



FSD Connects with the Industries

Licensing and Certification Command

Fire Protection Engineering Compliance Division

27 Oct 2023



消防處

Fire Services Department

Part 1:

Introduction to FSD CL No. 2/2023

Fire Safety Requirements for Mechanical Ventilating Systems

Part 2:

Introduction to FSD CL No. 3/2023

***Specification of Gas Extraction System for Battery Room and
Electrical Charging Facilities***



Licensing and Certification Command
Fire Protection Engineering Compliance Division
Ventilating Systems Group

Part 1 - Introduction to FSD CL No. 2/2023
Fire Safety Requirements for Mechanical Ventilating System
issued on 7 June 2023
with effective date on 1 Sept 2023

- 1. Background**
- 2. Legislation and Control**
- 3. Technical Requirements and Standards**
- 4. Application of FSD CL No. 2/2023**
- 5. Major Revision of Fire Safety Requirements for Mechanical Ventilating Systems**

Background

Working Group for holistic review on relevant Fire Safety Requirements (FSR)

- **Ventilation Installation Liaison Group (VILG)**
including HKRSCVA, HKACRA, HKFEMC, HKIE, IFireE & HKACE
- **Fire Safety Standard Advisory Group (FSSAG)**
- **Relevant FSD Unit / Division**



FSD CL No. 2/2023

Arrangements of revised FSR Implementation superseding FSD CL No. 4/96 and 4/97, Part XI

- Item 1-7 & Checklist for MVS falling within the scope of Cap. 123J & Cap.132CE were revised
- Item 8, Battery Rooms MVS as FSI was promulgated separately in FSD CL No. 3/2023
- Item 9, Ventilation of Cat. 5 DG Areas was incorporated into the “Guide to Application for Dangerous Goods Licence and Approval” (since 31.3.2022)

FSD CL No. 3/2023

- Revised specification for Gas Extraction Systems for Battery Room and Electrical Charging Facilities
- Supplemented to the CoP (Red Book, Sep 2022)

Legislation and Control

Regulations and FSD CL

- **Ventilation of Scheduled Premises Regulation, Cap. 132 CE**
- **Building (Ventilating Systems) Regulations, Cap. 123J**
- **FSD CL No. 2/2023**
Fire Safety Requirements for Mechanical Ventilating Systems

Legislation and Control

Ventilation of Scheduled Premises Regulation, Cap. 132 CE

Apply to every ventilating system of the Scheduled Premises.



General Restaurant



Factory Canteen

	Premises	牌照處所	Licensing Authority
1	General Restaurant	普通食肆	FEHD
2	Light Refreshment Restaurant	小食食肆	FEHD
3	Dancing Establishment	跳舞場所	FEHD
4	Cinema	戲院	FEHD
5	Theatre	劇院	FEHD
6	Funeral Parlour	殯儀館	FEHD
7	Factory Canteen	工廠食堂	FEHD
8	Karaoke Establishment in Restaurant	卡拉OK場所	FEHD

Scheduled Premises
(The Second Schedule, Cap 132)

Legislation and Control

Building (Ventilating Systems) Regulations, Cap. 123J

Apply to every ventilating system of the non-scheduled premises that embodies the use of ducting or trunking, which passes through any wall, floor or ceiling of the building in which the ventilating system is installed, from one compartment of such building to another.

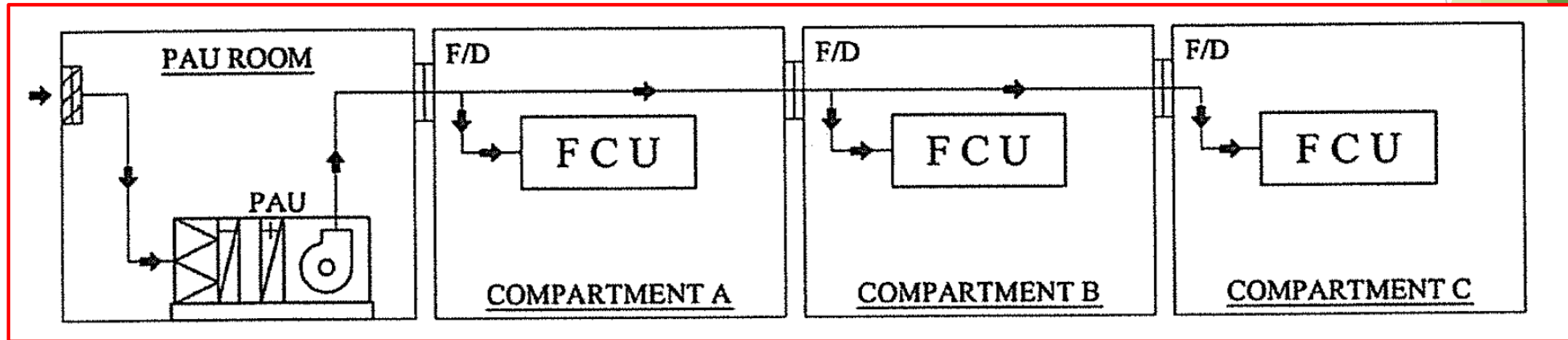


Image from FSD CL No. 1/2019

Legislation and Control

Building (Ventilating Systems) Regulations, Cap. 123J



M+ Museum



Hotel Development

Non-Scheduled Premises

Premises	牌照處所	Licensing Authority
Amusement Game Centre	遊戲機中心	HAD
Bakery	烘製麵包餅食店	FEHD
	桌球室	LCSD
	保齡球場	LCSD
	幼兒中心	SWD
	會所	ED
	會所	HAD
	電器廢物處置	EPD
	食品製造廠	FEHD
	賓館	HAD
	酒牌	FEHD
按摩院		HKPF
		HAD
Places of Public Entertainment	公眾娛樂場所	FEHD
Private Columbaria	私營骨灰安置所	FEHD
Public Skating Rink	公眾溜冰場	LCSD
Hotel	酒店	HAD
Residential Care Home for the Elderly	安老院	SWD
Residential Care Home for Persons with Disabilities	殘疾人士院舍	SWD
Cold Store	凍房	FEHD
DG Store	危險品	FSD
Fuel Tank	燃料缸	FSD

