

FIRE SERVICES DEPARTMENT FIRE SAFETY STANDARDS FOR

BAKERIES AND FOOD FACTORIES FOR MANUFACTURE AND SALE ON PREMISES

(Explanatory Notes)

Introduction

- 1. This document consists of three parts :
 - 1.1 These explanatory notes, Form PPA/101(C)-1, containing information relevant to the safe operation of this type of bakeries and food factories;
 - 1.2 The standard requirements, Form PPA/101(C)-2, to be complied with prior to the issue of Fire Services Certificate required for the licensing of food premises under Section 33B of the Food Business Regulation (Cap. 132 sub. leg. X); and
 - 1.3 Fire precautions, Form PPA/101(C)-3, that should be observed for the safe operation of the food business after issue of licence.
- 2. For food businesses already licensed, the licensees are advised to upgrade the fire protection to the standard as stipulated in this document at the earliest opportunity.
- 3. For other types of food business classified according to the risks they impose, please refer to :
 - 3.1 PPA/101(A) Food businesses in small houses;
 - 3.2 PPA/101(B) Bakeries and food factories for manufacture only;
 - 3.3 PPA/101(D) General (fast food) restaurants;
 - 3.4 PPA/101(E) Factory canteens with low fire potential;
 - 3.5 PPA/101(F) Light refreshment restaurants with low fire potential;
 - 3.6 PPA/101(G) Light refreshment restaurants with high fire potential;
 - 3.7 PPA/101(H) Barbecue/hot pot restaurants with low fire potential;
 - 3.8 PPA/101(I) General restaurants with low fire potential;
 - 3.9 PPA/101(J) Factory canteens with high fire potential, Barbecue/hot pot restaurants with high fire potential, and General restaurants with high fire potential.

Application

4. The contents of this document apply to food factories which involve the manufacture or preparation of food for sale on the premises such as bakeries and fast food shops without seating accommodation. In terms of licencing requirements under Food Business Regulation (Cap.132 sub. leg. X), these may either be for the purpose of applying for a Bakery licence or a Food Factory licence.

Restriction

- 5. The food factory shall not be located :-
 - 5.1 In the case of non-industrial buildings :-
 - 5.1.1 In areas designed for emergency use, such as the buffer floor (also referred to as the refuge floor), or
 - 5.1.2 In areas designed for other use, such as car parks.
 - 5.2 In the case of industrial buildings, in any area other than the ground floor only as admission of members of public to such buildings may expose them to dangers they are not aware of, nor prepared to face. The area of the premises shall not exceed 230 m².

Fire Services Requirements

- 6. The Fire Services requirements as detailed in Form PPA/101(C)-2 are formulated for three purposes :
 - 6.1 To reduce the probability of fire;
 - 6.2 To mitigate the effect of fire; and
 - 6.3 To limit the spread of fire.
- 7. These requirements do not include those stipulated by the Building Authority, as the controlling authority on :-
 - 7.1 Means of escape although whatever required under the Buildings Ordinance may be, after issue of licence, enforced by the Fire Services Department under Sections 14 and 15 of the Fire Services(Fire Hazard Abatement) Regulation (Cap.95 sub. leg. F); and
 - 7.2 Building construction such as compartmentation and fire resistance of building elements. For buildings of sub- standard construction or where there have been serious alterations to affect the fire safety, the Director of Fire Services may refuse to issue Fire Services Certificate in accordance with Section 33B of the Food Business Regulation (Cap. 132 sub. leg. X).

Fire Services Department (06/2010)



FIRE SERVICES DEPARTMENT FIRE SAFETY STANDARDS FOR BAKERIES AND FOOD FACTORIES FOR MANUFACTURE AND SALE ON PREMISES (Standard Requirements)

