

Australasian Health Facility Guidelines

Part B - Health Facility Briefing and Planning HPU 131 Mental Health – Overarching Guideline

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Australasian Health Facility Guidelines

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01 INTRODUCTION

1.1 PREAMBLE

This Health Planning Unit (HPU) has been developed by the Australasian Health Infrastructure Alliance (AHIA) following extensive consultation during 2016 and 2017 with clinical experts, consumers and carers.

This HPU is intended to assist in the planning and design of mental health inpatient facilities.

1.2 INTRODUCTION

1.2.1 General

The Mental Health – Overarching Guideline describes the generic planning and design requirements that should be considered when planning mental health inpatient units. This document contains information that is common across all mental health inpatient units and should be read in conjunction with service specific HPU documents. These service specific documents include:

- HPU 132 Child and Adolescent Mental Health Unit;
- HPU 133 Psychiatric Emergency Care Centre (PECC);
- HPU 134 Adult Acute Mental Health Inpatient Unit;
- HPU 135 Older People's Acute Mental Health Inpatient Unit;
- HPU 136 Non Acute Mental Health Unit which includes rehabilitation, extended care and forensics; and
- HPU 137 Mental Health Intensive Care Unit.

The focus of this document is acute inpatient units but it can be used to inform non-acute environments. This document is not intended to inform the planning and design of acute forensic units, residential supported accommodation and community based non-acute mental health facilities.

This document should be read in conjunction with the Australasian Health Facility Guideline (AusHFG) generic requirements and standard components described in:

- Part A: Introduction and Instructions for Use;
- Part B: Section 80 - General Requirements & Section 90 - Standard Components;
- Part C: Design for Access, Mobility, OHS and Security;
- Part D: Infection Prevention and Control; and
- Part E: Building Services and Environmental Design.

1.3 POLICY FRAMEWORK

Before undertaking a project, planners and project staff should familiarise themselves with individual jurisdictional plans, regulations, policies, service specific guidelines and reports. Some key documents include:

- Principles for the Protection of People with Mental Health Illness and the Improvement of Mental Health Care, United Nations, 1991;

- Fourth National Mental Health Plan - an Agenda for Collaborative Government Action in Mental Health 2009–2014, Commonwealth of Australia, 2009 (noting the Fifth National Mental Health Plan is currently in draft);
- National Standards in Mental Health Services, Australian Commission on Safety and Quality in Health Care;
- Mental Health Statement on Rights and Responsibilities, Commonwealth of Australia, 2012;
- A National Framework for Recovery-Orientated Mental Health Services: Guide for Practitioners and Providers, Australian Health Ministers Advisory Council, Commonwealth of Australia, 2013; and
- A Case for Change: Position Paper on Seclusion, Restraint and Restrictive Practices in Mental Health Services, National Mental Health Commission, May 2015.

Jurisdictional policy information, where available, is contained in the Further Reading section of this HPU.

1.4 DESCRIPTION

1.4.1 Description of Mental Health Inpatient Units

Mental health inpatient units are an important component of a comprehensive mental health system and aim to provide safe and therapeutic, recovery-oriented care in the least restrictive environment possible. Mental health inpatient units will vary in size, target population (e.g. adult or child and adolescent), clinical presentations (e.g. sub-acute, acute and high dependency beds) and admission type (e.g. voluntary or involuntary).

The National Safety Priorities in Mental Health: a National Plan for Reducing Harm (2005), lists some key principles that influence the planning and design of mental health inpatient units. These include:

- consumer and carer rights to dignity, respect and privacy;
- consumer and carer involvement in service planning;
- a right to be treated in the least restrictive environment; and
- the environment provided for mental health services is safe for consumers, carers, families and staff.

Planning and design of mental health inpatient units should support recovery-orientated models of service delivery. Recovery-orientated Practice, published by the Department of Health Victoria (2011) describes this as mental health care that:

- encourages self-determination and self-management of mental health and wellbeing;
- involves personalised care that is responsive to people's unique strengths, circumstances, needs and preferences;
- supports people to define their goals, wishes and aspirations;
- involves a holistic approach that addresses a range of factors that impact on people's wellbeing, such as housing, education and employment, and family and social relationships; and
- supports people's social and community inclusion.

In terms of creating a physical environment that supports recovery orientated mental health, services need to achieve the outcomes described below.

Outcome	How this may be achieved
Welcoming and supportive	<p>Consumers are admitted to an inpatient unit when community based care is no longer an option. The environment needs to promote hope. A non-institutional, homely environment will reduce stress and encourage family and friends to visit. This homely environment will allow consumers to continue, where possible, to undertake activities of daily living and participate in a range of activities.</p> <p>This may include:</p> <ul style="list-style-type: none"> - high quality interiors - quiet, safe and private space such as individual bedrooms and ensuites - a choice of spaces that provide private, semi-private and social engagement opportunities - sizing inpatient units so that facilities avoid being 'more institutional and contribute to patients feeling less safe...and noisier,' (Royal College of Psychiatrists, 2011) - inspirational artwork.
Therapeutic relationships	<p>The environment should support the active engagement of consumers and staff. Good relationships and interactions build trust and contribute to recovery.</p> <p>The availability of a structured and therapeutic activities program can help a consumer actively participate in their recovery. This program may range from occupational therapy, life skills and physical activities. Suitable spaces need to be provided to support these programs.</p>
Maintain meaningful engagement with family and friends	<p>Successful outcomes are enhanced by maintaining relationships with families and friends. This includes parents being able to engage with their children.</p> <p>This may include:</p> <ul style="list-style-type: none"> - multipurpose space, accessed from public areas where groups can meet - space to meet with children in a safe environment - access to phones and technology to maintain relationships and access community resources.
Self-management	<p>Provide a range of spaces and resources to assist in the self-management and achievement of goals. This in turn will support strategies to reduce the use of restraint and seclusion by preventing and/or behavioural disturbance.</p> <p>This may include:</p> <ul style="list-style-type: none"> - a range of places and spaces including; <ul style="list-style-type: none"> o calm and quiet space o social space o entertainment and activity o daily living activities - access to outdoor space - access to relaxation space and sensory modulation space equipped with specialised equipment.
Holistic management of health	<p>Consumers admitted to an inpatient unit may also have a range of other health problems that need to be managed.</p> <p>This may include:</p> <ul style="list-style-type: none"> - provision of clinical space that can be used to assess physical health - access to activities that promote healthy lifestyles such as outdoor space and gyms.

Outcome	How this may be achieved
A safe environment	A safe environment will need to balance the principles of choice and positive risk-taking and that of a duty of care and safety. Inpatient environments will accommodate a range of vulnerable consumers and strategies to protect them must be considered.

The physical environment and ambience of an acute mental health inpatient unit will impact on consumer recovery, outcomes and the safety of those consumers and staff working within the service. This guideline provides overarching principles that seek to promote positive physical environments so that optimal recovery outcomes for consumers can be achieved.

Mental health inpatient units will also support the needs and activities of carers, families and friends, staff, students, official visitors and other stakeholders.

