

Fire Safety Standard Advisory Group (FSSAG)

Matters Discussed in the 49th FSSAG Meeting held on 3 October 2016

1. Review of PPA 104 (Issued under cover of FSD Circular Letter No. 1/2006)

The draft PPA/104 and draft PPA/104(A) [5th Revision] had been revised to adopt the new BS 5266-1:2016 and BS EN 1838:2013 standards and issued to members of the Sub-Working Group (SWG) for comment.

2. Review on fire resisting cable requirements for fire service installations

The draft Fire Resisting Cable Requirements for Fire Service Installations had been revised to incorporate the requirements of the updated fire resisting cable standards and issued to members of the SWG for comment. Members had been requested to provide comments for discussion in the next SWG meeting.

3. Enhancement on Application procedure for Approval/Acceptance of Fire Service Installations and Equipment (FSI) and other Products

Preparatory work for the enhancement programme had come to the final stage. The revised Fire Protection Notice No.15 was expected to be launched by end of 2016, and the enhancement would then be announced formally through Circular Letter.

4. Review of the Requirements for Emergency Lighting

The 4th SWG meeting was held on 22 September 2016. It was agreed that BS 5266-1: 2016 which had been recently published should be reviewed.

5. Review of Clean Fire Extinguishing Agents including Novec 1230

The draft circular letter had been circulated to FSSAG members for comment. The following table showing members' comments and FSD's response was for discussion in the meeting:

<i>Item</i>	<i>Members' comments</i>	<i>FSD's responses</i>
(a)	<p>Para. 8 quoted that "Besides, other clean agents recognized in NFPA Standard 2001 not containing any "Scheduled Substances" under Ozone Layer Protection Ordinance (Cap. 403) may also be accepted by this Department." Please consider to mention the specific procedure in the same Circular Letter on how to seek for the acceptance of FSD on other clean agents.</p>	<p>In this CL, all commonly used and previously accepted clean agents have been mentioned in Para. 8. For other new agents, applicants can follow the current procedures to obtain FSD's acceptance on their applications.</p>
(b)	<p>Para. 8.4 mentioned that "Apart from new buildings, layout plans for both total flooding systems and fixed sprayer units for existing buildings are to be submitted to this Department for consideration prior to installation." Would such a requirement apply only to those new installations or change of clean agents in existing buildings? If this is the case, please consider to revise the sentence to make the meaning clear and specific.</p>	<p>For the sake of clarity, this paragraph should be revised as follows:</p> <p>"Apart from new buildings, layout plans for total flooding system or fixed sprayer units (including both new installations and alteration & addition works) for existing buildings are to be submitted to this Department for consideration prior to installation."</p>
(c)	<p>It is noted that the chemical names, agent designation and trade names of the clean agents are not used consistently throughout the draft Circular Letter and Appendices, causing confusion. For example, the terms Dodecafluoro-2-methylpentan-3-</p>	<p>In order to enhance readability, common names/trade names will also be added with bracket behind the agent designations. For example:</p> <p>HFC-227ea (*FM200) FK-5-1-12 (*Novec 1230) IG-541 (*Inergen)</p>

	<p>one and Novec 1230 are used in para. 8 while another name of the same agent, Fluoroketone, is adopted in Appendix E. Similarly, HFC-23 is mentioned in para. 8, while in para. 8.5 and Appendix E, the term CHF₃ is quoted. Also, in Appendix D, HCFC (PFB) is used on the graphic on the left hand side while the term CEA-410 is mentioned in those words under "CAUTION" on the right hand side of the same diagram. Such inconsistency in the terms used may cause confusion, particularly under emergency situation. Please consider to tidy up such terms used in particular on those diagrams.</p>	<p>PFB (*CEA-410)</p> <p>Besides, since symbols for fire extinguishing agents which have been adopted for many years, it is recommended that they should not be amended so as to avoid confusion.</p>
(d)	<p>Please consider to improve the clarity of all diagrams so that all words, particularly those small words, are legible.</p>	<p>The legibility will be improved.</p>

With reference to the contents of the above table, members made a thorough discussion on the subject matter. It was concluded that FSD would revise the draft circular letter according to the discussion made in the meeting and submit it to the FSD Senior Management for deliberation.

6. Implementation of BS 5839: 2013 “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”

The 2nd SWG meeting was held on 12 July 2016. Members of the SWG were reviewing the draft proposal for implementation of BS 5839-1:2013.

7. Provision of securing devices to prevent the Gate Valve of FS tank from being tampered or inadvertently turned off

The draft FSD Circular Letter would be finalized for issue.

