

Experience Sharing on Acceptance Inspection of FSI, FSI worker Scheme and Fire Safety of Buildings

24th December 2020



WELCOMING ADDRESS



Ir LEUNG Kwun-hong, FSDSM
Assistant Director (Licensing and Certification)

OBJECTIVES









Annual Inspection Checklists for Fire Hydrant/Hose Reel Systems



Revised Application Procedure for Inspection and Testing of Fire Service Installations and Equipment in New Building



27 Nov 2017

25 Jun 2018

23 Nov 2018

11 Jun 2019

19 Dec 2019

17 Jul 2020

24 Dec 2020



FSD Connects on 17.7.2020

FSI Acceptance Inspection & Case Sharing



Annual Inspection Checklists on Sprinkler System



Electrical Installations for Electric Vehicle



Approval of Portable Equipment / Acceptance of FSI Products



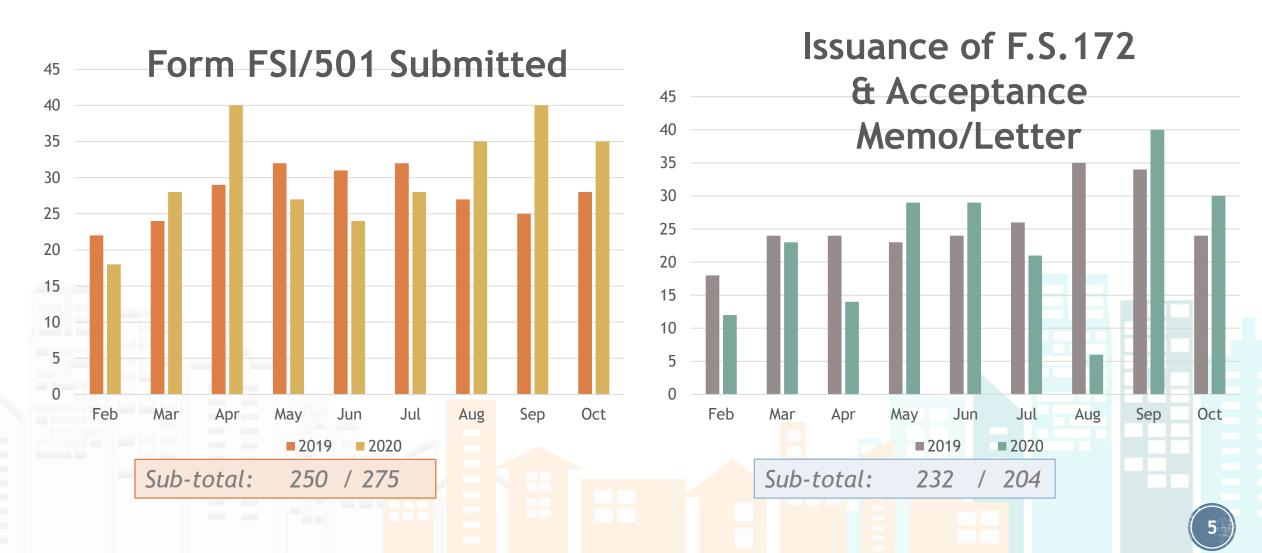
Introduction of Reference Guide for Design, Installation, Acceptance and Maintenance of FSI



Introduction of Fire Safety (Industrial Buildings) Ordinance Cap. 636



Statistics of 2020



Projects with SES and/or SPS

Duration: .
Average of 2 months

One Take Pass (39%)

Re-inspection Required (61%)

Duration:
May be up to 7 months

Source: May 2018 - Sep 2020 (Project with FS172 only)

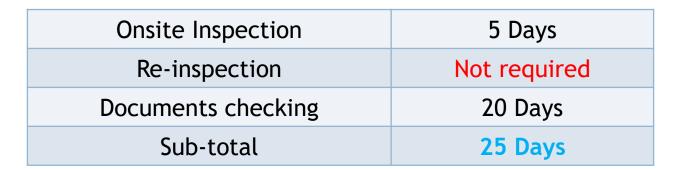
Case Study A residential development

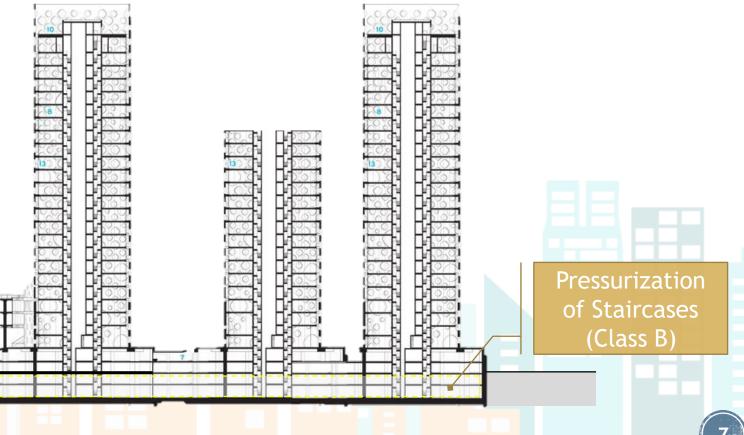
(Sep - Oct 2020)

Domestic x 6 towers

Podium

Basement





HINTS for Smooth Acceptance Inspection



Assure Collaborative Involvement

Liaisons among RPE, owner, AP, consultant, RFSIC and etc.

2 Familiar with acceptance criteria
Submit Accurate T&C Report and doc.
Possess Good FS knowledge

? | Perform High quality of works

Confirm Site Readiness and Safety
Prepare Smooth Rundown
Arrange good Telecommunication

Adopt Prescriptive/ Fire
Engineering Design Approach
Provide Early Submission for Fire Engineering Design

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

Effective Date: 1.1.2021

附件1



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)



FIRE SERVICES DEPARTMENT
LICENSING AND CERTIFICATION COMMANI
507. Fire Services Headquarters Building.
No. 1 Hing Chang Book Jimis Star Tool East

Ez (84) in FP(LC) 314/97 Pt/9 EFz

ents of FSD Circular Letters

(882) 2723 2197 III.: lepolic2@hkfid.gov.hk NO_c: 0882) 2733 7619

15 July 2020

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

inder the Fire Service (Installations and Equipment) Regulations, all portable is shall be approved by the Director of Fire Services (D of FS) before they are be supplied or sold in Hong Kong, For FSIs and Fire Safety Products¹ which are y the D of FS for the protection of buildings, they shall be of an accepted type and with relevant standard(s) and local requirements. In this regard, the Fire Services at (FSD) has promulgated Fire Service Installations — Equipment List and Fire Notice No.15 — Guidance for Product Approval of Fire Service Installations and rivide FSD Circular Letter No. 1/2007 to facilitate relevant applications by the trade. viewed the current procedures and practices as well as consulted the trades through aftery Standard Advisory Group (FSSAG) and the Association of Registered Fire stallation Contractors of Hong Kong Limited (FSICA), the FSD will put in place tillitation measures.

his letter serves to announce the revised measures on application for approval of quipment / acceptance of FSIs and Fire Safety Products, which will come into effect ary 2021 and the FSD Circular Letter No.1/2007 is to be repealed and replaced by

Fire Safety Products : means the equipment or installations other than PSIs which are crucial to fire safety, e.g. cromponey only device

Ref. Number and data should be quoted in reference to this 凡提及本信特請引进編號及日期

FSD Circular Letter No. 5/2020
Specification for Automatic
Sprinkler Installations

Effective Date: 1.1.2021



HONG KONG FIRE SERVICES DEPARTMENT



TECHNICAL GUIDANCE

Application of Loss Prevention Council Rules for Automatic Sprinkler Installations 2015 incorporating BS EN 12845 in Hong Kong

September 2020



牌照及審批總區 最九龍尖沙祖東部原莊迪1號 消防處總部大竄5槽

OUR REF.: (84) in FP(LC) 314/07 Pt.5

ats of FSD Circular Letters

EQUR REF.: (86) in FP(LC) 314/07 P EYOUR REF: IFAX: (852) 2367 3631 TEL: (852) 2733 7619



FIRE SERVICES DEPARTMENT

LICENSING AND CERTIFICATION COMMAND 5/F, Fire Services Headquarters Building No.1 Houg Chang Road, Trim Sha Tani Rest, Kanton, Hong Kan

10 September 2020

rs/Madams,

FSD Circular Letter No. 5/2020 Specification for Automatic Sprinkler Installations

Subsequent to the issue of LPC Rules for Automatic Sprinkler Installations rating B8 EN 12845:2015 by the Fire Protection Association, the Fire Services ment has reviewed the specifications for sprinkler systems, including the extent of or protection and hazard classification. This Circular Letter announces the adoption, cal modifications, of the LPC Rules for Automatic Sprinkler Installations incorporating 12845:2015.

A Sub-working Group of the Fire Safety Standard Advisory Group was set up in year ad tasked to look into the feasibility and practicability of adopting these Rules for local tions. After comprehensive discussions as well as extensive consultations with the ad respective parties of interests, the Sub-working Group has meticulously formulated a cal Guidance by making reference to the figures, tables and other technical details of the Except for the clauses/parts of the Rules covered in this Technical Guidance, all other parts of the Rules should be followed directly. Relevant clauses/parts of the Rules din Part 2 and 3 of the Technical Guidance are either "not to be applied locally", "to be "or "for reference only" with due consideration on the local situations and relevant requirements. This Technical Guidance is intended to facilitate stakeholders of local apply the Rules in Hong Kong. It should be read in conjunction with the Rules, ng the Technical Bulletins, Notes, Commentary and Recommendations, and the relevant ments of the Codes quoted therein.

Subject to the modifications specified in the Technical Guidance attached to this Letter, C Rules for Automatic Sprinkler Installations incorporating BS EN 12845:2015 are nended to be adopted as the standard for sprinkler installations referred in the Codes of the for Minimum Fire Service Installations and Equipment and Inspection, Testing and nance of Installations and Equipment.

...../2

NEF, AUSBIER AND DATE SHOULD BE QUOTED IN REFERENCE TO THIS LETTER

FSD Circular Letter No. 8/2020
Annual Inspection Checklists
on Sprinkler System

消防魔 牌照及審批總區 等清九集央沙場東部原至領1號 消防集積形大賞 5 標 Ä

FIRE SERVICES DEPARTMENT
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本集機管 OUR-REF: (88) in FFS(2) 334/97 Pt. 1 來函機管 YOUR-REF: 賽文傳賞 FAX: (852) 2723 2197

15 December 2020

To: Recipients of FSD Circular Letters

Dear Sir/Madam,

FSD Circular Letter No. 8/2020 Annual Inspection Checklist for Sprinkler Systems

This letter serves to announce the introduction of an annual inspection checklist to facilitate annual inspection (AI) of sprinkler systems by Registered Fire Service Installation Contractors (RFSICs).

The AI checklist for sprinkler systems (Annex) is devised by making reference to the codes and standards published by relevant overeas professional bodies and upon extensive consultation with local trade members. It specifies the minimum requirements for conducting AIs. Items listed in the checklist and its appendices, if applicable to the sprinkler system in the buildings/premises, shall be inspected/tested. RFSICs shall, after inspection, complete the checklist by indicating, where appropriate, whether the inspected and tested items conform to the standards/requirements as stipulated in the Code of Practice for Minimum Fire Service Installations and Equipment (the version that is relevant to the buildings/premises).

This apart, RFSiCs shall duly observe the principles and requirements regarding "Completion of checklists for Al" and "Duty and responsibility of RFSiCs" as stated in FSD Circular Letter No. 4/2019 "Annual Inspection Checklists for Fire Hydrant/Hose Reel Systems and Supply Tanks" issued on 3 December 2019. It is important for RFSiCs to note

Reference number and date should be quoted in reference to this lett

Annual Inspection Checklist for Sprinkler Systems	
	RFSIC Ref.

Serial to, of FS 281:
Comprisin Date of Annual Impection:
Building®realme Address:

The samual inspection is conducted in accordance with the appropriate edition of the Sprinkler Installation Rairs applicable to the system(s) in the building/prenion. In this Checklist, items required in such Rules are inspected and/or fested.

See Table I for the Schedule of Equipment and Table II for the Water Supply Flow Rate and Pressure Testing Record.

ı.	Type of Water Supply	Remarks		
	(Please insert a "-\" in the appropriate box)			
	Direct town main connection without any pump	[1	Where applicable, parts of the water supply portion that need
	Sprinkler tank refilled directly from town main	{	J	inspection is listed in Appendix I.
	Sprinkler task relified from town main via a transfer pumping installation	1	1	
	Internal fire main which serves more than one building and/or system.	[1	Where applicable, parts of the water supply portion that need inspection is listed in Appendix I.

Security: | Appendix XII may be used individually if the annual inspection only involves the sprinkler installation within one or more equidantal flats.

"Yes" denotes compliance with the FSD's requirements. "No" denotes non-compliance with the FSD's requirements. "NA" denotes not applicable

Sprinkler Pump Installation (where provided) The annual inspection for sprinkler pump installation, where provided, is recorded in Appendix II. J. Sprinkler Intermediate Booster Pump Installation (where provided) [] If N/A, go to 4

3.	Sprinkler Intermediate Boaster Pump Installation (where provided)		1	If N/A, go to 4
1	The annual inspection for sprinkler intermediate becoter pump installation, where provided, is			
	recorded in Appendix IV.			

4. Sp		inkler Infet	Yes	No	NA	Remarks
	n.	The sprinkler inlex(s), including the body, couplings, hand-wheel, stems, built- in non-veturn valves and other accessories, where applicable, is/are intact and		[]	[]	leskiletiskuluteetietsil sessemassinkskiliskil
		free from leakage and undue corresion.				
	b.	The sprinkler intet(s) is/are equipped with a drain cock for pressure relief, and	[]	[]	()	
		the drain cock is tested to be in working order.				

