

UNI-BRADE HP 85

UNI-BRADE HP 85 is a high alumina product with a unique calcium phosphate bond that can be rammed, hand packed or gunned. This product has been developed for applications requiring abrasion resistance.

Service Temperature:	2500°F	1370°C
Water Required to Cast:	6.2%	6.2%
Material Required:	175 lbs/ft ³	2804 kg/m ³
Abrasion Resistance - ASTM C704:	<3.0 cc	<3.0 cc

TYPICAL CHEMICAL ANALYSIS, %

Al ₂ O ₃	SiO ₂	TiO ₂	Fe ₂ O ₃	CaO	MgO	Alkalies	P ₂ O ₅
83.1	8.8	2.1	0.7	2.6	0.1	0.9	1.7

TYPICAL PHYSICAL PROPERTIES

Pre-Fired To		Bulk Density		Cold Compressive Strength		Cold Modulus of Rupture		Total Linear Change
°F	°C	lbs/ft ³	kg/m ³	psi	MPa	psi	MPa	%
220	105	176	2820	17,000	117	-	-	-0.1
1500	815	175	2800	18,000	124	3200	22	-0.4

K-values (BTU-in/hr/ft²/°F)

	400°F	800°F	1200°F	1600°F	2000°F	2400°F
Rammed	11.71	12.17	12.93	13.97	15.31	16.95

Revision date: 8/8/2024 - Check with your URC sales rep to determine if you have the current sheet
UNI-BRADE HP 85