

DECLARATION OF PERFORMANCE, UPM PLYWOOD

No. UPM007CPR

1. Unique identification code of the product-type:
Structural birch plywood, uncoated or coated, 4–50 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
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-7109 (Jyväskylä), 0416-CPR-7110 (Pellos), 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 μ	Wet 90, dry 220 (uncoated)	
	Mean density 680 kg/m ³	
Release of formaldehyde	E1	
Content of pentachlorophenol (PCP)	≤ 5 ppm	
Airborne sound insulation	NPD	
Sound absorption α	0,10/0,30	
Thermal conductivity λ	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 ⁽⁶⁾	Minimum thickness (mm)	Class ⁽⁷⁾ (excluding floorings)	Class ⁽⁸⁾ (floorings)
Without an air gap behind the wood-based panel ^{(1), (2), (5)}	9	D-s2, d0	D _{fl} -s1
With a closed or an open air gap not more than 22 mm behind the wood-based panel ^{(3), (5)}	9	D-s2, d2	–
With a closed air gap behind the wood-based panel ^{(4), (5)}	15	D-s2, d1	D _{fl} -s1
With an open air gap behind the wood-based panel ^{(4), (5)}	18	D-s2, d0	D _{fl} -s1
Any ⁽⁵⁾	4	E	E _{fl}

⁽¹⁾ Mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10kg/m³ or at least class D-s2, d2.

⁽²⁾ 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.

⁽³⁾ 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/m³.

⁽⁴⁾ 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/m³.

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

⁽⁶⁾ A vapour barrier with a thickness up to 0,4 mm and a mass up to 200 g/m² can be mounted in between the wood-based panel and a substrate if there are no air gaps in between.

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

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

Nominal thickness		4	6,5	9	12	15	18	21	24	27	30	32	35	40	45	50
Number of plies		3	5	7	9	11	13	15	17	19	21	23	25	29	33	37
Essential characteristics		Performance														
Characteristic bending strength N/mm²	f _m	65,9	50,9	45,6	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 _{m⊥}	10,6	29,0	32,1	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 _c	31,8	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 _{c⊥}	20,2	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 _t	45,8	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 _{t⊥}	29,2	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 _m	16471	12737	11395	10719	10316	10048	9858	9717	9607	9519	9448	9389	9296	9227	9173
	E _{m⊥}	1029	4763	6105	6781	7184	7452	7642	7783	7893	7981	8052	8111	8204	8273	8327
Mean MOE in compression and tension N/mm²	E _{t,c}	10694	9844	9511	9333	9223	9148	9093	9052	9019	8993	8972	8953	8925	8904	8887
	E _{t,c⊥}	6806	7656	7989	8167	8277	8352	8407	8448	8481	8507	8528	8547	8575	8596	8613
Char. panel shear N/mm²	f _v	9,5	9,5	9,5	9,5											
	f _{v⊥}	9,5	9,5	9,5	9,5											
Char. Planar shear N/mm²	f _r	2,8	3,2	2,6	2,6											
	f _{r⊥}	NPD	1,8	2,4	2,4											
Mean MOR in panel shear N/mm²	G _v	620	620	620	620											
	G _{v⊥}	620	620	620	620											
Mean MOR in planar shear N/mm²	G _r	170	170	205	205											
	G _{r⊥}	NPD	120	160	180											
Strength and stiffness under point load		NPD														
Impact resistance		NPD														
k _{mod} and k _{def} values according to EN 1995-1-1																

Harmonised standard EN 13986:2004+A1:2015

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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 5th, 2018



Sirkku Salmikuukka, Product Manager
UPM Plywood