8. Emergency Power supply for Lift Homing

This item had been thoroughly discussed in the last meeting. As no further discussion was required for the issue, the meeting agreed to delete this item in the next meeting.

9. Automatic Actuation Devices for Lifts Not Discharging to Protected Means of Escape (Heading in 46th FSSAG Meeting : FSI Requirements for Buildings with Lifts Serving Direct to Occupancy)

The reply for the subject proposal had been received from the EMSD after consultation with the lift trade. In gist, there was no objection to overriding all car calls to prevent lift passengers unknowingly from disembarking on the scene of fire on upper floor and at the same time initiating the home landing operation. However, for fire signal at the home landing (i.e. operation sequence (c) in the draft paper), the trade opined that there would be difficulties to redirect the lift to non-designated floors. Furthermore, there was no lift manufacturer that could provide such function with existing products.

As the original intent of the subject proposal was to avoid the potential hazard of those lifts NOT opening to a lobby, the scenario of redirecting the lift car away from home landing should be regarded as an added safety feature. Noting that the home landing floor (usually ground floor) being a location leading directly to a place of safety and the technical infeasibility, the additional proposed feature to redirect away from home landing would not be further pursued.

FSD would revise the proposal and circulate to the EMSD for further comment. Members would be informed of the progress in due course.

10. Fire Alarm Signal and Sounding for AFA System and Sprinkler System for Residential Flats with Open Kitchen

The general arrangement of fire alarms for domestic buildings with open kitchen

units under Clause C13.4 of the CoP for Fire Safety in Buildings 2011 would be described in the following table:

Scenario		Sounding of the sounder of that sounder-based detector in the open kitchen	Building fire alarm	Fire alarm transmission via CFATS
1	Actuation of sounder-base detector in an open kitchen unit	YES	NO	NO
2	Actuation of detector in common areas	NO	YES	YES
3	Actuation of sprinkler in an open kitchen unit	NO	YES	YES
4	Actuation of sprinkler in common areas	NO	YES	YES

Remark: Fire signals from sounder-base detectors should be connected to the fire alarm panel to draw the caretaker's attention.

Members were also reminded that the arrangement above was based on Clause C13.4 of the BD Fire Safety Code 2011. Members should note that when carrying out FSI maintenance for previous projects or for those projects not in compliance with Clause C13.4, the above alarm sounding arrangements might not be applicable.

11. Automatic Sprinkler System Design for Deep Basement

This item had been thoroughly discussed in the last meeting. As no further discussion was required for the issue, the meeting agreed to delete this item in the next meeting.

12. BS EN 12845 (2015 version)

This item had been thoroughly discussed in the last meeting. As no further discussion was required for the issue, the meeting agreed to delete this item in the next meeting. In the meantime, members might propose specific items in relation to BS EN 12845 (2015 version) to FSD and if necessary, a new agenda in this

regard could be created.

13. Alarms and Monitoring of Sprinkler System – BS EN12845:2003

This item had been thoroughly discussed in the last meeting. As no further discussion was required for the issue, the meeting agreed to delete this item in the next meeting.

14. Calibration Requirements for Test Instruments used for Compliance Inspection of Fire Services Installations

This item had been thoroughly discussed in the last meeting. As no further discussion was required for the issue, the meeting agreed to delete this item in the next meeting.

15. Operation Instruction Notice of Hose Reel

The issue was discussed in the meeting. It was concluded that regarding the provision of operation instruction notice of the hose reel, members should make reference to paragraph 5.14 (b) of the Code of Practice for Minimum Fire Service Installations and Equipment that either “BREAK GLASS OF THE FIRE ALARM CALL POINT” or “ACTUATE FIRE ALARM CALL POINT” should be used according to the actual conditions.

16. Flashing Requirement for Exit Sign and Directional Sign in Audio / Visual Advisory System (AVAS)

The issue was discussed in the meeting. It was concluded that the same design principle (i.e. either flashing type or maintained type with flashing light) should not be applied to directional signs incorporated in AVAS. Therefore, directional signs which were incorporated in AVAS should be of flashing type only. In addition, it was strongly recommended by FSD that, from fire safety point of view, maintained type exit signs with flashing light instead of flashing type exit signs should be used.

17. Actuation Temperature of Heat detector(s) under the Fire Safety Requirements for D.G. Store

As the issue involved some historical background information, FSD would take follow up action in this regard with a view to reporting the findings in the next FSSAG meeting.