



TECHNICAL DATA SHEET

RENO NC SIC is a high alumina, silicon-carbide, no-cement material designed to be installed by pumping. This material has high density, low porosity, high hot strength and rapid dry-out characteristics which makes it an excellent material for use in foundries and steel mills with harsh conditions. This material can be installed on existing material by the method of shotcreting.

RENO NC SIC has excellent resistance to iron, slag, thermal shock and oxidation. This material is recommended for use blast furnace troughs and cupola carbon wells. Can also be used where slag wear is a problem.

SERVICE TEMPERATURE:	3000°F (reducing)
MATERIAL REQUIRED FOR ESTIMATING:	190 lbs/cf
BINDER ADDITION:	7.5 – 8.5% by weight
STORAGE LIFE:	1 year

TYPICAL CHEMICAL ANALYSIS (includes binder) (Calcined Basis)

Al ₂ O ₃	SiO ₂	TiO ₂	SiC + C
68	7	1.6	23

TYPICAL PHYSICAL PROPERTIES (reducing conditions above 250°F)

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %
250	600 – 900	5,500 – 9,500	-0.1
1,500	1,100 – 1,500	6,000 – 9,000	-.01
2,000	1,100 – 1,450	5,000 – 8,000	0.3
2,500	1,200 – 1,450	7,500 – 10,500	0.5

ABRASION LOSS After 2000°F: 2.5 cc
ABRASION LOSS After 2500°F: 7.1 cc

THERMAL CYCLE LOSS (ASTM C-1171): 21%
USS THERMAL SHOCK TEST: 1 Rating

PACKAGING: 55 lb. Bags, 72 per Pallet (3960 lbs.)
1500 lb. Bags, 2 per Pallet (3000 lbs.)
2000 lb. Bags, 2 per Pallet (4000 lbs.)

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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.