

*FLY ENGINEERING  
CAPABILITY STATEMENT*





## ABOUT US

FLY Engineering Pty. Ltd. is an engineering consultancy providing structural and civil engineering consulting services to developers, builders, architects, project managers and planners.

With environmental conscience at the forefront, we are committed to providing *innovative* and *smart* design by applying our sound understanding of engineering principles and extensive experience. We pride ourselves on the delivery of innovative, practical and cost effective engineering solutions.

FLY Engineering is competent to provide services during all stages of the project including concept, tender and construction stages.

Our services include but not limited to:

- Structural Engineering Design
- Civil Engineering and Stormwater Design
- Facade Structure Design
- Construction Documents
- Building Structure Inspections
- Building Product Research
- Dilapidation Reports
- Feasibility study

FLY Engineering Pty. Ltd. is capable of providing structural design to most types of structures including:

- Steel Structures
- Reinforced Concrete Structures
- Post-tensioned Concrete Structures
- Concrete-Steel Composite Structures
- Masonry Structures
- Timber Structures
- Precast/Tilt-up Structures
- Light-Gauge Steel Structures
- Aluminium and Stainless Steel Structures
- Glass Structures



## *COMMERCIAL / EDUCATIONAL / HEALTHCARE*

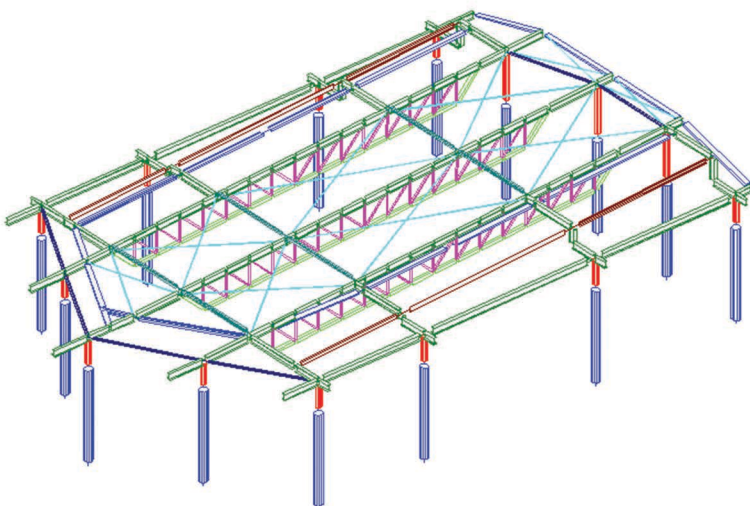
Our people's extensive experience in commercial buildings enables us in offering our clients comprehensive engineering services to their precious projects.

We are fully competent in reinforced concrete structures, post-tensioned structures, composite structures and precast/tilt ups.

By applying advanced finite element analysis (FEA) to our projects, especially RC and PT concrete structures, we are able to achieve highly cost effective designs and satisfy our clients' needs.

Our experience in commercial structures include Mercedes Benz Hornsby new display room: a two stage design with large span steel trusses.

Our directors' experience include high-rise office buildings, multi-storey shopping centres, 7 storey medical research laboratory buildings and many others.





## *INDUSTRIAL*

Our excellent understanding of steel structures gives us the capacity to design smart structures for industrial developments and provide optimum solutions to tough challenges.

We utilise 3D computer models for the analysis of steel structures even for small projects. 3D models help us understand the structural behaviour from a global view, and achieve smart and efficient design so our clients' requirements can be satisfied to the maximum extent.

Several industrial projects we have completed include:

- Warehouse extension in Prospect
- New platform at the Googong Water Recycling Plant
- New loading platform and cantilever wash bay cover for factory in Blacktown

Our directors' experience include, but not limited to:

- \$28M industrial development in Brisbane comprising of 5 buildings of steel structures, and factory with 2 cranes.
- Australian Post Parcel Centre and other developments: 90x90m steel structure with 3 mid-columns. Effective use of air space to achieve client's goal of minimising the number of mid-columns.



