



RENO REFRACTORIES, INC

RENO AluSHIELD NC 808 SC

TECHNICAL DATA SHEET

RENO AluSHIELD NC 808 SC is a high alumina, silicon carbide no cement castable.

FEATURES:

- Excellent resistance to oxide buildup, thermal shock and abrasion
- Excellent resistance to aluminum penetration and alkali attack
- Less than 0.7% crystalline silica
- High Hot Strength
- Applications include molten aluminum contact and high wear areas such as ramps and belly bands. Excellent choice for special shapes for aluminum applications

METHOD OF INSTALLATION:

Cast, Pump, Shotcrete - applications not directly overhead with R503 activator that must be purchased separately and is calculated at 1.5 % of product weight

DRY MATERIAL REQUIRED: 174 lbs./cuft
SERVICE TEMPERATURE: 2500°F
BINDER ADDITION: 10 - 11%

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al ₂ O ₃	SiO ₂	TiO ₂	CaO	SiC
78	8-9	2-3	0.2	7

TYPICAL PHYSICAL PROPERTIES (Shotcreted)

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %	Abrasion Loss Cc	Thermal Cond. Btu-in/hr-ft ² °F
250	825-1,125	8,290-10,135	Nil	--	15.3
1500	1,500-1,744	10,400-12,700	0.0	4.9	18.5
2500	1,275-1,950	>15,000	-0.7	2.3	19.7

TYPICAL PHYSICAL PROPERTIES (Pumped)

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %	Density pcf	Porosity %	Abrasion Loss cc
250	1,121	7,326	-0.2	171	15.8	--
1500	2,555	14,083	-0.1	174	17.1	4.8
2000	2,740	14,997	+0.1	172	17.5	--
2500	2,555	12,106	0.0	171	18.4	2.3

HOT MOR @ 1500°F (ASTM C583): 3,637 psi

THERMAL SHOCK AFTER 2000°F ASTM C-1171: 16% Loss

ALUMINUM CUP TEST RATING: EXCELLENT

17-008 23-072

604580 – 12/19/23

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.

**Reno Refractories, Inc. PO Box 201, Morris, Alabama 35116
205.647.0240 | Toll Free 1.800.741.7366**