

5.0 Doors

5.1 Door Swing

Doors shall not swing into corridors in a manner that might obstruct traffic flow or reduce the required corridor width. This applies only to doors subject to constant patient or staff usage. Where doors need to swing out into corridor they should be set in a recess.

5.1.1 *Doors in the Path of Fire Egress*

All doors on the path of fire egress shall be single or double swing type. These shall comply with the requirements of NFPA 101 Fire and Life Safety Codes, (Note: if such doors also form part of a fire or smoke compartment, they shall maintain those properties in the closed position).

Sliding doors may be used for exit doors opening directly to the outside if an approved failsafe system is provided to open the door in case of fire.

5.1.2 *Doors Used by Patients*

Doors to rooms that are likely to be used by patients without staff assistance should be single or double-swing type.

Swing doors should generally open from corridors and distribution spaces into rooms. The exceptions are as follows:

- Doors to small patient Ensuites should generally open out
- Doors to disabled toilets and showers should open out
- Doors to small change cubicles should open out
- Doors subject to the requirements of 'Emergency Access' shall open out or open in both directions.

Clear door openings between two sections of a corridor or from one corridor to another shall be as specified by the relevant building Codes and Standards for doors in the path of fire egress. In effect, for the purpose of these Guidelines all corridors are on the path of egress.

5.2 Door Width

The minimum dimensions of clear door openings to patient bedrooms in new areas shall be 1200mm wide and 2030mm high. In patient care and critical care areas likely to be used for bariatric patients or for additional bulky equipment in the room, provide a minimum clear opening dimension of 1400mm width to allow for large bariatric sized beds exceeding 1200mm width and other equipment such as patient lifting devices. Existing doors of lesser dimensions may be considered acceptable where function is not adversely affected and replacement is impractical.

In general, clear door openings to rooms that may be accessed by stretchers, wheeled bed stretchers, wheelchairs or handicapped persons, shall be a minimum of 900mm. For situations such as hoists and shower trolleys, 1000mm is recommended.

While these Standards are intended to facilitate access by personnel and mobile equipment, consideration must be given to the size of furniture and special equipment that is to be delivered via these access ways.

5.3 Emergency Access

Certain rooms that are used by patients shall be equipped with doors and hardware that will permit emergency access from the outside. These rooms can be defined broadly as follows:

- Rooms that are used independently by patients, have only one door and are smaller than 6m²
- Rooms where there is less than 2.5m of clear space behind the single door
- Patient bedrooms, Bathrooms and Ensuites in mental health facilities, or mental health components of other health facilities
- Secure rooms in mental health facilities.

When such rooms have only one opening, the door shall be capable of opening outwards or in a manner that will negate the need to push against a patient who may have collapsed within the room. In other words, if the door normally opens inwards, in case of emergency the staff must be able to open the door outwards without any need to use a key, Allen key or special device.

These Guidelines recommend the use of retractable door-stops within flat metal door frames together with coin operated door snibs. The snib can be opened with a coin while the door can be opened outward by simply pushing the door-stop into the frame.

Important note: This requirement cannot be satisfied by any of the following alternatives:

- Cavity sliding doors
- Sliding doors on the inside of the room.

In all areas except Mental Health Secure Rooms, surface sliding doors installed on the outside of the room may satisfy the requirements of this clause. This can be achieved if:

- The door can be easily and safely removed off the track
- Door removal is not prevented by the door locking mechanism.

Notwithstanding the above possibility, manual sliding doors are not recommended by these Guidelines for any area of Hospitals or Day Procedure Centers.

In Mental Health Secure Rooms, the following configuration is mandatory:

- One standard door, opening in
- One adjacent door minimum 450mm wide, opening out
- Both doors with external locks and fully recessed internal handles.

5.4 Door Handles

5.4.1 *General*

The following considerations shall be given to the particular hardware requirements and special fittings needed for certain areas.

5.4.2 *Door Handles Generally*

In areas where staff frequently pass doors, serious consideration should be given to the shape of the door handle so that it is not caught by the pockets in overalls. Handles with a full return are recommended.

5.4.3 *Mental Health*

Door handles in a Mental Health Unit shall prevent self-harm by not providing a supporting point. This can usually be achieved by using recessed, concealed or flush hardware. Alternatively, specially formed knobs are available which do not allow 'hanging'.

5.4.4 *Shared Ensuites*

Ensuites that are shared by two patients shall incorporate hardware to automatically lock one door and indicate 'Room Occupied' if the other door is operated. Both doors shall be unlocked once one of the doors is opened from inside.

5.4.5 *Pediatric Rooms*

In Pediatric Rooms, consideration should be given to providing two sets of door handles one at high level and one at low level.

Door handles may incorporate locks, snibs, push buttons and indicators. Designers and specifiers should be advised to consider flexible hardware systems where the functionality of the door may be changed without necessarily changing the hardware.

The type of locking function shall be appropriate for the use of the room. In any event, the locking device shall prevent a person being inadvertently locked in a room, and shall be openable from inside with a single action.

5.4.6 *Push/Pull Plates*

In many instances, a door lock or latch is not necessary. Rooms that do not require locking may work well with only push/pull plates and a self-closer. Push/pull plates are recommended in rooms that are used frequently by staff holding objects in their hands. Dirty Utility Rooms are a good example.

5.5 Door Grilles and Undercuts

The Heating, Ventilation and Air-Conditioning (HVAC) design may require door grilles or undercuts. These are usually required for return air, makeup air or pressure relief.

