HOW THIS GUIDE CAN HELP YOU
This information is for businesses that intend to design, construct and fit-out food premises and mobile food vehicles. It has been compiled to assist you in making decisions on the design of your food premises and the construction material proposed for use.

LEGISLATIVE REQUIREMENTS
The food premises should be designed and constructed in accordance with the Food Safety Standards and Australian Standard 4674-2004 Design, construction and fit-out of food premises. Knowledge and understanding of the standards is necessary to design, build and fit out a food premises.

PLANS AND DESIGN APPROVAL
Plans are the first step that needs to be completed when you want to design, build or fit-out a new or existing food premises. The plans must be assessed and approved by Council before building starts (as part of the food licence application process).

Your application for a food licence must be accompanied by a copy of all plans drawn to scale. Submit the application form, with the applicable fee, to Council at least 30 days before you commence operation.

TYPES OF PLANS REQUIRED
Copies of the following plans for your premises must be submitted with your food licence application.

- Floor plan – (scale of 1:50)
- Sectional elevations – (scale of 1:50)
- Hydraulic plans – (scale of 1:50)
- Mechanical exhaust ventilation plans – (scale of 1:50)

DETAIL REQUIRED ON PLANS
The following details are to be included on the plans:

- Finishes to floors, walls and ceilings
- Layout of all equipment, benches, fittings and fixtures, mechanical ventilation
- Door and window openings
- Customer and staff toilet details (if detached, provide the distance to the facilities and the number available for use) and
- Mechanical exhaust ventilation

HOW TO USE THIS GUIDE
The Food Safety Standards and Safe Food Australia can be found at www.foodstandards.gov.au. Safe Food Australia is the guideline to the legally binding Food Safety Standards.

The “Performance criteria” in the following tables outlines prescriptive design requirements as set out in the Food Standards Australia New Zealand Food Safety Standards.

The “Acceptable solutions” lists minimum requirements to meet the food safety outcomes. Any proposal that is not listed in the “Acceptable solutions” column will require documented proof that the design and construction will not affect the production of safe food.

The tables include a summary of the criteria for:

- Food storage/display
- Cleaning and sanitising of specific equipment
- Temperature measuring devices
- Design and Construction - General requirements.
- Water supply
- Sewage and waste water disposal
- Storage of garbage and recyclable matter
- Ventilation
- Lighting
- Floors
- Walls and ceilings
- Fixtures, fittings and equipment – general requirements
- Fixtures, fittings and equipment - Washing facilities
- Hand washing facilities
- Storage facilities
- Toilet facilities
- Food transport vehicles

MORE INFORMATION
For more information, please visit Townsville City Council’s website at townsville.qld.gov.au or call on 13 48 10.
### FOOD STORAGE/DISPLAY

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
<th>Performance criteria</th>
<th>Acceptable solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 3.2.2 Division 3 Clause 6 and 8 SFA pp.29 and 42</td>
<td>□ Protected from the likelihood of contamination □ Store/display potentially hazardous food under temperature control □ Able to be easily and effectively cleaned</td>
<td>» Protective sneeze barrier » Hot display unit 60°C or above » Cold display unit/ Cold room 5°C or below » Freezer units – food remains frozen</td>
</tr>
</tbody>
</table>

### CLEANING AND SANITISING OF SPECIFIC EQUIPMENT

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FSS 3.2.2 Division 5 Clause 20 SFA p.80</td>
<td>□ Ensure all equipment and utensils are in a clean and sanitary state □ Heat and/or chemicals applied to reduce the number of micro-organisms on the surface or utensil 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.</td>
<td>Cleaning  » Sink • Warm to hot water at 54°C to 60°C and detergent  » Dishwasher • Water at 74°C for stationary rack and detergent • Water at 66°C to 71°C for other dishwasher types and detergent  » Glass washer Sanitising » Chemical sanitiser (e.g. chlorine-based compounds, quaternary ammonium compounds, alcohol, iodine, organic acids and hydrogen peroxide) » Hot water - immersed in 77°C (minimum) hot water for 30 seconds</td>
</tr>
</tbody>
</table>

