



RENO REFRACTORIES, INC

RENO AluSHIELD 6810 SC

TECHNICAL DATA SHEET

RENO AluSHIELD 6810 SC is an alumina based, silicon carbide containing, non-wetting refractory. Recommended in lower sidewalls, bellybands, hearths and ramps.

FEATURES:

- Free silica is less than 0.6%
- Excellent non-wetting
- Excellent abrasion resistance
- Excellent alkali resistance

SERVICE TEMPERATURE: 2500°F
 MATERIAL REQUIRED FOR ESTIMATING: 175 lbs./ft³
 WATER ADDITION: 4.5-5.5%

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

| Al ₂ O ₃ | SiC | SiO ₂ | Fe ₂ O ₃ | TiO ₂ | CaO | Alkali | Other |
|--------------------------------|-----|------------------|--------------------------------|------------------|-----|--------|-------|
| 68 | 10 | 12.5 | 1.5 | 4.5 | 1.5 | < 0.25 | 2 |

TYPICAL PHYSICAL PROPERTIES

| Prefired to °F | Modulus of Rupture, psi | Cold Crushing Strength, psi | Density (pcf) | Linear Change (%) | Porosity % |
|----------------|-------------------------|-----------------------------|---------------|-------------------|------------|
| Green | 1,000 | 10,790 | 179 | -0.06 | 0 |
| 250 | 1,761 | 9,162 | 178 | -0.11 | 9.12 |
| 750 | 1,966 | 10,023 | 175 | -0.03 | 14.22 |
| 1500 | 3,278 | 13,197 | 177 | -0.10 | 15.95 |
| 2200 | 3,730 | 16,134 | 173 | -0.04 | 14.85 |

HMOR at 1500°F: 990 psi

ABRASION LOSS After 1500°F: 4 cc

THERMAL Cycle After 2000°F: 30% MOR Loss (ASTM C-1171)

ALUMINUM CUP TEST RATING: Excellent

ALKALI RESISTANCE TEST RATING: Excellent

PACKAGING: 55 lb. Bags, 72 per Pallet (3960) lbs.

23-080

603625 – 04/22/2024

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.