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**Plico Refractories**

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**Technical Data Sheet**

**Plico Stix ABR**

Product Number 14265

Date 12/10/2018

**Product Description**

High alumina , abrasion resistant hybrid castable. Advance data.

**Service limit -** 2500°F 1370 °C

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

**Density to place** 175 pcf 2,804 kg/m<sup>3</sup>

**Water range per std. package:**

**Density in service** 175 pcf 2,804 kg/m<sup>3</sup>

**Vibcasting** 1.3 to 1.5 qts 1.3 to 1.4 / 5.0% to 5.5%

**Min time before firing** 24 hr

**Casting** 1.5 to 1.6 qts 1.5 to 1.6 / 5.8% to 6.2%

**Pumping**

**Chemistry % (calcined)**

Al <sub>2</sub> O <sub>3</sub>	83.4	P <sub>2</sub> O <sub>5</sub>	1.7
SiO <sub>2</sub>	10.3	Alk.	0.2
Fe <sub>2</sub> O <sub>3</sub>	1.1	MgO	0.1
CaO	2.2	SiC	
TiO <sub>2</sub>	1.0	ZrO <sub>2</sub>	
		Other	

**Thermal Conductivity**

	btu*in/hr*ft <sup>2</sup> * F	w/m°C
500F / 260C	11.9	1.7
1000F / 540C	12.4	1.8
1500F / 815C	12.8	1.8
2000F / 1090C	13.0	1.9

**Abrasion Loss**

per ASTM C 704  
after 1500 F

3 cc

**Coefficient of Thermal Expansion**

(reversible)

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

8.6 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	-0.1%	2800	19.3	10,500	72.0		
1500 F / 815 C	-0.5%	3300	22.8	11,500	79.0	3600	24.8
1800 F / 980 C						2200	15.2
2300 F / 1260 C						2500	17.2

**Other Data**

**Heat Up Guide**

Schedule C or C-Linear

**ASTM Class**

Service Mixes/Coatings

**Note:**

All data are averaged results of ASTM tests (where applicable) on laboratory shotcreted 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 Plibrico representative to make sure you have the most current data.