

# SWISSMDF SF-B

## Flame retardant MDF for non load-bearing

<p>Characteristics</p>	<p>SWISSMDF SF-B is a raw, flame-retardant medium density fibreboard (MDF), a high-grade SWISS KRONO product of ecological, Swiss quality manufacture using wood from sustainable Swiss forests. This dry-process MDF board presents a virtually homogeneous cross section.</p> <p>The melamine urea formaldehyde (MUF) resin used as the adhesive is enriched with a flame retardant and added to the recipe in a gentle process. The result is good mechanical and fire-retardant properties</p>
<p>Use</p>	<p>SWISSMDF SF-B is suitable for residential and other building projects that must fulfil enhanced fire requirements, and for general-purpose dry-area applications outside of the vapour barrier:</p> <ul style="list-style-type: none"> <li>- In homes: Board element in wall, floor, and roof structures, but not load-bearing</li> <li>- In buildings and stands: as a stabilising or frame-building (but not load-bearing) element</li> <li>- As a base board for lining furniture and indoor dry-area surfaces</li> </ul>
<p>Technical classification</p>	<p>Dry-process fibreboard for use as non-loadbearing components in dry conditions as defined under EN 662-5, type MDF        Reaction to fire: B-s2, d0 acc. EN13501-1</p>
<p>Product structure</p>	<div style="display: flex; align-items: center;">  <ul style="list-style-type: none"> <li>→ Uniform high-quality fibres are extracted from pulped fresh wood chips from forest clearings and sawmill waste.</li> <li>→ The fibres are coated with glue, spread in a homogeneous blanket, and compressed under great pressure</li> <li>→ The flame retardant integrated in the recipe suppresses the board's flammability, minimising the generation of smoke.</li> <li>→ Red color</li> </ul> </div>
<p>Processing</p>	<ul style="list-style-type: none"> <li>- SWISSMDF SF-B can be processed with the usual woodworking tools.</li> <li>- The boards are suitable for lining with laminate, veneer, decorative paper, varnishes, and paints</li> <li>- If the raw board is to be lined after installation, please observe the instructions under Lignatec, "Holzwerkstoffe in Innenräumen", Zürich 2008 (see "Recommended board linings").</li> <li>- Fittings can be secured to the sides or on the surface, depending on the board thickness. Drilling, screwing, or gluing is possible.</li> </ul>
<p>Certificates / labels</p>	<div style="display: flex; justify-content: space-around; align-items: flex-end;"> <div style="text-align: center;">  <p>Swiss Made Swiss Quality</p> </div> <div style="text-align: center;">  <p>Certified System Swiss TS ISO 9001 - ISO 14001 Certified Quality and Environmental Management</p> </div> <div style="text-align: center;">  <p>Low CO<sub>2</sub>-production</p> </div> <div style="text-align: center;">  <p>Swiss Wood</p> </div> <div style="text-align: center;">  <p>from sustainable forestry (certificates can be provided upon request)</p> </div> <div style="text-align: center;">  <p>The Mark of responsible forestry FSC® C014886 Ask for FSC® certified products www.fsc.org</p> </div> </div>

## Product range und Technical Data

### Product range

**EX STOCK:** 2800 | 5600 mm x 2070 mm 12, 16, 19, 22, 25 mm  
*Panels per pack:* 25, 25, 25, 20, 20

Delivery of single or packaged boards in accordance with our terms and conditions

### Technical Data

#### General and mechanical properties (EN 622-5)

Thickness	12	16, 19	22, 25	mm	EN 324-1
Thickness tolerance	±0.2	±0.2	±0.3	mm	EN 324-1
Surface fineness (finish grinding grain size)	100	100	100	Grit	
Density	850	850	850	kg/m <sup>3</sup>	EN 323
Bending strength	22.0	20.0	18.0	N/mm <sup>2</sup>	EN 310
Modulus of elasticity	2'500	2'200	2'100	N/mm <sup>2</sup>	EN 310
Internal bond strength	0.60	0.55	0.55	N/mm <sup>2</sup>	EN 319
Surface soundness	1.0	1.0	1.0	N/mm <sup>2</sup>	EN 311
Moisture content	≥4.5	≥4.5	≥4.5	%	EN 322
Thickness swelling (in water 24h)	15	12	10	%	EN 317
Lindane   Pentachlorophenol (PCP)	n.d.   n.d. (n.d. = not detectable)			mg/kg	ChemVerbotV
Formaldehyde content	E1: ≤ 8mg/100g abs. dry board				EN 120
Formaldehyde emission	E1: ≤ 0.124mg/m <sup>3</sup> Air (≤ 0.1ppm)				EN 717-1
Tolerances	Length, Width for 2.80x2.07 m, 5.60x2.07 m ±5.0 mm Edge straightness L and B 1.5 mm/m   Squareness 2.0 mm/m Density (deviation from mean density within board) ±7%				EN 324-1 EN 324-2 EN 323

#### Physical characteristics (EN 13986)

Thermal conductivity	0.14	0.14	0.13	W/(mK)	EN 13986
Water vapour resistance [humid   dry]	18   27	17   26	17   26		EN 13986 EN 13986
Airborne sound insulation	26	28.5	30.5	dB	EN 13986
Acoustic absorption coefficient	0.10 (250-500 Hz)   0.20 (1'000-2'000 Hz)				EN 13986
Reaction to fire	B-s1,d0 flame retardant (no/little smoke, no dripping) RF2 low contribution to fire				EN13501-1 VKF (CH)
Ecological characteristics	Renewable energy > 90%   Wood 72-78%   MUF-Resin 14-18%   flame retardant 8-10%   Swiss Wood   local softwood from forest thinnings and sawmill residues   no post-consumer recycled content   no chlorides no biocides in the wood   thermally recyclable (in small quantities)				SIA 493.05

## Safety and other information

- Owing to their weight and size, special care must be taken in handling the boards (proper way of lifting, risk of crushing, etc.).
- Processing can give rise to saw- and grinding dust. Do not breathe in this wood dust (protective equipment and suction)! Suction equipment should always be used to remove wood dust. The risk of explosion is therefore minimised. Store unprocessed boards horizontally in a dry environment!
- The product is not on the list of hazardous substances, nor is it subject to precise labelling requirements (Dangerous Substances Ordinance / Waste Traffic Ordinance).
- The base board is glued with melamine urea formaldehyde (MUF) resin, yet there is scarcely any free formaldehyde that can be emitted from the correctly processed board. For the sake of caution, though, the unlined board should be installed only outside of the vapour barrier in indoor rooms with a tight shell.
- The product is chemically stable and has no toxic effects.
- **SWISSMDF SF-B** is a product from sustainable forest management. The wood used comes from felled forest clearings, and so helps to keep Swiss forests healthy.
- After the first lifecycle, the product can be converted into heat in a suitable plant (CO<sub>2</sub>-free energy). The product is flame-retardant, so bear in mind that only small quantities should be added to the fire.