3.13.2.2 If the building is not owned, but significant then the alpha letter and number will be assigned to the building on all maps, but the alpha letter and number will not be placed on the building.

The alpha and cluster letter/numbers will be assigned by the Manager, Infrastructure Systems & Information.

Building Levels
Building floor numbering is determined as per the *USP Wayfinding Signage Manual*.[2]

Room Numbers
All room numbers must be assigned by the USP, Infrastructure Systems & Information Unit.

The Principal Consultant must email to fm_records@USP.edu.au the architectural design floor plans (in AutoCAD format) and room type descriptions to Property & Facilities, Infrastructure Systems & Information (ISI) Unit, wherever a project will cause a building floor plan to change or a new floor plan to be created.

All As-Constructed drawings and equipment schedules must only display the USP assigned room numbers!

Project Number
The USP project number starts with the USP Work Request number followed by the building code. If the project is across two to five buildings, a separate project number will be issued for each building. Separate drawing sheets/files are required per building. These numbers are essential to our archive search system and must be obtained at the start of each project and included on all items of project documentation. Project numbers are to be obtained from the Project Coordinator.

3.14 Design Principles and Space Standards

The following design principles and space standards should be referenced by consultants and end users when undertaking projects at USP. These standards should be used as a guideline and may in some instances need to be modified to suit particular applications and circumstances. Regulatory requirements and intent under Workplace Health and Safety and other relevant legislation shall be complied with as a minimum.

Implementation of Work Space Planning at USP
In planning new work space layouts the University's Project Coordinators in conjunction with the consultants and end users will advise on the design. The proposed office layout must comply with the principles outlined in this standard and with the ***Work Space Planning Policy***[3] (Refer Section 1.2.4 of the *University Manual of Policy and Procedures*).

In exceptional circumstances variations of +/- 15% may be permissible (e.g. where extant physical or structural constraints or functional need dictates). In such circumstances the Director FM will make the final determination of the nature and format of the planned areas. Any plans that do not comply with this policy must be approved by the Director FM.

[2] Refer to Section 18, Signage and Appendix 18.2 Wayfinding Signage Manual, Issue C, Dated 15.11.2012
[3] Refer The University Manual of Policy and Procedures, Chapter H, Section 1.2.4, Work space planning policy

Work Space Planning Policy

The *Work Space Planning Policy* has been adopted by USP based on a balanced consideration of end user needs with sustainable environmental and financial management practices. Under the *Work Space Planning Policy,* University staff will generally be accommodated within a flexible and open work space comprised of a variety of individual and shared work zones. Flexible, open work spaces with a variety of activity based work zones enable the University to:

3.14.1 Foster greater collaboration and exchange of knowledge between staff, students and other University stakeholders

3.14.2 Provide a greater level of amenity and choice to all staff in the workplace

3.14.3 Support a diverse range of end user functional requirements

3.14.4 Provide more flexible and efficient space that can readily respond to organisational churn

3.14.5 Reduce organisational costs and excess material wastage

Work Space Design Principles

The following design principles underpin USP's Work Space Planning Policy and should be referenced by consultants and end users to design sustainable work spaces that encourage collaboration and organisational transparency and that support end user functional requirements:

Principle 1 Openness & Transparency

Design open work spaces that encourage organisational transparency, maximise natural light and provide an appropriate level of amenity for all occupants:

3.14.6 Limit the extent of "enclosed built fitout" (partitions extending to the ceiling) and optimise open, flexible work zones. The extent of "enclosed built fitout" will be assessed on a project by project basis but should generally be limited to a maximum of 20% of the total modified area. Any variation to this limit will be subject to endorsement by the Director FM

3.14.7 Locate "enclosed built fitout" to areas either adjacent to the building's core or away from the building's perimeter

3.14.8 Use the building's perimeter for open, flexible work spaces to maximise natural light and outlook

3.14.9 Maximise the use of glazing on "enclosed built fitout"

Principle 2 Function & Variety

Provide a variety of individual and shared work zones that support end user functional requirements and that support collaboration and knowledge sharing. Such work zones may include:

3.14.10 Open plan, individual work points

3.14.11 Informal breakout areas

3.14.12 Meeting carrels and quiet zones

3.14.13 Team tables

3.14.14 Multi-purpose meeting and project rooms

3.14.15 Enclosed offices (Refer *Section 3.15 Enclosed Office Fitout and Workstation Services*)

3.14.16 Shared storage and utility hubs

When planning these work zones, key end user functional requirements that should be considered include (but are not limited to):