1.4.2 Terminology

Anti-ligature design: When this term is used in this document, it is expected the product will be of a type specifically manufactured and marketed as anti-ligature and installed in accordance with the manufacturer's instructions. The design documentation will also need to consider anti-ligature design in specifications and design details.

Carer: A person of any age who provides personal care, support and assistance to another person because the other person has a disability, a medical condition, a mental illness or is frail (Mental Health Statement of Rights and Responsibilities, 2012).

Consumer: In the mental health context, the person or patient is referred to as the 'consumer.' Where possible, this document will use the term consumer.

Involuntary treatment: When a consumer is being treated for their illness without their consent and under mental health legislation, either in hospital or the community (National Mental Health Commission 2012).

Personal recovery: Being able to create and live a meaningful and contributing life in a community of choice with or without the presence of mental health issues (Australian Health Ministers Advisory Council, 2013).

Recovery-orientated service delivery: The application of sets of capabilities that support people to recognise and take responsibility for their own recovery and wellbeing and to define their goals, wishes and aspiration (Australian Health Ministers Advisory Council, 2013)

Seclusion: is the confinement of the consumer at any time of the day or night alone in a room or area from which free exit is prevented (National Mental Health Seclusion and Restraint Project 2007-2009). The use of seclusion is detailed in jurisdictional Mental Health Acts and policies.

Sensory modulation: the ability to regulate and organise responses to sensory input in a graded and adaptive manner. This activity is often undertaken in a dedicated space and consumers become calm or change their emotional state by using a range of sensory tools and equipment (Te Pou 2013).

Trauma informed design: refers to design that consciously addresses the sensitivities and vulnerabilities of people who have experienced trauma. Spaces are created that promote feelings of psychological and physical safety, promote healing and recovery and do not traumatise or re-traumatise a consumer.

02 PLANNING

2.1 OPERATIONAL MODELS

2.1.1 Service Configuration

A mental health inpatient unit may be located:

- in a stand-alone building on an acute hospital site, either as a single unit or as part of a dedicated mental health precinct;
- as a dedicated unit within a hospital building; or
- located on another health-related site.

2.1.2 Bed Numbers

The number of beds provided in a unit will vary according to the service needs identified in the service plan, the model of care, and the role of the unit within the context of other mental health services in the region, required staffing ratios and the need to ensure service delivery is safe, cost effective and sustainable. The Royal College of Psychiatrists (2011) recommends a maximum unit size of 18 beds to 'promote a more personal and comfortable environment.'

The design should enable larger units (e.g. 25 beds) to be subdivided into smaller operational 'pods' to provide a more therapeutic environment for consumers, to support gender safety and to enable cohorting of consumers with differing support needs, while retaining operational efficiencies. In some circumstances, a smaller number of high dependency beds may be needed to manage a range of acute conditions and behaviours. This arrangement in pods will allow some key infrastructure such as main entry, staff offices and selected meeting rooms to be shared.

Bedroom configurations in general units and high dependency 'pods' should also promote efficient staffing ratios.

For recommendations relating to each service type, refer to the service specific HPU.

2.2 OPERATIONAL POLICIES

2.2.1 General

Operational policies impact on the capital and recurrent costs of a facility. The cost implications of proposed policies should be fully evaluated to ensure the most cost-effective and efficient solutions are provided.

Refer to AusHFG Part B: Section 80 General Requirements for further information.

2.2.2 Management of Acute Medical Comorbidities

Space should be provided to enable a range of medical related assessment and simple treatments to be managed (e.g. consult and treatment rooms). Consumers with complex medical conditions will be managed in general inpatient units.

2.2.3 Medication Management

A medication room is required for secure storage of medications. Systems for administering medications may vary from a single distribution point to the use of mobile trolleys (traditional or electronic) that provide medications to each consumer within the unit in various locations.

2.2.4 Electroconvulsive Therapy (ECT)

ECT and recovery should only be undertaken in a day procedure unit, operating unit or dedicated and fully equipped ECT suite, either within an acute hospital campus or within a mental health complex depending on jurisdictional requirements. Facilities for ECT are not addressed in this HPU.

Refer to jurisdictional policies for further information.

2.2.5 Medical Emergencies

Medical emergencies will be managed in accordance with local arrangements. A resuscitation trolley and portable oxygen should be readily available in a secure staff only area such as the staff station or treatment room.

Consumer emergencies (such as suicide or acute behavioural disturbance) will be managed in accordance with unit's protocols. These protocols will seek to reduce the use of restraint and seclusion.

2.2.6 Firearm Security - Police

Requirements will vary depending on jurisdiction specific firearm acts, regulations and policies.

Police officers accessing the inpatient unit should be encouraged to disarm at the entry and store weapons and related equipment within a gun safe. The local area command (LAC) should be consulted in firearm security during the planning and design phase.

2.2.7 Medical Records

Health services increasingly use an electronic patient record, therefore networked computer access will be needed at staff stations and other clinical spaces (e.g. consult and interview rooms).

A mobile solution may also promote interactions between staff and consumers.

2.2.8 Seclusion and Restraint

The National Safety Priorities in Mental Health: A National Plan (2005) seeks to reduce harm and the use of and, where possible, eliminate restraint and seclusion as both are associated with adverse events.

A first line of strategy is self-management usually undertaken in a range of space accessible within the inpatient unit (e.g. quiet, activity and sensory modulation spaces). De-escalation strategies provide an opportunity for the consumer to separate for a period of time from others. This can be done within a segregated area of the inpatient unit.

Seclusion is an intervention of last resort and generally will only be implemented after other de-escalation strategies have failed.

For further information refer to:

- seclusion requirements (refer to Standard Component);
- description of sensory modulation rooms is provided in the appendices of this document; and
- jurisdictional policies and legislation on seclusion and restraint.

2.2.9 Sexual Safety

Health services have a duty of care for all consumers who may be particularly vulnerable, have experienced past trauma and be at significant risk of further trauma. The layout of the physical environment and protocols regarding its use must support the sexual safety of all consumers with particular regard to women and other vulnerable individuals. For further information, refer to jurisdictional policies.

2.2.10 Smoking

In most jurisdictions, healthcare campuses are designated smoke-free areas. Supports will be put in place to assist the consumer during their stay.

Refer to each jurisdiction for policies regarding smoking.

2.2.11 Staffing

Unit staff work as a multidisciplinary team and may include, in a permanent and/or visiting capacity:

- medical staff;
- nursing staff;
- allied health staff;
- administrative staff;
- peer workers;
- security and other emergency response staff; and
- cleaning, maintenance and food services staff.

Visitors, official visitors, mental health advocates, case workers and students should also be considered when assessing staff facilities and visitor amenities.

2.3 PLANNING MODELS

2.3.1 Location

Consumer access to attractive, safe and secure outdoor areas is a major consideration when planning mental health inpatient units. Increasingly, land availability on acute hospital sites is limited, particularly in metropolitan areas. While a ground floor location provides easy access to outdoor areas, it may lack privacy and be overshadowed and overlooked by adjacent buildings.