- 1. All fire service installations and equipment provided for the premises shall be retained and maintained in efficient working order. For all maintenance, alterations and additions, such works shall be carried out by a Registered FSI Contractor who shall issue Certificate(s) of Fire Service Installations and Equipment (FS 251) to the owner with copies forwarded to the Director of Fire Services within 14 days after completion of the works. A certificate of compliance (FSI/314A or FSI/314B as appropriate) shall also be submitted by the responsible Registered FSI Contractor to the Director of Fire Services for the alteration and addition works.
- 2. Portable fire fighting equipment of the approved type, over and above those installed for the occupation of the building, shall be provided as follows:
 - 2.1 _____x 9L water type extinguisher at _____
 - 2.2 _____x 4.5 kg CO₂ gas type fire extinguisher at _____
 - 2.3 _____x 1.44 m² fire blanket at _____
- 3. All exits shall be suitably indicated by illuminated signs bearing the word and characters "EXIT ⊞□" in block letters and characters of not less than 125mm high with 15mm strokes. The colour of the letters/characters and contrasting colour on the background shall comply with the Code of Practice for Minimum Fire Service Installations and Equipment.
- 4. All combustible materials used as false ceilings, partitions or wall furnishings shall conform to British Standard 476 : Part 7 Class 1 or 2 Rate of Surface Spread of Flame or to another standard acceptable to the Director of Fire Services, or shall be brought up to any of those standards by treating with a fire retardant paint or solution acceptable to the Director of Fire Services. In the latter case, the work shall be carried out by a Class 2 Registered Fire Service Installation Contractor and a certificate (FS251) to this effect from the Contractor shall be forwarded to this Department as documentary proof of compliance.

- 5. All draperies and curtains, if installed, shall be made of fire resistant material and conform to British Standard 5867: Part 2 fabric type B when tested in accordance with British Standard 5438 or to another standard acceptable to the Director of Fire Services, or shall be brought up to any of those standards by treating with a fire retardant solution acceptable to the Director of Fire Services. In the latter case, the work shall be carried out by a Class 2 Registered Fire Service Installation Contractor and a certificate (FS251) to this effect from the Contractor shall be forwarded to this Department as documentary proof of compliance.
- 6. PU Foam
 - 6.1 All polyurethane (PU) foam filled mattresses and covering material used for fabrication of the mattresses shall conform to British Standard 7177 (for use in medium hazard premises/building); or Flammability Test Procedure for Mattresses for Use in High Risk Occupancies (Technical Bulletin Number 121) or Flammability Test Procedure for Use for Mattresses for Use in Public Buildings (Technical Bulletin Number 129) as issued by the Bureau of Home Furnishings and Thermal Insulation, Department of Consumer Affairs, State of California; or to other standard acceptable to the Director of Fire Services.
 - 6.2 All PU foam filled upholstered furniture and covering material used for fabrication of the furniture shall conform to British Standard 7176 (for use in medium hazard premises/building); or Flammability Test Procedure for Seating Furniture for Use in Public Occupancies (Technical Bulletin Number 133) as issued by the Bureau of Home Furnishings and Thermal Insulation, Department of Consumer Affairs, State of California; or to other standard acceptable to the Director of Fire Services.
 - 6.3 Each PU foam filled mattresses and upholstered furniture conforming to British Standard 7177 (for use in medium hazard premises/building) and British Standard 7176 (for use in medium hazards premises/building) respectively shall bear an appropriate label (Appendix).
 - 6.4 Invoices from manufactures/suppliers and test certificates from testing laboratories indicating that the PU foam filled mattresses and/or furniture items have complied with the specified standards shall be produced for verification. Test certificate shall be issued by a testing laboratory accredited to conduct test according to the specified standard, and be authenticated by the company's stamp of manufacturer/supplier.
- 7. The requirements for the use of fuels in the kitchen are stipulated in Form PPA/102.

<u>Remarks</u>

Should the applicants have insurmountable difficulties in complying with the prescribed requirements, they can submit alternative proposals for FSD's consideration. For example, applicants can adopt the Fire Engineering approach, or submit a study report to explain how they will tackle problems of fire suppression, smoke control, evacuation and access of fire services personnel etc.

Fire Services Department (06/2010)



FIRE SERVICES DEPARTMENT FIRE SAFETY STANDARDS FOR BAKERIES AND FOOD FACTORIES FOR MANUFACTURE AND SALE ON PREMISES (Fire Precautions)

Means of Escape

- 1. The following are deemed by the Director of Fire Services as means of escape within the meaning of Section 2 of the Fire Services (Fire Hazard Abatement) Regulation (Cap.95 sub. leg. F):-
 - 1.1 In the case of open-front premises, the entire width of the shop front;
 - 1.2 In the case of premises provided with doors and exits, all such exits/doors giving onto any corridor leading to the open, or directly giving onto the open.
- 2. All means of escape should be kept free from obstruction. In particular:-
 - 2.1 No matter or thing may be left in the area as defined at para. 1 above at any time when the building is occupied; and
 - 2.2 All exits/doors should be kept openable from the inside without the use of a key and all metal gates and shutters, where installed, should be kept in the open position at any time when members of public are present in the premises.
- 3. Failure to observe these precautions may result in the operator being prosecuted under Sections 14 and 15 of the Fire Services (Fire Hazard Abatement) Regulation (Cap.95 sub. leg. F) without prior warning.