3.14.17 Effective consultation with students and other USP stakeholders

3.14.18 Quiet/focused individual tasks

3.14.19 Storage for a range of resources and artefacts

3.14.20 Adequate and appropriate levels of security and access for staff, students and other University stakeholders

Other design considerations may include:

3.14.21 Relationships between functions and how that translates to the layout of offices, workstations, other support facilities and equipment

3.14.22 Planning requirements for links to adjacent buildings

3.14.23 Collocation of dual functions for spaces not occupied full time

3.14.24 Zoning functions to avoid disruption due to conflicting acoustic and functional requirements. For example adequately segregating noisy functions (e.g. common facilities, kitchen, and resource areas) from quieter non-related functions. A key consideration in this regard is allowing for effective engagement with students and other University stakeholders while avoiding disruption to other end user functions

3.14.25 Providing spaces that address a range of end user privacy requirements (acoustic and visual). Whilst privacy may be required for some functions, open interaction is desired for others

3.14.26 Providing ease of mobility and circulation

3.14.27 Providing a variety of support spaces which complement and supplement end user requirements. It is important to plan for adequate support space such as meeting rooms, storage, common utility facilities (printers, photocopying etc.), filing space, common library

3.14.28 Reviewing occupational ergonomics

Principle 3 Flexibility & Efficiency

Consider future flexibility and efficiency during the design stages to ensure the space can easily be modified and to reduce the cost of organisational churn:

3.14.29 Plan work spaces in functional zones

3.14.30 Plan for consistency with the base building (including the building's structural grid and mullions)

3.14.31 Design layouts based on modular space standards (particularly with respect to "enclosed built fitout")

3.14.32 Provide sufficient flexibility to support organisational and physical re-configuration

3.14.33 Provide sufficient flexibility to adapt to new technologies and new ways of working

3.14.34 Incorporate multi-purpose zones

3.14.35 Avoid use of built-in joinery

3.14.36 Design fitouts as separate elements that can easily be connected and disconnected for the purposes of reconfiguration, replacement and upgrade

Principle 4
Sustainability

Procurement:

Contracting and design of workspaces, furniture and fittings should be based on the elements of sustainable procurement which include the following:

3.14.37 Meeting the users' needs (functional, fit for purpose)

3.14.38 Delivering long term 'value for money' by considering whole-of-life costs

3.14.39 Maximising social and economic benefits

3.14.40 Avoiding adverse impacts to the environment and human health

3.14.41 Referencing independent, sustainable purchasing guides for fitouts and furniture

Environment:

Design for environmental sustainability by considering the following:

3.14.42 Materials and fittings selection
3.14.43 Reduce material use
3.14.44 Minimise embodied energy
3.14.45 Reuse furniture and fittings
3.14.46 Use recycled content
3.14.47 Consider whole-of-life environmental impacts and management

Indoor environment
3.14.48 Reduce adverse impact of design and materials on indoor air quality
3.14.49 Optimise use of natural light and ventilation for users comfort

Shared conveniences
3.14.50 Provide centralised waste receptacles
3.14.51 Include adequate recycling facilities with intuitive design and/or signs to encourage recycling
3.14.52 Allow for central printing stations with controls to minimise ink, paper and energy use
3.14.53 Provide water stations for filling glasses or larger water bottles

Space Allocation

The following space standards are to be used to determine the schedule of areas for work space projects being undertaken at USP:

Where a work space area accommodates 10 or more FTE, a gross space allocation of up to 14m^2 UFA/FTE will be provided. Where the group size is less than 10 FTE, a reduction to 10m^2 UFA/FTE (gross) or less may be proposed dependant on the availability of other support facilities and approval from the Director FM.

Note that UFA includes "enclosed built fitout" (partitions extending to the ceiling for rooms such as offices, meeting rooms, tea or lunch rooms, secure storage rooms, etc.) and "open plan areas" (such as workstations, breakout and informal meeting spaces, waiting areas, secondary circulation, shared storage, printing/resource areas etc.). UFA excludes toilets, stairs, lifts, plant rooms, data centres and primary circulation.

