

## Epic® 80AL

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**DESCRIPTION:** High alumina brick made from bauxite and high-purity clays. Phosphoric acid added. Resistant to aluminum metal penetration due to other specific additives.

**USES INCLUDE:** Working linings for aluminum smelters.

### CHEMICAL ANALYSIS: (TYPICAL CHEMICAL ANALYSIS)

Approximate % - calcined basis

Alumina	Al <sub>2</sub> O <sub>3</sub>	78.0
Silica	SiO <sub>2</sub>	13.6
Titania	TiO <sub>2</sub>	1.6
Ferric Oxide	Fe <sub>2</sub> O <sub>3</sub>	1.3
Phosphorous	P <sub>2</sub> O <sub>5</sub>	5.0
Lime	CaO	0.1
Magnesia	MgO	0.1
Alkalies		0.1

### TYPICAL AS RECEIVED PROPERTIES:

Apparent Porosity, %	15
Bulk Density, g/cm <sup>3</sup> (pcf)	2.80 (175)
Linear Reheat Expansion, %	+ 0.5
At 600° Thermal Conductivity, W/MK (btu/sf/hr <sup>2</sup> )	2.25 (15.6)
Cold Crushing Strength, MPa (psi)	70 (10150)

The values reported above are average values derived from production data encompassing many different sizes and shapes. Actual data will vary to a small degree naturally, and as a function of size and shape. This form is not intended to be used for purposes of specification, it is informational only.

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