

**Plico Flow LC 3000 KK**

Product Number 14256

Date 2/10/2014

**Product Description**

A super duty, self leveling, low cement castable.

**Service limit -** 3000°F 1,648 °C

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

**Density to place** 140 pcf 2,242 kg/m<sup>3</sup>

**Water range per std. package:**

**Density in service** 140 pcf 2,243 kg/m<sup>3</sup>

**Casting** 1.9 to 2.2 qts 1.8 to 2.1 l

**Min time before firing** 24 hr

**Pumping** 2.0 to 2.4 qts 1.9 to 2.3 l

**Chemistry % (calcined)**

Al <sub>2</sub> O <sub>3</sub>	47.1	P <sub>2</sub> O <sub>5</sub>	
SiO <sub>2</sub>	47.3	Alk.	0.6
Fe <sub>2</sub> O <sub>3</sub>	0.8	MgO	0.1
CaO	2.3	SiC	
TiO <sub>2</sub>	1.8	ZrO <sub>2</sub>	
		Other	

**Thermal Conductivity**

	btu*in/hr*ff <sup>2</sup> *°F	w/m°C
500F / 260C	9.3	1.33
1000F / 540C	10.0	1.44
1500F / 815C	10.7	1.54
2000F / 1090C	11.5	1.65

**Abrasion Loss**

per ASTM C 704  
after 1500 F

9 cc

**Coefficient of Thermal Expansion**  
(reversible)

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

5.5 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%	1500	10.3	8500	59		
1500 F / 815 C	-0.3%	1800	12.4	8400	58	2400	16.6
2000 F / 1090C	-0.4%	2000	13.8		0	2800	19.3
2500 F / 1370 C	0.3%	2200	15.2		0	350	2.4
3000 F / 1650 C	2.5%	2500	17.2		0		0.0

**Other Data**

**Heat Up Guide**

Schedule C or C-Linear

**ASTM Class**

C 401 Class E

Low Cement Castable

**Note:**

All data are averaged results of ASTM tests (where applicable) on laboratory self flow 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.*