

CV3313: Building Engineering

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[1]

Jason Alread, Design-Tech: Building Science for Architects. Burlington, MA: Architectural Press, 2007.

[2]

Dav Chadderton, Building Services Engineering. Routledge.

[3]

K. Daniels, Advanced building systems: a technical guide for architects and engineers. Basel: Birkhäuser, 2003.

[4]

A. Dye, Environmental Construction Handbook. 2008.

[5]

Emmitt, Stephen, Gorse, Christopher A., and Barry, R., Barry's advanced construction of buildings, Rev. ed. Oxford: Blackwell, 2006.

[6]

Foster, Jack Stroud, Harington, Raymond, and Greeno, Roger, Structure and fabric: Part 2, 7th ed., vol. Mitchell's building series. Harlow: Pearson Prentice Hall, 2007.

[7]

C. Harris, P. Borer, G. Preston, B. Foo, and Centre for Alternative Technology (Great Britain), *The whole house book: ecological building design & materials*, 2nd ed. Machynlleth: Centre for Alternative Technology, 2005.

[8]

M. Millais, *Building Structures: From Concepts to Design*. Spon Press.

[9]

K. A. Pennycook and Building Services Research and Information Association, *The illustrated guide to renewable technologies*. Bracknell: BSRIA, 2008.

[10]

Seward, Derek W., *Understanding structures: analysis, materials, design*. Basingstoke: Macmillan, 1994.

[11]

Peter F., Smith , *Architecture in a climate of change: a guide to sustainable design*. Elsevier, 2005.

[12]

McMullan, R., *Environmental science in building*, 6th ed. Basingstoke: Palgrave Macmillan, 2007.

[13]

J. S. Foster and R. Greeno, *Structure and fabric: Part 1*, 7th ed., vol. Mitchell's building series. Harlow: Pearson/Prentice Hall, 2007.

[14]

Foster, Jack Stroud, Harington, Raymond, and Greeno, Roger, *Structure and fabric: Part 2*,

7th ed., vol. Mitchell's building series. Harlow: Pearson Prentice Hall, 2007.

[15]

David C. Pritchard, Environmental Physics Lighting. London: Longman, 1978.

[16]

Burberry, Peter, Environment and services, 8th ed., vol. Mitchell's building series. Longman, 1997.

[17]

Roberts, John and Fairhall, Diane, Noise control in the built environment. Gower Technical.

[18]

Billington, M. J., Bright, Keith, and Waters, J. R., The building regulations: explained and illustrated, 13th ed. Oxford: Blackwell, 2007.

[19]

S. Groák, The idea of building: thought and action in the design and production of buildings . London: E. & F. N. Spon, 1992.

[20]

Ralph Morton, Construction UK. Oxford: Blackwell Science, 2002.

[21]

J., Nesbit, A Turbulent Transition Building Contracts 1980 to 2001. 2002.

[22]

M. F. Atkinson, Structural foundations manual for low-rise buildings. London: Spon Press, 2004.

[23]

G. Barnbrook, House Foundations for the Builder and Building Designer. British Cement Association, 1981.

[24]

J. A. Charles and Building Research Establishment, Geotechnics for building professionals. Watford: BRE, 2005.

[25]

J. A. Charles, Building Research Establishment, Construction Research Communications Ltd, and National House-Building Council, Brownfield sites: ground-related risks for buildings. Watford: CRC, 2002.

[26]

W. G. Curtin, N. J. Seward, and Wiley Online Library EBS., Structural foundation designers' manual, 2nd ed. Malden, MA: Blackwell Pub, 2006 [Online]. Available: <http://0-dx.doi.org.wam.city.ac.uk/10.1002/9780470775066>

[27]

W. S. Martin, Site Guide to Foundation Construction: A Handbook for Young Professionals. London: CIRIA, 1996.

[28]

H. W. Harrison, P. M. Trotman, and Building Research Establishment, Foundations, basements and external works: performance, diagnosis, maintenance, repair and the avoidance of defects, vol. BRE building elements. Garston: BRE, 2002.

[29]

Tomlinson, M. J. and Boorman, R., Foundation design and construction, 7th ed. Harlow: Prentice Hall, 2001.