Units provided in upper levels of a building also need a safe and secure outdoor area. It may be easier in this scenario to provide outlook and privacy from a courtyard area. Screening should be safe and secure while enhancing the outlook and ambience of the space.

Units that are part of a general healthcare facility should be located in a way that supports the movement of staff and consumers to and from other units (e.g. ECT suite, medical imaging services). The location of the unit should allow discreet transfer of consumers from the emergency department and rapid responses in emergencies.

2.3.2 Shared Facilities

There may be opportunities to share infrastructure where several inpatient units are collocated. For example, a single main public entry may be provided or selected staff areas and amenities shared. The designated formal hearings room and meeting rooms may also be shared but should have ease of access from, and be in close proximity to, all consumer, visitor and staff areas.

Where a group of services is collocated in a mental health precinct, each service should have its own recreational and therapeutic outdoor areas. Sharing of facilities should not compromise the ability of staff to supervise consumers and provide therapeutic care in either zone nor compromise the safety and security of consumers, carers, staff and visitors.

2.4 FUNCTIONAL AREAS

A mental health inpatient unit will broadly accommodate the following functional zones:

- main entry;
- reception and waiting (this will include a meeting room used for Tribunals);
- admission and assessment rooms (i.e. consult and/or interview rooms);
- consumer areas;
 - bed rooms, usually including general (may be acute or sub-acute) and high dependency areas (where provided)
 - communal and activity areas including sensory modulation and outdoor space
 - therapy and treatment areas
 - visiting areas accessible by family and friends
- clinical treatment areas including seclusion and/or de-escalation suite (where provided);
- clinical and non-clinical support areas; and
- staff areas including office space and amenities.

A secure entrance for emergency vehicles such as ambulance or police vehicles may also be required.

Refer to service specific HPU for further information.

2.5 FUNCTIONAL RELATIONSHIPS

2.5.1 External

Mental health inpatient units should consider timely access to emergency services should transfer to and from the service be needed.

Mental health inpatient units located on a hospital site will need easy access to a range of services such as medical imaging and operating theatres (for ECT).

Refer to service specific HPU for detail relating to each service as this may vary depending on the service acuity and location.

2.5.2 Internal

The entry, reception and waiting area should act as a secure access control point to inpatient areas. Where possible, consumers will enter via the main entry although a secure emergency entrance is required in most acute inpatient environments.

Consumer areas will be arranged so that bed rooms are separated from communal areas to reduce noise and make observation easier. Access to secure outdoor areas should be provided from communal areas of the unit.

Separate consumer and selected clinical support will be provided for a high dependency unit (HDU) provided as part of an acute mental health inpatient unit. In small units, it may be possible to share some infrastructure such as a staff station to better utilise staff resources. The seclusion or de-escalation suite will be located adjacent to the HDU. A secure entrance, for emergency vehicles such as ambulance or police, will provide quick and direct access to the HDU.

Clinical support rooms and spaces should only be accessible by staff. Selected rooms and spaces accessed frequently by clinical staff need to be located so that significant staff time is not lost travelling between them and engagement with consumers is not compromised.

Staff offices and amenities should only be accessible by staff and while they can be located adjacent to other areas of the unit and staff should not have to travel through clinical areas to access this space.

03 DESIGN

3.1 ACCESSIBILITY

3.1.1 External

The mental health inpatient unit requires a dedicated main entry for consumers, their families, carers and staff if located in a stand-alone location.

A separate, secure, entry point for consumer admissions such as police-assisted transfers may be needed for selected acute services. This secure entry point will be linked to a high dependency unit zone.

A secure, back of house, services entry point is also needed for delivery and removal of food, linen, supplies and waste. Access will be controlled by staff.

3.1.2 Internal

Where several units are accommodated within one building, travel should not occur through other units.

3.2 PARKING

Parking requirements include:

- all weather drop-off at the main entrance (where provided as a stand-alone facility);
- nearby accessible parking; and
- short-term parking for emergency services vehicles.

Should the facility be located on a larger healthcare site, visitors will typically access visitor parking on site.

For staff parking, refer to AusHFG Part C Section 6.0 Safety and Security.

3.3 DISASTER PLANNING

The mental health inpatient services need to be included in broader disaster planning for the health service.

Refer to AusHFG Part B Section 80 for further information.

3.4 INFECTION PREVENTION AND CONTROL

Infection prevention and control issues risks are generally not the same as those in acute medical and surgical inpatient environments. Measures should be commensurate with consumers that are generally ambulant and self-caring. Even so, hand hygiene, environmental cleaning, surface and finishes selections are important.

Alcohol based hand rub will be mounted in staff only areas. Alternatively, different types of preparations may be used that reduce risks associated with ingestion of the product.

Sensor taps should be used on clinical basins in areas accessible to consumers as they reduce risks associated with tapware.

Refer to:

- AusHFG Part D Infection, Prevention and Control; and
- jurisdictional policies.

3.5 ENVIRONMENTAL CONSIDERATIONS

An attractive, comfortable, non-institutional and safe environment will impact positively on consumers, visitors and staff. The design of the environment will address the sensitivities and vulnerabilities of people who have experienced trauma.

3.5.1 Scale

An appropriate scale in mental health inpatient units will assist in creating a safe and therapeutic environment as it increases in size. Scale can be achieved by:

- designing spaces that facilitate consumer choice (e.g. provision of smaller private areas, mid-sized semi-communal and a large communal area or areas);
- clustering bed rooms into 'pods' rather than large wings;
- avoiding overcrowding by planning space to accommodate the expected number of users;
- separation of zones such as bed rooms from communal activity areas; and
- a simple layout which reduces the need for signage.

3.5.2 Acoustics

Effective management of noise levels will improve the therapeutic nature of the environment and promote a sense of calm and a feeling of safety.

Ceiling heights, wall and door construction, furnishings and finishes need to be specified to optimise the acoustic environment and reduce unwanted noise.

Areas requiring special attention include consult, treatment and interview rooms. Bed rooms should be located away from larger communal areas.

In acoustically-treated rooms, return air grilles should also be acoustically treated to avoid transfer of conversations to adjacent areas. Door grilles should not be installed.

Emergency and communication systems (e.g. duress or nurse call), should be installed in a way that does not generate disturbing noises. Alternatives are linking these systems to phones or pagers or utilising other alert systems such as lights.

Carpet may be used in selected communal areas of a mental health inpatient unit to reduce noise levels (e.g. quiet sitting areas).

3.5.3 Lighting

A well designed lighting scheme, both natural and artificial, will improve the amenity, therapeutic environment and safety of the mental health facility. Lighting systems should provide a pleasant, calming and domestic style approach where possible.

The use of natural light should be maximised in consumer and staff areas while avoiding shadow and glare. Too much direct sunlight can adversely affect consumers with medication-related photosensitivity.

Modern lighting systems can be programmed to change colour cast throughout the day to support the natural sleep and wake cycle.

Consumers should be able to control the light, both natural and artificial, in their bed rooms. The inclusion of integrated blinds to consumers' bed room windows assists with managing external light and privacy. Night lighting is recommended in bed rooms as consumers may experience sleep disturbances. This lighting will be locally controlled and also facilitate discreet observation by staff.

