



FIRE SERVICES DEPARTMENT

**FIRE SAFETY REQUIREMENTS FOR
E-WASTE DISPOSAL LICENCE (INDUSTRIAL BUILDING)**

A. Restrictions on Location

The premises shall be located in Industrial Building except:

- (a) at any part of buildings/structures which are of substandard construction;
- (b) at any floor below ground level; and
- (c) in areas designated for emergency use such as buffer or refuge floor.

B. 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 Fire Service Installations Contractor (RFSIC) 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 RFSIC to the Director of Fire Services for the alteration and addition works.
2. A sprinkler system shall be provided in premises occupying an area exceeding 230m².
3. There shall be sufficient hydrants and hose reels to ensure that every part of the building can be reached by a length of not more than 30m of Fire Service hose or hose reel tubing.
4. A manual fire alarm system with visual alarm signals in accordance with the Code of Practice for Minimum Fire Service Installations and Equipment with fire alarm call point shall be provided adjacent to all exits (within a distance of not more than 2 m). The manual fire alarm shall be provided with one actuating point and one audio warning device at each hose reel point. This actuating point shall include facilities for fire pump start and audio warning devices shall be provided to form part of the fire alarm system.
5. Portable fire-fighting equipment of the approved type, over and above those installed for the occupation of the building, shall be provided at the following scales:
 - 5.1 _____ x 9L water type extinguisher (FE) at _____
 - 5.2 _____ x 2 kg dry powder type fire extinguisher (FE) at _____

6. All exits shall be suitably indicated by illuminated signs, in the form of either characters exit signs, combined graphical symbol and characters exit signs, or graphical symbol exit signs, installed in accordance with the requirements set out in the Code of Practice for Minimum Fire Service Installations and Equipment as published from time to time by the Director of Fire Services. Adequate directional signs indicating the route to an exit shall be provided at locations where exit signs are not readily visible.
7. Emergency lighting shall be provided to the premises in accordance with the requirements set out in the Code of Practice for Minimum Fire Service Installations and Equipment as published from time to time by the Director of Fire Services and/or the **attached** “Requirements for Self-contained Luminaries Emergency Lighting System” (PPA/104(A)) shall be complied with.
8. The windows of the premises shall not in any way be obstructed by any decoration or sealed up for more than 50% of the designed openable/breakable window areas totally, nor 25% of these areas located on the upper part, unless a dedicated smoke extraction system that conforms to the standard set out in Code of Practice for Minimum Fire Service Installations and Equipment as published from time to time by the Director of Fire Services shall be provided.
9. A ventilation/air-conditioning control system shall be provided to the premises if applicable and the **attached** “Requirements for Ventilation/Air-conditioning Control System for Licensed Premises” shall be complied with.
10. The mechanical ventilating system installed at the premises shall comply with the Building (Ventilating Systems) Regulations, Cap.123J, Laws of Hong Kong and the fire safety requirements for mechanical ventilating systems as stipulated in the Fire Services Department Circular Letter No.4/96 Part XI.
11. The following requirements on storage of e-waste products shall be adhered to. For better understanding, the illustrations are shown in **Appendix I** for reference.
 - 11.1 The maximum height of storage is 3m;
 - 11.2 The maximum width of stack is 20m in length; and
 - 11.3 The maximum storage areas shall be 50m² for any single block, with no less than 2.4m clearance around the block.

Additional Requirements (if any)

Remarks

Should the applicants have insurmountable difficulties in complying with the above 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 etc.

C. Fire Safety Precautions

1. Fire Service installations and Equipment

All fire service installations and equipment provided shall be:

- 1.1 Kept clear from any obstruction;
- 1.2 Clearly indicated as regard to their locations and methods of operation;
- 1.3 Maintained in efficient working order at all times; and
- 1.4 Inspected at least once every twelve months.

Works related to para.1.4 above shall be carried out by a Registered Fire Service Installations Contractor (RFSIC) who shall issue Certificate(s) of Fire Service Installations and Equipment (FS251) to the owner with copies forwarded to the Director of Fire Services within 14 days after completion of the works. Failure to observe the FS precautions in para1.3 & 1.4 may result in the owner of the installations being prosecuted under Regulation 8 of the Fire Services (Installations and Equipment) Regulations, Chapter 95B, Laws of Hong Kong.

