

CURRICULUM VITAE

Stephen James Lawrence

Contact Details:

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Date of Birth:

18 November 1947

Current Position:

Consultant specialising in masonry materials and structures

Specialist Skills:

- Masonry materials and structures performance
- Design and behaviour of structures
- Building product assessment and testing procedures
- Building standards conformance, codes and regulations

Professional Qualifications:

1984 PhD (School of Structural Engineering), University of New South Wales
1974 Master of Engineering (by research), University of Adelaide
1970 Bachelor of Engineering (First Class Honours) University of Adelaide

Professional Affiliations:

Fellow, The Institution of Engineers, Australia
Registered Professional Engineer (NPER) and Member of the Structural College
Member, The International Masonry Society
Member, The Masonry Society, USA
Conjoint Professor, The University of Newcastle, NSW

Awards:

2007 Awarded the Outstanding Service Award by Standards Australia.

Committees:

- Member, SAA BD/4 Masonry Structures, 1982-date (Chairman 1987-1996)
- Member, SAA BD/97 Masonry for Housing, 1996-date

- Member of other SAA Masonry committees and subcommittees since 1982, including Structural Design, Workmanship and Site Control, Design against Fire, Commentary, Masonry Units
- Member, SAA BD/28 Masonry Reinforcement and Wall Ties, 1988-date
- Member, SAA BD/34 Mortar for Masonry, 1981-date
- Member SAA BD/25 Residential Slabs and Footings, 2002-2008
- Chairman, SAA BD/99 Wind Loads for Housing, 2003-date
- Member SAA FP/20 Construction of Buildings in Bushfire-Prone Areas
- Member of other SAA technical committees at various times, including Loading on Structures, Wind Forces, Earthquake Loads
- Corresponding Member, RILEM 127MS Masonry Test Methods and 177MDT Non-destructive Testing and Durability, 1991-2007
- Corresponding Member, TMS (USA) Masonry Standards Joint Committee, 1993-2008

Research Grants

- 2006 ARC Linkage Grant \$107,940 'Stochastic Modelling of Strength & Reliability of Masonry Walls Loaded in Flexure & Compression' (with Professor M. Stewart, M. Masia & Professor A.W. Page).
- 1998 ARC Large Research Grant \$194,000 'A Fundamental Study of Masonry Bond Strength' (with Professor A.W. Page).
- 1994 ARC Large Research Grant \$205,000 'A Fundamental Study of the Mechanism of Bond in Masonry' (with Professor A.W. Page).
- 1993 ARC Small Research Grant \$11,000 'A Pilot Study of the Mechanism of Bond in Masonry' (with Professor A.W. Page).

Research Activities:

Currently actively involved in research projects on earthquake resistance of masonry structures, flexural behaviour of unreinforced masonry, durability of masonry mortars and reliability of masonry construction.

Recent Professional Development:

- 2008 14th International Brick/Block Masonry Conference (incorporating the 8th Australasian Masonry Conference), Sydney (Organising Committee)
- 2005 Australasian Structural Engineering Conference (ASEC2005)
- 2004 7th Australasian Masonry Conference, Newcastle (Organising Committee)
- 2002 AGC Fill Seminar, Perth
- 2001 6th Australasian Masonry Conference, Adelaide (Organising Committee)
- 2000 12th International Brick/Block Masonry Conference, Madrid, Spain (Represented Australia on the steering committee)

Professional Experience:

1998 – date

Director, SPL Consulting Pty Ltd

Providing consulting services to the building and construction industry, specialising in masonry structures and materials.

1991 – 1998

Senior Principal Research Scientist, CSIRO-DBCE

Leading a group in research, consultancies and testing of structures and materials with emphasis on masonry. Development of national standards in masonry structures and materials.

1989 – 1991

Project Leader - Performance of the Building Envelope, CSIRO-DBCE

Leading a group engaged in research into weather resistance of facades, roofs and cladding elements, masonry, glass, earth wall construction and wind engineering.

Investigative testing, specialised consultations and technical advice to industry and input to the development of standards, codes and regulations.

1988 – 1989

Principal Research Scientist, CSIRO-DBCE

Research in the field of masonry structures and materials.

Consultations to the building industry on masonry materials and structures.

1987 – 1988

Research Coordinator (Principal Research Scientist), National Building Technology Centre

Overall management and coordination of all NBTC research, involving over 60 projects in the fields of fire resistance, fire hazard assessment, fire protection systems, masonry, concrete, glass, foundations, weather resistance, durability, acoustics, thermal performance, hydraulics and performance evaluation of buildings.

1986 – 1987

Manager - Building Performance, National Building Technology Centre

Managing a section of 20 staff undertaking research, consultations, sponsored testing and information dissemination in engineering structures and materials, including concrete, masonry, glass, facades, raised floors, ceramics and plastics.

1984 – 1986

Engineer Class 4, National Building Technology Centre

Leading a group in research into the structural and fire behaviour of masonry systems, providing specialist advice on structural masonry and representing NBTC on relevant committees.

1980 – 1984

Engineer Class 3, Experimental Building Station

Research into the structural behaviour of masonry systems, specialist advice on structural masonry and representing EBS on committees of the Standards Association of Australia and other bodies.

1973 – 1980

Engineer Class 2, Experimental Building Station

Research into the structural behaviour of buildings with emphasis on the resistance of masonry panels to wind loading.

1972 – 1973

Engineer Class 1, Department of Works, Port Moresby, Papua New Guinea

General structural design in concrete, steel and reinforced concrete masonry.

Design and supervision of rural roads, drainage, aircraft pavements and roads and drainage for housing subdivisions.

1971 – 1972

Engineer Class 1, Structural Section, Department of Works, Adelaide

General structural design in steel and reinforced concrete.