



## ScandiBoard 810

Fire Free ScandiBoard 810 core material is a lightweight calcium silicate board, which is classified as non-combustible according to ISO 1182:1990 (annex A), NT FIRE 001 and DS 1057.1 and IMO Resolution A. 799(19).

Fire Free ScandiBoard 810 calcium silicate have been tested for quartz and asbestos content by The National Institute of Occupational Health, Denmark. No content of quartz or asbestos has been detected.

Fire Free ScandiBoard 810 is available in thicknesses from 20 mm - 100 mm and can be processed to the dimension needed for a specific construction from a maximum size of 2440 mm x 1220 mm. Fire Free ScandiBoard 810 can be sanded on both sides on request.

The following skin materials can be applied onto the Fire Free ScandiBoard 810 core material:

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| <input type="checkbox"/> Steel     | <input type="checkbox"/> MDF          |
| <input type="checkbox"/> Aluminium | <input type="checkbox"/> Chipboard    |
| <input type="checkbox"/> 3-Plywood | <input type="checkbox"/> Polylaminate |

### Standard sizes

(min. thickness 20 mm is achieved by sanding)

### Length x width mm

1220 x 1000

2040 x 1220

2440 x 1220

Special sizes are made to order.

And sanding on request.

### Tolerances

	Trimmed	Sanded
Length/width	± 2.5 mm	± 2.5 mm
Thickness	± 1.5 mm	± 0.5 mm



### Product profile

Fire Free ScandiBoard 810 core material is characterized by:

- Non-combustibility
- Extremely lightweight
- Good mechanical characteristics
- Frost resistant
- Low hygric expansion and contraction
- Good thermal resistance
- Rot resistant
- Environmentally friendly
- Easy to machine and work with

**Max. service temp.** 1000 °C

**Bulk density, dry** 300 kg/m<sup>3</sup>

**Compressive strength**  
(EN 1094-5: 1995) 2.8 MPa

**Modulus of rupture**  
(EN 993-6: 1995) 1.7 MPa

**Coefficient of reversible thermal expansion** (BS 1902: section 5.3: 1990) @ 20°C-750°C (68°F-1382°F)  $5.5 \times 10^{-6}$  m/(mK)

**Coefficient of hygric expansion**  
(DTI rep.) @ 23°C 50%RH to 23°C 10%RH,  $4.0 \times 10^{-3}$  mm/(m%RH)

### Coefficient of hygric contraction

(DTI rep.) @ 23°C 50%RH to 23°C 100%RH, 0 mm/(m%RH)

### Sound reduction index

Thickness 19 mm 26 dB

Thickness 38 mm 29 dB

Thickness 60 mm 31 dB

### Thermal conductivity

@ 20°C 0.06 W/(m×K)

@ 200°C 0.08 W/(m×K)

@ 400°C 0.10 W/(m×K)

@ 600°C 0.12 W/(m×K)

### Chemical analysis, typical

Silica SiO<sub>2</sub> 46%

Calcium oxide CaO 45%

Loss on ignition

1025°C (1877°F) LOI 6%

**Water content** 2.5%

**Colour** Grey

### Non-combustibility tests:

**ISO 1182:1990,**  
**NT FIRE 001 and DS 1057.1 and**  
**IMO Resolution A. 799(19).**