



## Fedcast 80

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**DESCRIPTION:** 80% alumina, low-cement castable.

**USES INCLUDE:** Ladle bottoms.  
Barrels.  
Safety linings.  
Precast shapes for myriad uses.  
Reheat furnace hearth.

### CHEMICAL ANALYSIS: (TYPICAL CHEMICAL ANALYSIS)

(Approximate % - calcined basis)

Al <sub>2</sub> O <sub>3</sub>	80.0%
SiO <sub>2</sub>	13.25%
TiO <sub>2</sub>	2.68%
Fe <sub>2</sub> O <sub>3</sub>	1.06%
CaO	1.04%
Alkalies, K <sub>2</sub> O + Na <sub>2</sub> O	0.32%
MgO	0.07%

### TYPICAL AS RECEIVED PROPERTIES:

Temperature °C (°F)	Bulk Density pcf (g/cc)	Cold MOR psi (MPa) ASTM C865 & C133	Hot MOR psi (MPa) ASTM C583	Total Linear Change % ASTM C865 & C133
104 (220)	174	1150		0.00
815 (1500)	172	1400	2174	- 0.04
1371 (2500)	169	1650	530 (4)	+ 0.60
1704 (3100)	175	2250		- 0.71

Maximum Service Temp °C (°F):	1787.77 (3250)
Material Required/Ft <sup>3</sup> lbs (kg):	173
Water Required for Mixing (%):	5.00 ~ 6.00
Grain Size (mesh):	- 3

The values reported above are average values derived from production data encompassing many different sizes and shapes. Actual data will vary to a small degree naturally and as a function of size and shape. This form is not intended to be used for purposes of specification; it is informational only.

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