Effective Date: 1 June 2021

Annual Inspection Checklist for Sprinkler Systems

Table II
Vater Supply Flow Rate and Pressure Testing Record
Building/Premises Address:
Building/Block Name:

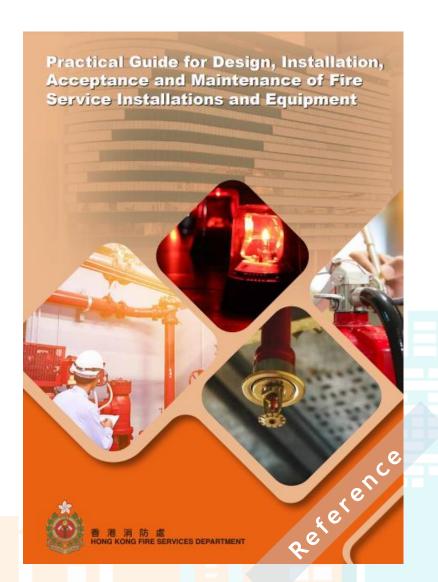
Item no.	Floor Level(s) to be served	Height of Highest Sprinkler above	Water Supply Source (Remark: Insert a "√" in the [] for the applicable		Flow Rate (l/min)	Pressure (bar)	
	to be served	Control Valve (m)	type(s) of water supply source) Jockey Pump	1	1	N/A	COLOR CONTROL
			Sprinkler Pump No.	ſ)		
			Sprinkler Pump No.	1	1	Andrewski-senski-senskie, skiepperponisk-karangene, spensenski-senskiesenskie	
			Sprinkler Intermediate Booster Pump No.	ï	j		
			Sprinkler Intermediate Booster Pump No.	{	Ĭ	Management and American Americ	COLUMN TO SERVICE MANAGEMENT AND SERVICE MANA
			Sprinkler Tank Gravity Supply	Į	J		
			Direct Town Main Supply	ŧ	1		

Remark:

- 1. For jockey pump(s), only testing on zero-flow pressure (churning pressure) is required. The pressure measurement shall be taken at the sprinkler control valve.
- Other than jockey pump(s), testing at the two rated flow characteristics (including "flow" and "maximum demand flow" as per EN 12845 (known as "low flow" and "high flow" as per BS 5306-2 and the two "characteristics not less than" as per FOC) are required. The flow and pressure measurements shall be taken at the sprinkler control valve.
- For pumped supply where the pumps are designed to deliver up to the nominal data (nominal rating), testing at nominal data shall also be taken which shall be measured at the pump room/enclosure/space.
- 4. Use additional sheets where necessary.

2/2-Table

Practical Guide for Design,
Installation, Acceptance and
Maintenance of FSI



Planned Roadmap

BS 5266-1:2016



Emergency lighting

Part 1: Code of practice emergency lighting of pre



5

Technical Guidance

Application of BS 5266-1:2016 and BS EN 1838:2013 for Emergency Lighting System in Hong Kong

6

Technical Guidance

Application of BS 5839-1:2017 in Hong Kong

BS 5839-1:2017

Incorporating Corrigendum No.1



BSI Standards Publication



Fire detection and fire alarm systems for buildings

Part 1: Code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises





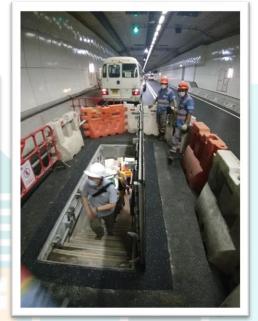


Major Projects in 2020 Tuen Mun - Chek Lap Kok Link









Private Projects in 2020







Completed MiC in 2020

Quarantine Facilities





Pat Heung JPC

Penny's Bay





Lei Yu Mun



Sai Kung Outdoor Recreational Centre

AGENDA of Today

Experience Sharing on acceptance inspection and Hot Smoke Test

Revised procedure for reporting FSI Shutdown

Promotion of wider adoption of stand-alone fire detectors

01

02

03

04

05

FSI drawing submissions under statutory buildings improvement works

Voluntary Recognition Scheme for FSI Trade

Experience sharing on FSI Acceptance Inspection

Senior Station Officer LAU Ying-kai

Fire Service Installations Division

Licensing and Certification Command

Hong Kong Fire Services Department

Today's sharing

- ① Analysis of the application of FSI acceptance inspection
- ② Experience sharing on the acceptance inspection of smoke extraction systems
- **③ Performance verification by hot smoke test**

Revised application procedures for FSI acceptance inspection

- FSD Circular Letter No. 1/2020
- Effective 1 May 2020
- Briefings on 25 March 2020 & 17 July 2020
- Sharing available with video recording at:

https://www.hkfsd.gov.hk/eng/fire_protection/licensing/

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FIRE SERVICES DEPARTMENT LICENSING AND CERTIFICATION COMMAND

5/F, Fire Services Headquarters Building No. 1 Hong Chong Road, Tsim Sha Tsui East Kewloon, Hong Kong

本庭葡號 OUR REF.: (41) in FP(LC) 314/97 PL9 來商葡號 YOUR REF.: (852) 2723 2197 電子郵件 E-MAIL: tepolic2@hkfsd.gov.hk 號 括 TEL.NO.: (852) 2733 76/19

10 February 2020

To: Recipients of FSD Circular Letters

Dear Sir/Madam.

FSD Circular Letter No. 1/2020 Revised Application Procedure for Inspection and Testing of Fire Service Installations and Equipment in New Building

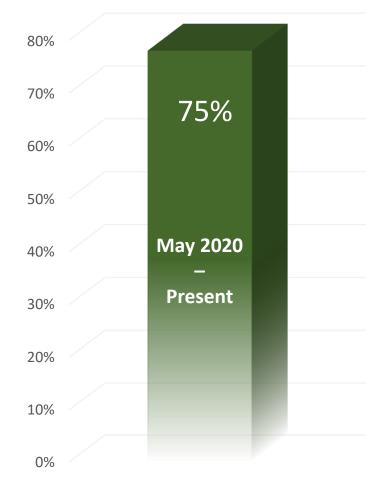
This letter serves to announce the revised application procedure for inspection and testing of fire service installations and equipment (FSI) by FSI/501 submission which will come into effect on 1 May 2020.

Currently, application for inspection and testing of FSI in new building¹ should be submitted by authorized person (AP) who together with the registered fire service installation contractor (RFSIC) concerned are required to sign on the same application form FSI/501 to certify that the FSI listed therein have been installed and tested, and are in efficient working order pursuant to the Codes of Practice for Minimum Fire Service Installations and Equipment and Inspection, Testing and Maintenance of Installations and Equipment (Code). To facilitate the application process, as well as to specify clearly the respective areas of professional responsibility of AP, registered professional engineer (RPE) and RFSIC engaged in the process, the Fire Services Department (FSD) has revised the application procedure and divided the extant application form into FSI/501 (Rev.2020) and FSI/501a. The revised application procedure together with the new forms will be put into general use with effect from 1 May 2020.

¹ According to the Buildings Ordinance (Cap. 123), new building means any building hereafter erected and also any existing building of which not less than one half measured by volume is rebuilt or which is altered to such an extent as to necessitate the reconstruction of not less than one half of the superficial area of the main walls.

Analysis of FSI/501 Application – Successful Rate

185 out of 247 Cases

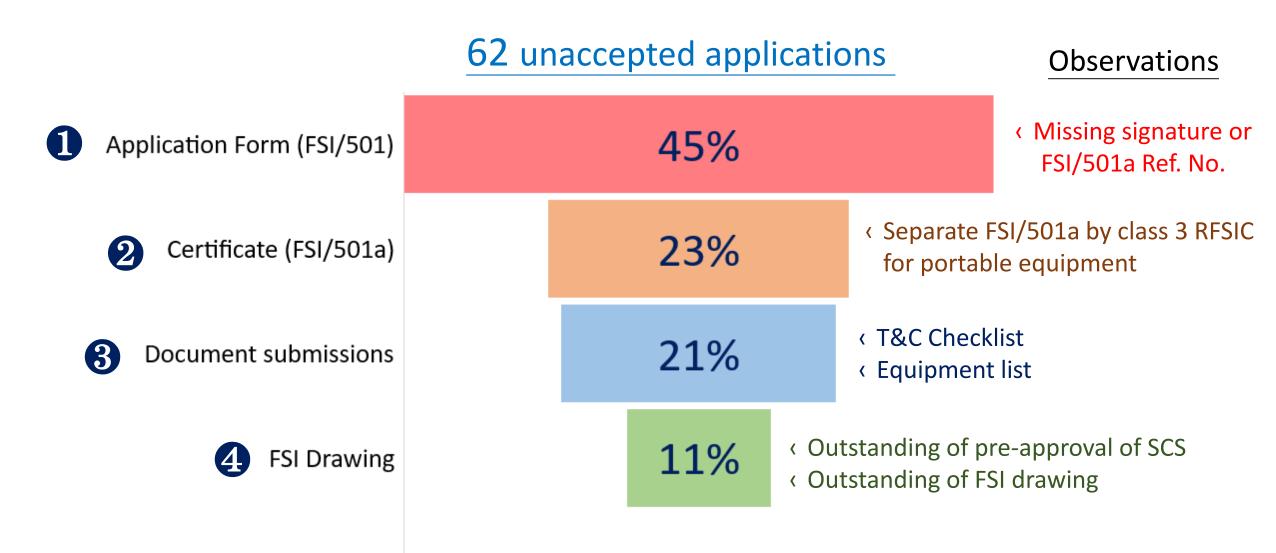


FSI/501a Section 21(6)(d) of the Buildings Ordinance (Cap. 123) RFSIC Ref. No. RC 2 / 2 7 3 3 - 2 0 2 0 0 5 0 1 - 0 1 Application for Inspection and Testing of Fire Service Installations and Equipment Certificate of Completion of Installation of Fire Service Installations and Equipment in New Buildin Types of Fire Service Installations and Equipment ✓ Audio/Visual Advisory System ☐ Fire Blanket Types of Fire Service Installations and Equipment: □ Automatic Actuating Device ☐ Fire Control Centre Sprinkler System ☑ Audio/Visual Advisory System □ Automatic Fixed Installation other Fire Detection System □ Static Smoke Extraction System ☐ Automatic Actuating Device ☐ Automatic Fixed Installation other ☑ Fire Detection System Fire Hydrant/Hose Reel System ☐ Drencher System Fixed Automatically Operated □ Deluge System Approved Appliance ☐ Drencher System Fire Hydrant/Hose Reel System* ☐ Fixed Automatically Operated Approved Appliance □ Dynamic Smoke Extraction System ☐ Dynamic Smoke Extraction System ☑ Emergency Generator ☐ Gas Extraction System ☑ Exit Sign Emergency Lighting Fire Alarm System ☐ Ring Main System with Fixed ☐ Portable Fire Extinguis Exit Sign Please tick the appropriate box(es) I hereby certify that the "staticase pressurization system(s)/dynamic smoke extraction system(s)/water mist and the transmitter with mass or inpenses on the properties. I hereby dentity and such fire service installed according to the FSI plans submitted under the cover of FSI/501a, which was/were approved by the Fire Services Department (FSD) on-2000 and/or building plans approved by FSD on 19/08/2019, has/have been tested and,), has/have been installed and tested in accordance with the FSD's Angeledge, is/are in efficient working order in accordance with the Codes of Practice for am satisfied that the above systems are operating in accordance with the approved design Installations and Equipment and Inspection, Testing and Maintenance of Installations pies of the following documents are attached as follows npleted testing and commissioning checklist(s) Signature of Registered Professional Enginee 1. the fire service installation(s)/equipment listed above and in the attached FSI/501a has/have been Others (please specify, e.g. Fire Safety Management Plan, Fire Engineering Report) see document list attached installed in accordance with the approved building plans stamped by the FSD on 19/08/2019 and is/are 2. Fire Service Completion Advice in respect of fire service installation(s)/equipment requiring government emarks: Relevant test report(s) for dynamic smoke extraction system/staircase pressurization system endorsed by the degistered Professional Engineer, if applicable, should be attached. water main connection has been *applied for/issued by the Water Supplies Department (copy This certificate shall be issued by RFSIC to the person on whose instructions the installation work was undertaken and a * Please delete as appropriate. FSI/501 (Rev. 2020)

1.5.2020 - 30.11.2020

Specimen available in **FSD Circular Letter No. 1/2020**

Major Causes of Unaccepted FSI/501 Application



Reference for application of acceptance inspection of FSI

Responsible Person	Type of Form/Document	Reference
AP / RPE	Form FSI/501 application for acceptance inspection	FSD Circular Letter No. 1/2020
RFSIC	Copy of Certificate FSI/501a #	
RFSIC	Form FSI/314 covering FSI Plans*	FSD Circular Letter No. 1/2015 FSD Circular Letter No. 4/2008 FSD Circular Letter No. 4/96
RFSIC / RPE	T&C Checklists	FSD Circular Letter No. 1/2015 (Appendix 1 to 7)
RFSIC / RPE	Test Reports for FSI	Part II of the CoP for Inspection, Testing and Maintenance of Installations and Equipment
RFSIC	FSI - Equipment List	FSD Circular Letter No. 3/2020 FSD Circular Letter No. 1/2015 (for application submitted on/before 31.12.2020)

^{*} As prior approval for FSI including dynamic SES, SPS and VAC system shall have been obtained from FSD beforehand, no further submission of FSI plans for such system are required. However, RFSIC, AP & RPE shall be reminded that T&C checklist or test reports, where appropriate, for such FSI shall be submitted along with the application.

[#] RFSICs shall observe that specific FSI systems may be required prior approval or obtained an approved license, e.g. sprinkler installation by hydraulic calculation, DG license for fuel tank of emergency generator.

Analysis of FSI Acceptance Inspection

Summary of Analysis of 148 completed applications (May – Oct 2020 #)

	Descriptions (Nos./%)	Duration between Receipt	Distribution of time		
Item		of FSI/501 and Issue of FS172	FSD	AP/RFSIC	
		Average Calendar day	Average (%)	Average (%)	
1	Cases WITHOUT Re-inspection [117 Cases (79%)]	47	72 %	28%	
2	Cases With 1 Re-inspection [26 Cases (18%)]	82	35%	65%	
3	Cases With 2 Re-inspection [5 Cases (3%)]	97	28%	72 %	

[#] Special work arrangement had been implemented due to Covid-19

^{*} Blue colour – Time taken by FSD

^{*} Red colour – Time taken by AP/RFSIC

Analysis of FSI Acceptance Inspection

Comparison between the **Former** and **New** Application Procedures since the implementation of facilitation measures* in early 2018

Course of Inspection	Former (FSI/501)	New (FSI/501 & FSI/501a)		
	Average Calendar Day	Average Calendar Day		
Cases WITHOUT Re-inspection	48	47		
Cases with 1 re-inspection	88	82		
Cases with 2 re-inspection	116	97		
Cases with 3 re-inspection	150	Nil		

^{*} Facilitation measures include pre-inspection meeting, document checklist, etc.

Precautionary Measures against Covid-19 in Workplace





FIRE SERVICES DEPARTMENT LICENSING & CERTIFICATION COMMAND FIRE SERVICES HEADQUARTERS BUILDING, 5/F, No.1 Hong Chong Road, Tsim Sha Tsul East, Kowloon Hong Kong.