Legislation and Control



A Guide to Application of Letter of Compliance for Mechanical Ventilating Systems

Fire Services Department

(September 2023)

1. Introduction
2. Legislations Governing Ventilating System
3. Types of Applications Requiring the Issue of Letter of Compliance (Ventilating System)
4. Procedures and Performance Pledges for the Issue of Letter of Compliance for Ventilating System
5. Role of a Registered Specialist Contractor (Ventilation Works Category)
6. Essential Fire Safety Requirements in Mechanical Ventilating System
7. Points to Note before Making Inspection Appointment
8. Enquiry

Technical Requirements and Standards

FSD CL No. 2/2023

Fire Safety Requirements for Mechanical Ventilating Systems

Stipulates all technical requirements and standards of ventilating systems in addition to the Cap. 132 CE and Cap. 123J

Available on FSD website:

English: https://www.hkfsd.gov.hk/eng/source/circular/2023_02_eng_20230621_104014.pdf

Chinese: https://www.hkfsd.gov.hk/chi/source/circular/2023_02_chi_20230621_104014.pdf

- 2 -

(b) Specified requirements for air filter cells and air filter media, electrostatic precipitators, and fire and smoke dampers used in mechanical ventilating systems;

(c) Updated requirements for installation of insulation materials near fire dampers;

for Mechanical Ventilating System”.

5

conform with the amended Dangerous Goods into effect on 31 March 2022. The revised Section 2.3.3, Chapter 2.3 of “A Guide to Licence and Approval” issued by this Department. The following FSD’s Dangerous Goods Thematic

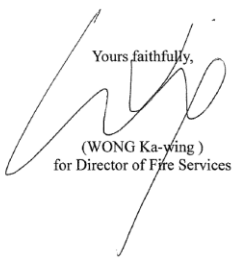
guide/

ent) Regulations, Cap. 95B

sign with the requirements of gas extraction battery rooms and electrical charging facilities for Minimum Fire Service Installations and requirements are to be promulgated separately

ilation Division at 2718 7567 or Fire Service hours.

Yours faithfully,



(WONG Ka-wing)
for Director of Fire Services

quoted in reference to this letter
引述編號及日期

.../2

Ref Number and date should be quoted in reference to this letter
凡提及本信時請引述編號及日期

消防處
牌照及審批總區
香港九龍尖沙咀東部康莊道一號
消防總部大廈五樓



FIRE SERVICES DEPARTMENT
LICENSING & CERTIFICATION COMMAND
5/F, Fire Services Headquarters Building,
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Kowloon, Hong Kong

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來函編號 YOUR REF.:
圖文傳真 FAX NO.: 852 2723 2197
電子郵件 E-mail: lcpolice2@hkfsd.gov.hk
電話 TEL. NO.: 852 2733 7619

7 June 2023

To: Recipients of FSD Circular Letters

Dear Sir/Madam,

FSD Circular Letter No. 2/2023
Fire Safety Requirements for Mechanical Ventilating Systems

This Circular Letter serves to announce the revised fire safety requirements for mechanical ventilating systems and arrangements of their implementation. These requirements will take effect on **1 September 2023**, thereby superseding relevant requirements stipulated in Part XI of FSD Circular Letter No. 4/96.

With a view to enhancing fire safety standards of mechanical ventilating systems, a Sub-working Group joined by the Ventilation Installation Liaison Group and the Fire Safety Standard Advisory Group, has conducted a holistic review on relevant requirements. The Sub-working Group revised the fire safety requirements for mechanical ventilating systems falling within the scopes of the following government regulations respectively. Details are as follows.

(i) Building (Ventilating Systems) Regulations (Cap. 123J)
(ii) Ventilation of Scheduled Premises Regulation (Cap. 132CE)

The revised requirements “Fire Safety Requirements for Mechanical Ventilating Systems”, is attached at **Appendix 1** to this letter. Apart from updating of relevant requirements with reference to the current international/national standards, main areas of revision are as follows:-

(a) Specified requirements for installations inside mechanical ventilating systems;

Technical Requirements and Standards

Fire Safety Requirements issued by Fire Services Department

- ▶ Fire Safety Requirements of Ventilating System for Scheduled Premises
- ▶ Fire Safety Requirements of Ventilating System for Premises (other than Scheduled Premises)

Ref: VSG/SP



Fire Safety Requirements of Ventilating System for Scheduled Premises*
附表所列處所*內通風系統的消防安全規定

1. **Application 適用範圍**

These requirements shall apply to every ventilating system of the scheduled premises, which include restaurants, dancing establishments, cinemas, theatres, funeral parlours and factory canteens as stipulated in the Ventilation of Scheduled Premises Regulation, Cap132 CE.
根據香港法例第132CE章《附表所列處所通風設施規例》，本規定適用於任何附表所列處所的通風系統。這些處所包括：食肆、跳舞場所、戲院、劇院、殯儀館及工廠食堂。


2. **The Requirements 規定**

(a) No air intake for the ventilating system shall be sited in any place which in the opinion of the Director of Fire Services constitutes a fire hazard.
通風系統的人氣口不得位於消防處處長認為構成火警危險的任何地方。

(b) The opening of every air intake shall be fitted with a screen constructed of corrosion-resistant material having a mesh not greater than 12mm.
每個人氣口須裝上一個用防蝕物料製造的網罩，其網孔不得超過 12 毫米闊。

(c) Every duct shall be wholly constructed of non-combustible material having a strength and durability similar to that of galvanized sheet iron or steel.
每條管道須全部用不易燃物料製成，該等物料的強度及耐用度須與鍍鋅鐵片或鋼片的強度及耐用度相近。

Ref: VSG/NSP



Fire Safety Requirements of Ventilating System for Premises
(other than Scheduled Premises *)
處所內通風系統的消防安全規定
(附表所列處所*除外)

