

## Technical Bulletin: October 2021

# Fire detection and fire alarm systems

The current requirements for Park Homes and Holiday Caravans are as follows:

- **BS 3632:2015** includes a minimum requirement for one battery powered smoke alarm (Grade F).
- **BS EN 1647:2018** does not specify requirements for fire detection (national standards apply). Historically, the UK caravan industry has adopted a minimum requirement for one battery powered smoke alarm (Grade F).

As with all clauses within the habitation standards:

- the minimum requirement is not intended to be the target in all circumstances, but it indicates the minimum level for health and safety for occupants of the simplest caravan possible under the habitation standards; and
- each manufacturer must decide if they will exceed the minimum requirements, and, if so, in what areas, how, and by how much.

## System design

To give some context, when considering what fire detection and fire alarm system to install, the design is determined by considering the **grade** of fire detection, and the **category** of protection.

### Grades of system

The applicable grades are defined as follows (extracted from BS 5839-6):

Grade	Requirement
D1	A system of one or more mains-powered detectors each with tamper-proof standby supply consisting of a battery or batteries.
D2	A system of one or more mains-powered detectors each with an integral standby supply consisting of user-replaceable battery or batteries.
F1	A system of one or more battery-powered detectors powered by a tamper-proof primary battery or batteries.
F2	A system of one or more battery-powered detectors powered by a user-replaceable primary battery or batteries.
In the case of Grade D and Grade F systems, where more than one smoke alarm is installed, the smoke alarms normally need to be interlinked. Heat alarms also need to be interlinked with smoke alarms.	

## Categories of system

The applicable categories for the protection of life are defined as follows (extracted from BS 5839-6):

Category	Requirement
LD1	A system installed throughout the premises, incorporating detectors in all circulation areas that form part of the escape routes from the premises, and in all rooms and areas, other than those with negligible sources of ignition, such as toilets, bathrooms and shower rooms.
LD2	A system incorporating detectors in all circulation areas that form part of the escape routes from the premises, and in all specified rooms or areas that present a high fire risk to occupants, including any kitchen and the principal habitable room.

## Considerations

### Fire safety legislation

Park Home and Holiday Caravan parks are subject to fire safety legislation up to the point where the public highway is reached. However, Park Homes and Holiday Caravans (including any private garden associated with them) which are owned or leased by individuals, either as their primary residential dwelling or as a holiday home, are private premises and, as such, fall outside the scope of the fire safety legislation.

Nevertheless, if a Park Home or Holiday Caravan is used for holiday letting purposes, it is considered to fall within the scope of fire safety legislation (as the accommodation is analogous to rooms in a motel).

*NOTE: In the caravan industry, this typically applies to a Holiday Caravan manufactured in accordance with BS EN 1647 (or a 'holiday lodge' manufactured in accordance with the Park Home Standard BS 3632) if used for holiday letting purposes (where permitted by the holiday park), but it also applies to other scenarios where Park Home/Holiday Caravan accommodation is used for holiday letting purposes.*

Where any Park Home or Holiday Caravan is subject to fire safety legislation, the relevant legislation is:

- the Regulatory Reform (Fire Safety) Order 2005 (England & Wales);
- the Fire (Scotland) Act 2005 (Scotland); or
- the Fire and Rescue Services (Northern Ireland) Order 2006 (Northern Ireland).

Where the above fire safety legislation applies, a fire safety risk assessment must be carried out by the owner, and this should consider the fire detection and fire alarm system. **The fire safety risk assessment *may* deem that a superior system to the minimum requirements of the habitation standard is appropriate.**

## Park Homes (manufactured in accordance with BS 3632)

Park Homes fall under the scope of BS 5839-6 *Code of practice for the design, installation, commissioning and maintenance of fire detection and fire alarm systems in domestic premises*.

Recommendations are as follows (extracted from BS 5839-6):

Class of premises	New build grade	New build category
Single family dwellings <ul style="list-style-type: none"> <li>Owner-occupied bungalow, flat or other single storey unit</li> <li>Rented bungalow, flat or other single storey unit</li> </ul>	D2 D1	LD2 LD2
Self-catering premises with short term paying guests	D1	LD1
<p>See BS 5839-6 for a breakdown of the detector types and locations which should be included within the system design. This will usually require a heat detector in the kitchen and may include a smoke detector in a loft space in certain circumstances.</p> <p>If occupants are known to have disabilities, the additional recommendations within BS 5839-6 should also be considered.</p>		

*NOTE: BS 3632 is currently under review by BSI and a D2, LD2 system in accordance with BS 5839-6 has been proposed as the minimum requirement.*

## Holiday Caravans (manufactured in accordance with BS EN 1647)

Holiday Caravans (Leisure Accommodation Vehicles) do not fall under the scope of BS 5839-6. However, the principles are equally valuable.

### Useful sources of information

*NOTE: This is not a definitive list and nor does it represent the requirements.*

#### ENGLAND & WALES

The UK government has provided guidance which can be found here:

<https://www.gov.uk/government/publications/do-you-have-paying-guests>

*NOTE: This guidance is in the course of revision and a new version will be published by the Home Office before the end on 2021.*

<https://www.gov.uk/government/publications/fire-safety-risk-assessment-sleeping-accommodation>

#### SCOTLAND

The Scottish government has provided guidance which can be found here:

<https://www.gov.scot/publications/practical-fire-safety-guidance-existing-premises-sleeping-accommodation/>

#### NORTHERN IRELAND

The Northern Ireland government has provided guidance which can be found here:

<https://www.nifrs.org/wp-content/uploads/2021/02/Sleeping-Accommodation.pdf>

## **Actions from this Technical Bulletin**

Park Home and Holiday Caravan manufacturers are reminded that the minimum requirements of the habitation standards are not the target under all circumstances. A superior system might be appropriate according to the specific design and use of the Park Home/Holiday Caravan.

Where fire safety legislation applies:

- the purchaser – the individual or Park who will be the owner of the Park Home/Holiday Caravan – should consider the fire detection and fire alarm system as part of their fire safety risk assessment. The purchaser should inform the Park Home/Holiday Caravan manufacturer what system is required; and
- the manufacturer of the Park Home/Holiday Caravan should liaise with their customer – the individual or Park who will be the owner of the Park Home/Holiday Caravan – to ascertain what fire detection and fire alarm system should be installed, and this should be in accordance with the owner's fire safety risk assessment.

*NOTE: This Technical Bulletin and links to useful sources of information should not be used to design a fire detection and fire alarm system. They are an aid to highlight the need to properly consider what system is appropriate.*

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