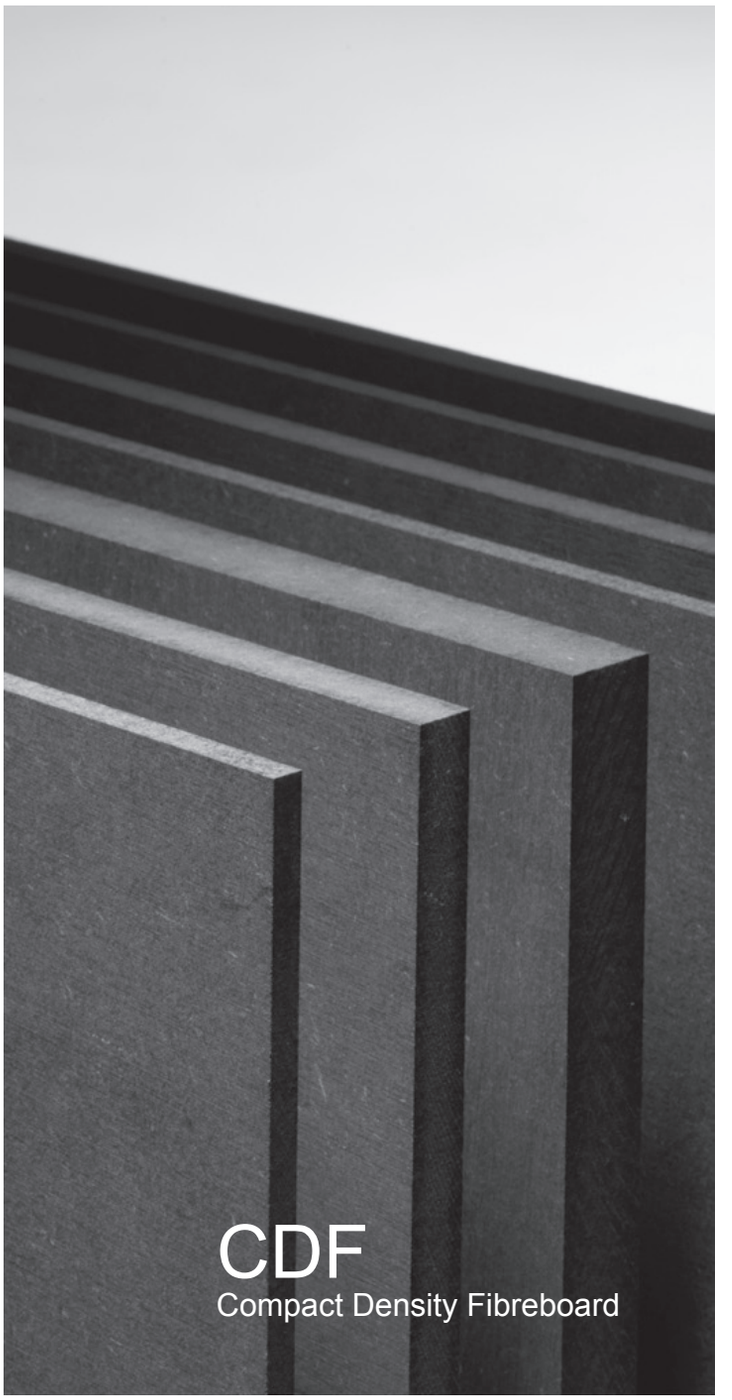
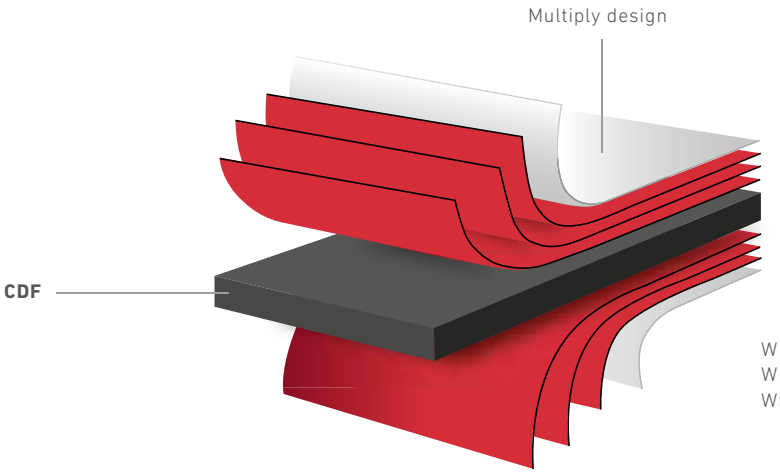

