



airey taylor consulting

## **RESUME OF PROFESSIONAL EXPERIENCE**

### **PETER AIREY BE GradDipAdmin FIEAust CPEng Director**

#### **Professional Profile**

As Founder and Managing Director of Airey Taylor Consulting Engineers & Scientists (formerly Airey Ryan & Hill) Peter Airey has provided engineering leadership within Western Australia for over 40 years, establishing the practice as a frontline provider of advanced, pro-active engineering specialising in innovative and award-winning design for complex, multi-faceted structures.

Peter's outstanding capacity in design of complex architectural structures has earned him awards and recognition within Australia and has confirmed his professional reputation internationally. As the responsible Director, Peter received the 2011 Engineers Australia State and National Excellence Award (for structure) for the State Theatre Centre of WA. He has held overall responsibility for over 17,000 commissions in the discipline of structural engineering, representing a significant contribution to the built environment of Perth and Western Australia.

Nationally and internationally sought after for his extensive knowledge of design options and comprehensive understanding of the construction industry and its methods, Peter has received major commissions for projects in New South Wales, Queensland, South Australia, Northern Territory, as well as India, Indonesia, Thailand, Malaysia and the United Arab Emirates.

Peter is committed to presenting pro-active engineering solutions to total design criteria and has pioneered unique structural systems to provide imaginative engineering responses to challenging design criteria. In October 2005 Peter was awarded a Patent for the "ClayLock" foundation design method on clay soils for new buildings. ATC were commissioned by the State Government to do original research on the Claylock System which was applied first on the new Moora Hospital. We still hold the patents on this system.

He also received a National Certificate of Recognition in the 1998 ACEA Awards for Excellence for originality of design in the development of a remediation system for permanent restoration of damaged buildings on clay based soils. In January 2013, the patent for the layering system for permanent repair of cracked walls was received. Patents are pending for Piles to Pillars technology for use in Top Down Construction.

Peter has developed design capacity for the use of glass fibre reinforced plastics rather than use of steel reinforcement which is notoriously prone to rusting and degradation in a marine environment and has performed original research on the use of this material as a substitute for steel reinforcement. In 2012 sponsored research by the University of WA (sponsored by ATC) was completed. Research resumed in 2014 and is ongoing. Research demonstrated that the use of GFRP in compression members is a technically viable option, and that, moreover, it is financially viable.

Peter is professionally active in the drafting of Australian Codes of Practice for both the engineering profession and building industry of Australia. He is an acknowledged expert witness, sought for his Forensic Engineering expertise.

Committed to constructive leadership Peter's history of mentoring Junior/Graduate Engineers has seen former engineering employees advance to business ownership or similar managerial positions in the industry. Under his direction Airey Taylor Consulting has become the most experienced Perth practice in the design and implementation of post-tensioned concrete in architectural structures.



### **Qualifications**

- Bachelor of Engineering (University of Western Australia 1960)
- James and Rose Coombe Scholar
- Commonwealth Scholar
- Graduate Diploma in Administration (WA Institute of Technology 1975)

### **Professional Memberships**

- Fellow, Engineers Australia
- Chartered Professional Engineer

### **Forensic Engineering**

Peter Airey has acknowledged expertise in the investigation of causes of damage, collapse or failure to the full spectrum of structures both old and new. His expertise is widely recognised as superior, particularly in the depth of knowledge he possesses of construction techniques and materials, either currently in use or used in the past.

He is also singularly expert in the structural interpretation of geotechnical data, and has advanced the status of structural engineering design within this State and Australia by the introduction of innovative and unusual foundation design for building structures.

Continuation of this specialised interest has led to his development of unique systems for cost-effective remediation of damaged structures. In 1998 he was accorded National recognition by his peers for development of an original system to address ongoing damage to structures constructed on clay-based soils with inadequate foundations. He has also made a lasting contribution to the Australian Codes of Practice for both the engineering profession and building industry of Australia. He was nominated by the State Government of WA to be a member of Standards Association of Australia Committee BD25 which is the committee charged with drafting AS 2870: Residential Slabs and Footings. He was a member for 15 years.

In the field of investigative structural reporting Peter Airey has established an outstanding reputation for the high level of professionalism with which each case is approached: firstly by the scrupulous and careful investigation of evidence followed by the thorough and logical presentation of his findings.

Investigative reporting is an ongoing facet of Mr Airey's practice, both for clients like insurance assessors and for law firms representing their clients in cases of controversy surrounding failure of a structure. He is also an experienced expert witness in Court cases as can be seen in the case of Goldfields Homes Pty Ltd vs Blacker & Anor (1999 WADC 71) where Mr Airey was commended by the Judge for the excellence of his evidence. In many cases, the depth of his investigations has circumvented the possibility of Court action and the matter has been settled out of Court.