[30]

Waltham, A. C., Foundations of engineering geology, 2nd ed. London: Spon Press, 2002.

[31]

M. F. Atkinson, Structural foundations manual for low-rise buildings. London: Spon Press, 2004.

[32]

R. B. Bonshor, Cracking in buildings. London: Construction Research Communications, 1996.

[33]

Bullivant, Roger A. and Bradbury, H. W., Underpinning: a practical guide. Oxford: Blackwell Science, 1996.

[34]

R. M. C. Driscoll, H. Skinner, and BRE Trust, Subsidence damage to domestic buildings: a guide to good technical practice. Bracknell: IHS BRE Press, 2007.

[35]

John Roberts, Nick Jackson, and Mark Smith, Tree Roots in the Built Environment (Research for Amenity Trees). Stationery Office.

[36]

R. Hunt, D.H. Dyer, and R. Driscoll, Foundation Movement and Remedial Underpinning in Low-rise Buildings. IHS BRE.

[37]

P. Webb, 'Hoopsafe beams to rectify subsidence damage in low-rise buildings', *Structural Survey*, vol. 17, no. 2, pp. 109–116, 1999, doi: 10.1108/02630809910273785.

[38]

BDA guide to successful brickwork. London: Arnold, 2000.

[39]

J. W. P. Campbell and W. Pryce, *Brick: a world history*. London: Thames & Hudson, 2003.

[40]

Construction Industry Research and Information Association and Construction Industry Research and Information Association, *Wall technology: Vol.A: Performance requirements*, vol. Special publication. CIRIA, 1992.

[41]

John Duell, *Damp proof course detailing*. London: Architectural Press, 1977.

[42]

J. R., Harding , *Brickwork Durability*. 1983.

[43]

A.W. Hendry, *Masonry Wall Construction*. Taylor & Francis, 2000.

[44]

N. J. Seward and Institution of Structural Engineers (Great Britain), *Manual for the design of plain masonry in building structures*, 2nd ed. London: Institution of Structural Engineers,

2005.

[45]

Gerard Lynch, Brickwork: History, Technology and Practice, vol. 2. London: Donhead, 1994.

[46]

Foster, Jack Stroud, Harington, Raymond, and Greeno, Roger, Structure and fabric: Part 2, 7th ed., vol. Mitchell's building series. Harlow: Pearson Prentice Hall, 2007.

[47]

A.J. Newman, Rain Penetration Through Masonry Walls: Diagnosis and Remedial Measures. Construction Research Communications (CRC).

[48]

Andrew Orton, Structural design of masonry. London: Longman, 1992.

[49]

G., Pfeifer, Masonry construction manual. Boston: Birkha
user, 2001.

[50]

K. Thomas, Masonry walls. Boston: Butterworth-Heinemann, 1996.

[51]

'The Vulnerability of UK Property to Windstorm Damage', 2003. .

[52]

'BS 6399-2 Loading for buildings. Code of practice for wind loads'. BSI, 1997.

[53]

BRE Digest 436 Parts 1 - 3. 1999.

[54]

'BRE Digest 346 Parts 1 - 8', Building Research Establishment.

[55]

BRE, Wind, Floods and Climate Pack. Building Research Establishment, 2007.

[56]

Cook, N J. and Building Research Establishment, The designer's guide to wind loading of building structures, vol. Building Research Establishment report. Butterworths.

[57]

S. Vivian, W. Rogers, N. Williams, Great Britain, and Construction Industry Research and Information Association, Climate change risks in building: an introduction. London: CIRIA, 2005.

[58]

Ground Investigation and Treatment Pack. BRE Press .

[59]

'British Geological Survey (BGS) '. .

[60]

'BS 5950 Structural use of steelwork in building. Code of practice for fire resistant design'. BSI, 2003.

[61]

J. A. Charles and Building Research Establishment, Geotechnics for building professionals. Watford: BRE, 2005.

[62]

J. A. Charles, 'Building on brownfield sites: identifying the hazards', 2003. .

[63]

'Development and Flood Risk – Guidance for the Construction Industry', 2004. .

