



DOH Health Facility Guidelines 2019

## Part B – Health Facility Briefing & Design 50 Catering Unit



## Executive Summary

This Functional Planning Unit (FPU) covers the requirements of a Catering Unit. The Catering Unit provides food service for inpatients, outpatients, ambulatory patients and staff as appropriate and according to the Service Plan of the facility. The food service may also include catering for meetings and functions, such as board meetings, seminars, conferences and special occasions. Provision of food services may include cafeterias, kiosks, or vending machine dispensing areas, particularly for after-hours access.

A Catering Unit will be subdivided into various functional zones. These will include receiving areas, cleaning/ washing areas, food preparation and distribution areas, storage areas, dining areas as well as staff support areas. The size of the Unit will depend on the Operational Policy of the health facility and the number of meals required per day.

External and internal functional relationships must be considered when planning the Unit. For both on-site or off-site options, the Unit should be in proximity to the loading dock where preferably dirty and clean goods are separated. Deliveries to the Catering Unit should be directly from the 'clean' dock. Within the Unit, the flow of food processing from receipt to Stores, Preparation, Cooking, Plating and Delivery is in one direction. Clean and dirty workflows must be considered in the design of the Unit to ensure strict separation and to avoid contamination.

The Schedules of Accommodation are provided using references to Standard Components (typical room templates) and quantities for a typical layout from RDL 3 and above.

Further reading material is suggested at the end of this FPU but none are mandatory.

Users who wish to propose minor deviations from these guidelines should use the **Non-Compliance Report (Appendix 4 in Part A)** to briefly describe and record their reasoning based on models of care and unique circumstances. The details of this FPU follow overleaf.

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# 1. Catering Unit

## 1.1 Introduction

The Food Services Unit provides food service for inpatients, outpatients, ambulatory patients and staff as appropriate and according to the Service Plan of the facility. The food service may also include food services for meetings and functions, such as board meetings, seminars, conferences and special occasions.

Food Services Units, in healthcare facilities, deliver food to a highly susceptible population who are more likely than other populations to experience foodborne disease as they may be immunocompromised, frail, medically ill or very young. As a result, providing nutrition is challenging due to the diverse dietary needs of the population. Food must be familiar, tasty and appealing to patients from all age groups, religious, cultural and social backgrounds and those nutritionally vulnerable due to illness.

Organisational structures, policies, procedures and practices must treat ethnic minorities fairly and equally. Special diets must meet cultural or religious needs, while personal diets are those meeting personal preferences. Assessment of the patients' dietary needs should also consider preferences for timings of meals and provision for snack or composite dish style meals instead of full meals for those with reduced appetite.

Provision of food services may include cafeterias, kiosks, or vending machine dispensing areas, particularly for after-hours access.

The Food Service Model will determine the space and equipment requirement for the preparation and service of various food items including:

- The proposed receiving and delivery areas
- Storage areas
- Preparation and handling areas
- Cooking, reheating and thawing areas
- Serving and delivery of meals.

Food service facilities and equipment must comply with these Guidelines and relevant Food Standards Codes.

## 1.2 Functional & Planning Considerations

The Food Services Unit will generally operate on a long day basis, providing daily service for inpatients, covering all meals during the day with preparation and storage of meals for night staff.

### 1.2.1 Operational Models

The Food Services Unit may be located on-site within the health facility or off-site, remote from the health facility.

## 1.3 Unit Planning Models

### On-site Preparation

The Food Services Unit may be designed to accommodate a Cook-Chill or a Cook-Serve food preparation system.

Cook-Chill refers to the process where food (fresh or frozen) is prepared, cooked and then chilled for up to five days. Food may be chilled in bulk or cold plated and then chilled. Plated, chilled food may then be re-thermalised and served. Alternatively, bulk chilled food may be reconstituted and then plated and served.

Variations on Cook-Chill preparation include:

- Extended Shelf Life Cook-Chill, where food is processed according to the Cook-Chill method and stored chilled at a controlled temperature for up to 28 days
- Cook-Freeze, where food is prepared, portioned or left in bulk form and frozen for up to 12 months; following thawing, food is processed the same way as conventional Cook-Chill.

Cook-Serve refers to the process where food, fresh or frozen is prepared, cooked, plated and served immediately. Variations of the Cook-Serve process include:

- Hot plating, delivery and serving
- Delivery of hot bulk food, then plating and serving.

Food preparation systems require space and equipment for receipt, storage, preparing, cooking and baking. Convenience food service systems such as frozen prepared meals, bulk packaged entrees, individual packaged portions, or systems using contractual commissioned services, require space and equipment for refrigeration, holding, thawing, portioning, cooking and/or baking.

### **Off-site Preparation**

If food is prepared off site or in a remote location on the hospital campus, then the following will apply:

- Briefed requirements under this section (Catering Unit) may be reduced as appropriate
- Provide protection for food delivered to ensure it maintains freshness, retains temperature and avoids contamination.
- If delivery is from outside sources, provide protection against the weather. Provisions must be made for thorough cleaning and sanitising of equipment to avoid mixing soiled and clean items. If food is brought in from a remote part of the hospital site, all connections must be under cover and reasonably weather protected.

