

## TECHNICAL DATA SHEET

**RENO NC 60** is a high alumina no cement material with excellent resistance to thermal shock and cracking. This material is high in alumina which allows for better thermal conductivity properties. Ease of installation, dryout, high hot strength and high thermal shock resistance is its unique properties. This material also processes very good strengths at high temperatures. It is designed to be easily installed by casting or pumping.

**RENO NC 60** is recommended for applications in any ladle application where iron is being handled. Also can be used for reheat furnace hearths, and tundish back-up linings and precast shapes for iron and steel applications.

| SERVICE TEMPERATURE:              | 3000°F                |
|-----------------------------------|-----------------------|
| MATERIAL REQUIRED FOR ESTIMATING: | 160 lbs/cf            |
| BINDER ADDITION:                  | 9.5 – 10.5% by weight |

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

| $AI_2O_3$ | SiO <sub>2</sub> | $Fe_2O_3$  | TiO <sub>2</sub> |
|-----------|------------------|------------|------------------|
| 57 - 62   | 38 - 42          | 0.75 – 1.0 | 1.75 – 2.0       |

## **TYPICAL PHYSICAL PROPERTIES**

| Prefired to<br>°f | Modulus of<br>Rupture, psi | Cold Crushing<br>Strength, psi | Linear Change<br>% | "K" Factor<br>BTU-in/hr-ft²-°F |
|-------------------|----------------------------|--------------------------------|--------------------|--------------------------------|
| 250               | 650 – 900                  | 3,500 - 4,500                  | Nil                | 9.4                            |
| 1500              | 1,200 – 1,450              | 5,800 - 7,400                  | -0.1               | 8.24                           |
| 2000              | 1,600 – 1,850              | 6,000 - 7,800                  | -0.3               | 8.42                           |
| 2500              | 2,100 – 2,350              | 6,600 - 8,200                  | -0.4               | 9.0                            |
| 3000              | 2,700 – 2,950              | 7,500 – 8,500                  | +1.1               | 9.98                           |

HOT MOR (ASTM C583) @ 2500°F: 1,511 - 1,631 psi (Orton)

| ABRASION LOSS After 1500°F: | <11 cc |
|-----------------------------|--------|
| ABRASION LOSS After 2000°F: | <7 cc  |
| ABRASION LOSS After 2500°F: | <6 cc  |

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.

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