

# Resumé, Patrick Irwin, Consulting Engineer

**Updated** January, 2016

**Name** William “Patrick” Beresford Irwin

**Occupation** Forensic Structural Engineer

**Tertiary Qualification** Bachelor of Engineering (Civil),  
University of Melbourne

**Summary of Expertise** Structural and civil engineering, specialist in the forensic investigation of property and building issues. 30 years experience in engineering investigation, design and construction. Extensive experience as an expert witness.



**Current Positions**

**Director:** Irwin Structures Pty Ltd

**Vice President:** Forensic Engineers Society of Australia

**Immediate Past President:** Building Dispute Practitioners’ Society

**Member:** Building Appeals Board

**Director:** IFT Holdings Pty Ltd (private company)

**Contact Details**

Irwin Structures Pty Ltd  
21 Church Street,  
Port Melbourne 3207  
Telephone 03 9676 9502  
Email [pi@irwinstructures.com.au](mailto:pi@irwinstructures.com.au)

**Date of Birth** June 19, 1960

**Memberships & Endorsements**

Fellow of Engineers Australia [FIE Aust], Civil & Structural Colleges  
Admitted to Engineers Australia Professional Standards Scheme (via Irwin Structures) 2014. Scheme discontinued in 2016.  
Engineers Australia Certified Professional Engineer [CP Eng]  
Engineers Australia National Engineering Register [NER]  
Registered Building Practitioner, Engineer, Reg No. EC - 1619  
Registered Building Practitioner, Draftsperson, Building Design, Architectural, Reg No. DP-AD - 24450.  
Member, Association of Consulting Structural Engineers, Victoria [ACSEV]  
Member, Building Dispute Practitioners’ Society Inc. [BDPS]  
Member, Forensic Engineers’ Society of Australia. [FESA]

## **Publications**

**Paper published by Australian Government Senate inquiry** into personal choice and community impacts.

*Principles and practices, an engineering perspective.*

**Article BDPS News, January, 2015.**

*Floor Stiffness, How Much Bounce is too Much?*

**E-book, commercial publication, 2012.**

*Solutions to Cracking in Houses & Other Small Buildings*

**Article BDPS News, October, 2011.**

*Electronic Document Exchange (with John Browning),*

**Article, BDPS News, July, 2010.**

*Remedial Solutions to Reactive Building Movement*

**Foundations & Footings Society & Swinburn University), 2009**

Building movement research project (contributor)

**Article, BDPS News, June, 2010**

*Expert's Corner, Protection Works*

**Article, BDPS News, June, 2009.** 2010 BDPS Essay Prize winner.

Reactive Foundation Movement, Causes & Responsibilities, article

**Article: Architecture Victoria, Nov, 2008 & BDPS News, April, 2009**

*Sustainability*

**Monthly article series, ACSEV News 2002 & 2003**

*The Business of Practice*

## **Courses**

**Building Appeals Board**, short course on natural justice, August 2014.

**Master Builders' Association.** Red card training course, 2008

**Urban Search and Rescue Training (USAR), MFB, 2006**

**NSW Global, expert witness course** with Professor (former Justice)

George Hampel, September, 2006

## **Presentations**

**To the Forensic Engineering Society of Australia, November 2015.**

Excavation damage.

**To the Australian Government Senate inquiry into personal choice and community impacts, September 2015.**

Presentation on behalf of the Forensic Engineering Society of Australia.