## *RESIDENTIAL*

Fly Engineering is competent in designing all types of residential building structures: high-rise, low-rise, houses and town houses.

We are highly experienced with the design of masonry, concrete, timber and steel structures for residential buildings which satisfy all relevant codes and standards.

Since our inception, we have designed numerous residential buildings including:

- Luxury dual occupancy with basement at Raglan Street, Mosman NSW;
- Town house developments at Carlingford Road, Epping NSW;
- Town house developments at Riverside Crescent, Marrickville NSW;
- Town house developments at Concord Road, Strathfield NSW;
- Luxury dual occupancy with basement at Denning Street, South Coogee NSW; and
- New duplexes and houses in NSW.



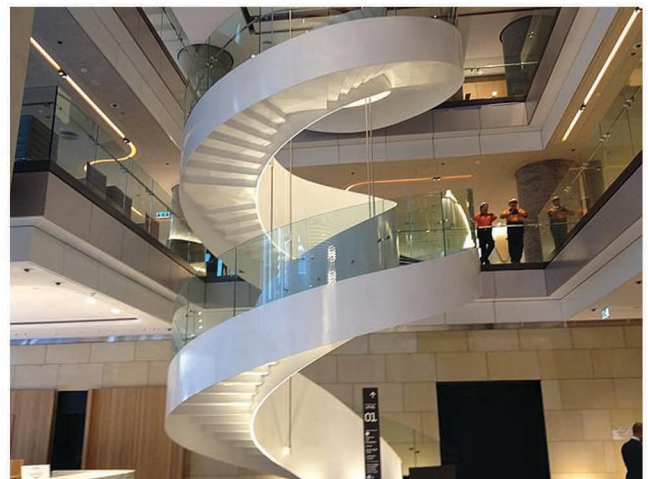
## *FACADE*

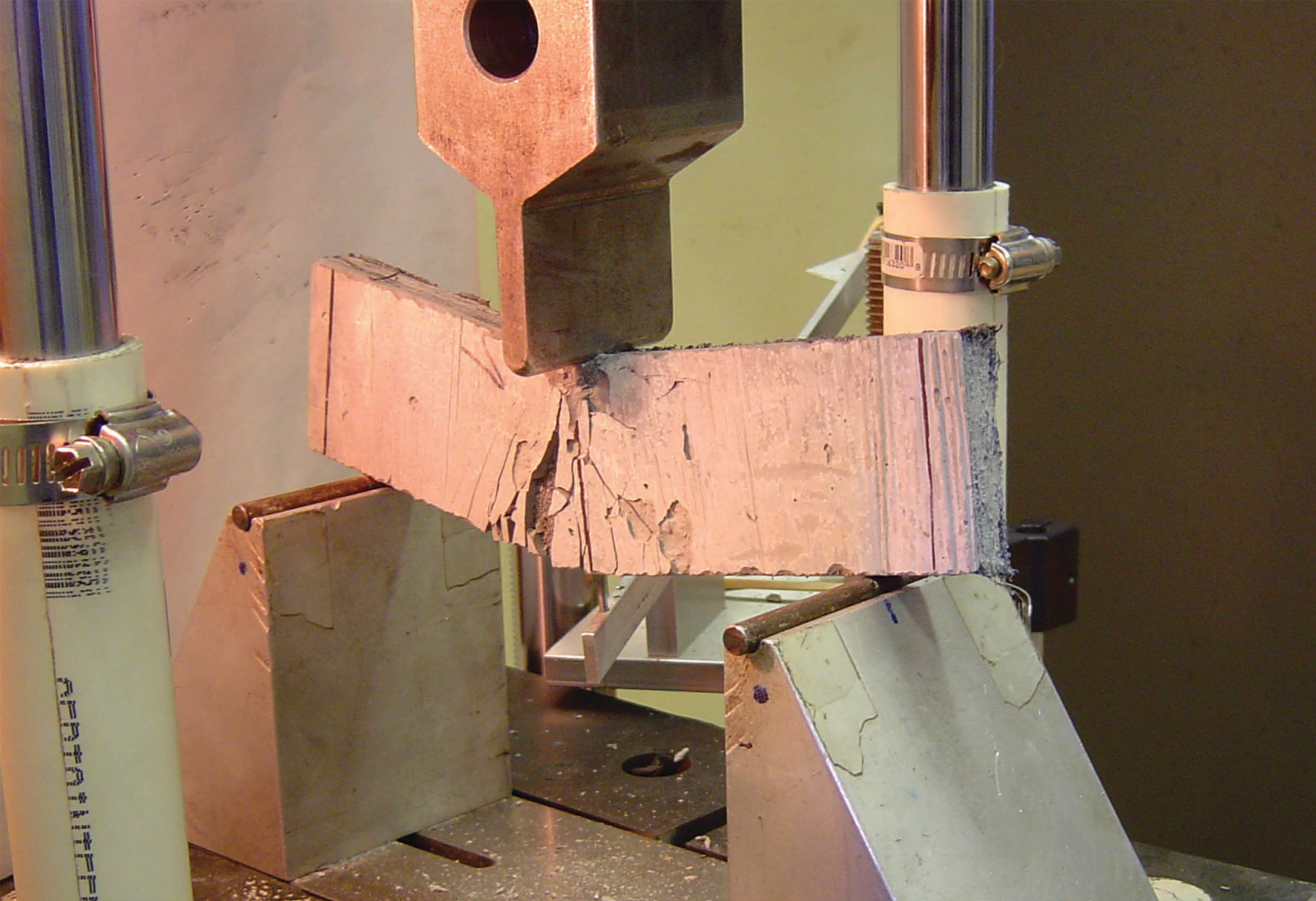
Fly Engineering has been providing engineering technical support to numerous facade contractors, builders and developers.