[64]

R. Cowell, 'Beside the Track Side Vibration Isolation', 1991.

[65]

'Planning Policy Guidance 14 1990: Development on Unstable Ground ', 1990. .

[66]

'Environment Agency'. .

[67]

A., Saunders , London County Council Bomb Damage Maps 1939-45. London Topographical Society , 2005.

[68]

NHBC Standards. National House-Building Council, 1992.

[69]

R. J. Steffens, Structural vibration and damage: some notes on aspects of the problem and a review of available information, vol. Reports / Building Research Establishment. London: H.M.S.O, 1974.

[70]

TRL Report 192 Sources of information for site investigations in Britain. Transport Research Laboratory, 1996.

[71]

Waltham, A. C., Foundations of engineering geology, 2nd ed. London: Spon Press, 2002.

[72]

Arya, Chanakya and EBL DDA., Design of Structural Elements: Concrete, Steelwork, Masonry and Timber Designs to British Standards and Eurocodes, Third Edition, 3rd ed. Hoboken: Taylor and Francis, 2009 [Online]. Available: <http://city.ebilib.com/patron/FullRecord.aspx?p=428375>

[73]

D. Bennett, Exploring concrete architecture: tone, texture, form. Basel: Birkhäuser, 2001.

[74]

Sarah Gaventa, Concrete design. London: Mitchell Beazley, 2001.

[75]

P. L. J. Domone, J. M. Illston, and Dawsonera, Construction materials: their nature and behaviour, 4th ed. London: Spon, 2010 [Online]. Available: <https://www.dawsonera.com/guard/protected/dawson.jsp?name=https://eresources.city.ac.uk/oala/metadata&dest=http://www.dawsonera.com/depp/reader/protected/external/Abstr>

actView/S9780203927571

[76]

A. Rabeneck, 'Concrete – the Twentieth Century Material', 2009.

[77]

D. Seward, Understanding structures: analysis, materials, design, Fifth edition. Basingstoke, Hampshire: Palgrave Macmillan, 2014.

[78]

'TR 62 Self-Compacting Concrete – A Review', 2005. .

[79]

R. E. Shaeffer, Reinforced concrete. New York: McGraw-Hill, 1992.

[80]

C. Abel and Royal Academy of Arts (Great Britain), Sky high: vertical architecture. London: Royal Academy of Arts, 2003.

[81]

Arya, Chanakya and EBL DDA., Design of Structural Elements: Concrete, Steelwork, Masonry and Timber Designs to British Standards and Eurocodes, Third Edition, 3rd ed. Hoboken: Taylor and Francis, 2009 [Online]. Available: <http://city.ebilib.com/patron/FullRecord.aspx?p=428375>

[82]

D., Bennett, The Art of Precast Concrete. Birkhäuser Basel.

[83]

D., Bennett, Architectural Insitu Concrete. RIBA , 2007.

[84]

D. Bennett, Exploring concrete architecture: tone, texture, form. Basel: Birkhäuser, 2001.

[85]

R. Benton, Basic structural detailing, vol. Longman Technician Series. Harlow: Longman, 1989.

[86]

Boughton, Brian William, Reinforced concrete detailer's manual, 3rd ed. London: Crosby Lockwood Staples, 1979.

[87]

Chudley, R., Building superstructure. London: Construction, 1982.

[88]

Kim Elliott, Precast Concrete Structures. Butterworth-Heinemann, 2002.

[89]

Elliott, K. S., Tovey, A. K., and British Cement Association, Precast concrete frame buildings: design guide, vol. British Cement Association publication. Slough: British Cement Association, 1992.

[90]

Sarah Gaventa, Concrete design. London: Mitchell Beazley, 2001.

[91]

P. L. J. Domone, J. M. Illston, and Dawsonera, Construction materials: their nature and behaviour, 4th ed. London: Spon, 2010 [Online]. Available: <https://www.dawsonera.com/guard/protected/dawson.jsp?name=https://eresources.city.ac.uk/oala/metadata&dest=http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780203927571>

[92]

F. Kind-Barkauskas, Concrete construction manual. Basel: Birkhäuser, 2002.

[93]

A. M. Neville, Properties of concrete, Fifth edition. Harlow, England: Pearson, 2011.

[94]

E. Nolan, Great Britain, and Building Research Establishment, Innovation in concrete frame construction 1995-2015. Bracknell: BRE Publications, 2005.

