



**RENO REFRACTORIES, INC**

**RENO NC 50 COARSE**

**TECHNICAL DATA SHEET**

**RENO NC 50 COARSE** is a high alumina no-cement material with excellent resistance to thermal shock and abrasion. It is designed to be easily installed by casting. High density, low porosity, high hot strength, and quick dry-out are its unique characteristics.

**RENO NC 50 COARSE** is recommended for applications for coke oven door plugs, reheat furnace subhearth, tundish back-up linings and covers and cement kiln preheaters and coolers.

**SERVICE TEMPERATURE:** 2850°F  
**MATERIAL REQUIRED FOR ESTIMATING:** 148 lbs/cf  
**STORAGE LIFE:** 1 year  
**BINDER ADDITION:** 10 - 11% by weight

**TYPICAL CHEMICAL ANALYSIS (includes binder) (Calcined Basis)**

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>
50 – 52	46 – 47	0.7 – 0.9	1.0 – 1.7

**TYPICAL PHYSICAL PROPERTIES**

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %	“K” Factor Btu/ft <sup>2</sup> /hr/in/°F
250	900 – 1,250	5,000 – 6,250	Nil	500°F – 11.5
1,500	1,100 – 1,450	7,400 – 7,750	+0.1	1,000°F – 8.5
2,000	1,270 – 1,660	7,900 – 10,100	-0.1	1,500°F – 6.5
2,500	1,800 – 2,200	9,000 – 11,445	Nil	2,000°F – 6.5
2,730	2,200 – 2,650	11,300 – 13,000	-0.2	

**ABRASION LOSS After 2000°F:** <7 cc

**ABRASION LOSS After 2500°F:** <6 cc

**APPARENT POROSITY @ 1500°F:** 16%  
**2850°F:** 10%

**HOT MOR @ 1500°F:** 1,500 – 1,650 psi

**THERMAL EXPANSION (MAXIMUM) 2600°F:** 0.75%

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