The extent of "enclosed built fitout" (partitions extending to the ceiling) will be assessed on a project by project basis but should generally be limited to a maximum of 20% of the total project area. Limiting the extent of "enclosed built fitout" serves to optimise an open and flexible work space. Any variation to this limit will be subject to endorsement by the Director FM.

a) Enclosed Offices

Enclosed offices will only be provided where there is a demonstrable functional requirement. An example of a functional requirement is where the majority of an officer's time is spent in completely confidential work (such as staff counselling) and access to a shared meeting room is not appropriate.

Where there is a demonstrable functional need supported by a recommendation from the Executive Dean of Faculty/Head of Division, a standard enclosed office of 11m^2 may be provided in accordance with *Section* 3.15 *Enclosed Office Fitout and Workstation Services* and subject to endorsement by the Director FM in consultation with the Vice-Chancellor, USP.

b) Storage

USP recognises the importance of providing adequate storage for both academic and professional staff. Where possible, staff should maximise the use of digital storage options provided by USP. As a supplement to digital storage, new workspace projects will address the provision of adequate physical storage through a range of personal and shared design solutions. These design solutions include:

- Personal storage located at individual workstations and in enclosed offices
- Shared, team storage/libraries located in areas adjacent to team clusters
- Shared facility and resource hubs located throughout the total work space
- Shared secure storage located where appropriate

Building Efficiency

Building efficiency, (UFA/GFA x 100) calculated in accordance with the definitions published by TEFMA (which are based on NPWC definitions), shall be not less than the following:

Science type	65%
Humanities type	70%
Library	80%
Administration	70%

Teaching Space

All new and refurbished general teaching rooms must have a minimum of 2m²/student. This applies to all general teaching rooms at USP including all seminar rooms and tutorial rooms. Other teaching spaces, such as lecture theatres, computer rooms and specialist studios, must be sized so that they are fit for purpose.

All teaching rooms and student facilities must allow for access by students and staff with disabilities. This requires wheel chair access to all facilities and impacts on the space requirements. Refer also Section 16 Circulation & Access for People with Disabilities and Section 19 Teaching Spaces.

- Classrooms 2m² per person
- Lecture room/theatre, including bio-box from 150 to 600 seats 1m²/seat plus 30 m² to 75 m² dependent on layout and to accommodate bio-box.
- Computer Laboratories 3-3.5m²/station
- Computer Room/V lab style 4m²/station
- Science Laboratories 4m²/student

The size required will depend on the layout required for teaching and the need to provide access for People with disabilities.

Library Space

For major projects, particularly if the building is off Campus the Library must be consulted for space requirements for the delivery of their services.

Reading space including associated passageways 2.5 m²/place

Open access book stacks including gangways and aisles 2.2m²/double sided 900mm shelving unit Compactus storage areas including aisles per volumes 1m²/360 book volumes

Note even where a library is not part of the brief there may be a need to provide additional library services, see item below "Library Services"

Space Reporting Requirement

For all Major Projects an areas schedule must be provided at the completion of the sketch design stage. This is used by the Maintenance and Cleaning sections in their forward planning. The schedule is to have GFA, UFA and a breakdown of non-usable areas. The format is to be agreed with USP.

3.15 Enclosed Office Fitout and Services

This section should be referenced by consultants and University end users in conjunction with *Section 3.14 Design Principles and Space Standards*

Enclosed Offices Partitions

Generally enclosed offices will be formed with floor to ceiling partitions as follows:

- Partitions to the front and sides of an enclosed office are to maximise the use of full height glazing.
- The front partition will be fully glazed with no blinds, film or un-authorised signage.
- The side partitions will be predominantly glazed allowing for a component of the partition to be solid to accommodate building services where necessary.
- Glazing to side partitions should generally be free from blinds, film or un-authorised signage except where an office is adjacent to a meeting, conference or training room. In this instance a plain, translucent film may be applied to the shared partition (between 450mm and 1850mm above the floor) to provide a level of visual privacy but maintain transfer of light.