本 成 都 號 OUR REF.: (87) in FP 209/G/IX 來 由 檔 號 YOUR REF.: 聞 文 博 真 FAX: 852-2367 3631 微 話 TEL NO.: 852-2733 7617

8 Dec 2020

To: All Registered Fire Service Installation Contractors

Dear Sir/ Madam,

Precautionary Measures against Coronavirus Disease 2019 (COVID-19) in the Workplace

In view of the severe local COVID-19 situation and recent reports of cases at construction sites, we would like to remind all Registered Fire Service Installation Contractors to take precautionary measures against the disease in the workplace. Such precautionary measures include:

- 1. Minimise the number of people in the workplace as far as practicable;
- Keep body temperature and physical conditions in check regularly. Those with fever, respiratory symptoms or COVID-19 related symptoms such as sudden loss of taste/smell should refrain from going to work and seek medical advice promptly;
- 3. Wear a surgical mask and/or appropriate personal protective equipment; and
- 4. Practise social distancing, i.e. keep at least 1.5 m away from others.

During FSI acceptance inspections, you are also required to observe other anti-COVID-19 measures as advised by our personnel in the pre-inspection meetings. In case minor amendments have to be made to fire service installation plans after the inspection of new buildings, you may collect your plans from our office for amendment under our temporary arrangement as announced in our letter of 3 July 2020 for the purpose of minimising social contact.

..../2

REF. NUMBER AND DATE SHOULD BE QUOTED IN REFERENCE TO THIS LETTER

凡提及本信時期引丝編號及日期

FS 107A (Rev. 10/95)

Letter to all Registered Fire Service Installation Contractors

- Precautionary measures against the disease in the workplace
 - minimize no. of people in the workplace
 - Keep body temperature and physical conditions in check
 - wear surgical mask and/or personal protective equipment
 - practise social distancing

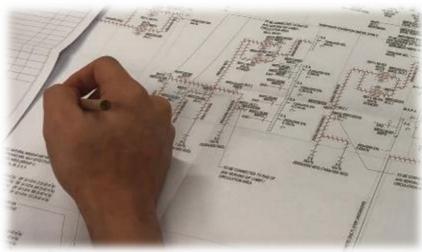
regularly

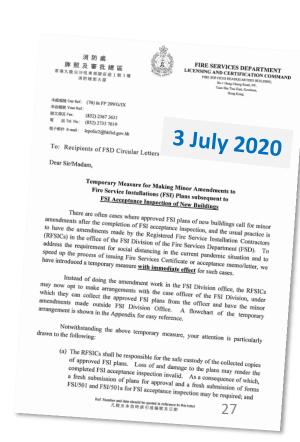


Precautionary Measures against Covid-19 in Workplace

- ② During FSI acceptance inspections:
 - □ observe anti-COVID-19 measures as advised by FSD personnel
 - □ observe the temporary measure for FSI plans amendment via letter on 3.7.2020
 - ✓ maintain social distancing
 - ✓ speed up the document checking process





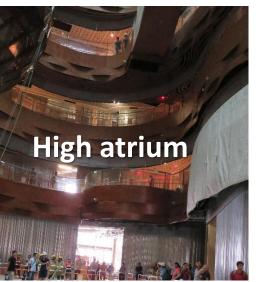


Experience sharing on acceptance of dynamic smoke extraction system & verification of the performance by hot smoke test

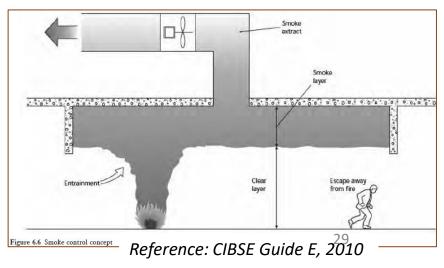
Dynamic smoke extraction system (SES)

- Mechanical ventilation system capable of :-
 - Removing smoke and products of combustion
 - Supplying fresh air
 - Maintaining a tenable conditions below smoke layer





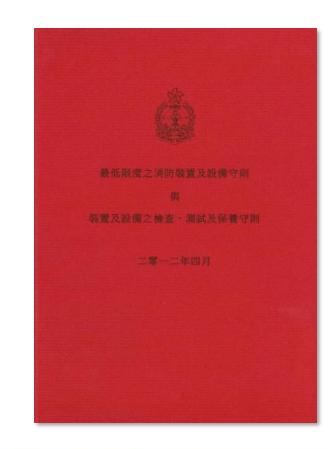


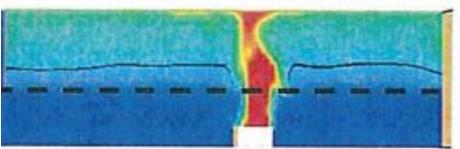


Design approach for SES

- Prescriptive Design
 - 8 Air Change per Hour (8 ACH) of the total compartment volume

- Fire Engineering Design
 - Design fire size based on the worst-case scenario
 - Smoke extraction rate determined by empirical calculations and computational simulation





Design workflow of SES

Prescriptive approach

GBP[#] → Detailed design (FSI/314) → Installation and T&C → FS Inspection

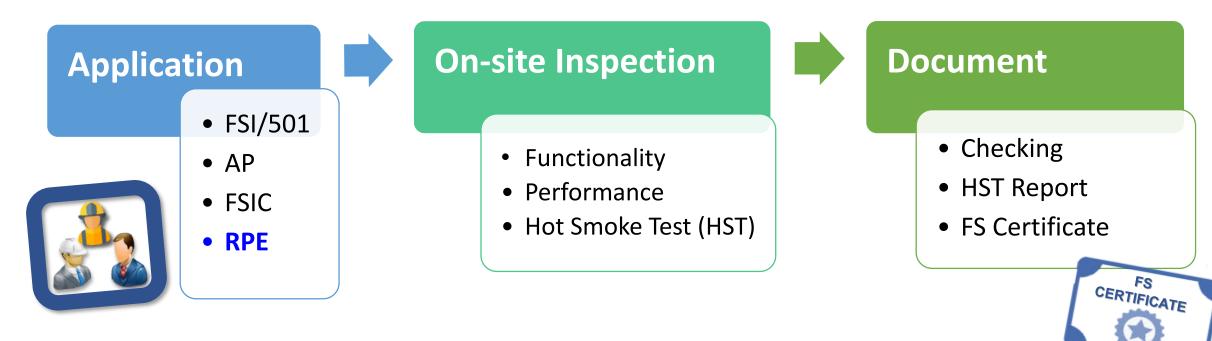
Fire engineering design approach

FE related submission \rightarrow GBP $^{\#}$ Detailed design (FSI/314) \rightarrow Installation and T&C \rightarrow FS Inspection

- # Hot Smoke Test will be required in the building plans involving compartment:-
 - with headroom of 12 m or more; or
 - with irregular geometrical dimension or extraordinary large size

GBP – General Building Plan ; **T&C** – Testing & Commissioning

Workflow of acceptance inspection involving SES



RPE – Registered Professional Engineer (Building Services, fire or mechanical engineering)

Verification of the performance of SES

Functionality	Performance
ActuationSmoke detectorSprinkler flow switch	Total extraction rate • Accumulated fans
Fan operationSmoke extraction fanMake-up fan	Zone extraction rateSmoke zone extraction rate
 Associated equipment Smoke curtain Motorized fire & smoke damper Make-up door 	 Flow velocity Extract grille ≤ 6 m/s Mechanical make-up ≤ 6 m/s Natural make-up ≤ 3 m/s

Performance verification by hot smoke test

Hot smoke Test

- To ensure the satisfactory installation of SES
- To ascertain the performance of SES

Requirements

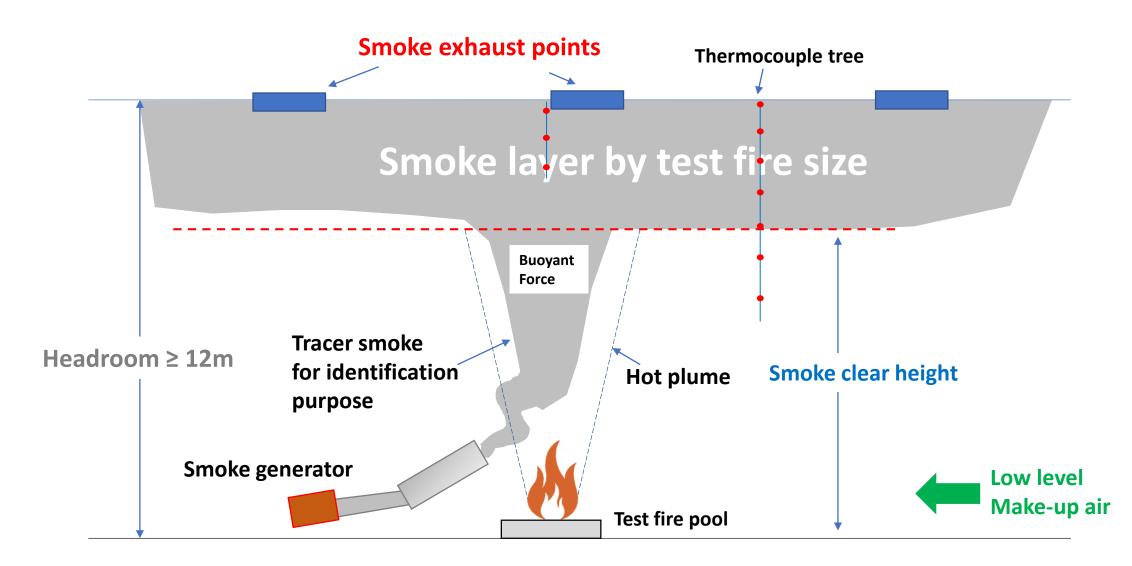
 Code of practice for inspection, testing and maintenance of installations and equipment 2012 - Section 2.23







General principle of hot smoke test



Salient point of the tests

Test fire

- At least 1 MW or size agreed by FSD
- Non-contaminating industrial grade methylated spirit

Hot plume temperature

 maintained 10 °C or below a temperature rating of ceiling sprinkler

Tracer smoke

Non-toxic oil based smoke generator

Reference: AS-4391:1999 Smoke Management Systems – Hot Smoke Test





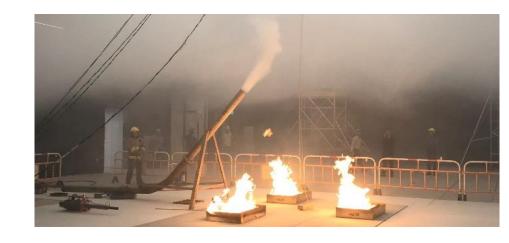


Acceptable criteria

- **Operation Prompt actuation** of SES
- 2 No impact on the stability of smoke layer by make-up air. Low-level make-up air & high-level extract air forming flow path with "sourcing" effect.
- ③ Designed smoke clear height be maintained







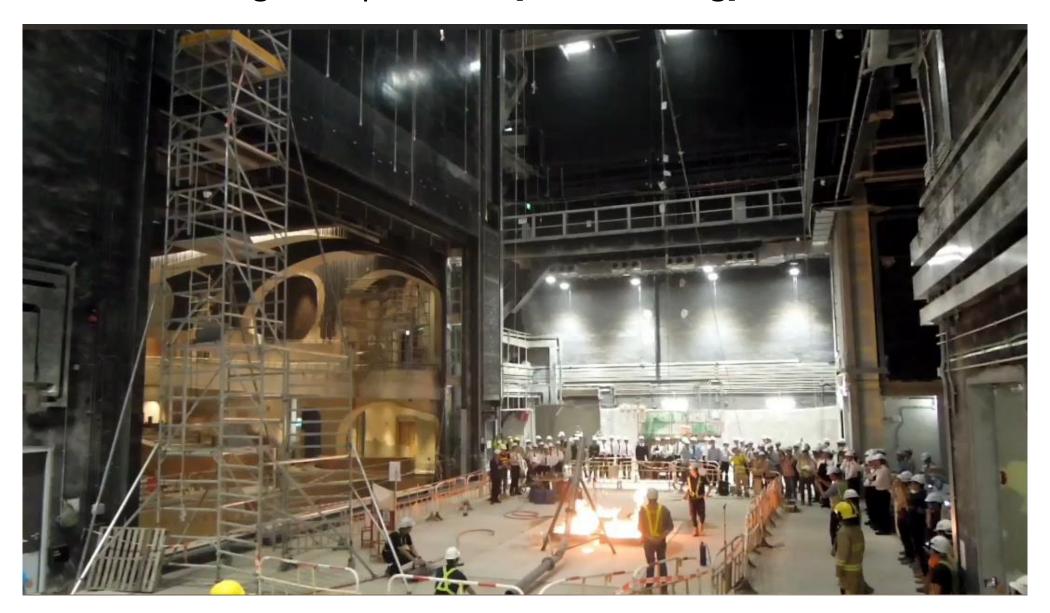
Acceptable criteria

- 4 No "stagnant corner" with significant smoke built up beneath the smoke layer
- Solution Significant disperse of smoke to adjoining smoke compartment
- 6 No deflection of smoke curtains exceeding the design limit
- No smoke should re-enter into the building through building openings or fresh intake louvres





Hot smoke test in a large compartment [video sharing]