### **1.3.1 Functional Zones**

The Food Services Unit may include the following Functional Areas dependent on the planning model adopted:

- Entry:
  - Receipt area for supplies with access to the Clean Loading Dock
  - Airlock Entry
- Cleaning/ Washing Areas:
  - Trolley return/ stripping for returned food delivery trolleys
  - Trolley/ cart washing area
  - Dishwashing
  - Pot washing
- Food preparation and Distribution areas:
  - Separate preparation areas for food types including meat, dairy, vegetables, pastry, special diets, special requirements such as halal foods. Note that separate preparation tools should be used for different food types
  - Cooking facilities
  - Equipment for cook-chill processing

- Reheating facilities and/ or re-thermalisation facilities if cook-chill food is processed
- Plating areas
- Cart holding area including provision for re-thermalisation of pre-plated chilled food for cook-chill service, or hot/ cold trolleys for fresh-cook service
- Trolley parking for food distribution trolleys
- Storage Areas
  - Refrigerator/s, cool rooms and freezers of adequate size to store perishable foodstuffs
  - Storage areas for dry goods
  - Fruit/ Vegetable storage
  - Storage for tableware, linen, crockery and utensils
  - Storage for equipment used in functions – tables and chairs
  - Chemicals used in cleaning, dish and pot washing equipment
- Dining Areas
  - Servery
  - Staff Dining room
  - Vending Machine area (optional)
- Staff and Support Areas including:
  - Cleaner's room
  - Disposal of waste
  - Offices and workstations for Manager, Dieticians
  - Staff Change with Toilets, showers and lockers
  - Staff Toilets in addition to Change areas depending on location of facilities.

#### **Entry Area**

##### **Supplies Receipt**

An area shall be provided for the receiving and control of incoming food supplies with access to a Clean Loading Dock. This area shall be separated from the general loading dock areas used for access to waste areas and body holding rooms. Supplies are received by Food services staff and storage organised immediately particularly for chilled or frozen foods.

##### **Air-lock Entry**

An Air-Lock Entry is required and to prevent external air, insects or contaminants such as dust entering the Food Services Unit and to control access to the Unit.

##### **Cleaning/ Washing Areas**

The designation of dirty and clean areas should be strictly kept separate within this Unit.

##### **Trolley Return/ Stripping**

The Trolley Return area will hold used meal delivery trolleys, returned from Inpatient Units or Operating Unit. Trolleys will then be taken into the Trolley Stripping area where they will be dismantled, dishes, trays and waste removed, and the trolley cleaned in the Trolley/ Cart Washing area.

##### **Trolley/ Cart Wash**

An area shall be provided for washing/ disinfecting and drying of trolleys and carts, with ready access to the trolley return and parking areas. There must be a clear flow from dirty to clean to prevent cross flow of dirty with clean items.

Automated trolley/ cart washing equipment may be fitted; if provided install according to manufacturer's specifications.

### **Dishwashing**

The Food Services Unit will require separate stainless-steel sinks and drainers or equipment for washing of dishes, utensils and cutlery. Commercial type washing equipment is recommended.

The area shall also provide space for receiving, scraping, rinsing, sorting and stacking of soiled tableware.

Dedicated crockery, utensil and cutlery washing (ware washing) facilities shall be located as far as practical from the food preparation and serving area. It is recommended that where possible, a ware washing space be located in a separate room or alcove.

Ware washing facilities shall be designed to prevent contamination of clean wares with soiled wares through cross-traffic. The clean wares shall be transferred for storage or use in plating, serving or dining areas without having to pass through food preparation areas.

### **Pot Washing**

The Food Services Unit shall provide separate stainless-steel sinks and drainers or automated equipment for washing of pots. If automated Pot scrubbing facilities are installed then sinks shall also be provided for emergency manual pot washing in the event of equipment failure.

## **Food Preparation and Distribution Area**

### **Preparation Areas**

Food Preparation areas do not necessarily involve cooking on site. Food may be prepared off site, then reheated and served on site.

Food preparation areas are provided as discrete areas for separation of food types. Vegetarian, religious and cultural practices demand the preparation and serving of food with strict storage, preparation and serving requirements. Vegetarian and vegan food may need to be prepared, cooked and stored separately. Foods for particular health issues may include diabetes, food sensitivities or allergies such as lactose and glucose intolerance or nut, shellfish or egg protein allergies.

### **Cooking & Re-thermalising areas**

Cooking and re-thermalising equipment will be selected to suit the menu and may use convection or conduction heating. Cooking equipment must be commercial quality and will require installation according to manufacturer's specifications particularly with attention to services required which may include power, gas, water or steam. Equipment should include temperature control and monitoring devices and safety features such as electricity cut-off switches in the event of emergencies.

### **Blast Chillers**

Blast Chillers are required for the Cook-Chill process and are used for rapid chilling of cooked food in order to store food until ready for plating. In Cook-Chill food production, the Blast Chillers will be located with ready access to the cooking and food preparation areas.

### **Plating /Tray Preparation**

Cooked food may be plated:

- Cold (as in cook-chill food service) and then chilled for future reconstitution and delivery
- Hot (as in cook-serve or fresh cook food service) followed by hot transport and immediate delivery.

The plating area equipment will be dependent on the number of meals to be plated and delivered to ensure meals are delivered at the correct time and a suitable temperature.

The Plating area may include automated plating conveyor systems supported by food serving trolleys, table ware and utensil trolleys. The process of plating includes tray setting and plating of food using a multiple station process line for efficiency, each station adding an item to the food tray to end with a completed meal.

Commonly, the room temperature in the plating area is maintained at a lower temperature than the cooking area to ensure prepared food are served in their optimal state.

#### **Food Distribution**

A trolley/ cart distribution system shall be provided with spaces for storage, loading, distribution, receiving, and sanitising of the food service carts.

The meal trolley/ cart delivery traffic and the cleaning, sanitising process shall be designed to eliminate any danger of cross-circulation between outgoing food carts and incoming, soiled carts. Trolley/ cart traffic shall not be through food processing areas.

