

# Product Definition

Insulating Bricks and Slabs

Product :

**TR28-11**

Other names :

Ref-date : 2008-1

Maximum Classified Temperature : **1 550 °C** Mark on the brick \* : TR28-11

Brand Code : 1182

Description : Fired refractory brick enriched with alumina

Properties :	Standards	Units	Average $\mu$	Std. Dev. s	Limits		
					Ti (lower)	Ts (upper)	
Classification :	ISO 2245		150				
Classification :	ASTM C155		28				
Bulk Density :	ISO 5016	g/cm <sup>3</sup>	1.1	0.04		1.2	
Cold Crushing Strength : (// to extrusion or perpendicular to pressing direction)	ISO 8895	MPa	7	0.8	5		
Permanent Linear Change : 12h at 1550 °C	ISO 2477	%	-1		-2		
Chemical Analysis :	XRF	%					
			Al <sub>2</sub> O <sub>3</sub>	57		55	
			SiO <sub>2</sub>	38			
			Fe <sub>2</sub> O <sub>3</sub>	0.7			1
			TiO <sub>2</sub>	0.6			
			CaO+MgO	0.4			0.8
	Na <sub>2</sub> O+K <sub>2</sub> O	0.9			1.7		
Thermal Conductivity : (Through 114 mm dimension)	ASTM C182	W/m.K					
			200 °C	0.38		0.48	
			400 °C				
			600 °C	0.45		0.55	
			800 °C				
			1 000 °C	0.52		0.62	
	1 200 °C						
Reversible Thermal Expansion : (20 °C to 1000 °C)	NF B40 308	%	0.55				
Pyroscopic Cone Equivalent :	ISO 528	°C	1 730				

Dimensional tolerances:	Standard Pieces	Non Standard Pieces
	Length Width Thickness Squareness	±0.5%, mini ±1.5mm ±0.5%, mini ±1.5mm ±0.5%, mini ±1.5mm 1mm / 100mm

Other Informations :	
Recommended Mortar :	Heatset : TC 1600 S or H (S = Dry, H = Ready to use) Airset : TH 1600 S ou H (S = Dry, H = Ready to use)
Manufacturing Plant :	LIBOS (F47500)

Physical properties are based on averages of routine quality controls carried out from bricks 230 x 114 x 64 mm or 230 x 114 x 76 mm.  
Averages and standard deviations are indicative values, limits (Ti et Ts) are guaranteed values.

\* The marking is not contractual.

Frequency, Sampling, Acceptation Methods are detailed in our C.T.C./Q.P.D. (Document n° 8030).