

## A Note on BS5839-1:2017 and Video Fire Detection

*"Fire detection and fire alarm systems for buildings: code of practice for design, installation, commissioning and maintenance of systems in non-domestic premises."*

This British Standard is widely accepted as the fire detection systems guidance applicable to the vast majority of (non-domestic) buildings in the UK, and is also used as the basis for guidance in many other jurisdictions.

The standard specifically allows for the use of video fire detection as the primary/sole means of fire detection. It acknowledges the current lack of recognised product standards for video fire detection and instead requires that reliance be placed on manufacturers' guidance.

It is an installation standard so does not apply to products, and thus no product can legitimately claim direct compliance with BS5839-1. However the Ciqurix CORE system has been designed and built specifically with BS5839-1 in mind (as well as EN54 parts 2,4,10 and 18). **This means that a fire detection system which uses Ciqurix FCam CORE products can be successfully assessed and accredited against BS5839-1:2017 for design, installation, and commissioning.**

Ciqurix can take formal responsibility for both design and commissioning if required and will issue certification in accordance with BS5839-1:2017.

Specific relevant clauses:

21.1.7 *"Where video fire detectors are the sole means of detection they need to be designed, and their suitability and performance verified, by a qualified specialist."*

We provide a full design and commissioning service for each installation.

21.2.j *"It is important that video fire detectors are capable of detecting flame and/or smoke reliably in the absence of the normal lighting in the building and the absence of a mains power supply to any lighting provided specifically to aid detection."*

The FCam works in all light levels and does not need any lighting to operate.

*"When video fire detectors are used as the sole means of detection, the recommendations of the product manufacturer and/or suppliers in terms of detection performance and application limitations should be followed".*

We provided detailed recommendations in writing for each site.

26.2.c *“Cable systems used for all parts of the critical signal paths, and for the low voltage mains supply to the system, should adequately resist the effects of fire.”*

The CORE system has terminals suitable for fire resistant data cable, and we provide comprehensive advice on suitable cable types and availability.

25.4.e.1 *“The mains supply [to the fire system] needs to be backed up by a standby supply that is able to support the system while the fault in the mains supply is corrected. The [battery] capacity should be sufficient to maintain the system in operation for at least 24 h, after which sufficient capacity should remain to operate all fire alarm devices for at least 30 min.”*

The CORE system has a built-in standby battery supply which will power the entire system during a mains failure for over 24.5 hours (not including non-critical functions e.g. video recording/playback).

11.2.s *“Where a PC or similar IT equipment is used as a user interface, it should be considered as a supplementary interface and there should be CIE conforming to BS EN 54-2 mounted nearby”.*

The CORE system interfaces directly to the site fire alarm system and uses the site fire alarm control panel as its primary user interface. Although an NVR (video recorder) and/or video display screen are often provided alongside the CORE system, these are supplementary, only provided for convenience, and do not affect or impact the operation or performance of the system in any way.

*Information last updated 31<sup>st</sup> May 2023*