

Food premises design and construction specifications

The purpose of this document is to provide appropriate information on food premises construction and is relevant to new food premises or alterations to existing premises.

This document should be read in conjunction with Food Standards Australia New Zealand (FSANZ), Safe Food Australia Standard 3.2.3 (Food Premises and Equipment, 2nd edition) and the Australian Standard™ (AS) 4674-2004 *Design, construction and fit-out of food premises*. Food businesses in Victoria are required under the Food Act 1984 to comply with Standard 3.2.3 (Food Premises and Equipment).

- FSANZ Safe Food Australia Standard 3.2.3 (Food Premises and Equipment) can be viewed for free on the FSANZ website:

www.foodstandards.gov.au/thecode/

- AS 4674-2004 *Design, Construction & Fit-out of Food Premises* can be purchased from the Standards Australia website:

www.standards.org.au

Prior to beginning the construction or alteration, including the installation of new fittings or mechanical ventilation, plans are required to be submitted to Bayside City Council Environmental Health Services for approval. Two (2) copies of the plans, drawn to a scale of not less than 1:100, are to be submitted with the Application for Plans Approval form with the applicable fee to be paid.

Applicants must also ensure all that relevant Town Planning and Building Department approvals are obtained prior to commencing works.

Further information and advice may be obtained by contacting Bayside Environmental Health Services on (03) 9599 4417.

1. GENERAL REQUIREMENTS

1.1 General requirements

The design and construction of a food premises must:

- be appropriate for the purpose for which they are used.
- provide adequate space for food production and equipment.
- facilitate cleaning, sanitising and maintenance.
- prevent access and harborage of pests.
- keep out dust, dirt, fumes smoke and other contaminants.

1.2 Standard of workmanship

It is expected that the standard of workmanship will be high in the construction of a food premises. Unfinished work, rough grouting, uneven tiling, temporary finishes and any other low level of workmanship that lead to any other requirement of the Standards not to be met are not acceptable.

2. FOOD PREPARATION AND SERVERY

Floors, walls and ceilings

These requirements relate to all floors, walls and ceilings of areas used for food preparation, food display and food storage.

2.1 Floors

- Floor surfaces to be constructed of a smooth, durable material and be appropriate for the area. Floors must be able to be easily and effectively cleaned, be impervious and laid so that there is no ponding of water or allow for the harbourage of pests.

Examples of materials suitable for flooring in food preparation and storage areas, including within coolrooms and freezer rooms, include:

- Sealed ceramic tiles
- Commercial linoleum with welded seams
- Commercial grade epoxy resin
- Stainless steel

- Floors draining to a floor waste should be evenly graded (at least 1:100) so that water falls to the floor waste.

2.2 Coving

- The intersection of floors and walls in food preparation areas, wet areas and areas where floors are cleaned with hose and water, behind stoves, food preparation benches and other difficult to reach areas should be provided with coving.

Coving is to be extended up the wall to a height of 70mm and to be designed in a manner that a continuous uninterrupted surface between floor and wall is obtained. Approved materials include tiled, metal or plastic coving pieces.

Coving must be appropriately sealed to wall and floor surfaces to prevent gapping.

2.3 Walls

- Wall surfaces must be appropriate for the area. Walls must be able to be easily and effectively cleaned, be non-absorbent and be finished in a light-coloured washable gloss paint.
- Wall surfaces are to be of a smooth even surface, free of cracks, crevices, ledges, picture rails or open joint spaces to ensure that dirt, grease and other contaminants do not accumulate, to facilitate cleaning and prevent the access and/or harbourage of pests.
- Walls must be provided with a splashback in wet areas including behind all sinks and handwash basins, behind food preparation areas, cooking equipment and in areas of heavy wear. Suitable splash backs include tiling, stainless steel, colourbond or commercial linoleum. As a guide this material should be extended to a height of at least 1.8m from the floor.
- All service pipes should be chased into walls or alternatively fixed in approved brackets to provide 30mm clearance between walls and pipe.

2.4 Ceilings

- Ceilings should be smooth, free from cracks, crevices and ledges and be maintained in a good state of repair. An example of a suitable ceiling surface is plasterboard painted in a light-coloured washable paint.
- Ceilings must be sealed to prevent the entry of dirt, dust and pests. Junctions between walls and ceilings must be tightly joined.

The use of drop-in, removable panel ceilings is not permitted in food preparation areas or over areas where open food is displayed or served.

Fixtures, fittings and equipment

These requirements cover all fixtures, fittings (including benches, shelves, sinks, washbasins, cupboards, light fittings and ventilation ducts) and equipment (includes all equipment used in handling food, cleaning equipment and refrigeration motors) within a food premises.