Doors

- Where possible, doors to enclosed offices should be avoided
- Where there is a requirement for a door, a full height, glazed sliding or hinged door should be used
- Doors are to be free from blinds, film or un-authorised signage

Furniture

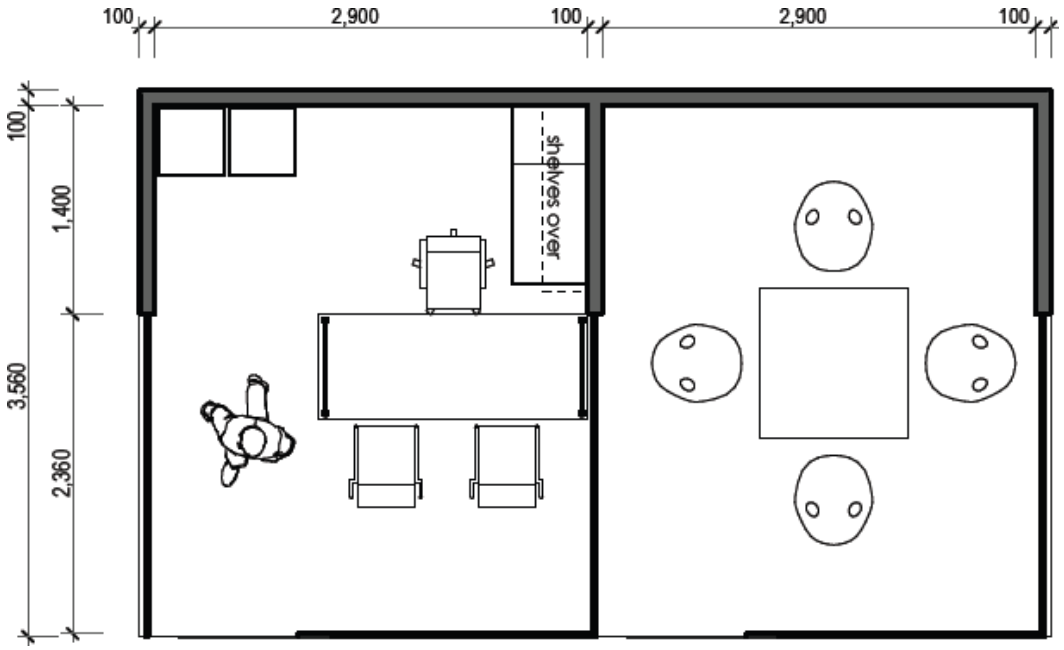
- Refer *Section 9.12 Office Furniture*.

Services

- For enclosed offices provide 4 double GPO and 2 data outlets
- For workstations in open work space areas provide a minimum of 2 double GPOs, a telephone outlet, and 2 data outlets.

Indicative layouts demonstrating fitout components for a standard 11m^2 enclosed office are provided on the following pages.

Option A - Indicative fitout for a standard 11m^2 enclosed office adjacent to an 11m^2 meeting room



Maximum use of glazing to front and side partitions.

