

# ElectroCast<sup>™</sup> 386-C

## **TECHNICAL DATA SHEET**

**ElectroCast<sup>™</sup> 386-C** is a high alumina, bauxite based castable with a large top size aggregate. This product is designed to be installed in large precast shapes by vibration casting. Recommended for EAF deltas, tundish covers, large shapes, dynamic molten iron, and steel contact.

- High hot strength, corrosion, and abrasion resistance.
- Low porosity for reduced penetration and reaction with molten metals, slags, and vapors.
- Excellent thermal shock and impact resistance.
- Micro porosity of bond phase has greatly reduced reactivity to furnace and ladle vapors by reducing the exposed surface area.
- Based on Reno's proprietary Electro Chemical bond system featuring an electrolyte for ultimate performance.

Service Temperature:	3100°F / 1704°C
Liquid Type:	E3
Addition Quantity:	3.75% - 4.25%

Wt. Required for Estimating:	179 lbs/ft <sup>3</sup>
Storage Life:	6 months
Shotcrete Binder:	N/A

#### TYPICAL CHEMICAL ANALYSIS (% Calcined Basis)

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	Alkalies	Other
84	10	1	3	1	0.08	1

### **TYPICAL COLD PHYSICAL PROPERTIES**

Prefired to °F	Cold Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Abrasion Loss (cc)	Thermal Shock Loss (%)	Permeability (mDarcys)	Surface Area (g/m²)
250	1,921	9,261	178	11.8%	-0.1			0.3370	3.608
750	1,702	9,126	176	13.9%	-0.1			0.5817	3.889
1500	2,392	13,986	179	12.7%	-0.1	<3 cc		4.2464	3.297
2000	3,458	24,815	181	11.3%	-0.3		40.3%	2.7711	0.292
2500	3,241	25,144	178	11.8%	0.2	<3 cc		8.5760	0.145
2800	2,785	24,420	176	11.5%	-0.3	<3 cc		1.7015	0.095
3000	2,853	23,067	177	12.1%	-0.5			15.9476	0.109

#### TYPICAL HOT PHYSICAL PROPERTIES

Prefired	Thermal Conductivity	Thermal Expansion
10 F		(%)
250	19.2	0.08
750	18.5	0.40
1500	18.0	0.84
2000	17.8	0.82
2500	17.6	1.15
2750	17.6	1.35
3000	17.5	0.20 (2912°F)

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The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures as required. They are subject to normal variations and should not be used for specification purposes.

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