

DECLARATION OF PERFORMANCE

No. **UPM006CPR**

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, 18-22 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 μ	wet 66, dry 190 (uncoated)	
Release of formaldehyde	E1	
Content of pentachlorophenol (PCP)	No indication	
Airborne sound insulation	NPD	
Sound absorption α	0,10/0,30	
Thermal conductivity λ	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		18	22	
Number of plies		7	9	
Essential characteristics		Performance		
Characteristic bending strength N/mm ²	$f_{m }$	20,2	19,1	Harmonised technical specification EN 13986:2004
	$f_{m\perp}$	12,7	13,6	
Characteristic compression strength N/mm ²	$f_{c }$	17,1	16,3	
	$f_{c\perp}$	12,9	13,7	
Characteristic tension strength N/mm ²	$f_{t }$	10,3	9,8	
	$f_{t\perp}$	7,7	8,2	
Mean MOE in bending N/mm ²	$E_{m }$	8131	7658	
	$E_{m\perp}$	3866	4342	
Mean MOE in compression and tension N/mm ²	$E_{t,c }$	6857	6526	
	$E_{t,c\perp}$	5143	5474	
Char. panel shear N/mm ²	$f_{v }$	3,5		
	$f_{v\perp}$	3,5		
Char. Planar shear N/mm ²	$f_{r }$	1,0		
	$f_{r\perp}$	0,8		
Mean MOR in panel shear N/mm ²	$G_{v }$	350		
	$G_{v\perp}$	350		
Mean MOR in planar shear N/mm ²	$G_{r }$	54	52	
	$G_{r\perp}$	36	42	
Strength and stiffness under point load	Appendix 1			
Impact resistance	Appendix 1			
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, April 24, 2015



Riku Härkönen, Portfolio Manager

CONCENTRATED POINT LOAD OF WISA®-SPRUCEFLOOR PLYWOOD
in accordance with Eurocode 5

The characteristic values are for a static concentrated load and mean stiffness according to EN 12871 for a structural floor and roof decking on joists.

The tested values are without safety factor.

The concentrated load is located at the tongued and grooved joint which is the most vulnerable point.

Table: Static point load (50 x 50 mm²) values and impact resistance for WISA-Sprucefloor.

			Point load			Soft body impact
			Characteristic strength		Mean stiffness	
Nominal thickness mm	Veneers/ layers	Span mm	Serviceability F _{ser} ' k	Ultimate F _{ult} ' k	Rm kN/mm	Impact resistance
			kN	kN		
Floor decking						
18	7/7	400	3.4	5.0	0.68	Fulfilled
18	7/7	600	3.3	3.9	0.34	Fulfilled
22	9/9	400	4.7	7.2	0.98	Fulfilled
22	9/9	600	4.4	6.2	0.55	Fulfilled

Detailed technical properties: Please see DoP (Declaration of Performance) UPM006CPR on www.wisaplywood.com/dop.