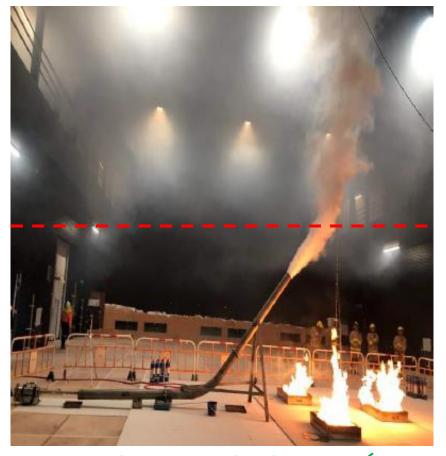


Observations by hot smoke test

Failure of maintenance of clear smoke layer



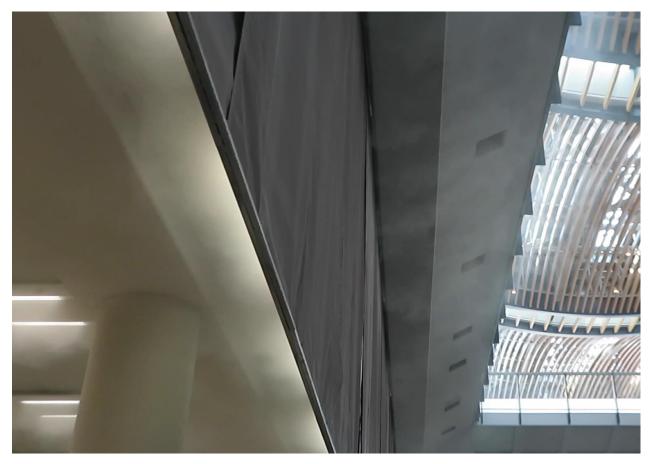
No smoke layer **≭**



Clear smoke layer ✓₄₀



Disperse of smoke to adjoining smoke compartment

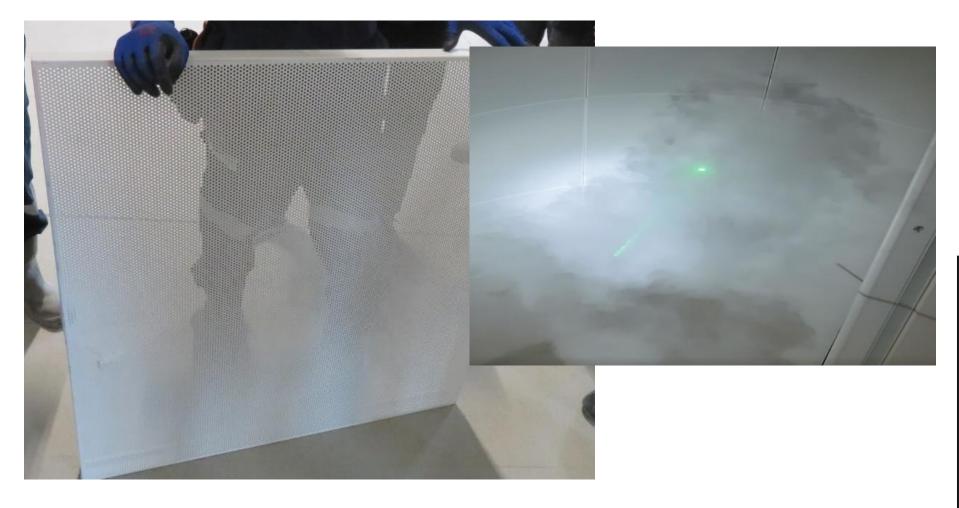


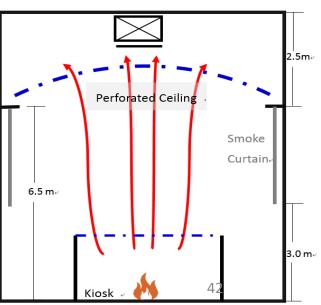
Smoke curtain failed to contain smoke *



Prevention of smoke spread by smoke curtain

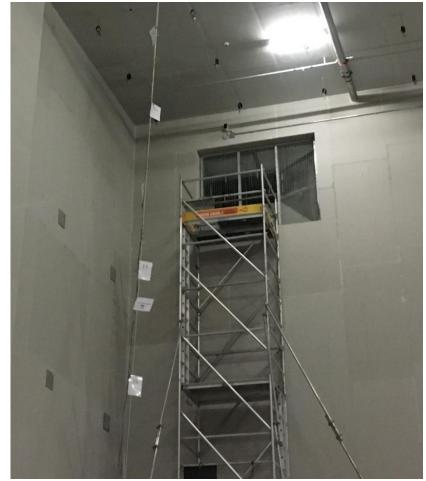
Reduction of smoke extraction effectiveness by perforated ceiling





Failure in Operation of Motorized Fire & Smoke Damper



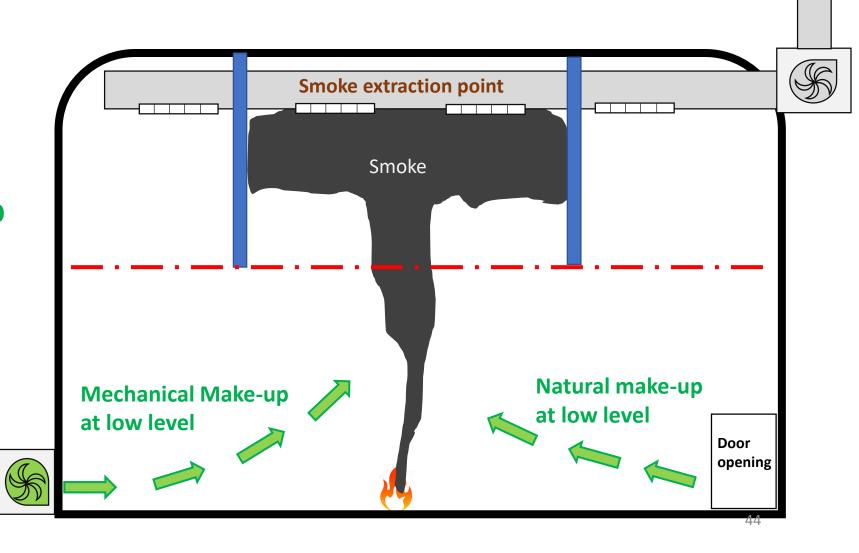


Motorized Fire & Smoke Damper failed to operate effectively during the test

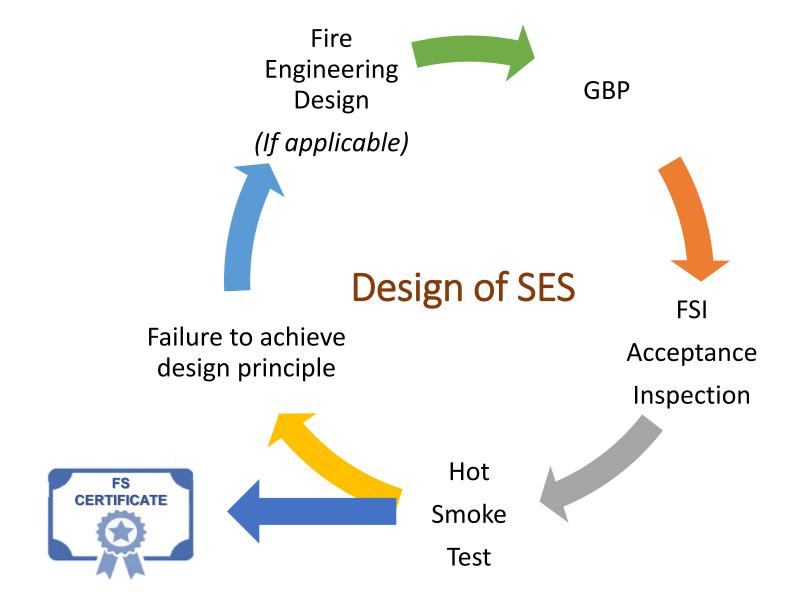
Critical points in SES Design

① Containment of smoke by smoke curtains

- ② Location of make-up
- ③ Distribution of extraction points
- Smoke path



Critical points in SES Design



To sum up

 Collaboration between FSD and the Trade to enhance the efficiency of FSI Acceptance Inspection

- Shared key points to be observed in the design and acceptance of SES
- Hot Smoke Test provides a practical means to verify the performance of SES, particular for those designed by computational simulation

Thank you

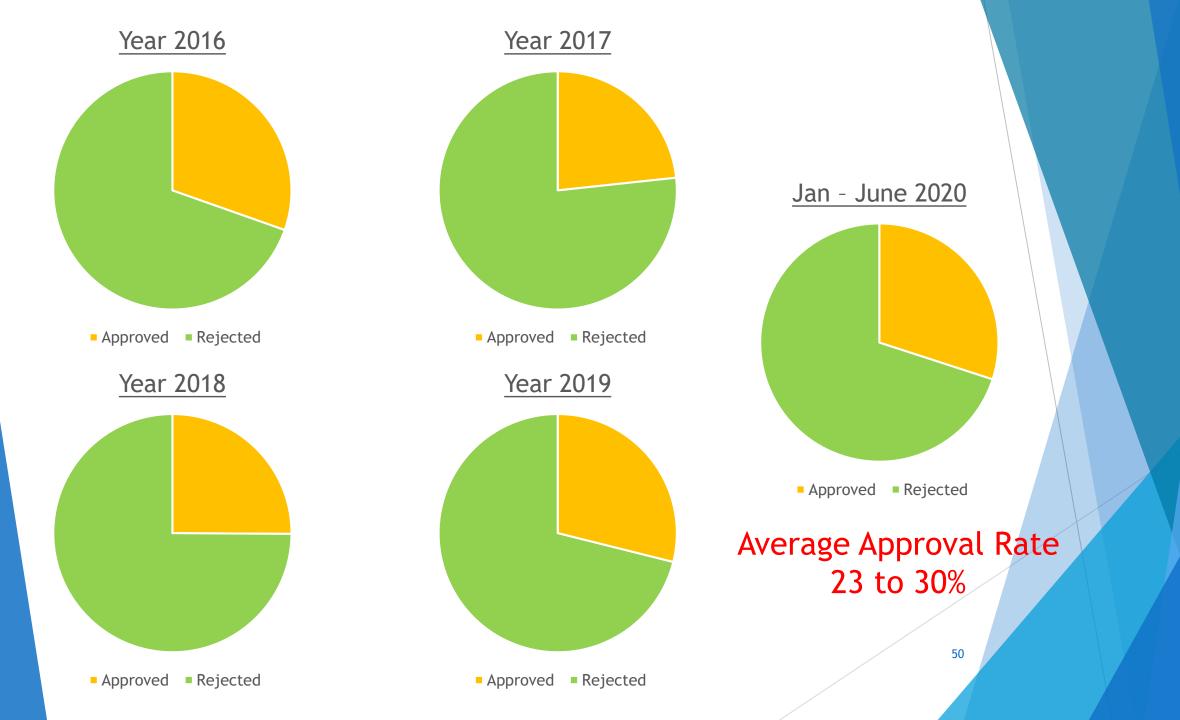
FSIC's performance on FSI drawing submissions under statutory buildings improvement works (with Case Study)

Engineer(BI)1 Ir FAN Kai-yip, Ivan

Statistics on FSI plans submissions under FSI/314B and FSI/314C



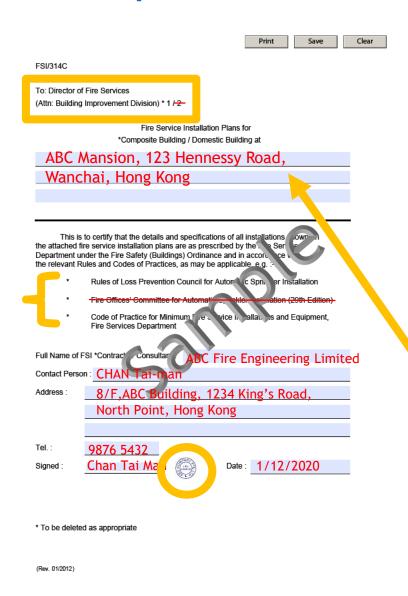




Observations on the Form FSI/314B and FSI/314C Submissions

- Incomplete Form FSI/314B and 314C
- ②Outstanding Submission documents
- 3 Improper Design on Fire Service Installations

Incomplete Form FSI/314B and 314C





Fire Safety (Buildings) Ordinance (Chapter 572)

(Section 5)

Fire Safety Direction

Direction No. : FSD/FSDn /1234/2020 Our Ref. No. : (123) in FP 56/1234 «Pa

The Incorporated Owner of A. C. Mansion

G/F, ABC Mans n, 123 1 nnessy Road, Wanchai, Hong

Kong

1. TAKE NOTICE that the building at

ABC Mansion, 123 Hennessy

Road, Wanchai, Hong Kong

is a composite building within the meaning of Section 3(1) of the Fire Safety (Buildings) Ordinance (the Ordinance). Pursuant to Section 5(2)(a)(i) of the Ordinance, the Director of Fire Services hereby direct you, as the owner of

Common Mistakes:

- 1. No company chop / signature
- 2. Address not consistent with Fire Safety Direction (FSDn)
- 3. Do not cross out the appropriate code
- 4. The submitted Form FSI/314C is not updated

QR Code for Form FSI/314B



QR Code for Form FSI/314C



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Outstanding Submission Documents

Sample of Authorization Letter

About (Address): ABC Mansion, 123 Hennessy Road, Wanchai, Hong Kong

FSD / Ref: (123) in FP 56 / (1234)

Direction No.: FSD / FSDn / (123) / (2020)

Dear Sir / Madam,
The Incorporated Owners

-*I (Authorized Person) / *We (Incorporated Owners)

of ABC Mansion

hereby nominate *Name of Consultants:

*Name of RFSIC: ABC Fire Engineering Limited

on behalf of the above building to comply with the Fire Safety Direction	and
coordinate the following matters:	
Application for the Extension of Time to the Fire Safety Direction to Pile	- A
Services Department	
Submission of Fire Service Installations plans (FSI/3	
Department	
Commencement of FS improvement worl w. In the suding boundary	V
To allow fire service installations and uipmunt inside individual units	_
(Non-Domestic portan) of the Mail ag to be integrated with those fire	
service installati	
To raise any enquiry to Fire Pervices Department	

*Name of Authorized Person CHAN Tai-man

*Signature of Authorized Person CHAN Tai-man

*Name of the responsible person of I.O./Owner Lee Siu-ming

*Signature of the responsible person of I.O./Owner <u>Lee Siu-ming</u>

Date 1 /12 /2020

*Chop of I.O.



Common Mistakes:

- 1. No Chop / Signature
- 2.3 sets of FSI drawings with 2 set in colour
- 3. Original Authorization Letter (Copy is not preferable)
- 4. Name of the Owner shown in an Authorization Letter was deviated from those shown in FSDn
- 5. Consent letter from the I/O or owners for the installations of FSI equipment passing through the private owners areas / carry out extra F.S. improvement works other than the requirements of FSDn.

