

A GUIDE TO THE CONSTRUCTION OF FOOD PREMISES

1. INTRODUCTION

This information is provided as a general guide for owners, proprietors, architects and / or builders who intend to design, construct / fit-out and operate a food premises or food vehicle within the City of South Perth. This guide also details the process for approval and registration of a food business within the City of South Perth.

2. LEGISLATION

Food businesses are currently governed by the following legislation:

- Food Act 2008
- Food Regulations 2009
- Australia New Zealand Food Standards Code

Copies of the legislation can be downloaded at the State Law Publisher website www.legislation.wa.gov.au and at the FSANZ website www.foodstandards.gov.au. Australian Standard AS 4674-2004 *Design, construction and fit-out of food premises* provides specific detail for design and construction for food business.

3. RISK CLASSIFICATION

The City of South Perth uses a risk-based classification system for food businesses which is determined by the type of food prepared and who the food is prepared for.

Food businesses are classed into:

- **Very Low Risk** e.g. Bottle shops.
- **Low Risk** e.g. Prepackaged food, shelf stable food premises.
- **Medium Risk** e.g. Cafes, restaurants.
- **High Risk** e.g. Aged care/child care facilities, hospitals.

4. FEES

The fees applicable to food premises include:

- Application fee, payable when the application to fit out the premises is lodged. This fee varies depending on the risk category of the premises.
- Certificate of Registration fee, payable on opening a new food premises or registering a new manager or owner.
- Annual Food Premises Fee, which varies with the risk category and is invoiced at the beginning of each new financial year. Annual Food Premises Fees will be charged pro-rata for new premises commencing throughout the year.
- Alfresco licence fee where applicable.

For the current fee schedule please contact Health Services on 9474 0777.

5. CITY OF SOUTH PERTH REQUIREMENTS

5.1 Planning Services

The premises you have chosen may require planning approval, and a Development Application may need to be submitted to ascertain suitability with the Town Planning Scheme in relation to zoning, parking and other issues. For further information contact Planning Services on 9474 0777.

5.2 Building Services

You will be required to submit a Building Licence Application for:-

- newly constructed premises;
- where coolrooms and exhaust canopies are to be installed; or
- where alterations may affect the structural integrity of the building.

For further information contact Building Services on 9474 0777.

5.3 Health Services

Before any new developments, alterations or extensions occur, approval must be obtained from Health Services, even where planning approval or a building licence is not required.

Your shop-fitter, draftsman or architect should be able to assist you with plans. The following must be submitted:

1. Application to Construct or Alter a Food Premises
2. Application for a Certificate of Registration
3. Two sets of drawings to a scale 1:50 showing:
 - a) All dimensions
 - b) Floor plan of the entire food premises, including any alfresco dining
 - c) Sectional elevations through walls etc.
 - d) Hydraulic plans of fresh water and waste-water services
 - e) Mechanical exhaust ventilation plan
 - f) Finishes of every wall, floor and ceiling
 - g) The position and type of every fixture, fitting and equipment
 - h) Toilet facilities
 - i) Grease traps
 - j) Bin enclosure
 - k) Estimated number of patrons.

NOTE: Submitted plans must be of a high quality clearly showing all requested information, which will expedite the process.

5.4 Approval of Plans and Final Inspection

Once the plans have been approved, a copy will be given back to you with the "Health Conditions of Approval" and a Building Licence (if applicable) attached. You can then commence the construction of the food premises in compliance with the Conditions of Approval. On completion of construction, contact Health Services to arrange a final inspection, where compliance with the approved plans and Conditions of Approval will be assessed.

6. DESIGN AND CONSTRUCTION

6.1 General Requirements

The food premises must comply with the requirements of Food Safety Standard 3.2.3 – Food Premises and Equipment (FSS 3.2.3). The following information may be useful when designing your food premises.

Your food business design must:

- Exclude locations that may allow harbourage to vermin by eliminating cavities, cracks and crevices.

- Facilitate easy cleaning by providing open access to all surfaces where grease and dust may accumulate, and ensuring that all surfaces are durable, smooth, impervious and washable.
- Allow the flow of food in one direction, from receipt, to storage, to preparation, to packing / serving / dispatch incorporating in the design process provision for safe food handling practices to ensure that the risk of contamination is minimised.

