

**SCH/102****FIRE SERVICES DEPARTMENT****Fire Safety Requirements
for
Converted School Premises****A. Restrictions on Location**

Converted school premises shall not be located : -

- (a) in any premises designed for residential use;
- (b) in any industrial building, warehouses, cinemas or premises whereby the undertakings therein may endanger the lives or safety of pupils;
- (c) in any premises situated at a height of 30m above ground level;
- (d) in any premises located vertically above/below a restaurant/club.

B. Standard Requirements

1. All fire service installations and equipment (FSI) provided for the premises shall be retained and maintained in efficient working order. For all maintenance, alteration and addition, 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, FSI/314B or FSI/314C 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. A sprinkler system in accordance with the Code of Practice for Minimum Fire Service Installations and Equipment shall be provided if the school premises exceeds 230 square metres in area on any floor, or its aggregate area of different floors exceeds 230 square metres without fire separation.
3. If sleeping accommodation is provided for children, a fire detection system activated by smoke detectors shall be provided in such area(s). This system shall be linked to the Fire Services Communication Centre by direct telephone line.

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4. A fire hydrant/hose reel system in accordance with the Code of Practice for Minimum Fire Service Installations and Equipment shall be provided if the school premises exceeds 230 square metres in area on any floor, or its aggregate area of different floors exceeds 230 square metres without fire separation.
5. Portable fire fighting equipment of the approved type, over and above those installed for the occupation of the building, shall be provided as follows:
 - 5.1 _____ x 9 L water type fire extinguisher(s) at _____;
 - 5.2 _____ x 4.5 kg CO₂ type fire extinguisher(s) at _____ ; and
 - 5.3 _____ x 1.44 m² fire blanket at _____.
6. 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 at each of the following locations shall be provided :-
 - 6.1 the main entrance;
 - 6.2 near each exit.
7. All exits shall be suitably indicated by illuminated signs bearing the word and characters “EXIT 出口” 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.
8. If the exit signs are out of sight to any location within the premises, suitable directional signs in same dimensions as the exit signs shall be provided to assist the occupant to identify the exits in the event of an emergency.
9. Emergency lighting shall be provided to the premises and the attached requirements for Self-contained Luminaries Emergency Lighting System (PPA/104(A)) shall be complied with.
10. All combustible materials used for 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 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.

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11. All draperies and curtains, if installed, shall be made of fire resistant material and conform to British Standard BS 5867: Part 2 (Type B performance requirements) when tested in accordance with BS EN ISO 15025:2002 or to any other 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 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.

12. PU Foam
 - 12.1 All polyurethane (PU) foam filled mattresses and covering material used for fabrication of mattresses shall conform to British Standard 7177 (for use in medium hazard premises/building); or “Standard for the Flammability (Open Flame) of Mattress Sets” - (Part 1633 of Title 16 of Code of Federal Regulations) as issued by the Consumer Product Safety Commission (CPSC) in the US; or to other standard acceptable to the Director of Fire Services.

 - 12.2 All PU foam filled upholstered furniture and covering fabric 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.

 - 12.3 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).

 - 12.4 Invoices from manufacturers/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.

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13. An exit route plan drawn to a ratio of not less than 1:200 showing the floor layout of the premises and the directions of egress to escape staircases and means of escape shall be displayed prominently on wall immediately adjacent to the exit door of each classroom. The size of the exit plan shall not be less than 250mm x 250mm and shall be affixed at a height of 1500mm above the floor level.
14. The actual layout of the premises shall be in conformity with the latest approved plan.
15. If laboratory work is to be handled during the course, the attached Fire Safety Requirements for Laboratory (SCH/101) shall be complied with.
16. If a design & technology/art room is established, the attached Fire Safety Requirements for Design & Technology / Art Room (SCH/104) shall be complied with.
17. If a computer room / server room is established, the attached Fire Safety Requirements for Computer Classroom (SCH/107) shall be complied with.
18. Additional Requirements (if any) : -

Remarks :

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.

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.

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Works related to para. 1.4 above shall be carried out by a Registered FSI Contractor 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 para 1.3 & 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 shall be kept free from obstruction. In particular : -

- 2.1 No article or thing shall be left in the means of escape at any time (if in a domestic building) / at all times when persons are present in the building (if in a commercial building); and
- 2.2 All exits/doors shall be kept openable from the inside without the use of a key and all metal gates and shutters, where installed, shall be kept in the open position at all times when members of the public are present in the premises.

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, Chapter 95F, Laws of Hong Kong without prior warning.

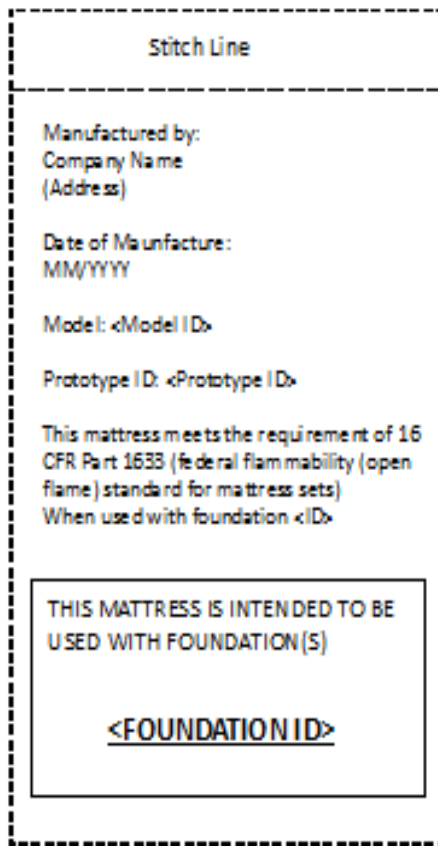
- 2.3 All smoke stop doors provided in the premises shall be kept in closed position at all times.

