### Fire Safety Standards Advisory Group (FSSAG) Matter Discussed in the 69<sup>th</sup> FSSAG Meeting held on 25 August 2022

# 1. Automatic Operated Total Flooding Systems complying with NFPA Standard 2001 (the "Standard")

It was stated that the FSD Circular Letter No. 1/2022 on "Clean Agent Fire Extinguishing Systems – Review and Annual Inspection of Enclosure Integrity" was issued on 30 June 2022. The above arrangement took effect from 1 August 2022 for a trial period of two years and would be reviewed after its trial period.

It was supplemented that for egress time study as required in the Standard, approved building plans in compliance with the Code of Practice for Fire Safety in Buildings, or approved fire engineering report(s) with evacuation time calculation should be submitted when submitting FSI/501. Furthermore, integration of the system actuation function into the FS control panel listed for system release was not mandatory according to the Standard and so there would be free hand for designers to deliberate the most suitable arrangement to suit the client's needs. If the use of the FS control panel for system release was adopted, listing certificates for the FS control panel should be submitted when submitting FSI/501.

It was added that the issue on the proposed local application scheme was brought up for discussion at the Property Management Association Liaison Meeting held on 18 July 2022 and no specific comment was received.

# 2. Review of Precautions and Requirements in regard to Fire Safety in Mechanical Ventilating Systems

It was revealed that there was no further comment received from FSSAG members on the (i) updated Fire Safety Requirements (FSRs) for mechanical ventilating systems under Cap 123J and Cap 132CE and (ii) latest draft of FSRs for application of gas extraction system for battery room with electrical charging facilities. The circular letters to be issued for the updated requirements of the two subjects under Part XI of FSD Circular Letter no. 4/96 and no. 4/97 were under preparation respectively.

It was enquired the implementation timetable on the subject matter. It was

responded that the implementation timetable was not yet confirmed and comments on details of the implementation would further be sought from members after the meeting. It was expected that the effective date should be close to the issuance of the relevant FSD circular letter.

#### 3. Review on the Application of Flexible Sprinkler Drop in Hong Kong

It was revealed that the sub-working group was formed to explore the applicability of sprinkler droppers in Hong Kong. The first sub-working group meeting was held on 5 July 2022. During the sub-working group meeting, members exchanged their views on local market situations and applicable international standards, further discussion would be made in next sub-working group meeting in mid-September 2022.

Taking into account the sub-working group might require on-going discussion and would not come to conclusion in a short period of time, members agreed that this item would be shelved for the time being until there was update to report.

### 4. Clarification on Fire Hydrant Header Pipe Installation

It was advised that subsequent to clarification made last meeting, there was no further query on this issue. It was suggested and agreed to shelve this item in the next meeting.

## 5. Clarification on Fireman's Emergency Switch for Carpark EV Charging Facilities

It was advised that since the discussion of the item had been completed in the last meeting and thereafter there was no further query on this issue. It was suggested and agreed to shelve this item in the next meeting,

# 6. Clarification on Requirement of Provision for Testing the Sprinkler Intermediate Booster Pump

It was advised that subsequent to the discussion of the item in the last meeting, there

was no further query on this issue. It was also stated that there was no further enquiry on the subject matter at the moment. It was suggested and agreed to shelve this item in the next meeting.

#### 7. Audio/Visual Advisory System (AVAS) (Appendix I) (FSICA)

With reference to Appendix I, it was presented to members the background of the issue and enquired whether the interpretation and arrangement of the sample case as shown in Appendix I was acceptable to FSD.

It was advised that with reference to clause 5.1 of the Codes of Practice for Minimum Fire Services Installations and Equipment (FSI CoP), the audio/visual advice should be provided throughout the required floors and/or areas leading to staircase only. According to the sample case provided by FSICA, the subject back of house (BOH) & protected corridor should be regarded as areas leading to staircase and AVAS shall be provided in accordance with the FSI CoP.

# 8. Clarification on Open Kitchen Sprinkler Head positions against Cabinet in Residential Unit (Appendix II) (FSICA)

With reference to Appendix II, it was briefed members the background of the issue and would like to seek for advice on the minimum distance between the open kitchen sprinkler head and its adjacent cabinet.

Members discussed the issue in details and expressed their concerns on the minimum distance between the sprinkler head and adjacent cabinet, and whether the cabinet would be treated as an obstruction to sprinkler coverage. It was supplemented that the record of previous water discharge test in open kitchen could be provided by FSICA's members if required.

It was responded that in recent years, it was common that cabinet or other furniture were found installed in open kitchen during acceptance inspection. There were various designs of sprinkler to suit different headroom requirement and architectural design. According to clause 12.4 of Loss Prevention Council Rules for Automatic Sprinkler Installations Incorporating BS EN 12845 ("LPC Rules"), there were no minimum installation clearance specified between the nearest sprinkler and the wall, and only the spacing requirements were specified for separation from building

construction, i.e. beams, columns, trusses etc. and platforms/ducts.

It was further added that the cabinet was non-structural member and not wholly constructed with non-combustible material, thus it was under the protection of the sprinkler head in case of fire and not classified as obstruction under the LPC Rules. Therefore, the spacing requirement of sprinkler head in relation to obstruction in the LPC Rules was not applicable. However, the designer should pay particular attention on the siting of sprinkler heads such that the notional open kitchen area should be covered by sprinkler head(s) as far as practicable. In view of the siting of sprinkler heads had already been detailed in the LPC Rules, it was not recommended to introduce a clearance requirement solely for open kitchen which may hinder other viable design in other buildings.

After considering the requirements of the LPC Rules and the cabinet in the open kitchen, it was not recommended to introduce the minimum distance on sprinkler head from cabinet in residential unit with open kitchen. It was added that as long as the design and layout of the open kitchen sprinkler head was fully complied with LPC Rules and the related regulatory requirements, it was not necessary to conduct on-site water discharge test.

### 9. Validity Period of Calibration of Testing Equipment for Staircase Pressurization System and Smoke Extraction System (Appendix III) (HKFEMC)

With reference to Appendix III, it was briefed members the proposed change of the validity period of calibration of testing equipment for staircase pressurization system and dynamic smoke extraction system from 3 months to one year.

It was advised that the calibration requirements for test instruments used for testing/measuring should comply with FSD Circular Letter No. 1/2016 as based on the review conducted by a working group of FSSAG in year 2014/15.

Members exchanged views and discussed the proposed validity period of calibration in details. The validity period of calibration requirement for multi-meter and pressure gauge (for water system) as specified in FSD Circular Letter No. 1/2016 was on yearly and 3-yearly basis respectively. Further review for other identified test instruments include push-pull gauge and anemometer used in testing/measuring for staircase pressurization system and smoke extraction system based on applicable calibration standard and calibration period as recommended by the

equipment/instrument manufacturer could be considered. It was also noted that for construction project undertaken by works departments generally adopted a calibration period not exceeding 12 months. Considering there was insufficient recognized testing or calibration laboratories locally and the duration of calibration validity in 3 months was difficult to execute, the validity period of the captioned testing equipment being changed to not more than one year was considered to be more practicable and acceptable to the trade.

Considering the factors above, it was concluded to extend the validity period of calibration of testing equipment for staircase pressurization system and dynamic smoke extraction system from not more than 3 months to not more than one year. FSD would prepare a FSD Circular Letter to announce the captioned change in due course. To facilitate the efficiency of the trade, it was expected that the change would be effective on the date of the relevant FSD circular letter to be issued.

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