The distribution service must ensure food is delivered to the patient hot or cold as required. Cook-Chill food systems require insulated carts for food re-thermalisation; the carts will have separate heating and chilled food compartments. Patient meals may be re-thermalised in the Food Services Unit or in the Inpatient Unit Pantries, depending on operational policy.

Cook-Serve or Fresh Cook meals will require an enclosed tray trolley delivery system with insulated plate covers to keep hot food hot during delivery. Consideration should be given to parking of trolleys in Inpatient Units when not in use, awaiting collection of used meal trays.

#### **Storage Areas**

##### **Refrigeration, Cool rooms, Freezers**

For optimal operation, cool rooms and freezers should be commercial quality and temperature monitored, with an alarm system. Alternatively, refrigerators may be installed in smaller facilities. Sufficient quantities of refrigerators/ freezers and cool rooms will be required for separation of stored food types. Temperature and humidity should also be monitored in dry stores.

Storage Areas will be required for:

- Perishable food such as fruit and vegetables, in a temperature and humidity-controlled environment
- Dry goods such as spices, dry ingredients and cooking condiments, stored in a moisture-controlled environment
- Utensils, crockery, cutlery, glassware and table linen, stored as close to the point of use as possible
- Equipment items such as stored tables, chairs for special dining functions as required
- Cleaning agents and chemicals used in dish/pot washing equipment.

Food storage components should be grouped for convenient access from receiving areas to the food preparation areas. All food shall be stored clear of the floor. The lowest shelf shall be not less than 300 mm above the floor or shall be closed in and sealed tight for ease of cleaning.

Storage space must adequately suit the delivery schedule of the facility. Food services facilities in remote areas may require proportionally more food storage facilities than needed for the four days recommended depending on the frequency and reliability of deliveries. Consideration should be given to storage of food for emergencies or disasters; such as having a backup plan to have food delivered from a third party if the kitchen equipment fails to work.

#### **Dining Areas**

### **Servery**

The Servery provides an area for plating and serving food with facilities for keeping food warm or cool. The Servery may be located with close access to the Food Services Unit and adjacent to Staff Dining Areas.

### **Dining Room**

A Staff Dining Room may be provided for staff dining and relaxation. If provided, the Dining Room should be sized to accommodate all staff potentially requiring dining space during any single shift. The minimum area for a Staff Dining Room shall be 1.25 m<sup>2</sup> per person dining at any one time. Note: Staggered dining sessions is an acceptable way of reducing the size of this room.

Depending on Operational Policy of the hospital, a combined public/ staff Dining Area may be provided, and located close to the entrance area.

Alternatively, Cafeteria and commercial food areas may be available for staff and visitor meals.

### **Vending Machine Area**

A vending machine area may be provided for after-hours access to prepared food and snacks. The vending machines maybe located within the Dining Room with security considerations to prevent access to the Food Services Unit after hours.

### **Staff and Support Areas**

#### **Cleaner's Room**

The Food Services Unit will require a dedicated Cleaner's room, not shared with clinical patient areas.

#### **Waste Disposal**

Provision shall be made for regular wet and dry waste storage, removal and disposal in accordance with Waste Management guidelines and policies. All garbage, and in particular wet waste, shall be stored in sealed bins. Provision shall be made for the storage and cleaning of bins.

In large Hospitals or food services facilities, the following are highly recommended:

- Refrigerated wet waste storage.
- Special equipment to reduce the water content of wet waste.

#### **Staff Amenities**

Staff Change Rooms with toilets, showers and locker spaces should be provided for the food services staff within the Unit unless available in close proximity. These shall not open directly into the food preparation areas, but must be in close proximity to them. Staff will require access to a Staff Room that may be shared with other Units.

Offices will be required for the Manager/ Supervisors and key senior staff within the Unit including Dietitians. Offices for the Manager/ Supervisor should have oversight of the operational areas within the Unit. The provision of offices will depend upon the size of the Unit. Workstations may be available for Dietetics staff. Storage should be provided for records, resource materials for dietitians and menus, as required.

Access to a Meeting Room will be required for staff meetings and training purposes, which may be shared with an adjacent Unit.

## **1.4 Functional Relationships**

A Functional Relationship can be defined as the correlation between various areas of activity which work together closely to promote the delivery of services that are efficient in terms of management, cost and human resources.

#### 1.4.1 External Relationships

The Food Services Unit has a functional relationship with:

- Loading dock for deliveries of clean supplies
- Waste disposal area
- Inpatient and clinical Units
- Operating Unit for staff meals
- Staff Dining areas if provided (these may be centrally located or dispersed throughout the complex)
- Visitor food service areas if provided by the hospital.
- External relationships outlined in the diagram below include:
  - Entrance for staff, supplies from a Staff/Service corridor
  - Entry for supplies from Clean Loading dock or external area through an Airlock
  - Access to Offices and staff areas via service corridor
  - Access to/ from clinical units and areas requiring a food services service via a service corridor with a uni-directional traffic flow from delivery of food trolley/ carts to return of soiled food trolley/ carts
  - Access to the dirty loading dock for Waste Holding via a service corridor
  - Entry for staff or public to a Dining area via the public corridor.

