



**FRONTIER ENGINEERS
SPECIALISES IN
INSPECTING AND
REPORTING ON
RESIDENTIAL,
COMMERCIAL,
INDUSTRIAL AND
GOVERNMENT
BUILDINGS ON BEHALF
OF PROPERTY OWNERS,
CONSTRUCTION
COMPANIES AND THE
INSURANCE SECTOR.**

SERVICES



STRUCTURAL INVESTIGATION

Structural investigations generally examine distressed structures and/or building finishes and commence with a thorough survey of the existing structure.



FORENSIC ENGINEERING

Forensic engineering is the investigation of materials, products, structures or components that fail or do not function as intended, causing personal injury or damage to property.



REMEDIAL ENGINEERING

Understanding damage comes from many years of inspecting, investigating and determining not only the cause of damage, but also the effect on the structure.



DISASTER RESPONSE

Our team of engineers and building consultants has experience with many of the natural disasters that have occurred throughout New Zealand, the Pacific Islands and Australia.



BUILDING SERVICES

Building Services is concerned with building assessments for compliance with the Current NZ Building Code and Standards, quality review of work carried out, compliance recommendations and consenting. The purpose is achieving optimal integrated building systems for the comfort and wellbeing of the occupants.



STRUCTURAL DESIGN

Structural Design focuses on the stability, strength and rigidity of a structure to ensure it is capable of resisting all applied loads without failure during its intended life. If the structure is improperly designed or fabricated, or if the actual applied loads exceed the design specifications, the structure will probably fail to perform its intended function, with possible serious consequences. A well-engineered structure greatly minimises the risk of costly failures.



STRUCTURAL DRAFTING

Builders and supervisors often want an answer to an engineering problem immediately in order to prevent delays to the construction process. We are able to attend site and provide written instructions with design before leaving the site. When the issue is more complicated, we utilise the latest in CAD technology to prepare suitably drafted and designed engineering plans for construction of all elements of various structures.



ARCHITECTURAL DRAFTING

Architectural drawings are used to develop a design idea into a coherent proposal, to communicate ideas and concepts, to convince clients of the merits of a design, to enable a contractor to construct it, as a record of the completed work, and to make a record of a building that already exists. We bring residential and commercial architectural projects to life with style and imagination.



DILAPIDATION SURVEYS

Dilapidation surveys are ideally performed upon existing structures in the immediate vicinity of planned construction prior to it commencing to eliminate or reduce the potential for a dispute with adjacent property owners.



MISSION

Frontier Engineers provide professional and sustainable client-focused engineering and design solutions, developed by experienced and qualified staff.

VISION

To be recognised leaders in providing innovative, practical and cost-effective engineering and design solutions for our clients in a financially viable way.

VALUES

Integrity
Accountability
Independence
Excellence
Respect
People

RESIDENTIAL STRUCTURAL INVESTIGATION, DESIGN AND CERTIFICATION

Frontier Engineers is Christchurch based and has been specifically developed to assist in the rebuild of the city following the earthquakes. We have invested in and continue to invest in the training, tools, processes and systems required to enable us to respond in a timely manner to the demands of our clients. We are continuing to hire staff with the required skill set to give us capacity on an ongoing basis so we can keep pace with the rebuild.

Our professional personnel are skilled and experienced at tracing distress patterns back to a cause using a variety of instruments, documentation and liaison with independent organisations. We provide detailed reports, designs and documentation on remedial repairs.

Our structural assessments typically include:

- Engineers Initial Visual Report
- Residential Engineering Evaluation
- Structural Demolition Report
- Design of Repair Strategy
- Design and Documentation
- Engineers External Works Evaluation
- Commercial Engineering Evaluation
- Detailed and forensic reports where required
- Management of Repairs during Reinstatement
- Evaluation of Scope of Works for Consent

COMMERCIAL ENGINEERING

Our commercial team can provide the following services:

- Property evaluations
- Detailed Engineering Evaluation
- Non-invasive and invasive testing
- Desk-top and site survey studies of historic structural performance
- Desk-top and field investigations of site characteristics
- Structural design and documentation for building consent
- Construction phase monitoring of structural elements – PS4

Lead Design Consultant role including:

- Development of repair strategies and rebuilds
- Design and documentation

**OUR STAFF HAVE A RANGE OF
EXPERIENCE ACROSS SEVERAL
DISCIPLINES –
STRUCTURAL ENGINEERING,
BUILDING CONSULTANCY,
ESTIMATING AND DESIGN.**

WHO WE WORK FOR

Our clients include:

- Insurance companies
- Loss adjusters
- Legal practitioners
- Building contractors
- Project managers
- Government Departments
- Industrial processors
- Commercial property owners
- Body corporate organisations
- Residential property owners

PO Box 79183 • Avonhead Christchurch 8446 • 1/35 Sheffield Cres • Burnside Christchurch 8053
P: 0508 FRONTIER (0508 376 684) • E: admin@frontierengineers.co.nz

