



Professor Emeritus David A. Nethercot

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<http://www.imperial.ac.uk/people/d.nethercot>

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https://en.wikipedia.org/wiki/David_A._Nethercot

https://www.researchgate.net/profile/Da_Nethercot

<http://coe.ntu.edu.sg/aboutus/Organisation/Pages/DavidNethercot.aspx>

http://www.iabse.org/IABSE/Press_Releases/Prof._D._A._Nethercot_-_New_President_of_IABSE.aspx

<https://www.nae.edu/130216.aspx>

<http://www.linkapedia-civilengineering.com/topics/civil-engineering/david-a-nethercot/40539862>

OBE, FREng, FIStructE, FICE, FCGI

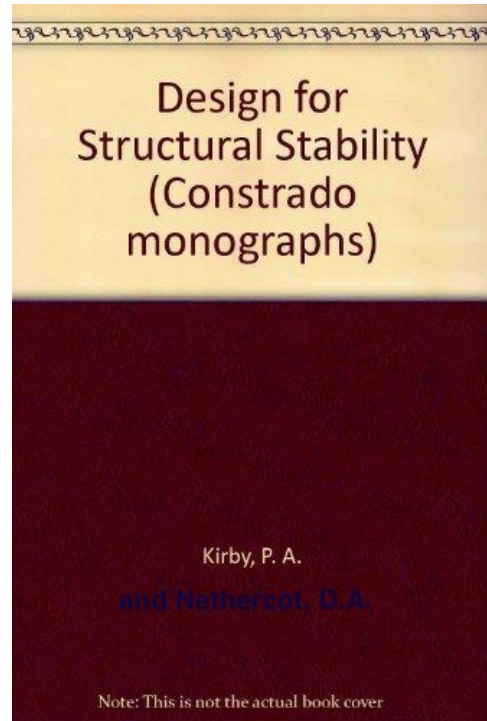
Former Head, Dept. of Civil and Environmental Engineering

Imperial College London

Biography:

Professor David A Nethercot OBE, BSc, PhD, DSc, FREng, FIStructE, FICE, FCGI, is former Head of the Department of Civil and Environmental Engineering at Imperial College and former Deputy Principal (Teaching) of the Engineering Faculty. He has more than thirty years experience of research, specialised advisory work and committee activity in the area of steel, aluminium and composite construction. He was previously on the staff at Cardiff, Sheffield and Nottingham Universities, including 5 years as Head of Department at Nottingham.

A particular interest has been the influence of connection behaviour on the overall performance of frame structures, where he has been responsible for major programmes of combined experimental and numerical work that underpin design treatments in British, European and other national standards, as well as industry design



Kirby, P.A. and Nethercot, D.A., Design for Structural Stability, Wiley, 1991

guides such as those produced by the SCI. Current research interests include progressive collapse of structures and light gauge and stainless steel construction.

The author of some four hundred technical papers, he has supervised more than forty externally funded research projects - several of them on an international basis - and has spoken - often as a keynote presenter - in more than fifty countries worldwide. He was for more than 10 years chairman of the BSI Committee responsible for BS5950 and for UK input into EC3, is a past chairman of IABSE's technical committee responsible for oversight of all the Association's technical activities and a past Deputy Chairman of the Council of the Steel Construction Institute.

Ten of his papers have won Institution prize. He was awarded a DSc degree in 1993 and elected to the Royal Academy of Engineering in that same year. He is Past President of the IStructE and a former Council Member of the Royal Academy of Engineering. In 2006 he was awarded an OBE for services to Structural Engineering, was the 2008 recipient of the Charles Massonnet prize from the European Convention for Structural Steelwork and received a Gold Medal from the Institution of Structural Engineers in 2009.

Selected Publications:

Early Work:

Nethercot, D.A., and Rockey, K.C., 1971. A unified approach to the elastic lateral buckling of beams. *Journal of Structure Engineering*, ASCE 49(7): 321-330.

Kirby, P.A.; Nethercot, D.A. (1979), *Design for Structural Stability*, Granada Publishing, UK

Nethercot, D., Kerdal, D. (1982). "Lateral-torsional buckling of castellated beams". *The Structural Engineer*, 60b, pp. 53-61.

Fukumoto, Y.; Nethercot, D.A.; Galambos, T.V. (1983), Experimental data for the buckling of steel structures – NDSS Stability of metal structures, In: *Proceedings of the 3rd International Colloquium SSRC*, pp. 609-630, Toronto, Ontario, Canada

Kerdal, D., Nethercot, D. (1984). "Failure Modes for Castellated Beams". *Journal of Constructional Steel Research*, 4, pp. 295-315.

