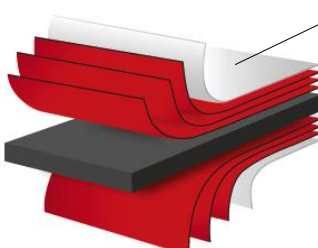










SWISSCDF DECOR

Compact Density Fibreboard

Menznau, 01 October 2014 | Version 1.4 (supersedes all previously published data)

<p>Characteristics</p>	<p>SWISSCDF is a high density, black coloured wood fibreboard (>1'000 kg/m³). With the support board and the multilayer structure, SWISSCDF sets new standards in both design-oriented and structural interior design. Stability, scratch resistance, splash water resistance and flame retardancy are among the positive characteristics of this natural wood material.</p>
<p>Use</p>	<p>SWISSCDF is ideal for the construction of furniture and objects subjected to severe surface stresses and high demands in terms of its robustness, such as</p> <ul style="list-style-type: none"> → in design-focused interior fittings: high-quality sideboards, wall combinations, open shelves and office and school furniture → in spaces with increased humidity (in the case of splash water, with no permanent contact with water and not submerged in static water): as kitchen and bathroom fronts, lockers in sports and spa areas and partition walls in sanitary areas → in shopfitting: changing rooms, carcass for high-quality product presentations and design elements → for CNC milling/cutting of lettering, logos, ornaments and 3D effects through coloured multilayer structure
<p>Technical classification</p>	<p>High-density wood fibreboard (>1'000 kg/m³) for non-load-bearing purposes, with Melamine coating, suitable for applications in interior design which are subject to moisture exposure</p>
<p>Product structure</p>	<div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>SWISSCDF - black-coloured (compact fibreboard)</p> </div>  <div style="margin-left: 20px;"> <p>Multilayer paper (on each side) Uppermost layer decor paper x layers of barrier paper</p> <p>WB07 Four sheet structure with 0.7mm WB05 Three sheet structure with 0.5mm WB03 Two sheet structure with 0.3mm</p> </div> </div>
<p>Processing</p>	<p>When processing SWISSCDF DECOR, please follow the information below:</p> <ul style="list-style-type: none"> → Working and cutting of the material must be performed using hard metal tools. For larger batches and when using modern machine tools, we recommend using diamond-tipped tools. → The high bulk density must be taken into consideration regarding the processing parameters. Sharp, hard-cut tools are important in order to achieve optimum edge quality. → In order to provide optimum protection against humidity and apply a finish, the black edges are treated using varnish, wax, oil or other hydrophobizing media. → Fittings can be fixed to the surface by screwing or using construction adhesive. → For detailed recommendations regarding adhesives, refer to: www.swisscdf.com → Packs should be stored in horizontal position on a flat, supportive and even surface (Ideal Storage conditions are 15-25°C, 45-65% Humidity). → Permanent exposure to heat is admissible up to temperatures of 50°C. For short periods of time (1 hour at the most) temperatures of up to 90°C are admissible. Continuous exposure to temperatures of over 50°C may lead to cracks in the surface. → The surface can be treated with a damp cloth and a mild, non-abrasive cleaning agent.
<p>Certification labels</p>	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Excellent moisture resistance</p> </div> <div style="text-align: center;">  <p>flame-retardant</p> </div> <div style="text-align: center;">  <p>low emissions</p> </div> <div style="text-align: center;">  <p>Swiss-made</p> </div> <div style="text-align: center;">  <p>made of Swiss wood</p> </div> <div style="text-align: center;">  <p>from sustainable forestry regions (certificate can be provided upon request)</p> </div> <div style="text-align: center;">  <p>low CO₂ production</p> </div> <div style="text-align: center;">  <p>quality-tested / environmentally approved</p> </div> </div>

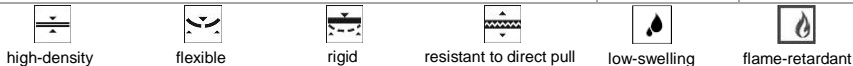
Product range

in White K101 Grey U191 Anthracite U164 Black U190 with PE structure in panel format 2800 mm x 2070 mm							
Final thickness for WB03 (two-ply structure)	6.4	8.4	10.4	12.4	16.4	19.4 mm	ex warehouse
in Panorama Collection with structure as agreed, in panel format 2800 mm x 2070 mm							
Final thickness for WB03 (two-ply structure)	6.4	8.4	10.4	12.4	13.0	16.4	19.4 mm
Final thickness for WB05 (three-ply structure)	6.8	8.8	10.8	12.8	13.4	16.8	19.8 mm
Final thickness for WB07 (four-ply structure)	7.2	9.2	11.2	13.2	13.8	17.2	20.2 mm

Technical data of SWISSCDF (raw board)
(acc. to EN 622-5: Fibreboards – requirements for the boards after drying process MDF) ¹⁾

