



**RENO REFRACTORIES, INC**

**RENO CAST 40 AR**

**TECHNICAL DATA SHEET**

**RENO CAST 40 AR** is a low moisture, low cement castable that can be installed by casting, pumping, or shotcreting. This product is designed for alkali resistance.

<b>SERVICE TEMPERATURE:</b>	2800°F
<b>MATERIAL REQUIRED FOR ESTIMATING:</b>	150 lbs./cu. ft.
<b>CASTING WATER:</b>	6.5-7.5%

**TYPICAL CHEMICAL ANALYSIS (Calcined Basis)**

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	SiC	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	MgO	CaO	Alkalies	ZrO <sub>2</sub>
42	45	3.1	0.8	1.2	0.1	2.1	0.3	5

**TYPICAL PHYSICAL PROPERTIES**

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %	Porosity %
750	1,050 – 1,200	4,335 – 6,095	-0.20	17.2
1000	1,260 – 1,465	4,545 – 5,440	-0.11	17.5
1500	1,750 – 1,950	4,340 – 5,880	-0.25	18.0
2000	2,530 – 2,750	7,170 – 7,745	-0.42	17.6
2200	2,135 – 2,565	6,160 – 7,300	-0.22	17.0
2500*	2,240 – 2,710	6,670 – 9,095	0.72	16.2
2800*	1,725 – 2,395	11,275 – 12,500	0.93	14.7

**ABRASION LOSS:** 6.5 cc (1500°F)      7.1 cc (2500°F\*)

**HOT MODULUS OF RUPTURE:** 2,485 psi (1500°F)

**THERMAL SHOCK LOSS, 2000°F:** 38%

\* reducing atmosphere  
19-096A

140200 – 09/03/19

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.