Door grilles or undercuts may be used in areas that do not compromise the requirements of the building Codes and Standards and other requirements of these Guidelines. These may include:

- Areas with a particular air-pressurization scheme
- Isolation Rooms
- Room requiring acoustic isolation
- Rooms requiring radiation shielding.

The following non-mandatory recommendations also apply to grilles and undercuts:

- Door grilles are not recommended for areas used by people in wheelchairs due to potential impact and damage
- Door grilles are not recommended for bathrooms or Ensuites
- Large undercuts close to bathroom showers are not recommended as they can result in water leaking outside to adjoining rooms
- As an alternative to a door undercut, designers may consider an inward sloping door slot approximately 200mm above the floor to reduce water egress whilst providing the same functionality as a door undercut.

5.6 Hold-Open Device

Door hold-open devices should also be considered for doors that should remain open, such as doors on main traffic routes and delivery doors. The following requirements shall apply:

- Hold-open devices shall be capable of activation and de-activation without any need for the staff to bend down
- Hold-open devices shall not be fitted to doors where this compromises fire doors, smoke doors or other doors that are required to achieve a specific air pressurization or isolation scheme by these Guidelines
- Hold-open devices shall not be fitted to the side of a door that may permit a disturbed patient to lock the door from inside.

In areas frequently used by staff holding objects or pushing trolleys, the use of delayed action, combined self-closer/hold-open device is recommended.

5.7 Self-Closers

5.7.1 General

Self-closers are required for fire and smoke doors nominated in the Building Codes and Standards and shall comply with its requirements. This section covers other door types including:

- Doors required to achieve a certain airflow or air pressurization scheme required by these Guidelines
- All air locks, with or without an air pressurization scheme
- Entrance doors to any area nominated as a restricted area by these Guidelines including:
 - Operating Unit
 - Sterile Supply Unit
 - Catering Unit
 - Sterile Stock Rooms
- Isolation Rooms
- Birthing Rooms
- Dirty Utility Rooms.

Apart from the above doors, self-closers are not required or encouraged. Indeed an over-provision of self-closers can lead to unnecessary capital and maintenance costs.

Self-closers to the following rooms are discouraged:

- Offices
- Patient Rooms
- Bathrooms and Ensuites
- Rooms used independently by people with disabilities
- Meeting Rooms and Interview Rooms.

5.7.2 Hardware

Self-closers shall be designed and installed to allow for the door opening a full 90 degrees. The nib space required for the self-closer arm should be considered.

Self-closers used in double doors shall be accompanied by suitable sequencer hardware to allow the doors to be closed in the right sequence. Self-closers that duplicate the functionality of a hold-open device may also be considered.

5.8 Observation Glass

Glazed panels shall be provided in doors where visual observation for reasons of safety, security or patient observation is required. However, in fire doors the size must comply with the Protection of Openings in Fire Resistant Walls in the relevant building Codes and Standards.

Observation glass is recommended in the following areas:

- Entry/exit doors to Operating Rooms or Procedure Rooms
- Doors from Scrub Rooms to Operating Rooms
- Doors to air-locks
- Doors to Clean and Dirty Utility
- Work Rooms frequently used by staff
- Doors to rooms used to interview mental health or disturbed patients
- Doors to rooms requiring an observation window but with no physical possibility of providing a window
- Doors to Kitchens and Pantries.

Observation glass is not recommended in the following areas:

- Doors to patient bedrooms generally
- Doors to rooms requiring acoustic isolation
- Doors to Mental Health Secure Rooms
- Doors to rooms resulting in an invasion of patient or staff privacy.

Observation glass shall have a mechanism, device or material to protect the glass in the following areas:

- Operating Rooms and Procedure Rooms where laser may be in use
- Rooms requiring X-Ray or other radiation shielding
- Rooms requiring electromagnetic shielding (such as a Faraday Cage).

Observation glass may be semi-frosted in areas where a clear vision of the room is not required. This type of glass or applied film may suit rooms where the primary concern is to avoid danger to staff passing through the door. Semi-frosted glass is usually adequate to enable staff to avoid the danger. Semi-frosted glass is recommended in doors to the following rooms:

- Clean Utility
- Dirty Utility.

5.9 Automatic Doors

Beam activated automatic sliding or swing doors are considered highly desirable in high traffic areas such as Main Entrances and delivery points.

They may also be used successfully in areas where 'hands-off' access is necessary, such as entries to an Operating Unit. Where installed, they are to satisfy the requirements of emergency egress and to close at a rate that provides sufficient time for disabled and frail patients and visitors to enter/exit.

Automatic doors are not mandatory.

5.10 Sliding Doors

Sliding doors may be used subject to compliance with the building Codes and Guidelines and the following mandatory requirements.

Cavity sliders may not be used in the following areas:

- Planning units containing Patient Care Areas or Treatment Areas
- Planning units containing sterile equipment
- Planning units containing patient diagnostic equipment
- Catering Facilities
- Laboratory Areas
- Mental Health facilities.

Surface sliding doors may be used subject to the requirements of 'Emergency Access'.

Note 1: Generally, these Guidelines do not recommend the use of sliding doors in health facilities due to a number of reasons including hygiene concerns, maintenance problems and potential for locking in place.

Note 2: Sliding doors, if used should be of solid core or metal frame type to resist warping and therefore locking. Sliding doors should have tracks on top and bottom to ensure safety of operation.