

### DECLARATION OF PERFORMANCE

Reference :	DOPQualirackLF+v1
Commercial name :	Qualirack LF+
Product type :	Particleboard
Reference standard :	Wood Based Panel - EN13986:2004+A1:2015 Annex A Table A.4
CE Class :	P4
Field of application :	Internal use as a structural component in dry conditions
AVCP Class :	2+
Certification number:	1161-CPR-0145
Produced at:	Breestraat 4,B-8710 Wielsbeke Ingelmunstersteenweg 299,B-8780 Oostrozebeke

Essential Characteristic	Unit	Reference	Thickness range (mm)						
			>8-10	>10-13	>13-20	>20-25	>25-32	>32-40	>40
Bending strength	N/mm <sup>2</sup>	EN 622-5	16	15	15	13	11	9	7
Modulus of elasticity in bending	N/mm <sup>2</sup>	EN 622-5	2300	2300	2300	2050	1850	1500	1200
Internal bond	N/mm <sup>2</sup>	EN 622-5	0.40	0.35	0.35	0.30	0.25	0.20	0.20
Swelling in thickness, 24h	%	EN 622-5	19	15	15	15	15	14	14
Formaldehyde class	Class	EN 13986-table B1	E1	E1	E1	E1	E1	E1	E1
Reaction to fire	Class	EN 13501-1	D-s2d0(*)	D-s2d0	D-s2d0	D-s2d0	D-s2d0	D-s2d0	D-s2d0
Water vapour permeability $\mu$	wet	EN 13986 - table 9	17	16	16	16	15	15	15
	dry		50	50	50	50	50	50	50
Airborne sound insulation	dB	EN 13986-5.10	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Sound absorption $\alpha$		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	0,10/0,25
Thermal conductivity $\lambda$	W/m.K	EN 13986 - table 11	0.14	0.14	0.14	0.13	0.12	0.12	0.12
Strength - tension $f_t$	N/mm <sup>2</sup>	EN 12369-1	8.9	7.9	7.9	6.9	6.1	5	4.4
Strength - compression $f_c$	N/mm <sup>2</sup>	EN 12369-1	12	11.1	11.1	9.6	9	7.6	6.1
Strength - bending $f_m$	N/mm <sup>2</sup>	EN 12369-1	14.2	12.5	12.5	10.8	9.2	7.5	5.8
Strength - panel shear $f_p$	N/mm <sup>2</sup>	EN 12369-1	6.6	6.1	6.1	5.5	4.8	4.4	4.2
Strength - planar shear $f_r$	N/mm <sup>2</sup>	EN 12369-1	1.8	1.6	1.6	1.4	1.2	1.1	1
Stiffness - tension $E_t$	N/mm <sup>2</sup>	EN 12369-1	1800	1700	1700	1600	1400	1200	1100
Stiffness - compression $E_c$	N/mm <sup>2</sup>	EN 12369-1	1800	1700	1700	1600	1400	1200	1100
Stiffness - bending $E_m$	N/mm <sup>2</sup>	EN 12369-1	3200	2900	2900	2700	2400	2100	1800
Stiffness - panel shear $G_p$	N/mm <sup>2</sup>	EN 12369-1	860	830	830	770	680	600	550
Impact resistance	Class	EN 12871	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Punishing shear strength $R_{mean}$	N/mm <sup>2</sup>	EN 1195	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Punishing shear strength $F_{ser,k}$	N/mm <sup>2</sup>	EN 1195	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Punishing shear strength $F_{max,k}$	N/mm <sup>2</sup>	EN 1195	NPD	NPD	NPD	NPD	NPD	NPD	NPD
Linear expansion $\delta_{30,85}$	mm/m	EN 318	< 4	< 4	< 4	< 4	< 4	< 4	< 4
Mechanical durability (kmod; kdef)		Shall be taken from :	EN 1995-1-1	EN 1995-1-1	EN 1995-1-1	EN 1995-1-1	EN 1995-1-1	EN 1995-1-1	EN 1995-1-1
Biological durability	Service Class	EN 335	1	1	1	1	1	1	1
Content of PCP	ppm	EN 13986-5.18	<5	<5	<5	<5	<5	<5	<5

(\*) <9mm : E; 9mm : D-s2,d0

Informative Characteristic	Unit	Reference	Thickness range (mm)					
			>8-10	>10-13	>13-20	>20-25	>25-32	>32-40
Formaldehyde class	Class	ASTM E1333	CARB 2 < 0.09 ppm [8 -> 60mm]					
Formaldehyde class	Class	ASTM E1333	TSCA Title VI (EPA) < 0.09 ppm [8 -> 60mm]					
Formaldehyde emission	ppm	ChemVerbots	<= 0.1 ppm [ISO 16516 LF1.8/EN 717-1*2]					

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