



**A Guide to
Application for Letter of Compliance
for Ventilating System**

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1. Introduction

The purpose of this Guide is to provide general information to assist applicants in their applications for licences / alterations and renewal of licences. Although every attempt has been made to ensure that the information contained in this Guide is up-to-date, revision may be made from time to time.

To apply for a Licence, the applicant should submit an application to the respective Licensing Authorities. The Licensing Authority will not issue any Licence until the applicant has complied with, among others, all requirements or recommendations given by the Director of Fire Services. (Detailed listing of the types of premises and the licensing authorities having jurisdiction can be found in Paragraph 3.) The proof of compliance with fire safety requirements in ventilating system is a Letter of Compliance (LC) issued by the Director of Fire Services to the applicant direct and copied to the Licensing Authority.

2. Legislation Governing Ventilating System

Ventilating system is a mechanical system usually comprises of air blower and air duct. The system will maintain air movement in an indoor environment. Filter and/or electrostatic precipitator installed in the system will filter the air passing through them so as to improve the air quality. When an air duct passes through compartment walls/floors, fire dampers shall be fitted in the duct to curb the spread of fire and smoke through air duct system in case of fire.

The Building (Ventilating Systems) Regulations, Cap. 123J, Laws of Hong Kong apply to every ventilating system that embodies the use of ducting or trunking which passes through any wall and floor of the building in which the ventilating system is installed, from one compartment of such building to another. Whereas the Ventilation of Scheduled Premises Regulation, Cap. 132CE, Laws of Hong Kong applies to ventilating system in Scheduled Premises (i.e. general restaurant, factory canteen, dancing hall, cinema, theatre and funeral parlour).

3. Types of Applications Requiring the Issue of Letter of Compliance (Ventilating System)

<u>Licensing Authorities</u>	<u>Legislations</u>	<u>Type of Licence</u>
FEHD	Food Business Regulation, Cap. 132X	General Restaurant
		Light Refreshment Restaurant
		Factory Canteen
		Food Factory
		Bakery
	Karaoke Establishments Ordinance, Cap. 573	Karaoke Establishment Permit In Restaurant
	Places of Public Entertainment Ordinance, Cap. 172	Places of Public Entertainment / Cinema / Theatre / Dancing Establishment
HKPF	Massage Establishments Ordinance, Cap. 266	Massage Establishment
LCSD	Places of Amusement Regulation, Cap. 132BA	Billiard Establishment / Public Bowling Alley / Public Skating Rink
SWD	Child Care Services Ordinance, Cap. 243	Child Care Centre
TELA	Amusement Game Centres Ordinance, Cap. 435	Amusement Game Centres
HAD	Hotel and Guesthouse Accommodation Ordinance, Cap. 349 Clubs (Safety of Premises) Ordinance, Cap. 376	Hotel / Guesthouse / Club house

Abbreviations :

- FEHD** - Food and Environmental Hygiene Department
HKPF - Hong Kong Police Force
LCSD - Leisure and Cultural Services Department
SWD - Social Welfare Department
TELA - Television and Entertainment Licensing Authority
HAD - Home Affairs Department

4. Procedures and Performance Pledges for the Issue of Letter of Compliance for Ventilating System

- (A) The Flow Charts for Scheduled Premises, Non-scheduled Premises and Provisional Licenses showing the required procedures for obtaining Letter of Compliance for Ventilating System are in Appendix 1.

A typical Letter of Compliance in English and Chinese is attached in Appendix 2.

- (B) The performance pledges for issuing Letter of Compliance for Scheduled Premises and Non-Scheduled Premises are as follows:

Performance Pledges for Scheduled Premises

General Restaurant / Light Refreshment Restaurant / Factory Canteen / Karaoke Permit / Dancing Establishment / Places of Public Entertainment (Cinema / Theatre)	Target*
To conduct compliance inspection, upon receipt of report of completion and ventilation layout plan, within 10 working days for the 1 st and 2 nd inspection, and within 21 working days for the 3 rd inspection and onwards.	90%
To issue Letter of Compliance / result of compliance inspection within 7 working days from the date of inspection.	90%

Performance Pledges for Non-Scheduled Premises

Bakery / Food Factory / Places of Public Entertainment (Non Cinema/Theatre) / Billiard Establishment / Bowling Centre / Public Skating Rink / Massage Establishment, Child Care Centre / Swimming Pool / Siu Mei Shop / Fresh Provision Shop / Milk Factory / Bath House / Residential Care Home / Amusement Game Center / Fresh Confection Factory	Target*
To conduct compliance inspection, upon receipt of report of completion and ventilation layout plan, within 10 working days for the 1 st and 2 nd inspection, and within 21 working days for the 3 rd inspection and onwards.	90%
To issue Letter of Compliance / result of compliance inspection within 7 working days from the date of inspection.	90%