Consider:

- Sufficient dining space, allowing 1m² per person for dining area;
- Potential for future expansion. If in the future you wish to upgrade the type of food preparation, then you may also need to upgrade the premises to suit;
- The kitchen incorporating crockery / equipment / chemical / food storage, washing areas, wet and dry preparation areas, refrigeration and cooking areas;
- Separation of raw products and cooked / final products;
- Sanitary conveniences for both staff and customers;
- Space for change-rooms and storage area for personal items;
- Cleaning storage for cleaning equipment, chemicals and cleaner's sink;

6.2 Water Supply

Plumbing is to be carried out by a licensed plumber in accordance with the Metropolitan Water Supply, Sewerage and Drainage Board By-laws.

The water supply must be provided in an adequate quantity, potable and of an appropriate temperature. To achieve this ensure:

- Hot water system installed in adequate capacity for the activities occurring at the premises;
- Storage hot water systems to be located at least 150mm from adjacent vertical surfaces, be supported in metal legs 150mm in height or placed on a concrete plinth;
- Mains water supply;
- Where mains water is unavailable another approved water source (i.e. bore or water tank).

6.3 Sewage and Waste Water Disposal

The Industrial Waste Section at the Water Corporation should be consulted for provision of grease traps. Most food premises where food preparation occurs will require a grease trap to be installed.

Phone: 13 13 95 Website: www.watercorporation.com.au

The premises must have a sewage and waste water disposal system which effectively disposes of all sewage and wastewater. It is to be constructed and located so that there is no likelihood of the sewage and wastewater polluting the water supply or contaminating food, such as:

- Connection to deep sewer; or
- If the premises is located in areas without deep sewerage, an on-site disposal system will be required. Please contact Health Services for further information.

6.4 Storage of Garbage and Recyclable Matter

The premises must have waste facilities that adequately contain the quantity and type of waste and recyclable matter. A bin storage area needs to be provided and must include:

- A tap connected to an adequate supply of water;
- Enclosure to have smooth impervious walls constructed of approved material a minimum of 1.5m in height;
- An access way of at least 1m in width fitted with a self closing gate;
- Smooth impervious floor of not less than 75mm thickness, evenly graded and adequately drained to an approved liquid refuse disposal system;
- Fats and oils stored in leak proof containers are to be regularly collected by a waste removal contractor;
- Sized to adequately contain all waste receptacles and to allow easy access for removal of bins;
- Enclosures with a floor area greater than 17m² require a roof.

6.5 Ventilation and Exhaust Equipment

Mechanical exhaust ventilation systems to be designed, constructed and installed in accordance with AS 1668.2 -2012. Detailed plans showing design, outlet location (in relation to air-conditioning or air intakes, and neighbouring properties where applicable) and performance are required to be submitted with the application.

Mechanical ventilation is required to be installed for:

- Cooking equipment where electrical input exceeds 8kW;
- Cooking equipment where gas input exceeds 29MJ/h; and
- All deep fryers.

6.6 Lighting

Food premises must be provided at all times with natural and / or artificial lighting, suitable for the activities conducted within the premises. Light fittings must be easily and effectively cleaned, unable to provide harbourage for pests and constructed to protect food from contamination. Light fittings must be provided with protective plastic covers or sleeves to prevent contamination of food with broken glass.

7. FLOORS, WALLS AND CEILINGS

7.1 Floors, Walls and Ceilings

Floors, walls and ceilings must be appropriate for the activities being carried out within the premises. All surfaces shall be smooth, impervious, durable, easily cleanable and unable to provide harbourage for pests;

Floors

Acceptable floor finishes include:

- Terrazzo or ceramic tiles;
- Concrete with epoxy layer;
- Commercial grade heat welded vinyl;
- Treated concrete;

Coving to a minimum radius of 25mm is required for floor / wall junctions in all food preparation areas. All wet area floors to be adequately graded to 100mm diameter industrial floor waste(s), connected to an approved waste disposal system.

Walls

Internal wall surfaces to be smooth, corrosion resistant, non-toxic, impervious to water, free from cracks and crevices, and finished in a light colour. Acceptable wall finishes include:

- Stainless steel or aluminum metal sheeting;
- Hardwall plaster painted with polyurethane paint (where not exposed to impact / abrasion);
- Glazed tiles to full height of walls with epoxy grout.

All double paneling (stud) walls to be closed and the internal spaces filled with tightly packed fibre- glass wool or other suitable approved void-filling product. Splash backs are to be provided to sinks and benches.

Ceilings

Ceilings to be smooth, durable, non-toxic, resistant to corrosion, impervious to water, free from cracks and crevices and finished in a light colour, such as:

- Smooth finished painted plaster;
- Steel sheet;
- Concrete, sealed smooth finish;

NOTE: Drop-in panel ceilings are not permitted in kitchens and food preparation areas.

