

Curriculum Vitae

PAUL DAVIS

Qualifications

Bachelor of Engineering (Civil) with Honours, 1987 University of Queensland

Membership

The Institution of Engineers, Australia - Member (MIEAust), Chartered Professional Engineer (CPEng), National Engineers Register (NER)

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Work History: 33 Years' Experience

1998 to Present:

Principal Structural Engineer, Project X Solutions Pty Ltd

As principal structural engineer and owner of Project X Solutions I have delivered quality consulting engineering services to my clients including full responsibility for:

- Management of the immediate and strategic direction of the company.
- Engagement with customers, consultants, and trades.
- Engagement and management of engineers working for the company.
- Provision of industrial practice and training to a number of student engineers.
- Residential buildings design of various types.
- Design of various institutions, commercial and industrial buildings.
- Redevelopment of industrial buildings to apartment buildings.
- Design of structural elements of fit out for various types of buildings.
- Design of walkways, equipment platforms, silos, tanks, bunkers, cranes and, lifting equipment and more for industrial situations.
- Assessment and repair of structures, pavements, pits etc in industrial situations.
- Design of various aluminium structures such as devices for rope access to building facades and pergolas.
- Design of sundry steel structures such as for rope access, landscaping works, equipment support.
- Design of minor bridges.
- Design and checking engineer for temporary works.
- Design of cable structures for significant playground structures.

- Design of industrial hardstands, pavements and slabs.
- Design of retaining walls of all types.
- Investigated approximately two thousand failed or damaged structures including many major fires, structural failures of buildings, marine structures, retaining walls, dams, pavements etc.
- Expert presenter of timber engineering seminars to engineers undertaking professional development through the Engineering Training Institute of Australia.
- Expert presenter of forensic engineering seminars to engineers undertaking professional development through the Engineering Training Institute of Australia.
- Developed a flood resistant building system and obtained a patent for the system
- Provide technical advice to customers at a site level as one of the few independent experts in relation to prefabricated timber truss, wall, and floor systems.
- Provide high level and detailed technical advice to companies proving engineering systems and software to prefabricated timber engineering market.
- Provided expert advice and evidence relating to disputes in the area of building construction.

My broad range of experience in design, construction and the forensic fields compliment one another. Understanding how others' structures fail informs my design practice whilst my depth of design experience informs my forensic engineering work.

Timber Trader Magazine, Expert Columnist. September 1996 to Present

Every month I contribute an article to the Timber Trader magazine. These articles relate directly to the timber and domestic building industries. In the more than seventy articles completed to date I have presented pertinent but poorly understood technical issues in a "down to earth" manner. The column has an excellent acceptance by a generally non-technical audience.

Chief Engineer, Multinail Australia Pty Ltd. April 1996 to June 1998

I addressed the technical and management issues that confronted the company in Australia and overseas with the opportunity to:

- Hold the ultimate responsibility for all of the structural design and supervision work carried out by a staff of six engineers and several customer service personnel.
- Hold the responsibility for a large part of the structural design of thousands of houses per annum.
- Solve the more challenging technical issues that confronted the company and the company's clients.
- Run the engineering department productively and within budget.
- Develop and execute growth strategies for the company as part of the management team.

- Fine-tune the company's flagship timber design software.
- Test, develop and introduce a new, highly successful, composite timber and cold-formed steel floor joist system to the market.
- Develop basic theory for various arrangements of composite timber and steel beam systems.
- Developed software and technical manuals for the design of various composite timber and steel beam systems
- Improve the reliability and knowledge level regarding many of the other company's timber related products.
- Deal at an executive level with other building industry professionals on "big picture" issues.
- Liaise with industry bodies and various Standards Australia working groups developing three different Australian Standards relating to the timber industry.

Senior Engineer, Multinail Australia Pty Ltd. November 1992 to April 1996

In this role I was fortunate to:

- Consult with clients to identify their needs and to deliver service and solutions.
- Manage the Sydney team of three engineering and customer service personnel.
- Become an expert in timber design & technology.
- Develop a detailed knowledge of prefabricated building systems.
- Establish and develop the Sydney office for the company.
- Specify parameters for the formulation of engineering software.
- Produce technical manuals, user guides, test reports and brochures.

Structural Engineer Alexander Browne and Cambridge. January 1988 to August 1991

In this graduate role I undertook the design and inspection of:

- Industrial portal frame buildings with associated office and pavement design.
- Large scale refurbishment of institutional buildings.
- Reinforced, post-tensioned and prestressed concrete buildings.
- Timber framed domestic buildings.
- Miscellaneous steel structures including industrial platforms, steel framed buildings and bridges.