

Fire Safety Standards Advisory Group (FSSAG)
Matter Discussed in the 67th FSSAG Meeting held on 20 December 2021

1. *Automatic Operated Total Flooding Systems complying with NFPA Standard 2001*

It was reported that a briefing on the proposed local application of clean agent fire extinguishing systems to NFPA 2001:2018 was conducted in the Liaison Meeting between FSD & Authorized Persons on 29 July 2021 and the Liaison Meeting between FSD and FSICA on 12 August 2021. The draft declaration form signed by system owner(s) / occupier(s) for verifying maintenance of the related enclosure integrity as proposed by FSICA was discussed in the FSSAG Meeting on 7 September 2021. The draft declaration form was revised incorporating comments received in the meeting and circulated to members for agreement on 15 October 2021. FSICA offered their suggestions on 16 November 2021.

It was supplemented that the issue had been presented at the High-Level Liaison Meeting with Housing Department and would be brought up for discussion at the next Property Management Association Liaison Meeting. Meanwhile, a relevant FSD Circular Letter would be prepared on the bases of the comments received from FSSAG members and parties concerned. The Circular Letter would be issued with a view to putting the practice on trial for a period of two years to ensure effective implementation.

2. *Inspection, Maintenance, Modification and Repair of Fire Service Installations and Equipment with Moving Parts*

It was reported that the revised AI checklists for Fire Hydrant/Hose Reel Systems and Supply Tanks were promulgated via FSD Circular Letter No. 9/2021 on 25 November 2021. To allow more time for the trade to acquaint themselves with the revised AI checklists for Fire Hydrant/Hose Reel Systems and Supply Tanks, the revised AI checklists would take effect on 1 February 2022. Gratitude was expressed to all parties concerned for their comments/contribution on the revised AI checklists. As the relevant FSD Circular Letter had been issued, it was suggested to shelve this item for the time being until there were new checklist(s) brought up for discussion. Members had no objection to the arrangement.

3. *Requirement for Staircase Pressurization System with Notices/Indicating Lamps*

FSD Circular Letter No. 8/2021 on “Additional Requirements for the Pressurization of Staircases” was issued on 24 September 2021. The implementation date of the FSD Circular Letter 8/2021 would be 1 January 2022 for initial submission of building plans received by FSD on or after 1 January 2022. Developments with initial building plans submitted before 1 January 2022 were

welcome to voluntarily adopt these additional requirements. These additional requirements were also recommended for submissions on amendment or alteration to existing buildings installed with staircase pressurization systems. In fact, these additional requirements would be included in the revised CoP.

In view that the relevant FSD Circular Letter 8/2021 had been issued, it was suggested and agreed to delete this item in the next meeting.

4. *Zoning Arrangement for Sprinkler Installation in Staircases of Domestic Floors*

The subject matter had been discussed and an agreed conclusion had been reached in the previous FSSAG meeting. It was reiterated that the design intended for Clause 4.16(ii) of FSD CoP was to prevent the fire spreading from the non-domestic provision to domestic portion. The design requirements, such as hazard level, installation details for those extended areas should follow the same requirement as that for non-domestic areas, regardless whether or not sprinklers were provided in the domestic portion.

Since conclusion had been agreed in the last FSSAG meeting, it was suggested and agreed to delete this item in the next meeting.

5. *Proposal on System Design Provisions for Testing Intermediate Booster Pump Set (Appendix 1)*

It was reiterated that any testing arrangement should not affect the conformance of the operational and performance requirement of the existing FSI systems. In addition, during servicing or testing for maintenance, disruption to the normal operation of the FSI caused by its shutdown should be kept to the minimum.

It was supplemented that as the sample study based on the real case involved detailed technical issues, it would be addressed by Fire Service Installation Division (FSID).

As suggested by members in the last FSSAG meeting, FSICA had selected a typical residential building project for designing provisions for testing intermediate booster pumps during acceptance inspection and future annual maintenance service work. With reference to Appendix 1, it was presented to members the proposal prepared by FSICA.

Regarding the sample study given by FSICA, it was said that the proposed testing arrangement would affect the existing FSI system operation and performance while factors mentioned in the last FSSAG meeting should be considered.

Discussion was made on the issue. It was summarized that:

- (i) The conceptual design of the testing provisions for intermediate booster pump was not ideal as it would affect the operation of other existing FSI systems.
- (ii) FSD considered that it was inappropriate to issue a guideline on the design of such testing provisions so to allow more flexibilities to contractor/designer.
- (iii) FSD would consider to include a provision for testing intermediate booster pump set in coming FSD CoP, so as to facilitate acceptance inspection and future annual maintenance service work.

6. *Market Available Maximum Working Pressure of Sprinkler Alarm Valve (FSICA) (Appendix 2)*

With reference to Appendix 2, representative of FSICA presented to members the background of the issue and the proposal of two alternative solutions suggested by FSICA for FSD's consideration.

According to FSD Circular Letter No. 3/2020, "For FSIs and Fire Safety Products which are required by the Director of Fire Services for the protection of buildings, they shall be of an accepted type and conform with relevant standard(s) and local requirements". If a piece of FSI (except portable equipment) or other Fire Safety Product had been listed and published by a PCB for public access, it was deemed to be accepted by the FSD subject to such FSI Fire Safety Product being in conformity with all relevant local requirements.

In this connection, the sprinkler alarm valve should be the type accepted by FSD and the contractor should try to source any alternative products globally with similar performance that could satisfy the design requirement.

Since NFPA 13 was not the current standard adopted in Hong Kong for sprinkler system design and installation, and the PRV was not allowed in BS EN 12845 for sprinkler system, Option B was not preferred.

It had been a general practice that the sprinkler alarm valve could be relocated to higher floor for some super high-rise buildings. This practice as stated in Option A was also applicable if the overpressure was unavoidable for alarm valves available in Hong Kong market. However, such arrangement should be submitted to FSD for approval on a case by case basis.

7. *Review of Precautions and Requirements regarding Fire Safety in Mechanical Ventilating Systems*

To facilitate the review exercise on the precautions and requirements in respect of fire safety in mechanical ventilating systems stipulated in FSD Circular Letter No. 4/96 Part XI, FSSAG members had been invited to join the discussion with Ventilation Installation Liaison Group (VILG) members in the 4th and 5th Sub-working Group Meeting for Review of Part XI, Circular Letter no. 4/96 Part XI on 21 October 2021 and 25 November 2021 respectively.

In light of respective regulatory categories, the review would be conducted on updating the fire safety requirements (FSRs) and their implementation to suit the relevant regulations as listed below:

- (i) FSRs for Mechanical Ventilating System (under Cap 123J and Cap 132CE)
- (ii) Mechanical Ventilation and Electrical Installation for D.G. Stores (under Cap. 295)
- (iii) Gas Extraction System for Battery Rooms with Electrical Charging Facilities (under FSI Code, Cap 95B)

It was reported that comments on the review received from members of FSSAG and VILG were being fine-tuned and incorporated into the final version which would be circulated to members of FSSAG and VILG for endorsement in due course.

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