

## **DECLARATION OF PERFORMANCE, UPM PLYWOOD**

**No. UPM024CPR**

1. Unique identification code of the product-type:  
Structural spruce plywood, 15–30 mm
2. Intended uses:  
For internal use as a structural component in dry conditions, EN 636-1  
For protected external use as a structural component in humid conditions, EN 636-2
3. Manufacturer:  
WISA®  
UPM Plywood Oy  
P.O. Box 203  
FI-15141 Lahti, Finland  
[www.wisaplywood.com](http://www.wisaplywood.com)
5. System of AVCP:  
AVCP system 1
- 6a. Harmonized standard:  
EN 13986:2004 + A1:2015  
EN 13501-1+A1

Notified body:  
Inspecta Sertifiointi Oy No. 0416  
Certificate of constancy of performance 0416-CPR-9606.

7. Declared performance:

Essential characteristics	Performance	Harmonised standard
Point load strength and stiffness	NPD	EN 13986:2004+A1:2015
Racking resistance	Calculation according to EN 1995-1-1	
Impact resistance	NPD	
Water vapour permeability $\mu$	Wet 66, dry 190	
	Mean density 460 kg/m <sup>3</sup>	
Release of formaldehyde	E1	
Content of pentachlorophenol (PCP)	≤ 5 ppm	
Airborne sound insulation	NPD	
Sound absorption $\alpha$	0,10/0,30	
Thermal conductivity $\lambda$	0,13 W/mK	
Embedment strength	Calculation according to EN 1995-1-1	
Air permeability	NPD	
Bonding quality (acc. to EN 314-2)	Class 3	
Biological durability	Use class 2	

Reaction to fire			
End use condition <sup>(6)</sup>	Minimum thickness (mm)	Class <sup>(7)</sup> (excluding floorings)	Class <sup>(8)</sup> (floorings)
Any <sup>(5)</sup>	15	B-s1, d0	B <sub>fl</sub> -s1

<sup>(5)</sup> Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

<sup>(6)</sup> A vapour barrier with a thickness up to 0,4 mm and a mass up to 200 g/m<sup>2</sup> can be mounted in between the wood-based panel and a substrate if there are no air gaps in between.

<sup>(7)</sup> Class as provided for in Table 1 of the Annex to Decision 2000/147/EC.

<sup>(8)</sup> Class as provided for in Table 2 of the Annex to Decision 2000/147/EC.

Nominal thickness		15	18	21	24	27	30
Number of plies		5	7	7	9	9	11
Essential characteristics		Performance					
Characteristic bending strength N/mm <sup>2</sup>	f <sub>m  </sub>	23	20,4	18,9	19,4	19,3	18,7
	f <sub>m⊥</sub>	11,2	13	14,3	13,1	13,8	13,3
Characteristic compression strength N/mm <sup>2</sup>	f <sub>c  </sub>	17,5	16,7	16,0	17,0	15,5	17,2
	f <sub>c⊥</sub>	12,5	13,3	14,0	13,0	14,5	12,8
Characteristic compression strength N/mm <sup>2</sup>	f <sub>t  </sub>	10,5	10	9,6	10,2	9,3	10,3
	f <sub>t⊥</sub>	7,5	8	8,4	7,8	8,7	7,7
Mean MOE in bending N/mm <sup>2</sup>	E <sub>m  </sub>	9201	8170	7547	7751	7702	7479
	E <sub>m⊥</sub>	2799	3830	4453	4249	4298	4521
Mean MOE in compression and tension N/mm <sup>2</sup>	E <sub>t,c  </sub>	7013	6682	6408	6800	6182	6868
	E <sub>t,c⊥</sub>	4987	5318	5592	5200	5818	5132
Char. panel shear N/mm <sup>2</sup>	f <sub>v  </sub>	3,5	3,5				
	f <sub>v⊥</sub>	3,5	3,5				
Mean MOR in panel shear N/mm <sup>2</sup>	f <sub>r  </sub>	1	1				
	f <sub>r⊥</sub>	0,6	0,8				
Mean MOR in panel shear N/mm <sup>2</sup>	G <sub>v  </sub>	350	350				
	G <sub>v⊥</sub>	350	350				
Mean MOR in planar shear N/mm <sup>2</sup>	G <sub>r  </sub>	50	50				
	G <sub>r⊥</sub>	30	30				
Strength and stiffness under point load		NPD					
Impact resistance		NPD					
k <sub>mod</sub> and k <sub>def</sub> values according to EN 1995-1-1							

Harmoniserad standard EN 13986:2004+A1:2015

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

Signed for and on behalf of the manufacturer by:

Lahti, Finland, November 28th, 2018



Riku Härkönen, Product Manager  
UPM Plywood