用範圍

These requirements shall apply to every ventilating system that embodies the use of mechanical ventilation, which passes through any wall, floor or ceiling of the building in which the ventilating system is installed, from one compartment of such building to another compartment situated in the Building (Ventilating Systems) Regulations, Cap 123J. 123J 章《建築物(通風系統)規例》，任何通風系統如敷設有管道或穿過或穿槽穿過裝置該通風系統的建築物內的任何牆壁、樓面或天花，則本規定對該通風系統適用。

規定

The air intake of the ventilating system shall be sited in any place which in the opinion of the Director of Fire Services constitutes a fire hazard.
口不得位於消防處處長認為構成火警危險的任何地方。

Every air intake shall be fitted with a screen constructed of corrosion-resistant material having a mesh not greater than 12mm.
口須裝上一個用防蝕物料製造的網罩，其網孔不得大於 12 毫米。

Every duct shall be wholly constructed of non-combustible material having a strength not less than that of galvanized sheet-iron or steel.
每條管道須全部用不易燃物料製成，該等物料的強度及耐用度須不低於鍍鋅鐵片或鋼片的強度及耐用度相近。

Application of FSD CL No. 2/2023

1. Fire Services Department

1a) Application for various licences e.g. general and light refreshment restaurant

- Risk assessment for licensed premises application
- Issue FSR for MVS to licence applicant

B) For Ventilating system

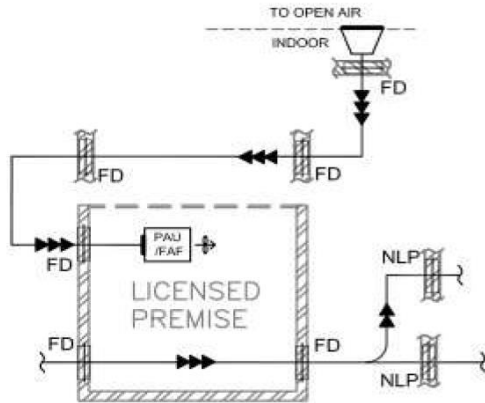
The mechanical ventilating system installed in the premises shall comply with the following Fire Safety Requirements (they are also applicable to Category D requirements for Provisional Licence):

- Fire Safety Requirements for ventilating system for scheduled premises; and
- Fire Safety Requirements for mechanical ventilating system as stipulated in the attached Fire Services Department Circular Letter No. 2/2023.

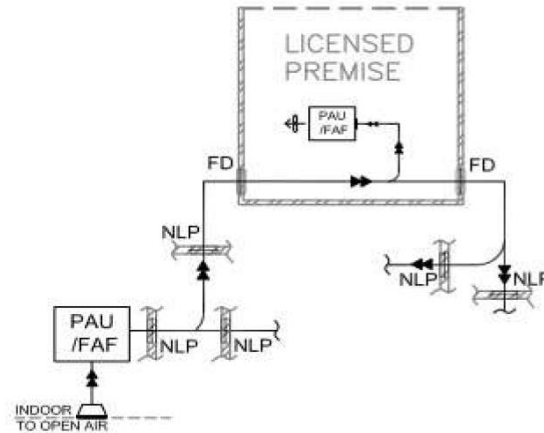
The document is a letter from the Fire Services Department, Learning and Certification Command, dated 3 October 2023. It is addressed to the Director of Food and Environmental Hygiene. The letter discusses the fire safety requirements for a mechanical ventilating system installed in the premises. A green box highlights a section of the document, and a green arrow points from this box to the 'For Ventilating system' section in the text on the left.

Application of FSD CL No. 2/2023

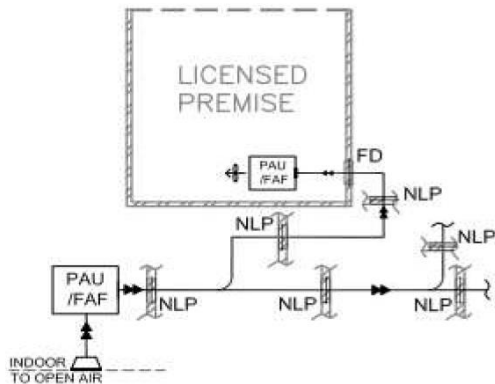
GUIDANCE DRAWING OF VENTILATING SYSTEM COMPLIANCE INSPECTION ARRANGEMENT IN LICENSED PREMISES



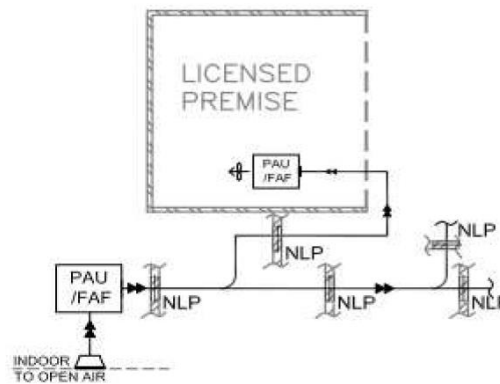
SCHEMATIC 1



SCHEMATIC 2



SCHEMATIC 3



SCHEMATIC 4







Scope of Ventilating System Compliance Inspection:

- 1) Ventilating System and associated fire damper(s) installed within the boundaries of licensed premises
- 2) Ventilating System and associated fire damper(s) installed in exclusive ventilation ductwork connecting from open air to the licensed premises

Notes:

- 1) Schematics 1-4 show the general ventilating system compliance inspection arrangement for licensed premises in various possible scenarios
- 2) Communal air ductwork shall be indicated in submitted drawing(s) and the fire damper(s) not required for ventilating system compliance inspection shall be marked as "NLP"

Legends:

-  Fire damper(s) under the scope of ventilating system compliance inspection shall be inspected and certified by Registered Specialist Contractor
-  Fire damper(s) not required for ventilating system compliance inspection (Non-licensed premises)
-  Fire Resistance Rating Partition
-  Non Fire Resistance Rating
-  Licensed Premises
-  Ventilating System Equipment

