



# IRAN REFRACTORIES COMPANY

## TECHNICAL DATA SHEET



### ALMACAST A 80 MC

<b>Temperature Service:</b>	1700 °C
<b>Classification:</b>	High Alumina Castable .
<b>Main Raw Material Component:</b>	Blended mixture of carefully sized high alumina aggregate and low Iron calcium aluminate binder.
<b>Type Of Bond:</b>	Hydraulic
<b>Grain Size</b>	0 – 3.6 mm
<b>Water required For Pouring</b>	9 – 11 %
<b>Dry Castable Required</b>	2500 Kg/m <sup>3</sup>
<b>Features and Main Applications:</b>	Excellent workability and setting properties to provide high refractoriness, Volume stability and excellent thermal shock resistance. Recommended for most high temperature metallurgical furnaces. Particularly designed for casting monolithic hearths, walls, electric furnace roofs, burner blocks and ladle lining. Excellent workability and setting properties.

#### Chemical Composition (Calcined base)

Al <sub>2</sub> O <sub>3</sub> %	SiO <sub>2</sub> %	TiO <sub>2</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	CaO %
78-82	13-15	2.5-3.0	1.4-1.8	2.6-3.2

#### Thermomechanical Properties

		After drying at 110 °C	After heating at 1480 °C
<b>Bulk Density</b>	(Kg/m <sup>3</sup> )	> 2500	—
<b>Cold Crushing Strength</b>	( kg/cm <sup>2</sup> )	300-440	400-500
<b>Modulus of Rupture</b>	( kg/cm <sup>2</sup> )	70-110	100-160
<b>Linear Change</b>	( %)	Negligible	0.0 to – 2.5

All data based on cast specimens . ASTM procedures , where applicable , used for determination of data .

For data of vibration cast or gunned , consult our sales & Engineering service's experts .

All data subject to reasonable deviations , and therefore , should not be used for specification purposes. ASTM Test Methods, where applicable, used for determination of data.

Revision:2

Date of issue: 1397/09/05

Code: IRF-ST-Q-860-19

Revision:00