Sample of Consent letter

* I/ We ,	WONG Tai-	ming		_ (*in cor	pora. d ov pe	owne	r / owne	r's repre	senta	tive / occu	pier / occ	upier 's	
r epresentati	ve of the above 1	premises), here	by have no	objection	n to Install 1	S pip	e route	е					
(#Type of	Fire Services	Installations	(FSIs)) a	t the	Shop 1 on	Grou	nd Floo	r		-			
(@Location	of FSIs) in	accordance	with the	I I j	ns submitt	ed un	der the	cover	of	FSI/314	(*B/C)	dated	
1 /12 /2	020			1,									
			50										
Signature/C	'hop:						53				4 440	10000	
WONC	Tai ming						6123	1547			1 /12	/2020	
WONG	Tai-ming					Tel.:	0123	430/		Date :			

Outstanding Submission Documents





Water Supplies Department 香港辦仔告士打道七號入境事務大機43 櫻 43/F, Immigration Tower, 7 Gloucester Road, Wan Chai, Hong Kong

wsdinfo@wsd.gov.hk

Telephone

Reference

國文傳真

客戶諮詢編號

先生/女士:

可行性消防供水

貴公司於

用涂,該區的最低水壓 1為300千帕斯卡。 平基準對上116.479米。請注意,你的樓

設計的(消防用)臨時花處系統有充足的供水,我們都會繼續維持最少有300 千帕斯卡的剩餘水壓,除了在供應區的盡頭外。

請先向消防處遞交建議的消防供水系統詳情及垂直水管路線圖,待 該處審核和同意後,才交由本署批核。此外,亦請盡快通知本署所需的消防 供水駁喉尺寸。

在設計上,凡使用政府總水管供水的消防裝置,均須與建築物內其 他供水系統完全分開。

請注意、若有關系統可由第二水源供水、則兩水源之間須有空氣分 隔裝置,以発出現第二水源污染政府總水管供水的情況。又請注意,消防供 水系統的製造商/設計者、須負責確保該系統符合有關消防處對流量及水壓的

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.../ 2

Checklist for Major Defects of FSI Drawings Submission under Cap. 502 / Cap. 572

BI/FSI/01
根據香港法例第 502 或 572 章消防裝置圖則審批核對表 <u>Checklist for Major Defects of FSI Drawings Submission under Cap 502 / Cap 572</u>
檔號 File Ref :
A 部 證明文件 Part A Supporting documents
(1) 須提供業主立案法團/業主就遞交消防裝置圖則的同意書/聘用書/提名信
(1) Record Product Name of the Control of the Contr

(1)	須提供業主立案法團/業主就遞交消防裝置圖則的同意書/聘用書/提名信 Consent / Employment / Nomination letter from the Incorporated Owner (I.O.) / Owner(s) for FSI submission shall be provided	[]
(2)	須在 FSI/314B 或 FSI/314C 表格上提供完整而準確的資料(即項目地址、公司名稱、公司印章、簽署等) Complete and accurate information on Form FSI/314B or FSI/314C (ie. Project address Company name, Company Chop, signature) shall be provided	-]
(3)	如週用,須提供田懿可人工提父的結博評估報告 Structural Appraisal Report (SAR) by Authorized Person shall be provided; if applicable	[]
(4)	其他 Others :-	[]

BI/FSI/01

B 部 消防裝置圖則的一般要求

Part B General requirement in FSI drawings

(1)	須提供準確的圖則清單/樓宇位置及平面圖/圖例/消防註釋及其消防裝置的 狀況與準則(現有/新安裝部分) Accurate drawing List / Location & Block Plan / Legend / Fire Services Notes with status criteria (existing / newly installed portions) shall be provided	[]
(2)	任何不包括在所遞交圖則內的樓宇範圍/部分,須以影線或陰影顯示並加上說 明]]
	Any areas / portions of the building not included in your submission shall be hatched or shaded with description		
(3)	消防裝置圖則與消防安全指示/已獲批准的建築圖則不符 FSI drawings do not tally with Fire Safety Direction / approved general building plan	[]
(4)	消防註釋與消防裝置圖則不符 FS notes do not tally with FSI drawings	[]
(5)	須提交 3 套圖則,其中至少 2 套須要著色 Three (3) sets of drawing shall be submitted with at least 2 sets in colour	[]
(6)	須依從消防處通函第 4/96 號的規定圖則比例和顏色代碼。而現有消防裝置須以 虛線顯示	[]
	Drawing scale and colour codes shall be provided in accordance with FSD Circular Letter No. 4/96. The existing FSI works to be shown in hidden lines.		
(7)	里和您欠时况仍沒且回则明線不經修司,以不有帐據工人應文时別雙时思兄, 相應更改 FSI plan resubmission is obviously not amended or without incorporating the	l	J
	comments made in previous submission		
(8)	須整合整棟樓宇的消防裝置。如適用,須提供整套消防裝置(包括樓宇住宅和 非住宅部分),或在消防裝置圖則上標示每個整合點	[]
	FSI(s) for the entire building is required to be integrated. Full set of FSI(s) including domestic and non-domestic portions of the building shall be provided or any integrated point(s) to be morked on FSI drawings if applicable.		
(9)	文字和符號難以閱讀 (字體/符號過小,或文字/符號與圖則的色彩對比過低) Text and symbols are not readable (size of font/symbol is too small / low colour contrast between text/symbols and the drawing)	[]
(10)	具他 55 Others:-	[]
	Others :-		

QR Code for Checklist for Major Defects



Document Checklist for FSI/314C Submission

		Submitted
(a)	Authorization Letter from Owner(s) / The Incorporated Owners	
(b)	If the design of the Fire Service Installation Plans plan involving fire safety improvement works in private areas, authorization letter(s) from the owner(s) of the individual unit(s) is / are required	
(c)	Copy of "Letter for Application for Improvement to the Fire Service (FS) Installations Special Approval for FS Tank Capacity" (if any)	
(d)	In case of Improvised Sprinkler System or Improvised Hose Reel System (Direct Feed Type), copy of the letter on the minimum residual pressure issued by Water Supplies Department	
(e)	Copy of approval letter for all associated building works under the Fire Safety Improvement works from Buildings Department	
(f)	Schematic Piping Diagram for Sprinkler System	
(g)	Schematic Piping Diagram for FH/HR System	
(h)	Copy of Periodic Test Certificate (Form WR2) with Schematic Wiring Diagram issued by EMSD (if necessary)	
(i)	Schematic Power Supply Diagram for the Fire Safety Improvement Works	
(j)	Structural Appraisal Report (SAR) submitted by Authorized Person (if necessary)	

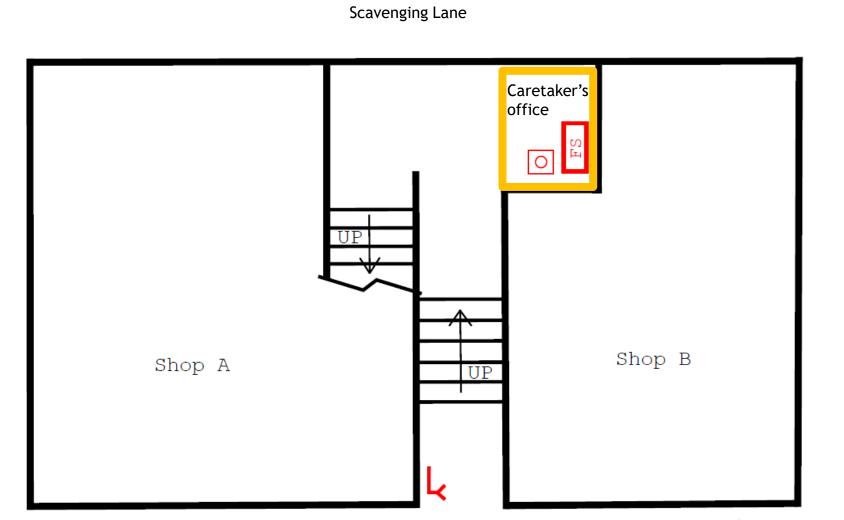
Improper Design on Fire Service Installations

- Fire Hydrant / Hose Reel System
- ②Sprinkler System / Improvised Sprinkler System
- 3 Manual Fire Alarm System
- 4 Automatic cut-off device for mechanical ventilation system

Fire Hydrant / Hose Reel System and Sprinkler system

- Location of FS / sprinkler Inlet
- ② Location of hose reel
- ③Upgrading of electrical installations for standby fixed / intermediate booster fire pumps

Location of FS/ Sprinkler Inlet and F.S. Control panel



Legend:



FS/Sprinkler Inlet



F.S. Control Panel

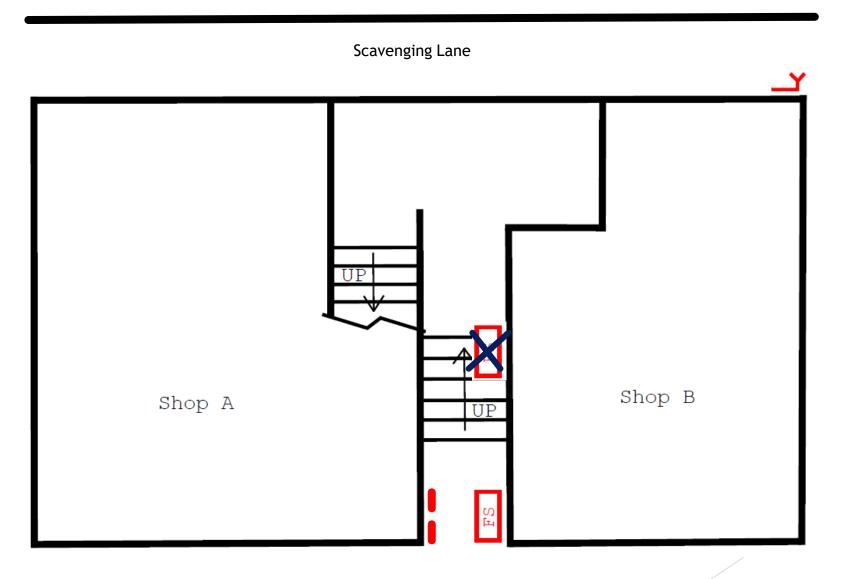


Manual fire alarm call point



Indication plate showing the location of sprinkler inlet and sprinkler control valve

Location of FS/ Sprinkler Inlet and F.S. Control panel



Justification of spatial constraints to install the FS inlet at main entrance shall be provided.

For example: Site Photo with measurements.



Location of hose reel

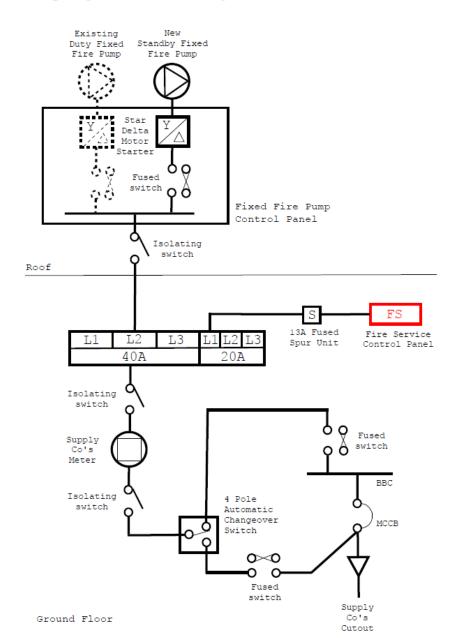




Justification of spatial constraints to install the hose reel at the smoke lobby shall be provided.

For example: Site Photo with measurements

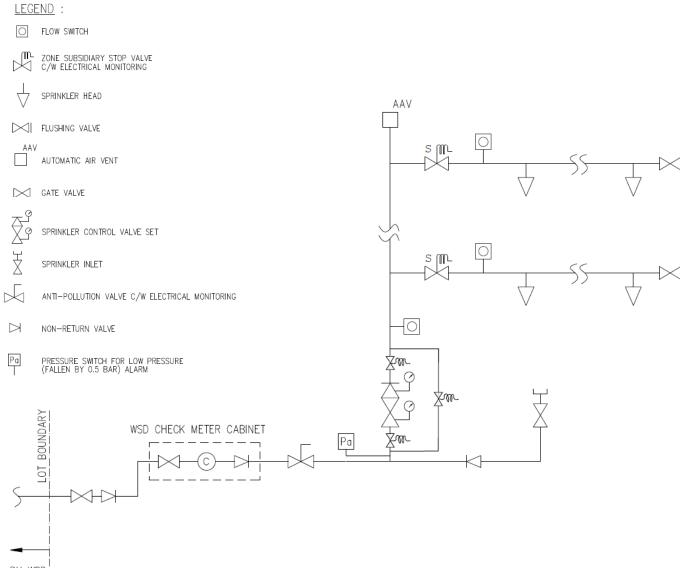
Upgrading of Electrical Installations



Common Mistakes:

- 1.No discrimination between protection devices of final, sub-main and main circuits.
- 2. Non-fire resisting cables for fixed fire pumps set and F.S. control panel
- 3. Current carrying capacity for the existing power supply circuits is less than the circuit design current of new standby fixed fire pump
- 4.Incorrect rating of protection devices, size and category of cable

Improvised Sprinkler System (Direct Town's Main Connection)



Common Mistakes:

1.Incorrect hydraulic calculation

2.Inappropriate location of anti-

pollution valve

3.Inappropriate subsidiary valve

zoning of

Case Sharing on Incorporation of the Fresh Water Supply System into the Fire Hydrant Hose Reel System

Case Study (Example 3)

消 防 處 消防安全總區

香港九龍尖沙咀東部康莊道一號 消防處總部大廈七樓

本處檔號 OUR REF.:

(34) in FSD FSC GR 13-314/07 IV

NA YOUR REF.:

圖文傳真 FAX: 電 話 TEL. NO.: (852) 2312 0376 (852) 2170 9595

27 September 2017

FIRE SERVICES DEPARTMENT

FIRE SAFETY COMMAND
7th Floor, Fire Services Headquarters Building

No. 1 Hong Chong Road Tsim Sha Tsui East, Kowloon

Hong Kong

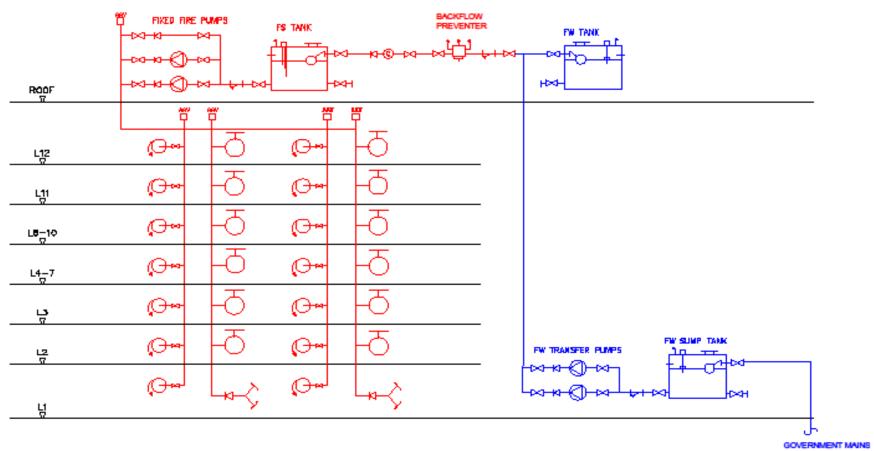
To: Recipients of FSD Circular Letters

Dear Sirs/Madams,

FSD Circular Letter No. 3/2017
Part I: Reduced Supply Tank Capacity Requirement for the Fire Hydrant/Hose Reel System; and
Part II: Pilot Scheme on the Incorporation of the Fresh Water Supply System into the Fire Hydrant/Hose Reel System in Connection with the Enforcement of the Fire Safety (Buildings) Ordinance, Cap. 572, Laws of Hong Kong