Performance Pledges for Hotel, Guest House and Club

Hotel / Guest House / Club	Target*
To conduct inspection within 21 working days upon receipt of referral of LICENCE APPLICATION from the licensing authority.	90%
To issue Letter of Compliance / result of compliance inspection within 7 working days from the date of inspection.	90%

- * A target percentage of 90% means that the processing time of 90% of the applications shall meet the performance pledge.

5. Role of a Registered Specialist Contractor (Ventilation Works Category)

Only a Registered Specialist Contractor (Ventilation Works Category) [RSC(V)] can issue an Annual Inspection Certificate. You can find a list of these contractors at the following Buildings Department's web page:

http://www.bd.gov.hk/english/inform/e_rsc_v_1.html

6. Essential Fire Safety Requirements in Ventilating System

The applicant shall pay attention to the following points in the installation and maintenance of a ventilating system. Photographs showing examples of satisfactory and defective installation can be found in Appendix 3.

(A) Fire Damper

- (1) Fire Damper Shall be Provided between Fire Compartment Walls/Floors
Fire damper is a vital device for stopping fire spread. It must be provided at openings where air ducts pass through fire compartment walls, floors or ceiling slabs. In general, partition walls of kitchens, mechanical plant rooms and licensed areas are considered as fire compartment walls.
- (2) Fire Damper shall be installed in the correct orientation so that it will close properly when the fusible link melts during fire (Fig. A1).
- (3) The gap or cavity between fire damper and building element shall be properly sealed with fire resisting material (Fig. A2).
- (4) Fire Damper shall be installed in the plane of compartment wall (Fig. A3).
- (5) Fire Damper shall be fitted with FSD approved fusible link (Fig. A4(a) and A4(b)).
- (6) Access panel shall be provided near fire damper for regular maintenance and annual certification of the fire damper.

(B) Installation Inside Air Stream

There shall be no combustible materials inside air stream. The following combustible materials shall be removed from the air stream:

- (1) Combustible air filter or filter not acceptable to the Director of Fire Services (Fig. B1).
- (2) Plastic Pipe and Conduit (Fig. B2 and B3). Electric wiring and control equipment shall be encapsulated by metal conduit or metal casing.

(C) External Insulation

External Insulation Shall Satisfy Specified Fire Test Standard

External insulation made of polystyrene material does not comply with fire test standard BS 476: Part 7 (Fig. C1). As polystyrene will emit toxic gases upon heating, the product has already been banned for all new installations since 1989. For existing installation with exposed polystyrene, it is recommended to either replace it by approved material, say, fiberglass or encapsulate it with cement plastered or metal cladding.

(D) Maintenance of Air Duct / Fire Damper

- (1) Air ductwork shall be properly maintained and free of rust; grease deposits inside the air duct are not allowed (Fig. D1).
- (2) Fire damper shall be properly maintained; rusty/jammed damper blades are not allowed (Fig. D2).

(E) Fire and Smoke Control Installation at Protected area

Ventilation duct shall not pass through Fireman Lift Lobby, Protected Staircase

Any service installations such as air ducts, chilled water pipes and associated accessories inside protected areas have to be properly protected by fire resisting material. If mechanical ventilation or air-conditioning equipment is installed inside protected areas, it shall be of a non-combustible construction and all ventilation openings, be they supply or exhaust, have to be protected by fire and smoke damper actuated by smoke detectors.

(F) Flexible Duct Installation Satisfying FSD Requirements

Flexible ducts are not permitted for main air distribution or penetration through fire compartments and their length should not exceed 4 m. The flexible duct material and construction have to conform to the recognized fire performance and puncture test standard. Flexible duct made from tin foil is not acceptable.

(G) Devices Requiring FSD Approval

The following devices shall be of the FSD approved type :

- (1) Fusible link of fire damper;
- (2) Electrostatic filter or precipitator; and
- (3) Special air filter e.g. activated carbon filter.

7. Points to Note before Making Inspection Appointment

(A) Ventilating System Drawings Must Tally with As-built Installation

The Applicant shall ensure that the ventilating system drawings submitted through the Licensing Authority (e.g. the Food and Environmental Hygiene Department for food business) are correct ones accurately showing the as-built configuration.

