

Glossary of Terms

0 -- 9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Word	Meaning	Web and other references
0 - 9		
3D printing	3D printing or additive manufacturing is a process of making three dimensional objects from a digital file. The creation of a 3D printed product is achieved using additive processes whereby an object is created by laying down successive layers of material. An advantage of the process is that complex three-dimensional forms can be created to rapid prototype a design.	http://3dprinting.com/what-is-3d-printing/
A		
Adaptive reuse	Adaptive reuse is the process of repurposing buildings - old buildings that have outlived their original purposes - for different uses or functions while retaining their historic features.	http://architecture.about.com/od/preservation/g/reuse.htm
Amenity	The qualities, characteristics and attributes people value about a place which contributes to their quality of life. These include the physical landscape or streetscape; areas of vegetation and public and private open space for recreation; urban design, including the scale and dominance of buildings; historic and cultural heritage; public views and outlooks; privacy; physical safety; and the accessibility of places.	http://www.oxforddictionaries.com/definition/english/amenity

Architecture	Architecture is a general term to describe buildings and other physical structures of the built environment. Architects are professionally trained designers who work on buildings and the built environment. They combine creative design with a wide range of technical knowledge to provide integrated solutions for built and natural environments.	http://dictionary.reference.com/browse/architecture http://www.architecture.com.au/architecture/national/about-architecture
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B

Biophilia	The hypothesis that humans have an inherent inclination to affiliate with nature / affection for plants and other living things (Grinde & Patil, 2009)	Grinde, B., & Patil, G. G. (2009). Biophilia: does visual contact with nature impact on health and well-being?. <i>International journal of environmental research and public health</i> , 6(9), 2332-2343.
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Built environment	The structures and places including buildings, streets, and other human-made structures in which we live, work and play, including land uses, transportation systems and design features. It also includes infrastructure such as regional roads and transport systems, energy distribution systems, lighting, water and waste treatment systems; all the things that support human life and the functioning of cities.	http://www.kunara.com.au/biophilia-how-nature-can-nourish-your-health/ http://dictionaryofsydney.org/entry/built_environment
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C

Cantilever	An unsupported overhang acting as a lever, like a flagpole sticking out of the side of a wall.	http://www.thefreedictionary.com/cantilever
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Central Business District (CBD)	The CBD or Central Business District is the focal point of a city. It is the commercial, office, retail, and cultural centre of the city and usually is the centre point for transportation networks.	http://geography.about.com/od/urbaneconomicgeography/a/cbd.htm
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Central Sydney Planning Committee (CSPC)	The Central Sydney Planning Committee (CSPC) determines applications for major developments with an estimated cost of more than \$50 million.	http://www.cityofsydney.nsw.gov.au/council/about-council/committees/central-sydney-planning
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City / Town Planning	The profession that studies physical, social, and political systems and how the interactions between these systems can create urban environments that have desired effects on people, communities, and economies. (Saelens, Sallis, Black, & Chen, 2003)	Saelens, B. E., Sallis, J. F., Black, J. B., & Chen, D. (2003). Neighborhood-based differences in physical activity: an environment scale evaluation, <i>American journal of public health</i> , 93(9), 1552-1558. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448009/
Computer-aided design (CAD)	Computer-aided design (CAD) is the use of computer systems to aid in the creation, modification, analysis, or optimisation of a design.	http://www.encyclopedia.com/topic/Computer_aided_design.aspx
Computer Numerical Control (CNC)	Computer Numerical Control (CNC) is a process in which the functions and motions of a machine tool, are controlled by means of a prepared program containing coded alphanumeric data.	http://wings.buffalo.edu/academic/department/eng/mae/courses/460-564/Course-Notes/CNC%20notes.pdf
Concept design	A concept design is a relatively unproven early proposition for the idea of a design. It is usually sketched or modeled and tested in various ways. Typically, multiple concepts are produced as part of the design process to thoroughly explore the possibilities for generating an optimum design solution.	
Connectivity	The directness of travel between destinations, which is influenced by the kind of intersections and their density in a given area. (Gebel et al. 2005)	Gebel, K., King, L., Bauman, A., Vita, P., Gill, T., Rigby, A., & Capon, A. (2005). Creating healthy environments: A review of links between the physical environment, physical activity and obesity. <i>Sydney: NSW Health Department and NSW Centre for Overweight and Obesity</i> . http://www.healthypaces.org.au/userfiles/file/Connectivity%20June09.pdf
Construction Management and Property Development	Construction Management involves the organising, scheduling, mobilising, and directing of equipment, material, and personnel in the performance of a construction contract. Property Development is a multifaceted business process, encompassing activities that range from the renovation and re-lease of existing buildings to the purchase of raw land and the sale of improved land or parcels to others.	https://en.wikipedia.org/wiki/Real_estate_development

Council	In Australia, the six states and the Northern Territory have a level of local government in the form of councils. Councils that handle community needs like waste collection, public recreation facilities and town planning. In the Australian Capital Territory, the responsibilities usually handled by local government are administered by a department of the territory government.	http://www.australia.gov.au/about-government/how-government-works/local-government
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D

