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Thermbond® A Patented Refractory System

Thermbond® refractory products are a complete line of engineered refractory materials. Each Thermbond® product is a two-part system (dry formulation and liquid activator) added together to form a uniquely bonded refractory material. The features of this bonding system provide benefits that set Thermbond® apart from conventional materials.

Thermbond Refractory technology has many advantages over conventional refractory systems:

- ❖ Fast Setting
- ❖ Fast Firing
- ❖ Thermal Shock Resistance
- ❖ Non-Wetting
- ❖ Bonding Capability

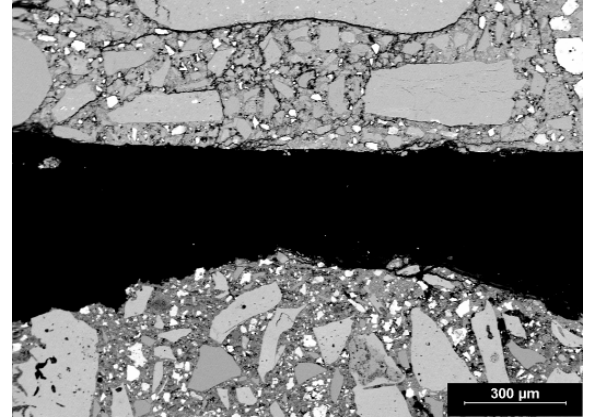
The tremendous ability of the Thermbond technology to bond to existing refractories allows for long-term patch and veneer repairs to existing linings without the need to expose retaining anchors. What is it about the Thermbond technology that accomplishes this?

Conventional Technology:

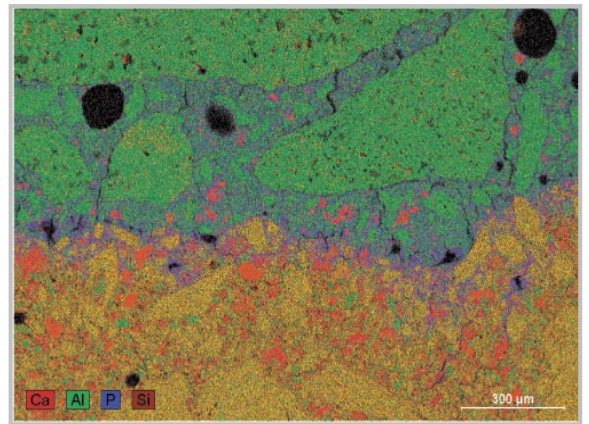
The first photo shows a conventional refractory applied to an existing fired conventional refractory castable. After firing the veneer shows an air gap. There is no bond to the substrate; the repair relies completely on mechanical anchoring to stay in place.

Thermbond Technology:

The same procedure is performed using Thermbond over a fired conventional refractory. After firing there is not only no separation of the samples but the Thermbond Activator actually penetrates the existing refractory (blue penetration at the interface). The Thermbond Activator chemically reacts within the substrate to provide for an integral chemical bond.



Conventional - No Bond



Thermbond - Chemically Bonded



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