Application of FSD CL No. 2/2023

1. Fire Services Department

1b) Application for product approval/ acceptance

Type of product approved by Director of Fire Services

- **Electrostatic filter or precipitator**
- **Fusible link**

FSD Circular Letter No. 3/2020
Facilitation Measures of Application for Approval of
Portable Equipment and
Acceptance of Fire Service Installations and Equipment
(FSIs) and Fire Safety Products



認可手提設備／
接納消防裝置及設備和消防安全產品的
申請指引

GUIDANCE FOR APPLICATION
FOR APPROVAL OF PORTABLE EQUIPMENT /
ACCEPTANCE OF FIRE SERVICE INSTALLATIONS AND EQUIPMENT
AND FIRE SAFETY PRODUCTS

(2020年7月版)
(July 2020 Version)

Application of FSD CL No. 2/2023

2. Buildings Department

Erection or alteration of fire damper in ventilating systems

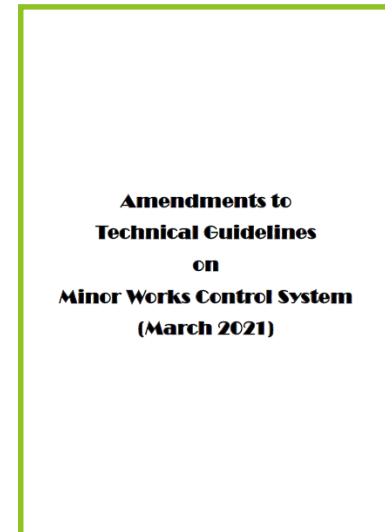
- Requirements for fire damper used in mechanical ventilating systems should be considered.



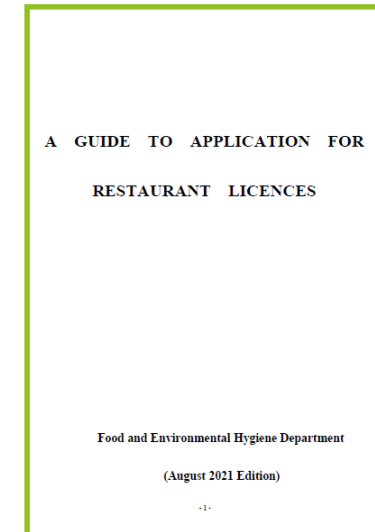
Image from BD website

3. Licensing Authority and ArchSD

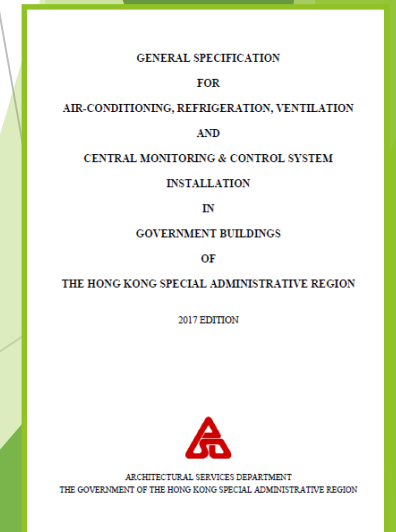
The installations shall conform requirements and CLs issued by FSD



BD



FEHD



ArchSD

Major Revision of FSR for MVS

PART XI

1. Electric Heating Elements Used in Mechanical Ventilating Systems
2. Fire Dampers Used in Mechanical Ventilating Systems
3. Use of Ceiling Void or Elevated Floor as air Plenum
4. Insulation for use with Ductwork or Pipework
5. Protection Requirements against Fire and Smoke in Protected Areas
6. Filters Used in Mechanical Ventilating Systems
7. Flexible Ducts Used in Mechanical Ventilating Systems
8. Battery Rooms Mechanical Ventilating Systems
9. Ventilation of Cat. 5 Dangerous Goods Areas
8. Checklist for Mechanical Ventilating Systems

- **Refinement (item 1-7 & Checklist)**
- **Move away (item 8 & 9)**

Specified requirement:

- ◆ **Installation inside MVS**
- ◆ **Air filter cells and filter media**
- ◆ **Electrostatic Precipitators**
- ◆ **Fire & Smoke Dampers**

Updated Checklist

FIRE SAFETY REQUIREMENTS FOR MECHANICAL VENTILATING SYSTEMS

1. Installations inside Mechanical Ventilating Systems
2. Air Filters Used in Mechanical Ventilating Systems
3. Fire Dampers and Fire and Smoke Dampers Used in Mechanical Ventilating Systems
4. Electrostatic Precipitators Used in Mechanical Ventilating Systems
5. Thermal Insulation for Ductwork and Pipework
6. Electric Heating Elements Used in Mechanical Ventilating Systems
7. Flexible Air Ducts Used in Mechanical Ventilating Systems
8. Use of False Ceilings and Elevated Floors (Other Than Installations at Computer Rooms) as Ductwork
9. Requirements for Protection against Fire and Smoke in Protected Areas

Annex 1 Inspection Checklist for Mechanical Ventilating System

Major Revision of FSR for MVS

Addition

Electrostatic Precipitators (EP) Used in MVS

Clause 4.1

EP shall be of a type approved by the Director of FS, with their construction in compliance with the applicable safety requirements stipulated in UL 867 and UL 710 or other acceptable national or international standards.



Major Revision of FSR for MVS

Addition

Electrostatic Precipitators (EP) Used in MVS

Clause 4.2

The EP shall, at the place of manufacture, have the following information clearly marked in a conspicuous location:

- (a) Manufacturer's name;
- (b) Country of origin; and
- (c) Type and model number.

Besides, a warning notice bearing the words “DANGER - HIGH VOLTAGE PARTS INSIDE/危險—內有高壓零件” shall be displayed on the equipment's casing.

Clause 4.3

Protective, safety interlocking and monitoring devices shall be in good working order.