3. Dangerous Goods

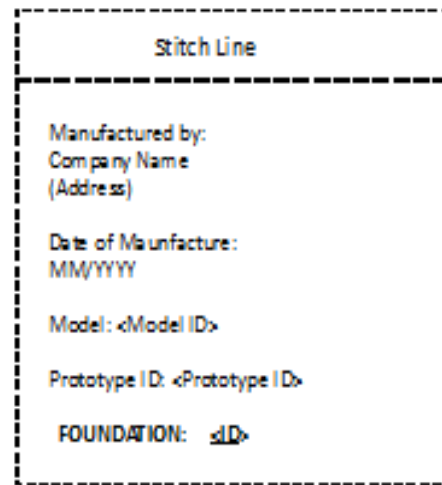
- 3.1 No storage of any dangerous goods in excess of the exempt quantity within the meaning of the Dangerous Goods (General) Regulations, Chapter 295B, Laws of Hong Kong is permitted without a licence or approval granted by the Director of Fire Services.

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Sample I (樣本 I)



Sample II (樣本 II)



The minimum size of the label shall be 2 X 3 inches and the minimum size of the type shall be one-eighth inch in height. All type shall be in capital letters.

Sample III (樣本 III)



Sample IV (樣本 IV)





SCH/104

FIRE SERVICES DEPARTMENT

**Fire Safety Requirements
for
Design & Technology / Art Room**

1. Portable fire fighting equipment of the approved type, over and above those installed for the occupation of the building, shall be provided as follows:
 - 1.1 _____ x 9 L water type fire extinguisher(s) at _____;
 - 1.2 _____ x 4.5 kg CO₂ type fire extinguisher(s) at _____ ; and
 - 1.3 _____ x 1.44 m² fire blanket at _____.
2. The room shall be completely separated from other part of the premises by walls of not less than one hour fire resistance period. High level ventilation to open balcony / open type corridor at a height of 1800 mm from floor level may be provided.
3. Windows or wall openings giving onto corridors and staircases shall be fitted with wired glazing in fixed metal frames.
4. All exit doors of the room shall be self-closing with a fire resistance period of not less than half an hour.
5. Spray painting involving the use of flammable liquids, except aerosol spray painting, is not permitted inside the room or any other part of the school premises.
6. When wax melting is required, it should be heated indirectly over a hot bath.
7. No mixed activities involving heat, paint spraying and wax melting etc. should be conducted at the same time.

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8. No storage of any dangerous goods exceeding the exempted quantity in accordance with the Dangerous Goods (General) Regulations, Chapter 295B, Laws of Hong Kong, shall be allowed.
9. Additional Requirements (if any) : -

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SCH/101

FIRE SERVICES DEPARTMENT

Fire Safety Requirements

for

Laboratory

1. Portable fire fighting equipment of the approved type, over and above those installed for the occupation of the building, shall be provided as follows:
 - 1.1 _____ x 9 L water type fire extinguisher(s) at _____;
 - 1.2 _____ x 4.5 kg CO₂ type fire extinguisher(s) at _____ ; and
 - 1.3 _____ x 1.44 m² fire blanket at _____.
2. The laboratory shall be completely separated from other part of the premises by walls of not less than one hour fire resistance period. High level ventilation to open balcony / open type corridor at a height of 1800 mm from floor level may be provided.
3. All exit doors of the laboratory shall be self-closing with a fire resistance period of not less than half hour.
4. Fume-cupboards, if provided, shall be adequately ventilated to the open air.
5. Poisonous substances and dangerous substances shall be kept in proper containers clearly marked with the names of the substances and kept in a locked room or cupboard, the key to which shall be kept under the control of the teacher/technician in charge of the laboratory.
6. The air conditioning system, if provided, shall be either window unit type or independent system exclusively servicing the school laboratory.
7. The air-conditioning system shall be able to provide adequate ventilation with fresh air from the outside.

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8. The exhaust air from the air-conditioning system shall be directed to the open air.
9. An exhaust system shall be provided and switched on whenever the school laboratory is in use to prevent any accumulation of hazardous vapours.
10. All hazardous operations, e.g. those operations where toxic vapours will be generated or those involving corrosive substances shall be performed inside a fume-cupboard.
11. No storage of any dangerous goods exceeding the exempted quantity in accordance with the Dangerous Goods (General) Regulations, Chapter 295B, Laws of Hong Kong, shall be allowed.
12. Additional Requirements (if any) : -

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SCH/107

FIRE SERVICES DEPARTMENT

**Fire Safety Requirements
for
Computer Classroom**

1. Portable fire fighting equipment of the approved type, over and above those installed for the occupation of the building, shall be provided as follows:
 - 1.1 _____ x 4.5 kg CO₂ type fire extinguisher(s) at _____.
2. All electric wiring shall be arranged in such a way that it shall not impede any passageway.
3. Additional Requirements (if any) : -

Fire Services Department
March 2012