2.5 Construction and installation of fixtures, fittings and equipment

- Fittings and fixtures, and equipment should be able to be easily and effectively cleaned and sanitised. Food contact surfaces should be smooth, free of cracks, chips, crevices, ridges or grooves that could harbour bacteria and impair cleaning.

Examples of materials suitable for fixtures, fittings and equipment in food preparation and storage areas include:

- Round edged laminex
 - Stainless steel
 - Raw wood/chipboard fittings such as cupboard units and shelving must be finished with laminex or a light-coloured, washable gloss paint. This not an approved surface for direct food contact such as benches or wet areas.
- Fit wheels or castors to equipment to enable it to be easily moved, preferably by one person.
 - Where fittings or fixtures are fixed, or are not easily movable, they should be located so that the external surfaces of the item and adjacent floor, wall, ceiling and other surfaces are able to be easily and effectively cleaned. Stoves, food heating appliances, shelving and refrigerators (other than cool rooms and freezer rooms) should be placed:
 - a) at least 150 millimetres from any wall, unless they are sealed to the wall with a flexible sealing material.
 - b) on legs of at least 150 millimetres in height or sealed to the floor on which they stand, in order that any spaces at the sides and underneath such equipment shall remain free of or can be kept free from dirt.
 - Ensure service wires, pipes or hoses (gas, electricity, water) can be disconnected (or flexible and long enough to enable the equipment to be moved).

Fixtures, fittings and equipment are to be installed in a manner that does not allow for the harbourage of pests.

2.6 Water supply

- Water must be provided in an adequate supply, at an appropriate volume, pressure and temperature, to meet the needs of the business including at peak operating times.
- Potable water, water that is acceptable for human consumption, must be provided for washing food ingredients, cooking, adding food/drinks, cleaning, sanitising and personal hygiene.
- All equipment used for cleaning and sanitising is to be connected to a continuous supply of hot and cold water.

2.7 Hot water systems

- A hot water system will be required to achieve the necessary temperatures required to effectively wash and sanitise equipment. The best temperature for washing utensils in the food service industry is between 54°C and 60°C.
- Warm water must be provided for hand washing. Warm water for personal washing is usually in the range of 20°C to 40°C.

2.8 Sinks

- Provide a double bowl stainless steel sink and draining board connected to an adequate supply of hot and cold portable running water through a single outlet for cleaning of all equipment, appliances and utensils.
- Sink sizes are to be adequate for the largest equipment that is to be washed / sanitised.
- Separate food preparation sinks are required for premises that frequently wash fruit and vegetables.

2.9 Dishwashers / glasswashers

- Dishwashers used to sanitise food contact equipment must have sufficient cycle temperatures and times to effectively clean and sanitise the equipment. Dishwashing and glass washing machines are to be:
 - i. fitted with a thermometer visible to the operator.
 - ii. capable of rinsing utensils at a water temperature of not less than 70°C or a chemical sanitiser must be used between the wash and rinse cycle or as specified in the manufacturers instructions.

2.10 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 5 metres 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 hand washbasins.
- Provided with a hands free device in food preparation areas such as sensors, or knee or foot operated devices.
- 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. A single bowl basin or sink separate to food preparation sinks is required.
- Provided with an adequate supply of potable warm running water through a single outlet.
- Provided with liquid soap, disposable paper towels via dispensers or other approved hand drying equipment.
- 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 to food.

An example of this is where a café has a rear kitchen and a servery area at the front of the shop where food is also prepared. A handwash basin may be required in both the kitchen and servery area depending on the nature of food prepared, the distance between the areas, and other obstructions within the premises.

2.10.1 Toilets

- If there are toilets on the premises hand basins are required to be installed immediately adjacent to the toilet or toilet cubicles. This is to ensure that food handlers wash their hands immediately after using the toilet to minimise the transfer of pathogens on hands to surfaces within the premises.

Also refer to the Building Code of Australia, which contains requirements for the number of hand basins that must be installed as part of the provision of sanitary fittings.

2.11 Ventilation

- Food premises must have sufficient natural or mechanical ventilation to effectively remove fumes, smoke, steam and vapours from the food premises to minimise the likelihood of airborne contamination of food in accordance with the Building Code of Australia. Natural ventilation will only be suitable in premises where little or no cooking occurs.

Premises that are undergoing a fit-out are required to meet natural/mechanical ventilation requirements in the Building Code of Australia (BCA). Contact the Building Department on 9599 4444 for further information.

- Provide a mechanical exhaust system over cooking and/or dishwashing appliances in accordance with Australian Standard No. 1668 and the Building Regulations 1994.

Building and / or planning permits may be required if you are installing a mechanical exhaust system, you can contact Council's Building Department and Town Planning Department on 9599 4444 for further information.