Premises

- 4. The number of persons permitted in the sale area at any time should not exceed the limit approved by the Building Authority.
- 5. Food packaging made of expanded polystyrene foam should be stored in cupboards or contained in metal dispensers to avoid coming into contact with excessive heat or naked flame.
- 6. Failure to observe the precautions as described in para. 5 may result in the operator being served with a Fire Hazard Abatement Notice and failure to comply with the notice may lead to prosecution under Section 9 of the Fire Services (Fire Hazard Abatement) Regulation (Cap.95 sub. leg. F).

Fire Service Installations and Equipment

- 7. All fire service installations and equipment provided should be:
 - 7.1 Kept clear from any obstruction;
 - 7.2 Clearly indicated as regard to their locations and methods of operation;
 - 7.3 Maintained in efficient working order at all times; and
 - 7.4 Inspected at least once every twelve months.
- 8. Failure to observe the precautions as described in para. 7.3 and 7.4 may result in the owner of the installations being prosecuted under Regulation 8 of the Fire Service (Installations and Equipment) Regulations (Cap.95 sub. leg. B).

Ventilating System

- 9. If the ducting or trunking of ventilating system installed on the premises passes through any wall, floor or ceiling from one compartment of the building to another, the owner of the ventilating system should:-
 - 9.1 Keep such ventilating system in safe and efficient working order at all times; and
 - 9.2 Cause every damper, filter and precipitator in such ventilating system to be inspected by a registered specialist contractor (ventilation works category) at least once in every twelve months.
- 10. Failure to observe these precautions may lead to the owner being prosecuted under Section 5 of the Building (Ventilating Systems) Regulations (Cap.123 sub. leg. J).

Daily Closing Down Inspection

- 11. The food premises should be thoroughly inspected before closing down each day to:-
 - 11.1 Extinguish any possible source of ignition that may be left unattended;
 - 11.2 Switch off the electrical main supply if possible, or at least switch off those circuits that are not required; and
 - 11.3 Turn off the fuel supply.
- 12. This precaution aims to prevent fires occurring in unattended food premises, which account for a very high percentage of past statistics.

Emergency Procedures

- 13. All staff of the food factory should be made aware of the emergency procedures to be taken in the event of a fire. These include:
 - 13.1 Giving warning of the fire by operating the manual fire alarm provided as part of the building FSI, or by shouting "fire";

- 13.2 Assisting to evacuate the occupants;
- 13.3 Reporting to Fire Services Department through "999";
- 13.4 Turning-off the fuel supply if the fire involves food warming utensils;
- 13.5 Turning the main switch to "OFF" position if the fire involves electrical installation. This should be done only after evacuation of the occupants and when it is safe to do so; and
- 13.6 Attempting to extinguish the fire by using the FSI and equipment if it is safe to do so.
- 14. The local fire station should be consulted for advice if required.

Fire Services Department (06/2010)

<u>Sample I (樣本 I)</u>

NOTICE

THIS ARTICLE IS MANUFACTURED FOR USE IN PUBLIC OCCUPANCIES AND MEETS THE FLAMMABILITY REQUIREMENTS OF CALIFORNIA BUREAU OF HOME FURNISHINGS TECHNICAL BULLETIN 133"/129"/121". CARE SHOULD BE EXERCISED NEAR OPEN FLAME OR WITH BURNING CIGARETTES.

告示

此家具為供公眾使用而製造, 符合加利福尼亞州家具局技 術報告(TB)第 133"/129"/121"的可燃性規定,請勿將此家具 放近明火或有香煙的地方。

*Delete wherever inapplicable/請刪去不適用者

- Note : The minimum size of the label shall be 5 x 7.5 cm and the minimum size of the type shall be 3 mm in height. All type shall be in capital letters.
- 註 : 標籤面積最小須為 5 x 7.5 厘米,字體高度最小須為 3 毫米。 (英文版告示的所有字體必須為大楷)

<u>Sample II (樣本 II</u>)



Sample III (樣本 III)