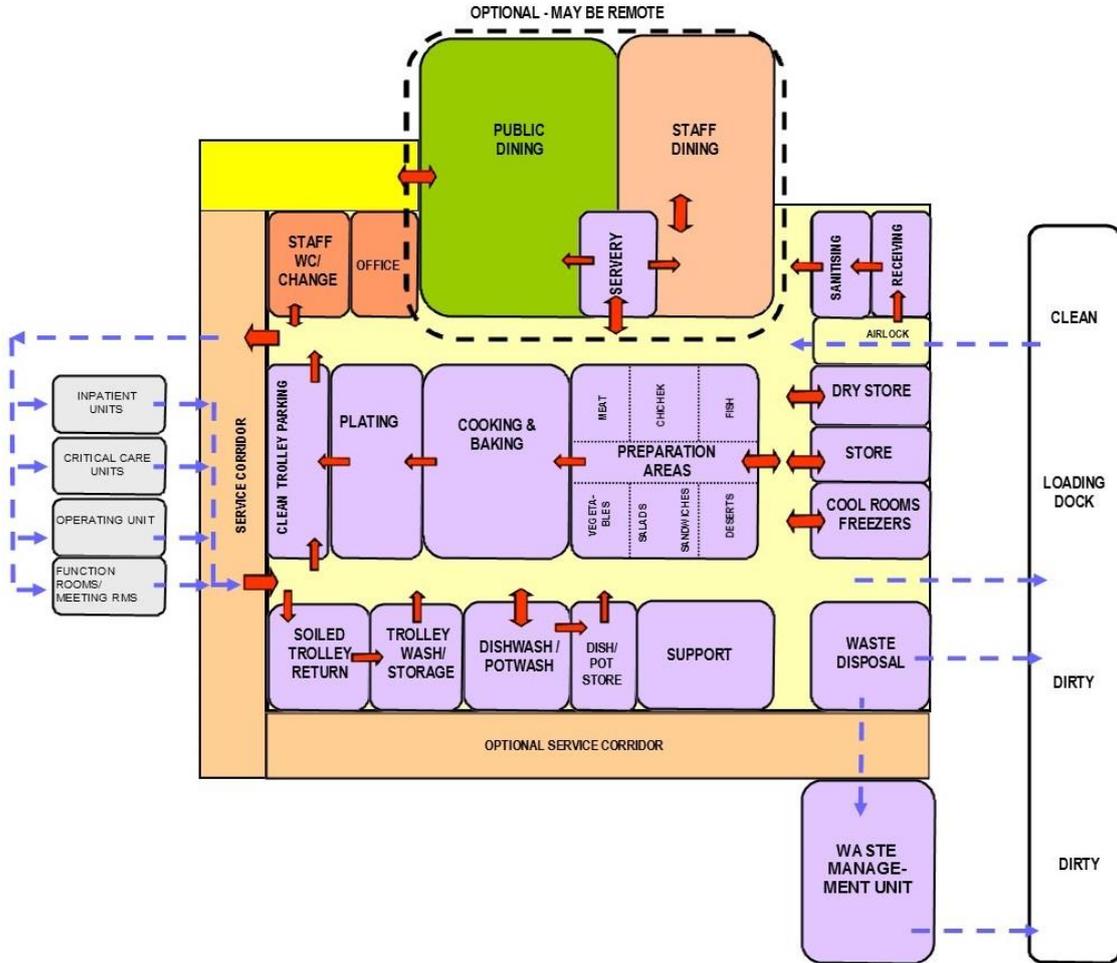
#### 1.4.2 Internal Relationships

Within the Food Services Unit the food preparation areas and food cooking areas are central to the operation of the Unit and have a strong functional link to all support areas required including dry stores, cold storage, freezer storage, plating, dishwashing and pot washing.

Optimum internal relationships outlined in the diagram below include:

- Controlled access at entry points from a Staff/ Service corridor
- Flow of food processing from receipt to Stores, Preparation, Cooking, Plating and delivery in one direction
- Separate entry for supplies and exit for removal of waste demonstrating separation of clean and dirty workflows
- Cooking area located centrally to Preparation and Plating areas
- Dishwashing and Pot Washing located conveniently to Preparation, Cooking, and Soiled Trolley return
- Support areas located at the perimeter, away from operational areas
- Staff Offices and Amenities located on a perimeter in a staff accessible zone.

### 1.4.3 Functional Relationships Diagram



#### LEGEND



## 1.5 Design Considerations

### 1.5.1 General

The design of the Unit shall provide staff with sufficient space, working surfaces and appropriate equipment to safely carry out their duties. Infection control, cooling and ventilation must be considered.

The Viewing Room and Waiting Areas shall be pleasant spaces with consideration given to adjustable lighting and possibly provision of a music system.

The Unit shall be ergonomically designed to avoid any potential injury to staff, family members and maintenance personnel.

## 1.5.2 Environmental Considerations

### Acoustics

Food Services Units have high levels of ambient noise due to mechanical equipment, extraction units, and materials with high reverberation scales.

Dining areas tend to be noisy and will require acoustic treatment, particularly to walls adjoining other departments. Provide acoustic treatment to dishwashing areas.

Refer to **Part G – Acoustics** of these Guidelines for more information.

### Natural Light/ Lighting

The use of natural light should be maximised throughout the Unit. Windows are an important aspect of sensory orientation and psychological well-being of patients. Where possible the inclusion of windows and a natural outlook should be favourably considered.

## 1.5.3 Accessibility

Dining areas should be designed to provide ease of access for persons in wheelchairs.

### 1.5.4 Doors

Adequately sized automatic/ semi-automatic doors are recommended for ease of passage of food distribution trolleys.

Refer also to **Part C - Access, Mobility and OH&S** in these Guidelines.

### 1.5.5 Ergonomics/ OH&S

Consideration should be given to ergonomic functionality in the Unit. Benches, storage shelves, sinks and preparation areas should be provided as suitable working heights. Adjustable height equipment is recommended where possible.

The following occupational health and safety issues should be addressed during planning and design for staff safety and welfare:

- Manual handling of heavy supplies that may require lifting equipment
- Chemical agents used in Cleaning/ Decontamination processes may require specific chemical handling requirements; refer to the requirements set by the Materials and Safety Data Sheets (MSDS)
- Electrical and fire hazards related to equipment in use.

