

UK DECLARATION OF CONFORMITY

NO. MW/PW/411-002/UKCA/UKDOC

**UK
CA**

1. PRODUCT-TYPE:

- Metsä Wood structural birch plywood (MUF)
- Uncoated or overlaid (melamine film)
 - Melamine reinforced urea-formaldehyde adhesive (interior gluing quality)

2. INTENDED USES:

Structural elements in internal applications in construction

EN 636-1 S

- for internal structural use in dry conditions

3. MANUFACTURER:

Metsäliitto Cooperative
Metsä Wood
Revontulenpuisto 2 A
FI-02100 Espoo, Finland
Tel. +358 10 4605
www.metsawood.com

5. SYSTEM OF ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE:

AVCP System 2+

6a. DESIGNATED STANDARD:

EN 13986:2004+A1:2015

Approved body:

CATG Ltd, No. 1245

Certificate of conformity of the factory production control:

- 1245-CPR-5008 (Suolahti plywood mills)
- 1245-CPR-5010 (Punkaharju plywood mill)
- 1245-CPR-5011 (Pärnu plywood mill)

7. DECLARED PERFORMANCES

ESSENTIAL CHARACTERISTICS		PERFORMANCE													
Strength and stiffness for structural use:		Sanded Metsä Wood birch plywood													
		Nominal thickness (mm)													
		4	6,5	9	12	15	18	21	24	27	30	35	40	45	50
		Number of plies													
		3	5	7	9	11	13	15	17	19	21	25	29	32	35
Characteristic bending strength (N/mm ²)	II	65,9	50,9	45,6	42,9	41,3	40,2	39,4	38,9	38,4	38,1	37,6	37,2	37,0	36,8
	⊥	10,6	29,0	32,1	33,2	33,8	34,1	34,3	34,4	34,5	34,6	34,7	34,7	34,8	34,8
Mean modulus of elasticity in bending (N/mm ²)	II	16471	12737	11395	10719	10316	10048	9858	9717	9607	9519	9389	9296	9243	9198
	⊥	1029	4763	6105	6781	7184	7452	7642	7783	7893	7981	8111	8204	8257	8302
Characteristic compression strength (N/mm ²)	II	31,8	29,3	28,3	27,7	27,4	27,2	27,0	26,9	26,8	26,7	26,6	26,5	25,6	26,4
	⊥	20,2	22,8	23,7	24,3	24,6	24,8	25,0	25,1	25,2	25,3	25,4	25,5	26,4	25,6
Characteristic tension strength (N/mm ²)	II	45,8	42,2	40,8	40,0	39,5	39,2	39,0	38,8	38,7	38,5	38,4	38,3	37,0	38,1
	⊥	29,2	32,8	34,2	35,0	35,5	35,8	36,0	36,2	36,3	36,5	36,6	36,8	38,0	36,9
Mean modulus of elasticity in comp./tension (N/mm ²)	II	10694	9844	9511	9333	9223	9148	9093	9052	9019	8993	8953	8925	8631	8895
	⊥	6806	7656	7989	8167	8277	8352	8407	8448	8481	8507	8547	8575	8869	8605
Characteristic panel shear strength (N/mm ²)	II	9,5													
	⊥	9,5													
Mean modulus of rigidity in panel shear (N/mm ²)	II	620													
	⊥	620													
Characteristic planar shear strength (N/mm ²)	II	2,77	3,20	2,68	2,78	2,62	2,67	2,59	2,62	2,57	2,59	2,57	2,56	2,55	2,54
	⊥	NPD	1,78	2,35	2,22	2,39	2,34	2,41	2,39	2,43	2,41	2,43	2,44	2,47	2,46
Mean modulus of rigidity in planar shear (N/mm ²)	II	169	199	206	207	207	206	206	206	205	205	204	204	192	203
	⊥	NPD	123	155	170	178	183	186	189	190	192	193	195	208	196

II = along the face veneer grain direction

⊥ = across the face veneer grain direction

The material values in this DoP are to be used for structural calculations with EN 1995 (Eurocode 5).

ESSENTIAL CHARACTERISTICS	PERFORMANCE			
Bonding quality	Class 3 (exterior)			
Release of formaldehyde	E1			
Reaction to fire	End use condition ¹	Minimum thickness (mm)	Class (excluding floorings)	Class ² (floorings)
	- without an air gap behind the panel - mounted directly against class A1 or A2-s1, d0 products with minimum density 10 kg/m³ or at least class D-s2, d2 products with minimum density 400 kg/m³ - a substrate of cellulose insulation material of at least class E may be included if mounted directly against the panel, but not for floorings	9	D-s2, d0	D _{fl} -s1
	- with a closed or an open air gap not more than 22mm behind the panel - the reverse face of the cavity shall be at least class A2-s1, d0 products with minimum density 10 kg/m³	9	D-s2, d2	-
	- with a closed air gap behind the panel - the reverse face of the cavity shall be at least class D2-s2, d2 products with minimum density 400 kg/m³	15	D-s2, d1	D _{fl} -s1
	- with an open air gap behind the panel - the reverse face of the cavity shall be at least class D2-s2, d2 products with minimum density 400 kg/m³	18	D-s2, d0	D _{fl} -s1
	- any	3	E	E _{fl}
Water vapour permeability		Mean density	Wet cup	Dry cup
	Uncoated	680 kg/m ³	50 µ	530 µ
	Overlaid	680 kg/m ³	95 µ	3240 µ
Airborne sound insulation	NPD			
Sound absorption	0,10 (250 Hz – 500 Hz) 0,30 (1000 Hz – 2000 Hz)			
Thermal conductivity	0,17 W/(m K)			
Impact resistance	NPD			
Strength and stiffness under point load	NPD			

¹ A vapour barrier with a thickness up to 0,4 mm and a mass up to 200 g/m² can be mounted in between the panel and a substrate if there are no air gaps in between.

² Uncoated flooring panels

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ESSENTIAL CHARACTERISTICS		PERFORMANCE
Mechanical durability	k_{mod}	According to EN 1995-1-1
	k_{def}	According to EN 1995-1-1
Biological durability (EN 335)		Use class 1
Content of pentachlorophenol (PCP)		< 5 ppm
Characteristic embedment strength		Calculated according to EN 1995-1-1: - characteristic density (ρ_k) 630 kg/m ³
Racking resistance		Calculated according to EN 1995-1-1: - panel thickness 4-50 mm - characteristic embedment strength, see above
Air permeability		NPD

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The performance of the product identified above is in conformity with the set of declared performance/s. This UK declaration of conformity is issued, in accordance with Regulation 305/2011/EU as it has effect in the United Kingdom, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

At Espoo on 7.11.2022

Sakari Kainumaa
Director, Product Management
Metsä Wood



Juha Kasslin
SVP, Supply Chain Management
Metsä Wood

