

## DECLARATION OF PERFORMANCE

No. **UPM021CPR**

1. Identification code of the product-type:  
Structural spruce plywood, uncoated
2. Type, batch or serial number of any other element allowing identification of the construction product:  
Structural spruce plywood, uncoated, 15 - 22 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
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	

9. Declared performance, strength and stiffness for structural use

Nominal thickness		15 unsanded	18	18 unsanded	19	22		
Number of plies		5	7	7	6	7		
Essential characteristics		Performance						Harmonised technical specification EN 13986:2004
Characteristic bending strength N/mm <sup>2</sup>	$f_{m  }$	23,8	27,5	21,3	23,4	20,6		
	$f_{m\perp}$	10,4	5,7	12,1	10,2	12,8		
Characteristic compression strength N/mm <sup>2</sup>	$f_{c  }$	18,0	21,1	17,1	21,8	16,8		
	$f_{c\perp}$	12,0	8,9	12,9	8,2	13,2		
Characteristic tension strength N/mm <sup>2</sup>	$f_{t  }$	10,8	12,7	10,3	13,1	10,1		
	$f_{t\perp}$	7,2	5,3	7,7	4,9	7,9		
Mean MOE in bending N/mm <sup>2</sup>	$E_{m  }$	9504	10994	8536	9359	8243		
	$E_{m\perp}$	2496	1006	3464	2641	3757		
Mean MOE in compression and tension N/mm <sup>2</sup>	$E_{tc  }$	7200	8455	6857	8733	6716		
	$E_{tc\perp}$	4800	3545	5143	3267	5284		
Char. panel shear N/mm <sup>2</sup>	$f_{v  }$	3,5	3,5	3,5	3,5	3,5		
	$f_{v\perp}$	3,5	3,5	3,5	3,5	3,5		
Char. Planar shear N/mm <sup>2</sup>	$f_{r  }$	1,1	1,0	1,0	1,2	1,0		
	$f_{r\perp}$	0,6	0,4	0,8	0,5	0,8		
Mean MOR in panel shear N/mm <sup>2</sup>	$G_{v  }$	350	350	350	350	350		
	$G_{v\perp}$	350	350	350	350	350		
Mean MOR in planar shear N/mm <sup>2</sup>	$G_{r  }$	51	59	52	89	52		
	$G_{r\perp}$	28	21	36	22	37		
Strength and stiffness under point load	NPD							
Impact resistance	NPD							
$k_{mod}$ and $k_{def}$ 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, 13 March, 2015



Riku Härkönen, Product Manager