Low level lights (300mm from the finished floor level) along bed room corridors will allow staff to supervise bed room areas with minimal impact.

3.5.4 Interior Decor

Decor should be non-institutional in appearance, provide visual interest and promote a welcoming, warm and therapeutic atmosphere.

The selection of colour, artwork and other decorative images in mental health facilities may vary depending on particular areas within a unit. The consumers using the facility may also influence selections (e.g. adolescent or Indigenous consumers). In many situations, consumers may assist with colour selections and other décor decisions.

Considerations may include:

- colours used in bed room, corridors and interview and consult rooms should eliminate an institutional feel and aim to provide a home like environment;
- shared communal areas, quiet rooms and seclusion rooms should aim to be uncluttered and simple rather than barren. Colours should be cool to reduce sensory overload. Lighting will be warm. (Manke, 1996); and
- shiny surfaces on wall or floor finishes should be avoided, especially where those with cognitive impairment are accommodated.

3.5.5 Privacy

A major challenge in the design of inpatient accommodation is the need to ensure consumers and staff can see each other, while also ensuring consumer privacy.

Strategies to enhance consumer privacy include:

- provision of single bed rooms with dedicated ensuites;
- ability of the consumer to control access to their bed room (with staff ability to over-ride in the event of an emergency);
- acoustic treatment;
- provision of private spaces for consumers to meet with family and friends;
- design to allow areas that can be separated for dedicated use by vulnerable consumers if necessary;
- discreet location of high dependency unit and quiet rooms; and
- reduced vision into the unit and its outdoor spaces, from public areas.

The provision of separate staff areas within the unit will enhance privacy for staff.

3.6 SPACE STANDARDS AND COMPONENTS

3.6.1 Human Engineering

Human engineering covers those aspects of design that permit effective, appropriate, safe and dignified use by all people, including those with disabilities.

Refer to AusHFG Part C Section 04 Human Engineering for further information.

3.6.2 Ergonomics

The build and design of the unit should not expose consumers, staff, visitors and maintenance personnel to risks or injury.

Refer to AusHFG Part C Section 04 Human Engineering for further information.

3.7 SAFETY AND SECURITY

3.7.1 General Principles

Perceptions of safety are equally important for consumers and staff however, it is important not to over design the security aspects of a facility, so that it becomes harsh and non-therapeutic.

The dimensions of security, as described in the UK Department of Health's Health Building Note 03-01 Adult Acute Mental Health Units (2013), include:

- relational security which is defined as 'the knowledge and understanding that staff have of a patient and of the environment; and the translation of that information into appropriate responses and care';
- procedural security which relates to the 'proper application of a set of procedures, routines and checking.' This ensures safe practices are 'embedded and applied in a consistent way'; and
- physical security which relates to the design of the unit. Where possible, security should be unobtrusive and/or part of the building fabric.

A balance of measures is needed as the 'ward culture should not be unduly risk adverse as recovery requires a careful level of risk-taking' (Royal College of Psychiatrists, 2011). Safety and security considerations should be incorporated into early planning and design so that all physical measures to reduce risk are part of an integrated solution rather than highly visible add-ons. The adoption of a risk management and harm minimisation approach is essential. This will promote operational and design solutions that reduce the institutional feel of the facility and the need for overt security features (e.g. CCTV). A safe and secure environment in mental health inpatient units is more likely to be achieved when a combination of security and additional measures are well understood and incorporated into planning so that the unit provides a therapeutic environment and is both safe and feels safe.

Consideration of safety and security risks should continue to be addressed and reviewed during the construction, commissioning and post occupancy stages.

The layout should also assist staff to carry out their duties safely to supervise consumers by allowing or restricting access to areas in a manner which is consistent with consumers' needs and abilities. Staff should be able to observe consumer movements and activities as naturally as possible, whenever necessary.

For additional information, refer to:

- AusHFG Part C Section 06 Safety and Security;
- National Standards for Mental Health Services, 2010 (Standard 2 Safety); and
- National Mental Health Working Group, 2005, National Safety Priorities in Mental Health: A National Plan for Reducing Harm.

The following information will address physical security aspects.

3.7.2 Reducing harm

During the planning and design of new mental health facilities, the project team (including clinical staff) should:

- conduct reviews of architectural plans, prototypes, specifications and products at key decision stages to identify, minimise and/or eliminate risk; and
- select and install anti-ligature products in all consumer accessible areas with special attention given to bed rooms and ensuites.

Anti-ligature design and products will not entirely eliminate risk and therefore additional operational responses are needed, including:

- staff training to ensure known environmental risks are understood;
- clinical risk assessment and management; and
- routine inspection and auditing of facilities to ensure safety systems and equipment are in good working order.

3.7.3 Physical Safety Requirements

Anti-ligature design

To reduce risks and minimise harm, all fittings and fixtures used in consumer areas of the building should be:

- of a type specifically manufactured and marketed as 'anti-ligature'; and
- installed in accordance with the manufacturer's instructions.

Anti-ligature fittings and fixtures include a range of items including but not limited to window and door hardware, hinges, hooks, plumbing and bathroom fixtures. In some circumstances, the item may rely on a load release system where the item gives way when its maximum load bearing capacity (typically 15kgs) is exceeded (e.g. curtain rail). Other anti-ligature items are fixed but designed in such a way as to prevent a ligature being attached to them.

The project team and the health service must satisfy themselves that as well as meeting the specific performance specification, load release items do not become a hazard (e.g. a heavy magnetised curtain rail with a breaking strain of 15kgs is capable of being used as a weapon).

Additional attention to detail is required in areas within a mental health inpatient unit that are not able to be constantly supervised by staff (e.g. consumer bed rooms and ensuites). The design and construction of these spaces should minimise and wherever possible, eliminate risk.

Many anti-ligature fittings and fixtures will be selected to provide a flush finish and tamper-proof installation as a specific manufactured and marketed product is not available (e.g. light fittings).

Access Control

Access control systems that are well considered and planned early in the design, will promote ease of movement around the facility and ensure the safety and security of consumers, visitors and staff. Access control systems will be a combination of electronic (proximity and swipe readers) and keys. Electronic systems will have key override in the event of a power failure.

Units should be designed with controlled entry and exit points so that movements in and out by consumers, visitors and visiting staff can be monitored. This is normally achieved by the use of an airlock. At main entry points, reception staff provide additional support by monitoring the main entry and providing an access control point into the clinical areas of the unit.

All rooms should have the ability to be locked and have provision to for staff to override the locking system where required (e.g. bed rooms and ensuites). The choice of opening system will depend on the number of staff or consumers that access the space. For example, electronic systems will routinely be used to promote free movement of staff and consumers and/or where there are large numbers of staff movements through inpatient units. Keys may be used where access is limited to a small number of people (e.g. a single person office) or access is more flexible (e.g. activity rooms, patient laundry).

When the unit is located within a multi-storey building, the lock system must ensure that there can be no unauthorised and unsupervised access to external spaces above ground level such as balconies or roof unless these are specifically designed for use by consumers.