[95]

O. E. Gjorv, K. Sakai, and International Workshop on 'Concrete Technology for a Sustainable Development in the 21st Century', Concrete technology for a sustainable development in the 21st century. London: E. & F. N. Spon, 2000.

[96]

M. Peck, Concrete: design, construction, examples. Basel: Birkhäuser, 2006.

[97]

C. Gray and Reading Production Engineering Group, In situ concrete frames: a strategy for improving the performance and productivity of the in situ concrete frame industry which will lower the cost of construction for the industry and its clients, vol. Improving construction performance. Reading: Reading Production Engineering Group, 1995.

[98]

D. Seward, Understanding structures: analysis, materials, design, Fifth edition. Basingstoke, Hampshire: Palgrave Macmillan, 2014.

[99]

British Cement Association, Concrete through the ages: from 7000 BC to AD 2000. Crowthorn: British Cement Association, 1999.

[100]

D. Bennett and Concrete Centre (Great Britain), Concrete elegance one. London: Riba Publishing, 2006.

[101]

D. Bennett and Concrete Centre (Great Britain), Concrete elegance two. London: RIBA Publications, 2006.

[102]

Concrete Elegance Three . .

[103]

A. H. Allen and British Cement Association, An introduction to prestressed concrete. Slough: British Cement Association, 1983.

[104]

'BS EN 197-1 Cement. Composition, specifications and conformity criteria for common cements'. BSI, 2011.

[105]

TR22 Non-structural cracks in concrete -Fourth Edition, 4th ed. The Concrete Society.

[106]

P. B. Bamforth, 'Early-age thermal crack control in concrete', 2007. .

[107]

BRE Digest 330 Alkali-silica reaction in concrete. 2004.

[108]

'BRE - Special Digest 1'. .

[109]

'BS 8500-2 Concrete. Complementary British Standard to BS EN 206-1. Specification for constituent materials and concrete'. BSI, 2006.

[110]

'BS EN 13791 Assessment of in-situ compressive strength in structures and pre-cast concrete components'. BSI, 2007.

[111]

'BS EN 1504-1:2005 Definitions'. .

[112]

'BS EN 1504-2:2004 Surface protection systems for concrete'. .

[113]

'BS EN 1504-3:2005 Structural and non-structural repair'. .

[114]

'BS EN 1504-5:2004 Concrete injection'. .

[115]

'BS EN 1504-8:2004 Quality control and evaluation of conformity'. .

[116]

'BS EN 1504-9:2008 Principles'. .

[117]

'BS EN 1504-10:2003 Site application of products and systems and quality control of the works'. .

[118]

'Diagnosis of deterioration in concrete structures Technical Report No 54', 2000. .

[119]

J.P. Broomfield, Corrosion of Steel in Concrete. Taylor & Francis.

[120]

BRE Digest 444 Corrosion of steel in concrete (in three parts). BRE, 2000.

[121]

'Technical Report 38 Patch repair of reinforced concrete - subject to reinforcement corrosion. Model specification and method of measurement', 1991. .

[122]

'Guide to surface treatments for protection and enhancement of concrete Technical Report No 50', 1997. .

[123]

C. Abel and Royal Academy of Arts (Great Britain), Sky high: vertical architecture. London: Royal Academy of Arts, 2003.

[124]

Blanc, Alan, McEvoy, Michael, Plank, Roger, and Steel Construction Institute, Architecture and construction in steel. London: E & F N Spon, 1993.

[125]

Davison, Buick, Owens, Graham W., and Steel Construction Institute, Steel designers' manual, 6th ed. Oxford: Blackwell Science, 2003.

[126]

J. Eisele and E. Kloft, High-rise manual: typology and design, construction, and technology. Basel: Birkhäuser-Publishers for Architecture, 2003.