**Example:
EP should be switched off when door is opened.**

Major Revision of FSR for MVS

Refinement

Installations inside MVS

Clause 1.1

Unless otherwise specified fire safety requirements, no combustibile materials shall be allowed in ductwork and MVS equipment pursuant to the:-

- ◆ Building (Ventilating Systems) Regulations (Cap. 123J) or
- ◆ Ventilation of Scheduled Premises Regulation (Cap. 132CE).

If forming part of the ventilating system, other apparatus such as tubes, electric wiring and control equipment shall be encapsulated in metallic conduits or casings.



Example 1
Combustible material (plastic flexible conduit) inside AHU shall be removed.

Major Revision of FSR for MVS

Refinement

Installations inside MVS



Example 2
Plastic wiring inside air equipment shall be removed.



Example 3
PVC blower fan casing and nylon filter inside return air plenum of A/C unit were not accepted.

Major Revision of FSR for MVS

Refinement

Air Filters Used in MVS

Clause 2.1 Air Filter cells and **Air Filter Media**

2.1.1 Air Filter cells (i.e. media plus media enclosure) and **air filter media shall be constructed of materials in compliance with the fire property requirements under one of the following standards:**

BS 476 : Part 4	Non-combustibility Test for Materials
BS 476 : Part 6	Method of Test for Fire Propagation for products with overall performance index “I” ≤ 12 and sub-index “i ₁ ” (derived from the initial period of the test) ≤ 6
UL 900	Standard for Air filter Units, Class 1 or Class 2
DIN 53438 Part 3	Response to Ignition by a Small Flame, Surface Ignition, Class F1



Intake air filter

Major Revision of FSR for MVS

Refinement

Air Filter Used in MVS

Clause 2.5 Filter Identification

2.5.2 The Director of FS may require applicants to submit a copy of the Certificate of Type Test for the air filter cells and air filter media issued by:

- (i) Mainland China's/overseas laboratories/organisations that provide product certification service with approved listing scheme/service and are accredited by Mainland China's/overseas accreditation bodies; or
- (ii) (ii) local laboratories/organisations that provide product certification service with approved listing scheme/service and are accredited by the Hong Kong Accreditation Service through the Hong Kong Certification Body Accreditation Scheme (HKCAS).

Failure to submit the certificate will render the application for filter installation unsuccessful.

Major Revision of FSR for MVS

Refinement

Fire Dampers and Fire & Smoke Dampers Used in MVS

Clause 3.2 Proprietary Manufactured Fire Dampers

3.2.1.The fire dampers shall comply with the fire property requirements under one of the following acceptable national or international standards:

- a) BS 476 : Part 20 for Integrity only[#]
- b) **BS EN 1366-2 for Integrity only[#]**
- c) **ISO 21925 -1 for Integrity only[#]**
- d) Underwriters Laboratories Inc. - UL 555.

Note: # i.e. excluding insulation and load bearing performance criteria.

Major Revision of FSR for MVS

Refinement

Fire Dampers and Fire & Smoke Dampers Used in MVS

Clause 3.3 Fire and Smoke Dampers

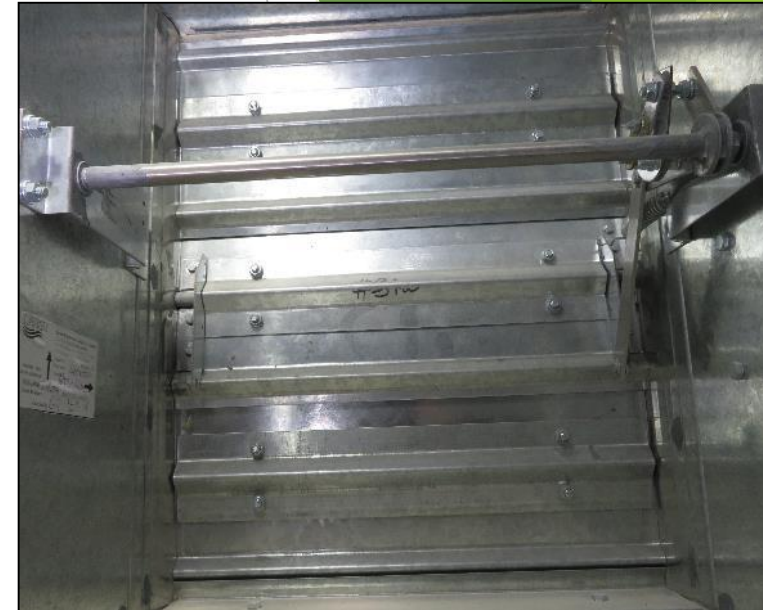
3.3.1.The fire and smoke dampers shall comply with the fire property requirements under one of the following acceptable national or international standards:

- (a) BS 476 : Part 20 or UL 555 for Integrity only[#] and UL 555S Leakage Class 1 or 2;
- (b) BS EN 1366 - 2;
- (c) ISO 21925 - 1.

3.3.2 The following information shall, at the place of manufacture, be clearly and durably marked in a conspicuous place on the fire and smoke damper:

- (a) Manufacturer's name; and
- (b) Type and model number.

[#] i.e. Excluding insulation and load bearing performance criteria



Fire and smoke damper

Major Revision of FSR for MVS

Refinement

Fire Dampers and Fire & Smoke Dampers Used in MVS

Clause 3.4 General Requirements

3.4.2 The fusible link shall be a type approved by the Director of FS and shall be imprinted with its

- brand name,
- the operating temperature and/or
- a lot number and/or
- clearly marked/stamped with the standard to which the link has been type-tested.

Under no circumstances shall the rated temperature of the fusible link exceed 69°C.



Major Revision of FSR for MVS

Refinement

Fire Dampers and Fire & Smoke Dampers Used in MVS

Clause 3.4 General Requirements

3.4.5 Where it is NOT possible to install a non-proprietary manufactured blade type fire damper on the plane of the fire separation wall due to site constraints, the section of the damper casing outside the wall, being an extension of the fire damper, must be encased in fire resistant materials with an FRR (integrity only) of not less than that of the wall and be adequately supported/protected against the risk of displacement/damage by impact. As for proprietary manufactured fire dampers, the construction and mounting method is subject to the requirements laid down in paragraph 3.2.1.



