



Declaration of Performance

No. 1224-CPR-0002

CSA 0121 - DFP

Douglas fir plywood (DFP), unsanded or overlaid concrete formwork, thickness (see over), width and length - 1200mm x 2400mm or 1220mm x 2440mm

For structural or non-structural use in internal or external applications in construction

Technical Class EN 636-3

Specific floor, wall and roof details as identified

Produced by:

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Assessment and Verification of Constancy of Performance (AVCP)


System 2+

Notified Factory Production Control Certification Body No.1224, BM TRADA Certification Limited, performed the initial inspection and continues to perform surveillance under AVCP System 2+.

Declared performance

| Essential characteristics | Performance | Harmonised Technical Specification |
|---|--|--------------------------------------|
| Bending strength (Characteristic values) | N/mm ² | EN 13986: 2004 + A1: 2015 |
| $f_{m,0}$ | Values for each thickness as provided in 'Strength and stiffness for structural use' | |
| $f_{m,90}$ | | |
| Bending stiffness (MoE) (Mean) | | |
| $E_{m,0}$ | | |
| $E_{m,90}$ | | |
| Bonding quality EN 314-2: 1993 | Class 3, non-covered exterior | |
| Release of formaldehyde | E1 | |
| Reaction to fire | D-s2, d0 D _{FL} -s1 | |
| Water vapour permeability (Table 9) | Wet cup: 66µ Dry cup 190µ | |
| Airborne sound insulation | NPD | |
| Sound absorption | Table 10 | |
| Thermal conductivity | 0.12 W/(m · K) | |
| Strength and stiffness for structural use <i>Determined according to EN 789</i> | See over | |
| Strength and stiffness under point load for structural use | For floor, roof and wall applications See over | |
| Impact resistance for structural use | | |
| Biological durability - natural EN 350-2: 1994, durability class | 5 <i>sapwood is not specifically excluded</i> | |
| Mechanical durability | k_{mod} and k_{def} from EN 1995-1-1 | |
| Content of pentachlorophenol | | |
| Regulated dangerous substances | NPD | |

Cont'd

| DOUGLAS FIR PLYWOOD Unsanded | | Strength and stiffness for structural use Determined according to EN 789 | | | | | | |
|---|-------------------------|---|--------------------------------|---|--|---|---|--|
| | | Declared performance (N/mm ²) | | | | | | |
| Thickness (mm) | | 9.5 | 12.5 | 15.5 | 17.5 | 18.5 | 22.5 | 25.5 |
| Plies | | 3 | 4 | 5 | 7 | 6 | 7 | 8 |
| Characteristic strength | | | | | | | | |
| Bending | $f_{m,0}$ | 24,9 | 22,1 | 26,2 | 23,8 | 23,8 | 25,3 | 24,1 |
| | $f_{m,90}$ | 5,4 | 7,0 | 9,6 | 10,7 | 10,7 | 10,3 | 10,8 |
| Tension | $f_{t,0}$ | 13,3 | 10,1 | 10,9 | 11,4 | 11,4 | 10,8 | 9,5 |
| | $f_{t,90}$ | 4,3 | 6,4 | 5,9 | 5,0 | 5,0 | 6,5 | 8,1 |
| Compression | $f_{c,0}$ | 20,1 | 15,2 | 16,5 | 17,3 | 17,3 | 16,3 | 14,4 |
| | $f_{c,90}$ | 8,0 | 11,7 | 7,8 | 6,5 | 6,5 | 8,5 | 10,6 |
| Panel shear | $f_{v,0}$ & $f_{v,90}$ | 3,5 | 3,5 | 3,5 | 3,5 | 3,5 | 3,5 | 3,5 |
| Planar shear in bending | $f_{r,m,0}$ | 0,89 | 0,95 | 1,31 | 1,07 | 1,07 | 1,16 | 0,90 |
| Mean modulus of elasticity | | | | | | | | |
| Bending | $E_{m,0}$ | 12 290 | 10980 | 9 930 | 9100 | 9100 | 9650 | 9260 |
| | $E_{m,90}$ | 490 | 1230 | 2 110 | 2640 | 2640 | 2800 | 3070 |
| Tension & Compression | $E_{t,0}$ & $E_{c,0}$ | 7 680 | 5840 | 6 300 | 6620 | 6620 | 6250 | 5520 |
| | $E_{t,90}$ & $E_{c,90}$ | 3 250 | 4780 | 3 190 | 2670 | 2670 | 3480 | 4320 |
| Panel shear | G_v | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| EN 636 and EN 12369-2 F/E Classification | | F 15/3 E 80/- | F 10/3 E 70/5 | F 15/5 E 60/10 | F 15/5 E 60/10 | F 15/5 E 60/10 | F 15/5 E 60/10 | F 15/5 E 60/20 |
| 5th percentile values for stiffness | | 0,67 times the mean values above | | | | | | |
| Density kg/m³ | | Mean | 500 | Characteristic | | | 460 | |
| For floor, roof and wall applications | | | | | Point Load Properties | | | Load Category |
| Fixing - nail spacing in all cases: panel perimeter 150 mm, intermediate supports 300 mm | | | | | Mean Stiffness R_{mean} (N/mm) | 5% Serviceability Char value $F_{ser,k,05}$ (N) | 5% Ultimate Load Char value F_{max} (N) | |
| | Thickness | Grade | Edge support | Orientation | | | | |
| Floor Decking Span 610 mm | 18,5 mm | Select | T&G | Face grain perp. to supports | 361 | 2470 | 3470 | A - domestic residential inc floors, stairs, balconies |
| Roof Decking Span 488 mm | 12,5 mm | Sheathing | Solid blocking | Face grain perp. to supports | 322 | 3720 | 4820 | H - roofs not accessible except for maint. & repair |
| Wall Sheathing Span 610 mm | 9,5 mm | Sheathing | All edges supported by framing | Face grain perp. or parallel to framing | - | - | - | Meets EN 12871 soft body impact criteria 240 Joules |
| The performance of the product identified above is in conformity with this declared performance. | | | | | | | | |
| This Declaration of Performance is issued under the sole responsibility of the producer identified above. | | | | | | | | |
| Signed for and on behalf of the producer by: | | | | | | | | |
| Mark Sutherland, Vice President, Sales | | | | |  | | | |
| Richmond, B.C., Canada January 30, 2017 | | | | | | | | |
| (place and date of issue) | | | | | (signature) | | | |