

DECLARATION OF PERFORMANCE, UPM PLYWOOD

No. UPM006CPR

1. Unique identification code of the product-type:
Structural spruce plywood, uncoated, 18–22 mm
2. Intended uses:
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
3. Manufacturer:
WISA®
UPM-Kymmene Wood Oy
P.O. Box 203
FI-15141 Lahti, Finland
www.wisaplywood.com
5. System of AVCP:
AVCP system 2+
- 6a. Harmonised standard:
EN 13986:2004 + A1:2015

Notified body:

Inspecta Sertifiointi Oy No. 0416 has 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.

7. Declared performance:

Essential characteristics	Performance	Harmonised standard
Reaction to fire	Dfl-s1	EN 13986:2004+A1:2015
Water vapour permeability μ	wet 66, dry 190 (uncoated)	
Release of formaldehyde	E1	
Content of pentachlorophenol (PCP)	Does not contain	
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	
Mean density kg/m ³	460	

7. Declared performance

Nominal thickness		18	22
Number of plies		7	9
Essential characteristics		Performance	
Characteristic bending strength N/mm ²	$f_{m\parallel}$	20,2	19,1
	$f_{m\perp}$	12,7	13,6
Characteristic compression strength N/mm ²	$f_{c\parallel}$	17,1	16,3
	$f_{c\perp}$	12,9	13,7
Characteristic tension strength N/mm ²	$f_{t\parallel}$	10,3	9,8
	$f_{t\perp}$	7,7	8,2
Mean MOE in bending N/mm ²	$E_{m\parallel}$	8131	7658
	$E_{m\perp}$	3866	4342
Mean MOE in compression and tension N/mm ²	$E_{t,c\parallel}$	6857	6526
	$E_{t,c\perp}$	5143	5474
Char. panel shear N/mm ²	$f_{v\parallel}$	3,5	
	$f_{v\perp}$	3,5	
Char. Planar shear N/mm ²	$f_{r\parallel}$	1,0	
	$f_{r\perp}$	0,8	
Mean MOR in panel shear N/mm ²	$G_{v\parallel}$	350	
	$G_{v\perp}$	350	
Mean MOR in planar shear N/mm ²	$G_{r\parallel}$	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			

Harmonised standard EN 13986:2004+A1:2015

The performance of the product identified above is in conformity with the set of declared performances. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Lahti, Finland, November 11th, 2016



Riku Härkönen, Product Manager
UPM Plywood

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.