



Fedcast 85

DESCRIPTION: 85% 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 ₂ O ₃	83.55 %
SiO ₂	11.57 %
Fe ₂ O ₃	1.08 %
TiO ₂	2.81 %
MgO	0.05 %
CaO	0.64 %
Alkalies, K ₂ O+Na ₂ O	0.3 %

TYPICAL AS RECEIVED PROPERTIES:

	Bulk Density Pcf (g/cc)	Cold MOR, psi (MPa) Per ASTM C865 & C133	Hot MOR, psi (MPa) Per ASTM C583	total Linear Change (%) Per ASTM C865 & C133
220°F (104°C)	178(2.85)	1200(8)	-	0.00
1500°F(815°C)	174(2.78)	1350(9)	1900(13)	-0.10
2500°F(1371°C)	175(2.80)	1650(11)	590(4)	+0.50
3000°F(1649°C)	177(2.84)	1880(13)	-	+0.10
Maximum Service Temp. °F, (°C):			3300 (1816)	
Material Required/Cubic ft, lbs (kg)			175 (2.80)	
Water Required For Mixing, %			5.5 ~ 6.25	
Grain Size:			-3 Mesh	

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.

Version 20.11