2. Space, Standards & Dimensions

2.1 Corridors

There are many schools of thought on minimum corridor widths and the underlying principles that should dictate them. This section includes the recommended minimum requirements with consideration given to the need to allow for the movement of mobile equipment such as trolleys, beds, wheelchairs, motorised carts etc. including the allowance for equipment to pass in opposite directions.

A key principle in establishing the minimum corridor width is the requirement to allow a width that will not restrict egress in the event of an emergency evacuation procedure.

In particular designers should note the following:

- Other Building Codes, such as UAE Fire and Life Safety and Dubai Universal Design Code, may also specify minimum corridor widths for Patient Care Areas with a focus on fire safety or access for people with determination. The requirements of these Guidelines for certain areas may be higher than codes such as Fire Safety or Accessibility as these Guidelines are concerned with a broader range of issues
- Hospitals may be planned with clearly designated staff-only and patient corridors; the requirements for patient corridors will not apply to staff only accessed corridors.
- All corridor widths identified are clear of hand rails and/ or crash rails or other items such as drinking fountains, hand basins, telephone booths, columns, vending machines and portable/ mobile equipment. Equipment bays and obstructions located in corridors must not impede the traffic flow. An allowance of 100mm is recommended for handrails.
- Consideration should be given to the elimination of potentially dangerous 'blind spots'.

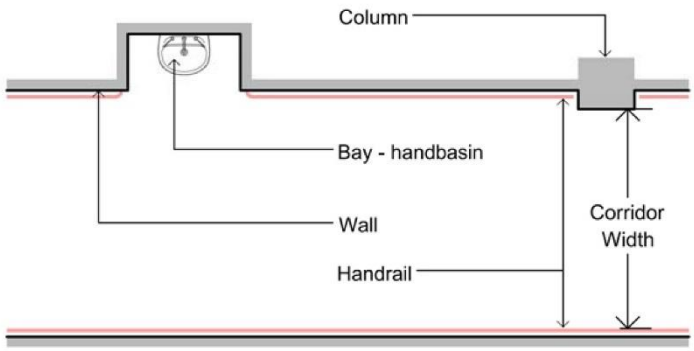
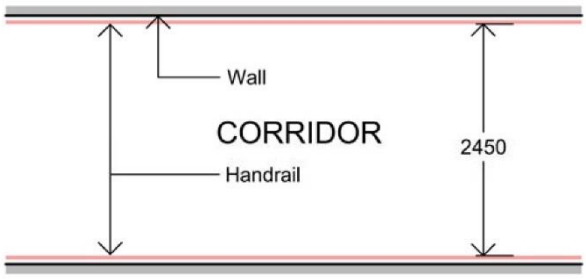


Figure 2.1: Corridor Plan – width clear of handrails and obstructions

2.1.1 Patient Corridors

In patient areas such as Inpatient Units, Operating Units and Intensive Care Units, where beds, trolleys and stretchers will be moved regularly, minimum clear corridor widths of 2450mm are recommended.

Refer to Figures 1.2 and 1.3 below.



Above: Figure 2.2: Corridor plan showing minimum clearance

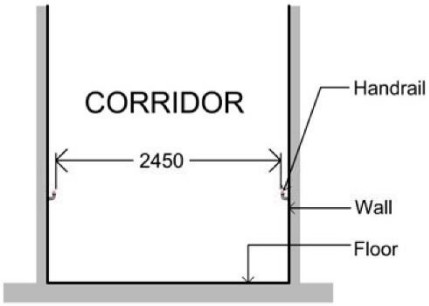


Figure 2.3: Corridor section

In Outpatients Unit, whether stand-alone or part of a Hospital, the minimum corridor width is 1850mm clear.

In all corridors special consideration must be given to the width of doorways into connecting rooms. Corridors may need to be widened at the entry to rooms to allow for beds/ trolleys to turn into the room.

Where an existing building is being redesigned, corridor widths that are smaller than the recommend dimensions may be permitted. However special consideration should be given to emergency egress and evacuation.

