

ElectroCast[™] 386

TECHNICAL DATA SHEET

ElectroCast[™] 386 is a high alumina, bauxite based, castable designed to be installed by vibration casting into forms.

- Based on Reno's proprietary Electro Chemical bond system featuring an electrolyte for ultimate performance.
- Rapid dry out capability while still having low porosity.
- Micro porosity of bond phase has greatly reduced reactivity to furnace and ladle vapors by reducing the exposed surface area.
- High hot strength, corrosion and abrasion resistance.
- Low porosity for reduced penetration and reaction with molten metals, slags, and vapors.
- Recommended for deltas, tundish covers, large shapes, dynamic molten iron and steel contact.

Service Temperature: 3000°F Electrolyte Type: E3

Addition Quantity: 4.2-4.6% by wt. Wt. Required for Estimating: 182 lb/ft³

Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (% Calcined Basis)

Al_2O_3	SiO_2	Fe_2O_3	TiO_2	Other
86	11	0.5	<1	1.5

TYPICAL PHYSICAL PROPERTIES

Prefire Temperature (°F)	Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Permeability (mDarcy)	Thermal K (Btu/in/Ft²/hr)	SurfaceArea (m2/g)
250	1,888	10,196	181.2	10.2	0.00	10.2	13.6	2.49
750	2,446	11,652	183.8	10.5	-0.11	0.59	14.8	3.68
1500	2,746	19,187	182.4	13.5	-0.11	0.91	15.1	3.11
2000	6,023	28,998	182.0	11.3	-0.41	4.36	15.8	0.324
2500	2,998	34,207	179.3	11.4	0.30	1.05	16.2	0.392
2800	3,315	37,991	180.1	12.3	0.11	4.06	16.8	0.162

Thermal Expansion Coefficient: 3.11E-6 in/in/F (ASTM C832)
Thermal Shock Loss (after 2000°F): 23.3% MOR Loss (ASTM C-1171)

Hot MOR at 2500°F: 1322 psi (ASTM C583) Hot MOR at 2750°F: 794 psi (ASTM C583)

Abrasion Loss After 1500°F:

Abrasion Loss After 2500°F:

Abrasion Loss After 2800°F:

2.5 cc (ASTM C704)

2.2 cc (ASTM C704)

4.0 cc (ASTM C704)

PACKAGING: 55 lb. Bags, 72 per Pallet (3960 lbs.) 1500 lb. Bags, 2 per Pallet (3000 lbs.) 2000 lb. Bags, 2 per Pallet (4000 lbs.) 20-033 Revised BP 5/17/2021 pin#191620

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.