

DECLARATION OF PERFORMANCE, UPM PLYWOOD

No. **UPM002CPR**

1. Unique identification code of the product-type:
Structural spruce plywood, uncoated or coated, 5–50 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
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 | D-s2,d0 (min 9 mm) | EN 13986:2004+A1:2015 |
| | E (< 9 mm) | |
| | Dfl-s1 (Flooring, min 9 mm) | |
| Water vapour permeability μ | wet 70, dry 200 (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 (uncoated) | |
| | Use class 3 (coated and edge sealed) | |
| Mean density kg/m ³ | 500 | |

7. Declared performance

| 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 ² | $f_{m\parallel}$ | 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 |
| | $f_{m\perp}$ | 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 ² | $f_{c\parallel}$ | 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 |
| | $f_{c\perp}$ | 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 ² | $f_{t\parallel}$ | 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 |
| | $f_{t\perp}$ | 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 ² | $E_{m\parallel}$ | 11390 | 11666 | 8995 | 8231 | 7308 | 7492 | 7641 | 7249 | 7444 | 7075 | 6873 | 6629 | 5905 |
| | $E_{m\perp}$ | 610 | 334 | 3005 | 3826 | 4692 | 4508 | 4359 | 4751 | 4556 | 4925 | 5127 | 5371 | 6095 |
| Mean MOE in compression and tension N/mm ² | $E_{t,c\parallel}$ | 7556 | 8364 | 6894 | 6328 | 5842 | 6667 | 7000 | 6393 | 6958 | 6586 | 6510 | 6203 | 5810 |
| | $E_{t,c\perp}$ | 4444 | 3636 | 5106 | 5902 | 6158 | 5333 | 5000 | 5607 | 5042 | 5414 | 5490 | 5797 | 6190 |
| Char. panel shear N/mm ² | $f_{v\parallel}$ | 3,5 | | 3,5 | | | | | | | | | | |
| | $f_{v\perp}$ | 3,5 | | 3,5 | | | | | | | | | | |
| Char. Planar shear N/mm ² | $f_{r\parallel}$ | 0,9 | | 1 | | | | | | | | | | |
| | $f_{r\perp}$ | NPD | | 0,8 | | | | | | | | | | |
| Mean MOR in panel shear N/mm ² | $G_{v\parallel}$ | 350 | | 350 | | | | | | | | | | |
| | $G_{v\perp}$ | 350 | | 350 | | | | | | | | | | |
| Mean MOR in planar shear N/mm ² | $G_{r\parallel}$ | 40 | | 50 | | | | | | | | | | |
| | $G_{r\perp}$ | NPD | | 40 | | | | | | | | | | |
| Strength and stiffness under point load | NPD | | | | | | | | | | | | | |
| Impact resistance | NPD | | | | | | | | | | | | | |
| 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, February 1st, 2017



Riku Härkönen, Product Manager
UPM Plywood