### **Most Relevant Legal Cases**

Statton on Murray, 418 – 428 Murray St, Perth  
24 storey, 115 apartment + 1 café building  
Client: Council of Owners for Statton on Murray C/- Lavan

Rio Tinto Hope Downs 4 (HD4) and Marandoo Mine Phase 2 (MMP2),  
Total project cost \$2.6 billion, investigation and reporting on significant plant/structure failures  
Hamersley HMS Pty Ltd v Kellogg Brown & Root Pty Ltd  
Supreme Court of WA – CIV 1270 of 2014  
Client: Hamersley HMS Pty Ltd C/- Herbert Smith Freehills



Islands Apartments, 21 Ocean Drive, North Coogee  
Owners of Strata Plan 52597 v Pindan Pty Ltd  
State Administrative Tribunal Case No. CC 6 of 2015  
Client: Lavan

Owners of Strata Plan 53038 & 53039 v J-Corp Pty Ltd & Diploma Construction (WA) Pty Ltd  
Sovereign Apartments Damage Investigation, East Perth  
Building Commission then SAT Matter  
Client: J-Corp Pty Ltd C/- Hotchkin Hanly Solicitors

Owners of SP 41133 & Upper East Side Apartments (Trafalgar Rd) in Dispute with  
Lend Lease Project Management (formerly Bovis Lend Lease)  
SAT Matter  
Client: Parkinfoot

### **Other Legal Cases**

Hipkins v. Bravkovitch: 1993: heard in East Perth Court.  
Client: Corrs Chambers Westgarth.

Drexel London, Architects v. Halpern Glick Maunsell, Engineers: 1999  
Client: Freehill Hollingdale & Page

Knags Construction v. Towie & Sons: (2000)  
Client: Hammond Worthington Prost

Goldfields Homes Pty Ltd v. Blacker & Anor (1999)  
Client: Phillips Fox

Daniele Nominees Pty Ltd v. Judith Williams  
100 Year Old Wall Collapse, Albany (2002)  
Client: Phillips Fox

Nikcarfee Pty Ltd & White and Ors v. Water Corporation (2000)  
Client: Srdarov Richards Burton

Pirrottina v. Pirone and Ors (Halpern Glick Maunsell Pty Ltd – Third Party)  
Client: Pynt & Partners

Hemmingway v. T & PF Pty Ltd & Collie  
District Court Action No. 1295 of 2000  
Client: Godfrey Virtue Barristers & Solicitors

George Webber v. Water Corporation  
Client: Kevin James O'Toole & Associates

37 Earl Street, Albany – Balcony Collapse  
Client: RAC Insurance

135 Eighth Ave, Mt Lawley  
Client: GIO Lumley C/- Downings Legal (now HWL Ebsworth Lawyers)

Carlisle v Collier Homes Pty Ltd  
89A Whitfield Street, Bassendean  
Client: Michael Paterson & Associates

104 Whitfield Street, Bassendean  
Client: Mr Neville Williams C/- Lavan Legal

Superfert Walkway, Kwinana  
Client: Sparke Helmore Lawyers



John Burridge v Hadley Holdings Pty Ltd and ANOR  
4 & 6 Adams Road, Dalkeith  
Client: Fiocco's Lawyers

Lot 303 Kargotich Road, Oakford  
Client: GV Lawyers

3 Jolly Ramblers, Ravenswood  
Client: Doyles Construction Lawyers

Merym Pty Ltd v Cavanagh  
36 Colonial Gardens, Mosman Park  
Client: Jackson McDonald Lawyers

Laneway Property Developments P/L v Kenneth Dobinson  
Trafford Street, Beaconsfield  
Client: Jackson McDonald Lawyers

67 Bermuda Drive - Balcony Collapse  
Client: Camm & Associates

Kordic v Tooltime & Ors  
32 Barrett St, Wembley  
Client: Mrs Kordic

Kennedy v Tooltime & Ors  
28 Barrett St, Wembley  
Client: Mrs Kennedy

Westralia Square Damage Investigation  
Insurance Commission of Western Australia  
Client: Downings Legal

Mr & Mrs Rodgers v De Mol Investments P/L and Jamac Construction Group P/L  
612 Beaufort Street, Mt Lawley  
Supreme Court of WA – CIV 2192 of 2010  
Client: Mr Lyndon Rodgers C/- Corser & Corser

Livie v Addstyle Constructions Pty Ltd  
11 Chenin Lane, The Vines  
SAT Matter  
Client: Mr & Mrs C Livie

Tyne Square, North Perth  
Client: Owners of Strata Plan C/O Perth Management Services

