Dorgard
Legislation and Standards

Some people need to know about the standards and legislation that relates to products they buy and this is especially important for Fire Safety products, so here goes…We have tried to make it as simple as possible.

Legislation in the UK that applies to the use of fire door retainers highlights the importance of a risk-assessed approach to fire safety precautions in the workplace. The responsibility for carrying out a Fire Risk Assessment is with the Responsible Person, generally the owner, occupier or employer. A Fire Risk Assessment should be carried out prior to installing all door retainers.

Dorgard and Dorgard X both acoustic and hardwired have been tested to and comply with the following standards:

- BS EN 1155: 1997 Building hardware. Electrically powered hold-open devices for swing doors (Manufacturer's classification number 357113).
- EN61000-6-1:2001 Electromagnetic compatibility (EMC). Generic standards. Immunity for residential, commercial and light industrial environments.
- EN61000-6-3:2001+A11:2004. Electromagnetic compatibility (EMC). Generic standards. Emission standard for residential, commercial and light industrial environments.
- BS 7273-4 category C. Code of practice for the operation of fire protection measures. Activation of release mechanisms for doors.

BS5839-1: 2002

The British Standard for fire alarm installation, BS5839-1: 2002, (Clause 16.2), states: -
The sound pressure level of alarm signals should be generally, throughout all accessible areas of the building not less than 65dB(A) . . . where the sound pressure level of background noise is greater than 60dBA, the sound pressure level of the fire alarm signal should be 5dB above the sound pressure level of the background noise.

It is understood that there are some noises in everyday life that may be louder than a fire alarm and persist for longer than 30 seconds, such as a vacuum cleaner. Although required in the British Standard, it is often found that the alarm is not 5 decibels louder.

BS EN 1155:1997

Our door retainers have been tested to and comply with BS EN 1155:1997, Building hardware, electrically powered hold-open devices for swing doors. This is a harmonized European standard which specifies requirements for separate hold-open mechanisms incorporated in a door closer intended to be used on fire/smoke doors.

BS 7273-4

BS 7273-4 concerns the interface (Critical Signal Path) between fire detection and fire alarm systems with forms of door hardware including devices to hold open self-closing fire doors.

The Critical Signal Path is the connection between the CIE and the door hardware. If the connection is compromised, the door hardware must fail-to-safe. It is important to note that for acoustically actuated systems, fire alarm sounder circuits are not deemed to be part of the Critical Signal Path. There are three categories of actuation within BS 7273:

Category A
Fail-to-safe when 12 specified faults or disablements on fire system occur (more if devices are radio actuated). Acoustic actuation is not permitted for this category. Our Dorgard X which receives a signal from System X hardwired, has been developed in accordance with the requirements for category A which is hardwired at the control panel, but controls the doors through the transmission of radio signals.

Category B
Fail-to-safe only when critical path wiring faults occur or when there is power loss to release mechanism. Acoustic actuation is acceptable for this category so we have combined our acoustic and radio technologies in System X to comply with the requirements of category B. Our Dorgard X which receives a signal from System X acoustic will even fail-to-safe if there is a loss of power to the control unit.

Category C
As category B, but interfacing via another system. The Critical Signal Path terminates at the other system. Dorgard meets the requirements of category C.

A combination of categories can be used throughout a building according to the specific needs of the areas in question on a risk assessed basis.