 20/15 12,0 - 15,0 mm 20/15 18,0 mm 16/20 21,0 - 40,0 mm 16/15		
	Characteristic strength in shear (0/90) ( $f_v$ / $f_{t,v}$ ) N/mm <sup>2</sup>	6,3/ 1,0		
	Stiffness in bending $E_{m,50}$ (0/90) ( $E_{m,0}$ / $E_{m,90}$ ) N/mm <sup>2</sup>	5,0-9,0 mm 10000/4000 12,0-15,0 mm 8000/6000 18,0 mm 8000/7000 21.0 - 40.0mm 8000/6000		
	Stiffness in tension, Compression $E_{t,c,50}$ (0/90) ( $E_{t,c,0}$ / $E_{t,c,90}$ ) N/mm <sup>2</sup>	5,0 - 9,0 mm 5000/3200 12,0 - 15,0 mm 4000/4800 18,0 mm 4000/5600 21,0 - 40,0 mm 4000/4800		
	Stiffness in shear (0/90) ( $G_v$ / $G_t$ ) N/mm <sup>2</sup>	480 / 60		
	Punching shear (for floor and roofs) as point load strength and point load stiffness N and N/mm <sup>2</sup>	NPD		
	Racking resistance for walls N and N/mm <sup>2</sup>	NPD		
	Impact resistance (for floors, roofs and walls) class	NPD		
	Reaction to fire class	[d-s2,d0]		
	Water vapour permeability ( $\mu$ ) value	wet cup: 90 / dry cup: 220		
	Release of formaldehyde (expressed as class E1 or E2) class	E1		
	Release (content) of pentachlorophenol (PCP) ppm	NPD		
	Airbase sound insulation (R) dB	NPD		
	Sound absorption (factor $\alpha$ ) value	0,10 $\alpha$ (250 Hz - 500 Hz) 0,30 $\alpha$ (1 000 Hz - 2 000 Hz)		
	Thermal conductivity ( $\lambda$ ) W/(m*K)	0,17		
	Embedment strength ( $f_b$ ) N/mm <sup>2</sup>	NPD		
	Air permeability ( $V_0$ ) m <sup>3</sup> /h	NPD		
Durability	Bonding strength (expressed as bonding classes 1, 2 or 3) (acc. to EN 314-1, 2) class	2		
	Internal bond N/mm <sup>2</sup>	NPD		
	Swelling thickness %	NPD		
	Moisture resistance class	2		
	Mechanical (i.e. duration of load creep) - modification factors $k_{mod}$ and $k_{def}$ value	NPD		
	Biological use class	NPD		

\*NPD...No Performance Determined.

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer defined above.

Signed by:

Haifeng Ma Head of Quality Department  
name and function