Note: Whatever building conditions prevail, any corridors which may be used by a patient for any purpose should not be less than 1850mm wide.

Corridors where irregular bed or trolley traffic is anticipated, such as Radiology, can be reduced to 2000mm clear width. In this case however special consideration must be given to door widths or local corridor widening to ensure the movement of beds or trolleys from corridor to connecting rooms is not restricted.

Corridor widths to permit turning are demonstrated in the diagrams below.

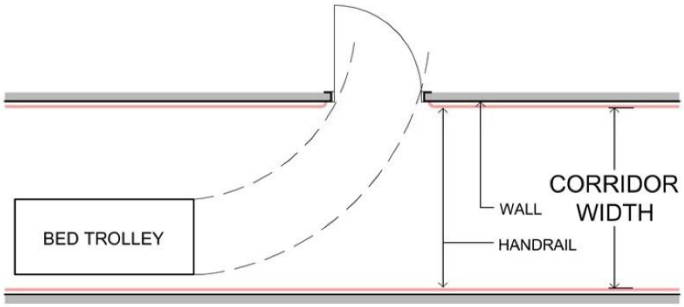


Figure 2.4: Corridor width permits turning into a room

In the figure shown above, corridor width is sufficient for a bed trolley can be manoeuvred to enter a room for which the entry door is located on corridor wall.

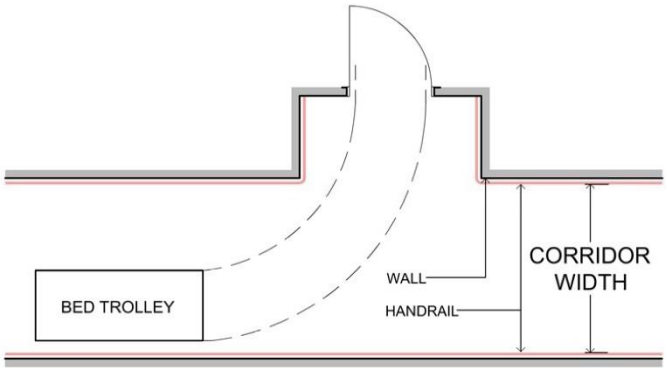


Figure 2.5: Corridor with recessed door entry to allow for turning

In the figure shown above, where the corridor width is not sufficient to allow a bed trolley to turn into a room, a recessed entry door is provided.

Alternatively, in the figure shown above, where the corridor width is not sufficient to allow a bed trolley to turn into a room, a double door may be provided.

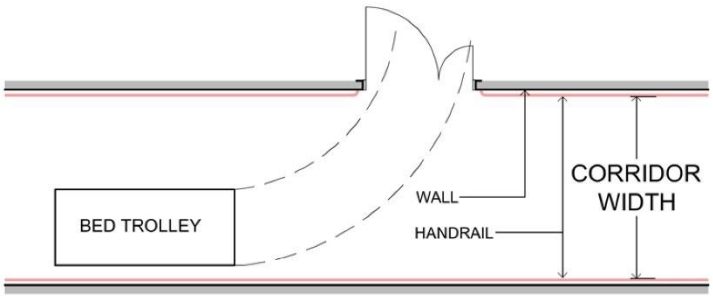


Figure 2.6: Corridor with double door room entry to permit turning

2.1.2 Staff Only Corridors

Staff only corridors with no patient traffic and where the corridor length is not greater than 12 metres, such as a corridor to a group of staff offices, may have a clear width of 1500mm. Consideration must also be given to accessibility requirements which may include localised corridor widening or provision of double doors to allow disabled staff to pass or to access doors.

