



Fire damaged floor refurbished

A serious fire on 15th June 2007 destroyed the Longburn warehouse of Brandlines. During the fire and the subsequent removal of the damaged warehouse building the concrete floor was seriously damaged.

Sika (NZ) Ltd was invited by the consulting engineer, John Silvester of Silvester Clark Consulting Engineers, Palmerston North to provide floor repair solutions.

The 2700m² warehouse concrete floor slab had moderate heat induced spalling of the surface, cracking, deep gorges and other general damage from many years of wear and tear.

The repair option had to be economic

and cope with the heavy duty requirements of a busy warehouse operation, including heavy forklift use.

Sika (NZ) Ltd proposed several options that would meet the tight budget yet provide the necessary protection. Options included:

- Cutting out and replacing the floor slabs
- Bonding a new concrete topping over the existing slab
- Isolated repair of damage only
- Repair and overlay the existing concrete using a Sika high strength cement or epoxy/cement flow applied flooring system.

The system selected was Sikafloor 81 EpoCem a very smooth, high strength, dust free epoxy cement screed.

Epo – water based epoxy, Cem – cement (like cement / like epoxy).

By combining the physical properties of the cement with the positive chemical properties of water based epoxy resin providing:

- Temporary moisture barrier
- Chemical/physical resistance
- Integral curing
- Waterproofing
- 60mpa compressive strength.

A contract was awarded to Sika (NZ) approved contractor New Zealand Specialised Coatings Ltd by the main contractor rebuilding the warehouse McMillan & Lockwood PN Ltd.

Repair consisted of:

- Removal and replacement of badly damaged concrete slabs

- All equipment and fixtures were removed from the floor
- Damaged floor joints were repaired with Sikafloor 91 high strength epoxy flooring then filled with Sikadur 51 flexible epoxy floor jointing compound
- Deep holes and gouges were filled with Sikafloor 91 high strength epoxy flooring
- Floor holes prepared and primed with Sika moisture control primer Sikafloor 155WN
- Finally the surface was finished using Sikafloor 81 EpoCem, flow applied to give a very smooth surface.

Because of the epoxy cement composition, the floor is hard and non porous providing an ideal finish for a food distribution business.

Colour is light grey to match a standard concrete finish.

A multi-faceted label

Monitoring the time and temperature of meat and seafood during shipping is easy with the PakSense Ultra Contact Label. Standard temperature ranges for the most frequently shipped perishable items, including meat and seafood, are pre-programmed into each label. Users simply snap the corner of the label to activate it and apply it to product or product packaging.

As product travels through distribution, light emitting diodes provide visual indication if acceptable temperature ranges are breached. In addition, all data collected from the label can be downloaded and graphed into a Microsoft Excel spreadsheet at any point. This shows when and for how long temperature has been out of range and enables better food safety and quality decisions.

PakSense Labels have many unique features not found in the average data logger. Data is stored in each label in non-volatile memory and can be downloaded at any time. This means that labels can be stapled to shipping paperwork for those who wish to file temperature information with a bill of lading or other documentation. This is particularly advantageous in the event of a claim or food safety audit

where records might need to be accessed at a later date.

Labels are also encased in food-grade packaging and are waterproof. This means they can be laid directly on top of product and can be used in circumstances where product is on ice.

The label's small size promotes its use in a variety of scenarios: it can be placed within small containers, it can be used as an anonymous temperature monitoring device, and some users even mail it back in the postal system for reading at a central location.

Data resolution is a top priority for PakSense. Labels are designed to sample temperature every minute and will take a surface read of the product or product packaging it is attached to. This helps eliminate the possibility of general ambient temperature reads and enables a better approximation of what the actual product is experiencing.

The PakSense system is easy to use, has low infrastructure and requires minimal investment to get started. PakSense Labels have been

embraced by both suppliers and retailers to help monitor temperature and have been sold into more than 45 countries. They provide incredible insight into what happens to product during distribution, enabling better food quality and safety decisions.

For more information contact: Mark Lyford, L & B Taspac, Tel: 09 573 2621, Email: mlyford@lbtaspac.co.nz or visit: www.lbtaspac.com





The Sika name is synonymous with high quality specialist floors.

Sika can provide an integrated flooring system solution to meet every flooring requirement - be it flooring for food processing plants, commercial kitchens, bakeries, butcheries, chillers, wineries, bottling plants, pharmaceutical manufacturing and packing plants, bar areas, showers and wet areas to name but a few.

- ▲ Hygienic
- ▲ Slip resistant
- ▲ Chemical resistant
- ▲ Expert technical advice
- ▲ Low / nil odour – non tainting
- ▲ Hard wearing, good looking, industrial floor coatings
- ▲ Tint to almost any RAL colour with no minimum order quantity
- ▲ EpoCem® technology – can be applied to green / damp concrete cutting weeks out of your construction programme!
- ▲ Meets NZ Food Safety Authority (NZFSA), Food & Drug Administration USA (FDA) and Good Manufacturing Practice (GMP)

Hard wearing... good looking industrial floors



0800 SIKAZ (0800 745 269)
www.sika.co.nz