

DECLARATION OF PERFORMANCE, UPM PLYWOOD

No. UPM012CPR

1. Unique identification code of the product-type:
Structural plywood with birch face and spruce core, uncoated or coated, 5–24 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-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 520 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 _{fi} -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 _{fi} -s1
With an open air gap behind the wood-based panel ^{(4), (5)}	18	D-s2, d0	D _{fi} -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	9	12	15	18	21	24	
Number of plies		3	5	5	6/7	7	8/9	8	
Essential characteristics		Performance							
Characteristic bending strength N/mm ²	$f_{m\parallel}$	50,5	34,7	26,5	25,9	25,0	24,4	23,1	Harmonised standard EN 13986:2004+A1:2015
	$f_{m\perp}$	8,8	16,1	19,1	17,4	18,4	17,0	18,3	
Characteristic compression strength N/mm ²	$f_{c\parallel}$	23,8	20,5	15,7	16,6	15,8	13,5	13,1	
	$f_{c\perp}$	16,3	12,8	16,3	12,8	15,8	15,3	18,2	
Characteristic tension strength N/mm ²	$f_{t\parallel}$	34,4	12,3	9,4	10,0	9,5	8,1	7,9	
	$f_{t\perp}$	9,8	7,7	8,6	9,2	9,5	9,2	9,9	
Mean MOE in bending N/mm ²	$E_{m\parallel}$	14719	10109	7721	7558	7306	7108	6744	
	$E_{m\perp}$	1907	4919	6222	5946	6457	6062	6645	
Mean MOE in compression and tension N/mm ²	$E_{t,c\parallel}$	8021	8181	6285	6638	6335	5388	5248	
	$E_{t,c\perp}$	6500	5106	6508	5120	6330	6118	7261	
Char. panel shear N/mm ²	$f_{v\parallel}$	3,5	3,5	3,5	3,5	3,5	3,5	3,5	
	$f_{v\perp}$	3,5	3,5	3,5	3,5	3,5	3,5	3,5	
Char. Planar shear N/mm ²	$f_{r\parallel}$	1,1	1,3	1,0	1,3	0,9	0,9	0,7	
	$f_{r\perp}$	NPD	0,8	0,6	0,9	0,9	1,0	0,8	
Mean MOR in panel shear N/mm ²	$G_{v\parallel}$	350	350	350	350	350	350	350	
	$G_{v\perp}$	350	350	350	350	350	350	350	
Mean MOR in planar shear N/mm ²	$G_{r\parallel}$	35	49	49	70	51	40	40	
	$G_{r\perp}$	NPD	40	38	31	45	46	65	
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