

PARTICLEBOARDS

Particleboard

1. Product description

Particleboard (SWISS KRONO Raw particleboard) is a three-layer wood-based material made by pressing wood particles at a high temperature and under pressure, using synthetic resins as a binding agent.

The inner layer consists of coarse fraction particles, while the external layers are formed from very fine and thin flat particles (micro-particles). This results in the surface, which is characterised by a low surface roughness and a high resistance to tearing off.

2. Application

Particleboard is basic material for the production of furniture and interior finishing elements (e.g. partition walls). Its surface quality makes it also possible to enrich chipboard by melamine facing, varnishing or laminating as well as covering with natural and artificial face layers.

Particleboard is base material for the production of worktops, windowsills, wall panels and floor panels, caissons.

Particleboard is manufactured, at SWISS KRONO sp. z o.o., for use in dry environment, i.e. where relative air humidity does not exceed 65% and they are not exposed to direct contact with water.

3. Technical data

Standard thickness and size:

- thickness (mm): 10, 12, 15, 16, 18, 22, 25, 28, 38
- size (mm): 2800 x 2070, 2070 x 2620

Other profiles and sizes are available against order, according to production possibilities, e.g.:

1830 x 2620, 1830 x 2500, 5600 x 2070, 5600 x 2500 mm

Sizes after press:

Length	min.	2100 mm	max.	5600 mm
Width	min.	2070 mm	max.	2620 mm
Thickness	min.	10 mm	max.	40 mm

Physical and mechanical parameters:

Parameter	Unit	Standards EN 312, Tab.1, Tab.3 – Type P2													Testing standard
Thickness	mm	8	10	12	15	16	18	19	22	25	28	32	36	38	
Density*	kg/m ³	720	700	690	670	660	650	650	640	620	620	610	610	600	EN 323
Bending strength	N/mm ²	11	11	11	11	11	11	11	10,5	10,5	9,5	9,5	8,5	8,5	EN 310
Integral bond	N/mm ²	>0,4	>0,4	>0,4	>0,35	>0,35	>0,35	>0,35	>0,30	>0,30	>0,25	>0,20	>0,20	>0,20	EN 319
Tearing off	N/mm ²	> 0,8													EN 311
Free formaldehyde content	mg 100 g s.m.	≤ 8,0 (E1) ≤ 4,0 (EPF-S)													EN 12460-5
Formaldehyde emission	ppm	≤ 0,05 (ED2020)													EN 717-1
Mineral particle content*	%	< 0,3													Sample combustion and HCl etching method
Moisture content	%	from 5 to 13													EN -322
Thickness tolerance	mm	+/- 0,3													EN 324-1
Length and width tolerance	mm	+/-5													EN 324-1
Squareness tolerance	mm/m	2													EN 324-2
Edge straightness tolerance	mm/m	1,5													EN 324-2

* Tolerance +/- 5%

** Requirements are not specified for boards type P2. Tests can be done on request.

4. Certificates

- Hygienic certificate (E1)
- Certificate WKI (ED2020)
- Certificate CARB
- Certificate TSCA
-

5. Packaging, Storage and Transport

Packaging materials:

- info label,
- lower spacers, height 90 x width 82 mm, with a length equal to the width of the pallet,
- upper spacers, height 16 x width 150 mm, with a length equal to the width of the pallet,
- polyester tape 16 mm wide.

Thickness	size 2800 x 2070 (E1)				size 2800 x 2070 (EPF-S)			
	number of pieces per pallet	package height	pallet gross weight*	number of pallets per truck	number of pieces per pallet	package height	pallet gross weight*	number of pallets per truck
mm	pcs.	mm	kg	pcs.	pcs.	mm	kg	pcs.
10	55	550	2353	10	55	550	2353	10
12	55	660	2670	9	50	600	2450	10
15	40	600	2404	10	40	600	2404	10
16	40	640	2482	9	38	608	2389	10
18	35	630	2468	10	35	630	2468	10
22	30	660	2472	10	30	660	2472	10
25	26	650	2456	10	26	650	2456	10
28	20	560	2040	11	20	560	2040	11
38	18	684	2402	10	18	684	2402	10

* - weight tolerance +/- 5%

Warning: The boards should be stored and transported in horizontal position, on a dry and flat surface, in a way preventing them from getting wet or mechanically damaged.

6. Particleboard flameproof Stop Fire

- Name of the product: **SWISS KRONO Raw particleboard flameproof Stop Fire**
- Application: in public utility buildings as schools, kindergartens, sport halls, shopping centers or hospitals
- Size of board: **2800 x 2070 x 18 mm**
- Fire Classification: Euroclass **B-s2,d0** (flameproof)
- The physical and mechanical parameters are the same like for the standard particleboard P2
- Packaging: 35 pc / pallet

Certificates:

- a) Hygienic Certificate
- b) Classification concerning reaction to fire
- c) Declaration of Performance – DoP
- d) Certificate of Conformity CE – HFB