Test parameters	Value							Requirement	Test standard
Thickness (panel thickness)	6.0	8.0	10.0	12.0	12.4	16.0	19.0 mm		EN 324-1
Thickness tolerance [acc. to EN 622-1]	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2 mm	±0.2	EN 324-1
Raw density	>1'000	>1'000	>1'000	>1'000	>1'000	>1'000	>1'000 kg/m ³	> 800 ²⁾	EN 323
Flexural strength	>60	>60	>60	>60	>60	>55	>55 N/mm ²	20 - 23	EN 310
Flexural elasticity module	>6'000	>6'000	>6'000	>6'000	>6'000	>5'500	>5'500 N/mm ²	2'200 - 2'700	EN 310
Resistance to direct pull	>2.0	>2.0	>2.0	>2.0	>2.0	>1.8	>1.8 N/mm ²	0.55 - 0.65	EN 319
Face strength	>2.5	>2.5	>2.5	>2.5	>2.5	>2.5	>2.5 N/mm ²	0.8 - 1.2 ²⁾	EN 311
Thermal conductivity	0.18	0.18	0.18	0.18	0.18	0.18	0.18 W/(mK)	0.14	EN 13986
Panel humidity [acc. to EN 622-1]	≥5 %	≥5 %	≥5 %	≥5 %	≥5 %	≥5 %	≥5 % Weight	4 - 11 %	EN 322
Thickness swelling (in water 24h)	<7 %	<7 %	<5 %	<5 %	<5 %	<5 %	<5 % Thickn.	12 - 30 %	EN 317
Fire performance	5.3 = fire-retardant, low smoke development analogue to B1 acc. to DIN 4102 (rescinded)							4.3 ²⁾	VKF B2 (DIN 4102)
Chloride: Lindan Pentachlorophenol PCP	n.d n.d mg/kg (n.d. = non-determinable, i.e. not present)							Lindan 0 PCP <5	ChemVerbotV.
Formaldehyde cont. [EN 622-1]	E1 ≤ 8 mg/100g atrop panel ≤ 0.124 mg/m ³ air							E1	EN120717-1

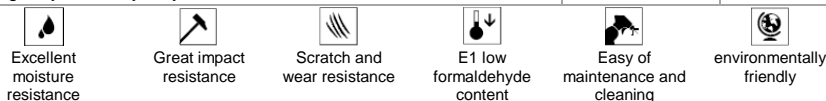
excellent properties of the support board



Technical data of SWISSCDF DECOR
(acc. to EN 14322: Melamine-coated boards for indoor applications)

Test parameters	WB03	WB05	WB07	Requirement	Evaluation	Test standard
Abrasion resistance	3A	3A	3A	- Class [1-4]	high	EN 14323
Scratch-resistance behaviour	3.5	3.5	3.5	≥1.5 N	very high	EN 14323
Susceptibility to cracking	5	5	5	≥3 Level [1-5]	very low	EN 14323
Shock resistance (large steel ball)	1'000	1'000	1'000	- mm, drop height	high	EN 14323 ³⁾
Behaviour when exposed to steam	4	4	4	- Level [1-5]	high	EN 14323 ³⁾
Colour / surface consistence	4	4	4	- Level [2-5]	high	EN 14323
Resistance to staining	4	4	4	≥3 Level [1-5]	high	EN 14323
Resistance to staining accord. EN 438-2	1 - 3	1 - 3	1 - 3	- Group [1-3]	very good	EN 438-2
Light fastness (xenon arc lamp)	> 4	> 4	> 4	- Levels [3]	high (grey scale)	EN 14323
Thickness swelling	<7 %	<7 %	<7 %	- Thickness	very low	EN 13329
Formaldehyde emission	<0.4	<0.4	<0.4	E1 ≤ 3.5 mg/m ² h	very low	EN 717-2
Fire classification acc. to EN 13501-1 for storage range WB03 (two-ply structure) Certification granted	10.4 mm with special barrier 19.4 mm w/o special barrier ✓			C-s2,d0 Classification	flame-retardant, limited smoke development, no dripping	EN 13501-1
Fire performance (fire coefficient acc. to VKF)	5.3 = fire-retardant, low smoke development				4.3 ²⁾	VKF
Tolerances acc. to standard requirements	Thickness +0.5/-0.3 mm Length x width at 2.80 x 2.07 m ±5.0 mm, for cut shapes ±2.5 mm Edge chipping at 2.80 x 2.07 m ≤10 mm, for cut shapes ≤3 mm Surface defect: Spots ≤2 mm ² /m ² , longitudinal defects ≤20 mm/m				conformance to standards	EN 14323
Ecology information acc. to SIA Product declaration SIA 493	Renewable energy > 90 % wood fibre 65-75 % MUF adhesive 20-30 % Swiss wood does not contain old-forest no chlorides no biocides in the wood no heavy metals in the coating biologically/thermally recyclable				high-quality	SIA 493.05

excellent properties of the laminated board



¹⁾ SWISSCDF is an innovation product, there is no standard available. Requirements pursuant to EN 622-1 (general), 622-5 applicable for MDF
²⁾ Common values. No requirements | ³⁾ Classification acc. to EN 438-2

Technical safety and other information

- Due to the large weight of the product, please take special care during handling (ensure correct lifting; prevent risks of crushing, etc.).
- Saw dust / buffing dust may occur during processing; do not breathe in this fibre dust (wear protective equipment and use air extraction device)! In order to prevent dust explosion, wood dust must always be extracted. Store unprocessed panels by laying them in a flat position in a dry environment!
- This product is not classified as a hazardous good and is thus not subject to statutory labelling requirements (hazardous goods ordinance / ordinance on waste management).
- The support board is bonded with Melamine-urea-formaldehyde resin (MUF); however, free formaldehyde is hardly present and practically does not escape from correctly processed boards (E1 undercut by factor 9-10). Suitable for indoor application!
- The product is chemically stable and is non-toxic, convenient for indoor applications.
- SWISSCDF is a product obtained from sustainable forestry. The thinning wood used, helps to preserve Swiss forests.
- The product may be recycled after its 1st life cycle or used to generate thermal energy in a suitable plant (CO₂-free energy).