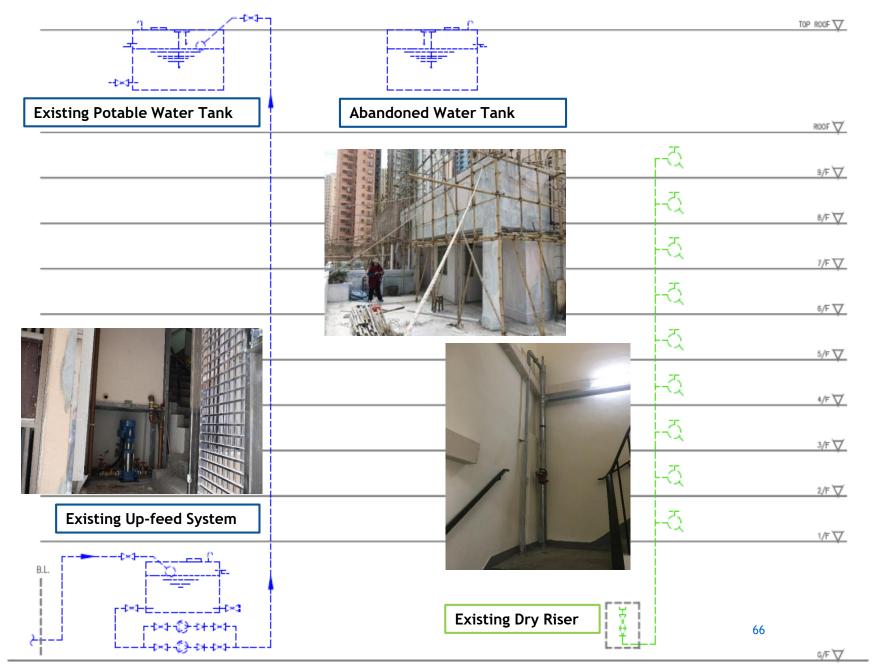
FSD Circular Letter No.3/2017 64

Case Study (Example 3)

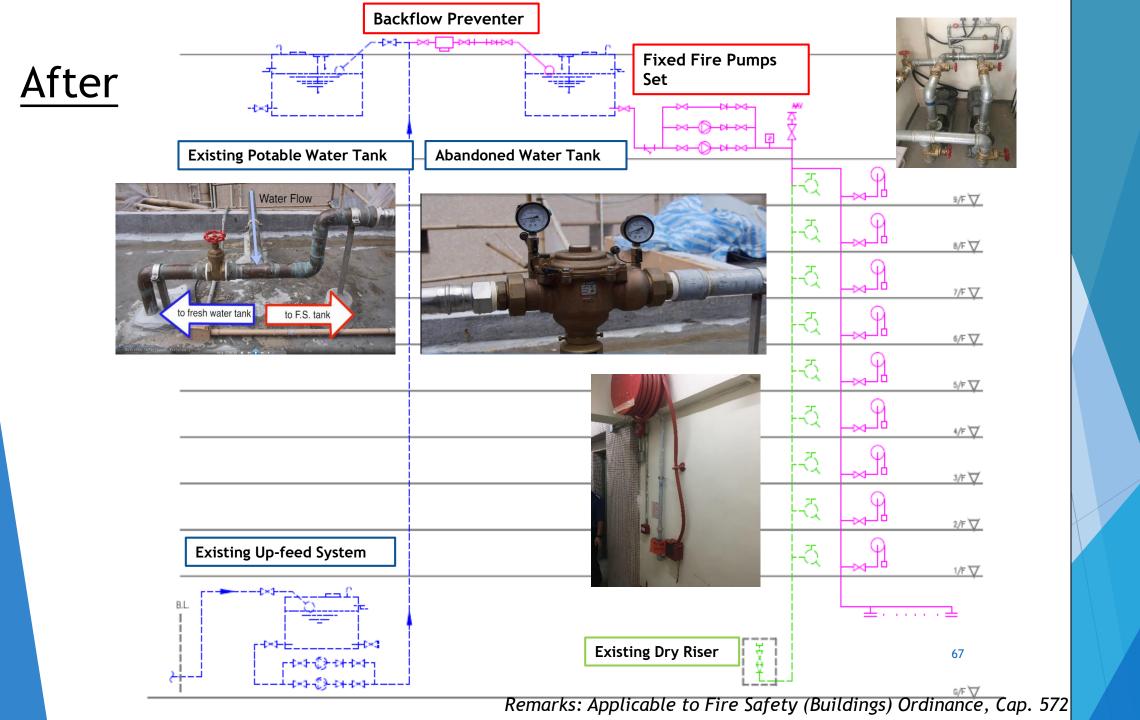


Example 3 - Fire Hydrant/Hose Reel System for 7 storeys or above or over 20 m in height (Water supply to FS water by making additional branch from the original upfeed water pipe of the fresh water system provided that the fresh water supply system is of a sump and pump design)

Before



Remarks: Applicable to Fire Safety (Buildings) Ordinance, Cap. 572



Thank You

Revised Procedure for Reporting FSI Shutdown



Objectives of Revision



Improve Building Fire Safety



Streamline Submission Procedures



Reduce Administrative Work



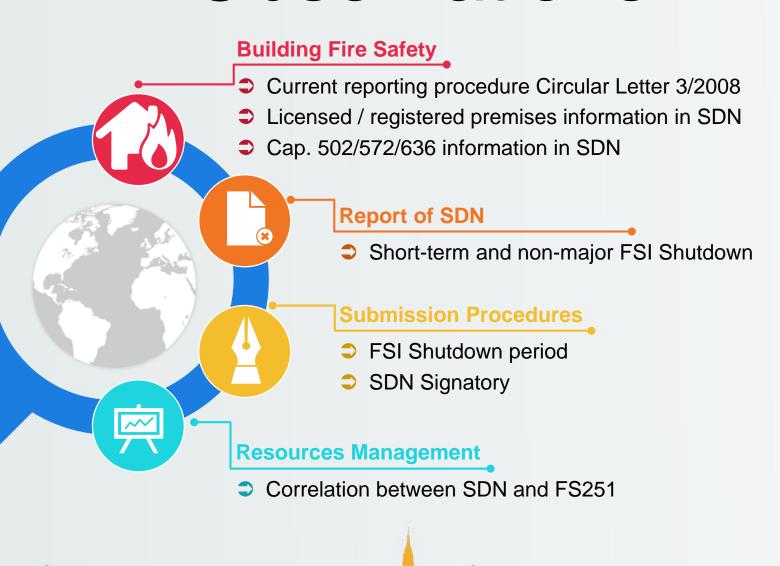
Optimise FS resources



Safeguard FSIC



Observations



	港消防處 防通訊中心		先和	用由消防處	消防通訊中	心填寫
· 傳真號碼 : 23			消防處核	當案編號:		
填寫日期:	711 0000		複字所屬	· 清防局:		
	雄	宇消防裝置關	開通知書			
		1 1/4 1/4 //4 344 195	14-47			
楼宇/星苑名稱	:			地區:		
門牌號數及街道	道名稱:			□ 香港] 九龍	□ 新界
註冊消防裝置力	永辨商:			級別/編號	ŧ:	
本公司確認以了	- 受影響的消防裝置需	要通宵或連續超過	124 小時關閉	No.		
□ 消防栓/喉鶇	鹿系統 □ 花灑系統	□ 乾喉系統	充 □ 火警	負測系統((存在休眠	風險的處所
□ 火警警報系	統 □ 噴水系統	□ 排煙系統	· □ 楼梯	持壓	□ 街道	消防栓系統

□ 火警警報系統 □ 噴水系統			系統(存在休眠風險的處所,
註1:花灑系統不應與 消防栓/喉轆系統			
以下持牌/註冊處所將會受到影響	上述消防裝	置因以下法例要求	進行消防安全改善工程
□ 安老/殘疾院舎 □ 酒店/賓館	☐ Cap. 505	2 消防安全(商業處)	所)條例
□ 幼兒中心 □ 危險品倉	☐ Cap. 572	? 消防安全(建築物))條例
□ 戲院/劇院/公眾娛樂場所	☐ Cap. 636) 消防安全(工業建	築物)條例
第一部份 - 關閉樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中心蓋印
開始關閉日期:			
預計完成日期:		1	
FS 251 編號(如有):		1	
填寫人姓名: 手提電話	; ; 2) () 司電話:	傳真號碼:
註 2:註冊消防裝置承辦商須確保消防裝			
第二部份 - 延長關閉禮宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中心蓋印
工程需延期至:		i	
FS 251 編號:		i	
			102002004800
填寫人姓名: 手提電訊):	公司電話:	傅真號碼:
填寫人姓名: 手提電話 註3:如需要延長關閉時間,註冊消防裝		No. of the Control of	
	置承辦商須 提交相	M FS 251 及延期不起	- December 1995
註3:如需要延長關閉時間,註冊消防裝	置承辦商須 <mark>提交相</mark> (QP) 或 獲授權簽品	關 FS 251 及延期不表 F證書人士(AS) =	過14天。
註3:如需要延長關閉時間,註冊消防業 註4:第二部份填寫人須為 <u>合資格人士(</u>	置承辦商須 <mark>提交相</mark> (QP) 或 獲授權簽司 負責有關工程,本	關 FS 251 及延期不起 P链套人士(AS)。 公司已把該系統的狀況	過14天。
註 3:如需要延長關閉時間,註冊消防裝 註 4:第二部份填寫人類為 含資格人士(□ 上述已關閉的消防系統不再由本公司	置承辦商須 <mark>提交相</mark> (QP) 或 獲授權簽司 負責有關工程,本	關 FS 251 及延期不起 P链套人士(AS)。 公司已把該系統的狀況	2週14天 。 兄詳细告知委聘人
註3:如需要延長關閉時間,註冊消防裝 註4:第二部份填寫人須為 查責格人士(□ 上述已關閉的消防系統不再由本公司 第三部份 - 恢復楼宇消防裝置	置承辦商須 <mark>提交相</mark> (QP) 或 獲授權簽司 負責有關工程,本	關 FS 251 及延期不起 P链套人士(AS)。 公司已把該系統的狀況	2週14天 。 兄詳细告知委聘人
註 3:如需要延長關閉時間,註冊消防裝 註 4:第二部份填寫人須為 查費格人士(□ 上述已關閉的消防系統不再由本公司 第三部份 - 恢復樓宇消防裝置 工程完成日期:	置承辦商須 <mark>擾交相 QP)或 獲授權簽書</mark> 負責有關工程,本 填寫人簽署	關 FS 251及延期不惠 肾證書人士(AS)。 公司已把該系統的股沟 承辦商蓋印	1過14天。 兄詳細告知委聘人 済防通訊中心蓋印



Refinement of SDN Scope

本公司確認以下受影響的消防裝置需要通宵或連續超過24小時關閉

Short-term Cases

⇒ FSI Shutdown for less than 24 hours and not overnight

比欄由消防處消防通訊中心填寫 消防處檔案編號: 樓宇所屬消防局: 樓宇消防裝置關閉通知書 樓宇/屋苑名稱: □ 香港 □ 九龍 □ 新界 門牌號數及街道名稱: 級別/編號: 註冊消防裝置承辦商: 本公司確認以下受影響的消防裝置需要通實或連續超過24小時關閉 □ 火警偵測系統(存在休眠風險的處所) 註1:花灑系統不應與 消防栓/喉轆系統 或 火警偵測系統(存在休眠風險的處所) 同時關閉 以下持牌/註冊處所將會受到影響 上述消防裝置因以下法例要求進行消防安全改善工程 □ 安老/殘疾院舍 □ 酒店/賓館 □ Cap, 502 消防安全(商業處所)條例 □ 幼兒中心 □ 危險品倉 □ Cap. 572 消防安全(建築物)條例 □ 戲院/劇院/公眾娛樂場所 |□ Cap, 636 消防安全(工業建築物)條例 第一部份 - 關閉樓宇消防裝置 填寫人簽署 承辦商蓋印 消防通訊中心蓋印 開始關閉日期: 預計完成日期: FS 251 編號(如有): 填寫人姓名: 手提電話: 公司電話: 傳真號碼: 註 2:註冊消防裝置承辦商須確保消防裝置關閉**不超過 14 天**:並於 **14 天內把相關 FS 251 副本送交本處**。 第二部份 - 延長關閉樓宇消防裝置 填寫人簽署 承辦商黨印 消防通訊中心蓋印 工程需延期至: FS 251 編號: 手捉電話: 公司電話: 傳真號碼: 註 3:如需要延長關閉時間,註冊消防裝置承辦商須提交相關 FS 251 及延期不超過 14 天: □ 上述已關閉的消防系統不再由本公司負責有關工程,本公司已把該系統的狀況詳細告知委聘人 第三部份 - 恢復樓宇消防裝置 填寫人簽署 承辦商蓋印 消防通訊中心蓋印 工程完成日期: 手提電話:____ 註 5:註冊消防裝置承辦商必須於有關工程完成後的 14 天內把相關 FS 251 副本送交本處



Refinement of SDN Scope

□ 消防栓/喉轆系統	□ 花灑系統	□ 乾喉系統	□ 火警偵測系統	充(存在休眠風險的處所)
□ 火警警報系統	□ 噴水系統	□ 排煙系統	□樓梯增壓	□ 街道消防栓系統

Revised Major System

- ⇒ Fire Detection System of premises with sleeping risk
- Smoke Extraction System
- Pressurization of Staircase
- Dry Riser System

: 香港消防處 **先欄由消防處消防通訊中心填寫** 消防處檔案編號: 傳真號碼: 2311 0066 樓宇所屬消防局: 填寫日期: 樓宇消防裝置關閉通知書 地區: 楼宇/屋苑名稱: □ 香港 □ 九龍 □ 新界 門牌號數及街道名稱: 級別/編號: 註冊消防裝置承辦商: 本公司確認以下受影響的消防裝置需要通宵或連續超過24小時關閉 □ 火警偵測系統(存在休眠風險的處所) □ 街道消防栓系統 □ 楼梯增壓 註1:花灑系統不應與 消防栓/喉轍系統 或 火警偵測系統(存在休眠風險的處所) 同時關閉 以下持牌/註冊處所將會受到影響 上述消防裝置因以下法例要求進行消防安全改善工程 □ 安老/殘疾院舍 □ 酒店/賓館 □ Cap, 502 消防安全(商業處所)條例 □ 幼兒中心 □ 危險品倉 □ Cap. 572 消防安全(建築物)條例 □ Cap. 636 消防安全(工業建築物)條例 □ 戲院/劇院/公眾娛樂場所 第一部份 - 關閉樓宇消防裝置 填寫人簽署 消防通訊中心蓋印 承辦商蓋印 開始關閉日期: 預計完成日期: FS 251 編號(如有): 填寫人姓名: 手提電話: 公司電話: 傳真號碼: 註 2:註冊消防裝置承辦商須確保消防裝置關閉**不超過 14 天**:並於 **14 天內把相關 FS 251 副本送交本處**。 第二部份 - 延長關閉樓宇消防裝置 填寫人簽署 承辦商蓋印 消防通訊中心蓋印 工程需延期至: FS 251 編號: 手提電話: 公司電話: 傳真號碼: 註3:如需要延長關閉時間,註冊消防裝置承辦商須提交相關 FS 251 及延期不超過 14 天。 註 4: 第二部份填寫人須為 合資格人士(QP) 或 獲授權簽署證書人士(AS)。 □ 上述已關閉的消防系統不再由本公司負責有關工程,本公司已把該系統的狀況詳細告知委聘人 第三部份 - 恢復樓宇消防裝置 填寫人簽署 承辦商蓋印 消防通訊中心蓋印 工程完成日期: FS 251 編號: _____ 手提電話: ______ 公司電話: _______ 傳真號碼: ___