All consumer bed rooms should have consumer-controlled access (e.g. electronic access) to promote the safety of female consumers and other vulnerable consumers.

The design of a unit should also enable smaller 'pods' of bedrooms to be accessed from a corridor/anteroom space that has consumer-controlled electronic access. This will enable the creation of dedicated zones for female consumers or other vulnerable consumers.

Staff must be able to override locks to gain access to consumer zones and bedrooms in the event of an emergency or to secure these rooms for reasons of operational security.

Ensuite doors will be provided with a privacy latch.

3.7.4 Observation and Communications

Therapeutic relationships between staff and consumers are essential. Design can positively contribute while ensuring the safety of consumers, visitors and staff is maintained.

Arrangement of Staff Spaces within a Clinical Unit

Where possible, staff areas such as staff bases or stations should not be a barrier to communication with consumers and visitors. Open desk arrangements are preferred with minimal or no use of security glazing, where this approach supported through rigorous risk assessment. This enhances staff and consumer engagement and facilitates clinical observation.

Staff will need access to an adjacent office space or clinical workroom that provides a quiet, secure and private location for phone calls, writing up clinical notes, discussions and storage of equipment such as duress, mobile duress hardwired back-up system, bed room RCD switch panel and fire mimic panel. This room will also provide a location for staff to retreat to in the event of a security incident.

General Observation

Ensure ease of observation for staff to permit continuous monitoring via:

- line of sight from staff station or bases to common areas such as communal lounge, dining, activity and outdoor areas;
- vision panels to seclusion rooms, consumer bed rooms, meeting and interview rooms;
- video intercom systems (monitored from the staff station) to ensure external key entry points are observed so that visitors to the unit can be managed out-of-hours; and
- frame infilled parabolic mirrors to observe blind spots.

Closed Circuit Television (CCTV) Surveillance

The use of CCTV in mental health inpatient units should not:

- reduce the therapeutic interaction between staff and consumers; and
- be used as an alternative to direct and active clinical observation by staff as this may have a negative impact on therapeutic rapport and infringe on a consumer's right to privacy.

The use of remotely managed CCTV in areas such as de-escalation areas including seclusion rooms is not recommended as the images do not accurately provide a status of the consumer's physical health and should not replace direct physical supervision by staff.

Staff must be present and directly monitor consumers in high risk areas such as seclusion rooms, high dependency or intensive care units. CCTV will only be used to augment but never replace monitoring (e.g. blind spots).

CCTV use should be determined by jurisdictional policy and may be useful for monitoring:

- selected internal areas such as stairways, reception lobbies, service corridors; and
- external areas such as perimeters, the main entry and other entry and egress points.

The use of CCTV in consumer bed rooms, ensuites and other private spaces is not supported.

The layout of the mental health inpatient unit should provide effective lines of sight and eliminate blind spots. CCTV should be operable under a range of lighting conditions such as artificial and natural lighting.

Public entrance CCTV cameras should be monitored centrally and be integrated into the campus-wide security system. CCTV cameras installed in patient areas will be monitored locally.

Duress Alarm System

A well designed duress alarm system will improve the safety and security of staff and consumers by allowing staff to indicate when and where additional assistance and support is needed.

A system of personal or mobile duress alarms with location finders to should operate throughout the unit and in all outdoor areas accessed by consumers. Mobile duress systems operate using Wi-Fi infrastructure. In mental health inpatient units, these will be installed in ceiling cavities.

The optimum approach is a combination of:

- mobile alarms with location finders set at regular intervals and linked to a real time monitor facility; and
- fixed alarms, particularly in areas where staff work in a relatively fixed position (e.g. receptions, staff stations, consult rooms and tribunal meeting rooms).

Staff, and in some cases visitors (e.g. official visitors), should be provided with, and trained in, the use of mobile duress alarms. An appropriate response mechanism should be in place and will be based on local operational guidelines. There should be sufficient number of mobile duress alarms to ensure all staff and relevant visitors can carry one while in the unit.

The charger and related PC for personal duress alarms should be located in a staff only area such as the clinical workroom and be accessible 24 hours per day. Location of fixed duress call points is critical to ensure that:

- staff can activate an alarm discreetly;
- they cannot be activated by consumers or children; and
- they cannot be activated accidentally (e.g. by a chair being pushed back).

3.8 FINISHES

3.8.1 Building Strategies

Building elements include walls, floors, ceilings, doors, windows and corridors.

Architects, designers, engineers and builders should recognise and understand that the fabric of a mental health inpatient unit needs to be significantly more robust than for other healthcare units. Particular attention should be given to walls, doors, ceilings and glazing, both in terms of acoustic management and the potential for damage, self-harm and potential for use as weapons. A robust finish will reduce maintenance costs over the life of the facility.

Selection of materials or fixtures should also consider ease of replacement and/or repair. Consumers and staff repeatedly comment that the quality of the construction and finishes, and the lack of timely building maintenance can have a real impact on the atmosphere of the unit.

The performance specification for each finish may vary depending on the type of environment. For example, a seclusion room, HDU or mental health intensive care unit will require a higher level of robustness compared with lower risk environments or those continuously observed by staff.

3.8.2 Ceiling Finishes

Ceilings in all consumer areas will resist damage and prevent consumer access to roof spaces. This will be achieved by:

- constructing ceiling linings from solid sheet plasterboard in all areas accessed by consumers;
- ensuring ceiling heights in all consumer accessible areas are a minimum of 2,700mm;
- the structural integrity and detailing of both ceilings and the various components routinely fixed within them such as air conditioning outlets, lights and fire detectors should be anti-ligature type, flush mounted and tamper resistant. Their installation should not create weak points that may provide access into the ceiling space;
- locating access holes to the ceiling space in staff only areas or rooms that can be locked or when in use are actively supervised by staff.

In the high dependency zone and seclusion room, ensure that ceilings are resistant to damage and/or penetration. An impact resistant plasterboard should be used. The inclusion of an additional escape proof material, attached to the plasterboard may be indicated in high risk areas such as bed rooms and ensuites where observation is difficult.

Ceiling tiles may be used in staff only areas or spaces that consumers only have access to when accompanied by a staff member (e.g. interview or consult room). A risk assessment should be undertaken.

Refer to AusHFG Part C Section 3.0 Space Standards and Dimensions for further information.

3.8.3 Floor Finishes

The selection of floor finishes can positively influence the ambience of a mental health inpatient unit and reduce unwanted noise.

Non-slip flooring is required in wet areas. Consider the use of vinyl in consumer accessible corridors, activity rooms and areas subject to heavy use. Carpet can be used in lounge areas, interview, meeting and group rooms and staff offices. Refer to jurisdictional policies to understand local approaches to floor finishes.

3.8.4 Wall Construction and Finishes

External walls to the mental health inpatient unit should restrict unauthorised access or egress. Internal walls should be vertical and detailed to make climbing difficult (e.g. no projections to be used as a foothold).

The construction of internal walls within mental health inpatient units should be robust while also minimising harm to the consumer.

Internal walls in consumer areas and particularly those in high risk areas should be able to resist significant assault. All wall linings should be washable and resistant to physical impact. Any vinyl joins must be welded.

