

## Isolmos 450 - Isolmos 550

Isolmos bricks are produced with accurately chosen raw materials and unique process. They have excellent mechanical, insulating characteristic and a high-quality standard ISO 9002 certified. Because it is very light, Isolmos has excellent insulation ability thus an economical solution for back-up lining.

### Application Areas

Ceramic, aluminium, cement, iron and steel, fertilizer, petrochemical industries.

### Features

- Very low density.
- Excellent insulation.
- High mechanical strength.
- Structural and dimensional stability at high temperatures.
- Availability of special dimensions and large slabs (up to 500 x 200 x 128 mm).
- Sensitive corners and surfaces.
- Safety of use (fibreless and without cristobalite, tridymite).



Main Properties	Isolmos 450	Isolmos 550
Classification Temperature, °C	900	900
Density, kg/m <sup>3</sup> (ASTM C 134-95)	425	500
Cold Crushing Strength, MN/cm <sup>2</sup> (ASTM C133-97)	13	25
High Temperature Performance		
Shrinkage, % 12 hours at 850 °C (ISO 2477)	1	1
Hot Load Subsidence, at 820 °C (ISO 1893)	0.5	0.5
Hot Crushing Strength, kg/cm <sup>2</sup> (at 800 °C)	18	34
Porosity, % (ISO 5017)	82	81
Thermal Conductivity, W/m.K (ASTM C 182-88)		
200°C	0.10	0.12
400°C	0.12	0.14
600°C	0.14	0.16
Chemical Composition, %		
SiO <sub>2</sub>	66.5	66.5
Al <sub>2</sub> O <sub>3</sub>	14.8	14.8
TiO <sub>2</sub>	0.5	0.5
Fe <sub>2</sub> O <sub>3</sub>	4.1	4.1
CaO	5.0	5.0
MgO	2.1	2.1
K <sub>2</sub> O	4.5	4.5
Na <sub>2</sub> O	2.0	2.0
Other	0.5	0.5
Dimensional Tolerances, %		
Standard	±2	-
Machined	±1	±1

The values given herein are typical average values obtained in accordance with standard test methods and subject to normal manufacturing variations. They are supplied as technical data and may change without notice. Contact our company to obtain detailed information.