Non-proprietary fire damper not in plane of fire separation, the section of the damper casing outside the wall must be encased in the FR materials

Major Revision of FSR for MVS

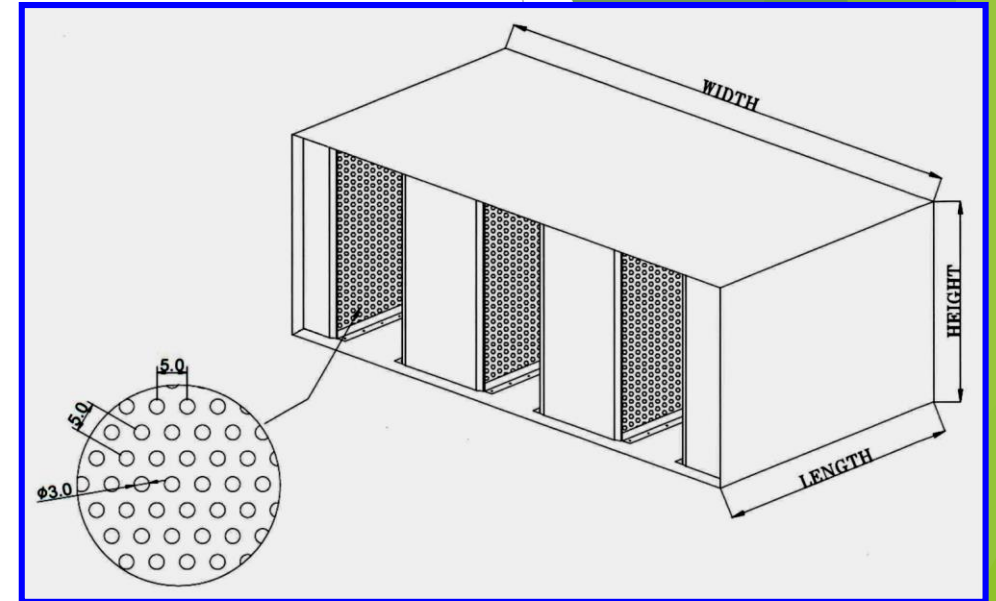
Refinement

Fire Dampers and Fire & Smoke Dampers Used in MVS

Clause 3.4 General Requirements

3.4.7 No ductwork internal lining and silencers packed with acoustic insulation materials shall be installed within 1 m from the fire damper; since in a fire, the damper, though closed, will be at an elevated temperature and may cause flame spread along the internal lining inside the ductwork in the adjoining compartments.

However, the requirement on separation distance between the fire damper and internal insulation/silencers may be waived if the insulation/sound attenuation materials are securely encased in perforated galvanised steel sheet or metal and with diameter of perforation not greater than 3 mm and at distance between centres not less than 5 mm.



Example:
Silencer insulation encased in perforated galvanised steel sheet with specified hole size will be allowed.

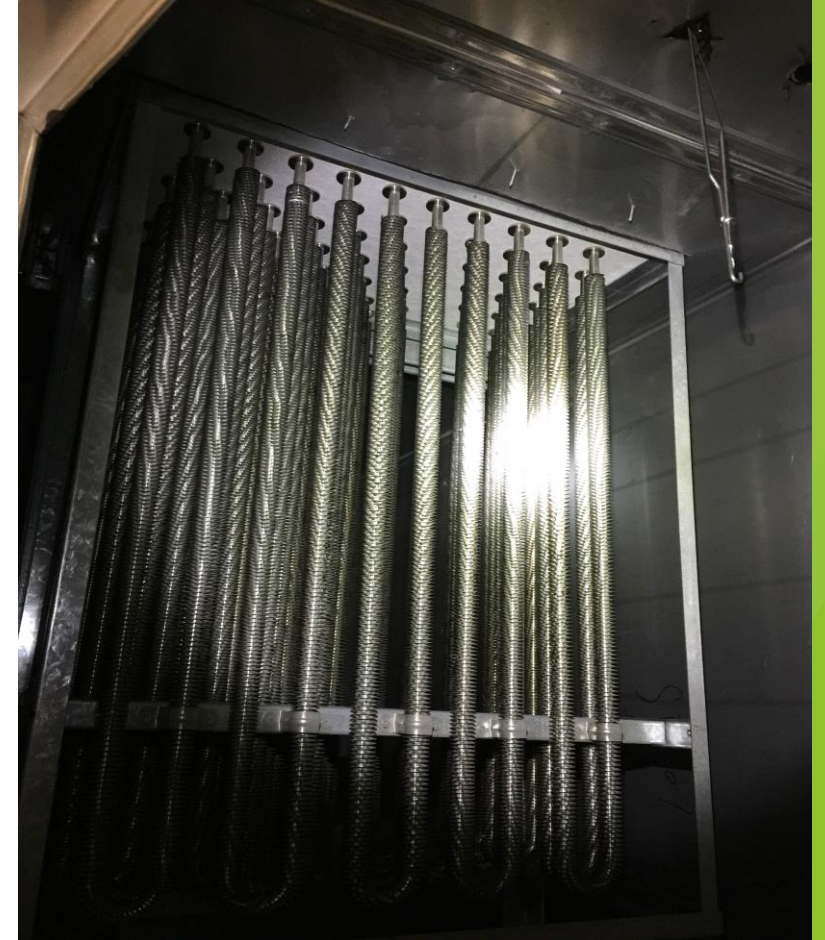
Major Revision of FSR for MVS

Refinement

Electric Heating Elements Used in MVS

Clause 6.2 Control and Sequence Interlocking of Heater and Fan

6.2.5 A duct-type overheat thermostat with a fail-safe feature and a manual reset button shall be provided at a maximum distance of 600 mm from the electric heating elements to ensure that **the elements will be switched off before the mean temperature inside the ductwork reaches 50°C or within 90 seconds when the mean temperature exceeds 50°C.**



