



# Product Update

## PliShot Si-Bond B

Plibrico's PliShot Si-Bond B is a no-cement shotcrete refractory material that mixes with water – no caustic or temperature-sensitive aqueous materials are needed for mixing. Highly-durable, PliShot Si-Bond B is suitable for all industrial applications and can be easily installed in high-heat, high-alkali, high-abrasion environments. Trim time is improved for faster, easier installation.

### Installation Report

In April 2015, Plibrico's PliShot Si-Bond B was installed at a cement plant that produces 1.2 million tons of cement per year. It was installed in the lower riser in the tower.

#### Environment

The installation took place in a high-heat (2400° F) and high-abrasion environment. Coke, methane and other alternative fuels are burned as fuel at the plant creating an environment that is high in corrosive alkaline elements.

#### Method

The PliShot Si-Bond B was applied as shotcrete using sodium silicate as an activator at the nozzle. The installer used a Reed B20 HP shotcrete pump. With the pump located on the ground, the PliShot Si-Bond B material was pumped at an approximate 180° vertical elevation. The total pumping distance was 225' with three 90° elbows. A 2" line was used for the first 200', then 1.5" line was used for the final 25' into the process unit.

#### Progress Report

After one year, the PliShot Si-Bond B material has virtually no visible wear. To-date, it has performed equal to other competitive materials used in this same application. Whether PliShot Si-Bond B is more durable than these competitive materials will be determined based on the material's service life.



*Pump used for PliShot Si-Bond B application.*

**Contact your local Plibrico *PliPartner* to learn more about PliShot Si-Bond B shotcrete refractory.**

