

1.4 Efficiency Guidelines

1.4.1 General

The concept of efficiency refers to the ratio between Net Functional Areas and Circulation Space. Simplistic Guidelines on efficiency tend to be misleading and should not be applied to vastly different functional briefs.

It is more appropriate to allocate different circulation percentages for generically different planning units. Such a guide has been provided under the Schedule of Circulation Percentages in this section. Inadequate circulation allowance in briefing documents is not recommended as it can result in undue pressure on designers to reduce sizes and therefore functionality. It must also be noted that the circulation percentages are a guide only. They apply to the Functional Planning Units (FPUs) included in these Guidelines under Generic Schedule of Finishes. For larger planning units, a different percentage may be appropriate.

1.4.2 Net Functional Areas

In briefing documents, Net Functional Areas represent the sum of individual room areas without any corridors.

Refer to Part B – Planning: Area Measurement Methodology for a description of how to measure areas off the plans.

1.4.3 Gross Departmental Areas

Gross Departmental Areas are calculated by adding the Net Functional Areas and departmental corridors. These are corridors that are entirely within one department (or FPU). In calculating the departmental corridors, the following should be taken into account:

- Service cupboards and passing risers are excluded
- Corridor wall thicknesses are excluded as these are included in room areas
- Columns are included
- Fire stairs are excluded
- Lifts and lift shafts are excluded.

1.4.4 Travel

'Travel' represents arterial corridors that connect the FPUs. Travel is required to allow passage from one unit to another without going through the internal corridors of another FPU. A target of 15% is appropriate for Travel in a hospital of one to two stories. Travel can be considerably reduced in high-rise buildings since in many instances corridors are replaced by vertical transportation.

In calculating travel, the following should be considered:

- Wall thicknesses are excluded as these are part of the Gross Departmental Areas
- Fire stairs are included once for each floor-to-floor connection
- External wall thicknesses are excluded
- Lift shafts are excluded
- Service cupboards are excluded
- Service shafts and risers are excluded.



1.4.5 Engineering

Engineering refers to the area of Plant Rooms and other service areas. In calculating the Engineering allowance, the following areas should be included:

- Service cupboards
- Lift Motor Rooms
- Service shafts and risers.

Lift shafts should be excluded. The target of 15% applied to Gross Departmental Areas may be used for a typical one to two-story hospital building.



1.5 Schedule of Circulation Percentages

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

No	Department or	Minimum
1	Functional Planning Unit (FPU) ACUTE MENTAL HEALTH UNITS	Circulation 32
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2	ADMINISTRATION UNIT	20
3	ALLIED HEALTH UNIT	25
4	BIOMEDICAL ENGINEERING	20
5	CATERING UNIT	25
6	CLEANING/HOUSEKEEPING UNIT	10
7	CLINICAL INFORMATION UNIT	15
8	CORONARY CARE UNIT	35
9	DAY SURGERY/PROCEDURE UNIT	35
10	DENTAL UNIT	20
11	EDUCATION AND TRAINING UNIT	15
12	EMERGENCY UNIT	40
13	ENGINEERING AND MAINTENANCE UNIT	15
14	INPATIENT ACCOMMODATION UNIT	32
15	INTENSIVE CARE UNITS	40
16	LAUNDRY/LINEN HANDLING UNIT	10
17	MEDICAL IMAGING UNITS	35
18	MORTUARY UNIT	15
19	NUCLEAR MEDICINE UNIT	30
20	OBSTETRIC UNIT	35
21	OPERATING UNIT	40
22	PEDIATRIC/ADOLESCENT UNIT	32
23	PATHOLOGY UNIT	25
24	PHARMACY UNIT	25
25	PUBLIC AMENITIES UNIT	10
26	RADIATION ONCOLOGY UNIT	30
27	REHABILITATION UNIT	32
28	RENAL DIALYSIS UNIT	32
29	STAFF AMENITIES UNIT	10
30	STERILE SUPPLY UNIT	20
31	SUPPLY UNIT	10
32	WASTE MANAGEMENT UNIT	20