註 5: 註冊消防裝置承轉商必須於有關工程完成後的 14 天內把相關 FS 251 副本送交本處。

上遊已關閉的消防系統不再由本公司負責有關工程,本公司已把該系統的狀況詳細告知委聘人

註 6:第三部份填寫人須為 合資格人士(QP) 或 獲授權簽署證書人士(AS)。



Refinement of SDN Scope

□ 消防栓/喉轆系統	□ 花灑系統	□ 乾喉系統	□ 火警偵測系統	充(存在休眠風險的處所)
□ 火警警報系統	□ 噴水系統	□排煙系統	□樓梯增壓	□ 街道消防栓系統

Non-major System

- Emergency Generators
- Exit Signs

致 : 香港消防處

消防通訊中心

先欄由消防處消防通訊中心填

消防處檔案編號:

樓宇所屬消防局:

樓宇消防裝置關閉通知書

樓字/屋苑名稱:		地區	t
門牌號數及街道名稱:		□ 看	下港 □九龍 □新界
註冊消防裝置承辦商:		级别。	/編號:
本公司確認以下受影響的消防裝置需要	通宵或連續超過	24 小時關閉	
□ 消防栓/喉轆系統 □ 花灑系統	□ 乾喉系統	充 □ 火警偵測	系統(存在休眠風險的處所)
□ 火警警報系統 □ 噴水系統			
註1:花灑系統不應與 消防栓/喉轆系統			
以下持牌/註冊處所將會受到影響			售行消防安全改善工程
□ 安老/殘疾院舎□ 歯店/賓館□ 幼兒中心□ 危險品倉		消防安全(商業處 消防安全(建築物)	100 A
□ 裁院/劇院/公眾娛樂場所		消防安全(工業建)	1997

	填寫人簽署	承辦問蓋印	消防通訊中心蓋印
開始關閉日期:			
预計完成日期:			
FS 251 編號(如有):	**		
填寫人姓名: 手提電話			
註2:註冊消防裝置承辦商須確保消防裝置			
第二部份 - 延長關閉樓宇消防裝置	填寫人發者	水狮的鱼印	消防通訊中心蓋印
工程需延期至:		i i	
FS 251 編號:			
填寫人姓名: 手提電話	:2	·司電話:	傳真號碼:
註3:如需要延長關閉時間,註冊消防裝置	注承辦商須 提交相	M FS 251 及延期不超	過14天。
註 4:第二部份填寫人須為 合資格人士(Q			+ And A Th. E. St. webs 1
□ 上述已關閉的消防系統不再由本公司負			
第三部份 - 恢復樓宇消防裝置	填寫人簽署	承辨商蓋印	消防通訊中心蓋印
工程完成日期:			
FS 251 編號:			
填寫人姓名: 手提電話		V. 4. 100COM-000-00	- I THE COUNTY OF THE COUNTY O
註 5:註冊消防裝置承辦商必須於有關工程 註 6:第三部份填寫人須為 合資格人士(Q)	AND THE RESERVE OF THE PARTY OF		送交本處 。
□ 上遠已關閉的消防系統不再由本公司負			孔詳細告知委聘人
grand to a reconstruct that the second control of the second to the first that the second to the second that the second to the s	100 mm - 100 mm - 100 mm - 100 mm	research constitutes and market his fig. 1700.	non-governmentation of Telecophysics



Refinement of SDN Scope

註1:花灑系統不應與 消防栓/喉轆系統 或 火警偵測系統(存在休眠風險的處所) 同時關閉

Critical Cases

Sprinkler system and FH/HR or FDS in premises with sleeping risk shall not be shutdown simultaneously 致 :香港消防處

消防通訊中心

先欄由消防處消防通訊中心填

消防處檔案編號:

樓宇所屬消防局:

樓宇消防裝置關閉通知書

梅 宇/星苑名稱:		地區	地區:		
門牌號數及街道名稱:			港] 九龍	□ 新界	
註冊消防裝置承辦商:			/編號:		
本公司確認以下受影響的消防裝置需要	通宵或連續超過	124 小時關閉			
□ 消防栓/喉辘系統 □ 花灑系統 □ 乾喉系統 □ 火警偵測系統(存在休眠風險的 □ 火警警報系統 □ 噴水系統 □ 排煙系統 □ 楼梯增壓 □ 街道消防机 □ 注: 花灑系統不應與 消防栓/喉辘系統 或 火警偵測系統(存在休眠風險的處所) 同時開閉 以下持牌/註冊處所將會受到影響 □ 上述消防裝置因以下法例要求進行消防安全改善工名			消防栓系統		
以下持牌/註冊與所辦實受到影響 □ 安老/殘疾院會 □ 酒店/賓館 □ 如兒中心 □ 危險品會 □ Cap. 502 消防安全(商業處所)條例 □ 幼兒中心 □ 危險品會 □ Cap. 572 消防安全(建築物)條例 □ 截院/尉院/公眾娛樂場所 □ Cap. 636 消防安全(工業建築物)條例					
第一部份 - 關閉樓宇消防裝置 開始關閉日期: 預計完成日期: FS 251 編號(如有):	填寫人簽署	承辦商蓋印	消防通訊中	/心蓋印	
填寫人姓名: 手提電話: 註2:註冊消防裝置承辦商須確保消防裝置 第二部份 - 延長關閉棲宇消防裝置	關閉不超過14月	· 並於 14 天內把相關	JFS 251 副本送	交本處。	
工程需延期至:					
填寫人姓名: 手提電話:		·司電話:	傳真號碼:		
註3:如需要延長關閉時間,註冊消防裝置 註4:第二部份填寫人須為 合實格人士(QF 上述已關閉的消防系統不再由本公司負	") 或 獲授權簽署	接套人士(AS)。			
第三部份 - 恢復樓宇消防裝置 工程完成日期: FS 251 編號:	填寫人簽署	承辨商蓋印	消防通訊中	7心蓋印	
填寫人姓名:手提電話: 註5:註冊消防裝置承辦商必須於有關工程	完成後的 14 天户	1把相關 FS 251 副本並			
註 6:第三部份填寫人須為 合實格人士(QF □ 上述已關閉的消防系統不再由本公司負			上詳細告知委聘人		



第一部份 - 關閉樓宇消防裝置	填寫人簽署	承辨商蓋印	消防通訊中心蓋印
開始關閉日期:			
預計完成日期:			
FS 251 編號(如有):			
填寫人姓名: 手提電話	:	公司電話:	傳真號碼:
註2:註冊消防裝置承辦商須確保消防裝	置關閉不超過14	天,並於 <u>14天內把相關</u>]	PS 251 副本送交本處。

Correlation between SDN and FS251

⇒ Relevant FS251 serial number is required when submitting SDN for commencement / extension / completion of FSI Shutdown.

致 :香港消防處			防處消防通訊中心填寫
消防通訊中心 傳真號碼 : 2311 0066		消防處檔案編	號:
填寫日期 :		樓宇所屬消防	局:
樓	宇消防裝置關陽	月通知書	
l		地區	÷
門牌號數及街道名稱:		🗆 🕯	斥港 □九龍 □新界
註冊消防裝置承辦商:		級別	/編號:
本公司確認以下受影響的消防裝置需	要通宵或連續超過2	4 小時關閉	
□ 消防栓/喉轆系統 □ 花灑系統	□ 乾喉系統	□ 火警偵測	系統(存在休眠風險的處所
□ 火警警報系統 □ 噴水系統	□ 排煙系統	□ 楼梯增壓	□ 街道消防栓系統
註1:花灑系統不應與 消防栓/喉轆系統	, 或 火警債測系統(存	在休眠風險的處所)同時關閉
以下持牌/註冊處所將會受到影響	上述消防裝置	因以下法例要求	進行消防安全改善工程
□ 安老/殘疾院舍 □ 酒店/賓館	☐ Cap. 502 5	肖防安全(商業處)	新)條例
□ 幼兒中心 □ 危險品倉	☐ Cap. 572 %	占防安全(建築物)	條例
□ 戲院/劇院/公眾娛樂場所	☐ Cap. 636 ž	的防安全(工業建	築物)條例
第一部份 - 關閉樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中心蓋印
開始關閉日期:		T.	
倾計完成日期:			
FS 251 編號(如有):	i i		
填寫人姓名: 手提電話	: 公司] 電話:	傳真號碼:
注2:註冊消防裝置承辦商須確保消防裝			
第二部份 - 延長關閉棲宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中心蓋印
工程需延期至:			
'S 251 編號:		Paratria -	1020020020
填寫人姓名: 手提電訊	The second secon	201010000	
註3:如需要延長關閉時間,註冊消防裝 註4:第二部份填寫人須為 合資格人士 (12 20-2	<u>過 14 天</u> 。
□ 上述已關閉的消防系統不再由本公司	The state of the s		兄詳細告知季聘人
	V V		70 3 3 3 3 3 4 C C C C C C C C C C C C C C
第三部份 - 恢復樓宇治防裝署	1 斑系人谷子		
	1 100 A 100	사사에 이 판나	77.113 - 1151 - 55 %
工程完成日期:	1 100 A 100	7.74 16) <u>a.</u> -11	
第三部份 - 恢復棲宇消防裝置 工程完成日期:			



以一	下持牌/註冊處所;	将會受到影響
	安老/殘疾院舍	□ 酒店/賓館
	幼兒中心	□危險品倉
	戲院/劇院/公眾	娛樂場所

Licensed / Registered Premises affected by FSI Shutdown

⇒ RFSIC will indicate in SDN if the shutdown affect the premises.

樓字/星苑	名	稱:		
			樓宇消防裝置	關閉通知書
填寫日期	:		_	樓宇所屬消防局:
傳真號碼	;	2311 0066		消防處檔案編號:
		消防通訊中心		ALL CONTROL OF THE CO
致	:	香港消防處		

樓字/屋苑名稱:			:	
門牌號數及街道名稱:				
註冊消防裝置承辦商:		級別.	/編號:	
本公司確認以下受影響的消防裝置需	要通宵或連續超過	24 小時關閉		
□ 消防栓/喉轆系統 □ 花灑系統				
□ 火警警報系統 □ 噴水系統 註1:花灑系統不應與 消防栓/喉辘系統				育防栓系統
以下持牌/註冊處所將會受到影響		置因以下法例要求		上程
□ 安老/殘疾院舍 □ 酒店/賓館		消防安全(商業處)		-
□ 幼兒中心 □ 危險品倉	☐ Cap. 572	消防安全(建築物)	條例	
□ 戲院/劇院/公眾娛樂場所	☐ Cap. 636	消防安全(工業建	築物)條例	
第一部份 - 關閉樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中心	2蓋印
開始關閉日期:				
预計完成日期:				
FS 251 編號(如有):				
填寫人姓名: 手提電話	:2	司電話:	傳真號碼:_	
註 2: 註冊消防裝置承辦商須確保消防裝	是關閉不超過14天	: 並於 14 天內把相	WFS 251 副本送交	本庭。
第二部份 - 延長關閉模字消防裝置	填寫人簽署	承辦商蓋印	消防通訊中心	3盖印
工程需延期至:				
FS 251 編號:				
填寫人姓名: 手提電話	: 2	司電話:	傳真號碼:	
註3:如需要延長關閉時間,註冊消防裝				ĺ
註 1: 第二部份填寫人須為 合資格人士(
□ 上述已關閉的消防系統不再由本公司				
第三部份 - 恢復樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中小	3.夏 印
工程完成日期:				
FS 251 編號:				
填寫人姓名:		A STATE OF THE STA		-
註 5:註冊消防裝置承辦商必須於有關工 註 6:第三部份填寫人須為 合資格人士 (AND THE RESERVE OF STREET	WILLIAM TO MICH.	达父本是"	
□ 上遠已關閉的消防系統不再由本公司			见詳細告知委聘人	



SDN Information

上	述消防裝.	置因以下法例要求進行消防安全改善工程	
	Cap. 502	消防安全(商業處所)條例	
	Cap. 572	消防安全(建築物)條例	
	Cap. 636	消防安全(工業建築物)條例	

Streamlining handling procedures of BI works & FSI Shutdown

⇒ RFSIC shall indicate on SDN if the works are related to improvement works for old building under Cap 502 / 572 / 636.

致 : 香港消防處

育心內防処 消防涌記中心 **先欄由消防處消防通訊中心填**〕

消防處檔案編號:

樓宇所屬消防局:

樓宇消防裝置關閉通知書

等字/星苑名稱:			地區:		
門牌號數及街道名稱:			序港 □ 九龍	□ 新界	
注冊消防裝置承辦商:			級別/編號:		
本公司確認以下受影響的消防裝置需要	通宵或連續超過	24 小時關閉			
□ 消防栓/喉糖系統 □ 花灑系統 □ 火警警報系統 □ 噴水系統 □ 噴水系統 註1: 花灑系統不應與消防栓/喉觀系統	□ 排煙系統	□ 楼梯增壓	□ 街道		
以下持牌/註冊處所將會受到影響	0. 300.000.000	置因以下法例要求	Marine and the second second second	善工程	
□ 安老/殘疾院舎□ 描店/賓館□ 幼兒中心□ 危險品倉□ 戴院/劇院/公眾娛樂場所	☐ Cap. 572	消防安全(商業處) 消防安全(建築物) 消防安全(工業建))條例		
第一部份 - 關閉樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中	心蓋印	
開始關閉日期:					
预計完成日期:					
FS 251 編號(如有):					
填寫人姓名: 手提電話	: &	司雷話:	建直脂碼 :		
註 2: 註冊消防裝置承辦商須碟保消防裝					
第二部份 - 延長關閉樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中	心蓋印	
工程需延期至:	ĺ	ĺ			
FS 251 編號:					
填寫人姓名: 手提電話	: 公	司電話:	傳真號碼:		
註 3:如需要延長關閉時間,註冊消防裝 註 4:第二部份填寫人須為 查費格人士((上述已關閉的消防系統不再由本公司)	菱承瓣商須 <mark>提交相∭</mark> Ⅳ)或 <u>獲授權簽署</u>	NFS 251 及延期不超 證書人士(AS)。	過14天。		
第三部份 - 恢復樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中	心蓋印	
工程完成日期:					
FS 251 編號:					
填寫人姓名: 手提電話	:公	司電話:	傳真號碼:		
註 5:註冊消防裝置承辦商必須於有關工程					
註 6:第三部份填寫人須為 <u>含責格人士((</u>					
□ 上遠已關閉的消防系統不再由本公司 負	負責有關工程,本公	公司已把該系統的狀态	兄詳細告知委聘人		



Monitoring of FSI Shutdown

第二部份 - 延長關閉樓宇消防裝置	填寫人簽署	承辦商蓋印	消防通訊中心蓋印
工程需延期至:	2		
FS 251 編號:			
填寫人姓名: 手提電話	:	、司電話:	傳真號碼:
註 3: 如需要延長關閉時間,註冊消防裝	置承辦商須提交相	關 FS 251 及延期不超	過14天。
註4:第二部份填寫人須為 合資格人士(QP) 或 <u>獲授權簽署</u>	P證書人士(AS)。	
□ 上述已關閉的消防系統不再由本公司	負責有關工程,本	公司已把該系統的狀況	己詳細告知委聘人

Restriction on FSI Shutdown Period (14 days)

⇒ RFSIC shall critically review the case; any undue, arbitrary or deliberate delay of FSI repair works will be inquire into critically.