Wall partitions should be taken up into the ceiling space to reduce the transmission of sound between rooms.

Reducing the transmission of sound between rooms is important, therefore wall partitions should be taken up into the ceiling space.

Refer to AusHFG Part C Section 3.0 Space Standards and Dimensions.

3.8.5 Corridors

All corridors, with the exception of those in staff accessible areas, should have a minimum clear width of 2000mm.

Where hand and/or bumper rails are installed in consumer accessible areas, these will be anti-ligature type, fixed in line with the manufacturer's specification and have rounded edges.

3.8.6 Doors

Careful detailing of the door, door frames and associated hardware within a mental health inpatient unit is important to ensure a safe and secure environment is provided. Doors within the bed room suite, especially the ensuite door, present a high risk and therefore attention to detailing the door hardware is essential.

Zone/ room	Features
Bed room – high dependency	<ul style="list-style-type: none"> - Doors within this unit require higher levels of performance. - Door will be single leaf, fitted with all anti-ligature hardware, including a continuous anti-ligature hinge and the ability to be outward opening to enable staff access in the event of an emergency. - Include a viewing panel.
Seclusion Room	<ul style="list-style-type: none"> - Doors within this unit require higher levels of performance as detailed below. - Door will be single leaf and outward opening to 180° and wide enough to admit a consumer with at least two escorts. Robust, solid and impact resistant construction is needed. Door frames should be sturdy enough to resist repeated targeted levels of force. There should be at least four door hinges, which should be recessed and pins protected to prevent removal. - door locks are multipoint, heavy duty, quickly secured and released, able to withstand a considerable amount of repeated and targeted force and resist breakage. - Include a viewing panel but this should be specified to resist being damaged or broken.
Bed room – acute, sub-acute	<ul style="list-style-type: none"> - Door will be a single leaf fitted with all anti-ligature hardware including a continuous anti-ligature hinge and the ability to outward opening to enable staff access in the event of an emergency. <p>Requirement for viewing panels to be determined by a thorough, well documented risk assessment by the project team.</p>
Ensuite	<ul style="list-style-type: none"> - Doors should be outwardly opening. - Doors should be able to be opened quickly in an emergency without the use of special tools. - 'Cut downs' may be provided at the top of the door, or top and bottom of the door according to local jurisdictional policies, for example, in Victoria, ensuite doors must either be eliminated or cut down at both top and bottom and fitted with anti-ligature hardware including a continuous anti-ligature hinge. Where there is no jurisdictional policy, a thorough risk assessment should be undertaken on a project by project basis to determine whether the cut down is required to ensure consumer safety.
Toilet (shared access)	Doors should not open directly onto communal areas and outward opening.

Refer to the relevant AusHFG standard components for additional information.

Other general considerations include:

- aluminium acoustic door seals should not be used on doors in consumer areas as these can be removed;
- taking care with the design of inward opening doors. If double-hinged with removable stops to enable outward opening in an emergency, the room acoustics may be compromised; and

- anti-ligature hinges needed on all doors with special attention given to those in bed rooms and ensuites.

Refer to AusHFG Part C Section 3.0 Space Standards and Dimensions for further information.

3.8.7 Shutters

The use of metal shutters to secure selected areas (e.g. server and consumer accessible beverage bays) can create a harsh commercial feel to the environment. Alternatives are preferred wherever possible.

Where shutters are used to secure selected areas Occupational Health and Safety (OHS) requirements:

- be motorised rather than manually operated;
- locks on shutters located so that staff do not have to stoop to unlock; and
- be sturdy and impact resistant.

3.8.8 Windows and Glazing

Access to natural light and a pleasant outlook contribute to the positive ambience of a mental health inpatient unit.

External windows in consumer bed rooms should allow for a consumer to see the outside from their bed.

Careful attention is needed to the design of windows, their fixings and hardware.

Toughened laminated security glazing is recommended in all areas occupied by consumers. A thorough, well-documented risk assessment should be conducted by the project team to ensure the right glazing product is chosen for each situation. For example, high risk areas may use a security glass where both the glass and laminate is thicker.

Polycarbonate should not be used as it suffers from surface scratching and deteriorates, thereby reducing vision.

In areas where damage to glass may be anticipated, large panes should be avoided as smaller panes are inherently stronger for a given thickness than larger panes.

In consumer areas, all window frames should be heavy duty (commercial frame) construction, fixed from the outside and securely fixed to the wall fabric.

Where provided, opening windows should be designed so that they will not allow egress, passing of contraband and locks will be managed by staff. The window system and hardware will be a purpose designed assemblage suitable for the context.

Fly screens, attached to openable windows should be secured so that they cannot be removed by consumers but should be removable by staff to allow window cleaning.

3.8.9 Courtyards, Terraces and Gardens

Courtyards or terraces, ideally with views, are integral components of a mental health inpatient unit and are essential to the consumers' recovery.

Allowances for outdoor spaces should be included in schedules of accommodation.

Outdoor areas will provide comfortable, all-weather access (e.g. provision of covered verandas).

Outdoor areas may be fully enclosed by buildings (courtyard) that act as perimeter security, or open-ended requiring perimeter walls or fencing. Perimeter fencing is discussed in more detail later in this document.

These areas will be carefully designed to provide views while protecting privacy.

Separate courtyards or terraces should be provided for general use, the high dependency zone and for vulnerable consumers. All outdoor areas need to be secure but a greater level of perimeter security is required for the high dependency courtyard.

Access to external spaces will be from the communal lounge, dining and activity spaces and be visible from the staff station.

Consideration should be given to access for garden and lawn maintenance to avoid or reduce the requirement for maintenance staff to pass through the unit.

The design of outdoor areas should be domestic in nature and:

- provide opportunities for activities of daily living to be undertaken in addition to recreational and leisure activities (both active and passive) with unobtrusive environmental boundaries and appropriate safety protection;
- pay careful attention to detailing of roof overhangs, guttering and drain pipes to minimise opportunities for climbing, to eliminate opportunities for self-harm as far as possible and eliminate access to points from which it is possible to jump;
- pay careful attention to reducing and/or eliminating climbing opportunities (e.g. elimination of right angles where the ground meets a wall surface and footholds and handholds); and
- include night lighting (using efficient, long life lamps) that is robust and installed so that it does not provide a ligature point.

Landscaping is essential for promoting a feeling of space and tranquility and there are many imaginative solutions available for creating a very special area for consumers, visitors and staff within the boundaries of a safe and secure environment. Plants should not be toxic if touched or ingested. When mature, they should not provide a foothold to scale the walls. Consideration needs to be given to ongoing grounds maintenance and plantings and lawns need to suit local climate and water restrictions. Ground watering systems are not recommended.

Courtyards should be designed to reduce the consumers' sense of being contained, and provide some form of sensory stimulus. Suggestions include textured ground surfaces, resilient plants, shaded areas and attractive but sturdy fixed furniture.

Barbecues are beneficial as part of the therapeutic program but should be located undercover, inbuilt with locked off switch control for piped gas, with surrounding that can be easily secured and cleaned. Portable barbecues are not recommended.