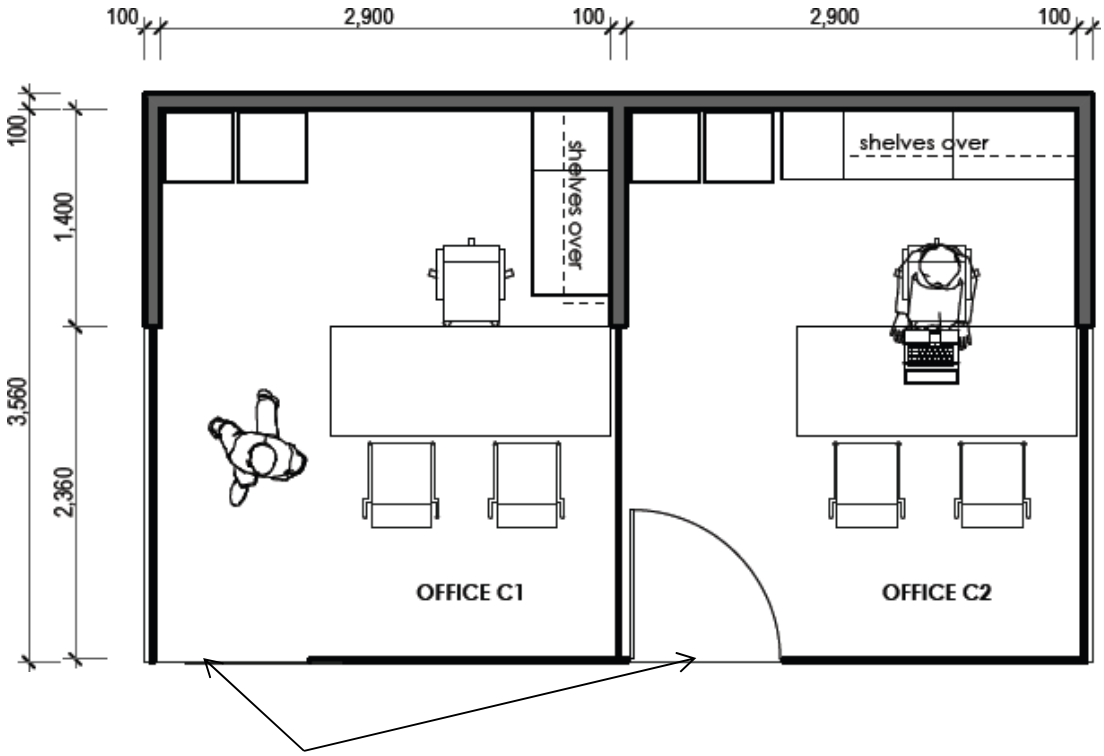
No film or unauthorised signage

Component of partition solid to accommodate services

Plain, translucent film to glazed, shared partition between office and meeting



Option B - Indicative fitout for a standard 11m^2 enclosed office adjacent to an 11m^2 enclosed office



Use of glazed door (hinged or sliding).

Component of partition solid to accommodate services

Maximum use of glazing to front and side partitions. No film or unauthorised signage

No film or signage to glazing of shared partition



3.16 Workplace Amenities

Workplace amenities requirements are defined in WH & S Act and Regulations. Changes to legislation in January 2005 now specify requirements for the provision of:

- First aid facilities, Toilets, Hand washing facilities, Drinking water, Dining facilities, Dressing Rooms, Showers, Lighting, Ventilation, Work area spaces and airspace.
- These Regulations align WH & S Amenity requirements with the BCA and QDC for design and construction of buildings or workplaces. However, the intent of the WH & S Regulations may require minor variations in some areas, to achieve health and safety performance outcomes.

3.17 Service Space Requirements

Refer also to each section in Part 2

Cleaners' Rooms
Cleaners' rooms are to be located on each floor and shall be a minimum of 3m2 in area. Each cleaner's room shall contain a cleaners' sink with tiled splashback and shall be connected to hot and cold water. The floor shall be finished with non-slip vinyl with coved skirtings. Adjustable shelving (4 linear meters) to be provided. Doors must open out.

Shower Facilities
Provide in each new building a minimum of either one combined Unisex/PWD shower or one each separate male and female shower facilities. Each facility to have hot and cold water, closable doors, benches, shower screens, hooks, mirror, and shelves. The facilities should be located at or near ground level. Where the facilities provided also serve PWD requirements, the requirements of Section 16 Circulation & Access for People with Disabilities apply. Review with USP on the need for additional showers.

Bike Storage and ventilated wet-gear Storage
Per major project, discuss the need for lockable bicycle storage with USP and for the provision of a secure drying area and locker area for sporting gear.

Gardeners/Building Maintenance Store
A room of 10m² (minimum) in area should be provided at ground level with external access in each building. The room shall have one GPO at a height of one metre and a cleaner's sink with 20mm cold water hose cock. The external door shall have a clear opening width of one metre and shall be outward or upward opening. Provide appropriate storage for flammable liquids, chemicals and the like, which may include the need for proprietary cabinets.

Valve Room
One major service duct riser shall be accessible from outside the building at ground level in which all main services isolation valves, meters, RPZD and the like shall be located.

Service and Storage Areas
Particular care is to be taken in the design of these areas to provide convenient access to industrial waste bins and other rubbish containers while at the same time providing suitable visual screening. Adequate provision is to be made for the secure and ventilated storage of gas bottles where required.

Plant Rooms, Communication rooms, Specialist Service Rooms and Service Risers

Allocation of adequate plant areas and vertical riser space to accommodate all necessary plant and services reticulations shall be provided in the preliminary design sketches.

Sufficient unencumbered space around fixed plant shall be provided to enable safe access to all parts of the facility or equipment and allow for special activities such as refuelling.

Vending Machines

Consideration shall be given in the design of public external spaces adjoining 24 hour access facilities such as lecture theatres, libraries, or commercial buildings on University campuses for the installation by others of vending machines. Allowance should be made for lighting, power, water supply and drainage to sewer. Vending machines shall only be located in areas approved by USP and in all cases must be aesthetically integrated into the space.

Library Services

For major projects, particularly if the building is off Campus the Library (TILS representative) must be consulted for space requirements for the delivery of their services.