

## UNI-BRADE HP 175P

UNI-BRADE HP 175P is a pumpable refractory designed for use in hydrocarbon processing applications. It is well suited for areas requiring a high density with excellent abrasion resistance.

<b>Service Temperature:</b>	3200°F	1760°C
<b>Water Required to Pump:</b>	5.5%	5.5%
<b>Water Required to Cast:</b>	4.7%	4.7%
<b>Material Required:</b>	182 lbs/ft <sup>3</sup>	2915 kg/m <sup>3</sup>
<b>Abrasion Resistance - ASTM C704:</b>	<5.0cc	<5.0cc

### TYPICAL CHEMICAL ANALYSIS, %

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	CaO	MgO	Alkalies
83.2	11.5	2.1	0.8	1.5	0.1	0.2

### TYPICAL PHYSICAL PROPERTIES

Pre-Fired To		Bulk Density		Cold Compressive Strength		Cold Modulus of Rupture		Total Linear Change	Porosity
°F	°C	lbs/ft <sup>3</sup>	kg/m <sup>3</sup>	psi	MPa	psi	MPa	%	%
230	110	184	2950	17,000	120	2800	19	-	-
1500	815	182	2915	19,000	130	3500	24	-0.2	17
2000	1093	182	2915	22,000	150	4000	27	-0.2	17
2552	1400	179	2870	22,000	150	3000	20	+0.3	18
2732	1500	181	2900	21,000	145	3000	20	+0.2	17
2912	1600	182	2915	21,000	145	3000	20	0.0	16

### K-values (BTU-in/hr/ft<sup>2</sup>/°F)

	400°F	800°F	1200°F	1600°F	2000°F	2400°F
Pump	23.90	19.57	17.74	17.07	17.12	17.68

Revision date: 07/24/2024 - Check with your URC sales rep to determine if you have the current sheet