CDF
Compact Density Fibreboard

Technical Data

CDF

High density wood fibreboard (>1,000 kg/m³)



WB07 four ply design with 0.7 mm
WB05 three ply design with 0.5 mm
WB03 two ply design with 0.3 mm

STOCK PROGRAM

Format (mm)	Design[1)]	Panel thickness (mm)						
Raw		6.0	8.0	10.0	12.0	12.4	16.0	19.0
2800 × 2070	–	●	●	●	●	●	●	●
5600 × 2070 (5ᴹ)	–	●	●	●	●	●	●	●
K101 PE U164 PE U190 PE U191 PE	**WB03**	6.4	8.4	10.4	12.4	13.0*	16.4	19.4
2800 × 2070		●	●	●	●	–	●	●
Further decors available on request								
ONE WORLD SWISS COLLECTION 2800 × 2070	**WB03**	6.4*	8.4*	10.4*	12.4*	13.0*	16.4*	19.4*
	WB05			10.8*	12.8*	13.4*	16.8*	19.8*
	WB07			11.2*	13.2*	13.8*	17.2*	20.2*

[1)] Design: WB03: two ply design, WB05: three ply design, WB07: four ply design
● Available ex-works
* special productions: from 10 boards

Low swelling
Low flammability
Shock resistant
Scratch resistant
Processing friendly
Low emissions
Environmentally friendly
Easy care
Hygienic
A wide variety of colours and structures

RAW BOARD CDF (acc. to EN 622-5: Fibreboards – requirements for the boards after drying process MDF)

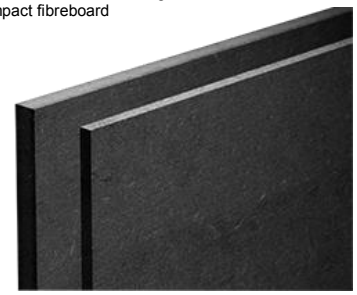
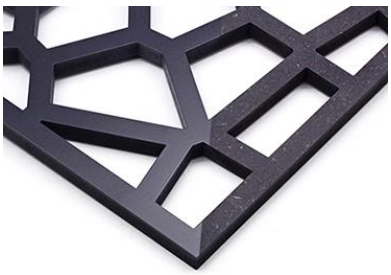
Testing Parameter									MDF 12 mm comparison	Standard
Thickness	**6.0**	**8.0**	**10.0**	**12.0**	**12.4**	**16.0**	**19.0**	**mm**		EN 324-1
Thickness tolerance	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	±0.2	mm		EN 324-1
Raw density	1'000	1'000	1'000	1'000	1'000	1'000	1'000	kg/m³	750	EN 323
Bending strength	55	50	50	50	50	45	45	N/mm²	22	EN 310
Bending modulus of elasticity	5'000	5'000	5'000	5'000	5'000	4'500	4'500	N/mm²	2'500	EN 310
Resistance to direct pull	2.0	2.0	2.0	2.0	1.8	1.8	1.6	N/mm²	0.6	EN 319
Face strength	2.3	2.3	2.3	2.3	2.3	2.3	2.3	N/mm²	1.0	EN 311
Panel humidity	≥5	≥5	≥5	≥5	≥5	≥5	≥5	%		EN 322
Thickness swelling	<7	<7	<5	<5	<5	<5	<5	%	15	EN 317
Thermal conductivity	0.18	0.18	0.18	0.18	0.18	0.18	0.18	W/(mK)		EN 13986
Airborne sound insulation	23	25	26	27	27	28	29	dB		EN 13986
Formaldehyde emission CARB II	<0.13	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	ppm		ASTM E 6007
Formaldehyde emission E1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ppm		EN 717-1
Formaldehyde cont.	<8	<8	<8	<8	<8	<8	<8	mg/100g		EN 120
Fire classification	B-s2,d0 flame-retardant (limited smoke development, no dripping) approved for the following usage: freestanding, on a metal profile, directly onto A1, A2-s1									EN 13501-1
Lindan | Pentachlorophenol PCP	n.b. | n.b. (n.b. = non-determinable)									ChemVerbotV

LAMINATED BOARD CDF (acc. to EN 14322: Melamine-coated borads for indoor applications)

