

... for a safer Sinaapore



This Presentation May Impact You As A Fire Safety Manager..

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Scope

Fire Certificate

Case Study #1: Fire Extinguisher

Case Study #2: Shopping Mall Fire



Fire Certificate



Fire Certificate (FC)

- A scheme to ensure proper maintenance and good working condition of fire protection systems in the premises.
- These systems to be tested annually in accordance with the Fire Safety Act and relevant regulations and codes of practice.
- FC must be obtained within twelve months from the issuance of Fire Safety Certificate (FSC).
- Next slide: Common FC enquiries





What forms of payment are acceptable?

Answer

We accept payment via:

- Credit
- Debit Card
- GIRO





What forms of payment are acceptable?

Answer (continue..)

But payment via cheque and cash will <u>NOT</u> be accepted.

Question #1

What forms of payment are acceptable?

Answer (continue..)
Plus, submissions must be accompanied with payment to be valid, else, they will not be processed.



Answer

For yearly FC renewal, owner must engage Professional Engineer and contractors to pre-test the systems in accordance with Fire Code and relevant code of practices, prior to scheduled site inspection by SCDF.

Question #2
What must I do to renew FC?



Reminder: Do engage
Professional Engineer <u>early</u>
(about 3-4 months prior to
FC expiry date.)

Question #2 What must I do to renew FC?



Case Study #1 Fire Extinguisher



Background



- Class A fire: For fires involving ordinary combustible materials like wood, paper, cloth, furnishing, plastics, rubber.
- Class B fire: For fires involving flammable liquids, solvents, oils, paints, thinner and liquefiable solids.
- Class C fire: For fires involving flammable gases.



Background



- Class D fires: Fires involving combustible metals e.g. potassium, magnesium, titanium, sodium, lithium and zirconium.
- Class F fires: Fires involving cooking media (vegetable or animal oils and fats) in cooking appliances.
- Fires involving electrical equipment?



Requirements

SCDF communicated requirements through circulars in January 2013, on the adoption of:

• SS 578:2012

SS EN 3-7:2012 to SS EN 3-10:2012

SS 578:2012 Use & Maintenance of Portable Fire Extinguishers SS EN 3-7:2012 Characteristics, performance requirements and test methods

Additional requirements to SS EN 3-7 for the construction, resistance to pressure and mechanical tests for extinguishers with a maximum allowable pressure equal to or SS EN 3-8:2012

lower than 30 bar

SS FN 3-9:2012 Additional requirements to SS EN 3-7 for pressure resistance of CO2 extinguishers SS EN 3-10:2012

Provisions for evaluating the conformity of a portable fire extinguishers to SS EN 3-7



Requirements

- SS EN 3-7 states that for Class C fires, the manufacturer "shall be required to provide evidence of suitability to the relevant authority and the Certification Body before listing".
- SS 578 states that there is "no fire test" for Class C, and "the classification and rating of Class C extinguisher shall be the responsibility of the manufacturers with the approval of the relevant authority".





Requirements

To date, <u>neither SCDF nor</u> the two accredited Certification Bodies:

- TUV SUD PSB Pte Ltd
- Setsco Services Pte Ltd

have approved or certified FEs for Class C fires.





Moving Forward

- SCDF seeks the assistance of FSMs to ensure that all FEs only display the markings for classes of fires which the Certification Bodies have certified them for.
- In particular, for FEs certified or renewed from 1 May 2013 onwards, these should not display Class C markings, as no FE has been certified for this class.
- If the FEs in your premises show Class C markings, please contact the FE suppliers/manufacturers to make the rectification.



Moving Forward

For any inquiry or clarification, please write to SCDF's Product Listing Scheme team at scdf_pls@scdf.gov.sg



Case Study #2 Shopping Mall Fire







What Actually Happened

4.37pm: Security alerted SCDF after spotting fire

breakout from CCTV in FCC.

Fire alarm and announcement were

activated.

Smoke was spreading in the mall.

4.40pm: CERT teams assisted in evacuation and

extinguished the fire with extinguishers

before SCDF arrived.

They were also deployed at entrances and carpark gantries to restrict entry into

the building.

4.42pm: SCDF arrived for post-fire investigation.

Fire alarm system, lifts, escalators and smoke

curtains were set to reset mode.

5.55pm: Building staffs were allowed to return to the mall

for cleaning operations.

6.45pm: Retail business resumed.



Learning Points

- ✓ Staffs were vigilant in managing the initial crisis.
- ✓ Ground coordination was fluid in ensuring crisis was under control.
- ✓ CERT team was familiar with mitigation of fire.
- ✓ CERT team handed over to SCDF smoothly.
- ✓ Fire wardens ensured paced crowd evacuation.
- ✓ Building management handled the post-fire situation well.



Fire Safety Reminder

- Indoor events must be confined to the designated event spaces.
- Fire-fighting and fire protection systems such as the sprinklers, hose reels, fire extinguishers, call points are not be obstructed.



Fire Safety Reminder



- These areas must be protected with an automatic fire-fighting sprinkler system.
- The building's escape passageways and corridors are not obstructed.
- https://bit.ly/2VWU6k7 for more information

Temporary Permit Application

- Temporary Permit (TP) is required before any temporary events begin as there is a change of use from the norm.
- Stage shows, exhibitions, trade fairs, carnivals and other promotional activities.
- For SCDF to review the fire safety aspects of the temporary structures setups and to ensure that there is adequate fire safety measures given.

Overcrowding

Ensure Standard Operating Procedures in place to account for the total number of people during the event, and to stop or slow down the flow when it is nearing the permissible occupant load.



Isolation of Fire Alarm System

- If the fire alarm is activating too often, there might be an underlying cause to it and repair or corrective maintenance should be taken.
- For renovation works that involve the fire alarm systems, prior plan approval have to be sought from SCDF before any commencement in the fire safety works.

EVC Announcements

 Play alert announcements to inform occupants of the current situation in the building especially after a fire alarm activation.

 This is to prevent cause confusion amongst occupants who may unable to make an informed decision to
 evacuate or resume their activities.

EVC Announcements

 Prompt investigation must be conducted upon any alarm activation.

 The alert message or announcement shall be broadcasted after alarm activation and after investigation of the alarm is completed.

3 Takeaways Before Heading Home

- 1. Ensure that renewal of Fire Certificate is done yearly. This includes payments are promptly done.
- 2. Verify and ensure that your premise uses certified fire extinguishers for **Class A &B fires** only.
- 3. FSMs must ensure that staffs and CERTs are "well-oiled" for crisis response.



Thank You!

