



**RENO REFRACTORIES, INC**

**Reno ElectroVibe 8010 Cu**

## TECHNICAL DATA SHEET

**Reno ElectroVibe 8010 Cu** is a high purity, fused alumina based refractory with Silicon Carbide additions. It is designed for lining coreless holding and melting induction furnaces for copper and its alloys. This product is of the dry castable type that rapidly densifies with external vibration. High densities are reliably obtained when the product is compacted using a traditional vibrator arrangement. A unique bonding system increases corrosion resistance due to a low porosity micro-structure with very small pore sizes.

- Due to the dry, moisture free composition, a reduced heatup/sintering schedule reduces repair turnaround time.
- A non-wetting surface is formed which prevents chemical reactions from occurring. Superior performance in contact with copper alloys reduces contamination from soluble materials often found in other refractory sources.
- Improved sintering occurs due to improved colloidal particle packing.
- The Electro Bonding improves erosion resistance and density by controlling static charging of particles. Because of the unique composition, extremely corrosion resistant phases are formed.
- Very low dust levels are normally observed.

**Service Temperature:** 2800°F/1538°C

**Wt. Required for Estimating:** 165 lbs/ft<sup>3</sup>

**Storage Life:** 12 Months if stored in dry, temperature controlled air.

### TYPICAL CHEMICAL ANALYSIS (% Calcined Basis)

Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	SiC	B <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>
81.68	3.79	0.62	9.33	0.75	1.86

### TYPICAL COLD PHYSICAL PROPERTIES

Prefired to °F / °C	Bulk Density lbs/ft <sup>3</sup> / g/cm <sup>3</sup>	True Density lbs/ft <sup>3</sup> / g/cm <sup>3</sup>	Cold Crushing Strength psi / MPa	Apparent Porosity (%)	Linear Change (%)	Median Pore Diameter (µm)
2200 / 1204	158.69/ 2.543	202.43/ 3.244	8,706 / 60.02	21.61	5.0	6.49
2400 / 1316	165.57/ 2.653	212.22/ 3.401	2,713 / 18.71	21.98	4.0	6.93
2500 / 1371	184.70/2.960	220.82/3.539	1,794 / 12.37	16.35	6.0	3.85

Packaging: 40/55# bags per pallet;  
2/ 1,100# bulk bags per pallet;  
1/ 2,100# bulk bags per pallet

EBCO 24-194

PIN#199680

5/29/2024

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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