(B) FS 251 and Certification of Ventilating Systems

It is a myth that the Certificate of Fire Service Installations and Equipment (FS 251) also covers the ventilating system. In fact, the certifications and inspections for fire service installations and ventilating systems are independent statutory requirements. The work has to be conducted by two separate categories of registered contractors. According to the pertinent statutory provisions, fire service installations (including the ventilation automatic cut-out systems) and ventilating systems have to be inspected and certified by Registered Fire Service Installation Contractors (RFSIC) and RSC(V) respectively.

(C) Prove of Compliance of Ventilating System with Fire Safety Requirements during Licence Inspection

Before a licence can be issued, officers from FSD will visit the premises under application. Inspection will be conducted separately by the Regional Offices and the Ventilation Division of FSD upon the receipt of report of work completion to confirm compliance with the fire safety requirements.

The RSC(V) / applicant's representative shall attend the ventilation inspection to demonstrate that the system operates as designed, especially the fire damper, electrostatic precipitator and smoke control facilities where appropriate. The applicant/ RSC(V) should provide access means, e.g. ladder, work platform, etc. to facilitate the inspection. Lack of access facilities, RSC(V) not present, absence of access/inspection panels, etc. would hinder the inspection and delay the issue of a Letter of Compliance.

(D) Ventilating System of Landlord and Other Licensed Premises

Each individual licensed premises will be treated as an independent fire compartment. Fire safety concern is not only on one's own ventilation installation. Ventilation ductwork provided by landlord as well as those owned by others but run within the boundaries of one's licensed premises shall also be fitted with suitable fire safety measures. RSC(V)s are therefore reminded to check and ensure that fire dampers are installed in all air ducts at locations where they enter/leave the licensed area or alternatively, such ducts have to be enclosed by fire rated materials.

8. Enquiry

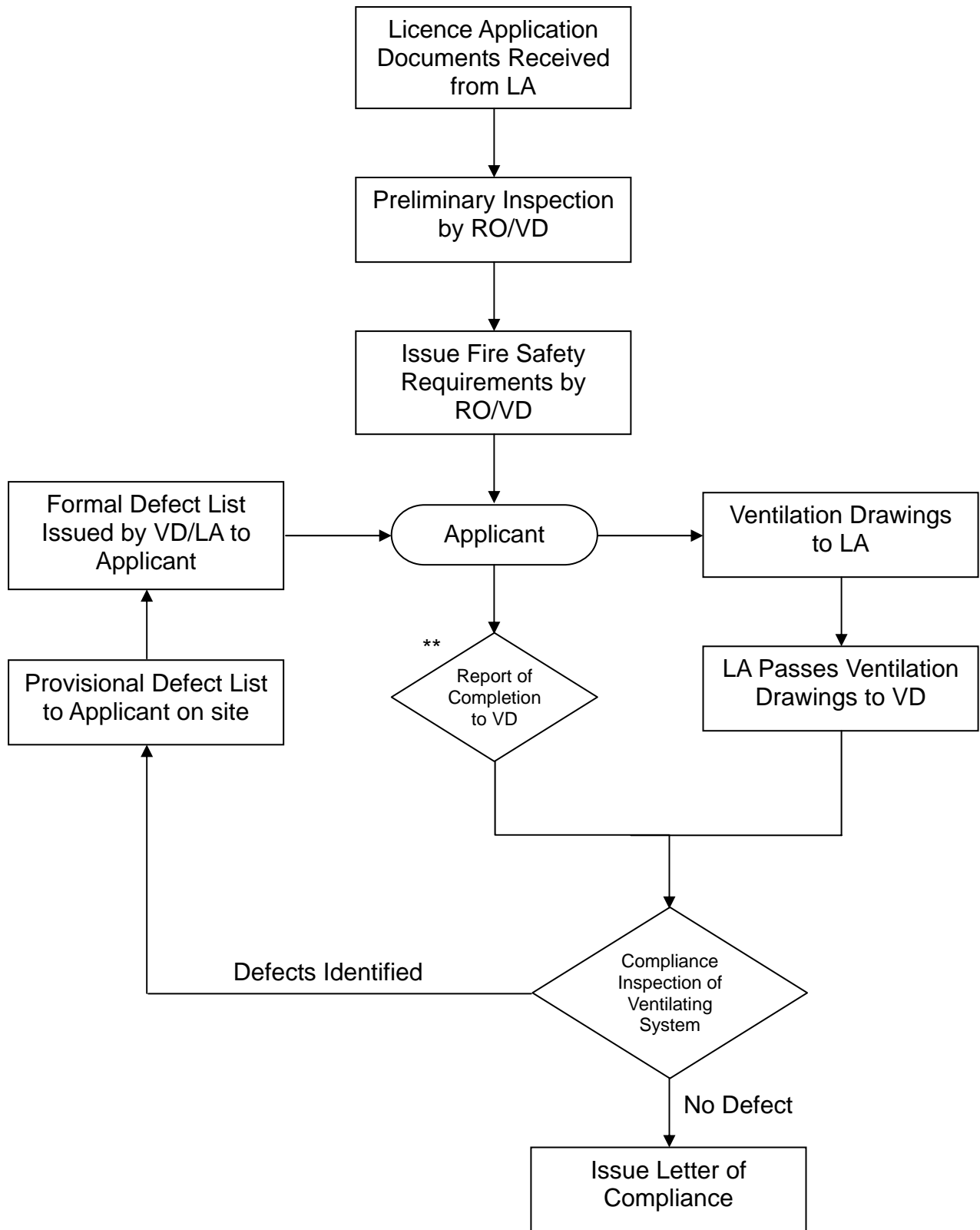
The contents in this guide book are for general information only. For further information or enquiry, please contact the Ventilation Division, Licensing & Certification Command of the Fire Services Department:-

