



# IRAN REFRACTORIES COMPANY

## TECHNICAL DATA SHEET



### SEMIROM

<b>Classification:</b>	Super duty Fireclay Brick
<b>Main Raw Material Component:</b>	High quality chamotte
<b>Type Of Bond:</b>	Ceramic
<b>P.C.E .(Equivalent temperature)</b>	> 32 (1717 °C)
<b>Main Applications:</b>	Various purposes ;Steel & Cement Industries(particularly preheater and calcining zone of rotary kiln) as well as Chemical & Nonferrous Industries, Regenerator side walls and checker networks, Lime kilns.

<b>Chemical Composition</b> (Calcined base)			
Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	TiO <sub>2</sub> %
40– 43	50 – 54	1.6 – 2.1	1.8 – 2.2

<b>Physical Properties</b>		
<b>Bulk Density</b>	g/cm <sup>3</sup>	2.20 – 2.30
<b>Cold Crushing Strength</b>	kg/cm <sup>2</sup>	400 – 600
<b>Apparent Porosity</b>	%	10- 17
<b>Modulus of Rupture</b>	kg/cm <sup>2</sup>	80-150

<b>Thermomechanical Properties</b>		
<b>Refractoriness under Load T05</b>	°C	Min 1350
<b>Reversible Linear thermal expansion (1100 °C)</b>	%	≈ 0.8

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.

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