

Advice Leaflet 6 Caravan Sites – Fire Safety

Ref FS-PAN0006
Rev Aug 2009
To be reviewed Sep 2012

West Yorkshire Fire & Rescue Service
Fire Safety Group
Oakroyd Hall
Birkenshaw
West Yorkshire
BD11 2DY

Tel: 01274 682311
Fax: 01274 655888

Introduction

This leaflet is for prospective/current Caravan Site owners and provides guidance on the standards that are considered appropriate in respect to fire safety on Residential, Holiday and Touring Caravan Sites.

The information aims to set general principles and to provide the reader with information as to which approved document or technical standard is considered by this Authority to be appropriate.

Information

Model Standards, on which this note is based, are specified by the Secretary of State under section 5 of the Caravan Sites and Control of Development Act 1960. The Standards are not statutory, but represent what should normally to be expected as a matter of good practice. A local authority, in deciding what conditions to attach to a site licence, is required by the Act to have regard to the specified Standard. However, no condition of license may be specified that relates to any matter in relation to which requirements or prohibitions are, or could be, made by or under, the Regulatory Reform (Fire Safety) Order 2005.

Permanent Residential Caravan Sites

Space between Caravans

Every caravan should be not less than 6 metres from any other caravan in a separate occupation, and not less than 2 metres from a road. The point of measurement for porches, awnings etc, is the exterior cladding of the caravan.

Porches may protrude 1m into the 6 metres and should be of the open type. Where awnings are used, the distance between any part of the awning and an adjoining caravan should not be less than 3 metres. They should not be of the type that incorporates sleeping accommodation and they should not face each other or touch.

Eaves, drainpipes and bay windows may extend into the 6 metre space provided the total distance between the extremities of 2 adjacent units is not less than 5.25 metres.

Where there are ramps for the disabled, verandas and stairs extending from the unit, there should be 4.5m clear spaces between them and two such items should not face each other in any space. If they are enclosed, they may need to be considered as part of the unit and, as such, should not intrude into the 6m spaces.

A garage, a shed or a covered storage space should be permitted between units only if it is of non-combustible construction (including non-combustible roof) and sufficient space is maintained around each unit so as not to prejudice means of escape in case of fire. Windows in such structures should not face towards the units on either side. Carports and covered walkway should in no circumstances be allowed within the 6 metre space. For cars and boats between units, see below.

Advice Leaflet 6 Caravan Sites – Fire Safety

The gross density should not exceed 50 caravans to the hectare, calculated on the usable area.

Roads, Gateways and Footpaths

Roads, gateways and footpaths should be designed to provide adequate access for fire appliances. Roads of suitable material should be provided so that no caravan standing is more than 50 metres from a road. Where the approach to the caravan is across ground that may become difficult or dangerous to negotiate in wet weather, each standing should be connected to a carriageway by a footpath with a hard surface.

Roads should not be less than 3.7 metres wide, or, if they form part of a clearly marked one way traffic system, 3 metres wide. Gateways should be a minimum of 3.1 metres wide and have a minimum height clearance of 3.7 metres. Footpaths should not be less than 0.75 metres wide. Roads should have no overhead cable less than 4.5 metres above the ground. Roads and footpaths should be suitably lit.

Emergency vehicle routes within the site should be kept clear of obstruction at all times.

Hard Standings

Every caravan should stand on a concrete hard-standing which should extend over the whole area occupied by the caravan placed upon it, and should project a sufficient distance outwards from its entrance or entrances to enable occupants to enter and leave safely.

Fire Fighting Appliances

The following section is only applicable when the 'responsible person' for the site provides fire fighting equipment and trains a nominated person(s) to safely use fire fighting equipment.

a. Fire Points

These should be established so that no caravan or site building is more than 30 metres from a fire point. They should be housed in a weatherproof structure, easily accessible and clearly and conspicuously marked "FIRE POINT".

b. Fire Fighting Equipment

Where water standpipes are provided and there is a water supply of sufficient pressure and flow to project a jet of water approximately 5 metres from the nozzle, such water standpipes should be situated at each fire point. There should also be a reel that complies with British Standard 5306 Part 1, with a hose not less than 30 metres long, having a means of connection to a water standpipe (preferably a screw thread connection) with a water supply of sufficient pressure and terminating in a small hand control nozzle. Hoses should be housed in box and painted red and marked "HOSE REEL".

Where standpipes are not provided but there is a water supply of sufficient pressure and flow, fire hydrants should be installed within 100 metres of every caravan standing. Hydrants should conform to British Standard 750. Access to hydrants and other water supplies should not be obstructed or obscured.