Datum line	A line to which dimensions are referred on engineering drawings, and from which measurements are calculated.	http://www.oxforddictionaries.com/definition/english/datum-line
Decentralised Energy (DE)	Electricity production at or near the point of use, irrespective of size, technology or fuel used - both off-grid and on-grid.	http://www.localpower.org/deb_what.html
Density	The measure of the number of dwellings in a given land area. It can also be a measure of population in a given land area.	http://dictionary.reference.com/browse/density
Design guidelines	A set of planning provisions intended to guide development toward a desired level of quality through the design of the physical environment.	http://encyclopedia2.thefreedictionary.com/Design+guidelines
Design brief	A statement of the goals, requirements and expectations for a design project prepared by a client to inform the designer what the project needs to achieve.	https://designbuzzwords.wordpress.com/d/
Design research	Any research focused on clarifying the context for a new design that may influence its outcome. For example, this might encompass user research, market research or trend research.	https://pr4designer.wordpress.com/2012/09/25/the-10-design-commandments/

E

Ergonomics	Application of scientific data based on the understanding of interactions among humans and other elements of a system, to arrive at a methodology of design of manmade objects/ environment in order to optimize human well-being and overall system performance.	http://www.konstruktdesign.com/product-design-glossary/
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F

Floor Space Ratio (FSR)	The ratio of the floor area of a building to its site area. FSR is one control used to define the size of a building and control the intensity of development on a parcel of land. FSR is used in NSW, Australia while Plot Ratio is used in Western Australia. In other countries, terms used include Floor Space Index (FSI), Floor Area Ratio (FAR), Gross Plot Ratio (GPR), Site Ratio.	http://www.austlii.edu.au/au/legis/nsw/consol_reg/silep531/s4.5.html
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G

Genius loci	The prevailing character or atmosphere of a place, with the additional meaning referring to a 'spirit' of a place.	http://www.oxforddictionaries.com/definition/english/genius-loci
Government Architect	An appointed officer of the State Government, managing the Government Architect's Office (GAO), a multi-disciplinary consultancy operating on commercial principles providing architecture, design, and engineering services.	http://www.publicworks.nsw.gov.au/about-nsw-public-works/government-architects-office
Greywater	Greywater is wastewater from a range of sources including your bath, bathroom basin, laundry and shower. It doesn't include blackwater such as wastewater from toilets.	http://yourenergysavings.gov.au/water/sustainable-water-systems/greywater

H

Heliostat	A heliostat (from helios, the Greek word for sun, and stat, as in stationary) is a device that includes a mirror and mechanical motor to move the mirror, so as to keep reflecting sunlight toward a predetermined target, compensating for the sun's apparent motions in the sky. Some also included a computerised sun tracking system. The principal uses of heliostats are for daylighting (bringing daylight into a space that would otherwise be poorly illuminated), and in the generation of electricity in solar-thermal power stations.	http://www.appropedia.org/Heliostats
Heritage	A building of great historical or artistic value that has official protection to prevent it from being changed or destroyed.	http://www.environment.nsw.gov.au/Heritage/listings/benefitowners.htm

Hyperdensity	Density sufficient to support intensive public transportation systems; typically regarded as 75 dwelling units per hectare or 30 units per acre.	http://www.lincolnst.edu/subcenters/visualizing-density/tour/t4.aspx https://placesjournal.org/article/building-hyperdensity-and-civic-delight/
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I

Iconic architecture	Refers to buildings and spaces that that have achieved international recognition and fame; often they also have special symbolic/aesthetic significance.	http://tcs.sagepub.com/content/27/5/135.abstract
Industrial Design / Product Design	Industrial design professionals create functional and desirable products for users that are optimised for efficient manufacture. These products are as diverse as consumer electronics, transportation and kitchen appliances. Increasingly, Industrial designers are working in multidisciplinary teams in service design, entertainment design and strategic design.	http://www.idsa.org/education/what-is-industrial-design
Interior Architecture	A profession that combines the study and practice of interior design with architecture. It explores how the interiors of buildings such as office blocks, houses, hospitals and galleries are inhabited, used and experienced.	http://www.thecompleteuniversityguide.co.uk/courses/options/interior-architecture/

L

Landscape Architecture	Landscape architecture involves the spatial reorganisation of outdoor places to meet human needs and desires while protecting or enhancing natural environments and processes. Landscape architects aim to create places that meet social, environmental, cultural, aesthetic and practical requirements (Dee 2001, p.1).	Dee, C. (2001). <i>Form and Fabric in Landscape Architecture</i> , E &FN Spon, London. (Available as an ebook)
Laser cutter	A device that uses laser technology to cut materials. It is typically used for industrial manufacturing applications. Laser cutting works by directing the output of a high-power laser most commonly through optics.	http://www.twi-global.com/technical-knowledge/published-papers/the-early-days-of-laser-cutting-august-2007/
Liveable	Liveable encompasses all the aspects that add up to the quality of life of a place, including its economy, amenity, environmental sustainability, health and wellbeing, equity, education and learning, and leadership.	http://livable.org.au/index.php?id=12 http://livablecity.org/missiongoals/

