## **RENO REFRACTORIES, INC**

# ElectroShot<sup>™</sup> 1152 AR

## **TECHNICAL DATA SHEET**

**ElectroShot**<sup>™</sup> **1152 AR** is a high alumina, silicon-carbide, zirconia, no cement castable designed for shotcrete installations.

- Based on Reno's propriety Electro-Chemical bond system which utilizes a nano fluid 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 vapors.
- Displays excellent non-wetting by aluminum alloys.
- Excellent abrasion resistance.

Service Temperature:	2800°F
Electrolyte Type:	E11
Addition Quantity:	4.75-6.0% (wt.)
Wt. Required for Estimating:	163 lb/ft <sup>3</sup>
Storage Life:	6 months

#### TYPICAL CHEMICAL ANALYSIS (Calcined Basis)

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	ŹrO <sub>2</sub>	SiC	Fe <sub>2</sub> O <sub>3</sub>	Others
52	32	6-7	8-9	0.8	2.0

### **TYPICAL PHYSICAL PROPERTIES**

Prefire Temperature	Modulus of	Cold Crushing	Density (pcf)	Porosity (%)	Linear Change	Permeability (mDarcy)	Thermal K (Btu/in/ft <sup>2</sup> /ºF)	Surface Area
(°F)	Rupture (psi)	Strength (psi)	(F)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(%)	(	(,	(m2/g)
300	500	2,314	162.0	15.8	-0.10		14.3	
750	867	2,339	162.2	14.7	0.08	0.9	12.2	4.56
1500	1,401	6,939	161.3	15.1	-0.06	0.8	11.1	3.39
2000	2,513	15,460	162.9	14.3	-0.26	10.2	10.6	0.70
2500	2,584	16,057	163.8	12.5	-0.33	9.2	10.2	0.90
2650	2,625	13,465	164.5	12.7	-0.25	9.2	10.0	0.69

Thermal Expansion Coefficient: Thermal Shock Loss (after 2000<sup>o</sup>F): 2.52E-6 in/in/°F (ASTM C832) -3.1% MOR Loss (ASTM C-1171)

Hot MOR at 2500°F:

Abrasion Loss After 1500°F: Abrasion Loss After 2500°F: 1,657 psi (ASTM C583)

9.8 cc (ASTM C704) 5.1 cc (ASTM C704)

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.)
21-100 A	Revised 5/16/21	pin#197941

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.

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