

Particleboard P2

Application

Base panel for surface coatings used in furnishings and interior design. The panels are suitable for non-load-bearing applications on floors, walls and ceilings.

Technical class

Particleboard for interior fitments (including furniture) for use in dry conditions (Type P2, EN 312).



Technical Specifications

Properties									Unit	Standard
Material thickness	8	10	12	13	15	16	18	19	mm	
Certificate Code	P2	P2	P2	P2	P2	P2	P2	P2		
Density min	680	680	680	680	630	630	630	630	kg/m ³	EN 323
Density max	760	760	760	760	680	680	680	680	kg/m ³	EN 323
Internal bond strength	0.4	0.4	0.4	0.4	0.35	0.35	0.35	0.35	N/mm ²	DIN EN 319
Bending strength	11	11	11	11	11	11	11	11	N/mm ²	DIN EN 310
Modulus of elasticity	1800	1800	1800	1800	1600	1600	1600	1600	N/mm ²	DIN EN 310
Surface soundness	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	N/mm ²	DIN EN 311
Formaldehyde emission (ppm) E1	≤ 0.05	≤ 0.05	≤ 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	≤ 0.09	≤ 0.09	ppm	ASTM D-6007
Final surface sanding (Grit size)	100	100	100	100	100	100	100	100		
Pentachlorophenol (PCP)	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	mg/kg	CEN/TR 14823
Lindane	0	0	0	0	0	0	0	0	mg/kg	
Reaction to fire (EU)	E	E	E	E	D-s2, d0	D-s2, d0	D-s2, d0	D-s2, d0		DIN EN 13986
Thermal conductivity	0.15	0.15	0.15	0.15	0.13	0.13	0.13	0.13	W/(mK)	DIN EN 13986
Water vapour resistance (humid)	17	17	17	17	16	16	16	16		DIN EN 13986
Water vapour resistance (dry)	50	50	50	50	50	50	50	50		DIN EN 13986
Airborne sound insulation	25	25	25	25	27	27	27	27	dB	DIN EN 13986

Tolerances

Properties									Unit	Standard
Material thickness	8	10	12	13	15	16	18	19	mm	
Thickness tolerance	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	mm	EN 324-1
Length tolerance	± 5	± 5	± 5	± 5	± 5	± 5	± 5	± 5	mm	EN 324-1
Width tolerance	± 5	± 5	± 5	± 5	± 5	± 5	± 5	± 5	mm	EN 324-1
Edge straightness	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	mm/m	EN 324-2
Squareness	2	2	2	2	2	2	2	2	mm/m	EN 324-2
Moisture content Min	5	5	5	5	5	5	5	5	%	EN 322
Moisture content Max	13	13	13	13	13	13	13	13	%	EN 322
Tolerance density	± 10	± 10	± 10	± 10	± 10	± 10	± 10	± 10	%	EN 323

Technical Specifications

Properties									Unit	Standard
Material thickness	22	25	28	30	33	36	38	40	mm	
Certificate Code	P2	P2	P2	P2	P2	P2	P2	P2		
Density min	600	600	600	600	580	580	580	580	kg/m ³	EN 323
Density max	630	630	630	630	620	620	620	620	kg/m ³	EN 323
Internal bond strength	0.3	0.3	0.25	0.25	0.2	0.2	0.2	0.2	N/mm ²	DIN EN 319
Bending strength	10.5	10.5	9.5	9.5	8.5	8.5	8.5	8.5	N/mm ²	DIN EN 310
Modulus of elasticity	1500	1500	1350	1350	1200	1200	1200	1200	N/mm ²	DIN EN 310
Surface soundness	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	N/mm ²	DIN EN 311
Formaldehyde emission (ppm) E1	≤ 0.05	≤ 0.05	≤ 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	≤ 0.09	≤ 0.09	ppm	ASTM D-6007
Final surface sanding (Grit size)	100	100	100	100	100	100	100	100		
Pentachlorophenol (PCP)	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	mg/kg	CEN/TR 14823
Lindane	0	0	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	D-s2, d0	D-s2, d0		DIN EN 13986
Thermal conductivity	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	W/(mK)	DIN EN 13986
Water vapour resistance (humid)	15	15	15	15	15	15	15	15		DIN EN 13986
Water vapour resistance (dry)	50	50	50	50	50	50	50	50		DIN EN 13986
Airborne sound insulation	29	29	30	30	31	31	31	31	dB	DIN EN 13986

Tolerances

Properties									Unit	Standard
Material thickness	22	25	28	30	33	36	38	40	mm	
Thickness tolerance	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	± 0.3	mm	EN 324-1
Length tolerance	± 5	± 5	± 5	± 5	± 5	± 5	± 5	± 5	mm	EN 324-1
Width tolerance	± 5	± 5	± 5	± 5	± 5	± 5	± 5	± 5	mm	EN 324-1
Edge straightness	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	mm/m	EN 324-2
Squareness	2	2	2	2	2	2	2	2	mm/m	EN 324-2
Moisture content Min	5	5	5	5	5	5	5	5	%	EN 322
Moisture content Max	13	13	13	13	13	13	13	13	%	EN 322
Tolerance density	± 10	± 10	± 10	± 10	± 10	± 10	± 10	± 10	%	EN 323

Technical Specifications

Properties			Unit	Standard
Material thickness	46	50	mm	
Certificate Code	P2	P2		
Density min	560	560	kg/m ³	EN 323
Density max	610	610	kg/m ³	EN 323
Internal bond strength	0.2	0.2	N/mm ²	DIN EN 319
Bending strength	7	7	N/mm ²	DIN EN 310
Modulus of elasticity	1050	1050	N/mm ²	DIN EN 310
Surface soundness	0.8	0.8	N/mm ²	DIN EN 311
Formaldehyde emission (ppm) E1	≤ 0.05	≤ 0.05	ppm	EN 717-1
Formaldehyde emission (ppm) CARB II / TSCA Title VI	≤ 0.09	≤ 0.09	ppm	ASTM D-6007
Final surface sanding (Grit size)	100	100		
Pentachlorophenol (PCP)	< 5	< 5	mg/kg	CEN/TR 14823
Lindane	0	0	mg/kg	
Reaction to fire (EU)	D-s2, d0	D-s2, d0		DIN EN 13986
Thermal conductivity	0.12	0.12	W/(mK)	DIN EN 13986
Water vapour resistance (humid)	15	15		DIN EN 13986
Water vapour resistance (dry)	50	50		DIN EN 13986
Airborne sound insulation	32	32	dB	DIN EN 13986

Tolerances

Properties			Unit	Standard
Material thickness	46	50	mm	
Thickness tolerance	± 0.3	± 0.3	mm	EN 324-1
Length tolerance	± 5	± 5	mm	EN 324-1
Width tolerance	± 5	± 5	mm	EN 324-1
Edge straightness	1.5	1.5	mm/m	EN 324-2
Squareness	2	2	mm/m	EN 324-2
Moisture content Min	5	5	%	EN 322
Moisture content Max	13	13	%	EN 322
Tolerance density	± 10	± 10	%	EN 323