

## 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-Kymmene Wood 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
Reaction to fire	D-s2,d0 (min 9 mm)	EN 13986:2004+A1:2015
	E (< 9 mm)	
	F (Multicoated- products)	
	Dfl-s1 (flooring, min 9 mm)	
Water vapour permeability $\mu$	wet 90, dry 220 (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 $\lambda$	0,17	
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>	680	

## 7. Declared performance

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/mm <sup>2</sup>	$f_{m\parallel}$	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	
	$f_{m\perp}$	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/mm <sup>2</sup>	$f_{c\parallel}$	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	
	$f_{c\perp}$	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/mm <sup>2</sup>	$f_{t\parallel}$	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	
	$f_{t\perp}$	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/mm <sup>2</sup>	$E_{m\parallel}$	16471	12737	11395	10719	10316	10048	9858	9717	9607	9519	9448	9389	9296	9227	9173	
	$E_{m\perp}$	1029	4763	6105	6781	7184	7452	7642	7783	7893	7981	8052	8111	8204	8273	8327	
Mean MOE in compression and tension N/mm <sup>2</sup>	$E_{t,c\parallel}$	10694	9844	9511	9333	9223	9148	9093	9052	9019	8993	8972	8953	8925	8904	8887	
	$E_{t,c\perp}$	6806	7656	7989	8167	8277	8352	8407	8448	8481	8507	8528	8547	8575	8596	8613	
Char. panel shear N/mm <sup>2</sup>	$f_{v\parallel}$	9,5	9,5	9,5	9,5												
	$f_{v\perp}$	9,5	9,5	9,5	9,5												
Char. Planar shear N/mm <sup>2</sup>	$f_{r\parallel}$	2,8	3,2	2,6	2,6												
	$f_{r\perp}$	NPD	1,8	2,4	2,4												
Mean MOR in panel shear N/mm <sup>2</sup>	$G_{v\parallel}$	620	620	620	620												
	$G_{v\perp}$	620	620	620	620												
Mean MOR in planar shear N/mm <sup>2</sup>	$G_{r\parallel}$	170	170	205	205												
	$G_{r\perp}$	NPD	120	160	180												
Strength and stiffness under point load		NPD															
Impact resistance		NPD															

Harmonised standard EN 13986:2004+A1:2015

$k_{mod}$  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 11th, 2016



Sirkku Heinonen, Product Manager  
UPM Plywood