Advice Leaflet 6 Caravan Sites – Fire Safety

Where standpipes are not provided or the water pressure or flow is not sufficient, each fire point should be provided with either water extinguishers (2 x 9 litres) or a water tank of at least 500 litres capacity fitted with a hinged cover, 2 buckets and 1 hand pump or bucket pump.

Fire Warning

A means of raising the alarm in the event of a fire should be provided at each fire point. This could be by means of a manually operated sounder, e.g. metal triangle with a striker, gong or hand operated siren.

Maintenance

All alarms and fire fighting equipment should be installed, tested and maintained in working order by a competent person and be available for inspection by, or on behalf of, the licensing Authority. A logbook should be kept to record all tests and any remedial action.

All equipment susceptible to damage by frost should be suitably protected.

Fire Notices

A clearly written and conspicuous notice should be provided and maintained at each fire point to indicate the action to be taken in case of fire and the location of the nearest telephone. This notice should include the following text:

“On discovering a fire, ensure the caravan or site building involved is evacuated.

Raise the alarm

Call the fire & rescue service (the nearest telephone is sited)

Attack the fire using the fire fighting equipment provided, if you have been nominated and trained to do so.

It is in the interest of all occupiers of this site to be familiar with the above routine and the method of operating the fire alarm”.

Fire Hazards

Long grass and vegetation should be cut at frequent and regular intervals where necessary to prevent it becoming a fire hazard to caravans, buildings or other installations on the site. Any such cuttings should be removed from the vicinity of caravans. The space beneath and between caravans should not be used for the storage of combustible materials.

Telephone

An immediately accessible telephone should be available on the site for calling the emergency services. A notice by the telephone should include the address of the site.

Storage of Liquefied Petroleum Gas (LPG)

- a. LPG storage supplied from tanks should comply with the LP Gas Association’s Code of Practice 1 - Bulk LPG Storage at Fixed Installations - Part 1: “Design, Installation and Operation of Vessels Located above Ground’, or, where LPG is supplied from

Advice Leaflet 6 Caravan Sites – Fire Safety

cylinders, the LP Gas Associations Code of Practice 7 – “Storage of Full and Empty LPG Cylinders and Cartridges” as appropriate.

Exposed gas bottles or cylinders should not be within the separation boundary of an adjoining unit.

- b. LPG cylinders in use should be located outside. Where this is impracticable, for example, where an internal housing is fitted, the cylinders should be accessible from the outside. It is essential that the housing be fire resistant to not less than 20 minute standard. Ventilation of the housing at high and low level, directly to the outside, should be provided (not less than 1/100 of the floor area of the housing). A notice, or the symbol for a gas container locker, should be permanently fixed to the outside of the housing indicating the presence of gas cylinders.

- c. LPG installations should conform to British Standard 5482, "Code of Practice for domestic butane and propane gas burning installations, Part 2: Installations in Caravans and non-permanent dwellings". Pipe work should be in copper or steel tube with compatible fittings. For detailed advice, regard should be had to "British Standard 5482: Part 2 - Domestic Butane and Propane Gas-Burning Installations". Where flexible tubing is necessary, it should comply with the requirements of British Standard 3212 with integral threaded metallic ends.

Type 1 - for internal use (not greater than 2 metres (6')).

Type 2 - high pressure, outside or in the cylinder housing where the manifold or regulator is not connected directly to the cylinder (not greater than 1 metre (3')).

In addition to the main control valve at the cylinder, every appliance and gas-burning fitting should be provided with a shut-off tap.

- d. A portable self-contained LPG space-heating appliance may be permitted within a caravan providing:

The appliance meets British Standard 3879

The appliance is maintained in accordance with the manufacturers instructions

Wherever practicable gas cylinders are changed outside.

- e. Where there are metered supplies from a common LPG storage tank, with the LP Gas Association's Code of Practice 1 – “Bulk LPG Storage at Fixed Installations - Part 1: Design, Installation and Operation of Vessels Located above Ground “ provides further guidance. In this and where a British Gas mains supply is available, then the Gas Safety (Installation and Use) Regulations 1984 and the Pipelines Act 1962 may also be applicable.

- f. Mains Gas Supply

For mains gas supply, the 1984 Regulations will be relevant for the installation downstream of any service pipes are subject to the Gas Safety Regulations 1972.

