



TECHNICAL DATA SHEET

RENO AluSHIELD 80 QH is a high alumina ultralow cement castable for aluminum contact applications.

FEATURES:

- High strength and thermal shock resistance
- Low porosity reduces molten metal penetration and reaction by molten metal and alkalis
- Applications include aluminum furnaces and troughs.

METHOD OF INSTALLATION

- Cast/Pump/Shotcrete

SERVICE TEMPERATURE:

3100°F

MIXING WATER:

4.5-5.0% (Casting)

5.0-6.0% (Pumping)

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂	MgO	CaO	Alkalies	Other
80	13	1	2	0.1	0.8	0.3	2-3

TYPICAL PHYSICAL PROPERTIES (Cast)

Prefired to °F	Density pcf	Linear Change %	Modulus of Rupture, psi	Cold Crushing Strength, psi	"K" Factor Btu*in/hr*ft ² *°F
250	174	Nil	1,750	7,400	12.46
1500	173	-0.1	3,350	>15,000	13.72
2000	172	-0.3	3,400	>15,000	14.24
2500	171	-0.1	3,150	>15,000	14.80

TYPICAL PHYSICAL PROPERTIES (Pump)

Prefired to °F	Density pcf	Porosity %	Linear Change %	Modulus of Rupture, psi	Cold Crushing Strength, psi
250	169	18.85	Nil	1,765	7,950
1500	168	19.65	-0.3	3,300	14,315
2000	167		-0.1	3,890	14,610

HOT MODULUS OF RUPTURE @ 1500°F: 3365 psi (Cast)

ABRASION LOSS AFTER 1500°F: <5 cc (Cast)
<5 cc (Pump)

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.