

Lightweight refractory bricks

## **SILCAREF 1300-780, 1400-860**

**SILCAREF** lightweight refractory bricks are produced by extrusion. These have a low proportion of ferrous oxide and are resistant to atmospheres containing carbon monoxide.

They are suitable for application in furnaces and thermotechnical systems, especially in continuously operating plants. The lightweight refractory bricks can be used for back-up and front insulation. In case of application in the front corrosive stress should be avoided and the mechanical load should be low.

Apart from the standard dimensions we can also produce blanks from these standard sizes (e.g. arch bricks). The production of blanks is not oriented on the standard dimensions. Therefore, any desired diameter can be produced from one brick size. This facilitates assembly and minimizes waste.

### **SPECIAL FEATURES**

- low thermal conductivity
- good compressive strength
- low thermal shrinkage
- low bulk density
- easy to work

**SILCAREF  
1300-780**

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SILCAREF		Method	Unit	1300-780	1400-860
Classification temperature			°C	1,300	1,400
Standard group		EN 1094-2		130	140
Bulk density		EN 1094-4	kg/m <sup>3</sup>	780	860
Cold compression strength		EN ISO 8895	MPa	1.7	2.4
Permanent linear change		EN 1094-6	°C 12 h	1,300 -0.8 %	1,400 -1.0 %
CO resistant		ASTM C 288		Class A	Class A
Thermal conductivity $\lambda$ at $t_m$	400 °C	ASTM C 182-88	W/(m K)	0.25	0.28
	600 °C			0.28	0.31
	800 °C			0.31	0.35
	1,000 °C			-	0.39
Chemical reference analysis	Al <sub>2</sub> O <sub>3</sub>	EN ISO 21587-2	%	43	45
	SiO <sub>2</sub>			52	51
	Fe <sub>2</sub> O <sub>3</sub>			1.4	1.2
Dimensions					
Standard sizes			mm	230 x 114 x 64 (NF1) 230 x 114 x 76 (NF1-76) 250 x 124 x 64 (NF2)	230 x 114 x 64 (NF1) 230 x 114 x 76 (NF1-76) 250 x 124 x 64 (NF2)
Special dimensions on request		Cuts are only available from standard dimensions..			
Other qualities		Special qualities are available on request.			

The mentioned properties mentioned are typical values obtained according to the listed methods. Product variations have to be taken into account. The data do not represent guaranteed properties and cannot be used for any warranty claim. Data are subject to technical modifications.



**Roller hearth furnace 1050 °C with SILCAREF**