



SIKA AT WORK

GLADSTONE ROAD APARTMENTS

WATERPROOFING SOLUTIONS

BUILDING TRUST



GLADSTONE ROAD PARNELL, AUCKLAND

PRODUCT DESCRIPTION

Gladstone apartments was built in the late 1990's. The design included a large area of intensive planted podium deck over car parking as well as an externally insulated facade with balconies inside and outside the building envelope.

The podium decks were constructed with concrete over a metal tray deck. The planted areas of the deck were waterproofed with a torch-on bitumen membrane system, protected with a geotextile and drainage mat. The ramp and lower vehicle deck had no waterproof membrane applied and had minimal falls and drainage.

Over the years invasive root growth, cracked concrete and the resulting moisture ingress had taken their toll on the decks and tray deck below. In 2014 Babbage Consultants were engaged to investigate refurbishment solutions for the balconies and vehicle podium decks.



PROJECT REQUIREMENT

- New drainage with screeds with new, fully bonded screeds to falls on all podium deck falls areas
- Waterproofing solution for podium vehicle deck areas with crack bridging ability
- Waterproofing solutions for balcony areas with crack bridging ability suitable for tiles on deck jacks. Both inside and outside the building envelope
- All solutions had to be BRANZ Appraised for the applications to be accepted by Auckland City Council
- A fully compatible system solution from one supplier with a manufacturers warranty

CHALLENGES

- The full extent of the condition of the concrete under the garden deck would not be known until all existing vegetation and wear layers had been removed
- The majority of the project had to be completed before the onset of winter 2016 with no specific site protection from weather possible. This made concrete curing times critical for programming. In some cases standard details or even new details had to be developed for existing applications
- Access had to be maintained for the residents including use of the lower deck parking while work proceeded
- All work had to be carried out by an approved contractor and monitored with regular site visits and meetings attended by Sika, the main contractor, Babbage and the waterproofing contractor. No margin for error with uncertain details or materials was acceptable



SIKA SOLUTION

Sika met the requirements of the screeds to falls on all decks with a combination of the following:

- Sikadur concrete bonding
- Sika concrete admixture design
- Sika MonoTop concrete repair products

For waterproofing podium decks and balconies the following solutions were applied:

- Sikafloor Car Park deck system for podium vehicle decks
- Sikafloor for podium balconies outside the building envelope
- SikaRoof for balconies inside the building envelope
- Sikaflex and Sikadur for joint and seismic joint waterproofing

PROJECT SIZE

1500sqm

PRODUCT USED

- Sika Viscocrete 5-555
- Sika Control 40
- Sikadur 32
- Sika MonoTop 438R
- Sikaflex Tank N
- Sika Screed 91
- Sikadur Combiflex
- Sikafloor Carpark Deck Dynamic crack bridging top deck system
- Sikafloor 400N pedestrian traffic deck system
- SikaRoof MTC
- Sikaflex PRO-3

PROJECT PARTICIPANTS

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|------------------------|---|
| Main Contractor: | Babbage Consultants |
| Specialist Contractor: | Absolute Building and Maintenance (ABM) |
| Sika Contact: | Gavin Norrington
Max Tombleson |





FOR MORE WATERPROOFING INFORMATION:



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