Testing Parameter	WB03	WB05	WB07	Unit	Standard
Abrasion resistance	3A	3A	3A	Class [1-4]	EN 14322
Scratch-resistance behaviour	3.5	3.5	3.5	N	EN 14322
Susceptibility to cracking	5	5	5	Class [1-5]	EN 14322
Shock resistance (large steel ball)	1'000	1'000	1'000	mm	EN 14322
Behaviour when exposed to steam	4	4	4	Level [1-5]	EN 14322
Colour / surface consistence	4	4	4	Level [1-5]	EN 14322
Resistance to staining	4	4	4	Level [1-5]	EN 14322
Light fastness	>4	>4	>4	Level	EN 14322
Edgeband swelling	<7	<7	<7	%	EN 13329
Formaldehyde emission	<0.4	<0.4	<0.4	mg/(m²h)	EN 717-2
Fire classification	C-s2,d0 flame-retardant (limited smoke development, no dripping)				EN 13501-1
Tolerances	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 mm²/m², longitudinal defects ≤20 mm/m				EN 14322
Ecology information	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				SIA 493.05

CDF RAW

Compact Density Fibreboard

Characteristics	**CDF** ROH is an extremely robust high density, black coloured wood fibreboard (>1,000 kg/m^3). Its high strength across the complete board cross section facilitates three-dimensional processing without any risk of fraying. **CDF** ROH is a natural material made of Swiss wood which defibres gently and is manufactured according to ecological principles.
Use	**CDF** ROH can be used as extremely compact, robust support board. Thanks to its black colouring and the compact product structure, the board can also be used as an attractive surface without additional coating. The excellent machinability into the depth of the panel allow for the creation of various three-dimensional elements for creative furniture and building design. **CDF** ROH is ideally suited for applications requiring ecologically sustainable material due to its environmentally compatible manufacturing.
Technical classification	High-density wood fibreboard (>1,000 kg/m^3) for non-load-bearing purposes for interior applications in areas subject to high exposure to moisture.
Product structure	**CDF** black-coloured; homogenous cross section; extremely compact fibreboard  *Fine machining possible (delicate cutting patterns) due to the extreme compactness of the material.* 
Processing	When processing **CDF** ROH, please follow the information below: ¬ Working and cutting of the material must be carried out 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. ¬ For optimum protection against humidity and to finish, the black panel is treated using varnish, wax, oil or other hydrophobizing media. ¬ Screw connections must always be pre-drilled. ¬ Store the fibreboard in a horizontal and fully supported position (optimum storage room conditions: 15-25°C, 45-65% relative humidity).
Certification incl. test records	low-swelling; flame retardant; low emissions; Swiss made; made of Swiss wood; from sustainable forestry regions (certificate can be provided upon request); low CO_2 production; quality-tested / environmentally approved

Product range and technical data

Product range

for fibreboard format 2800mm x 2070mm

Thickness (panel thickness)	6.0	8.0	10.0	12.0	12.4	16.0	19.0	mm

Technical data of **CDF** ROH (acc. to EN 622-5: Fibreboards – requirements for the boards after drying process MDF) [1)]

Test parameters	Values								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	C-s2,d0 5.3 = fire-retardant, low smoke development								4.3 [2)]	EN 13501-1 VKF
Chlorides: Lindan | Pentachlorphen. PCP	n.d | n.d in mg/kg (n.d. = non-determinable, i.e. not present)								Lindan 0 PCP <5	ChemVerbotV
Formaldehyde cont. [EN 622-1]	E1 ≤ 8 mg/100 g atro panel | ≤ 0.124 mg/m^3 air								E1	EN120|717-1
Tolerances acc. to requirements of the standard [EN 622-1]	Length x width at 2.80 x 2.07 m, 5.60 x 2.07 m ±5.0 mm Edge straightness L and W 1.5 mm/m | Rectangularity 2.0 mm/m Bulk density (deviation from average thickness within panel) ±7 %								meets the standard	EN 324-1 EN 324-2 EN 323
Ecological data acc. to SIA Product declaration SIA 493	Renewable energy > 90% | Wood fibres 65-75% | MUF adhesive 20-30% Swiss wood | does not contain waste wood | no chlorides wood free from biocides | coating free from heavy metals biologically/thermally recyclable								high quality	SIA 493.05

excellent properties of the support board


high density


flexible


rigid


resistant to direct pull


low swelling


flame-retardant

[1)] ***CDF** is an innovation product; there is no standard available. Requirements pursuant to EN 622-1 (general), 622-5 for MDF apply*
[2)] *common values. No requirement.*

Technical safety and other information

- Due to the high product weight, 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 a dust explosion, wood dust must always be pneumatically 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.
- **CDF** 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 (CO_2-free energy).

- CDF is made from wood that originates from sustainably managed forrests.
- 90% renewable energies are used during its production.
- CDF completely integrates into cascade use of the wood cycle and is biodegradable.
- Saves CO_2 and protects the enrivonment