Advice Leaflet 6 Caravan Sites – Fire Safety

Electrical Installations

Any electrical installations should be in accordance with Building Regulations. If there are overhead electric lines on the site, suitable warning notices should be displayed at the entrance to the site and on supports for the line. Where appropriate particular attention should be drawn to the danger of masts of yachts or dinghies contacting the line.

Refuse Disposal

Every caravan standing should have an adequate number of suitable non-combustible refuse bins with close-fitting lids or plastic bags.

Parking

One car only may be parked between adjoining caravans provided that the door to the caravan is not obstructed. Suitably surfaced parking spaces should be provided where necessary to meet the additional requirements of the occupants and their visitors. Plastic or wooden boats should not be parked between units.

General Fire Hazards

- a. Paraffin appliances should be refuelled outside the caravan.
- b. Where flue pipes pass through the structure of a caravan, they should be adequately insulated.

Holiday Caravan Sites

The foregoing standards should apply to Holiday and Touring caravan sites subject to the following modifications:

Density and Space Between Caravans

Subject to the following variations, the minimum spacing distance between caravans made of aluminium or other materials with similar fire performance properties should be not less than 5 metres between units, 3.5 metres at the corners. For those with a plywood or similar skin it should be not less than 6 metres. Where there is a mixture of holiday caravans of aluminium and plywood, the separation distance should be 6 metres; and where there is a mixture of permanent residential homes and holiday caravans, the separation distance should again be 6 metres. The point of measurement for porches, awnings etc are the exterior cladding of the caravan.

Porches may protrude 1m into the 5 metres and should be of the open type. Where awnings are used, the distance between any part of the awning and an adjoining caravan should not be less than 3 metres. They should not be of the type that incorporates sleeping accommodation and they should not face each other or touch.

Eaves, drainpipes and bay windows may extend into the 5 metre space provided the total distance between the extremities of 2 adjacent units is not less than 4.5 metres.

Where there are ramps for the disabled, verandas and stairs extending from the unit, there should be 3.5m clear space between them (4.5m if mixture of caravans) and such items should not face each other in any space. If they are enclosed, they may need to be considered as part of the unit and, as such, should not intrude into the 5m (or 6m) space.

Advice Leaflet 6 Caravan Sites – Fire Safety

The gross density should not exceed 60 caravans to the hectare, calculated on the useable area.

No caravan standing should be more than 50 metres from a road.

Hard standings may be dispensed with if the caravans are removed during the winter, or if they are situated on ground that is firm and safe in poor weather conditions.

Touring Caravan Sites

Density and Space Between Caravans

The gross density should not exceed 75 caravans or motor caravans per hectare (30 per acre). Where tent camping is also permitted the number of pitches should be reduced by the number of main tents stationed for human habitation.

Where the number of units is limited by conditions imposed by the Licensing Authority, maxima may be prescribed by reference to specified periods, permitting up to 10% more units during peak period agreed and providing that the space standards are complied with.

A minimum distance of 6 metres should be maintained between other units in separate family occupation, and not less than 3 metres between units in any circumstances. Vehicles and ancillary equipment is permitted within the 6 metres space but 3 metres clear space should always be maintained to restrict fire spread.

Roads, Gateways and Footpaths

Not prescribed, Station Managers should be familiar with any access problems and advise the site owner accordingly.

Emergency vehicles should have access to within 90 metres of any unit.

Site owners should be encouraged to maintain vegetation at a reasonable level, where the likelihood of fire spreading due to vegetation catching fire, suitable beaters of a type used by the Forestry Commission should be provided at each fire point.

Telephone

Although not prescribed, site owners should be encouraged to provide details of the nearest available telephone for contacting the emergency services.

Refuse Disposal

Adequate provision shall be made for the storage, collection and disposal of refuse.

Parking

Not specified, however it is recommended that the door to the caravan should not be obstructed.

Advice Leaflet 6 Caravan Sites – Fire Safety

Bibliography

Caravan Sites and Control of Development Act 1960 Section 5

Model Standards 1989: Permanent Residential Mobile Home Sites HMSO 1989.

Model Standards 1989: Holiday Caravan Sites HMSO 1989.

Model Standards 1989: Touring Caravan Sites HMSO 1989.

Guidance Note CS4. The Keeping of LPG in cylinders and similar containers. Health and Safety Executive. HMSO 1986.

Guidance Note CS11. The storage and use of LPG at Metered Estates. Health and Safety Executive. HMSO.

Guidance Booklet HSG 34. The storage of LPG at Fixed Installations. Health and Safety Executive. HMSO.

British Standard 5482. Code of Practice for domestic butane and propane gas burning installations Part 2: Installations in Caravans and non-permanent dwellings.