### TEMPERATURE MEASURING DEVICES

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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<th>Acceptable solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 3.2.2 Division 6 Clause 22 SFA p.85</td>
<td>□ Must have a temperature measure device that is readily available and can accurately measure the temperature of potentially hazardous food to +/- 1°C</td>
<td>» Probe thermometer » Infra-red thermometer » Fixed thermometers on equipment</td>
</tr>
</tbody>
</table>
### DESIGN AND CONSTRUCTION OF FOOD PREMISES - GENERAL REQUIREMENTS

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
<th>Performance criteria</th>
<th>Acceptable solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSS 3.2.3 Division 2 Clause 3</td>
<td>☐ Be appropriate for activities to be performed</td>
<td>» Appropriate location in relation to other activities</td>
</tr>
<tr>
<td></td>
<td>☐ Adequate space</td>
<td>» Adequate floor space</td>
</tr>
<tr>
<td></td>
<td>☐ Permit effective cleaning and sanitising</td>
<td>» No cracks or crevices</td>
</tr>
<tr>
<td></td>
<td>☐ Exclude dirt, dust, fumes, smoke and other contaminants</td>
<td>» Vermin proof construction</td>
</tr>
<tr>
<td></td>
<td>☐ Not permit the entry of pests</td>
<td>» Vermin proof strip to external doors</td>
</tr>
<tr>
<td></td>
<td>☐ Not provide vermin harbourage</td>
<td>» Insect screening to windows or similar</td>
</tr>
<tr>
<td>SFA p.102</td>
<td></td>
<td>» Insect screening to doors or similar</td>
</tr>
<tr>
<td></td>
<td></td>
<td>» Ceiling entries vermin proof</td>
</tr>
<tr>
<td></td>
<td></td>
<td>» Conduits vermin proof</td>
</tr>
</tbody>
</table>

#### WATER SUPPLY

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FSS 3.2.3 Division 2 Clause 4</td>
<td>☐ Adequate quantity</td>
<td>» Hot water system in adequate capacity for the activities on the premises</td>
</tr>
<tr>
<td></td>
<td>☐ Potable water</td>
<td>» Council reticulated water supply</td>
</tr>
<tr>
<td></td>
<td>☐ Appropriate temperature</td>
<td>» Tank and bore water (NATA lab certification stating compliance with NHMRC guidelines must be supplied)</td>
</tr>
<tr>
<td>SFA p.108</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### SEWAGE AND WASTE WATER DISPOSAL

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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</tr>
</thead>
<tbody>
<tr>
<td>FSS 3.2.3 Division 2 Clause 5</td>
<td>Must have a sewage and waste water disposal system that:</td>
<td>» Council sewage system or other approved waste water disposal system</td>
</tr>
<tr>
<td></td>
<td>☐ Effectively disposes of all sewage and waste water</td>
<td>» Trade waste agreement is required</td>
</tr>
<tr>
<td></td>
<td>☐ Is constructed and located so that there is no likelihood of the sewage and waste water polluting the water supply or contaminating the food</td>
<td>» Food transport vehicles – where there is no connection to Council sewage system, temporary holding tanks must be installed which can adequately hold the sewage and waste water</td>
</tr>
<tr>
<td>SFA p.113</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## STORAGE OF GARBAGE AND RECYCLABLE MATTER

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| FSS 3.2.3 Division 2 Clause 6 SFA p.11 | Must have facilities that: | » Wheeled refuse container  
« Commercial (bulk) refuse container  
« Approved storage area  
« Serviced by an approved contractor  
« Lidded containers within the premises  
« Plastic or similar material  
« External refuse and recycling storage areas should be covered and provided with a hose and tap connected to a water supply to easily and effectively clean the storage area |
| | □ Adequately contain the volume and type of waste and recyclable matter in the food premises  
| □ Enclose the garbage or recyclable matter to prevent access by vermin and animals  
| □ Are designed and constructed to be easily and effectively cleaned |