Tel. no. : 2718 7567

Fax no. : 2382 2495

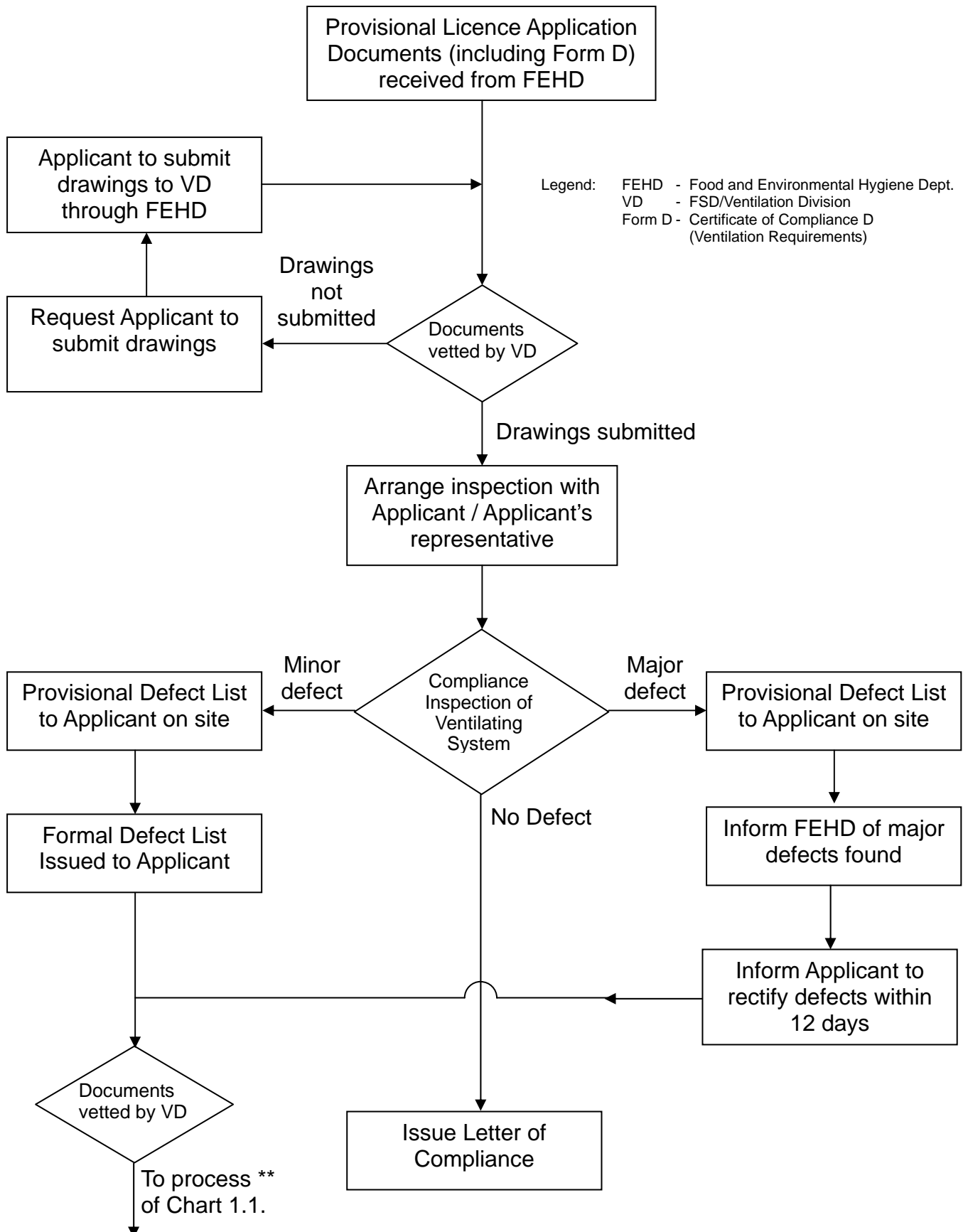
or visit the Fire Services Department web site: www.hkfsd.gov.hk

