

## DECLARATION OF PERFORMANCE

No. **UPM012CPR**

1. Identification code of the product-type:  
Structural plywood with birch face and spruce core, uncoated or coated
2. Type, batch or serial number of any other element allowing identification of the construction product:  
Structural plywood with birch face and spruce core, uncoated or coated, 5-24 mm
3. Intended use or uses of the construction product:  
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
4. Name, registered trade name or registered trade mark and contact address of the manufacturer:  
WISA®  
UPM-Kymmene Wood Oy  
P.O. Box 203  
FI-15141 Lahti, Finland  
www.wisaplywood.com
6. System or systems of assessment and verification of constancy of performance of the construction product:  
AVCP system 2+
7. In case of the declaration of performance concerning a construction product covered by a harmonised standard:  
Notified factory production control certification body Inspecta Sertifiointi Oy No. 0416 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.

### 9. Declared performance

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	D-s2,d0 (min 9 mm)	EN 13986:2004
	E (< 9 mm)	
Water vapour permeability $\mu$	wet 70, dry 200 (uncoated)	
Release of formaldehyde	E1	
Content of pentachlorophenol (PCP)	No indication	
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)	

## 9. Declared performance, strength and stiffness for structural use

Nominal thickness		5	9	12	15	18	21	24	
Number of plies		3	5	5	6	7	8	8	
Essential characteristics		Performance							
Characteristic bending strength N/mm <sup>2</sup>	$f_{m  }$	50,5	34,7	26,5	25,9	25,0	24,4	23,1	
	$f_{m\perp}$	8,8	16,1	19,9	19,1	18,4	17,9	18,3	
Characteristic compression strength N/mm <sup>2</sup>	$f_{c  }$	23,8	20,5	15,7	19,2	15,8	13,5	13,1	
	$f_{c\perp}$	16,3	12,8	16,6	12,8	15,8	17,9	18,2	
Characteristic tension strength N/mm <sup>2</sup>	$f_{t  }$	34,4	12,3	9,4	11,5	9,5	8,1	7,9	
	$f_{t\perp}$	9,8	7,7	8,6	9,8	10,5	9,3	9,9	
Mean MOE in bending N/mm <sup>2</sup>	$E_{m  }$	14719	10109	7721	7558	7306	7108	6744	
	$E_{m\perp}$	1907	4919	6626	6524	6457	6420	6645	
Mean MOE in compression and tension N/mm <sup>2</sup>	$E_{tc  }$	8021	8181	6285	7687	6335	5388	5248	
	$E_{tc\perp}$	6500	5106	6646	5120	6330	7178	7261	
Char. panel shear N/mm <sup>2</sup>	$f_{v  }$	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 <sup>2</sup>	$f_{r  }$	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 <sup>2</sup>	$G_{v  }$	350	350	350	350	350	350	350	
	$G_{v\perp}$	350	350	350	350	350	350	350	
Mean MOR in planar shear N/mm <sup>2</sup>	$G_{r  }$	35	49	49	70	51	40	40	
	$G_{r\perp}$	NPD	40	39	31	45	64	65	
Strength and stiffness under point load		NPD							
Impact resistance		NPD							
K <sub>mod</sub> and K <sub>def</sub> values according to EN 1995-1-1									

Harmonised technical specification EN 13986:2004

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Lahti, Finland, 1 July, 2013



Marko Kirkkala, Portfolio Manager