8. FIXTURES, FITTINGS AND EQUIPMENT

8.1 General Requirements

All working surfaces, food preparation benches and appliances must be smooth, durable, impervious, made of a material that will not contaminate the food and allow for easy and effective cleaning and sanitising.

8.2 Fixtures, fittings and equipment:

- Movable equipment to have castors fitted and flexible connections; or supported on metal legs 150mm high; or sealed to a concrete plinth at least 100mm in height and finished flush with the vertical surface of the equipment;
- Appliances placed on benches to be erected on legs 75mm above bench for ease of cleaning;
- Where fixed equipment is not sealed to an adjacent wall or other vertical surface it must be located at a distance of:
 - 150mm if equipment length is 1200mm or less;
 - 300mm if equipment length is 1200mm to 2400mm;
 - 450mm if equipment length is 2400mm or more.
- Service pipes and conduits to be chased into the walls or fixed in brackets to provide 25mm clearance between vertical surfaces and the pipe and 100mm between the pipe or conduit and the horizontal surfaces.
- Inaccessible cavities, false bottoms and similar hollow spaces (formed in construction of fixtures and equipment and capable of providing access and harbourage for vermin) are to be filled with fibreglass wool and sealed with corrosion resistant trims and silicone sealer.

8.3 Shelving:

- All shelves, cupboards and cabinets to have smooth impervious surfaces;
- All cupboards to be either backless, fixed and sealed to the wall or be readily mobile;
- Fixed shelving to be 40mm off walls or sealed to the wall or sealed hard against walls / surfaces;
- A clear space of 150mm to be provided between the floor and the lowest shelf with all areas accessible for ease of cleaning.

8.4 Washing facilities

All cooking equipment and eating / drinking utensils must be able to be easily and effectively cleaned and sanitised. Ensure the sinks and or dishwasher is of adequate size to effectively clean and sanitise all items. The minimum requirements are:

- Double bowl sink for utensil and equipment washing; and
- Separate sink for fruit and vegetable preparation; and
- Glass washer

OR

- Single bowl sink and commercial dishwasher; and
- Separate sink for fruit and vegetable preparation.

8.5 Hand washing facilities

Hand basins are required to be:

- Provided within areas and in close proximity where unpackaged food is handled. In a kitchen, a food handler should not have to travel more than 5m to the nearest hand basin.
- Located where food handlers can easily access them. Permanent or movable walls, fixtures, equipment or other items must not obstruct the hand basins.
- Provided with hands-free devices in food preparation areas such as foot operation, knee, arm or electronic activation;
- Connected to or provided with a supply of warm running potable water from a single outlet (i.e. flick mixer tap with elongated arm);
- Of adequate size to allow for appropriate hand washing. There must be sufficient room for food handlers to move their hands about under running water.
- Be clearly designated and used solely for hand washing only.
- Each hand basin to be supplied with liquid hand soap, disposable paper towels and a waste container;
- In certain food premises, more than one hand basin may be required if there is more than one area where hands need to be washed to reduce the risk of contamination of food.

8.6 Storage and display of potentially hazardous food

- Provide adequate refrigeration for the storage and display of potentially hazardous food at or below 5°C.
- Provide adequate frozen storage for the storage and display of potentially hazardous food at or below -15°C.
- Provide adequate hot storage for the storage and display of potentially hazardous food at or above 60°C.

8.7 Food protection

- Provide covers, sneeze guards or doors to display units for food on display.
- Provide food grade containers with tight fitting lids for the storage of food.
- Provide adequate shelving for the storage and display of food off the floor including within coolrooms and freezer rooms.

8.8 Dry food and packaging storage

- Provide adequate shelving for the storage of food and packaging materials in a clean, dry area off the floor.
- Floors, walls and ceiling must be sealed to prevent the entry of pests.

8.9 Personal effects

- Provide adequate facilities for storing personal effects and clothing.
- Enclosed cupboards used for the storage of clothing and personal belongings are to be located separate to food areas.

8.10 Cleaning and other chemicals

- Cleaners store within the food premises must contain a cleaner's sink and sufficient storage for all cleaning chemicals and equipment.
- Facilities are to be located and designed so that food areas cannot be contaminated.

8.11 Coolrooms / Freezers

Installation of a walk-in cool room or freezer requires a building licence.