Refer also to **Part C - Access, Mobility and OH&S** in these Guidelines.

### 1.5.6 Size of the Unit

The size of the Unit will be dependent on the size of the facility, the number of meals to be served daily, the Service Plan and Operational Model adopted for the facility.

Schedules of Accommodation have been provided for typical Food Services Units servicing RDL 3 to 6 hospital facilities.

### 1.5.7 Safety and Security

To prevent accidents, all internal kitchen doors shall have clear glazing to the top half.

All electrical equipment should have emergency shut off switches to prevent overheating.

Mobile food trolleys and food services equipment on casters must have locking brakes.

The Food Services Unit will have a food safety program in place which is a written document indicating how the Food Services Unit will control the food safety hazards including:

- Identification of the suppliers and sources of received food
- Recall of unsafe food, which includes records of production and food distribution

Contingency arrangements for loss of power to refrigeration, freezing and cooking equipment.

The Food services Unit will require controlled access to prevent unauthorised entry and the Unit should be isolated from general hospital traffic. Visitors to the Unit should be directed to the Main Reception of the facility for directions. Door signs should be installed on restricted access doors.

### 1.5.8 Finishes

All tables, benches and other surfaces on which food is prepared or handled shall be covered in a smooth impervious material.

All exposed ceilings and ceiling structures in food preparation or food storage areas should be finished to ensure they can be readily cleaned with equipment used routinely in daily housekeeping activities. In food preparation and other areas where dust fallout would present a potential problem, a monolithic ceiling should be provided that covers all conduits, piping, duct work and open construction.

In areas used for food preparation or assembly, floors should be non-slip, water resistant and greaseproof to comply with relevant standards. Floor finish must be easily cleaned with no crevices.

Floor and wall construction finishes and trims in dietary and food preparation areas should be free of gaps/ spaces that can harbour rodents and insects. Compliance with relevant public health regulations is required.

Wall finishes are to be smooth, impervious to moisture, easily cleaned and able to withstand repeated washing. Hollow wall constructions are vulnerable to trolley damage and risk pest infestation. Solid, rendered, smooth walls, epoxy coated, or spray painted withstand heavy treatment and allow ease of repair.

Refer also to **Part C - Access, Mobility and OH&S** in these Guidelines.

### 1.5.9 Fittings, Fixtures and Equipment

Refrigerators, freezers, ovens and other equipment that is thermostatically controlled will require temperature monitoring to maintain desired temperatures and alarms when temperature is not reached or exceeded. Alarms should be automatically recorded.

Movable equipment including food service delivery trolleys will require heavy duty locking castors.

Shelving systems installed should be constructed of non-porous materials, dust resistant, easily cleaned and avoid inaccessible corners.

Equipment installed in the Unit including sinks, dishwashing/ ware washing equipment, cooking equipment and exhaust hoods will require mechanical, hydraulics, or electrical services in accordance with manufacturers' recommendations and local regulations.

### 1.5.10 Building Service Requirements

This section identifies unit specific services briefing requirements only and must be read in conjunction with **Part E - Engineering Services** for the detailed parameters and standards applicable.

#### Information and Communication Technology

The following IT/ Communications systems shall be provided within the Food Services Unit:

- Voice and data points for telephones and computers with internet access
- Wireless internet provision for Offices, Meeting rooms
- Data provision for management and quality systems as required
- Data connections for electronic payment system such as in Dining Rooms

### **Heating Ventilation and Air-conditioning (HVAC)**

The Food Services Unit should be provided with air-conditioning for temperature and humidity control, ensuring food preparation integrity and staff comfort.

The recommended room temperature for cooking area is 26°C; preparation area is 22°C; dishwashing for 24°C.

### **Hydraulics**

Provide hot water to sinks used for food preparation and dishwashing, ware washing and pot washing within the Food services area. Provide hot water to all automatic dishwashing and utensil washing machines as specified by the manufacturer.

Under-counter conduits, piping, and drains shall be arranged to not interfere with cleaning of the equipment or of the floor below the counter.

## **1.5.11 Infection Control**

### **Hand Basins**

Staff Hand washing basins shall be provided in all clean-up, preparation, cooking, serving areas of the Unit. Staff in food preparation and serving areas should not be more than 6 metres from a handwashing basin. Basins should be hands-free operation with paper towel and soap dispensers. Mirrors should not be installed over basins in food preparation areas where contamination from touching hair may occur.

### **Antiseptic Hand Rubs**

Antiseptic Hand Rub dispensers can be provided within the Unit and comply with **Part D - Infection Prevention and Control**, in these guidelines. Antiseptic Hand Rubs, although very useful and welcome, cannot fully replace Handwash Bays. A combination of both are required.

### **Insect Control**

In new hospitals the kitchen should not open directly to the outside; an air lock shall be provided between the kitchen and external areas. A section of hospital corridor may be used as an air lock. In existing kitchens being refurbished, any door leading directly from the kitchen to the outside shall be fitted with a self-closer.

Refer to **Part D - Infection Prevention and Control** for additional details.

## **1.6 Standard Components of the Unit**

Standard Components are typical rooms within a health facility, each represented by a Room Data Sheet (RDS) and a Room Layout Sheet (RLS).