**City of Port Phillip Urban Design Framework Stakeholder Forum, 2012 & 2013, Invited member, presenter.**

**To the Victorian Bar Association, August 2012**

When the Earth Moves, Response & Redress

**To the Institute of Arbitrators & Mediators seminar “Expert Evidence Fundamentals”, October 2012**

Panel member and presenter

**Presentation, BDPS discussion evening September 2010.**

Soil and Buildings - Grounds for Dispute,

## **Committees**

**Victorian Building Authority part 7 of building act review**

Committee member 2015

**Victorian Building Authority regulation review**

Committee member 2014 & 2015

**Building Commission subcommittee, Protection Works**

Committee member & instigator, 2012

**FESA Committee (Vice President)**

Member since 2011

**BAB subcommittee, Protection Works**

Committee member 2010

**BDPS Committee (Immediate Past President)**

Member since 2005

**Industry Advisory Committee, Department of Civil Engineering, University of Melbourne**

Member 2003

<b>Past Positions</b>	<p><b>President, BDPS</b>, 2013 to 2015.</p> <p><b>Member</b>, Building Appeals Board, 2009 to 2012 (re-appointed 2014)</p> <p><b>Associate Director</b>, Irwinconsult, 2007 to 2009 (retained as a consultant 2009 to 2015)</p> <p><b>Director</b>, Melrose Street Pty Ltd, townhouse developers, 2008 to 2010</p> <p><b>Managing Director</b> : Design Action Consulting Engineers Pty Ltd and its progenitors <b>1988 to 2007</b>.</p> <p><b>Project &amp; Contract Engineer</b> TD&amp;C 1987 to 1991</p> <p><b>Design Engineer</b> M.R. Anderson &amp; Associates, 1985 to 1987.</p> <p><b>Civil Construction Engineer</b>, Costain Pearson Bridge, 1984.</p>
<b>Industry Activities</b>	Engineering design & diagnostic evaluations for construction and remedial works.
<b>Typical Projects</b>	Diverse construction works, often with special difficulties. Projects commonly involve existing structures Residential, commercial and industrial buildings and like structures.
<b>Awards</b>	<p>2001 ACSEV Steel Design</p> <p>2002 AISC Steel Building Design</p> <p>2004 ACSEV Steel Design</p> <p>2006 ACSEV Residential Design</p> <p>2006 Building Commission CPD Commendation</p> <p>2008 ACSEV Residential Design</p> <p>2010 BDPS News Essay Prize</p>
<b>Independent activities as builder/developer</b>	<p>1991 New residence at 38 Caroline Street, Clifton Hill</p> <p>1992 Joint Venture Development, Four Townhouse, 274 Langridge Street, Abbotsford</p> <p>1997 New residence at 54 Little Walker Lane, Clifton Hill</p> <p>1998 New residence at 52 Little Walker Lane, Clifton Hill</p> <p>2002 New residence and studio at 116 Stokes Street, Port Melbourne</p> <p>2003 Improvement work to residence at 52 Little Walker Lane, Clifton Hill</p> <p>2006 Improvement works to commercial premises at 46b Railway Ave, Ringwood</p> <p>2008 Appointed Director, Melrose Street Pty Ltd, townhouse developers</p> <p>2012 Improvement works to utility premises, 21 Church Street, Port Melbourne</p> <p>2013 Improvement works to commercial premises at 46b Railway Ave, Ringwood.</p>

## **Project Experience, Examples**

- \* **Expert Witness. Over 150 briefs for court complying reports since 2000.**
- \* Structural design of Habitech composite panel architectural applications and structural design of associated projects for Habitech. 2010 to 2014.
- \* Multiple forensic investigations and conservation specifications for works to multi unit residential projects for Conquest Dowlings, 2010 to 2013.
- \* Structural design; Royal Botanic Garden, Cranbourne; Australian Garden stage 2, 2008/9.
- \* Building defects investigations for the Office of Housing as part of their building movement programme under Irwinconsult. Over 200 investigations, reports and designs. 2000 to 2007.
- \* Numerous conservation works for the old Colonists' Association buildings, North Fitzroy, 2005 to 2013.
- \* Many complex residence designs such as residence at Drysdale for Dr & Mrs Balla via BKK Architect, 2005 (ACSEV award winner)
- \* Institutional projects such as school buildings for Strathmore Secondary College via Simon & Freda Thornton, architects, 1998/1999. AISC award winner.
- \* Hundreds of structural designs for architectural projects.
- \* Complete architectural and engineering design and contract supervision of residence at Stokes Street Port Melbourne, 2001/2002.
- \* Residential projects for AV Jennings, structural designs. Hundreds of projects 1985 to 2003.
- \* 27 Unit residential development at Melrose Street, North Melbourne, 2002 to 2005.
- \* Many conservation works for Ormond College, Parkville, 1994 to 2015.
- \* Commercial projects such as three storey commercial office building refurbishment , South Melbourne, for Metier 3, 1997. Structural engineering design and documentation.