

Particleboard P3

Application

Non-load-bearing panel for use in walls, floors and ceilings as well as in the construction of buildings and trade fair stands. Base panel for surface coatings used in furnishings and interior design.

Technical class

Particleboard for interior fitments (including furniture) for use in humid areas (type P3, EN 312).



Technical Specifications

Properties							Unit	Standard
Material thickness	16	19	22	25	30	40	mm	
Certificate Code	P3	P3	P3	P3	P3	P3		
Density min	640	640	640	620	620	560	kg/m ³	EN 323
Density max	680	680	680	660	660	610	kg/m ³	EN 323
Internal bond strength	0.45	0.45	0.4	0.4	0.35	0.3	N/mm ²	DIN EN 319
Bending strength	14	14	12	12	11	9	N/mm ²	DIN EN 310
Modulus of elasticity	1950	1950	1850	1850	1700	1550	N/mm ²	DIN EN 310
Surface soundness	0.8	0.8	0.8	0.8	0.8	0.8	N/mm ²	DIN EN 311
Moisture resistance	0.08	0.08	0.07	0.07	0.07	0.06	N/mm ²	DIN EN 1087-1
Thickness swelling	14	14	13	13	13	12	%	DIN EN 317
Formaldehyde emission (ppm) E1	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	≤ 0.05	ppm	EN 717-1
Formaldehyde emission (ppm) CARB II / TSCA Title VI	≤ 0.09	≤ 0.09	≤ 0.09	≤ 0.09	≤ 0.09	≤ 0.09	ppm	ASTM D-6007
Final surface sanding (Grit size)	100	100	100	100	100	100		
Pentachlorophenol (PCP)	< 5	< 5	< 5	< 5	< 5	< 5	mg/kg	CEN/TR 14823
Lindane	0	0	0	0	0	0	mg/kg	
Reaction to fire (EU)	D-s2, d0	D-s2, d0	D-s2, d0	D-s2, d0	D-s2, d0	D-s2, d0		DIN EN 13986
Thermal conductivity	0.15	0.15	0.15	0.14	0.14	0.12	W/(mK)	DIN EN 13986
Water vapour resistance (humid)	16	16	15	15	15	15		DIN EN 13986
Water vapour resistance (dry)	50	50	50	50	50	50		DIN EN 13986
Airborne sound insulation	27	28	29	30	31	32	dB	DIN EN 13986

Tolerances

Properties							Unit	Standard
Material thickness	16	19	22	25	30	40	mm	
Thickness tolerance	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	mm	EN 324-1
Length tolerance	± 5	± 5	± 5	± 5	± 5	± 5	mm	EN 324-1
Width tolerance	± 5	± 5	± 5	± 5	± 5	± 5	mm	EN 324-1
Edge straightness	1.5	1.5	1.5	1.5	1.5	1.5	mm/m	EN 324-2
Squareness	2	2	2	2	2	2	mm/m	EN 324-2
Moisture content Min	5	5	5	5	5	5	%	EN 322
Moisture content Max	13	13	13	13	13	13	%	EN 322
Tolerance density	± 10	± 10	± 10	± 10	± 10	± 10	%	EN 323