RENO REFRACTORIES, INC

RENO ElectroShot™ 1122 SIC

TECHNICAL DATA SHEET

ELECTROSHOT™ 1122 SIC is a high alumina silicon-carbide, no-cement castable with high density, low porosity, high hot strength and rapid dry-out characteristics designed to be installed by pump casting or shotcreting.

- Excellent material for use in foundries and steel mills with harsh conditions
- Excellent resistance to iron, slag, thermal shock and oxidation
- Recommended for use in blast furnace troughs and cupola carbon wells
- Can also be used where slag wear is a problem

SERVICE TEMPERATURE: 3000ºF
ELECTROLYTE: E11
BINDER ADDITION: 4.75 – 5.25% by weight
STORAGE LIFE: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al_2O_3	SiO_2	TiO_2	SiC + C	Other
67	7.5	1.6	22	1.9

TYPICAL PHYSICAL PROPERTIES-

Prefire Temperature (ºF)	Modulus of Rupture (psi)	Cold Crushing Strength (psi)	Density (pcf)	Porosity (%)	Linear Change (%)
250	615 – 795	1,700 – 3,475	165 – 183	10.3 – 18.7	0.11
750	555 – 1,440	1,805 – 4,800	163 – 182	14.1 – 19.9	0.11
1000	485 – 1,535	1,900 – 4,835	164 – 183	15.0 – 22.1	-0.15
1500	830 – 2,990	3,015 – 13,025	163 – 180	14.4 – 21.3	-0.11
2000	2,015 – 3,575	8,100 – 14,400	167 – 183	13.4 – 18.8	0.04
2500*	1,355 – 2,500	5,650 – 15,000	172 – 182	12.3 – 16.8	0.26
2800*	1,190 – 2,575	6,000 – 14,085	167 – 181	14.9 – 19.0	0.11

* reducing atmosphere

HOT MOR @ 2500ºF+: 1150 psi (ASTM C583 – Orton)
HOT MOR @ 2750ºF+: 370 psi (ASTM C583 – Orton)

ABRASION LOSS After 1500ºF: 2.1 – 6.1 cc
ABRASION LOSS After 2500ºF: 4.5 – 12.7 cc

- properties can vary depending on pump vs. shotcrete installation
+ cast sample data
17-184, 17-148

195040 – 2/13/18

Reno Refractories, PO Box 201, Morris, Alabama 35116
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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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