[127]

Garber, G. and Elsevier EBS., Design and construction of concrete floors, 2nd ed. Amsterdam: Butterworth-Heinemann, 2006 [Online]. Available: <http://0-www.sciencedirect.com.wam.city.ac.uk/science/book/9780750666565>

[128]

J. D. Holmes, Wind Loading of Structures, 3 ed. Oakville: Apple Academic Press Inc, 2015.

[129]

A. Reichel, Building with steel: details, principles, examples. Basel: Birkhäuser, 2007.

[130]

Steel Construction Manual. Ingram, 2011.

[131]

Steel Construction Yearbook . 2008.

[132]

P. Trebilcock, R. M. Lawson, and Steel Construction Institute, Architectural design in steel. London: Spon, 2004 [Online]. Available:
<https://www.dawsonera.com/guard/protected/dawson.jsp?name=https://eresources.city.ac.uk/oala/metadata&dest=http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780203641651>

[133]

A. Wood and Council on Tall Buildings and Urban Habitat, Best tall buildings 2012: CTBUH international award winning projects. New York: Routledge, 2013.

[134]

C. Abel and Royal Academy of Arts (Great Britain), Sky high: vertical architecture. London: Royal Academy of Arts, 2003.

[135]

Blanc, Alan, McEvoy, Michael, Plank, Roger, and Steel Construction Institute, Architecture and construction in steel. London: E & F N Spon, 1993.

[136]

Davison, Buick, Owens, Graham W., and Steel Construction Institute, Steel designers' manual, 6th ed. Oxford: Blackwell Science, 2003.

[137]

J. Eisele and E. Kloft, High-rise manual: typology and design, construction, and technology. Basel: Birkhäuser-Publishers for Architecture, 2003.

[138]

Garber, G. and Elsevier EBS., Design and construction of concrete floors, 2nd ed. Amsterdam: Butterworth-Heinemann, 2006 [Online]. Available: <http://0-www.sciencedirect.com.wam.city.ac.uk/science/book/9780750666565>

[139]

J. D. Holmes, Wind Loading of Structures, 3 ed. Oakville: Apple Academic Press Inc, 2015.

[140]

A. Reichel, Building with steel: details, principles, examples. Basel: Birkhäuser, 2007.

[141]

Steel Construction Manual. Ingram, 2011.

[142]

Davison, Buick, Owens, Graham W., and Steel Construction Institute, Steel designers' manual, 6th ed. Oxford: Blackwell Science, 2003.

[143]

Steel Construction Yearbook . 2008.

[144]

Tall Buildings: A Strategic Design Guide. London: RIBA, 2005.

[145]

P. Trebilcock, R. M. Lawson, and Steel Construction Institute, Architectural design in steel. London: Spon, 2004 [Online]. Available:

<https://www.dawsonera.com/guard/protected/dawson.jsp?name=https://eresources.city.ac.uk/oala/metadata&dest=http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780203641651>

[146]

A. Wood and Council on Tall Buildings and Urban Habitat, Best tall buildings 2012: CTBUH international award winning projects. New York: Routledge, 2013.

[147]

C. Abel and Royal Academy of Arts (Great Britain), Sky high: vertical architecture. London: Royal Academy of Arts, 2003.

[148]

Blanc, Alan, McEvoy, Michael, Plank, Roger, and Steel Construction Institute, Architecture and construction in steel. London: E & F N Spon, 1993.

[149]

Davison, Buick, Owens, Graham W., and Steel Construction Institute, Steel designers' manual, 6th ed. Oxford: Blackwell Science, 2003.

[150]

J. Eisele and E. Kloft, High-rise manual: typology and design, construction, and technology. Basel: Birkhäuser-Publishers for Architecture, 2003.

[151]

Garber, G. and Elsevier EBS., Design and construction of concrete floors, 2nd ed. Amsterdam: Butterworth-Heinemann, 2006 [Online]. Available: <http://0-www.sciencedirect.com.wam.city.ac.uk/science/book/9780750666565>

[152]

J. D. Holmes, Wind Loading of Structures, 3 ed. Oakville: Apple Academic Press Inc, 2015.

[153]

A. Reichel, Building with steel: details, principles, examples. Basel: Birkhäuser, 2007.

[154]

Steel Construction Manual. Ingram, 2011.

[155]

Davison, Buick, Owens, Graham W., and Steel Construction Institute, Steel designers' manual, 6th ed. Oxford: Blackwell Science, 2003.

