

SECTION 6

ARCHITECTURAL DESIGN

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Version	Date	Authors	Summary of Changes
1	19/8/14		Issue to web

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western facing facades are to be avoided, and eastern facing windows shall be minimised. Windows on the northern façade shall be designed such that the summer sun is excluded, but advantage can be taken of the winter sun. All external doorways, entrances and porches shall have protection from weather, except where precluded by building legislation. Excessive glare from summer and winter sun is to be avoided or controlled. Reflective glass shall not be used, except in exceptional circumstances and only with the express approval of JCU.

6.6 Natural Light

Perimeter rooms are not to block the transmission of natural light into interior corridors or other spaces. Daylight may be borrowed through the use of glazed walls or windows. Glazed walls must be clear glass unless approved by JCU.

6.7 Wind around buildings

For an individual building or groups of buildings, designers need to be aware of the problems of wind turbulence and wind-tunneling.

Site wind patterns must be assessed as part of the design.

6.8 Acoustic Control

Refer to Section 18 Acoustics for detailed requirements.

Consider users needs in relation to comfortable working and studying environments.

6.9 Crime Prevention through Environmental Design

Incorporate "Crime Prevention Through Environmental Design" (CPTED) to enhance security to building/s, car-parks, walkways, bicycle paths and surrounding areas. CPTED initiatives shall reduce the incidence and fear of crime, and an emphasis is placed on factors including but not limited to sightlines, entrapment spots, isolation, loitering, transitional space, and signage. The designer shall consider the behavioural objectives for the subject development and its relationship to neighbouring buildings whether on or adjacent to the campus.

CPTED Principles

All buildings, car parks, walkways, bicycle paths and their immediate environs shall be designed to incorporate Crime Prevention through Environmental Design (CPTED) concepts and strategies to achieve a positive working and learning environment whilst reducing the opportunity for crimes against University property, staff and students.

In general terms, CPTED is a process which reduces the incidence and fear of crime through the effective design and use of the built environment. The application of CPTED concepts and strategies in the design of buildings has direct benefit to the University by reducing losses through theft and vandalism, and enhancing the personal safety of staff and students.

Designers shall familiarise themselves with the application of CPTED concepts and strategies or engage the services of a specialist consultant to ensure that their designs meet the intent of these Guidelines. The "Queensland CPTED Guidelines" are publicly available via the Queensland Police Service web site. It is essential that designers clearly define the behavioural objectives for a given space and ensure that the design and use of that space supports those objectives.

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The following design factors shall be given specific attention:

Lighting

See Security section.

Sightlines

The inability to see what is ahead because of sharp corners, walls, topographical features, landscaping, shrubs or columns is a serious impediment to feeling and being safe. These same features provide concealment for crimes such as assault, robbery, burglary, vandalism and graffiti. Designers shall maximize "visual permeability" and opportunities for "natural surveillance" and avoid "blind" corners, especially on stairs, in corridors, and in the location of toilets. All rooms should have glass panels from corridors to increase security and windows should be used to increase observation of external areas.

Entrapment Spots

Entrapment spots are small, confined areas, adjacent or near frequently used routes. They are typically shielded on three sides by opaque barriers such as walls or vegetation. For example, dark

recessed entrances
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Access to toilets

Access to toilets for people attending after-hours must be provided. Security and, the logistics of unlocking doors or swipe card access and the path of travel must be considered.

6.10 Circulation

Foyers and Corridors

Foyer size and width of corridors shall be chosen to allow for highlevel use periods, circulation and break-out for gathering and teaching spaces.

Vertical Transport

Vertical transport (Lifts) shall be provided in all multi-level buildings.

External ramps as a means of interconnecting floors are not an acceptable alternative to providing a lift.

Stairs

Refer to Section 12 Staircases-Ramps-Ladders

6.11 Office Fit out and Services

This section should be referenced by consultants and University end users in conjunction with Section 6.12 Space Standards

Enclosed Offices

Partitions

Generally enclosed offices wil.1(t)-6.8(i)0.07F-3(ral)-1 f7ces wil.1 we

Indicative layouts demonstrating fitout components for a standard 11m² enclosed office are provided on the following pages.

JCU Office images



6.12 Rest Rooms

Toilets shall be provided to meet Code requirements and the expected occupancy of the building after consultation with the users.

Shower Facilities

Provide shower facilities in each new building to meet Code requirements and to suit users needs. Minimum requirement is for a combined Unisex PWD shower facility, located at or near ground level.

6.13 Service Space Requirements

Cleaners' Rooms

Provide one 6m² room in each building to be used as a Cleaners' Store. This space is required to store consumables and equipment including mop and broom racks, Adjustable shelving (4 lineal meters) to be provided and shall contain a cleaners' sink with a cold water supply only.

Unless otherwise determined by JCU, other cleaner's rooms each 2m² will be required on each floor to store cleaning equipment only. A cleaner's sink is not required for these rooms. JCU should be consulted during the Design stages to discuss locations and requirements. Doors shall open out.

Bike Storage and ventilated wet-gear Storage

