

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

**No. UPM007CPR**

1. Unique identification code of the product-type:  
Structural birch plywood, uncoated or coated, 6,5–50 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  
For external use as a structural component with coating and edge sealing, EN 636-3
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 2+
- 6a. Harmonised standard:  
EN 13986:2004 + A1:2015

**Notified body:**

Inspecta Sertifiointi Oy No. 0416 has performed the initial inspection of the manufacturing plant and a factory production control and continuous surveillance, assessment and evaluation of factory production control and issued the certificates of conformity of the factory production control 0416-CPR-7108 (Joensuu), 0416-CPR-7110 (Pello), 0416-CPR-7111 (Savonlinna), 0416-CPR-7112 (Chudovo), 0416-CPR-7113 (Otepää).

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 90, dry 220 (uncoated)	
	Mean density 680 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 $\lambda$	0,17 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 (uncoated)	
	Use class 3 (coated and edge sealed)	

Reaction to fire			
End use condition <sup>(6)</sup>	Minimum thickness (mm)	Class <sup>(7)</sup> (excluding floorings)	Class <sup>(8)</sup> (floorings)
Without an air gap behind the wood-based panel <sup>(1), (2), (5)</sup>	9	D-s2, d0	D <sub>fl</sub> -s1
With a closed or an open air gap not more than 22 mm behind the wood-based panel <sup>(3), (5)</sup>	9	D-s2, d2	–
With a closed air gap behind the wood-based panel <sup>(4), (5)</sup>	15	D-s2, d1	D <sub>fl</sub> -s1
With an open air gap behind the wood-based panel <sup>(4), (5)</sup>	18	D-s2, d0	D <sub>fl</sub> -s1
Any <sup>(5)</sup>	4	E	E <sub>fl</sub>

<sup>(1)</sup> Mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10kg/m<sup>3</sup> or at least class D-s2, d2.

<sup>(2)</sup> A substrate of cellulose insulation material of at least class E may be included if mounted directly against the wood-based panel, but not for floorings.

<sup>(3)</sup> Mounted with an air gap behind. The reverse face of the cavity shall be at least class A2-s1, d0 products with minimum density 10 kg/m<sup>3</sup>.

<sup>(4)</sup> Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400 kg/m<sup>3</sup>.

<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		6,5	9	12	15	18	21	24	27	30	32	35	40	45	50
Number of plies		5	7	9	11	13	15	17	19	21	23	25	29	33	37
Essential characteristics															
Characteristic bending strength N/mm²	f <sub>m  </sub>	44,6	46,4	42,9	41,3	40,2	39,4	38,9	38,4	38,1	37,8	37,6	37,2	36,9	36,7
	f <sub>m⊥</sub>	18,5	27,4	33,2	33,8	34,1	34,3	34,4	34,5	34,6	34,6	34,7	34,7	34,8	34,8
Characteristic compression strength N/mm²	f <sub>c  </sub>	29,3	28,3	27,7	27,4	27,2	27,0	26,9	26,8	26,7	26,7	26,6	26,5	26,5	26,4
	f <sub>c⊥</sub>	22,8	23,7	24,3	24,6	24,8	25,0	25,1	25,2	25,3	25,3	25,4	25,5	25,5	25,6
Characteristic tension strength N/mm²	f <sub>t  </sub>	42,2	40,8	40,0	39,5	39,2	39,0	38,8	38,7	38,5	38,4	38,4	38,3	38,2	38,1
	f <sub>t⊥</sub>	32,8	34,2	35,0	35,5	35,8	36,0	36,2	36,3	36,5	36,6	36,6	36,8	36,8	36,9
Mean MOE in bending N/mm²	E <sub>m  </sub>	11400	10850	10719	10316	10048	9858	9717	9607	9519	9448	9389	9296	9227	9173
	E <sub>m⊥</sub>	4270	6060	6781	7184	7452	7642	7783	7893	7981	8052	8111	8204	8273	8327
Mean MOE in compression and tension N/mm²	E <sub>t,c  </sub>	9844	9511	9333	9223	9148	9093	9052	9019	8993	8972	8953	8925	8904	8887
	E <sub>t,c⊥</sub>	7656	7989	8167	8277	8352	8407	8448	8481	8507	8528	8547	8575	8596	8613
Char. panel shear N/mm²	f <sub>v  </sub>	9,5	9,5	9,5											
	f <sub>v⊥</sub>	9,5	9,5	9,5											
Char. Planar shear N/mm²	f <sub>r  </sub>	3,2	2,6	2,6											
	f <sub>r⊥</sub>	1,8	2,4	2,4											
Mean MOR in panel shear N/mm²	G <sub>v  </sub>	620	620	620											
	G <sub>v⊥</sub>	620	620	620											
Mean MOR in planar shear N/mm²	G <sub>r  </sub>	170	205	205											
	G <sub>r⊥</sub>	120	160	180											
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															

Harmonised standard EN 13986:2004+A1:2015

Harmonised 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, April 27th, 2021



Sirkku Salmikuukka, Product Manager  
UPM Plywood