



IRAN REFRACTORIES COMPANY

TECHNICAL DATA SHEET



ALMA 50 Z

Classification:	Medium Alumina Brick
Main Raw Material Component:	Bauxite – Chamotte
Type Of Bond:	Ceramic
P.C.E .(Equivalent temperature)	> 33 (1743 °C)
Main Applications:	Various purposes ; Steel & Cement Industries (particularly end part of Safety zone of rotary kiln) as well as Chemical & Nonferrous Industries

Chemical Composition (Calcined base)			
Al ₂ O ₃ %	SiO ₂ %	Fe ₂ O ₃ %	TiO ₂ %
44 – 48	43-46	1.5 – 2.3	3.5 – 4.5

Physical Properties		
Bulk Density	gr/cm ³	2.22-2.30
Cold Crushing Strength	kg/cm ²	400-600
Apparent Porosity	%	15-19
Modulus of Rupture	kg/cm ²	80-150

Thermomechanical Properties		
Refractoriness under Load T05	°C	Min 1400
Reversible Linear thermal expansion (1100 °C)	%	≈ 0.9

The above data are typical of the properties of commercial Standard brick .

The data are subject to reasonable variation and therefore should not be used for Specification purposes. They may not be regarded as committed specifications and therefore not as guaranteed properties .

ASTM Test Methods, where applicable, used for determination of data.

Revision:7

Date of issue: 1397/08/15

Code: IRF-ST-Q-860-19

Revision:00