

DECLARATION OF PERFORMANCE, UPM PLYWOOD

No. UPM002CPR

1. Unique identification code of the product-type:
Structural spruce plywood, uncoated or coated, 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
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 certificate of conformity of the factory production control 0416-CPR-7110.

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 70, dry 200 (uncoated)	
	Mean density 500 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	0,13 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 (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⁾	5	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		5	6,5	9	12	15	18	19	21	24	27	30	40	50
Number of plies		3	3	5	7	7	9	9	11	11	13	15	21	21
Essential characteristics		Performance												
Characteristic bending strength N/mm ²	f _m	28,5	29,2	22,5	20,6	18,3	18,7	19,1	18,1	18,6	17,7	17,2	16,6	14,8
	f _{m⊥}	4,1	2,8	11,8	13,3	15,1	13,9	13,2	14,1	13,3	14,1	14,4	14,6	16,3
Characteristic compression strength N/mm ²	f _c	18,9	20,9	17,2	15,8	14,6	16,7	17,5	16,0	17,4	16,5	16,3	15,5	14,5
	f _{c⊥}	11,1	9,1	12,8	14,8	15,4	13,3	12,5	14,0	12,6	13,5	13,7	14,5	15,5
Characteristic tension strength N/mm ²	f _t	11,3	12,5	10,3	9,5	8,8	10,0	10,5	9,6	10,4	9,9	9,8	9,3	8,7
	f _{t⊥}	6,7	5,5	7,7	8,9	9,2	8,0	7,5	8,4	7,6	8,1	8,2	8,7	9,3
Mean MOE in bending N/mm ²	E _m	11390	11666	8995	8231	7308	7492	7641	7249	7444	7075	6873	6629	5905
	E _{m⊥}	610	334	3005	3826	4692	4508	4359	4751	4556	4925	5127	5371	6095
Mean MOE in compression and tension N/mm ²	E _{t,c}	7556	8364	6894	6328	5842	6667	7000	6393	6958	6586	6510	6203	5810
	E _{t,c⊥}	4444	3636	5106	5902	6158	5333	5000	5607	5042	5414	5490	5797	6190
Char. panel shear N/mm ²	f _v	3,5			3,5									
	f _{v⊥}	3,5			3,5									
Char. Planar shear N/mm ²	f _r	0,9			1									
	f _{r⊥}	NPD			0,8									
Mean MOR in panel shear N/mm ²	G _v	350			350									
	G _{v⊥}	350			350									
Mean MOR in planar shear N/mm ²	G _r	40			50									
	G _{r⊥}	NPD			40									
Strength and stiffness under point load		NPD												
Impact resistance		NPD												
k _{mod} and k _{def} values according to EN 1995-1-1														

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



Riku Härkönen, Product Manager
UPM Plywood