DATA SHEET

Multi-Storey Construction

RED STAG® TIMBERLAB

Multi-Storey Timber Structures - not Just a Recent Trend

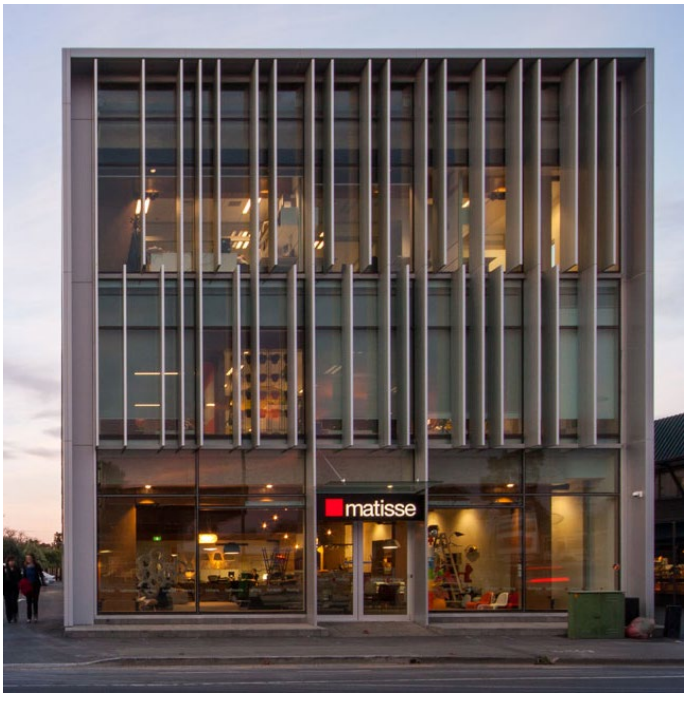
1800's - New Zealand Government Buildings

Multi-Storey timber buildings have been about in NZ for decades.

1876 saw the completion of the huge 4 storey wooden Government Buildings in Wellington. Over 145 years later, including a few earthquakes and storms; this remarkable building continues to bear testimony to the durability of these timber structures.

1970's - Tasman Timber

A hundred years on, Red Stag TimberLab was introducing Glulam to the New Zealand construction scene and soon large-scale 2 to 4-storey Glulam buildings were appearing in schools and commercial projects throughout the country.



2000's -Merritt Building, Christchurch

Red Stag TimberLab was part of the original Structural Timber Innovation Co. – STIC – that developed the unique seismic resistant design capabilities that are now being widely used in the design of many multi-storey engineered timber projects.

2021

Over more than 145 years since that pioneering Government building and following the disastrous Christchurch earthquake, the benefits of off-site prefabricated tall timber buildings are apparent.

Red Stag TimberLab offers a full range of engineered timber systems for multi-storey projects

Fabricated LVL / Glulam / Processing CLT panels

A one-stop shop with the back-up of extensive experience in 3D modelling and precise CNC production. Accurate detailing and prefabrication are essential in achieving efficient on-site construction of this new breed of multi-storey buildings.



Designers, developers and building occupants are discovering the advantages of using engineered timber in Multi-Storey construction

- Superior performance in earthquake events. Timber's ability to absorb energy results in damage-limiting performance, safer evacuation and quicker restoration.
- Reduced weight (a fifth the weight of concrete) can dramatically cut back foundation requirements with significant time and cost savings.
- Adding on to existing buildings is possible with this light-weight solution.
- Ease of fixings with sub-trades. Mechanical, electrical and plumbing fit-outs can be quickly and easily fixed directly to the timber structure.
- A quieter, cleaner & drier building site. No wet trades or kango hammers.
- Prefabricated timber systems reduce site waste and reliance on skilled finishing site labour.
- Environmental benefits of using what is construction's only renewable and sustainable material.
- The natural warmth, beauty and healthy environment created with a timber structure has well tested credentials.
- The architectural flexibility and aesthetics of engineered timber allows the structural system to be both functional and decorative.





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