CHART 1.1 Workflow for Licensing Inspection of Ventilating System (Scheduled Premises & Non-Scheduled Premises)



- Legend:
- VD - FSD/Ventilation Division
 - RO - FSD/Fire Protection Regional Offices
 - LA - Licensing Authority (including FEHD, LCSD, Police, SWD, ED, etc.)
 - LC - Letter of Compliance
 - ** - Continuation of workflow from Chart 1.2

CHART 1.2 Workflow for Licensing Inspection of Ventilating System (Provisional Licence)



(Subsequent workflow follows process ** as stated in Chart 1.1)

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消防處
牌照及審批總區

新界葵涌興盛路 86 號
消防處葵涌辦公大樓 3 樓



FIRE SERVICES DEPARTMENT
LICENSING & CERTIFICATION COMMAND

3/F, Fire Services Department
Kwai Chung Office Building
86 Hing Shing Road, Kwai Chung, N.T.

本處檔號 Our Ref.: FP 33/
來函檔號 Your Ref.:
圖文傳真 Fax: (852) 2382 2495
電話 Tel. No.: (852) 2718 7567
電郵 e-mail: fsvent@hkfsd.gov.hk

By Registered Mail

Dear Sir/Madam,

**LETTER OF COMPLIANCE
FOR VENTILATING SYSTEM INSTALLED IN
SCHEDULED PREMISES**

Owner : _____
Premises : _____
Address : _____

The ventilating system installed at the above premises was inspected on _____ by officers of this Department and at the time of inspection it was found in compliance with our fire safety requirements for ventilating system.

You are hereby reminded that under Section 6 of the Ventilation of Scheduled Premises Regulation, Cap. 132CE, Laws of Hong Kong, there are certain obligations, in respect of the ventilating systems installed in scheduled premises, which require your attention. Relevant particulars and advice are given in the enclosed attachment.

Yours faithfully,

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for Director of Fire Services

參考譯本

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消防處 牌照及審批總區

新界葵涌興盛路 86 號
消防處葵涌辦公大樓 3 樓



FIRE SERVICES DEPARTMENT LICENSING & CERTIFICATION COMMAND

3/F, Fire Services Department
Kwai Chung Office Building
86 Hing Shing Road, Kwai Chung, N.T.

本處檔號 Our Ref.: FP 33/
來函檔號 Your Ref.:
圖文傳真 Fax: (852) 2382 2495
電話 Tel. No.: (852) 2718 7567

掛號信件

先生/女士：

裝設在附表所列處所內的通風系統 符合規定通知書

業主： _____
處所： _____
地址： _____

本處人員於二零零__年__月__日檢查裝設於上述處所內的通風系統，當時該系統乃符合本處發出的有關通風系統的消防安全規定。

香港法例第 132CE 章《附表所列處所通風設施規例》第六條亦訂明了一些關於業主須對附表所列處所通風系統承擔的責任，現隨函附上有關資料及建議。

消防處處長

() (代行)

二零零__年__月__日

EXAMPLES OF SATISFACTORY AND DEFECTIVE INSTALLATION IN VENTILATING SYSTEM



<p>Fire damper installed properly which closes upon breakage of fusible link during fire</p>	<p>Fire damper installed incorrectly (upside down) which does not close upon breakage of fusible link</p>
	
<p style="text-align: center;">✓</p>	<p style="text-align: center;">✗</p>

Figure A1 Fire damper (Installation orientation)



<p>Surrounding gaps and cavity of fire damper should be totally sealed up by fire resisting material</p>	<p>Gaps/cavities around fire damper not sealed</p>
	