3.8.10 Perimeter Wall and Fencing

The design height of walls or fencing that form part of a secure boundary should not create a custodial environment nor increase the possibility of falling injuries should an attempt be made by a consumer to abscond.

The design should avoid handhold and foothold points to prevent scaling and incorporate barriers to prevent the exchange of contraband from public areas outside the unit. Landscape features, fixed furniture, plantings and outdoor lighting should be set back from the perimeter wall or fence to avoid purchase points. It should be noted that the design approach will vary depending on the location of the unit (i.e. on-grade or above ground).

Avoid blind spots to facilitate good observation of consumers by staff and vice versa. There are no precise guidelines recommended for fence or wall height and this may vary from 3.5m in a general inpatient acute unit to 4.5m (which generally cannot be scaled by two average height consumers by one standing on the other's shoulders) in high dependency or intensive care units.

The consumer profile and topography of the area should be taken into account when determining fence or wall height (e.g. young and fit or elderly consumers, land sloping away) and the degree of security required as determined by a thorough risk assessment.

The design solution for outdoor areas located above ground may need to consider the fall height should a consumer scale a perimeter wall.

3.9 FIXTURES, FITTINGS AND EQUIPMENT

3.9.1 Definitions

Room Data and Room Layout Sheets in the AusHFG define fixtures, fittings and equipment (FFE). There are range of mental health specific resources available. Refer to:

- Room Data Sheets (RDS) and Room Layout Sheets (RLS);
- AusHFG Part C: Section 710, Space Standards and Dimensions; and
- AusHFG Part F: Section 680 Furniture Fittings and Equipment.

3.9.2 General Principles

The potential of self-harm by consumers is a particular concern in mental health units, with hanging the most common lethal method. Hanging may involve suspending the body from a high ligature point although deaths also occur through asphyxiation or strangulation without suspension of the body, using a ligature point below head height. Due to the impossibility of observing all consumers at all times, selection of fixtures and fittings is important to eliminate or reduce risk of self-harm. Any fitting or fixture capable of supporting a consumer's weight should be avoided unless it is an item of furniture intended to bear a consumer's weight.

Fixtures and fittings selected for mental health inpatient units should be of a type specifically manufactured and marketed as anti-ligature type and installed in accordance with the manufacturer's specification, individual items should also be assessed by the project team on a project by project basis to ensure that they do not create any additional safety hazards for consumers, visitors and staff. For example, edges on joinery should be chamfered.

Fixtures and fittings should meet the required function, be safe, durable, tamper-proof and concealed where possible. Ensuring they are flush with the surfaces to which they are attached or are designed in a way that prevents attachment of anything around them (e.g. cords or belts). It is critical to ensure that if anything is or can be attached to the fitting or fixture it will break away when a weight of 15kgs is applied.

Fixtures and fittings should be kept to a minimum and be non-breakable. They should also:

- have no ligature points;
- provide no access to electrical wires;
- where needed, include shatterproof glass windows which cannot be removed or damaged by the consumer; and
- secure all ceiling-mounted fittings and fixtures.

Project teams should consult with and visit recently completed units to learn from their experiences the ongoing performance of fittings and fixtures.

Anti-ligature fixtures and fittings are a speciality item that should be considered throughout planning and design stages so that they can be ordered from speciality suppliers and avoid causing delays in construction.

3.9.3 Artwork, Signage and Mirrors

Artwork is an important feature of a mental health inpatient unit to promote a non-institutional environment and provide interest, distraction and hope. At the same time, the images selected should not exacerbate symptoms. Consumers and their carers should be included in the selection of art works, which may include selections from consumer art.

Artwork, mirrors and signage should be rigidly fixed to walls with concealed, flush, tamper-proof mountings. Artwork based on non-tearable fabric may be considered. Vinyl images may be applied to the entire wall and can often incorporate meaningful images important to consumers. Alternatively, abstract images can be chosen. The use of vinyl images needs to be carefully planned (i.e. the surface on which the image is attached should be flat, free of distractions such as hand rails, power points and light switches and lit to enhance the effect).

Vinyl signage is not recommended as letters are easy to remove.

Ensure that mirrors are made from safety glass or other appropriate impact-resistant and shatter proof construction, are scratch proof and free from distortion. Fully glue mirrors to a backing using anti-pick caulking to avoid distortion and prevent loose fragments of broken glass or other material.

3.9.4 Furniture

Furniture should promote a domestic, home-like atmosphere. Built-in furniture should be considered where appropriate.

Loose furniture should be comfortable, robust and difficult to lift. Furniture such as chairs should be selected that does not provide access to screws, staples or cavities.

Coverings for mattresses and furniture should be resistant to fire, damage and tampering.

Beds in consumer bed rooms should meet clinical requirements, maximise comfort and minimise any risk of use as a low ligature point.

Mattresses should have a high fire resistance rating and should not be inner sprung, especially in areas accommodating highly acute patients.

3.9.5 Plumbing fixtures

All fixtures and fittings used within the consumer ensuites and bathrooms should be of a type specifically manufactured and marketed as anti-ligature type and installed in accordance with the manufacturer's instructions.

Plumbing fixtures and fittings in other locations should be concealed or shrouded with tamper-proof fixtures and resistant to breakage and removal. Where possible toilet cisterns should be concealed and basins shrouded with tamper-proof fixtures and resistant to breakage and removal. This applies to consumer toilets and to all visitor toilets that may be accessible to consumers.

Recessed toilet roll dispensers are recommended.

3.9.6 Rails, Hooks and Handles

Horizontal grab rails should be avoided in toilets and showers. Anti-ligature type hand rails should be installed vertically. Anti-ligature type handrails may be installed horizontally in designated accessible toilets.

Collapsible anti-ligature type hooks should be avoided in consumer bed rooms, ensuites and toilets. Towel rails should also be avoided. Alternative arrangements for towel storage, such as a shelf integrated with the vanity, should be considered.

All hardware to cupboards, including hinges and handles, should be anti-ligature type. Consider using fittings with incorporated moulded hand pulls in order to avoid the need for handles.

3.9.7 Shower Curtains and Tracks

Shower curtains and tracks should be avoided as both present a significant risk and potential for misuse. The ensuites should be designed so that the shower cubicle is appropriately sited within the room, floors are graded appropriately and the water rate is controlled to prevent excessive splashing.

Where used, shower tracks should be of a type specifically marketed and manufactured as 'anti-ligature' type. It is critical to ensure that the entire track plus hooks has a 15kgs breaking strain to

ensure that if curtains are gathered into a single cluster the aggregate does not exceed 15kgs. For example, if curtain hooks are able to be pushed together, they should not be installed as this will have a combined breaking strain greater than the original 15kgs.

3.9.8 Window Treatments

Curtains, roller and venetian blinds with cords should not be used in consumer bed rooms. Alternative means of protecting consumer privacy should be considered (e.g. Venetian blinds integrated with a double glazed window unit with anti-ligature controls).