The Room Data Sheets are written descriptions representing the minimum briefing requirements of each room type, described under various categories:

- Room Primary Information; includes Briefed Area, Occupancy, Room Description and relationships, and special room requirements)
- Building Fabric and Finishes; identifies the fabric and finish required for the room ceiling, floor, walls, doors, and glazing requirements

- Furniture and Fittings; lists all the fittings and furniture typically located in the room; Furniture and Fittings are identified with a group number indicating who is responsible for providing the item according to a widely accepted description as follows:

Group	Description
1	Provided and installed by the builder
2	Provided by the Client and installed by the builder
3	Provided and installed by the Client

- Fixtures and Equipment; includes all the serviced equipment typically located in the room along with the services required such as power, data and hydraulics; Fixtures and Equipment are also identified with a group number as above indicating who is responsible for provision
- Building Services; indicates the requirement for communications, power, Heating, Ventilation and Air conditioning (HVAC), medical gases, nurse/ emergency call and lighting along with quantities and types where appropriate. Provision of all services items listed is mandatory

The Room Layout Sheets (RLS's) are indicative plan layouts and elevations illustrating an example of good design. The RLS indicated are deemed to satisfy these Guidelines. Alternative layouts and innovative planning shall be deemed to comply with these Guidelines provided that the following criteria are met:

- Compliance with the text of these Guidelines
- Minimum floor areas as shown in the schedule of accommodation
- Clearances and accessibility around various objects shown or implied
- Inclusion of all mandatory items identified in the RDS

The Food Services Unit will consist of Standard Components to comply with details described in these Guidelines. Refer also to Standard Components Room Data Sheets and Room Layout Sheets.

### 1.6.1 Non-Standard Rooms

Non-standard rooms are rooms are those which have not yet been standardised within these guidelines. As such there are very few Non-standard rooms. These are identified in the Schedules of Accommodation as NS and are separately covered below.

#### Supplies Receipt

The Supplies Receipt area should be located with close access to the Clean Loading Dock and with ready access to the Food Services Unit entry for prompt deliveries.

The receiving area shall contain the following:

- A control station
- An area for loading, un-crating, and weighing supplies

These areas may be shared with clean dock areas.

### **Sanitisation Area**

The Sanitisation area should have direct access from the Supplies Receipt area. Food supplies should be sanitised before storage in the Unit. A sink and hand wash basin should be available in the area.

### **Trolley Return/ Stripping**

The Trolley Return/ Stripping area will be located adjacent to the Dishwashing and the Trolley/ Cart Washing area, with direct access from the Entry Airlock. There should also be convenient access to Waste Disposal area.

The Trolley Return/ Stripping area will require:

- Wall and corner protection for trolley impact zones
- A hand washing basin should be located in close proximity.

### **Trolley/ Cart Washing**

The Trolley Wash area should be located remotely from the food preparation and storage areas with convenient access from the Trolley Return/ Stripping area.

The Trolley/ Cart washing area will require:

- Smooth, impervious and easily cleanable surfaces to walls and ceiling
- Impervious and non-slip finishes to the floor
- Hot and cold-water outlets with a high-pressure hose spray
- A trolley/cart drying area

If automated trolley washing equipment is installed, provide services and power according to manufacturer's specifications.

### **Dishwashing**

The Dishwashing Area should be located in close proximity to Trolley/Cart Stripping and away from food preparation/ cooking areas. Dishwashing areas will generally include automated dishwashing equipment. Sinks may also be provided for items that cannot be automatically processed.

Dishwashing equipment and sinks will require:

- Hot and cold water with a flexible hose spray
- Services according to manufacturer's specifications
- Provision for automated cleaning chemical dosing

The Dishwashing area requires the following finishes:

- Walls and ceiling that are smooth, impervious and easily cleanable
- Floors that are impervious and non-slip

### **Pot Washing**

Pot washing sinks or equipment shall be located with ready access to preparation and cooking areas and may be co-located with dishwashing areas.

The Pot washing area may include automated equipment or sinks for manual washing.

Automated Pot washing equipment should be installed to manufacturer's specifications. Sinks will require hot and cold water.

The Pot washing area requires the following finishes:

- Walls and ceiling that are smooth, impervious and easily cleanable

- Floors that are impervious and non-slip

### **Food Preparation Areas**

Food preparation areas will be located with ready access to storage areas, refrigeration for food supplies, cooking areas, boiling water units and ice dispensing machines.

The areas will include benches, sinks, shelving and mobile trolleys for utensils. Equipment may include food processors, slicers, mixers and cutters. All equipment must be installed according to manufacturer's specifications. Items of equipment may require special power and safety considerations such as power cut-off.

Food Preparation areas require:

- A temperature-controlled environment
- Handwashing basin with paper towel and soap fittings
- Surfaces that are smooth, impervious, easily cleaned and resistant to scratches and cleaning chemicals

### **Cooking Areas**

Cooking areas will be located in close proximity to food preparation areas and with convenient access to plating areas.

Cooking equipment must be installed to manufacturers' specifications and may include a range of services including gas, electricity, steam, water and drainage.

Cooking areas must be properly ventilated with an exhaust hood covering the entire area. Exhaust hoods must be designed and installed to prevent grease or condensation from collecting on walls, ceilings and from dripping into food or onto food contact surfaces.

Cooking areas will require the following finishes:

- Walls and ceiling that are smooth, impervious and easily cleanable
- Floors that are impervious and highly non-slip, particularly for grease spills

### **Blast Chiller/s (Optional)**

Blast Chillers are required in cook-chill food delivery systems. If installed, they should be located with ready access to cooking areas.

Blast Chillers will require direct power, temperature monitoring and should be installed according to manufacturer's specifications.