Bunnings Willetton v Harman  
Client: Wesfarmers

Herdsmen v Collier Homes Pty Ltd  
14 Beckett Circle, Darch – (Distressed House)  
Client: Mr & Mrs Herdsmen

Karara Mining Ltd v Laing O'Rourke Australia Construction Pty Ltd  
Geraldton Harbour Dual Wagon Tipper Vault  
Client: Karara Mining Ltd C/- Jackson McDonald Lawyers



Hathersage Nominees Pty Ltd v WA Country Builders Pty Ltd  
SAT Matter

Client: WA Country Builders C/- Hotchkin Hanly Solicitors

Nash Inv. (WA) Pty Ltd v Salta Constructions Pty Ltd

26 Queen St, Perth (Raine Square)

Supreme Court of WA Matter

Client: QBE Underwriting C/- HBA Legal

Holman and W & D Moffat

5 Maher St, Somerville, Kalgoorlie

Building Commission approached by Mr Moffatt

Building Remedy Order Issued

Builder subsequently sought a review by SAT

SAT Case CC1736 of 2014

Client: Mr W Moffatt C/- MDS Legal

Johan Jordaan v Lockheed Martin Australia Electrical Systems Pty Ltd

District Court of WA Matter

Client: ACE Insurance Ltd C/- Sparke Helmore Lawyers

89 Collins Rd, Wokalup (Shire of Harvey)

Client: Mr C Baggetta C/- Encore Legal

John Septimus Roe Gymnasium Structural Failure Investigation

Insured: De Francesh Builders Pty Ltd

Architects & Superintendent: Parry & Rosenthal

Project Engineers for Roof Structure: Aurecon

Subcontractor to De Francesh: Rinaldi & Son supply & install structural steel work for the roof

Client: CGU Insurance Ltd C/- Jackson McDonald

Eaton Fair Shopping Centre Leakage Investigation

Client: BGC Construction Pty Ltd C/- Hotchkin Hanly

Workshop 2, 53 Harrison Rd, Forrestfield

Client: GKMI Pty Ltd C/- Zilkens Lawyers

Greg & Tracey Harvey v Vinsan Corp Pty Ltd

33 & 35 Riley Rd, Claremont

Client: Vinsan Corporation Pty Ltd C/- HBA Legal

Lot 31 Garvey Rd, Dardanup

Building Commission Matter

Expert Report

Client: Ms K Servaas C/- Cullen McLeod Lawyers

6, Lot 923 Endeavour Circle, Wannanup-Roof Loss & Damage & Plumbing Vent

District Court Action No. CIV 897 of 2016

Claim No. CGU130149694

Claimants: Diane & Murray Priest

Insured: Accent on Homes Pty Ltd

Second Defendant: Industrial Progress Corporation Pty Ltd t/a Roofmart WA

Third Defendant: Dall Rigging & Construction Services

Date of Alleged Damage: 10 June 2012

Client: CGU Insurance C/- SRB Legal

3 Hawcroft Place, Lancelin – Balcony Collapse on 01.06.14

Client: Kakulas Legal



### **Professionally Related Posts**

- Past President Concrete Branch of the Institution of Engineers, W.A. Chapter
- Past Member Building Regulations Advisory Committee to Minister for Local Government (1990-96).
- Association of Consulting Engineers Australia Representative on Integrated Building Act Committee advising Minister for Local Government (1995).
- Past and present Member of a number of Committees of Review convened by Engineers Australia to review proposed or revised Australian Codes of Practice.
- Past Referee to the Minister for Local Government.
- Judge Master Builders Association of Western Australia “Excellence in Construction” Awards (2002, 2003, 2004 & 2005).
- In 2014 Peter was invited to be involved in drafting a National Code of Practice for Retention of Structures and Soil by Engineers Australia.

### **Recent Papers and Presentations**

- Basement Waterproofing – Concrete Institute of Australia, Perth – 11<sup>th</sup> July 2017
- Top Down Construction: Piling & Development of Pile to Pillars Technology, Piling & Deep Foundations Australasia, Brisbane 19 October 2016
- Forensic Investigations in Concrete - Concrete Institute of Australia, Perth June 2016
- Piling & Deep Foundations Conference - National Piling Conference, November 2014
- Forensic Engineering – Panel Lecturer, Concrete Institute of Australia - Forensic Engineering in Concrete Structures Lecture Series, All mainland capitals September 2013
- Non Standard use of Piling in Perth, Western Australia, International Quality and Productivity Centre - Piling and Deep Foundation Conference, Brisbane November, 2012
- Damage to Buildings due to Adjoining Site Excavations, Engineers Australia Seminar May 2011 (WA Division Structures Panel)
- Where Are We Headed with Shrinkage, Cracking and Restraint? - National Seminar Series, Shrinkage, Cracking and Restraint, Concrete Institute of Australia, March 2010