Wang, Y.; El-Khentas, M.; Nethercot, D. (1987); Lateral-torsional buckling of end-restrained beams. *J. Constructional Steel Research* 7 (1987) 335-362

Lai, Y.F.W.; Nethercot, D.A. (1992), Strength of aluminium members containing local transverse welds, In: *Engineering Structures*, Vol. 14, No. 4

M.P. Blyfield, D.A. Nethercot, Material and geometric properties of structural steel for use in design, *Struct. Eng.* 75 (21) (1997) 1-5.

Later Work:

Stylianidis PM, Nethercot DA, 2015, Modelling of connection behaviour for progressive collapse analysis, *Journal of Constructional Steel Research*, Vol:113, ISSN:0143-974X, Pages:169-184

Vidalis CA, Nethercot DA, 2014, Redesigning composite frames for progressive collapse, *Proceedings of the Institution of Civil Engineers-structures and Buildings*, Vol:167, ISSN:0965-0911, Pages:153-177

Cheng X, Chen Y, Nethercot DA, 2013, Experimental study on H-shaped steel beam-columns with large width-thickness ratios under cyclic bending about weak-axis, *ENGINEERING STRUCTURES*, Vol: 49, Pages: 264-274, ISSN: 0141-0296

Haidarali MR, Nethercot DA, 2012, Local and distortional buckling of cold-formed steel beams with edge-stiffened flanges, *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*, Vol: 73, Pages: 31-42, ISSN: 0143-974X

Haidarali MR, Nethercot DA, 2012, Local and distortional buckling of cold-formed steel beams with both edge and intermediate stiffeners in their compression flanges, *THIN-WALLED STRUCTURES*, Vol: 54, Pages: 106-112, ISSN: 0263-8231

Haidarali MR, Nethercot DA, 2011, Finite element modelling of cold-formed steel beams under local buckling or combined local/distortional buckling, *THIN-WALLED STRUCTURES*, Vol: 49, Pages: 1554-1562, ISSN: 0263-8231

Nethercot DA, 2011, Design of Building Structures to Improve their Resistance to Progressive Collapse, 12th East Asia-Pacific Conference on Structural Engineering and Construction (EASEC), Publisher: ELSEVIER SCIENCE BV, ISSN: 1877-7058

Salih EL, Gardner L, Nethercot DA, 2010, Numerical investigation of net section failure in stainless steel bolted connections, *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*, Vol: 66, Pages: 1455-1466, ISSN: 0143-974X

Nethercot DA, Haidarali MR, 2009, EDGE STIFFENING FOR COLD FORMED MEMBERS, 9th International Conference on Steel-Concrete Composite and Hybrid Structures, Publisher: RES PUBL SERV, Pages: 3-13

C. Rebelo, N. Lopes, L. Simoes da Silva, D. Nethercot and P. Vila Real, Statistical evaluation of the lateral-torsional buckling resistance of steel I-beams - Part 1: variability of the Eurocode 3 resistance model. *Journal of Constructional Steel Research* 65(4) (2009) 818–831.

N.S. Trahair, M.A. Bradford, D.A. Nethercot and L. Gardner, *The Behaviour and Design of Steel Structures to EC 3*, (Taylor and Francis, 2008).

Ashraf M, Gardner L, Nethercot DA, 2005, Geometric imperfections in stainless steel cross-sections, Shanghai, China, *Advances in steel structures. Proceedings of the 4th International Conference on Advances in Steel Structures*, 13 - 15 June 2005, Shanghai, China, Publisher: Elsevier, Pages: 105-112

Ashraf M, Gardner L, Nethercot DA, 2005, Numerical modelling of stainless steel open sections, Maastricht, The Netherlands, Eurosteel 2005. Fourth European Conference on Steel and Composite Structures, 8 - 10 June 2005, Maastricht, the Netherlands, Publisher: Druck und Verlagshaus Mainz GmbH Aachen, Pages: 197-204

Gardner L, Nethercot DA, 2004, Experiments on stainless steel hollow sections - Part 1: Material and cross-sectional behaviour, *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*, Vol: 60, Pages: 1291-1318, ISSN: 0143-974X

Gardner L, Nethercot DA, 2004, Experiments on stainless steel hollow sections - Part 2: Member behaviour of columns and beams, *JOURNAL OF CONSTRUCTIONAL STEEL RESEARCH*, Vol: 60, Pages: 1319-1332, ISSN: 0143-974X

Gardner L. & Nethercot D.A. (2004). "Numerical modelling of stainless steel structural components - a consistent approach" *ASCE Journal of Structural Engineering*, 130(10), 1586-1601.

Gardner L, Nethercot DA, 2003, Tests on stainless steel structural hollow sections, Structural stability research council, 2003, Publisher: SSRC, Pages: 379-402