2. Means of Escape

All means of escape should be kept free from obstruction. In particular:

- 2.1 No article or thing may be left in the means of escape of the building at any time; 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 the public are present in the premises.

Failure to observe these precautions may result in the operator or the responsible person being prosecuted under Section 14 and 15 of the Fire Services (Fire Hazard Abatement) Regulation (Cap.95 sub. leg.) without prior warning.

3. Dangerous Goods

- 3.1 No storage of any dangerous goods in excess of the exempt quantity within the meaning of the Dangerous Goods (General) Regulations, Chapter 295B, Laws of Hong Kong is permitted, except with a licence or approval granted by the Director of Fire Services.
- 3.2 If the applicant proposes to apply for a Dangerous Goods (DG) licence, the general siting requirements shall be observed:
 - 3.2.1 The proposed DG store should normally be located on ground floor of a building. If such building is an industrial building, the proposed DG store could be located on upper floor not higher than 30m above the ground floor level. The store(s) is/are to be provided with a lobby approach. The lobby is to be provided with a window opening on the external wall. Such opening shall be provided with fixed open

glass louvers or without glazing. The lobby should also be accessible by aerial ladders or platforms of fire appliances;

3.2.2 The proposed DG store should not be located directly under or above another DG store on the next higher floor (or roof) or the next lower floor respectively;

3.2.3 Storage above ground shall be indicated by an approved standard sign fixed to the external wall adjacent to the lobby window opening of the store. The sign shall not obstruct access or ventilation to the lobby. The sign shall be painted with red-reflective materials on a white background. Note: Storage of category 2 dangerous goods on a floor above ground level is not recommended; and

3.2.4 An applicant should decide on the siting and construction of the DG store and associated facilities in the planning stage. Since the construction of DG store may involve alteration works to an existing building or affect the safety remaining parts of the building, applicant is strongly advised to submit the general building plans including the location of the proposed DG store to the Buildings Department for siting approval prior to the submission of a formal DG licence application to the Dangerous Goods Division.

4. Avoidance of smoking and naked flame

4.1 Maintain high degree of fire safety alertness. Never smoke outside the designated smoking area. Moreover, cigarette ends should be entirely extinguished before discard into the trash;

4.2 Keep away from the accumulated wastes and combustible articles whilst smoking;

4.3 Avoidance of naked flames in the premises as far as possible. Naked flame should be kept away from combustible materials; and

4.4 Naked flame must be completely extinguished before leaving.

5. Proper use of electrical appliance and maintenance of electrical installation

5.1 Avoid overloading of electrical installation;

5.2 Repair, maintenance or installation of new electrical appliances must be carried out by registered electrical contractors/workers; and

5.3 Waste batteries and waste electronic parts should be stored properly and avoid contacting each other or contacting water which may cause the outbreak of fire.

6. Precautionary measures during welding and cutting process

6.1 Adequate ventilation should be provided to prevent any flammable gas from accumulating in the workplace; and

6.2 Particular attention should be drawn to the wind direction during welding or cutting operations to prevent slag or sparks from being carried away by wind and igniting combustible materials in the vicinity.

7. Check before ending the day's operation

- 7.1 The premises should be checked thoroughly to ensure that the extinguishment of fire source before ending the day's operation; and
- 7.2 Turning off the main switch of the electricity supply if possible or at least turn off the switch of electrical wiring, the fuel supply valves and various engines.

8. Fire safety management

- 8.1 A caretaker should be deployed to the premises at all times. Should an emergency occurs, he/she should provide immediate assistance as appropriate and report to the emergency services.

Appendix I

The licence applicant should adhere to the requirements on storage of e-waste products as below:

Requirements

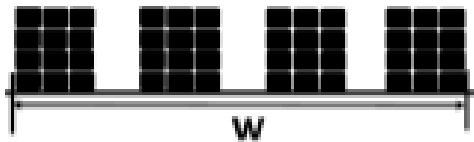
i.



Remarks

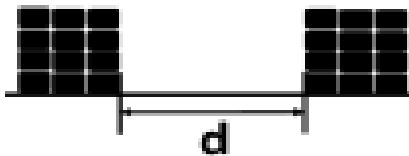
The maximum height of storage (h) is 3m.

ii.



The maximum width (w) of stack is 20m in length.

iii.



The maximum storage areas shall be 50m² for any single block, with no less than 2.4m clearance (d) between the block.