

## DECLARATION OF PERFORMANCE, UPM PLYWOOD

**No. UPM022CPR**

1. Unique identification code of the product-type:  
Structural birch plywood, uncoated, 12–30 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-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	EN 13986:2004+A1:2015
	Dfl-s1 (flooring)	
Water vapour permeability $\mu$	wet 90, dry 220	
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	
Mean density kg/m <sup>3</sup>	680	

## 7. Declared performance

Nominal thickness	12	15	18	21	24	27	30	
Number of plies	9	11	13	15	17	19	21	
Essential characteristics	Performance							
Characteristic bending strength N/mm <sup>2</sup>	$f_{m \parallel}$	59,0	55,5	52,9	50,9	49,2	47,9	46,8
	$f_{m \perp}$	18,9	21,8	23,9	25,4	26,5	27,4	28,1
Characteristic compression strength N/mm <sup>2</sup>	$f_{c \parallel}$	33,8	32,3	31,3	30,6	30,0	29,6	29,3
	$f_{c \perp}$	18,2	19,7	20,7	21,4	22,0	22,4	22,8
Characteristic tension strength	$f_{t \parallel}$	48,8	46,6	45,2	44,1	43,3	42,7	42,2
	$f_{t \perp}$	26,3	28,4	29,8	30,9	31,7	32,3	32,8
Mean MOE in bending N/mm <sup>2</sup>	$E_{m \parallel}$	14749	13886	13228	12715	12305	11970	11692
	$E_{m \perp}$	2751	3614	4272	4785	5195	5530	5808
Mean MOE in compression and tension N/mm <sup>2</sup>	$E_{t,c \parallel}$	11375	10878	10540	10294	10108	9962	9844
	$E_{t,c \perp}$	6125	6622	6960	7206	7392	7538	7656
Char. panel shear N/mm <sup>2</sup>	$f_{v \parallel}$	9,5			9,5			
	$f_{v \perp}$	9,5			9,5			
Char. Planar shear N/mm <sup>2</sup>	$f_{r \parallel}$	2,7	2,8	2,7	2,8	2,7	2,7	2,7
	$f_{r \perp}$	1,8	1,8	2,0	2,0	2,1	2,1	2,2
Mean MOR in panel shear N/mm <sup>2</sup>	$G_{v \parallel}$	620			620			
	$G_{v \perp}$	620			620			
Mean MOR in planar shear N/mm <sup>2</sup>	$G_{r \parallel}$	222	219	217	215	214	213	213
	$G_{r \perp}$	119	138	150	158	164	168	172
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 11th, 2016



Sirkku Heinonen, Product Manager  
UPM Plywood