

# Fertiliser Service Centre Remediation, Waikato

Refurbishment

Sika@Work



Project description

This fertiliser distribution centre in Waikato was originally constructed using precast concrete panels, forming both the external structure and internal storage bund walls. Over time, the facility experienced significant deterioration due to repeated impact, abrasion, moisture ingress, and exposure to aggressive salts and chemicals from stored agricultural materials.

This resulted in visible defects including widespread cracking, ranging from fine shrinkage cracks to larger structural fractures. Ongoing exposure allowed moisture and contaminants to penetrate the concrete, leading to corrosion of reinforcing steel and subsequent spalling and degradation of the structure.

Project facts

|              |                                                                                                                                                                                                                     |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Project name | Fertiliser Service Centre                                                                                                                                                                                           |
| Location     | Waikato, New Zealand                                                                                                                                                                                                |
| Year         | 2025                                                                                                                                                                                                                |
| Product      | Sikadur®-32<br>Sika MonoTop®-352 N<br>Sika MonoTop®-910<br>Sika FerroGard® Patch Anodes<br>Sikagard®-720 EpoCem®<br>Sikadur® Injectokit TH and LV<br>Sika AnchorFix®-3030<br>Sikagard®-740 W<br>Sikaflex® AT Facade |

Project participants

|                       |                  |
|-----------------------|------------------|
| Specialist contractor | Surfprep Limited |
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Project requirements

A comprehensive concrete repair and protection system was required to restore the structural integrity of the facility and provide long-term durability. The solution needed to address existing damage while protecting reinforced concrete elements from further moisture and chemical ingress in a highly aggressive industrial environment.

Challenges

- Active agricultural facility requiring minimal disruption to daily operations
- High levels of absorbed moisture within the concrete, requiring drying before repairs could proceed
- Extensive cracking, spalling, and structural damage across both interior and exterior surfaces
- Exposure to aggressive chemicals and salts from stored fertiliser materials
- Need for highly durable, long-lasting repair systems suited to heavy industrial use

Solution

A wide range of Sika solutions were used to repair the damaged concrete and provide long-term protection. Spalled concrete was repaired using Sika MonoTop® EN 1504-compliant primers and repair mortars, along with Sikadur®-32 as a bonding primer.

For corroded reinforcing steel, Sika FerroGard anodes were installed as part of the repair process to help mitigate future corrosion. Sikagard-720 EpoCem was applied to the interior bund wall surfaces, creating a highly durable and cost-effective protective layer against moisture and chemical ingress. Structural cracks were treated using Sikadur Injectokit epoxy injection systems.

Exterior surfaces were coated with Sikagard-740 W to provide a breathable, water-repellent finish, helping keep the structure dry. These surfaces are scheduled for painting in the coming summer months. Sikaflex AT Façade was used for general elastomeric sealing of the façade.