GILBERT HAN
STRUCTURAL ENGINEER
CURRICULUM VITAE

GILBERT HAN CV

PROFILE

Gilbert is a structural engineer with experience working in Construction as a Site Engineer. After graduating he worked as a site engineer for two years. During that time, he supervised the construction of two high-rise apartment projects.

Gilbert returned to complete a master's degree specialising in Earthquake engineering. He has experience in residential, industrial and commercial structural design as well as seismic assessments of existing buildings. He has a special interest in precast concrete and completed his research topic for his masters degree on precast concrete walls.

QUALIFICATIONS

BE (Hons) – Bachelor of Civil Engineering, University of Auckland, 2016

MEqEng (Hons) – Master of Earthquake Engineering, University of Auckland, 2020

Member of Engineering New Zealand

CAREER HISTORY

2020 – Present, Structural Engineer – Structus Consulting Limited, Auckland, New Zealand

2019 – 2020, Structural Engineer – Resonant Consulting Ltd, Auckland, New Zealand

2016 – 2018, Site Engineer – Kalmar Construction Ltd, Auckland, New Zealand

TECHNICAL SKILLS

- Experience in Structural design of concrete, timber, steel structures and structural elements
- Knowledge of engineering design process and consent documentation
- Experience in construction supervision of structural works
- Knowledge of New Zealand Design Standards and Codes

SELECTED PROJECT EXPERIENCE

Pompallier College, Whangarei, 2020 - present

A new single storey 4 no. teaching space classroom block, plus a Detailed Seismic Assessment and refurbishment of 2 no. two storey existing classroom blocks. Structus is providing full structural engineering design, documentation and construction monitoring services.

Countdown Gisborne, 2019

Structural design of a Countdown supermarket in an area of high seismicity. The main building structure was designed with steel portal frames across the transverse direction of the building and full-height precast concrete panels around the perimeter of the building. A plant platform was designed to sit on top of the main structure. The building also has secondary structures including an office section with suspended ceilings and half height steel stud walls, and canopies along the shop front and walkways.

NZDF Papakura Base Camp building 3 & 4, Auckland, 2019

Structural design of two single storey garage and office complex. The garage Building 3 was made of portal frames in the transverse direction and steel moment resisting frames in the longitudinal direction. Garage Building 4 utilised masonry walls for bracing in the longitudinal direction. Both office Buildings were timber framed with timber truss roof. A bracing system was designed on the roof level to act as diaphragms for distribution of seismic roof loads. Deep timber pile foundations were designed to overcome the poor soil conditions at the site.

8-10 Rugby Road Apartment refurbishments, Auckland, 2018-2019

Refurbishment of existing timber framed townhouses with new floors, balconies and roof trusses. Worked extensively with clients in developing engineering solutions as the demolition works proceeded.

Unitec School of Architecture, Auckland, 2020 - present, $11m

The School of Architecture project consists two storeys of open plan, high quality learning spaces interconnected with the existing heritage building in a prominent position on the campus. The new extension seamlessly integrates with the existing building, and complements the architecture of the existing building, which will also house the School of Architecture. The structure generally comprises steel frame with concrete filled columns, Comflor slab and Hyspan purlins, with stainless steel cross bracing. Structus services comprise structural and civil engineering design, and through construction monitoring.

St Johns Hill Mental Health Centre, Whanganui, 2020

Structural design of a two-storey healthcare complex. The building consisted of portal frames with intermediate floor beams, and precast concrete shear walls in selected locations. The ground floor was slab on grade while the first floor adopted the ComFlor system spanning between the steel floor beams. Shallow foundations were designed around the perimeter of the building under the portal frame legs and shear walls.

Placemakers DSA, Wellington, 2019

Detailed seismic assessment of a single storey warehouse building initially constructed pre-1930's in area of high seismicity. The structure consisted of light metal sheet roofing on steel portal frames and concrete framed wall with masonry infill around the perimeter.

Assessment was carried out according to Guideline Part C6 and C7 from NZSEE.

MIT North Campus Refurbishment, Auckland, 2020

Internal refurbishment of existing three storey concrete building. Seismic restraint system for partitions, suspended ceilings and services was designed and detailed. The work also included seismic strengthening of existing internal block walls that lacked top restraint.

K Mart - Seismic Restraint of Shop Front Structures, Auckland, 2020

Seismic restraint of suspended lighting structures and showcases at the shop front of a boutique store in Westfield New Market Shopping mall.