

# **Fire Safety Standard Advisory Group (FSSAG)**

## Matters Discussed in the 38<sup>th</sup> FSSAG Meeting held on 22 October 2013

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

A draft FSD Circular Letter together with the draft of PPA/104 & PPA/104(A) (5<sup>th</sup> Revision) was prepared by the Sub-working Group and issued to the Members of the FSSAG for final review

### **2. Provision of Indication Label for Manual Evacuation Switch**

The design provided by FSICA in the last meeting had been slightly amended and forwarded to Operation Commands of FSD for further comments.

### **3. Review on fire resisting cable requirements for fire service installations**

The 2<sup>nd</sup> and 3<sup>rd</sup> Sub-working Group meetings were held on 13.8.2013 and 24.9.2013. Members had reviewed and discussed the relevant standards related to fire resisting cables used in different type of fire service installations and a task list was formulated for the topics/issues/problems to be discussed and resolved in the coming Sub-working Group meetings.

### **4. Review of Case Drawings 12/1 to 12/5 for V/AC Control Systems under FSD Circular Letter No. 2/2005**

The meeting agreed that if no further comments on the draft V/AC control plans on food premises received from Members before 15 November 2014, the draft would be submitted to the FSD's Management for deliberation.

### **5. To clarify the incorporation of exit signs in Audio/Visual Advisory System (AVAS) in area with transient occupancy**

It was clarified in the meeting that according to item 5.1 of FSCoP, AVAS consisted of "a system of flashing lights with directional signs, which may be incorporated to the exit signs and directional signs as required under para. 5.10 and supplemented by low level directional signs...".

- (a) The provisions of AVAS should be in accordance with the requirements of NP Division.
- (b) Exit signs might be flashing or maintained type. If it was a maintained type, flashing lights should be provided at their vicinities to draw the attention of occupancies for facilitating their efficient evacuation. Hence the location of flashing direction sign in relation to the exit sign should be judged on site.

## **6. Revised Requirements for Fire Hydrant/Hose Reel System**

Regarding the issue, Members were informed to pay attention to the FSD Circular Letter No. 2/2013 dated 20.8.2013 on the location of hydrants. After reviewing the location of hydrants from operational point of view, instead of “not more than 30m” on each floor the extent of provision was amended as “in all approach lobbies to required staircases or required staircase enclosures” on each floor. While the revised requirement was based on the maximum travel distance specified in the Code of Practice for Fire Safety in Buildings promulgated by the Buildings Department, building designs adopting fire engineering approach would be considered on a case-by-case basis. Also, siting of hydrants at the central core of staircase enclosure was considered unacceptable because when connected to the hydrant, the fire hose would run across the means of escape. The revised requirements had taken effect from 1.10.2013 for all initial building plan submissions.

## **7. Revised Fire Service Requirement for Signboards**

Members' attention was drawn to the revised PNAP APP-126 on signboards issued by the Buildings Department in September 2013. Among other revisions, extension of building FSIs (i.e. fire hydrant/hose reel system, portable hand-operated approved appliance and sprinkler system, where applicable) to protect the signboards was required except for signboards classified as minor works or designated exempted works under the Building (Minor Works) Regulation.

## **8. Maintenance Inspection for Fire Detection Systems**

According to the COP Inspection, Testing & Maintenance of Installations & Equipment, 2012 Edition, Part II, Section 2.13 Fire Detection System, Sub-section

(ii), “a DLC or a direct telephone link (DTL) as we generally call it, of an FDS which forms part of the FDS, shall be inspected by an RFSIC at least once in every 12 months. The DTL should be tested once every 2 weeks or at such time and interval as agreed by D of FS.”

Members exchanged views and discussed on the duties and responsibilities of different stakeholders regarding the testing and maintenance of the DTL once every 2 weeks and the suspension period of the DTL. As views were varied, the meeting agreed that more information in this aspect should be obtained for further discussion in the next meeting.

## **9. Provision of Sprinkler Inlet**

Members were informed that Location of sprinkler inlet was always shown in the general building plans upon the submission of GBP from the AP for the agreement of NP Division of FSD. However the total number of sprinkler inlet required was not prescribed by NP Division at that stage.

The function of the sprinkler inlet was to facilitate the water from street fire hydrant fed to the sprinkler installation via the main pump of FSD. To enable the sprinkler installation to operate at their nominal flow rate according to the requirements of LPC Rules, the total number of sprinkler inlet should be sufficient to feed in the required water flow rates according to Table TB 210.7.1 which varied from 300 l/min to 3,350 l/min. Hence the FSIC should further provide calculation to justify their provision of sprinkler inlet meeting the required flow rates in their submission of FSI/314 drawings.

## **10. High Rise Sprinkler System**

FSICA proposed to adopt the practice of using a single sprinkler pump without multi-outlets to serve high rise sprinkler system of same hazard group or high rise sprinkler system consisting of different hazard groups. Members exchanged views and discussed the issue in detail. As views were varied and no decision could be made, the meeting agreed that all parties concerned should obtain more information in this regard prior to further discussion in the next meeting.

## **11. Improvements to smoke extraction systems due to unacceptable result of hot smoke test**

The objective of the discussion was to clarify the consequential measures of the Authorised Person (AP)/registered fire service installations contractor (FSIC) required after the occurrence of unacceptable result of hot smoke test in association with smoke extraction systems prescribed for premises.

Members exchanged views and discussed the issue in detail. The gist of the discussions and recommendations were as follows:

- (a) There might be case of failure in hot smoke test even the smoke extraction system was a code compliance design.
- (b) In case fire engineering approach was conducted for the smoke extraction system performance, the failure in hot smoke test would be more remote. Hence, the APs, consultants or related parties of the development projects might adopt fire engineering approach to assess the smoke extraction system performance if they wished to secure the result of the hot smoke test.
- (c) The APs, consultants or FSICs might reserve rooms in the system capacity with a view to allowing the increase in system flow rate as one of the means to enhance the system performance after the failure of the hot smoke test.
- (d) To suit the tight local construction programme, hot smoke test was recommended to be conducted as soon as possible such that float time could be reserve for possible system enhancement before the formal hot smoke test witnessed by the FSD in the course of compliance inspection.
- (e) Since the completeness of building elements associated with hot smoke test such as wall construction, façade, sealing up of building openings, etc., contributed to the success of hot smoke test, the prompt completion of these building works to facilitate the early conduction of hot smoke test would be crucial and critical.

Members were invited to widely convey the above to the organizations they were representing with a view to achieving smooth compliance inspections.

## **12. Sprinkler System Pump Sets Arrangement for Non-High Rise Building**

Representative of FSICA briefed the meeting on the issue about the use of a common sprinkler pump serving two scenarios: (a) same hazard classification but system extended more than 45m and (b) system supplying different hazard classifications but within the same zone of height.

Members exchanged views and discussed the issue in detail. As views were varied and no decision could be made, the meeting suggested FSICA to refer the enquiry to the LPC for clarification and to review the past guidelines issued by the LPC Rules relating to pump selection and calculations.