Guidance on the design and installation of mechanical exhaust systems may be found in Australian Standard 1668.2 and the Building Code of Australia.

2.12 Lighting

- Food premises must have an adequate lighting system that provides sufficient natural or artificial lighting to enable staff to carry out food handling operations, cleaning and sanitising and other activities in the premises.

2.13 Light covers

- In areas where open food is handled or stored, light fittings must be designed and constructed to prevent the contamination of food should the globe or tube shatter. Provide a shatterproof cover or sleeve to fittings.
- Light fittings whose purpose is to provide heat and or are part of equipment used to display or process open food are to be designed to prevent the contamination of the food should the globe or tube shatter.

2.14 Pest proofing

- Food premises must be designed to prevent, as far as practicable, the entry of rodents, birds, animals and insects. Suitable pest proofing methods include:
 - Installing self-closing flyscreen doors, double doors, flystrips or air curtains at entrances.
 - Installing mesh screens to windows or other ventilated openings.
 - Ensuring that drains, grease traps and ventilation pipes are sealed.
 - Sealing all gaps around piping/drains/cables/ducts that pass through external walls/ceilings/roofs.
 - Install appropriate flashing, weather strip, draft extractor or the like to the base of external doors.
- Insect control devices are not to be installed directly over food preparation surfaces, exposed food, clean equipment/utensils and unwrapped packaging materials. Insect control devices that are designed to electrocute or stun flying insects are to be designed so that the insect is retained within the device. Please be advised that insect control devices such as ultraviolet zappers are not approved as a means of pest control for entrances and openings, and can be used only as an addition to the approved pest control means listed above.
- Where bi-fold doors or the like are proposed to be installed in a food premises, the main food preparation area must be substantially enclosed to prevent the entry of pests, and further pest control measures may also be required. Please contact Council's Environmental Health Department on 9599 4417 to discuss your proposal before lodging plans.

3. Storage

3.1 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.

3.2 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.
- Ensure condensate from coolrooms is drained directly to sewer.

3.3 Dry food and packaging storage

- Provide adequate shelving/pallets 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.

3.4 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.

3.5 Cleaning and other chemicals

- Facilities are to be provided for the storage of chemicals used for cleaning and pest control, and for equipment used for these purposes.
- Facilities are to be located and designed so that food areas and areas used for personal effects storage cannot be contaminated.

3.6 Office materials

- Facilities such as a designated room, enclosed cupboard, drawers or any other sealed storage systems, are to be provided for the storing of business administration paperwork and materials.

4. Food transport

4.1 Food transport vehicles

- Food transport vehicles must be designed and constructed to protect food being transported from contamination. Ensure all parts of the vehicle used to transport food are capable of being effectively cleaned and surfaces in contact with food are capable of being sanitised if necessary.
- Food transport vehicles that are to be used for the transportation of potentially hazardous foods are to ensure that temperature control is maintained.

5. Sewage and waste disposal

Liquid waste is likely to contain pathogenic organisms particularly waste from toilets, personal washing or water contaminated with blood or soil. This liquid waste poses a potential contamination source in food preparation and storage areas.

5.1 Sewage

- Food premises must have a sewage and waste water disposal system that will effectively dispose of all sewage and wastewater. Disposal must be in accordance with statutory requirements including statutory environmental requirements and is to be constructed and located so that there is no likelihood of the sewage and wastewater polluting the water supply of the premises or contaminating food. Access opening to the sanitary drainage system is not to be located in areas of the premises where open food is handled.

5.2 Grease traps / arrestors

- You are required to contact South East Water's Trade Waste Branch on 131 694 to discuss grease trap requirements for your business.
- Grease traps must not be installed in areas where food, equipment or packaging materials are handled or stored.
- Access to grease traps for emptying shall not be through areas where open food is handled or stored or where food contact equipment and packaging materials are handled or stored.

5.3 Garbage and recyclable matter

- Food premises must have adequate facilities for the storage of garbage containers, containers for recyclable materials either in an external area of the premises or in a room made specifically for that purpose.
- The storage area must adequately contain the volume and type of garbage or recyclable matter. The waste should be placed in adequate bins, hoppers, wire cages or other containers suitable for the type of waste. All garbage and recyclable matter must be enclosed where practicable to deter pests and animals.

5.4 Bin wash areas

- The area used to store garbage and recyclable matter must be designed so that it may be easily and effectively cleaned. A bunded area graded and drained to sewer and provided with hot and cold water is required to be installed to facilitate cleaning of waste storage containers.