致 :香港消防處

消防通訊中心

先欄由消防處消防通訊中心填)

消防處檔案編號:

樓宇所屬消防局:

樓宇消防裝置關閉通知書

要 宇/星苑名稱:		地	地區:		
門牌號數及街道名稱:			」香港 □ 九龍	. □新界	
註冊消防裝置承辦商:		級	別/編號:		
本公司確認以下受影響的消防裝置需要通	宵或連續超過	24 小時關閉			
□ 消防栓/喉鶇系統 □ 花灑系統 □ 火警警報系統 □ 噴水系統 \$\frac{\pmathbf{t1}}{\pmathbf{t2}} \tau \tau \tau \tau \tau \tau \tau \tau	□ 排煙系統 火警偵測系統(. □ 楼梯增存在休眠風險的處	壓 □ 街泊 底所)同時開閉	道消防栓系統	
以下持牌/註冊處所將會受到影響 上述消防裝置因以下法例要求進行消防安全改善工程					
□ 安老/殘疾院舎 □ 酒店/賓館 □ Cap. 502 消防安全(商業處所)條例					
□ 幼兒中心 □ 危險品倉 □ Cap. 572 消防安全(建築物)條例 □ 戲院/劇院/公眾娛樂場所 □ Cap. 636 消防安全(工業建築物)條例					
		承辦商蓋印		也么类的	
	B 向入贺省	孙 树阁 <u>温</u> 叶	洞沙理机	平心盖印	
開始關閉日期:					
FS 251 編號(如有):					
填寫人姓名:		河塘松 :	/	•	
註2:註冊消防裝置承辦商須確保消防裝置關					
第二部份 - 延長關閉樓宇消防裝置 与	真寫人簽署	承辦商蓋印	消防通訊	中心蓋印	
工程需延期至:					
FS 251 編號:					
填寫人姓名: 手提電話:_	公	司電話:	傳真號碼	:	
註 3:如需要延長關閉時間,註冊消防裝置承辦商須 接交相關 FS 251 及 延期不超過 14 天 。					
註 4:第二部份填寫人須為 合資格人士(QP)□ 上述已關閉的消防系統不再由本公司負責			状况詳細告知季聘 .		
第三部份 - 恢復樓宇消防裝置 均			1		
工程完成日期:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		111111111111111111111111111111111111111	1 - 11	
FS 251 編號:					
填寫人姓名: 手提電話:_	公	司電話:	傳真號碼	:	
註 5: 註冊消防裝置承轉商必須於有關工程完					
註 6:第三部份填寫人須為 <u>合責格人士(QP)</u>					
□ 上遊已關閉的消防系統不再由本公司負責	有關工程,本公	一司已把該系統的	快況詳細告知委聘	٨.	



Monitoring of FSI Shutdown

第二部份 - 延長關閉樓宇消防裝置	填寫人簽署	承辨商蓋印	消防通訊中心蓋印			
工程需延期至: FS 251 編號:						
填寫人姓名:手提電話	:	公司電話:	傳真號碼:			
註 3:如需要延長關閉時間,註冊消防裝置承辦商須提交相關 FS 251 及延期不超過 14 天。 註 4:第二部份填寫人須為 合資格人士(QP) 或 獲授權簽署證書人士(AS)。						
□ 上述已關閉的消防系統不再由本公司負責有關工程,本公司已把該系統的狀況詳細告知委聘人						

Liability of SDN signatory

⇒ AS/QP shall notify FSD and parties concerned without delay if the RFSIC is no longer employed for the works.

Important Guides



Practical

- Keep the disruption to the normal operation of the FSI caused by maintenance, modification or repair to minimum
- Adopt a systematic approach, i.e. shut down the FSI by sections and resumed normal as soon as practicable
- Refrain from shutting down the whole FSI system f or a prolonged period of time
- ⇒ Top-up the water tanks of the affected/unaffected
 FSI system prior the commencement of work

Important Guides



Administration

- Post simple and standardized graphical notices detailing the shutdown
- ⇒ Ensure the residents/ occupants/ property management company has/have been notified of the shutdown information

Advantages



FSD

Essential information



Holistic concern

Optimise FS resources



Public

Fire Safety 1





Trade

Streamline works

Safeguard



Record management



Thank You





VOLUNTARY RECOGNITION SCHEME FOR FSI TRADE

VISION

To protect life and property of Hong Kong citizens in building fires

MISSIONS

- To raise the building fire safety level of Hong Kong
- To enhance the working order of building FSI
- To enhance the professional qualifications and performance standard of FSI maintenance practitioners

BENEFITS

- Uplift the professional image of FSI maintenance practitioners
- Breed and attract talents of the trade
- Establish recognition and assessment framework for the trade
- Promote Continuing Professional Development (CPD)

RECOGNITION REQUIREMENTS

Route 1

Registered FSI Skilled Workers

Registered
under the trade of
Fire Service Mechanics
of CWRO (Cap. 583)

Route 2

Experienced FSI Workers

Over 10 years of working experience in FSI maintenance

RECOGNITION REQUIREMENTS

Registered FSI Skilled Workers

Experienced FSIWorkers

Enhancement Training

VALUE

KNOWLEDGE

SKILL

FSD recognition



CPD and Renewal Requirements

Technical Advisory Board

Recognition Document

Quality Assurance

Renewal Requirements

- Validity Period of Recognition
- To complete designated hours of CPD for Recognition Renewal

Technical Advisory Board

Recognition Document

Quality Assurance

CPD and Renewal Requirements

Technical Advisory Board

- Formed by Representatives from the trade, professional training institutes and Government Departments
- To formulate Recognition Requirements
- To identify training opportunities
- To oversee the administration of the Scheme

Recognition Document

Quality Assurance

CPD and Renewal Requirements

Technical Advisory Board

- Formed by Representatives from the trade, professional training institutes and Government Departments
- To formulate Recognition Requirements
- To identify training opportunities
- To oversee the administration of the Scheme

Recognition Document

Quality Assurance

CPD and Renewal Requirements

Technical Advisory Board

Recognition Document

- Recognition Certificate
- Registers of all recognized persons for public reference

Quality Assurance

CPD and Renewal Requirements

Technical Advisory Board

Recognition Document

Quality Assurance

■ Code of Conduct and Performance Monitoring Mechanism

CPD and Renewal Requirements

Technical Advisory Board

Recognition Document

Quality Assurance

Appeal Mechanism

■ To be administered by the Advisory Board

PRINCIPLES OF THE SCHEME

- No contradiction with any legislations in effect
- No negative impact to business
- Equal opportunity for practitioners
- Flexibility of the Scheme

LAUNCHING OF ONLINE SURVEY

(1.12.2020 - 22.12.2020)

Survey 1

for RFSICs and other subcontractors related to FSI maintenance works



Survey 2

for FSI maintenance practitioners



EXTENSION OF SURVEY PERIOD TO 8.1.2021

Survey 1

for RFSICs and other subcontractors related to FSI maintenance works



Survey 2

for FSI maintenance practitioners



Thank you 100

Promotion of wider adoption of

Stand-alone
Fire Detectors



Background

Ivy Street, Tai Kok Tsui 1 death (10 December 2020)

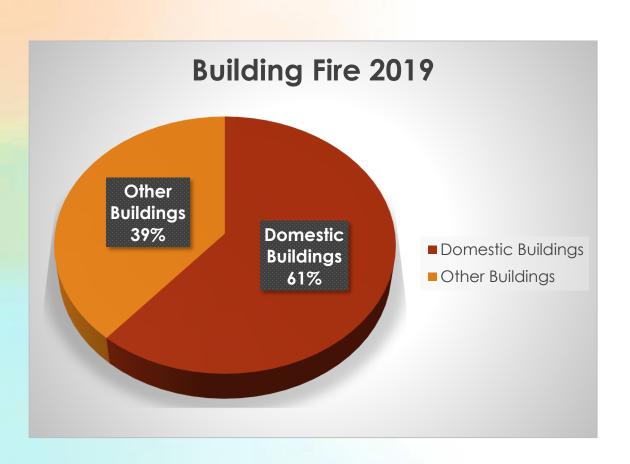


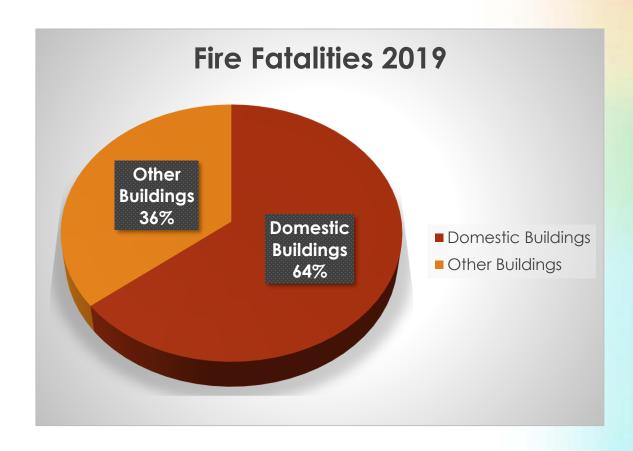
Tin Heng Estate, Yuen Long 2 deaths (1 September 2018)

Canton Road, Yau Ma Tei 8 deaths (15 November 2020)



Analysis of Building Fires





Modern Compartment Furnishing







Modern Compartment Furnishing





Aim

- Enhance fire safety in buildings
- User can purchase and install stand-alone fire detectors on their own





Characteristics of stand-alone fire detectors

- Smoke Alarm
 - Photoelectric (光電原理)
 - Ionization (電離原理)

- Heat Alarm
 - Thermistor
 - Rate-of-rise





Photoelectric

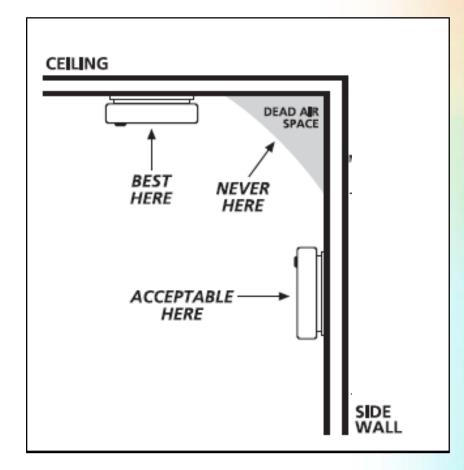
Ionization



Heat Alarm

108 Characteristics of stand-alone fire detectors

- Battery-operated
- Easy maintenance
- Low cost



Stand-alone fire detector installation guide

109 Overseas Experiences

- About 92% of U.S. household have smoke alarms installed
- About 75% of UK dwellings have smoke alarms installed
- Death rate of home fires is twice as high for homes without working smoke alarm (NFPA, 2019)



Specifications of stand-alone fire detectors

- International / National standards –
 - BS EN 14604
 - UL 217
 - GB 20517
 - AS 3786, etc.



GB 20517

CCC Certified



EN 14604

LPCB approved



UL 217 / EN14604

UL Listed

Wifi connection



GB 20517

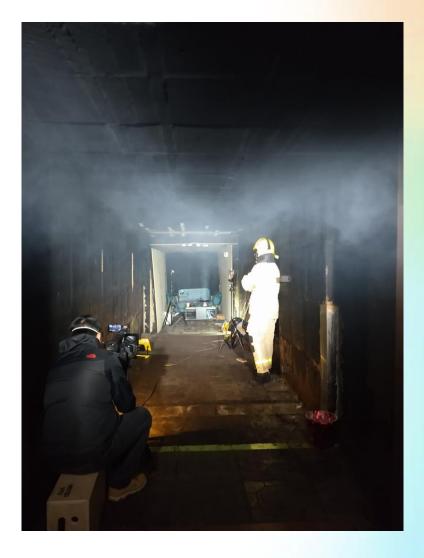
CCC Certified

IoT Technology

In-house Testing By FSD







Legal Requirements of FSI under Cap. 95B

Reg. 6

• <u>Installed</u> by RFSIC

Reg. 7

Maintained, inspected and repaired by RFSIC

Reg. 8

- Efficient working order at all times
- Inspected by a RFSIC every 12 months

All FSI:

Current Situation in Hong Kong



Stand-alone fire detectors (not required by Government Authorities)



FSI

Legislative Amendment



 Relax control over stand-alone fire detectors not required by Government Authorities

Promote the wider use of stand-alone fire detectors in Hong Kong, on their own volition

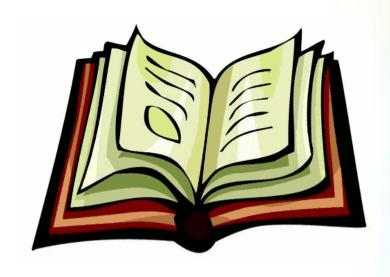
Public Education

User Guideline

<u>Purchase</u> of stand-alone fire detector Standards, optional features (wifi, multi-sensor etc.)

<u>Installation</u> of stand-alone fire detector Where to install, how to install

Maintenance of stand-alone fire detector Monthly testing, low battery warning



Publicity Campaign



Planned Future Development

家居安华探討





END

Thank you

Text Input / 打字

Select Icon 選圖案

Q & A Panel 『問與答』面板 "All Panelists" 選 "所有答疑者" Text 打字提問

Q & A Session

Please text back if you have any questions



Thank You