



TECHNICAL DATA SHEET

RENO CLEANCAST 18Z is an alumina-zircon aggregate and Mullite based low cement castable.

**FEATURES:**

- Can be vibration cast, pumped, or shot-creted
- Excellent resistance to alkali attack
- Abrasion and thermal shock resistant
- Applications include cement, lime and glass industries.

<b>SERVICE TEMPERATURE:</b>	2800°F
<b>MATERIAL REQUIRED FOR ESTIMATING:</b>	173 lbs./cu. ft.
<b>CASTING WATER</b>	5 - 5.5%
<b>PUMPING WATER:</b>	5.5- 6%

**TYPICAL CHEMICAL ANALYSIS (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>	ZrO <sub>2</sub>	CaO	SiC
48	28	0.4	Tr	18	2	2.5

**TYPICAL PHYSICAL PROPERTIES (Cast)**

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	Linear Change %
250	2,107	9,905	Nil
1500	2,550	11,240	+0.1
2500	3,660	13,223	+0.3

**ABRASION LOSS AFTER 1500°F:** <4 cc

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.

### TYPICAL PHYSICAL PROPERTIES (Pumped)

Prefired to °F	Modulus of Rupture, psi	Cold Crushing Strength, psi	HMOR Psi	Linear Change %	Porosity %	Abrasion Loss, cc
250	1,360	9,315	--	Nil	--	--
1500	1,780	10,920	1,150	-0.3	15.5	6
1800	1,625	12,425	--	0.0	14.4	5.5
2500	2,537	10,120	630	+0.2	10.5	4.3
2700	3,000	16,000	--	+0.6	--	--

**THERMAL SHOCK LOSS – ASTM C-1171:** 35%

**THERMAL EXPANSION:**  $2.6 \times 10^{-6}$

**HOT MOR – ASTM C583:** 1500°F: 2980-3640 psi  
2500°F: 550-720 psi

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

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