## VENTILATION

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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<th>Acceptable solutions</th>
</tr>
</thead>
</table>
| FSS 3.2.3 Division 2 Clause 7 SFA p.116 | | » Mechanical ventilation – for cooking equipment where electrical input exceeds 8kW, gas input exceeds 29MJ/h, deep fryers and dishwashers  
» Submit form 16 to certify that the mechanical ventilation complies with AS1668  
» Mechanical ventilation – alternative design with documentation demonstrating compliance with performance criteria  
» Natural ventilation – suitable for food premises where there is little or no cooking that generates steam or greasy air  
» Food transport vehicle – as above and all intake and exhaust vents are to be screened to prevent entry of vermin |
| | □ Effectively remove fumes, smoke, steam and vapours so as not to attract pests or enable moulds or microorganisms to grow  
| □ Mechanical exhaust ventilation system to be designed, constructed and installed in accordance with the Australian Standard 1668.2 – 2002  
| □ Able to be easily and effectively cleaned |

## LIGHTING

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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<th>Acceptable solutions</th>
</tr>
</thead>
</table>
| FSS 3.2.3 Division 2 Clause 8 SFA p.119 | | » Be shatter proof or fitted with approved light diffusers  
» Natural light  
» Artificial light which is recessed into ceilings or equipment where possible  
» Be free from any feature that would collect dirt or dust, harbour insects or make the fitting harder to clean |
| | □ Provides sufficient light to undertake all activities in the food premise  
| □ Able to be easily and effectively cleaned  
| □ Unable to provide harbourage for pests  
| □ Covered to protect food from contamination |
## Floors

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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</tr>
</thead>
</table>
| FSS 3.2.3 Division 3 Clause 10 SFA p.120 | Floors must be designed and constructed so that they:  
- are appropriate for the activities conducted in the food premises  
- can be easily and effectively cleaned  
- do not absorb grease, food particles or water  
- are laid so there is no ponding of water  
- are unable to provide a harbourage for pests | Floors are to be finished in an appropriate material and laid to a smooth surface, free from cracks and crevices to facilitate effective cleaning.  
- Sealed quarry or ceramic tiles  
- Epoxy resin  
- Commercial grade continuous vinyl  
- Trowelled cement  
- Stainless steel, slip proof  
- Other documented flooring demonstrating compliance with performance criteria  
Flooring materials must be light in colour. **Note:** It is best practice to have coving installed. |

## Walls and Ceilings

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| FSS 3.2.3 Division 3 Clause 11 Safe Food Australia - A guide to the Food Safety Standards (SFA) p.123 | Walls and ceilings must be designed and constructed so that they:  
- are appropriate for activities conducted in the food premises  
- protect food from contamination  
- prevent entry of dirt, dust and pests  
- do not absorb grease, food particles or water  
- can be easily and effectively cleaned | Walls and ceilings are to be finished with a washable and easy-to-clean surface such as:  
- Ceramic tiles  
- Gloss painted fibre cement sheeting  
- Vinyl sheets  
- Stainless steel  
- Aluminum steel  
- Pre-formed panels  
- Trowelled cement  
- Painted plaster  
- Smooth finish provided  
- Splash backs provided to sinks and benches  
- Heat resistance material behind cooking equipment  
- Light coloured paint  
- Ceilings must be of a solid, continuous construction  
**Note:** Drop-in panel ceilings will not be approved. |
### Fixtures, Fittings and Equipment - General Requirements

<table>
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<tr>
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</tr>
</thead>
</table>
| FSS 3.2.3 Division 4 Clause 12 SFA p.127 | Adequate for the production of safe food | Fittings, fixtures, shelving and equipment are:  
Fit for the intended use  
Designed, constructed and installed so that:  
» there is no likelihood that they will cause food contamination  
» they are able to be easily and effectively cleaned  
» adjacent floors, walls, ceilings and other surfaces are able to be easily and effectively cleaned  
» they do not provide a harbourage for pests  
Food contact surfaces must be:  
» able to be easily and effectively cleaned and sanitised  
» impervious  |

