



TECHNICAL DATA SHEET

Reno FireCast 70 is a high alumina, one component, no cement refractory. Designed to be installed by cast, pump, or shotcrete.

- Quick installation and dry-out for quick turn around.
- Excellent abrasion resistance
- Excellent thermal shock resistance.

Service Temperature: 3000°F / 1649°C
 Liquid Type: Water
 Addition Quantity: Cast: 4.75 – 5.25%
 Pump/shotcrete: 5.25% - 5.75%

Wt. Required for Estimating: 166 lbs/ft³
 Storage Life: 6 months
 Shotcrete Binder: 1.66% Magnesium Sulfate

TYPICAL CHEMICAL ANALYSIS (% Calcined Basis)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂	MgO	CaO	Alkalies	Other
71.5	23.7	< 1	2	< 1	< 0.5	< 0.2	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 Change (%)
Green	148	627	173	2.8	-		
250	1,010	4,665	170	16.3	-0.3		
750	901	4,881	168	16.1	-0.2		
1500	1,337	5,847	166	17.7	-0.3	2.3	
2000	2,577	15,372	164	16.6	-0.5		-19.90
2500	3,082	15,185	164	14.7	0.4	2.4	
2800	3,045	10,572	164	14.4	0.3	2.3	
3000	3,865	12,109	161	14.4	1.4		

TYPICAL HOT PHYSICAL PROPERTIES

Prefired to °F	Hot Modulus of Rupture (psi)	Thermal Conductivity (BTU/ft ² /hr/in/°F)	Thermal Expansion (%)
250		12.48	0.02
750		13.58	0.12
1500	2,245	14.32	0.25
2000		14.58	0.20
2500	756	14.70	0.73
2750	346	14.85	0.69

Coefficient of Thermal Expansion: 3.76x10⁻⁶ in/in/°F

Standard Cure Out Schedule: Schedule D

Packaging: 72/55 lb bags per pallet

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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.