Living wall / green wall / vertical garden	A living or green wall is comprised of plants grown in supported vertical systems that are generally attached to an internal or external wall, although in some cases can be freestanding. Like many green roofs, green walls incorporate vegetation, growing medium, irrigation and drainage into a single system.	http://www.growinggreenguide.org/technical-guide/introduction-to-roofs-walls-and-facades/green-wall-definition/
Local Environment Plan (LEP)	The principal legal document for controlling development of land at the local government level in NSW, Australia.	http://www.lithgow.com/lep/factSheets/Fact%20Sheet%20%20What%20is%20LEP.pdf
Lord Mayor	The Right Honourable Lord Mayor is the honorific title of the head of an Australian Local Government Council.	https://en.wikipedia.org/wiki/Lord_Mayor

M

Mixed use	Mixed use development refers to a mix of activities within a geographic location. An example of this would be residential apartments located above retail outlets, neighbouring an office block. (Mead Dodson, & Ellway, 2006)	Mead, E., Dodson, J., & Ellway, C. (2006). Urban environments and health: identifying key relationships and policy imperatives. <i>Brisbane: Urban Research Program</i> https://www.planning.org.au/documents/item/189
Model or Prototype	Model or prototypes are made during the design process to assess aspects of a design prior to its production. Usually physical objects, but may take other forms, including on-screen or computer simulation. The terms physical prototype and model can be used interchangeably.	Hallgrimsson, B. (2012). <i>Prototyping and Modelmaking for Product Design</i> , Laurence King Publishing.

P

Passive solar design	Passive solar design refers to the use of the sun's energy for the heating and cooling of living spaces. In this approach, the building itself or some element of it takes advantage of natural energy characteristics in materials and air created by exposure to the sun.	http://passivesolar.sustainablesources.com/
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S

Scale	A ratio of size to allow documentation of designs that are too large or small to be documented effectively at true size. For example a chair may be drawn at 1:5 scale (one fifth of full size). A scale may also refer to a ruler with graduations to easily measure scaled drawings, but this is more common in architecture.	http://www.konstruktdesign.com/product-design-glossary/
Site plan	The plan showing property boundaries and dimensions, major buildings and features such as drive ways, name(s) of street frontage(s), the direction of North, and existing and/or proposed landscape features such as vegetation and topography	
Slip casting	The manufacture of ceramic ware by allowing slip to solidify in a mould.	http://www.ceramicsacademy.com/molds-and-slip-casting.html
Space planning	The design of the interior of a building for efficient space management that meet the needs of the occupant. In space planning, the design professional blocks out interior spatial areas, defines circulation patterns, and develops plans and layouts for furniture and equipment placement.	http://www.aia.org/aiaucmp/groups/aia/documents/pdf/aiab089276.pdf
Starchitect	An architect whose celebrity and critical acclaim have transformed them into idols of the architecture world and may even have given them some degree of fame amongst the general public.	https://en.wikipedia.org/wiki/Starchitect
State significant	Types of development which are deemed to have state significance due to the size, economic value or potential impacts that a development may have.	http://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/State-Significant-Development

T

Trigeneration	Trigeneration is referred to as combined cooling, heat and power (CCHP). This process simultaneously generates electricity, heating and cooling for usable consumption from the combustion of a fuel (typically natural gas) or a solar heat collector. Trigeneration is an improvement of cogeneration systems that generate electricity and heating.	http://www.sciencedirect.com/science/article/pii/S0306261903000618 http://www.healthyactivebydesign.com.au/glossary-terms-0
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Triple bottom line (TBL) The triple bottom line (TBL) is an accounting framework that incorporates three dimensions of performance: social, environmental and financial. This differs from traditional reporting frameworks as it includes ecological (or environmental) and social measures that can be difficult to assign appropriate means of measurement. The TBL dimensions are also commonly called the three P's: people, planet and profits. <http://www.ibrc.indiana.edu/ibr/2011/spring/article2.html>

U

Urban Settlements are usually designated as urban once they have grown large enough to support industries which are not rural in nature. No common figure can be put on the size of an urban area as settlements function differently in different areas due to local circumstances. <http://www.journals.elsevier.com/landscape-and-urban-planning/most-downloaded-articles/>

However, in Australia, census districts which have a population density of 200 or more persons per square kilometre are classified as urban.

Urban Design The process of giving form, shape, and character to groups of buildings, to whole neighbourhoods, and the city. It is a framework that orders the elements into a network of streets, squares, and blocks. <http://www.urbandesign.org/>

W

Walkability Walkability is a measure of how accessible and easy an area is for walking. It is generally calculated as a composite of factors which includes at least net residential density, street connectivity and land use mix. <http://www.walkable.org/>

Z

Zoning Zoning, the regulation of the use of real property by local government, restricts a particular territory to residential, commercial, industrial, or other uses. The local governing body considers the character of the property as well as its fitness for particular uses. It must enact the regulations in accordance with a well-considered and comprehensive plan intended to avoid Arbitrary exercise of government power. <http://legal-dictionary.thefreedictionary.com/Zoning>