### **Plating/ Tray Preparation Areas**

The Plating area will be located with ready access to food delivery trolley/ cart holding area for efficient distribution. The Plating/ Tray preparation area will consist of:

- Plating conveyor or bench for tray preparation and meal serving
- Mobile bulk food serving trolleys for plating
- Supplies of trays, plates, utensils and items for tray setting
- Plating/ Tray Preparation areas will require power to heated/ chilled food serving trolleys and food delivery trolley/ carts

### **Meal Trolley/ Cart Holding**

Meal Trolley/ Cart Holding parking space will be required in the Food Services Unit and should be located adjacent to Plating/Tray Preparation area with convenient access to the exit doors. The size

of the area will be dependent on the number of trolleys to be accommodated. Trolley/Carts that keep food hot and cold will require power according to manufacturer's specifications.

### **Cool Rooms, Refrigerators, Freezers**

Cool Rooms, refrigerators and Freezers should be located with ready access to food preparation, cooking and re-thermalisation areas. Refrigeration units should generally not be located directly adjacent to cooking equipment or other high heat producing equipment which may interfere with the temperature control within the refrigerator or freezer.

Cool Rooms, refrigerators and freezers will require installation and services according to manufacturers' specifications.

### **Dining Areas**

#### **Servery**

The Servery will be located in close association with a Dining area. The Servery may be located in close proximity to the food preparation and cooking area or food may be prepared remotely and transported to the Servery.

The Servery will require the following fittings and fixtures:

- Workbenches with an impervious top and splashback
- Single or double bowl stainless steel sink set in the bench top supplied with hot and cold reticulated water, lever action or automatically activated taps
- Heated and chilled food display cabinets and serving Bain Maires
- Provision for plates, food trays and utensils
- Disposable glove dispenser
- Handbasin, with liquid soap and paper towel dispensers
- Cash register and electronic payment system for sale of food items, according to operational policy

The Servery will require the following finishes:

- Walls and ceiling that are smooth, impervious and easily cleanable
- Floors that are impervious and non-slip

#### **Staff Dining**

The Staff Dining Room should be located in a staff only, discreet area of the facility with direct access to a circulation corridor. It should have ready access to the Food Services Unit. Access to an external dining area is desirable. Acoustic privacy may be required to adjoining areas.

The Dining Room should incorporate the following:

- External windows
- Dining tables and chairs
- Telephone within or adjacent to the room for staff use
- Provision for dirty plates and trays for return to cleaning areas
- Food waste and recyclables area

## 1.7 Schedule of Accommodation

The Schedule of Accommodation (SOA) provided below represents generic requirements for this Unit. It identifies the rooms required along with the room quantities and the recommended room areas. The sum of the room areas is shown as the Sub Total as the Net Area. The Total area is the Sub Total plus the circulation percentage. The circulation percentage represents the minimum recommended target area for corridors within the Unit in an efficient and appropriate design.

Within the SOA, room sizes are indicated for typical units and are organised into the functional zones. Not all rooms identified are mandatory therefore, optional rooms are indicated in the Remarks. These guidelines do not dictate the size of the facilities, therefore, the SOA provided represents a limited sample based on assumed unit sizes. The actual size of the facilities is determined by Service Planning or Feasibility Studies. Quantities of rooms need to be proportionally adjusted to suit the desired unit size and service needs.

The Schedule of Accommodation are developed for particular levels of services known as Role Delineation Level (RDL) and numbered from 1 to 6. Refer to the full **Role Delineation Framework (Part A - Appendix 6)** in these guidelines for a full description of RDL's.

The table below shows typical Units within a Hospital from RDL3 to 6.

Any proposed deviations from the mandatory requirements, justified by innovative and alternative operational models may be proposed and record in the **Non-Compliance Report** (refer to **Part A - Appendix 4**) with any departure from the Guidelines for consideration by the DOH for approval.

### 1.7.1 Catering Unit within a health facility, full cooking kitchen

ROOM/ SPACE	Standard Component Room Codes		RDL 3 Qty x m <sup>2</sup>	RDL 4 Qty x m <sup>2</sup>	RDL 5/ 6 Qty x m <sup>2</sup>	Remarks
<b>Entry Area</b>						
Airlock Entry	airle-10-d		1 x 10	1 x 10	1 x 10	Required if Unit is accessed directly from outside
Sanitisation area	NS			1 x 6	1 x 10	Direct access from Supplies Receipt area; combined with Supplies Receipt area if Unit provided at RDL3
Supplies Receipt area	NS			1 x 6	1 x 10	with access to Clean Loading Dock
<b>Cleaning/ Washing Area</b>						
Dishwashing	NS		1 x 10	1 x 15	1 x 30	
Pot Washing	NS		1 x 8	1 x 15	1 x 25	
Trolley Return	NS		1 x 15	1 x 15	1 x 20	
Trolley Stripping	NS			1 x 15	1 x 25	Combined with Trolley return if Unit provided at RDL3
Trolley / Cart Washing	NS		1 x 10	1 x 15	1 x 20	

