LD1 Hob Detection

Technical Sheet

Designed for Studio, Open Plan and Student Apartment's to reduce the kitchen hob risk and activate sounders throughout the apartment, thus allowing relaxation on the hob position and restrictions on the open plan area of the apartment.

MANAGING THE RISK BEFORE IT BECOMES A FIRE.

'LD1 Hob Detection' forms an extension of the intelligent apartment LD1 ceiling mounted detectors to provide local detection and management of the cooking hob.

Hob Detection in 'monitor mode' is designed to provide enhanced early detection at the hob and activates a warning alarm.

In 'fire mode', the power supply to the hob is isolated prior to a fire occurring and the ceiling mounted sounders throughout the apartment are activated.

The hob detection provides an earlier response over that of the ceiling mounted heat detector thus improving detection times and as it forms an extension of the LD1 detection system, the sounders are activated resulting in the occupants moving earlier.

Hob Detection works by monitoring the hob constantly for cooking activity. This includes infrared for monitoring radiant & conducted energy, time, power consumption, movement combined with sophisticated algorithms as required by the BS EN Standard. The system will initially raise a pre warning 15 second alarm in 'monitor mode' when conditions approach an unacceptable level. Where no action is taken or conditions become critical, the Hob Detection is activated in 'fire mode' to isolate the hob power supply preventing ignition and activating the apartment sounders .

Hob Detection comes from Norway & Finland where the Building Regulations equivalent require all kitchen hobs to be fitted with a monitoring Hob Detection in accordance with the British Standard BS EN50615:2015 'Hob Fire Prevention Standard', resulting in reduced numbers of cooking incidents since its introduction.

The system gives Fire Engineers a system to assist in presenting a case for managing the risk areas out, allowing greater flexibility with open plan apartments regardless of the floor area.

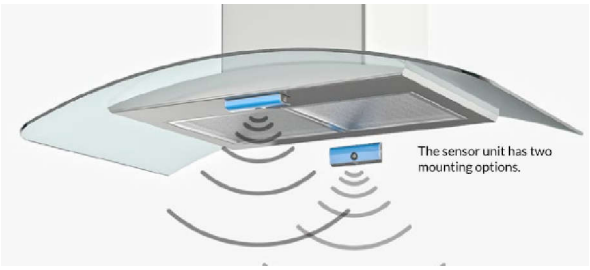
Stock Codes

DMS432AB : 32 amp LD1 Hob Control Unit

DMS101 : Ionisation intelligent smoke detector (alkaline)

DMS102 : Optical intelligent smoke detector (alkaline)

DMS103 : Intelligent heat detector (alkaline)



Features

Hob Detection prevents hob fires occurring by constantly monitoring the hob and isolating the power supplies prior to a fire occurring in accordance with BS EN50615:2015.

Allows trade off in studio apartments giving greater flexibility with the hob positions.

Allows kitchen to be part of the open plan in LD1 & sprinklered apartments exceeding 32m^2 in area as restricted by BS9991:2015.

Activation of Hob Detection in 'fire mode', operates the apartment LD1 sounders.

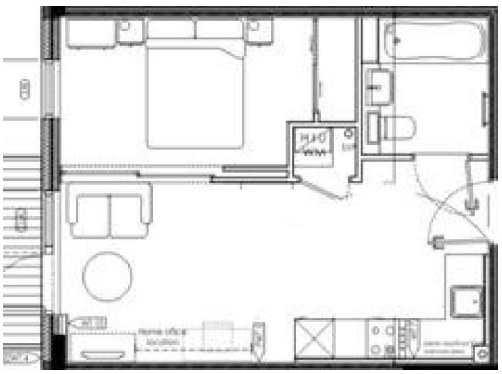
Hob Detection is tested and certificated for 32 amp hobs to show compliance with the British Standard BS EN50615:2015.

Intelligent LD1 Smoke & Heat Detectors to BS 5446-2 and BS5839.

System manually reset's after activation and is ready to protect the hob and kitchen again.

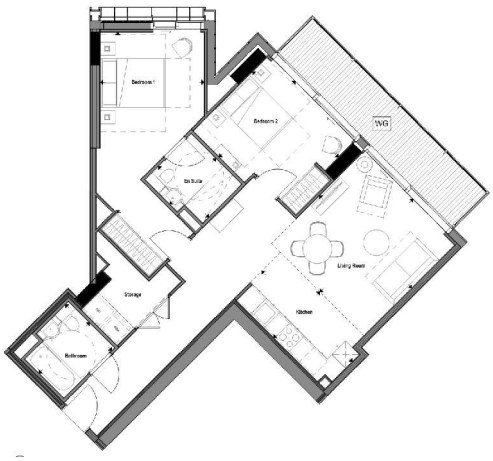
Only maintenance is replacing the AA batteries every 3 years.

Failsafe to isolate the hob power supply where unit is removed or no power to the batteries.

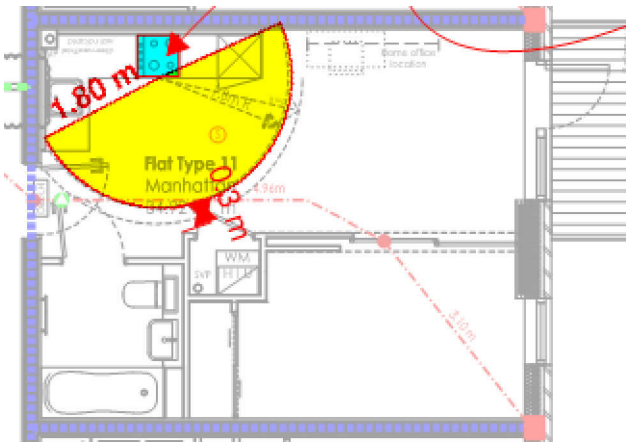


37m^2 Studio Apartment (no sprinklers)

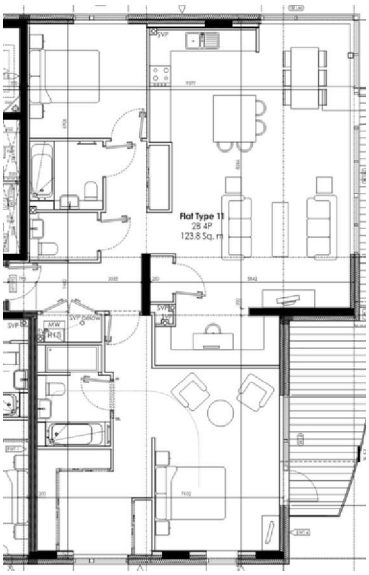
DM Solutions



181m² Open Plan Sprinklered Apartment



37m² Unsprinklered Studio Apartment



162m² Open Plan Sprinklered Apartment

Apartment
Consumer unit

Heat Detector /Sounder (DMS103)

Smoke Detector /Sounder (DMS101)

Smoke Detector /Sounder (DMS102)

Hob Guard Detector

Hob

LD1 Hob Control Unit under the hob (DMS432AB)

Components provided by LD1 Hob Detection

Standard wiring to appliance

Unit Dimensions

- Ceiling Detectors 130 dia. x 54mm deep
- Hob Detector above hob 130 x 45 x 20mm deep
- LD1 Hob Control Unit 240 x 190 x 90mm deep located below the hob

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