

## DECLARATION OF PERFORMANCE

No. **UPM001CPR**

1. Identification code of the product-type:  
Structural spruce plywood, uncoated or coated
2. Type, batch or serial number of any other element allowing identification of the construction product:  
Structural spruce plywood, uncoated or coated, 9-50 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	EN 13986:2004
Water vapour permeability $\mu$	wet 66, dry 190 (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		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>	$f_{m  }$	28,7	22,8	23,0	20,4	18,9	19,4	19,3	18,7	16,8	15,6	
	$f_{m\perp}$	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>	$f_{c  }$	19,3	17,4	17,5	16,7	16,0	17,0	15,5	17,2	15,5	14,7	
	$f_{c\perp}$	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>	$f_{t  }$	11,6	10,5	10,5	10,0	9,6	10,2	9,3	10,3	9,3	8,8	
	$f_{t\perp}$	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>	$E_{m  }$	11461	9123	9201	8170	7547	7751	7702	7479	6723	6227	
	$E_{m\perp}$	539	2876	2799	3830	4453	4249	4298	4521	5277	5773	
Mean MOE in compression and tension N/mm <sup>2</sup>	$E_{t,c  }$	7733	6968	7013	6682	6408	6800	6182	6868	6211	5880	
	$E_{t,c\perp}$	4267	5032	4987	5318	5592	5200	5818	5132	5789	6120	
Char. panel shear N/mm <sup>2</sup>	$f_{v  }$	3,5	3,5					3,5				
	$f_{v\perp}$	3,5	3,5					3,5				
Char. Planar shear N/mm <sup>2</sup>	$f_{r  }$	1	1					1				
	$f_{r\perp}$	NPD	0,6					0,8				
Mean MOR in panel shear N/mm <sup>2</sup>	$G_{v  }$	350	350					350				
	$G_{v\perp}$	350	350					350				
Mean MOR in planar shear N/mm <sup>2</sup>	$G_{r  }$	45	50					50				
	$G_{r\perp}$	NPD	30					40				
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



Riku Härkönen, Portfolio Manager