

**Exo-Set UNO B**

Product Number 17435

Date 2/10/2014

**Product Description**

An one component, rapid hardening, chemically bonded, bauxite based refractory castable. Exhibits excellent bonding adherence to old refractory - hot or cold. Non wetting to aluminum.

**Typical Applications**

As a primary lining or for maintenance repairs of metal contact areas in aluminum melting and holding furnaces, ladles, troughs and launders.

**Service limit -** 2500°F 1371 °C

**Std. package** 55 # / 25 kg Bag

**Density to place** 160 pcf 2,563 kg/m<sup>3</sup>

**Water range per std. package:**

**Density in service** 160 pcf 2,563 kg/m<sup>3</sup>

**Casting** 1.9 to 2.1 qts 1.8 to 2.0 l

**Min time before firing** none

**Pumping** 2.0 to 2.3 qts 1.9 to 2.2 l

**Chemistry % (calcined)**

Al <sub>2</sub> O <sub>3</sub>	76.7	P <sub>2</sub> O <sub>5</sub>	4.3
SiO <sub>2</sub>	8.5	Other	10.2

**Thermal Conductivity**

	btu*in/hr*ff <sup>2</sup> *°F	w/m°C
500F / 260C	11.5	1.65
1000F / 540C	10.6	1.52
1500F / 815C	10.7	1.54
2000F / 1090C	11.9	1.71

**Abrasion Loss**

per ASTM C 704  
after 1500 F

9 cc

**Coefficient of Thermal Expansion**

(reversible)

4.3 x 10<sup>-6</sup> in/in F

7.7 x 10<sup>-6</sup> m/m C

Temperature per <u>ASTM C113 / C865</u>	Linear Change per <u>ASTM C113 / C179</u>	Cold MOR		CCS		Hot MOR	
		per ASTM C133 <u>psi</u>	<u>MPa</u>	per ASTM C133 <u>psi</u>	<u>MPa</u>	per ASTM C583 <u>psi</u>	<u>MPa</u>
230 F / 110 C	0.0%	1100	7.6	5000	34		
1500 F / 815 C	-0.2%	850	5.9	3500	24	1600	11.0
1800 F / 980 C	-0.3%	1400	9.7		0	1100	7.6
2000 F / 1090 C	-0.6%	2000	13.8		0		0.0
2500 F / 1370 C	-1.0%	2300	15.9		0		0.0

**Other Data**

**Heat Up Guide**  
Schedule D

**ASTM Class**

**Note:**

All data are averaged results of ASTM tests (where applicable) on laboratory cast specimens. Reasonable variations in data can be expected. Data is not to be used for specification purposes. Product data is periodically updated to reflect product / raw material / process / testing changes. Please consult your Plico representative to make sure you have the most current data.

*Plico Refractories are manufactured by Plibrico Company LLC, USA.*