ROOM/ SPACE	Standard Component Room Codes		RDL 3 Qty x m <sup>2</sup>	RDL 4 Qty x m <sup>2</sup>	RDL 5/ 6 Qty x m <sup>2</sup>	Remarks
<b>Food Preparation and Distribution</b>						
Blast Chillers	NS			1 x 20	1 x 40	Optional, additional area for Cook-chill system
Cooking	NS		1 x 20	1 x 35	1 x 110	May be reduced if preparation / cooking is off-site
Meal Trolley Holding	NS		1 x 5	1 x 10	1 x 20	Parking, ready for distribution to patient areas
Preparation - Cold Food	NS		1 x 6	1 x 8	1 x 20	May be reduced if preparation / cooking is off-site
Preparation - Diets / VIP	NS		1 x 6	1 x 8	1 x 20	May be reduced if preparation / cooking is off-site
Preparation - Meat	NS		1 x 6	1 x 8	2 x 10	May be reduced if preparation / cooking is off-site
Preparation - Pastry	NS		1 x 6	1 x 8	1 x 25	May be reduced if preparation / cooking is off-site
Preparation - Vegetable	NS		1 x 6	1 x 8	1 x 20	May be reduced if preparation / cooking is off-site
Plating / Tray Preparation	NS		1 x 15	1 x 35	1 x 50	
<b>Storage Areas</b>						
Cool Room - Dairy / Vegetable	corm-d similar		1 x 6	2 x 6	4 x 10	Separate cool rooms for dairy/produce.
Cool Room - Meat	corm-d similar		1 x 6	2 x 6	3 x 10	Allow for separation of food storage
Freezer	frfm-d similar		1 x 6	2 x 6	3 x 10	Allow for separation of food storage
Cool Room / Freezer-Fish	frfm-d similar		1 x 4	1 x 6	1 x 10	Includes an upright freezer in the cool room.
Dry Store	stgn-8-d stgn-14-d similar		1 x 10	2 x 8	2 x 14	
Fruit/ Vegetable Store	stgn-8-d stgn-14-d similar		1 x 10	2 x 8	1 x 14	
Store - Chemical	stcm-d		1 x 4	1 x 4	1 x 4	dishwashing/ cleaning chemicals
Store - Tableware	stgn-8-d similar stgn-14-d		1 x 4	1 x 6	1 x 14	Crockery, utensils, linen.
Store - Equipment	steq-10-d similar steq-20-d		1 x 8	1 x 10	1 x 20	Optional; for stored tables, chairs used in functions
<b>Dining Areas</b>						
Public Dining	NS		1 x 25	1 x 50	1 x 100	<b>Optional</b> Allows 40/80 persons, may be located remotely
Servery	NS		1 x 12	1 x 12	1 x 20	
Staff Dining	NS		1 x 25	1 x 50	1 x 100	Allows 40/ 80 persons, may be located remotely
Vending Machine Area	bvm-3-d		1 x 3	1 x 3	2 x 3	After hours service
<b>Staff &amp; Support Areas</b>						

ROOM/ SPACE	Standard Component Room Codes				RDL 3 Qty x m <sup>2</sup>			RDL 4 Qty x m <sup>2</sup>			RDL 5/ 6 Qty x m <sup>2</sup>			Remarks
Cleaners Room	clrm-6-d				1	x	6	1	x	6	1	x	6	
Disposal Room	disp-8-d				1	x	8	1	x	8	1	x	8	
Office - Single Person	off-s9-d				1	x	9	1	x	9	1	x	9	Note 1; Manager
Office/ Workstations - Dieticians	off-ws-d				1	x	5.5	2	x	5.5	2	x	5.5	
Store - Photocopy/ Stationery	stps-8-d similar				1	x	6	1	x	8	1	x	10	Dieticians storage – menus etc.
Change Room - Staff	chst-12-d similar chst-20-d similar				2	x	10	2	x	12	2	x	16	Toilet. Shower & Lockers
Toilet - Staff	wcst-d				1	x	3	1	x	3	2	x	3	as required, in addition to Staff Change
<b>Sub Total</b>					<b>303.5</b>			<b>515</b>			<b>973</b>			
<b>Circulation %</b>					<b>25</b>			<b>25</b>			<b>25</b>			
<b>Area Total</b>					<b>379.3</b>			<b>643.7</b>			<b>1261.2</b>			

Note 1: Offices to be provided according to the number of approved full-time positions within the Unit

Please note the following:

- Areas noted in Schedules of Accommodation take precedence over all other areas noted in the Standard Components
- All the areas shown in the SOA follow the No-Gap system described elsewhere in these Guidelines
- Exact requirements for room quantities and sizes shall reflect Key Planning Units (KPU) identified in the Clinical Service Plan and the Operational Policies of the Unit
- Room sizes indicated should be viewed as a minimum requirement; variations are acceptable to reflect the needs of individual Unit

## 1.8 Further Reading

In addition to Sections referenced in this FPU, i.e. **Part C- Access, Mobility, OH&S, Part D - Infection Prevention and Control, and Part E - Engineering Services, Part G-Acoustics** readers may find the following helpful:

- FDA (US Food & Drug Administration) Food Establishment Plan Review Guideline, 2000  
<http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/IndustryandRegulatoryAssistanceandTrainingResources/ucm101639.htm>
- Food and Medicine Regulation, Food Standards Australia and New Zealand, refer to website:  
<http://www.foodstandards.gov.au/industry/food-medicine-regulation/Pages/default.aspx>
- International Health Facility Guidelines (iHFG) [www.healthdesign.com.au/iHfg](http://www.healthdesign.com.au/iHfg)
- Ministry of Health UAE, Unified Healthcare Professional Qualification Requirements, 2017, refer to website: <https://www.haad.ae/haad/tabid/927/Default.aspx>
- Nutrient Needs of the Hospital Population: National Catering and Nutrition Specification for Food and Fluid Provision in Hospitals in Scotland (2008)  
<http://www.gov.scot/Resource/Doc/229423/0062185.pdf>
- The Facility Guidelines Institute (US), Guidelines for Design and Construction of Hospitals, 2018. Refer to website [www.fgiguideines.org](http://www.fgiguideines.org)
- That's Progress - Advancements in Hospital Foodservice, 2009, Maura Keller, Today's Dietitian, Vol. 11 No. 8 P. 28, refer to <http://www.todaysdietitian.com/newarchives/072709p28.shtml>
- The Building Regulation & Facilities for the Disabled United Arab Emirates Code  
<https://www.moid.gov.ae/EPublications/The%20Building%20Regulation%20Facilities%20For%20the%20Disabled-en.pdf>