- The floor to be properly surfaced and have an even fall to an approved floor waste outlet located outside the cool room.
- Where the unit(s) are built with an inaccessible cavity between the top and the ceiling above or between the walls of the room and the cool room / freezer, such cavities to be filled with approved void filling product and effectively sealed with metal trims.
- The angle between walls and floor in the cool room / freezer to be coved to a minimum radius of 25mm.
- Internal service lines to be located 25mm off the walls.
- All racks and shelves should be of smooth, non-absorbent, easily cleanable, non-corrosive material.
- Cool room and freezer condensates should discharge to a drainage system located outside the cool room / freezer (i.e. tundish).
- All doors are to be:
 - fitted with a rubber or similar seal which effectively prevents the escape of cold air or the entry of warm air when the door is closed, and the seal must be kept clean and in good repair; and
 - capable of being opened from the inside at all times (BCA requirement).
- Should cool room be externally accessed it may only be utilised for bulk storage where food is fully enclosed within packaging material.
- Alarm to be provided on outside of cool room that is controlled only from the inside of the cool room (BCA requirement).

- Internal lighting controlled by a switch located adjacent to the entrance doorway (BCA requirement).
- All cool room motors and compressors should be located outside the premises if possible.

9. MISCELLANEOUS

9.1 Temperature measuring

A food premises must have a temperature measure device that can accurately measure the temperature of potentially hazardous food to +/- 1°C. Ensure thermostat and gauges are provided on all units; and a digital probe thermometer accurate to +/- 1°C.

9.2 Cleaning and sanitising

All equipment and utensils must be kept in a clean and sanitary state.

Heat and / or chemicals must be applied to equipment and utensils to ensure the number of micro-organisms on the surface has been reduced to a level that;

- Does not compromise the safety of the food which it may come in contact with; and
- Does not permit the transmission of infectious disease.

Cleaning

- Sink (water at 54°C and detergent);
- Dishwasher (water at 75°C or water at 54°C and detergent);
- Glass washer (water at 54°C and detergent).

Sanitising

- Chemical food-grade sanitiser;
- Water at 77°C for hot water sanitising at the sink;

Rinsing compartment should be provided with heating elements capable of maintaining the water at a minimum temperature of 77°C.

9.3 Toilet facilities

The number of toilet facilities to be provided for staff and patrons can be found in the Building Code of Australia. However as a general guide the following will be required:

- A designated staff toilet/s containing:
 - Air lock and self closing door; or
 - Single door, mechanical ventilation and self closer.
- Patron sanitary conveniences are generally only required when a food premises accommodates more than 20 persons.
- Sanitary conveniences must be equipped with both hot and cold water, liquid soap and single-use paper towels.
- Gender identification signs are required on the toilet doors.
- A disabled facility must be provided in newly constructed premises and may be required when alteration, additions or a change of use are undertaken on an existing property. Contact the City's Building Services for further information prior to submitting an application.

9.4 Pests

- All openings should be protected as far as is practicable from pests through the use of screens, self-closing doors and other inhibiting mechanisms (e.g. air-curtains, fly-strips or fly zappers – fly-zappers must not be located over food contact surfaces).
- It is highly recommended to obtain the services of a qualified pest controller to carry out quarterly inspections and treatment for pests such as cockroaches and rodents.

10. FOOD VEHICLES

10.1 Food transport vehicles

Food Transport Vehicles must be:

