



ROHIT GOKHALE
STRUCTURAL ENGINEER
CURRICULUM VITAE

ROHIT GOKHALE CV



PROFILE

Rohit is a highly motivated structural engineer with experience in residential, commercial, and industrial design as well as seismic assessments and strengthening.

He has gained good industrial design experience through multiple dairy projects across both the NZ north and south islands.

Rohit also has experience in construction monitoring for some of these commercial, residential and industrial projects.

QUALIFICATIONS

BE (Civil) – Bachelor of Engineering, University of Mumbai 2014

MEngSt (Earthquake) – Master of Engineering Studies, University of Canterbury 2016

Member of Engineering New Zealand (MEngNZ)

CAREER HISTORY

2019 – Present, Structural Engineer - Structus Consulting Limited, Auckland, New Zealand

2016 – 2018, Graduate Structural Engineer - Silvester Clark Ltd, Palmerston North, New Zealand

TECHNICAL SKILLS

- Experienced in the design of structural steel, timber, reinforced concrete buildings
- Detailed knowledge of the complete design process and consent documentation
- Comprehensive knowledge of New Zealand Design Standards and Codes
- Proficient in the use of engineering software such as Microstran, SAP2000 and ETABS

MANAGEMENT SKILLS

- Proven project and design management along with attention to detail resulting in successful and timely project delivery
- Good communication skills and ability to relate well to clients, stakeholders, and the project team, providing clear advice

PROJECT EXPERIENCE

INDUSTRIAL PROJECTS

Mataura Valley Milk Infant Formula Plant, Gore, Southland, 2016 - 2017

A new 7,700 m² warehouse located in McNab, Gore, Southland. The new facility contains

light-weight roof structure supported by steel portal frames having a width of 70 m. These portal frames are internally supported by two rows of steel spine frames running in the longitudinal direction. The warehouse has a large load-out area at one of its gable ends, with office area at the other end. In addition, Rohit was also involved in analysis and design of several steel platforms and stairs.

Open Country Dairy, Horotiu, 2017

This is a 1660 m² warehouse for Open Country Dairy in Horotiu. The warehouse comprises of mono-pitched steel portal frames having a total span of 37.5 m in the transverse direction and steel trussed spine frame in longitudinal direction providing intermediate support to the main portal frames. The warehouse was designed to allow for future extension. In addition, Rohit was also involved in analysis and design of several standalone plant rooms (either steel or reinforced concrete structures), steel platforms and stairs associated with this project.

Alliance Group, Dannevirke, 2017

This project involved design of an extension to the existing mezzanine structure. Owing to its location in a very high seismic region, capacity design procedure was followed while designing the lateral load resisting system for the new as well as existing mezzanine structure. Wall bracing comprising of steel equal angles were carefully designed to dissipate energy at pre-determined locations in order to achieve higher ductility.

VINZ Vehicle Inspection Facility, Palmerston North, 2017-2018

A new 1000 m² vehicle inspection facility in Palmerston North with an adjoining single storey office area was constructed in a constrained site with challenging site conditions. Site retaining walls were required

to overcome the site topography. The warehouse typically contains large spanned steel portal frames supporting light-weight roof structure. These frames also support lean-to frames from the adjacent admin/office area. There are canopies to each gable end of the warehouse. Hard stand paving was provided throughout the site for the heavy vehicles. Rohit also provided construction monitoring for the project including pre-pour inspection of the precast cladding panels.

Synlait Milk, Project Green, Pokeno, 2018

Rohit was involved in the design of a large 14,300 m² warehouse for Synlait Milk in the Waikato region. 110 m wide steel portal frames in the transverse direction are internally supported by two rows of spine frames in the longitudinal direction. These spine frames have cantilever reinforced concrete columns that not only provide support against gravity loading but also lateral bracing in the longitudinal direction. The warehouse has a large load-out area at its gable end comprising of full height cantilever RC walls, partially supporting the load-out roof structure.

Industrial Workshop Alterations and Extensions – multiple projects, 2016-2018

Rohit has been involved in multiple projects related to alteration/extension of existing steel portal framed warehouses. This required assessment of the existing structure for additional loads in addition to the design of new structure.

DETAILED SEISMIC ASSESSMENTS AND STRENGTHENING

Terrace End Shops, Palmerston North, 2018

This 1950's building is a 2-storey reinforced concrete structure predominantly comprising

of shear walls and moment resisting frames with a light timber roof structure above. The building is currently used as office and retail tenancies. In order to assess the seismic performance of the building advanced computer analysis techniques were used to accurately quantify the building response during an earthquake. Structural strengthening works to allow for 67% NBS performance of the building were designed.

327- 329 Main St, Palmerston North, 2016

This early 1980's commercial single storey building comprises of concrete block walls with steel encased intermediate columns and a timber roof structure. The development was assessed for its seismic capacity and an efficient strengthening scheme to upgrade to 67% NBS was provided.

Cash Converters Building, Palmerston North, 2017

The building is a 2-storey reinforced concrete structure designed and constructed in the late 1960's. The building is currently used as offices and retail. The structure has concrete block walls predominately at the back and sides with moment resisting frames at the front allowing unobstructed views. To assess this torsionally-sensitive structure, advanced computer analysis techniques were used to accurately quantify the building response during an earthquake. Structural strengthening works to allow for 67% NBS performance of the building were designed and construction monitored.

Coachman Motel, Palmerston North, 2017-2018

Comprises 3 no. apartment-type buildings of 2-storeys constructed at different periods ranging from 1960's to 1970's which are currently utilized as a motel. The structures comprise reinforced concrete frames to the

front and concrete block walls to the rear. One of the long L-shaped buildings had to be seismically separated to allow compatible movement and avoid potential distressing of the corners. To evaluate the seismic capacity of the building advanced computer programmes were utilized to analyse the structures. A thorough strengthening scheme was provided to raise the %NBS to 67%. Rohit was involved with the site investigation and the design.

McVerry Crawford Motors, Palmerston North, 2018

Detailed seismic assessments for a McVerry Crawford Motors comprising of 2 storey office structure, an adjoining workshop and a showroom. The adjacent steel-portal framed workshop is partially supported at certain areas by the office structure. The showroom is a single storey steel structure with a double storey-height creating large open viewing areas. The buildings were originally constructed in late 1950's. Rohit was involved in completing Detailed Seismic Assessments of all the buildings that included site investigation and desktop study.

EDUCATION and RESIDENTIAL

Alteration and Upgrade Design – multiple projects, 2016-2018

Rohit was involved in providing design documentation for various schools and residential projects that not only included alternate design solutions but also structural upgrade of the areas getting refurbished. The work involved coordinating with the architects to incorporate design of structural elements that were outside the scope of NZS 3604. Construction monitoring was also carried out for certain projects.

