

DECLARATION OF CONFORMITY, UPM PLYWOOD

No. UPM001CPR

1. Unique identification code of the product-type:
Structural spruce plywood, uncoated or coated, 9–50 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
For external use as a structural component with coating and edge sealing, EN 636-3
3. Manufacturer:
WISA®
UPM Plywood Oy
P.O. Box 203
FI-15141 Lahti, Finland
www.wisaplywood.com
4. Authorized presentative
UPM Wood Material (UK) Limited
Rutherford House, First Floor, Warrington Road, Birchwood
Warrington, Cheshire
WA3 6ZH
United Kingdom
5. System of AVCP:
AVCP system 2+
- 6a. Harmonised standard:
EN 13986:2004 + A1:2015

Notified body:

CATG Ltd No. 1245 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 1245-CPR-5003.

7. Declared performance:

| Essential characteristics | Performance | Harmonised standard |
|------------------------------------|---|-----------------------|
| Point load strength and stiffness | NPD | EN 13986:2004+A1:2015 |
| Racking resistance | Calculation according to EN 1995-1-1 | |
| Impact resistance | NPD | |
| Water vapour permeability μ | Wet 66, dry 190 (uncoated) Mean density 460kg/m ³ | |
| Release of formaldehyde | E1 | |
| Content of pentachlorophenol (PCP) | ≤ 5 ppm | |
| Airborne sound insulation | NPD | |
| Sound absorption α | 0,10/0,30 | |
| Thermal conductivity λ | 0,13 W/mK | |
| Embedment strength | Calculation according to EN 1995-1-1 | |
| Air permeability | NPD | |
| Bonding quality (acc. to EN 314-2) | Class 3 | |
| Biological durability | Use class 2 (uncoated) | |
| | Use class 3 (coated and edge sealed) | |

| Reaction to fire | | | |
|--|------------------------|--|----------------------------------|
| End use condition ⁽⁶⁾ | Minimum thickness (mm) | Class ⁽⁷⁾ (excluding floorings) | Class ⁽⁸⁾ (floorings) |
| Without an air gap behind the wood-based panel ^{(1), (2), (5)} | 9 | D-s2, d0 | D _{fi} -s1 |
| With a closed or an open air gap not more than 22 mm behind the wood-based panel ^{(3), (5)} | 9 | D-s2, d2 | - |
| With a closed air gap behind the wood-based panel ^{(4), (5)} | 15 | D-s2, d1 | D _{fi} -s1 |
| With an open air gap behind the wood-based panel ^{(4), (5)} | 18 | D-s2, d0 | D _{fi} -s1 |

⁽¹⁾ Mounted without an air gap directly against class A1 or A2-s1, d0 products with minimum density 10kg/m³ or at least class D-s2, d2.

⁽²⁾ A substrate of cellulose insulation material of at least class E may be included if mounted directly against the wood-based panel, but not for floorings.

⁽³⁾ Mounted with an air gap behind. The reverse face of the cavity shall be at least class A2-s1, d0 products with minimum density 10 kg/m³.

⁽⁴⁾ Mounted with an air gap behind. The reverse face of the cavity shall be at least class D-s2, d2 products with minimum density 400 kg/m³.

⁽⁵⁾ Veneered, phenol- and melamine-faced panels are included for class excl. floorings.

⁽⁶⁾ 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 wood-based panel and a substrate if there are no air gaps in between.

⁽⁷⁾ Class as provided for in Table 1 of the Annex to Decision 2000/147/EC.

⁽⁸⁾ Class as provided for in Table 2 of the Annex to Decision 2000/147/EC.

| Nominal thickness | 9 | 12 | 15 | 18 | 21 | 24 | 27 | 30 | 40 | 50 | Harmonised standard EN 13986:2004+A1:2015 | |
|---|---------------------|-------|------|------|------|------|------|------|------|------|---|------|
| Number of plies | 3 | 5 | 5 | 7 | 7 | 9 | 9 | 11 | 13 | 17 | | |
| Essential characteristics | Performance | | | | | | | | | | | |
| Characteristic bending strength N/mm ² | $f_{m \parallel}$ | 28,7 | 22,8 | 23,0 | 20,4 | 18,9 | 19,4 | 19,3 | 18,7 | 16,8 | | 15,6 |
| | $f_{m \perp}$ | 3,8 | 11,4 | 11,2 | 13,0 | 14,3 | 13,1 | 13,8 | 13,3 | 14,9 | | 15,9 |
| Characteristic compression strength N/mm ² | $f_{c \parallel}$ | 19,3 | 17,4 | 17,5 | 16,7 | 16,0 | 17,0 | 15,5 | 17,2 | 15,5 | | 14,7 |
| | $f_{c \perp}$ | 10,7 | 12,6 | 12,5 | 13,3 | 14,0 | 13,0 | 14,5 | 12,8 | 14,5 | | 15,3 |
| Characteristic tension strength N/mm ² | $f_{t \parallel}$ | 11,6 | 10,5 | 10,5 | 10,0 | 9,6 | 10,2 | 9,3 | 10,3 | 9,3 | | 8,8 |
| | $f_{t \perp}$ | 6,4 | 7,5 | 7,5 | 8,0 | 8,4 | 7,8 | 8,7 | 7,7 | 8,7 | | 9,2 |
| Mean MOE in bending N/mm ² | $E_{m \parallel}$ | 10050 | 9123 | 9201 | 8170 | 7547 | 7751 | 7702 | 7479 | 6723 | | 6227 |
| | $E_{m \perp}$ | 539 | 2876 | 2799 | 3830 | 4453 | 4249 | 4298 | 4521 | 5277 | | 5773 |
| Mean MOE in compression and tension N/mm ² | $E_{t,c \parallel}$ | 7733 | 6968 | 7013 | 6682 | 6408 | 6800 | 6182 | 6868 | 6211 | | 5880 |
| | $E_{t,c \perp}$ | 4267 | 5032 | 4987 | 5318 | 5592 | 5200 | 5818 | 5132 | 5789 | | 6120 |
| Char. panel shear N/mm ² | $f_v \parallel$ | 3,5 | 3,5 | | | | | 3,5 | | | | |
| | $f_v \perp$ | 3,5 | 3,5 | | | | | 3,5 | | | | |
| Char. Planar shear N/mm ² | $f_r \parallel$ | 1 | 1 | | | | | 1 | | | | |
| | $f_r \perp$ | NPD | 0,6 | | | | | 0,8 | | | | |
| Mean MOR in panel shear N/mm ² | $G_v \parallel$ | 350 | 350 | | | | | 350 | | | | |
| | $G_v \perp$ | 350 | 350 | | | | | 350 | | | | |
| Mean MOR in planar shear N/mm ² | $G_r \parallel$ | 45 | 50 | | | | | 50 | | | | |
| | $G_r \perp$ | NPD | 30 | | | | | 40 | | | | |
| Strength and stiffness under point load | NPD | | | | | | | | | | | |
| Impact resistance | NPD | | | | | | | | | | | |
| k_{mod} and k_{def} values according to EN 1995-1-1 | | | | | | | | | | | | |

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, January 1st, 2023



Riku Härkönen, Product Manager
UPM Plywood