[156]

Steel Construction Yearbook . 2008.

[157]

Tall Buildings: A Strategic Design Guide. London: RIBA, 2005.

[158]

P. Trebilcock, R. M. Lawson, and Steel Construction Institute, Architectural design in steel. London: Spon, 2004 [Online]. Available:
<https://www.dawsonera.com/guard/protected/dawson.jsp?name=https://eresources.city.ac.uk/oala/metadata&dest=http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780203641651>

[159]

A. Wood and Council on Tall Buildings and Urban Habitat, Best tall buildings 2012: CTBUH international award winning projects. New York: Routledge, 2013.

[160]

Bangash, M. Y. H. and Institution of Civil Engineers, Structural detailing in steel. London: Thomas Telford Ltd, 2009.

[161]

Blanc, Alan, McEvoy, Michael, Plank, Roger, and Steel Construction Institute, Architecture and construction in steel. London: E & F N Spon, 1993.

[162]

Hart, F, Henn, Walter, Sontag, H., and Godfrey, G. Bernard, Multi-storey buildings in steel, 2nd ed. New York: Nichols Pub. Co, 1985.

[163]

Davison, Buick, Owens, Graham W., and Steel Construction Institute, Steel designers' manual, 6th ed. Oxford: Blackwell Science, 2003.

[164]

Steel Construction Yearbook . 2008.

[165]

Blanc, Alan, McEvoy, Michael, Plank, Roger, and Steel Construction Institute, Architecture and construction in steel. London: E & F N Spon, 1993.

[166]

'BS 5950 Structural use of steelwork in building. Code of practice for fire resistant design'. BSI, 2003.

[167]

R. M. Lawson, D. L. Mullett, and J. W. Rackham, Design of asymmetric Slimflor® beams using deep composite decking. Ascot: Steel Construction Institute, 1997.

[168]

Mullett, D. L., Lawson, R. M., and Steel Construction Institute, Slim floor construction using deep decking: interim design guidance. Steel Construction Institute, 1992.

[169]

G. H. Couchman and D. L. Rackham, Composite Slabs and Beams Using Steel Decking: Best Practice for Design and Construction. 2000.

[170]

Newman, G. M., The fire resistance of composite floors with steel decking, vol. SCI publication. Ascot: The Steel Construction Institute, 1989.

[171]

C. Abel and Royal Academy of Arts (Great Britain), Sky high: vertical architecture. London: Royal Academy of Arts, 2003.

[172]

Blanc, Alan, McEvoy, Michael, Plank, Roger, and Steel Construction Institute, Architecture and construction in steel. London: E & F N Spon, 1993.

[173]

Davison, Buick, Owens, Graham W., and Steel Construction Institute, Steel designers' manual, 6th ed. Oxford: Blackwell Science, 2003.

[174]

J. Eisele and E. Kloft, High-rise manual: typology and design, construction, and technology. Basel: Birkhäuser-Publishers for Architecture, 2003.

[175]

Garber, G. and Elsevier EBS., Design and construction of concrete floors, 2nd ed. Amsterdam: Butterworth-Heinemann, 2006 [Online]. Available: <http://0-www.sciencedirect.com.wam.city.ac.uk/science/book/9780750666565>

[176]

J. D. Holmes, Wind Loading of Structures, 3 ed. Oakville: Apple Academic Press Inc, 2015.

[177]

A. Reichel, Building with steel: details, principles, examples. Basel: Birkhäuser, 2007.

[178]

Steel Construction Manual. Ingram, 2011.

[179]

Steel Construction Yearbook . 2008.

[180]

Tall Buildings: A Strategic Design Guide. London: RIBA, 2005.

[181]

P. Trebilcock, R. M. Lawson, and Steel Construction Institute, Architectural design in steel. London: Spon, 2004 [Online]. Available: <https://www.dawsonera.com/guard/protected/dawson.jsp?name=https://eresources.city.ac.uk/oala/metadata&dest=http://www.dawsonera.com/depp/reader/protected/external/AbstractView/S9780203641651>

[182]

'Insulating Concrete Formwork Association - UK'. .

[183]

'RenewableUK - UK Wind Speed Database'. .