Reno AluSHIELD 5520 SC

TECHNICAL DATA SHEET

Reno AluSHIELD 5520 SC is a Mullite based; silicon carbide enhanced low cement castable.

SERVICE TEMPERATURE: 2500°F

MATERIAL REQUIRED FOR ESTIMATING: 155 lbs./cu ft

CASTING WATER: 5 - 6%

FEATURES:

- Excellent resistance to aluminum penetration
- Good abrasion resistance
- Thermal shock resistance below 2000°F
- Resists alkali attack and oxide build-up
- Applications include aluminum troughs, impact area, tilter boxes and tap blocks

TYPICAL CHEMICAL ANALYSIS (Reducing Conditions)

Al_2O_3	SiO ₂	Fe ₂ O ₃	CaO	SiC	Alkalies	Other
54.4	20.2	0.8	1.7	20.8	0.4	0.4

TYPICAL PHYSICAL PROPERTIES (Reducing conditions above 250°F.)

Prefired to	Modulus of	Cold Crushing	Abrasion Loss	Linear Change
°F	Rupture, psi	Strength, psi	CC	%
250	2,778	8,880		+0.2
1000	3,719	10,500		+0.1
1500	3,683	11,275	5.0	-0.2
2000	3,615	11,439	4.2	0.0

HOT MOR @1500°F (Orton): 5,390 psi **THERMAL SHOCK AFTER 2000°F:** 25% Loss

"K" FACTOR @ 1500°F mean temp: 20 Btu-in/hr-ft²-°F

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

603650 - 04/23/2024

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.