Major Revision of FSR for MVS

Refinement

Flexible Air Ducts Used in MVS

Clause 7.4 No flexible air ducts shall be allowed to penetrate through fire resisting walls, floors, ceilings and partitions. **No direct connection of flexible air ducts to fire dampers or fire and smoke dampers shall be allowed.**



Flexible air ducts penetrate through fire resisting walls is not accepted

Major Revision of FSR for MVS

Refinement

Use of False Ceilings and Elevated Floors (other than Installations at Computer Rooms) as Ductwork

Clause 8.2.3 All electrical mains distribution and control wirings in the void must be contained in heavy-duty gauge metal cable ducts and/or screwed metal conduits terminated in such a way to **comply with the requirements stipulated in the current edition of Code of Practice for the Electricity (Wiring) Regulations issued by the EMSD.**

Clause 8.2.5 Pneumatic control lines for A/C systems within the void shall be constructed of copper. Flexible air ducts shall be used only at the final connections from the copper pneumatic lines to the A/C terminals. The ducts shall not exceed 300 mm in length and **shall have a maximum fire spread distance of 1.5 m when tested to UL 1820.**

Major Revision of FSR for MVS

Refinement

Requirements for Protection against Fire and Smoke in Protected Areas

Clause 9.1 “Protected areas” refer to protected exit and protected lobby as defined in the current edition of Code of Practice for Fire Safety in Buildings issued by the BD.

Clause 5.3 in FSD CL No. 4/96 Part XI was removed

All ventilation/ A/C system in rooms with direct access from a staircase, staircase approach lobby of Fireman’s Lift lobby shall comply with requirements of paragraph 5.2 as long as fire doors of appropriate F.R.P. are installed, or requirements of paragraph 5.1 if no fire doors of appropriate F.R.P. are provided.

