



TECHNICAL DATA SHEET

RENO NC 70 is a high alumina, no cement material with high hot strength and excellent resistance to chemical attack and thermal shock. It is designed to be easily installed by vibration casting.

RENO NC 70 can be dried out faster than comparable cement bonded products.

RENO NC 70 is recommended for applications where chemical attack or thermal cycling are an issue. Applications include chemical processing, iron and steel ladles and power plants.

SERVICE TEMPERATURE:	3000°F
MATERIAL REQUIRED FOR ESTIMATING:	165 lbs. /cu. ft.
BINDER ADDITION:	9 – 10%

TYPICAL CHEMICAL ANALYSIS (includes binder) (Calcined Basis)

Al ₂ O ₃	SiO ₂	Fe ₂ O ₃	TiO ₂	Na ₂ O	Other
68-72	24-26	< 1.50	< 2	< 0.50	< 0.25

TYPICAL PHYSICAL PROPERTIES

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %	“K” Factor Btu-in/hr-ft ² °F
250	700 – 950	3,250 – 4,500	Nil	500°F – 12.8
1,500	1,000 – 1,250	4,250 – 5,500	Nil	1000°F – 13.0
2,000	1,500 – 1,750	5,500 – 6,750	-0.3	1500°F – 13.3
2,500	2,000 – 2,250	8,030 – 9,035	-0.2	2000°F – 13.7
2,850	2,900 – 3,150	9,500 – 12,000	+0.5	---

HOT MOR @ 1500°F:	1,704 psi
HOT MOR @ 2500°F:	1,337 psi (Orton)
HOT MOR @ 2750°F:	407 psi (Orton)
Coefficient of Thermal Expansion:	2.56x10 ⁻⁶ in/in/°F

ABRASION LOSS After 1500°F:	<9.2 cc
ABRASION LOSS After 2000°F:	<6 cc
ABRASION LOSS After 2500°F:	<6 cc

THERMAL SHOCK After 2200°F: 15.6% MOR Loss (ASTM C-1171)

PACKAGING: 55 lb. Bags, 72 per Pallet (3,960 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.