

| DECLARATION OF PERFORMANCE | |
|----------------------------|--|
| Reference : | DOPHydroflamv3 |
| Commercial name : | Hydroflam |
| Product type : | Fire retardant Particleboard |
| Reference standard : | Wood Based Panel - EN 13986+A1:2015 Annex A Table A.4 |
| CE Class : | P5 |
| Field of application : | Internal use as a structural component in humid conditions |
| AVCP Class : | 1 |
| Certification number: | 1161-CPR-1323 [10 mm ≤ d ≤ 22mm (B-s2,d0); (**) 18 mm ≤ d ≤ 22mm (Bfl-s1)] |
| Produced at: | Ingelmunstersteenweg 299,B-8780 Oostrozebeke |

| Essential Characteristic | Unit | Reference | Thickness range (mm) | | | | | |
|--|-------------------|-----------------------|----------------------|-------------|-------------|-----------|-----------|-----------|
| | | | >6-13 | >13-20 | >20-25 | >25-32 | >32-40 | >40 |
| Bending strength | N/mm ² | EN 622-5 | 18 | 16 | 14 | 12 | 10 | 9 |
| Modulus of elasticity in bending | N/mm ² | EN 622-5 | 2550 | 2400 | 2150 | 1900 | 1700 | 1550 |
| Internal bond | N/mm ² | EN 622-5 | 0.45 | 0.45 | 0.40 | 0.35 | 0.30 | 0.25 |
| Swelling in thickness, 24h | % | EN 622-5 | 13 | 10 | 10 | 10 | 9 | 9 |
| Moisture resistance OPTION 1 : Internal bond | N/mm ² | EN 622-5 | 0.25 | 0.22 | 0.2 | 0.17 | 0.15 | 0.12 |
| Moisture resistance OPTION 1 : Swelling in thickness | % | EN 622-5 | 12 | 12 | 11 | 10 | 9 | 9 |
| Surface Soundness | N/mm ² | EN 622-5 | NPD | NPD | NPD | NPD | NPD | NPD |
| Formaldehyde class | Class | EN 13986-table B1 | E1 | E1 | E1 | E1 | E1 | E1 |
| Reaction to fire | Class | EN 13986-5.8 | B-s2d0 (*) | B-s2d0 | B-s2d0 (*) | D-s2d0 | D-s2d0 | D-s2d0 |
| Reaction to fire (Flooring) | Class | EN 13986-5.8 | NPD | Bfl-s1 (**) | Bfl-s1 (**) | NPD | NPD | NPD |
| Water vapour permeability μ | wet | EN 13986 - table 9 | 16 | 16 | 15 | 15 | 15 | 15 |
| | dry | | 50 | 50 | 50 | 50 | 50 | 50 |
| Airborne sound insulation | dB | EN 13986-5.10 | NPD | NPD | NPD | NPD | NPD | NPD |
| Sound absorption α | | EN 13986 - table 10 | 0,10/0,25 | 0,10/0,25 | 0,10/0,25 | 0,10/0,25 | 0,10/0,25 | 0,10/0,25 |
| Thermal conductivity λ | W/m.K | EN 13986 - table 11 | 0.14 | 0.14 | 0.13 | 0.12 | 0.12 | 0.12 |
| Strength - tension ft | N/mm ² | EN 12369-1 | 9.4 | 8.3 | 7.4 | 6.6 | 5.6 | 5.6 |
| Strength - compression fc | N/mm ² | EN 12369-1 | 12.7 | 11.8 | 10.3 | 9.8 | 8.5 | 7.8 |
| Strength - bending f _m | N/mm ² | EN 12369-1 | 15 | 13.3 | 11.7 | 10 | 8.3 | 7.5 |
| Strength - panel shear f _y | N/mm ² | EN 12369-1 | 7 | 6.5 | 5.9 | 5.2 | 4.8 | 4.4 |
| Strength - planar shear f _r | N/mm ² | EN 12369-1 | 1.9 | 1.7 | 1.5 | 1.3 | 1.2 | 1 |
| Stiffness - tension E _t | N/mm ² | EN 12369-1 | 2000 | 1900 | 1800 | 1500 | 1400 | 1300 |
| Stiffness - compression E _c | N/mm ² | EN 12369-1 | 2000 | 1900 | 1800 | 1500 | 1400 | 1300 |
| Stiffness - bending E _m | N/mm ² | EN 12369-1 | 3500 | 3300 | 3000 | 2600 | 2400 | 2100 |
| Stiffness - panel shear G _v | N/mm ² | EN 12369-1 | 960 | 930 | 860 | 750 | 690 | 660 |
| Impact resistance | Class | EN 12871 | NPD | NPD | NPD | NPD | NPD | NPD |
| Punishing shear strength R _{mean} | N/mm ² | EN 1195 | NPD | NPD | NPD | NPD | NPD | NPD |
| Punishing shear strength F _{ser,k} | N/mm ² | EN 1195 | NPD | NPD | NPD | NPD | NPD | NPD |
| Punishing shear strength F _{max,k} | N/mm ² | EN 1195 | NPD | NPD | NPD | NPD | NPD | NPD |
| Linear expansion δ _{30,85} | mm/m | EN 318 | < 3 | < 3 | < 3 | < 3 | < 3 | < 3 |
| Mechanical durability (kmod; kdef) | | Shall be taken from : | NPD | NPD | NPD | NPD | NPD | NPD |
| Biological durability | Service Class | EN 335 | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 | 1 & 2 |
| Content of PCP | ppm | EN 13986-5.18 | <5 | <5 | <5 | <5 | <5 | <5 |

(*) <10mm : E; 10mm-22mm : B-s2,d0; > 22mm : D-s2,d0

| Informative Characteristic | Unit | Reference | Thickness range (mm) | | | | | |
|----------------------------|---------|-----------|----------------------|--------|--------|--------|--------|-----|
| | | | >6-13 | >13-20 | >20-25 | >25-32 | >32-40 | >40 |
| Formaldehyde content | mg/100g | EN 120 | < 8 mg/100g DS | | | | | |
| Reaction to fire | Klasse | BS 476 | Class 1 [10 -> 25mm] | | | | | |

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Lode De Boe,
President UNILIN bvba, division panels