We have been highly recognised for our thorough understanding of the relevant codes and standards for facade structures.

Design projects that we have successfully completed include:

- Large scale glazed balustrades for stage 2 development at the Sydney Cricket Ground;
- Glazed balustrade for oval room of UTS Dr. Chau Chak Wing building; and
- Glazed balustrade and security screen for spiral stair at Barangaroo project T2.





## ***BUILDING PRODUCT RESEARCH***

Fly Engineering is partnered with Enertren, a building product research specialist company, to provide product and system development from conception to launch and business integration.

As an influential business in the building product research field, Enertren have successfully collaborated with numerous manufacturers in the development of their new products and systems, and has been providing ongoing technical support.

We offer specialised engineering services in masonry, cold-formed steel, autoclaved aerated concrete (AAC), and building system product development.



## *LIGHT GAUGE STEEL FRAME BUILDING*

Light gauge steel frame housing has become a new trend in the building industry.

Our sophisticated understanding of cold-formed steel structures and relevant codes such as AS/NZS 4600 and NASH standards enables us in providing efficient and economical design solutions to light gauge steel frame buildings.

Numerous light gauge steel frame buildings have been erected through our structural design and certification, and our expertise has been integral to our clients' project success.

Our services include structural design, design review and certification as well as shop drawing review.





## ***CIVIL ENGINEERING***

Fly Engineering is capable of providing a range of civil engineering services including:

- Stormwater Management Plan Designs for residential, commercial and industrial developments in accordance with Council DCP and/or AS3500.3:2003.
- 1D or 2D Flood Studies to the requirements of all Councils to assess flood impact and determine required setbacks and floor levels.
- Soil and Water Management Plans and Sediment and Erosion Control Plans to the requirements of Councils.
- Water Balance Modelling using historical daily rainfall data to determine rainwater tank size for best cost benefit.
- Water Sensitive Urban Design.
- Roads and Pavement Design.

# FLY



**ENGINEERS  
AUSTRALIA**  
Chartered Professional Engineer  
**MEMBER**

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