



**CARORAM 90 PBR**

**2020**

**CARORAM 90 PBR** is a high purity, high alumina, chemically bonded ramming mix. High hot strengths, volume stability and thermal shock resistance are some of its exceptional properties. Applications include aluminum melting and holding furnaces, channel induction furnaces and delta sections of electric arc furnaces.

Maximum recommended service temperature..... 3300°F

Melting Point..... 3350°F

<u>Test Temperature</u>	<u>Modulus of Rupture,</u> <u>p.s.i.</u>	<u>Cold Crushing,</u> <u>p.s.i.</u>	<u>Linear Change %</u>
220°F	1500 – 2000	4800 – 5400	-0.1
1500°F	2200 – 2600	6700 – 7100	-0.2
2000°F	3300 – 3700	8500 – 8900	-0.1
2500°F	4500 – 5000	13500 – 14200	-0.4
3000°F	2400 – 2800	7100 – 7500	-0.2

**Chemical Analysis (%)**

Alumina (Al <sub>2</sub> O <sub>3</sub> ) .....	89.7
Silica (SiO <sub>2</sub> ) .....	5.8
Iron (Fe <sub>2</sub> O <sub>3</sub> ) .....	0.2
Titania (TiO <sub>2</sub> ) .....	0.1
Lime (CaO).....	0.5
Magnesia (MgO).....	0.1
Phosphorus Pentoxide (P <sub>2</sub> O <sub>5</sub> ).....	3.5

Material required for estimating – 185 lbs./ft<sup>3</sup>

Packaged in 75-pound cartons, thirty-six cartons per pallet (2700 pounds)