

OVER 40 YEARS OF PERFORMANCE DESIGNED SOLUTIONS

UNI-BRADE **AR** FAMILY OF ABRASION RESISTANT SPECIALTIES

UNI-BRADE Family	Al ₂ O ₃ (%)	Bond	Service Temp. (°F)	C704 Results (cc) Cast	C704 Results (cc) Gunned	Installation Method	Typical Applications
UNI-BRADE AR-85	83	■ Chemical	2500	<3.0	<7.0	■ Hand Pack ■ Ram ■ Gunite	■ CFBs ■ Cupola Stacks ■ Cement Plants ■ FCCUs ■ Taconite Plants
UNI-BRADE AR-60	60		2500	<6.0	<10.0		
UNI-BRADE AR-P8	83	■ Low Cement	3200	<5.0	N/A	■ Pump ■ Vibracast ■ Cast	■ Zinc Kilns ■ Precast Shapes ■ Cement Kilns ■ Lime Kilns
UNI-BRADE AR-VC8	82		3200	<5.0	N/A		

DELIVERED VALUE

UNI-BRADE AR-85



GUNNED

"We gun AR-85 regularly in the tough areas of our CFB plants."

Actual gunned data (independently tested)

After 1500°F CCS(psi)..... 11,300
C704(cc)..... 5.4

HAND PACKED

"Extremely consistent, easy to hand pack. Over 12 months, held up better than AA-22 or Actchem."

Actual hand packed data (independently tested)

After 1500°F CCS(psi)..... 14,600
C704(cc)..... 2.7



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APPLICATION: CEMENT INDUSTRY

LOCATION: USA

UNI-BRADE AR-85 UPDATE

Trowel/Handpack

- Consistent water range
- Long pot life with easy installation
- Independently tested at or below 3cc C704 standard

Gunite

- Sticky consistency guns with very low rebounds and dust
- Excellent for patches and veneers
- Independently tested in 5-7cc range with C704 standard



Case 1: 160 tons handpacked in Texas cement plant with **no issues** and **excellent performance** after 1 year of service.

Case 2: 20 tons handpacked & gunned in dedusting cyclones of Florida cement plant. **UNI-BRADE AR-85** went 1½ – 2 years, outperforming both tile and Densit.

Typical Data

- Material Required: 175 lbs/ft³
- Maximum Service Temperature: 2500 °F

	HANDPACKED	GUNNED
CCS (psi) after 1500 °F	16,000 – 18,000	11,000 – 13,000
C704 (cc) after 1500 °F	2.5 – 3.5	5.0 – 6.5

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OVER 45 YEARS OF PERFORMANCE DESIGNED SOLUTIONS

UNI-BRADE AD-20

TYPE:

Andalusite based ultra-low cement matrix enriched with silicon carbide

FEATURES:

Excellent hot strength, abrasion resistance, shock resistance and chemical resistance in key cement applications with exceptional volume stability

DATA:

Install Options	Material Required	C704 Abrasion	HMOR @ 2000° F	Prism Spall	Chemical Resistance
Pump and Vibcast	160 pcf	< 7.0 cc	4100 psi	> 30 cycles	Excellent



APPLICATIONS:

- Nose Ring / Tail Rings
- Bull Nose
- Preheaters
- Cooler Sections

Top: Nose Ring prepared for installation

Bottom: Nose Ring formed and poured in place