### Fixtures, Fittings and Equipment - Washing Facilities

<table>
<thead>
<tr>
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<th>Acceptable solutions</th>
</tr>
</thead>
</table>
| FSS 3.2.3 Division 4 Clause 12 SFA p.127 | Cooking equipment, eating and drinking utensils must be able to be easily and effectively cleaned and sanitised | Double bowl sink, OR single bowl sink and dishwasher  
Glass washer  
Separate sink for fruit/vegetable washing and utensil and equipment cleaning  
Separate hand wash basin  |

**Note:** Food transport vehicles with sinks and basins must be connected to a waste water tank or sewer and may require a trade waste permit.

### Storage Facilities

<table>
<thead>
<tr>
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<th>Acceptable solutions</th>
</tr>
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</table>
| FSS 3.2.3 Division 5 Clause 15 SFA p.142 | Adequate storage facilities for the storage of items that are likely to be source of contamination of food, including chemicals, office equipment, maintenance equipment, dirty linen, clothing and personal belongings  
Located where there is no likelihood of stored items contaminating food or food contact surfaces | Separated staff room  
Clearly designated shelf/cupboard or locker for personal belongings  
Separate storage room or designated shelf/cupboard for chemical/cleaning items  
Separate storage room or clearly designated shelf/cupboard for office equipment, maintenance equipment and/or dirty linen |
### TOILET FACILITIES

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
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</tr>
</thead>
</table>
| FSS 3.2.3 Division 5 Clause 16 SFA p.143 | Appropriate number of toilets are available for the use of food handlers (see Building Code of Australia) | » Internal staff toilet with double air lock/mechanical ventilation and self-closers  
 » External staff toilet  
 » External common toilet  
 » Food transport vehicles must have nominated toilet facilities |

### HAND WASHING FACILITIES

<table>
<thead>
<tr>
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</tr>
</thead>
</table>
| FSS 3.2.3 Division 4 Clause 14 SFA p.136 | Located in an easily accessible location for all food handlers:  
  • Within the area where food handlers work if their hands are likely to be a source of contamination of food; and  
  • if there are toilets on the food premises – immediately adjacent to the toilets or toilet cubicles  
  □ Permanent fixture  
  □ Connected to, or provided with, a supply of warm running, potable water (between 20°C and 40°C)  
  □ Warm and cold water delivered through a common spout.  
  □ A size that allows easy and effective hand washing  
  □ Clearly designated for the sole purpose of washing hands, arms and face  
  □ Supply of soap maintained at basin  
  □ Single use paper towel provided at basin  
  □ Waste container provided at basin for collection of used towel  
  □ Must be connected to the sewerage or waste water disposal system | » Suitably sized hand wash basin provided in the area where the food handlers are working  
 » Suitably sized hand wash basin provided adjacent to toilet facilities  
 » Soap and paper towel provided to each basin  
 » Rubbish bin provided to each basin  
 » Connected to sewer, or other approved waste water disposal system  
 » Water delivered through a common spout |
# FOOD TRANSPORT VEHICLES

<table>
<thead>
<tr>
<th>Relevant Food Safety Standard</th>
<th>Performance criteria</th>
<th>Acceptable solutions</th>
</tr>
</thead>
</table>
| FSS 3.2.3 Division 5 Clause 17 SFA p.144 | ☐ Must be designed and constructed to protect food if there is a likelihood of contamination during transport  
☐ Able to be easily and effectively cleaned  
☐ Able to store potentially hazardous food at or below 5°C or at or above 60°C | » Smooth, impervious and easy to clean surfaces  
» Food is to be transported in such a way to prevent contamination – i.e. packaged in food grade containers |