RENO REFRACTORIES, INC

ElectroShot™ 1125 SiC

TECHNICAL DATA SHEET

ElectroShot™ 1125 SIC is a fused alumina, silicon-carbide fortified, no-cement castable designed to be installed by pump/cast or the shotcrete process.

- Based on Reno's propriety Electro Chemical bond system featuring an electrolyte for ultimate performance.
- Rapid dry out capability while still retaining very low porosity.
- Excellent material for applications in cement plant cyclones, ducts, coolers, and offtakes.
- Excellent resistance to alkalai vapors, sulfur compounds, and chlorides.
- Excellent refractory for large scale installations.
- Low permeability to reduce vapor penetration into the refractory structure.
- The low porosity and small pore sizes creates dry hot face surfaces which greatly reduce dust buildup in ducts.

Service Temperature: 3000°F
Electrolyte Type: E11
Addition Quantity: 4.75-5.75% (wt.)
Wt. Required for Estimating: 180 lb/ft^3
Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al_2O_3	SiO_2	TiO_2	SiC + C
67	6.5	1.2	25

TYPICAL PHYSICAL PROPERTIES *reducing atmosphere

Prefire Temperature (°F)	Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)	Permeability (mdarcys)	Thermal K (Btu/in/ft^2/hr)
250	828	1,997	181.5	14.8	-0.11	1.4	16.2
750	915	2,571	178.9	15.6	0.18	5.4	18.8
1000	937	4,496	178.0	15.6	-0.07	7.2	19.9
1500	1,514	9,525	179.5	15.5	0.00	5.7	21.1
2000	3,074	14,187	178.2	12.4	-0.04	20.2	21.4
2200	3,091	10,815	182.1	12.6	-0.07	27.9	21.6
2500*	2,095	9,527	179.7	13.9	-0.36	24.5	21.9
2800*	1,894	12,280	179.1	13.6	-0.11	32.6	22.4

Thermal Expansion Coefficient: 2.88E-6 in/in/ °F (ASTM C832)
Thermal Shock Loss (after 2000°F):   -16.8% MOR (ASTM C-1171)

Abrasion Loss After 1500°F: 3.2 cc (ASTM C704)
Abrasion Loss After 2500°F: 6.0 cc (ASTM C704)

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