The facility should be designed to eliminate or reduce the need for external shading of windows. However, where external shading is required, the design should adopt the same safety principles as for fittings and fixtures to minimise potential risks.

Curtains used in consumer recreational areas should have tracks mounted flush to the ceiling with a breaking strain of 15kgs. Consideration should also be given to fabric type, (e.g. with respect to weight and thickness, to reduce the potential for tearing).

3.9.9 Storage

Built in, open shelved joinery units should be provided within consumer bed rooms to accommodate their possessions. Anti-ligature type clothing hooks should be avoided in consumer bed rooms and ensuites.

3.9.10 Other

Light fittings, smoke and thermal detectors should be of a type specifically marketed and manufactured as anti-ligature, flush mounted and installed in accordance with the manufacturer's instructions. They should be tamper-proof and incapable of supporting a consumer's weight.

Equipment located in ceiling cavities (e.g. cables should be secured above patient areas).

3.9.11 Lighting

Lighting, whether natural or artificial, has a direct influence on an occupant's perception of the space and comfort levels. Light should create a comfortable, varied, inviting and interesting atmosphere and support the intention of the architectural design and the functional requirements of the health facility.

Adjustable or dimmable lighting, rather than on and off lighting, can reduce stress. Darkness should be maximised at night to enhance sleep. While night lights are required as a fall prevention strategy, they should be positioned so as not to disturb sleep. Low-level wall lighting with light projected towards the floor should be considered in bed rooms and corridors to illuminate the floor and maintain low levels of lighting at night for patients and staff.

Light fittings, including reading lights, should be of a type specifically marketed and manufactured as anti-ligature type and installed in accordance with the manufacturer's instructions. They should be tamper-proof and incapable of supporting a consumer's weight.

Refer to AS / NZS 1680.2.5 Hospital and Medical Tasks for general guidelines on illuminance levels.

3.10 BUILDING SERVICE REQUIREMENTS

3.10.1 Electrical Services

All areas used by consumers will be body protected.

Residual current devices will be used in each consumer bed room and ensuite. The override for the RCD panel will be located in the staff station or clinical work room space.

GPO will be installed with tamper-proof screws.

Where needed, electrical supply shut-off systems should be installed in the staff station.

3.10.2 Air Handling Systems

Air grilles and diffusers located in consumer accessible areas should be an anti-ligature type. The outlets and the equipment used should be designed and built to:

- prevent the insertion of foreign objects;
- provide tamper-proof fasteners;
- ensure all convector or HVAC enclosures expressed in the room have rounded corners and closures fastened with tamper-proof screws; and
- vents should be fixed to the ceiling to prevent access to the roof cavity.

The position of air grilles in patient bed rooms should be carefully considered so that furniture, joinery units etc. do not provide consumers easy access to them.

They should be positioned to maximise consumer comfort (e.g. not located directly over the bed where cold air may be 'dumped' rather than diffused).

3.10.3 Information Technology and Communications

Systems used within the mental health inpatient unit environment may include:

- wireless technology for both staff and consumers to support devices;
- TV and entertainment systems for consumers;
- duress systems, both fixed and mobile;
- voice and data (telephone and computers);
- motion sensors used in patient bed rooms;
- electronic medical records;
- e-medication management systems;
- computer and internet access for consumers;
- teleconferencing, videoconferencing and tele-psychiatry facilities that are used for staff education, management and patient services; and
- CCTV.

3.10.4 Staff and Emergency Call System

Most consumers admitted to a mental health inpatient unit will be largely ambulant and self-caring.

Staff and emergency call systems should be considered in each consumer bed room and ensuite. Specific consumers (e.g. the aged or consumers with a disability) may require access to staff call.

Other locations for emergency call may be considered.

Any system installed should be compatible with systems used throughout the facility and capable of staff override.

Staff assistance and psychiatric emergencies would be managed by local health service protocols. Medical emergencies will need access to the hospital's cardiac arrest system.

3.10.5 Medical Gases

Medical gases are not routinely required in inpatient units. Some access may be required in selected clinical environments such as those managing older people. Portable oxygen and suction will, however, need to be available for any medical emergencies and to support patients recovering from a procedure.

3.10.6 Motion Sensors

Motion sensors inside bed room doorways or door head can be a useful adjunct to observation of consumers at night. They can be used to alert staff to consumers who may have left their bed room and who may be in distress, or who may try to gain access to another consumer's room. These systems will generally be activated as needed.

3.10.7 Fire Systems

Fire exit doors will be lockable to control consumer movement. Fire exit doors will fail secure in the event of fire. Fire hose reels and equipment should be located in recessed cupboards with lockable doors (no exposed fire hose reels or equipment). Doors and fire hose reel cabinets will only be openable by staff in the event an evacuation is needed. Locking of fire services and fire exit doors will require a Building Code of Australia dispensation under the special clause for mental health with advice from a fire systems consultant. Consultation should also be taken with local fire services regarding the local approaches to the evacuation of mental health facilities. Significant staff training will also be needed. Doors and fire hose reel cabinets will only be openable by staff in the event an evacuation is needed.

All fabrics, soft furnishings and items such as mattresses should have a low flame index. In general, fire requirements are covered by:

- ABCB, Building Code of Australia;
- Standards Australia AS 1603 (1997): Automatic Fire Detection and Alarm Systems; and
- jurisdictional policies.

AX APPENDICES

A1 ADDITIONAL SPACE REQUIREMENTS

If the proposed number of beds for a unit is to differ from the bed numbers in the generic Schedule of Accommodation, the guidelines in Table 1 below should be used to calculate space requirements for key areas. These were estimated using benchmarks from past capital planning projects, current standards and guidelines.

Provision of these spaces should be determined in accordance with local admission guidelines and processes and related models of care and should be amended as appropriate.

Table 1: Space Requirements

Area	Space requirement
Lounge/dining/activity areas - general/open	7.5m ² per person
Lounge/dining/activity areas – high dependency	10m ² per person
Outdoor areas – general/open	7.5m ² per person
Outdoor areas – high dependency	10m ² per person
Terrace – minimum area (where provided)	20m ²
Sensory modulation room	1 per unit at 14m ²
Interview rooms (inpatient use only)	Review anticipated activity
Consult rooms	Minimum 1 per unit

A2 SENSORY MODULATION ROOM REQUIREMENTS

Description and Function

Sensory modulation is the ability to regulate and organise responses to sensory input in a graded and adaptive manner. A sensory based therapeutic space is utilised to promote recovery and rehabilitation with different age groups and populations, where consumers have opportunities to manage distress and agitation using sensory modulation equipment. Equipment may include weighted, movement, tactile, vibrating, squeeze and auditory modalities.

Location and Relationships

As staff may need to supervise consumers using this room, it should be located so that this can be achieved.

Considerations

The range of equipment may include fixed items, equipment requiring services or loose items. Requirements should be detailed by users so that the fit-out will provide the expected therapeutic environment.

Refer also to NSW Health GL2015_001 Safe Use of Sensory Equipment and Sensory Rooms in NSW Mental Health Services.

A3 CHECKLISTS

For Planning Checklists refer to Parts A, B, C and D.

A4 REFERENCES

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