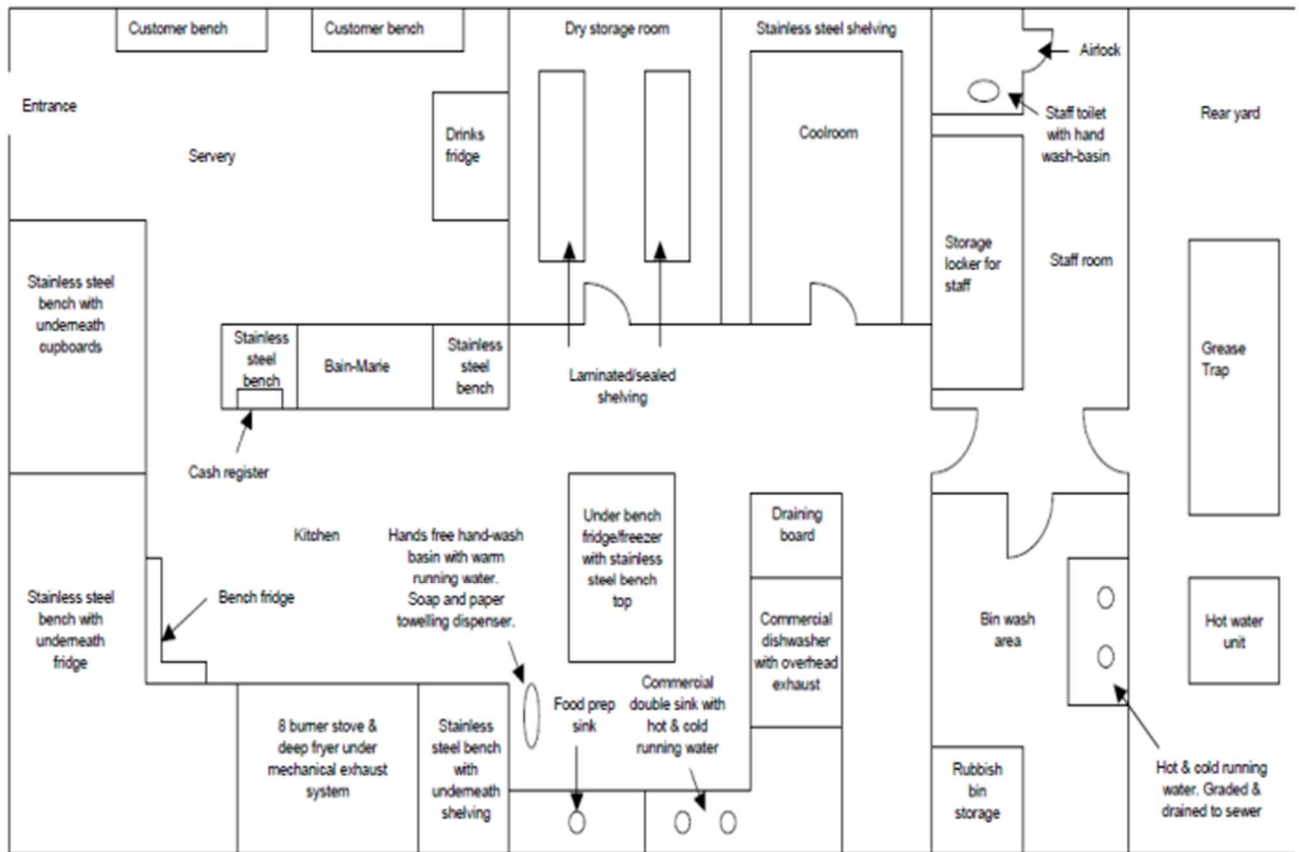
- Designed and constructed to protect food if there is a likelihood of contamination during transport;
- Designed and constructed to be easily and effectively cleaned and if necessary, sanitised;
- Smooth impervious surfaces to the storage compartment;
- Food is to be transported in such a way as to prevent contamination (e.g. packaged in food grade storage containers) and maintain temperature control for potentially hazardous food.

10.2 Mobile food vehicles

Mobile Food Vehicles are required to comply with the Food Standards Code. The minimum requirements listed below:

- The food preparation area must be sealed off from the driving area;
- A hand wash basin must be of adequate size, connected to a holding tank of sufficient size to contain all waste water and have a supply warm running water, liquid hand soap and disposable paper towels at all times;
- Utensil washing sink to be provided in addition to the hand wash basin and connected to the water holding tank;
- The vehicle must be equipped with a waste water tank external to the vehicle, of adequate capacity to hold all waste water, with an outlet of sufficient diameter to facilitate easy flushing and cleaning;
- Disposal of all liquid wastes generated within the vehicle shall be discharged to the sewer;
- Vehicles must be designed and constructed so that they are easily cleaned;
- Vehicles must be designed and constructed so food is protected from contamination during transport;
- Food contact surfaces must be designed and constructed so that they are easily cleaned and sanitised;
- Food vehicles must be kept in a clean condition and parts must be maintained in good working order;
- Provision of adequate storage of food, whether potentially hazardous and perishable or non-potentially hazardous;
- Ensure adequate storage facilities for items such as chemicals and personal items;
- Adequate rubbish disposal facilities must be provided and maintained in a sanitary condition.

Sample plan:



Sample specifications:

Floors: Sealed ceramic tiles, coving on floors including coolroom and dry store

Walls: Glass / stainless steel splash back behind sinks, hand wash basins, food preparation area.

Ceiling: Plasterboard painted in a light-coloured washable paint.

Equipment ducts): (benches, shelving, sinks, washbasins, cupboards, light fittings, ventilations

Round edged laminex, stainless steel, laminex or light-coloured washable gloss paint.