

**Business Facilitation Advisory Committee  
Wholesale and Retail Task Force**

***Promotion of Wider Use of Stand-alone Fire Detectors in Hong Kong***

**Purpose**

This paper briefs Members on the proposal of promoting a wider use of stand-alone fire detector introduced by the Fire Services Department (FSD) for enhancing building fire safety on a voluntary basis.

**Background**

2. FSD is committed to formulating fire safety policy for better protection of life and property in the territory. Prompted by the analysis of some major building fires in Hong Kong and having regard to global experience, FSD is of the view that promoting a wider use of stand-alone battery-operated fire detector (stand-alone fire detector) will be the simplest and most practical way to achieve the objective.

3. According to the analysis conducted by the FSD, of the building fires which claimed 84 lives between 2016 and 2020 in Hong Kong, with around 90% occurred in domestic premises. The fatality rate could have been reduced if building occupants were able to evacuate before their exposure to the effects of smoke, heat, or toxic effluent, particularly in circumstances where the occupants fell asleep in their premises when the fires occurred. Early detection of fire and an early warning to building occupants for timely evacuation are therefore of paramount importance to save their lives in case of a fire.

4. The technology of stand-alone fire detectors is now well developed with high reliability. A stand-alone fire detector adopting the modern technology normally has a lifespan of around ten years. Its

installation is simple and does not require any specific skill. It is normally fitted to a mounting plate, which can be attached to the ceiling by adhesive tapes or screws. It usually comes with a test button for checking whether it works normally, and a low battery warning buzz to alert users to the need for battery replacement. Owners can carry out periodic tests themselves by following the instructions in the user manual. No specific maintenance skill is required. Details of the operation, installation and maintenance of a stand-alone fire detector are elaborated at **Annex**.

## **The proposal**

### Legislative amendment

5. With a view to promoting a wider use of stand-alone fire detectors in buildings and premises, particularly in domestic premises, FSD proposes to amend the Fire Service (Installations and Equipment) Regulation (Cap. 95B) (FS(IE)R) that owners/occupants of any buildings/premises will not be required to engage Registered Fire Service Installation Contractors (RFSICs) for the installation, maintenance, inspection or repair of any stand-alone fire detectors which are installed upon their own volition. Besides, owners and occupants will be exempted from the statutory duty of keeping the stand-alone fire detectors in efficient working order at all times and having them inspected by RFSICs at least once in every 12 months.

### Publicity and promotion

6. Upon legislative amendments, a stand-alone detector, being a consumer product, will be regulated by the market itself. That said, FSD will publish guidelines for members of the public on selection of appropriate standalone fire detectors which meet established international/national standards, such as the Mainland, the United Kingdom, the United States and Australia. These standards are generally adopted worldwide, holistically regulating the construction, components, performance, manufacturing, and production and marking, etc. of stand-alone fire detectors. If FSD receives any report on suspected false description of the device (e.g. failure to comply with the standard claimed

by the manufacturer/ supplier), the case will be referred to the relevant enforcement authorities.

7. FSD will launch promotional activities to educate the public on the benefits and use of the device through internet platforms and traditional media. In parallel, having considered that only a few home appliance stores and fire installations and equipment companies sell stand-alone fire detectors in Hong Kong, FSD will liaise with relevant trade representatives to encourage them to import/sell stand-alone fire detectors which meet the above-mentioned standards with a view to boosting the local supply.

### **Advice Sought**

8. Members are invited to note the contents of the paper and provide views on the Government's proposal and increasing supply of standalone fire detectors in the local retail market.

**Fire Services Department**  
**July 2021**

**Operation, Installation & Maintenance  
of Stand-alone Battery-operated Fire Detectors  
(stand-alone fire detector)**

*(a) Operation*

Stand-alone fire detector is a self-operable device which mainly consists of smoke/heat sensor, alarm sounder, battery and test button without other ancillaries. It is different from fire detectors the installation of which is statutorily required. Fire detectors, which are statutorily required to be installed in buildings and licensed premises, such as commercial buildings, industrial buildings, restaurants and homes for the aged, are normally connected with various components and circuitry forming part of a fire detection system of a building/premises.

A stand-alone fire detector is a palm-sized device that gives sufficient sound level to alert building occupants upon its actuation<sup>1</sup> (Figure 1). Depending on the types, they can detect smoke, heat or products of combustion during the incipient stage of fires and give alert accordingly.



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<sup>1</sup> Some stand-alone fire detectors can give sound, vibration and visual alarm at the same time, targeting persons with visual or hearing impairments.

## Figure 1 - Typical stand-alone fire detector

### *(b) Installation & Maintenance*

Installation of stand-alone fire detectors is simple and does not need any specific skill. It is normally fitted to a mounting plate (Figure 2), which can be easily attached to the surface of a ceiling by adhesive tapes or screws. It also usually comes with a test button for checking whether it works normally, and a low battery warning buzz to alert users to the need for battery replacement. Stand-alone fire detectors are commonly available in retail and online platforms and manufactured with service life of 10 years. No specific maintenance skill is required. Users may carry out periodic tests themselves by following the instructions in the user manual that comes with the device upon purchase, or the guidelines to be published by the Fire Services Department.



Figure 2 – A stand-alone fire detector being mounted onto mounting plate