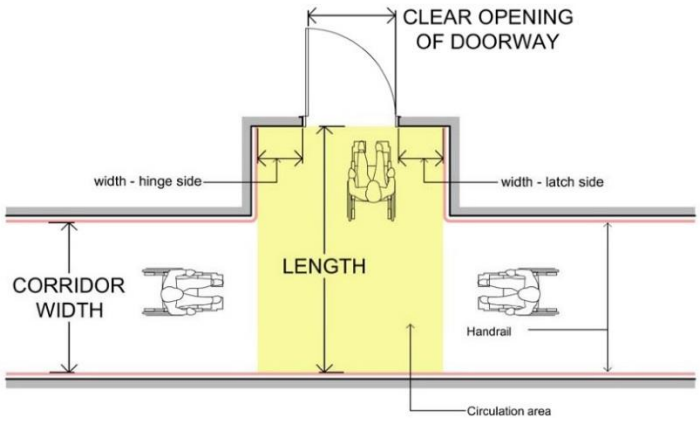


Figure 2.7: Corridor modified for people with determination access

In the figure shown above, the corridor has been modified to enable a person in a wheelchair the required circulation space to access and operate the door. The requirements of width - latch side, width - hinge side, clear opening of a doorway, the length, the direction of door swing and the direction of which a person approaches the doorway are inter-related and vary according to Dubai Universal Design Code.

2.1.3 Travel & Public Corridors

Travel corridors are inter-connecting departmental corridors that may be used by staff, patients and visitors.

The width of major inter-department arterial corridors and public corridors generally should be as wide as is deemed necessary for the proposed traffic flow, but should not be less than 2450mm.

2.2 Ceiling Heights

A ceiling height of 2700mm is recommended in work areas such as Patient treatment areas, Offices, Conference Rooms, Administrative areas and Kitchens.

The minimum acceptable ceiling height in occupied areas is recommended to be 2400mm, but consideration should be given to the size (sensory consideration) and use of the room.

Ceilings in patient bed areas including Bed Rooms, Bed Bays and Recovery areas should be a minimum of 2700mm. Bed Rooms for bariatric care may require an increase in ceiling height to accommodate lifting equipment. In critical care bed areas such as ICU, CCU, HDU and Resuscitation Rooms a ceiling height of 3000mm is recommended to provide sufficient height for ceiling mounted equipment and service pendants.

Seclusion rooms must be designed and constructed to avoid features that a patient could use for injury or self-harm. The recommended ceiling height is 3000mm with a minimum height of 2750mm.

The recommended ceiling height in new areas such as corridors, passages and recesses is 2700mm with a minimum of 2400mm. In existing facilities being renovated, ceiling heights in Corridors or Ensuites may

be reduced to 2250mm, but only over limited areas such as where a mechanical duct passes over a corridor. Wherever possible, reduced ceiling heights adjacent to doors should be avoided.

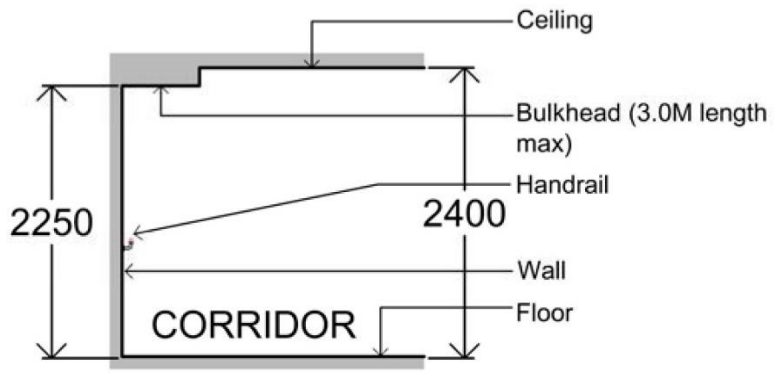


Figure 2:8: Corridor section showing minimum ceiling heights

In corridor bays or areas with restricted access such as a hand basins or a drinking fountain recess, a minimum ceiling height of 2250mm is acceptable.

Figure 2.9: Reduced height ceiling within a corridor bay

Rooms with ceiling mounted equipment, such as X-ray Rooms and Operating Rooms may require increased ceiling heights. Ceiling heights should achieve the minimum recommended height and comply with equipment manufacturers' installation requirements.

A minimum ceiling height of 3000mm is required in Operating rooms, Interventional Imaging rooms and Birthing rooms.

