



DALE XU
STRUCTURAL ENGINEER
CURRICULUM VITAE

DALE XU CV



PROFILE

Dale is a structural engineer with 3 years of experience working in New Zealand. After graduating, he worked as a site engineer for three months, supervising the construction of a major project in Auckland CBD before stepping into the consulting office.

In 2018, Dale returned to University of Auckland to complete his master's degree, focused on structural design and seismic engineering.

Dale has experience across various type of projects including residential, industrial, commercial, and educational structural design.

QUALIFICATIONS

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

MEngSt – Master of Engineering Studies, University of Auckland, 2019

Member of Engineering New Zealand

CAREER HISTORY

2021 – Present, Structural Engineer – Structus Consulting Limited, Auckland

October 2019 – March 2021, Structural Engineer – Redco NZ Limited, Auckland / Tauranga

May 2017 – June 2018, November 2018 - February 2019, Graduate Structural Engineer – Haigh Workman Limited, Kerikeri

February 2017 – May 2017, Site Engineer – Harris Dowd / Gibbons Construction Limited, Auckland

TECHNICAL SKILLS

- Experience in Structural design of concrete, structural steel, cold-formed steel, timber, polystyrene panel, and aluminium structural elements
- Experience in Geotechnical site investigations
- Knowledge of structural engineering design process and building consent documentation
- Experience in structural construction supervision of concrete works
- Knowledge of New Zealand Design Standards and Codes

PROJECT EXPERIENCE

St Ignatius College, Auckland, 2021 – Present

Concept design of a new 3 storey building providing options for both steel and concrete construction. Concept design of independent gymnasium, school hall and chapel buildings.

Various Warehouses for Shedit, NZ Nationwide, 2020-2021

Structural design of small to medium size warehouse type buildings across NZ. Features such as lean-to canopies, heritage barns, use as offices, workshops, storage sheds, aircraft hangers and living spaces. The structures are predominantly built with light gauge steel portal frames with screwed moment connections, bird proof purlins, steel straps, reinforced concrete slab and shallow concrete foundations.

Temporary Classrooms for Ministry of Education, 2020

Single storey transportable classrooms, typically sized at 12m x 6m x 4m, made from polystyrene panels and timber framed floor system. Roof and wall panels are held together using aluminium angles with self-pop rivets and lateral resistance is achieved by polystyrene in-plane shear. Services comprised structural and civil engineering design, and construction monitoring.

Cannabis Factory, Ruatoria, 2019

A 29m x 19m x 4m cannabis factory with solar panels covering 80% of the roof area. Polystyrene insulated panels were utilised to maintain the room temperature, whilst also acting as the primary structure. Design includes the roof and wall panels, lateral load resistance system, solar panel fixings, composite polystyrene panel-steel angle

beams, light steel frame floor system and screw piles.

59 Churchill Road Development, Tauranga, 2019

Includes a new two-storey townhouse consisting of 6 living units and renovation work of adding a storey below a nearby existing single storey house, which was constructed in 1980's, with an in-situ RC foundation wall. Design of steel portal frames, supporting steel beams, rib-raft floor slabs, pipe bridging, masonry retaining wall and providing construction methodology and design of temporary propping for undermining the existing foundations during excavation.

School Road Development, Paihia, 2018

Structural design of an architectural designed two-storey residential buildings comprising of Unispan floor, special designed staircase, GIB braced timber frame structures and reinforced concrete piles, with the building located on a steep site. Timber pole retaining wall for the driveway, up to 4m high.

718 Karamu Road, Hastings, 2019

Structural design of a customized outdoor aluminium framing for an existing two-storey office building .