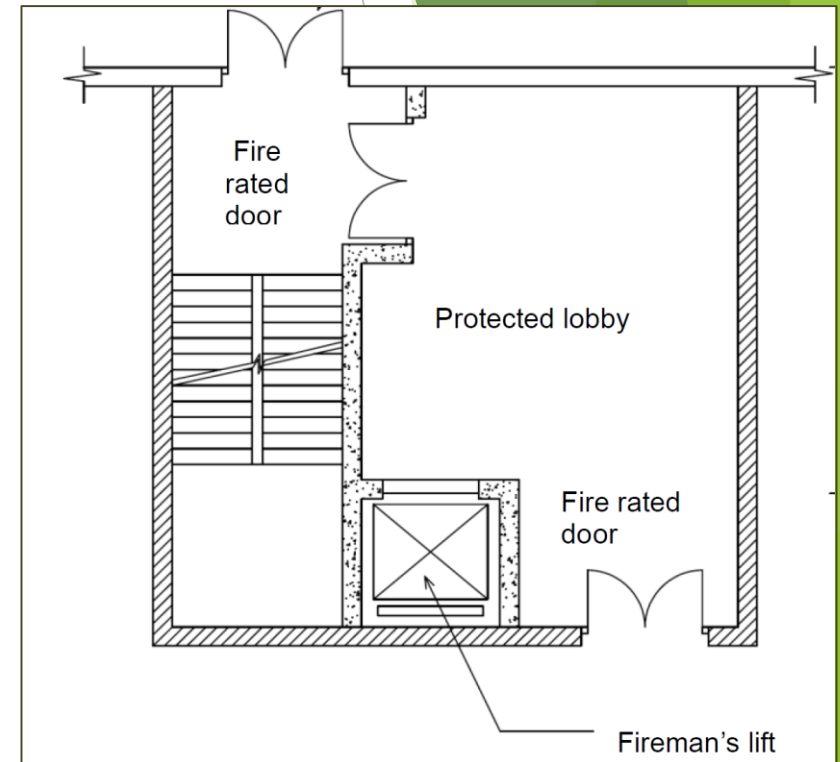


Image from BD COP for Fire Safety in Buildings 2011

Major Revision of FSR for MVS

Refinement

Requirements for Protection against Fire & Smoke in Protected Areas

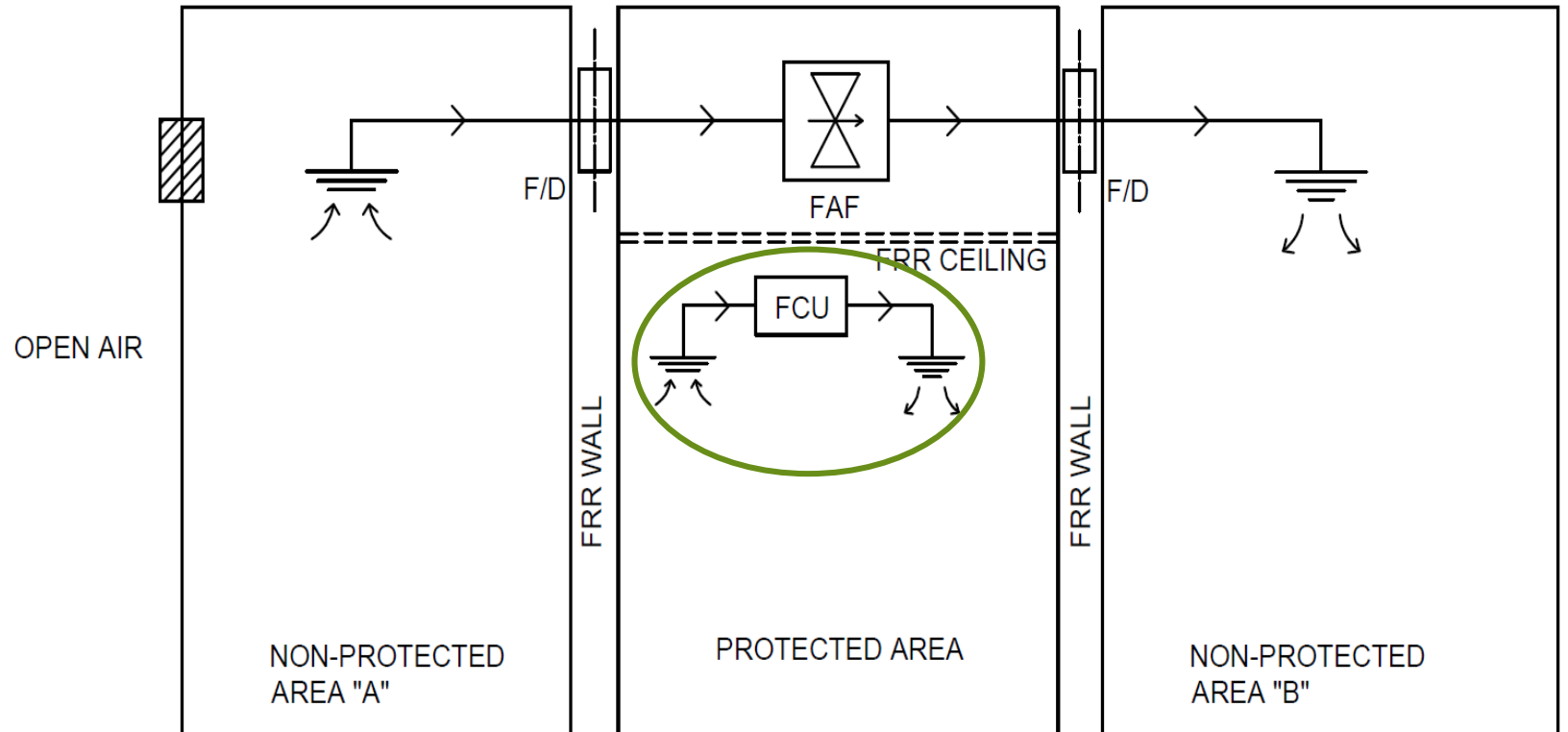
9.3.3 Self-contained fan coil units, which serve only and are wholly situated in protected areas, can be installed provided that:

- (a) The fan coil volute casing, fan blades, fan coil enclosure, connected ductwork and air distribution devices etc. shall be all constructed of or encased in metallic materials;**
- (b) All electrical wirings shall be installed inside metal conduits and/or enclosures; and**
- (c) Insulation materials for the fan coil unit and the associated pipework/ductwork shall comply with the requirements as stipulated in paragraph 5.**

Major Revision of FSR for MVS

Refinement

Requirements for Protection against Fire & Smoke in Protected Areas



Self-contained fan coil unit complied with Section 9.3.3 can be installed inside Protected Area

Major Revision of FSR for MVS

Refinement

Annex 1. Inspection Checklist for MVS

The Checklist at Annex 1 is designed to provide guidelines for **Registered Specialist Contractors in the Ventilation Works Category (RSC(V))** to carry out acceptance inspection and testing of MVS. It will also assist the relevant works inspectors and the contractors in verifying whether the equipment and systems are in conformity with the specified standards and requirements.

Annex 1			
Inspection Checklist for Mechanical Ventilating System			
Type of Premises :		FSD reference :	
Address :			
	Inspection Items	Comply with FSD Requirements	Remarks
1.	AIR INTAKE		
	a. Wire meshes made of corrosion-resistant materials having a mesh opening not greater than 12 mm provided	(Y/N/NA)	
	b. Located away from areas with potential fire hazards	(Y/N/NA)	
2.	DUCTWORKS		
	a. Made of non-combustible materials having strength and durability not less than that of galvanized iron or steel sheets	(Y/N/NA)	
	b. Flexible connectors conform to BS 476: Part 6, with the overall performance index "I" ≤ 12 and sub-index "i ₁ " ≤ 6 (with documentary proof attached)	(Y/N/NA)	
3.	AIR FILTERS		
	a. Air filters installed	(Y/N/NA)	
	b. Metallic air filter provided	(Y/N/NA)	
	c. Conform to FSD accepted standards (with documentary proof attached) Specify : _____	(Y/N/NA)	
	d. Air filter cells made of non-combustible materials	(Y/N/NA)	
	e. Air filters are clean	(Y/N/NA)	
4.	FIRE DAMPERS		
	General Requirements (applicable to Fire and Smoke Dampers)		
	a. Fire dampers installed for all air transfer openings and ductworks breaching fire compartments	(Y/N/NA)	
	b. Fire damper operation matches the air flow direction	(Y/N/NA)	
	c. Fire dampers properly secured to the structure	(Y/N/NA)	

Major Revision of FSR for MVS

Move Away

Requirement for Battery Rooms MVS (para. 8 of FSD CL 4/96 Part XI)

The requirements were revised to align with the requirements of gas extraction system for the type of premises with battery rooms and electrical charging facilities stipulated in the CoP for Minimum Fire Service Installations and Equipment (Red Book, Sep 2022).

These revised requirements are to be promulgated separately in FSD CL No. 3/2023.



Image from
<https://servicepoolen.com/en/news/ventilation-in-battery-room>

Major Revision of FSR for MVS

Move Away

Ventilation of Cat. 5 Dangerous Goods Areas (para. 9 of FSD CL 4/96 Part XI)

The requirements were revised to conform with the amended Dangerous Goods Ordinance (Cap. 295) which came into effect on 31 March 2022. The revised requirements were incorporated into Section 2.3.3, Chapter 2.3 of “A Guide to Application for Dangerous Goods Licence and Approval”.

The guide can be downloaded from the following FSD’s Dangerous Goods Thematic website:

<https://es.hkfsd.gov.hk/dg/en/licence/guide/>



**A Guide to Application for
Dangerous Goods Licence and Approval**
(for Class 2 to Class 9A Dangerous Goods
Excluding Liquefied Petroleum Gas and Other Gases under
Gas Safety Ordinance, Cap. 51, Laws of Hong Kong)

Fire Services Department
08/2022

END