

Fire Safety Standards Advisory Group (FSSAG)
Matter Discussed in the 73rd FSSAG Meeting held on 15 September 2023

1. *Review of Precautions and Requirements in regard to Fire Safety in Mechanical Ventilating Systems*

The updated (i) Fire Safety Requirements for Mechanical Ventilating Systems and (ii) Specification of Gas Extraction System for Battery Room and Electrical Charging Facilities published with the newly issued FSD Circular Letter Nos. 2/2023 and 3/2023 respectively had been issued on 7 June 2023 and took effect from 1 September 2023. It was supplemented that briefing session would be arranged in the coming FSD Connects in October 2023 to remind the trade to acquaint with the revised requirements and specification. There being no further updates on the item, it was suggested and agreed to delete the item in the next meeting.

2. *Review on the Application of Flexible Sprinkler Drop in Hong Kong*

Members were thanked on the comment on the proposed amendment of technical guidance for the application of flexible sprinkler drop. The response to comment and the revised amendment were sent to members for review before the meeting.

Having reviewed the revised amendment, FSICA briefed at the meeting the benefit on adoption of flexible sprinkler drop from different perspectives, including environmental, productivity, safety and health, and system reliability from stakeholders' point of view. It was further proposed (1) guidance on submission for usage of flexible dropper; (2) whether FSD would accept GI fittings, grooved fittings and standard manufacture fitting to meet TB requirements; and (3) flexible sprinkler dropper – warning label for members' information and consideration.

It was suggested that examples of applications/venues and elaboration of “relative movement” should be included for easy reference.

HKIE expressed his concern about the ceiling support system and the related fixing method be rigid enough to support the movement of flexible sprinkler. Besides, according to the technical bulletin, flexible connectors should be used to connect sprinklers to distribution pipe. It was further enquired about the clarification

regarding whether range pipe would also be applied. In relation to the warning label as proposed by FSICA, it was queried the necessity of registered professional engineer (RPE) be involved in the cautionary message, considering which might generate additional cost in the case.

In response to the proposed warning label, it was supplemented that all fire service installations and equipment (FSI) should be installed, inspected and maintained by registered fire service installation contractors (RFSICs) under current regulatory regime. In this regard, the message of “No Unauthorized Operation” would cause confusion and therefore the proposed warning label was not advisable to post for a specific type of FSI.

Having considered the observations and comments of members, it was responded and agreed that:

- a) To avoid ambiguity, the application of flexible connector due to relative movement would be assessed under prior approval by FSD on a case by case basis;
- b) The application of the suspended ceiling should follow the respective manufacturer’s standards and recommendations. The relevant ceiling designer/architect/authorized person/RFSIC should take note and be aware of the safety of the ceiling support system;
- c) As agreed in the 1st sub-working group meeting of FSSAG held on 5 July 2022, the local application of sprinkler system should generally comply with Loss Prevention Council Rules for Automatic Sprinkler Installations incorporating BS EN 12845 (LPC Rules) and relevant Technical Bulletins. The design standard should be based on LPC Rules for Automatic Sprinkler Installations incorporating BS EN 12845:2015 (i.e. Clause 17.1.4 Flexible Pipes and Joints) and Technical Bulletin 227 (i.e. TB227.2.4 - TB227.2.6);
- d) For design complying to BS EN 12845:2015 and the proposed amendments to the technical guidance, approval on the use of flexible connectors connecting single sprinkler to locations, justification related to “relative movement” situation and installation details including assemblies in specific would follow the current enquiry submission procedures as that for other compliance aspects related to sprinkler system installation at project basis;
- e) The original context under TB227.2.5 would be retained so that Loss Prevention Certification Board’s listed products (i.e. pipes and fittings) related to the use of flexible connectors connecting to single sprinklers might be accepted; and
- f) The warning label proposed by FSICA involved cautionary message which might cause confusion. Therefore, it was not suggested to incorporate into the

amendment of technical guidance.

It was concluded that considering no further comment from members, the amendment to the technical guidance would be recommended for implementation via the promulgation of FSD Circular Letter

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