<p style="text-align: center;">✓</p>	<p style="text-align: center;">✗</p>

Figure A2 Fire damper (Sealing of surrounding gaps and cavities)



<p>Installation of fire damper should be securely in plane of fire compartment wall</p>	<p>Fire damper installed not in plane of fire compartment wall (With exposed bush bearings)</p>
	
<p style="text-align: center;">✓</p>	<p style="text-align: center;">✗</p>

Figure A3 Fire damper (Fixing of damper in fire compartment wall)



<p>Fire damper linked up by FSD approved fusible link</p>	
	<div data-bbox="1066 1238 1369 1462" data-label="Image">  </div> <div data-bbox="962 1485 1473 1626" data-label="Text"> <p>Installation of fusible link should be FSD approved type with brand name , rating and lot no.</p> </div> <div data-bbox="962 1626 1473 1836" data-label="Text"> <p style="text-align: center;">✓</p> </div>

Figure A4 (a) Fire damper (FSD approved fusible link)



Fusible link replaced by solid wire or fusible link not approved by FSD	
	
	<p>Fusible link not approved by FSD (Without lot no. marking)</p> <p style="text-align: center;">X</p>

Figure A4 (b) Fire damper (Without FSD approved fusible link)



Air filter should be FSD approved type or should be made of non combustible material (e.g. metal filter)	Air pre-filter made of combustible material inside return air plenum
	
✓	X

Figure B1 Combustible materials inside air stream (Combustible air filter)

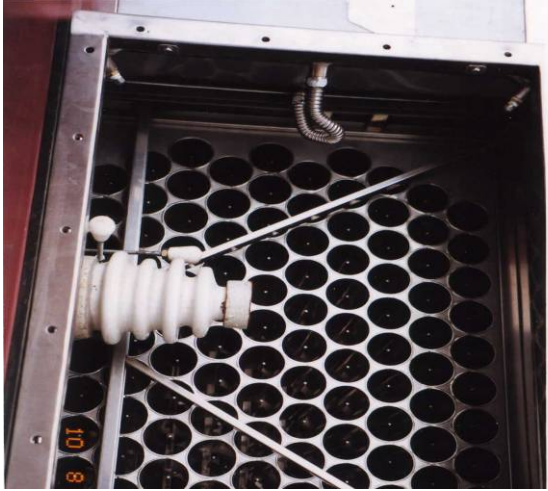
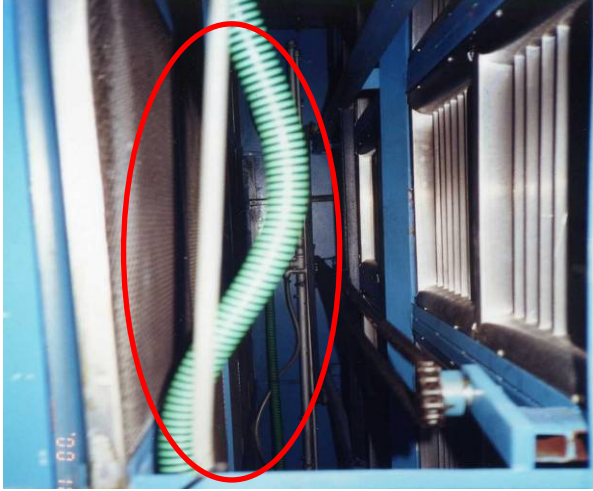
Combustible material should not be placed inside precipitator	Combustible material (Plastic flexible conduit) found inside precipitator
	
✓	✗

Figure B2 Combustible materials inside air stream (Plastic pipe & conduit)



Metal air filter inside air stream	Combustible material (Plastic flexible conduit) found inside precipitator
	
✓	✗

Figure B3 Combustible material inside air stream (Plastic casing of ventilation fan / blower)



<p>External air duct insulation material should comply with fire test standard BS476 Part 7 or equivalent</p>	<p>External air duct insulation made of polystyrene material not complying with fire test standard BS476 Part 7</p>
	
<p style="text-align: center;">✓</p>	<p style="text-align: center;">✗</p>

Figure C1 External insulation of air duct (Not satisfying specified fire test standard)



<p>Air duct kept in clean condition</p>	<p>Grease, rust and dust inside air duct is not acceptable</p>
	
<p style="text-align: center;">✓</p>	<p style="text-align: center;">✗</p>

Figure D1 Maintenance of air ductwork (Grease deposit inside)



Fire damper in good and working condition	Fire damper in rusty and poor condition
 <p>20/02/2006</p>	
✓	✗

Figure D2. Maintenance of fire damper