

SIKA AT WORK WAITOA NATURAL PROTEINS, PROCESSING PLANT, WAIKATO

BASEMENT TO ROOF



WAITOA NATURAL PROTEINS, PROCESSING PLANT, WAIKATO



PROIECT DESCRIPTION

Waitoa Natural Proteins Ltd's soon to be completed protein processing plant located in the Waikato will be a one of a kind facility. The protein plant will render fresh raw bone product and soft offal received from some of the region's export meat processing plants, into high-quality tallow and meal products. The plant has been designed to process up to 18 tonnes of raw product per hour.

The meal product will be exported for animal food, and the high grade tallow to places like Singapore and North Carolina for use as highly sought bio-fuel.

PROJECT REQUIREMENT

To provide solutions for:

- Below ground waterproofing
- Robust, hygienic floor screeds
- Wall sealers
- Structural grout
- Sealants

CHALLENGES

- The most challenging aspect of this project was the very high water table and significant basement structure.
- Sika were involved early to assist the structural design team with advice regarding the waterproofing system.
- M.W. Builders did an excellent job of controlling site conditions and dewatering, allowing for easier installation of the waterproofing membrane.
- A significant amount of reinforcing steel was placed over the membrane, before very large concrete pours were undertaken.
- The Sikafloor installation was later staged to meet the building program.

PROJECT SIZE

900m²

SIKA SOLUTION

Highly flexible membranes, SikaProof A+12 and SikaProof P-12 were used to successfully waterproof the concrete floor and in situ concrete walls.

Sikafloor PurCem systems proved a practical solution for the site conditions and program, with no concerns regarding concrete moisture. Sikafloor PurCem screeds were selected for their superior performance characteristics:

- Very little odour/ VOC's during installation
- Moisture tolerance
- Rapid installation and cure
- High chemical resistance
- High thermal shock resistance
- Impervious and hygienic
- High impact and abrasion resistance
- Non-slip options

Sika Purigo-5 S was selected as a clear sealer to concrete walls. Other miscellaneous products from the Sikaflex sealant, SikaGrout and Sikadur epoxy ranges were also used throughout the project.

PRODUCTS USED

SikaProof® A+ 12 SikaProof® P-12 Sikafloor®-21 PurCem Sika® Purigo- 5 S SikaGrout® range Sikadur® epoxy range Sikaflex® sealants

PROJECT PARTICIPANTS

Product Specifier: Main Contractor: Specialist Contractor: Gray Consulting Engineers Ltd M.W. Builders Ltd Hamilton Waikato Waterproofing Ltd NZ Specialised Coatings Ltd



The substaintial basement structure utilised SikaProof® highly flexible waterproofing membranes - SikaProof® A+ 12 being installed



Above and Below image: Sikafloor $\mbox{\rm PurCem}^{\otimes}$ high performance floor screed installation completed.



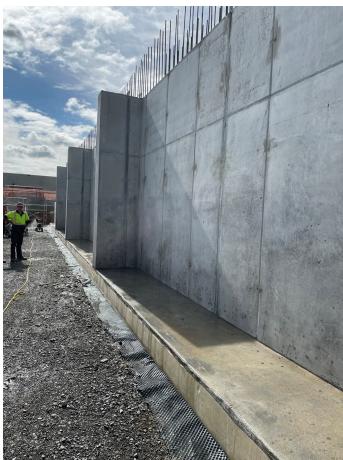


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SikaProof $^\circ$ P-12 self-adhesive sheet membrane - shows the height of the significant basement prior to backfilling.



In situ concrete walls prior to SikaProof® P-12 installation. SikaProof® A+ 12 visible to edge of footing.