

A Dictionary of

Construction, Surveying and Civil Engineering

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Preface

This Dictionary aims to provide a comprehensive and up-to-date reference of construction, surveying, and civil engineering terms within one publication. The entries address the needs of those studying on built environment courses or engaged in professional practice as well as providing much useful information for those with a general interest in architecture or construction. Builders, trade suppliers, and contractors will find the dictionary a useful desktop manual that can be easily and quickly used to check unfamiliar terminology.

Due to the size and nature of the industry, it is difficult for even the most knowledgeable professionals to stay abreast of emerging issues and retain an encyclopedia of construction terms at the front of their mind. In such cases, the book acts as a reminder, giving reassurance of meanings and confidence in communication. Built environment professionals, including architects, building surveyors, building services engineers, construction managers, civil engineers, electrical engineers, facilities managers, mechanical engineers, and quantity surveyors should find the Dictionary useful. It offers a quick and easy guide to terms and information that underpin the environment in which we live, both built and natural. In covering these terms, the authors have delved into the areas of building physics and science, and their application to design, structures, materials, and practices that inform construction and engineering. Issues associated with geology, geography, climate, and the natural environment within which buildings and structures are accommodated are also covered. The policy and legal frameworks that provide governance and procedure to the built environment are included, as well as the issues related to the professional organizations that hold influential positions within the industry.

The importance of the sustainability agenda and the related fields of building, engineering, and surveying mean that more people are taking an interest in construction and need to familiarize themselves quickly with the language and terminology used. The dictionary offers a good point of reference for those operating within the field and those just interested in learning more about the built environment and engineering. As a major consumer of the world's natural resources, the built environment and the impact that it has on the environment is high on the government agenda, with all policy makers ensuring that it is given due consideration. It is expected that the book, terms, and references will continue to grow and be in greater demand as the degree of importance associated with the built environment increases.

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rebate (Scotland **rabbet**) **1.** A cut into a material. The rebate is usually used to house another material such as a glass window. **2.** A rectangular recess cut on the edge of a material.

rebated joint A joint created by forming a rebate in a material, usually formed in wood capable of receiving the end of another material.

rebated weatherboarding *Weatherboarding that incorporates a rebate along the thickest edge of the board.

rebound hammer (Schmidt hammer) A device to determine the strength of concrete non-destructively. The device consists of a spring-loaded plunger that is pressed against the surface of the concrete to load the plunger. The plunger is then released to give an indication of the surface hardness and penetration resistance; with reference to the conversion chart an indication of the strength of the concrete can be obtained.

receptacle (US) A *socket outlet.

recess An indent in a wall or surface, sometimes built-in as a design feature, other times to provide a storage area for folding doors or other building furniture.

recessed joint Brickwork mortar joint that is raked out to a consistent depth, between 5–10 mm below the surface of the brickwork. The joint tends to hold water that falls on the surface of the wall. Porous brick walls with recessed joints are more susceptible to frost attack than *flush mortar joints.

recessed luminaire A *luminaire that is fixed flush to a ceiling, wall, or other surface.

reciprocal The result of dividing 1 by the number in question.

reciprocal lattice The arrangement of a group of points arranged in a metal at a microscopic level which describes the positioning of the atoms inside the metal.

reciprocal levelling A levelling procedure used when long sights are required (over rivers, ravines, or obstacles) to minimize *collimation, *curvature, and *refraction errors.

recirculated air Air extracted from the conditioned space that is sent to the air-conditioning or ventilation system and mixed with *fresh air. The mixed air is then supplied to the conditioned space.

recirculated hot water See SECONDARY CIRCULATION.

reclamation **1.** Bringing unsuitable land (waste land, marsh land, or desert land) back to use, for construction or farming. **2.** The extraction of useful substances from waste.

reconditioning To restore an item to a condition resembling that of the original, both in functional performance and aesthetics.

reconfigure The ability to alter or change.

recovery **1.** To return to a normal state. **2.** The reclamation of useful substances from waste.

recreational accommodation Buildings constructed for pursuits of leisure: sports, theatre, cinema, concerts, and other leisure activities.

rectangle A four-sided plane figure, having four right angles, adjacent sides of different length, and opposite sides of equal length; *see also* SQUARE.