Ceiling mounted equipment must be able to achieve the required clearance height of 2150mm when in the stowed position, especially within circulation areas. Refer to Figure 1.10 below.

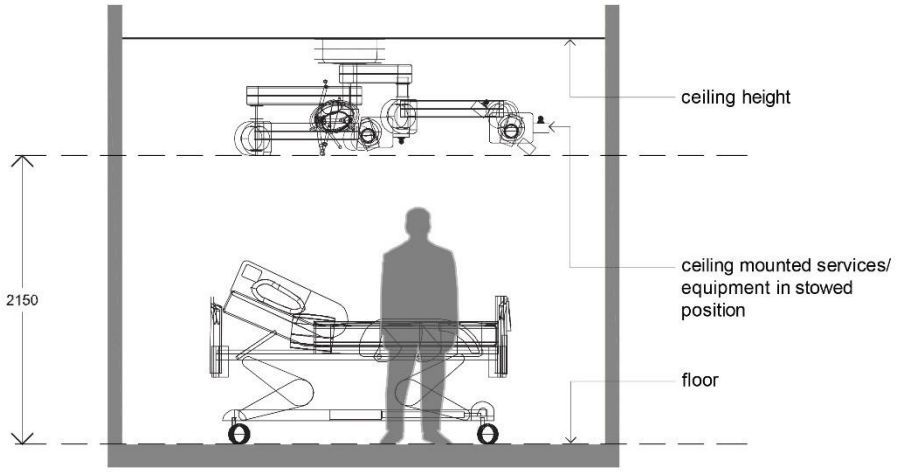


Figure 2.10: Ceiling mounted services stowed

Minimum ceiling (soffit) heights of external areas such as canopies over main entries, ambulance entries and loading docks should suit the requirements of the anticipated vehicle traffic. Special consideration should be given to emergency vehicles with aerials fitted. The recommended minimum ceiling (soffit) height is 3200mm.

Plant Room ceiling heights should suit the equipment installed and allow safe access for service and maintenance. The minimum recommended ceiling height is 2400mm in all trafficable areas.

Variations from recommended ceiling heights should be approved by the relevant health authority in writing.

2.3 Department Sizes

Department sizes will depend upon the perceived role of the facility as determined in the Service Plan and Operational Policies. Department sizes are also affected by the ability to share or combine functions as long as the planning provides for appropriate safety standards and optimal patient care.

For further discussion on departmental areas including Functional Areas, Gross Departmental Areas, Travel, Engineering and how to measure floor areas refer to Part B Health Facility Briefing and Design, in particular the section on Planning in these Guidelines.

Departmental sizes also are contingent on design efficiency. Refer to Efficiency Guidelines and Schedule of Circulation Percentages below.

2.4 Efficiency Guidelines

2.4.1 Schedule of Circulation Percentages

Recommended Circulation Percentages for typical Functional Planning Units (FPUs) are as follows:

Department or Functional Planning Unit (FPU)	Minimum Circulation %
Administration Unit	20-25
Admissions Unit & Discharge	20
Catering Unit	25
Clinical Information Unit	15
Coronary Care Unit	35
Day Surgery/ Procedure Unit	40
Dental Unit	32
Education Unit	30
Emergency Unit	40
Engineering & Maintenance Unit	15
Health Centre	32
Housekeeping Unit	10
Inpatient Accommodation Units	35
Intensive Care Units	40
Laboratory Unit	25
Linen Handling Unit	10
Maternity Unit	35
Medical Imaging Units	35-40
Mental Health Units	35
Mortuary Unit	20
Nuclear Medicine & PET Unit	35
Operating Unit	40-45
Outpatient Units	32
Pharmacy Unit	25
Public & Staff Amenities Unit	10
Radiation Oncology Unit	40
Rehabilitation - Allied Health Unit	25
Renal Dialysis Unit	35

Sterile Supply Unit	25
Supply Unit	20
Waste Management Unit	20

Table 1: Recommended Circulation Percentages