

DECLARATION OF PERFORMANCE, UPM PLYWOOD

No. UPM003CPR

1. Unique identification code of the product-type:
Structural spruce plywood, uncoated, 12–25 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
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 66, dry 190 (uncoated)	
	Mean density 450 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	

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)}	12	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)}	12	D-s2, d2	-
With a closed air gap behind the wood-based panel ^{(4), (5)}	18	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

⁽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		12	14	18	21	25
Number of plies		4	4	5	6	7
Essential characteristics		Performance				
Characteristic bending strength N/mm ²	$f_{m \parallel}$	23,2	25,7	23,1	21,5	20,7
	$f_{m \perp}$	5,8	8,2	11,1	12,3	12,7
Characteristic compression strength N/mm ²	$f_{c \parallel}$	11,7	14,3	17,6	19,7	16,8
	$f_{c \perp}$	13,2	15,7	12,4	10,3	13,2
Characteristic tension strength N/mm ²	$f_{t \parallel}$	7,0	8,6	10,6	11,8	10,1
	$f_{t \perp}$	7,9	9,4	7,4	6,2	7,9
Mean MOE in bending N/mm ²	$E_{m \parallel}$	9274	10296	9237	8615	8277
	$E_{m \perp}$	1027	1704	2763	3385	3723
Mean MOE in compression and tension N/mm ²	$E_{t,c \parallel}$	4678	5739	7034	7886	6732
	$E_{t,c \perp}$	5288	6261	4966	4114	5268
Char. panel shear N/mm ²	$f_{v \parallel}$	3,5		3,5		3,5
	$f_{v \perp}$	3,5		3,5		3,5
Char. Planar shear N/mm ²	$f_{r \parallel}$	0,7		0,8		0,8
	$f_{r \perp}$	NPD		0,5		0,6
Mean MOR in panel shear N/mm ²	$G_{v \parallel}$	350		350		350
	$G_{v \perp}$	350		350		350
Mean MOR in planar shear N/mm ²	$G_{r \parallel}$	33		51		52
	$G_{r \perp}$	NPD		25		37
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

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