



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 | 4,722 | 14,083 | -0.1 | 174 | 17.1 | 2.6 |
| 2000 | 4,731 | 14,997 | +0.1 | 172 | 17.5 | -- |
| 2500 | 4,033 | 12,106 | +0.7 | 171 | 17.8 | 2.3 |

HOT MOR @ 1500°F (ASTM C583): 2,350 psi

17-008

604580 – 5/1/17

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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