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SILCA[®] 250KM

Fire protection panels for non-bearing,
space-enclosing dividing walls pursuant to DIN EN 13501-2



Your refractory experts



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SILCA® 250KM

Fire-resistant panels for non-bearing, space-enclosing separating walls pursuant to DIN EN 13501-2 (equivalent to ÖNORM EN 13501-2)

SILCA® 250KM panels have established themselves as thermal insulation panels in the sector of fireplace and tiled stove construction. General Building Supervisory Board approval under no. Z-43.14-117 already exists for this sector for application as facing panels and thermal insulation in one material. **Please call for our special brochure.**

As the panels are non-combustible pursuant to DIN 4102-A1, tests were carried out at customer request for non-supporting interior walls with a fire resistance duration of at least 90 minutes.

The applied fire test pursuant to DIN EN 13501-2 with a single layer thickness of 80 mm showed a fire resistance period of 120 minutes. The test was carried out for a storey height of up to 4 metres and for all wall widths.

Panels in standard sizes of 1,000x625x80 or 1,250x500x80 mm are available for dividing wall constructions and

are glued using SILCADUR-KM adhesive. Assembly structure is in layers with offset vertical joints. **Please see our General Building Supervisory Board test certificate for further details in this respect.**

Modern production equipment, **permanent quality control, external control and certification according to DIN EN ISO 9001:2008** guarantee the continued **high quality standard** of our insulation boards.

The boards are not cut from a single block, but **individually pressed** on a filter press. This results in excellent homogeneity and a firm and **dust-free moulding skin** on both surfaces.

Dimensions of standard sizes are **1,250x500 mm** and **1,000x625 mm**. Further sizes are available up to a size of **3,000x1,250 mm**. Standard thicknesses range from 30 mm to 100 mm.

SILCA® 250KM panels are recognised as physiologically safe and are rated as an environmentally friendly building product.

SILCA® 250KM can be machined with **standard commercial woodworking tools**. This may usually be a **jigsaw** or a hand saw.

Your advantages at a glance

- Non-combustible to DIN 4102-A1
- Environmentally friendly building product
- Recognized as physiologically safe
- Easy handling and processing
- Trouble-free disposal as construction waste

MADE IN GERMANY

To achieve a decorative surface for dividing walls, they can also be treated with our SILCACON plaster system. This plaster system is made up of three components consisting of SILCACON prime coat/penetration stopper, SILCACON lime plaster and SILCACON smoothing lime mortar. In addition SILCATEX woven glass fabric can be plastered in for additional reinforcement.

| Material Description | | SILCA® 250KM |
|---|----------------|--|
| General Building Supervisory Board test certificate (AbP) | | No. P-2009-B-375/01 |
| Fire resistance | DIN EN 13501-2 | Fire resistance class EI 90 and EI 120 |
| Building material class | DIN 4102 | Non-combustible A1 |
| Bulk density (± 10 %) | DIN EN 1094-4 | 250 kg/m³ |
| Porosity | DIN EN 1094-4 | approx. 90 % |
| Compressive strength | DIN EN 1094-5 | > 1.4 MPa |
| Thermal conductivity λ at 200 °C | DIN EN 993-15 | < 0.1 W/mK |
| Thermal expansion at 500 °C | DIN EN 993-8 | < 0.2 % |
| Standard sizes in mm | | 1,250x500, 1,000x625 to max. 3,000x1,250 |
| Standard thicknesses in mm | | 30–100 |

SILCACON Prime Coat

SILCACON prime coat/penetrating stopper is used for surface treatment of SILCA® 250KM boards prior to plastering or application of smoothing lime mortar. The penetrating stopper reduces the capillary activity of the SILCA® 250KM insulation board creating a slightly hardened surface.

SILCACON prime coat is thinned with clean water at a ratio of 1:2/1:3 and can be applied by brush, roller or spray gun. A slightly bluish shade to the surface of treated areas becomes apparent. Subsequent applications should only be commenced after the surface has dried. The workplace must be sufficiently ventilated. The tools can be cleaned with water as long as the prime coat is not dry.



SILCACON Lime Plaster – Natural White

SILCACON lime plaster has a grain diameter of 0–1.2 mm and is applied to the surface of boards which have been treated with SILCACON prime coat and dried. We recommend SILCATEX-SE glass fibre for board joints or corners but also as general reinforcement.

The lime plaster can be applied in one or two work stages. The first plaster layer should be within a range of approx. 5–10 mm. The maximum total layer thickness is stipulated as 15 mm in the general Building Supervisory Board test certificate.



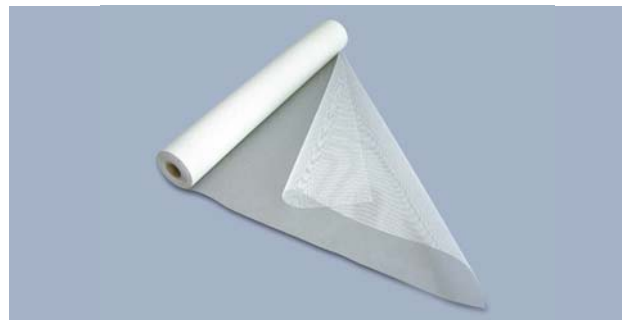
SILCACON Smoothing Lime Mortar – Natural White

SILCACON smoothing lime mortar can either be applied direct onto prime-coated SILCA® 250KM boards or as final layer on lime plaster to smooth the surface. The maximum layer thickness is 1 mm and is restricted to a total layer thickness of 2 mm by the general Building Supervisory Board test certificate. Please see the respective processing instructions on the container for further details concerning the handling and use of SILCACON products.



SILCATEX-SE Open Mesh Woven Glass Fabric

SILCATEX-SE is an E-glass with a special finish, resulting in low flammability and resistance to sliding and serves as plaster and concrete filler enforcement. It is alkali resistant, dimensionally stable and non-rotting. It contains no caustic or irritating substances.



SILCADUR-KM Adhesive

SILCADUR-KM Adhesive is to be used as adhesive for SILCA® 250KM boards. The adhesive is delivered in **buckets or bags, ready for use** and only needs to be mixed or kneaded respectively. For further details about processing, storage etc. please see the bonding manual which is enclosed in the package with the boards and the AbP.



| | |
|---|----------------------------|
| Classification temperature | 950 °C |
| Trading containers | Bucket: 6.5 kg; Bag: 850 g |
| Store frost-protected in closed buckets | 12 months |
| Processing temperature | 10–25 °C |



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The properties indicated in this brochure are typical values obtained in serial testing and determined by acknowledged test methods. Product-specific spreading of results should be taken into account. The information provided in this brochure does not represent guaranteed properties and cannot be used for any warranty claims.

SILCA Service- und Vertriebsgesellschaft für Dämmstoffe mbH

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