

## DECLARATION OF PERFORMANCE

No. **UPM002CPR**

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, 5-50 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 (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	6,5	9	12	15	18	19	21	24	27	30	40	50	
Number of plies	3	3	5	7	7	9	9	11	11	13	15	21	21	
Essential characteristics	Performance													
Characteristic bending strength N/mm <sup>2</sup>	$f_{m l}$	28,5	29,2	22,5	20,6	18,3	18,7	19,1	18,1	18,6	17,7	17,2	16,6	14,8
	$f_{m _}$	4,1	2,8	11,8	13,3	15,1	13,9	13,2	14,1	13,3	14,1	14,4	14,6	16,3
Characteristic compression strength N/mm <sup>2</sup>	$f_{c l}$	18,9	20,9	17,2	15,8	14,6	16,7	17,5	16,0	17,4	16,5	16,3	15,5	14,5
	$f_{c _}$	11,1	9,1	12,8	14,8	15,4	13,3	12,5	14,0	12,6	13,5	13,7	14,5	15,5
Characteristic tension strength N/mm <sup>2</sup>	$f_{t l}$	11,3	12,5	10,3	9,5	8,8	10,0	10,5	9,6	10,4	9,9	9,8	9,3	8,7
	$f_{t _}$	6,7	5,5	7,7	8,9	9,2	8,0	7,5	8,4	7,6	8,1	8,2	8,7	9,3
Mean MOE in bending N/mm <sup>2</sup>	$E_{m l}$	11390	11666	8995	8231	7308	7492	7641	7249	7444	7075	6873	6629	5905
	$E_{m _}$	610	334	3005	3826	4692	4508	4359	4751	4556	4925	5127	5371	6095
Mean MOE in compression and tension N/mm <sup>2</sup>	$E_{tc l}$	7556	8364	6894	6328	5842	6667	7000	6393	6958	6586	6510	6203	5810
	$E_{tc _}$	4444	3636	5106	5902	6158	5333	5000	5607	5042	5414	5490	5797	6190
Char. panel shear N/mm <sup>2</sup>	$f_{v l}$	3,5		3,5										
	$f_{v _}$	3,5		3,5										
Char. Planar shear N/mm <sup>2</sup>	$f_{r l}$	0,9		1										
	$f_{r _}$	NPD		0,8										
Mean MOR in panel shear N/mm <sup>2</sup>	$G_{v l}$	350		350										
	$G_{v _}$	350		350										
Mean MOR in planar shear N/mm <sup>2</sup>	$G_{r l}$	40		50										
	$G_{r _}$	NPD		40										
Strength and stiffness under point load	NPD													
Impact resistance	NPD													

Harmonised technical specification EN 13986:2004

$k_{mod}$  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, 1 July, 2013



Riku Härkönen, Portfolio Manager