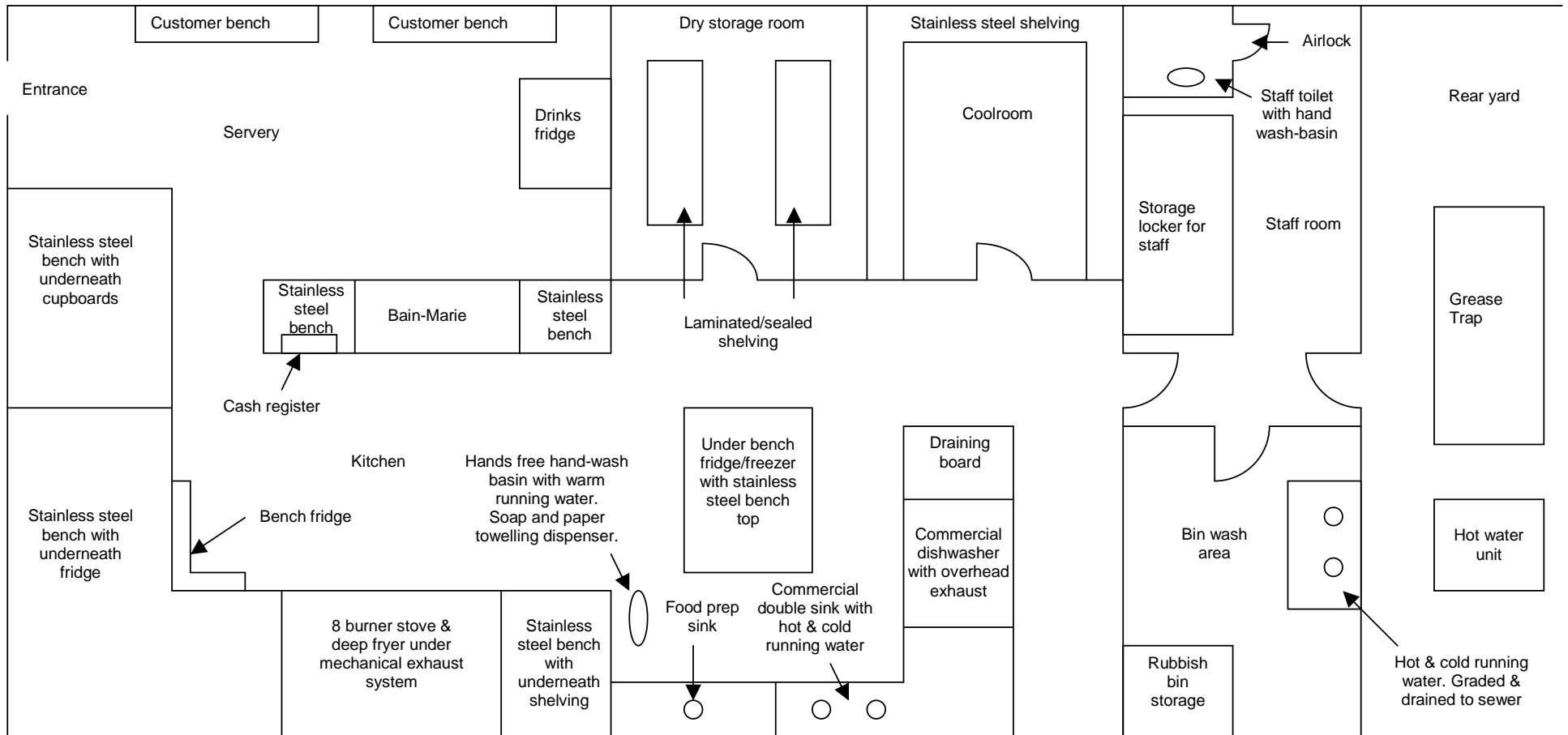
5.5 Cleaner's sinks / waste water disposal

- Provide a separate cleaners sink supplied with hot and cold water in an area that does not compromise food safety for the disposal of wastewater and for the cleaning of cleaning equipment. Facilities are to be located in a suitable area separate to where open food is handled.

5.6 Toilet facilities

- Food businesses must ensure that adequate toilets are provided for staff and for customers at the premises. Toilets must be provided in accordance with the Building Code of Australia; advice may be obtained from Council's Building Department on 9599 4444.
- Toilets are not to open directly into any area where open food is handled, displayed, or stored. An intervening ventilated space (air lock) fitted with self-closing doors is to be provided between toilet cubicles and food areas.

Sample plan



Address: 10 Bayside Drive, Bayside City Council
Name: Mr Smith **Contact number:** 0400 000 000

Specifications

Floors: Sealed ceramic tiles, coving on floors including coolroom & drystore

Walls: Glass/stainless steel splashback behind sinks, handwash basins, food prep area.

Ceiling: Plasterboard painted in a light-coloured washable paint

Equipment (benches, shelves, sinks, washbasins, cupboards, light fittings, ventilation ducts): Round edged laminex, stainless steel, laminex or light-coloured washable gloss paint.