



Car Deck Repairs

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All Industries

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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.

Heat Treat Furnace Car Deck Perimeter Curbs are subject to varying degrees of thermal shock and thermal cycling. This results in refractory problems - cracking, spalling and failure. Conventional repairs call for the existing refractory to be completely removed and either new pre-cast, pre-fired conventional blocks installed, or a new full lining poured. In this second situation the new lining often experiences micro-cracking on heat-up because these repairs cannot be heated up slowly and controlled enough to suit conventional materials. In both situations the resulting car deck is still no better than before and subject to premature failure from the same thermal shock issues.

The Solution

- ❖ Ease of Use
- ❖ Chemical Bond
- ❖ Rapid Firing
- ❖ Thermal Shock Resistance

Thermbond Formula 6BL can be either pre-cast as perimeter curb blocks or cast in-situ to repair the existing deck. Thermbond develops a very strong chemical bond with existing refractories which enables the best quality repairs without the need to remove existing, undamaged refractory to expose anchors. In addition Thermbond is very tolerant to heat up conditions and is not subject to damage during uncontrolled heat up like a conventional refractory. This ability to bond and fire quickly can not only reduce the cost of a repair but can also dramatically reduce downtime during the repair.



Three Years & Counting

The net result is a better quality car deck perimeter. Thermbond has tremendous thermal shock and thermal cycling resistance that enables it to stand up in this environment better than any other refractory castable. The following photos show Thermbond perimeter repairs after more than three years service. These Ontario furnaces are outside and when the car is removed from the furnace these cars are immediately exposed to ambient conditions, including snow.

