

## DECLARATION OF PERFORMANCE, UPM PLYWOOD

**No. UPM001CPR**

1. Unique identification code of the product-type:  
Structural spruce plywood, uncoated or coated, 9–50 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 & 0416-CPR-7109.

7. Declared performance:

Essential characteristics	Performance	Harmonised standard
Reaction to fire	D-s2,d0	EN 13986:2004+A1:2015
	Dfl-s1 (flooring)	
Water vapour permeability $\mu$	wet 66, dry 190 (uncoated)	
Release of formaldehyde	E1	
Content of pentachlorophenol (PCP)	Does not contain	
Airborne sound insulation	NPD	
Sound absorption $\alpha$	0,10/0,30	
Thermal conductivity $\lambda$	0,13	
Bonding quality (acc. to EN 314-2)	Class 3	
Biological durability	Use class 2 (uncoated)	
	Use class 3 (coated and edge sealed)	
Mean density kg/m <sup>3</sup>	460	

## 7. Declared performance

Nominal thickness		9	12	15	18	21	24	27	30	40	50	
Number of plies		3	5	5	7	7	9	9	11	13	17	
Essential characteristics		Performance										
Characteristic bending strength N/mm <sup>2</sup>	f <sub>m  </sub>	28,7	22,8	23,0	20,4	18,9	19,4	19,3	18,7	16,8	15,6	
	f <sub>m⊥</sub>	3,8	11,4	11,2	13,0	14,3	13,1	13,8	13,3	14,9	15,9	
Characteristic compression strength N/mm <sup>2</sup>	f <sub>c  </sub>	19,3	17,4	17,5	16,7	16,0	17,0	15,5	17,2	15,5	14,7	
	f <sub>c⊥</sub>	10,7	12,6	12,5	13,3	14,0	13,0	14,5	12,8	14,5	15,3	
Characteristic tension strength N/mm <sup>2</sup>	f <sub>t  </sub>	11,6	10,5	10,5	10,0	9,6	10,2	9,3	10,3	9,3	8,8	
	f <sub>t⊥</sub>	6,4	7,5	7,5	8,0	8,4	7,8	8,7	7,7	8,7	9,2	
Mean MOE in bending N/mm <sup>2</sup>	E <sub>m  </sub>	11461	9123	9201	8170	7547	7751	7702	7479	6723	6227	
	E <sub>m⊥</sub>	539	2876	2799	3830	4453	4249	4298	4521	5277	5773	
Mean MOE in compression and tension N/mm <sup>2</sup>	E <sub>t,c  </sub>	7733	6968	7013	6682	6408	6800	6182	6868	6211	5880	
	E <sub>t,c⊥</sub>	4267	5032	4987	5318	5592	5200	5818	5132	5789	6120	
Char. panel shear N/mm <sup>2</sup>	f <sub>v  </sub>	3,5	3,5					3,5				
	f <sub>v⊥</sub>	3,5	3,5					3,5				
Char. Planar shear N/mm <sup>2</sup>	f <sub>r  </sub>	1	1					1				
	f <sub>r⊥</sub>	NPD	0,6					0,8				
Mean MOR in panel shear N/mm <sup>2</sup>	G <sub>v  </sub>	350	350					350				
	G <sub>v⊥</sub>	350	350					350				
Mean MOR in planar shear N/mm <sup>2</sup>	G <sub>r  </sub>	45	50					50				
	G <sub>r⊥</sub>	NPD	30					40				
Strength and stiffness under point load		NPD										Harmonised standard EN 13986:2004+A1:2015
Impact resistance		NPD										
k <sub>mod</sub> and k <sub>def</sub> 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, February 1, 2018



Riku Härkönen, Product Manager  
UPM Plywood