



TECHNICAL DATA SHEET

ElectroCast™ 352 AR-AL is a high alumina, silicon-carbide, zirconia, cement castable designed for cast/pump installations.

- Based on Reno's propriety Electro Chemical bond system which utilizes an electrolyte for ultimate performance.
• Extremely small pore size of bond prevents any entry into castable by metal or fluxes.
• Rapid dry out capability while still retaining very low porosity.
• Excellent material for applications in aluminum furnace belly band, troughs, ladles and other areas both below and above the metal line.
• Excellent resistance to alkali.
• Displays excellent non-wetting by aluminum alloys.
• Excellent abrasion resistance.

Service Temperature: 2800°F
Electrolyte Type: E3
Addition Quantity: 4.5-5.2% (wt.)
Wt. Required for Estimating: 162 lb/ft³
Storage Life: 6 months

TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Table with 6 columns: Al2O3, SiO2, ZrO2, SiC, Fe2O3, Others. Values: 52, 31, 6-7, 8-9, 0.7, 2.0

TYPICAL PHYSICAL PROPERTIES

Table with 8 columns: Prefire Temperature (°F), Modulus of Rupture (psi), Cold Crushing Strength (psi), Density (pcf), Porosity (%), Permeability (mDarcy), Thermal K (Btu/in/ft²/°F), Linear Change (%). Rows for temperatures 300, 750, 1500, 2000, 2500.

Thermal Expansion Coefficient: 2.52E-6 in/in/°F (ASTM C832)
Thermal Shock Loss (after 2000°F): -36% MOR Loss (ASTM C-1171)

HMOR at 1500°F: 2,443 psi (ASTM C583)
HMOR at 2500°F: 1,656 psi (ASTM C583)

Abrasion Loss After 1500°F: 2.1 cc
Abrasion Loss After 2500°F: 3.0 cc

PACKAGING: 55 lb. Bags, 72 per Pallet (3960 lbs.) 1500 lb. Bags, 2 per Pallet (3000 lbs.) 2000 lb. Bags, 2 per Pallet (4000 lbs.)
19-124 A BP 197820 – 5/14/21

The data presented represents typical average results obtained by testing under ASTM or other acceptable procedures as required. They are subject to normal variations and should not be used for specification purposes.