

## DECLARATION OF PERFORMANCE

No. **UPM013CPR**

1. Identification code of the product-type:  
Structural plywood with birch face and spruce and birch mixed 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 and birch mixed core, uncoated or coated, 9-21 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-7109.
9. Declared performance

Essential characteristics	Performance	Harmonised technical specification
Reaction to fire	D-s2,d0 (min 9 mm)	EN 13986:2004
Water vapour permeability $\mu$	wet 80, dry 210 (uncoated)	
Release of formaldehyde	E1	
Content of pentachlorophenol (PCP)	No indication	
Airborne sound insulation	NPD	
Sound absorption $\alpha$	0,10/0,30	
Thermal conductivity $\lambda$	0,15	
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	
Number of plies		5	7	8	11	11	
Essential characteristics		Performance					
Characteristic bending strength N/mm <sup>2</sup>	$f_{m  }$	34,9	41,5	28,3	30,1	26,1	Harmonised technical specification EN 13986:2004
	$f_{m\perp}$	16,7	25,9	18,5	17,1	18,9	
Characteristic compression strength N/mm <sup>2</sup>	$f_{c  }$	21,3	21,7	16,9	22,8	19,5	
	$f_{c\perp}$	17,7	18,8	20,3	16,9	18,8	
Characteristic tension strength N/mm <sup>2</sup>	$f_{t  }$	30,7	13,0	24,4	32,9	28,1	
	$f_{t\perp}$	10,6	27,2	12,2	10,1	11,3	
Mean MOE in bending N/mm <sup>2</sup>	$E_{m  }$	9314	9675	7551	8016	6968	
	$E_{m\perp}$	5014	5595	6337	5988	6774	
Mean MOE in compression and tension N/mm <sup>2</sup>	$E_{t,c  }$	6545	8414	5195	7011	6000	
	$E_{t,c\perp}$	7091	5793	8104	6742	7500	
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>	$f_{r  }$	1,2	2,7	1,0			
	$f_{r\perp}$	1,9	0,9	2,4			
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>	$G_{r  }$	40	285	35			
	$G_{r\perp}$	203	33	200			
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							

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