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Nota di contenuto	Title Page; Table of Contents; Acknowledgements; About the Author; Introduction; Health and Safety; Building Regulations, Listed Buildings and Planning Consent; Chapter 1: The History of Buildings; The development of building knowledge; Styles of architecture and building construction; Chapter 2: Loadings and Aspects of Structural Theory Relating to Buildings; Weight and mass; Permanent actions or dead loads; Variable actions or imposed loads; Wind load; Accidental actions; Seismic action; BS EN 1991: Actions on structures EC1; Combinations of load and factors of safety; Stress; Strain Young's modulus or modulus of elasticityPlastic deformation; Buckling; Local buckling; Second moment of area; Centre of gravity; Lateral torsional buckling; Neutral axis; Bending force; Shear force and bending moment; Deflection; Static equilibrium; Internal forces; Derivation of shear force; Derivation of bending moment; Derivation of deflection; Basic theory of bending; Moment of resistance; Combined bending and direct stress; External and internal statically determinate structures; Connections and restraints; Stiffness; Buildings and load paths; Chapter 3: The Construction of Buildings Breathable and non-breathable constructionTimber frame; Stone; Modern timber frame construction; Solid brick construction; Cavity construction; Steel construction; Commercial steel portal frames;

Precast concrete construction; Chapter 4: Steel; Steel properties; Lateral torsional buckling; The effect of end restraints on a beam; Bending failure; Local buckling; Shear failure; Web bearing and buckling; Deflection; Fire and corrosion; Chapter 5: Concrete; The history of cement and concrete; Cement; Water and workability - now known as consistence; Failure of concrete; Strength of concrete
Concrete mix designsCreep; Environment; Air-entrained concrete; Accelerators and retarders; Plasticizers; Fly ash, silica flume and ground granulated blast furnace slag; Anti-corrosion; Chapter 6: Timber; Grading of timber; Moisture; Air-dried timber; Kiln-dried timber; Dimensions of timber; Shear; Bending; Deflection; Chapter 7: Foundations; Purpose of foundations; The history of foundations; Building Regulation requirements; Stepped foundation; Types of foundation; Piles; Bearing pressure; Bearing capacity; Eccentric loading on foundations; Climatic and moisture changes
Physical damage by treesUnderpinning; Chapter 8: Walls; The strength of walls; Masonry unit; Frost resistance and soluble salts; Concrete blocks; Mortar; Lime putty (non-hydraulic lime); Hydraulic lime; Important rules in the use of lime mortars; Cement; Characteristic strength of masonry; Slenderness ratio; Flexural stiffness and the second moment of area; Euler load; Leaning walls and stability; Movement joints; Changes due to temperature changes; Changes due to moisture changes; Traditional design of walls; Middle-third rule; Timber frame walls and raking; Chapter 9: Floors
The history of floors