

BS 3632:2015



BSI Standards Publication

Residential park homes – Specification

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Foreword

Publishing information

This British Standard was published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 30 November 2015. It was prepared by Technical Committee B/511, *Buildings mobile and temporary*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

The Technical Committee recognizes that users of BS 3632 might require time to comply with the requirements of BS 3632:2015. For this reason, there is a transition period of 12 months in which BS 3632:2005 will remain current.

This British Standard supersedes BS 3632:2005, which will be withdrawn on 30 November 2016.

Information about this document

When this British Standard was first published in 1963, the title *Specification for permanent residential caravans* was adopted to reflect the design and use of this type of caravan, the term by which it was then commonly known. Since then, the permanent residential caravan has undergone considerable development in terms of size, services, equipment and material.

When issued in 1981, this British Standard was titled *Specification for mobile homes*, “mobile home” being the term used in the United Kingdom following the Mobile Homes Act 1975 [1]. In 1981, the term “park home” was adopted by the caravan industry and was introduced into the 1981 revision of this standard. The term “residential park home” was adopted when this standard was revised in 1995.

The 2005 revision of this standard was developed to include criteria appropriate to more conventional forms of housing, and was aimed at ensuring the suitability of a residential park home as a permanent dwelling.

This revision of the standard continues that approach and reflects the advances in material technologies and building techniques that have taken place since the 2005 revision. This revision also includes a significant increase in the requirements to incorporate energy efficiency measures that were unavailable or unsuitable for inclusion in the 2005 edition. These measures help to reduce the environmental footprint of residential park homes in the built environment.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause J.1.1, which states, “Requirements should be expressed using wording such as: ‘When tested as described in Annex A, the product shall ...’”. This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

Particular attention is drawn to the following specific regulations:

- The Furniture and Furnishing (Fire) (Safety) Regulations 1988, as amended [2]
- The Gas Safety (Installation and use) Regulations 1998 [3]
- The Water Supply (Water Fittings) Regulations 1999, as amended [4]
- The Water Supply (Water Fittings) (Scotland) Byelaws 2014 [5]
- The Water Supply (Water Fittings) Regulations (Northern Ireland) 2009 [6]
- Caravan Sites and Control of Development Act 1960, as amended [7]
- Caravan Sites Act 1968, as amended [8]
- The General Product Safety Regulations 2005 [9]
- Manual Handling Operations Regulations 1992 [10]

1 Scope

This British Standard specifies requirements for the manufacture of an ex-works residential park home for use as a permanent place of residence. It also specifies the tests and acceptance criteria to ensure compliance with the requirements of this British Standard.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 476-3:2004, *Fire tests on building materials and structures – Part 3: Classification and method of test for external fire exposure to roofs*

BS 476-7:1997, *Fire tests on building materials and structures – Part 7: Method for classification of the surface spread of flame of products*

BS 715, *Specification for metal flue boxes for gas-fired appliances not exceeding 20 kW*

BS 1188, *Specification for ceramic wash basins and pedestals*

BS 5410-1, *Code of practice for oil firing – Part 1: Installations up to 45 kW output capacity for space heating and hot water supply purposes*

BS 5440-1, *Flueing and ventilation for gas appliances of rated input not exceeding 70 kW net (1st, 2nd and 3rd family gases) – Part 1: Specification for installation of gas appliances to chimneys and for maintenance of chimneys*

BS 5608, *Specification for preformed rigid polyurethane (PUR) and polyisocyanurate (PIR) foams for thermal insulation of pipework and equipment*

BS 6206, *Specification for impact performance requirements for flat safety glass and safety plastics for use in buildings*

BS 6262-4, *Glazing for buildings – Part 4: Code of practice for safety related to human impact*

BS 6762-2, *Services for leisure accommodation vehicles and transportable accommodation units – Part 2: Code of practice for the installation of solid fuel fired heating in park homes and transportable accommodation units*

BS 6891, *Installation of low pressure gas pipework of up to 35 mm (R1¹/₄) in domestic premises (2nd family gas) – Specification*

BS 7671, *Requirements for electrical installations – IET Wiring Regulations*

BS 8417, *Preservation of wood – Code of practice*

BS EN 30-1-1, *Domestic cooking appliances burning gas – Part 1-1: Safety – General*

BS EN 33, *Pedestal WC pans with close-coupled flushing cistern – Connecting dimensions*

BS EN 806-1, *Specification for installations inside buildings conveying water for human consumption – Part 1: General*

BS EN 806-2, *Specification for installations inside buildings conveying water for human consumption – Part 2: Design*

BS EN 806-3, *Specifications for installations inside buildings conveying water for human consumption – Part 3: Pipe sizing – Simplified method*

BS EN 806-4, *Specifications for installations inside buildings conveying water for human consumption – Part 4: Installation*

BS EN 806-5, *Specifications for installations inside buildings conveying water for human consumption – Part 5: Operation and maintenance*

BS EN 997, *WC pans and WC suites with integral trap*

BS EN 1111, *Sanitary tapware – Thermostatic mixing valves (PN 10) – General technical specification*

BS EN 1287, *Sanitary tapware – Low pressure thermostatic mixing valves – General technical specifications*

BS EN 12056-2, *Gravity drainage systems inside buildings – Part 2: Sanitary pipework, layout and calculation*

BS EN 12521, *Furniture – Strength, durability and safety – Requirements for domestic tables*

BS EN 12600, *Glass in building – Pendulum test – Impact test method and classification for flat glass*

BS EN 13501-5:2005+A1:2009, *Fire classification of construction products and building elements – Part 5: Classification using data from external fire exposure to roofs tests*

BS EN 13823:2010+A1:2014, *Reaction to fire tests for building products – Building products excluding floorings exposed to the thermal attack by a single burning item*

BS EN 13859-1, *Flexible sheets for waterproofing – Definitions and characteristics of underlays – Part 1: Underlays for discontinuous roofing*

BS EN 14604, *Smoke alarm devices*

BS EN 14749, *Domestic and kitchen storage units and worktops – Safety requirements and test methods*

BS EN 50291-1, *Electrical apparatus for the detection of carbon monoxide in domestic premises – Part 1: Test methods and performance requirements*

BS EN 60335-2-6, *Household and similar electrical appliances – Safety – Part 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances*

BS EN 60335-2-24, *Household and similar electrical appliances – Safety – Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers*

BS EN ISO 10140-2, *Acoustics – Laboratory measurement of sound insulation of building elements – Part 2: Measurement of airborne sound insulation*

BS EN ISO 11925-2:2010, *Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test*

BS EN ISO 12944-2:1998, *Paints and varnishes – Corrosion protection of steel structures by protective paint systems – Part 2: Classification of environments*

3 Terms and definitions

For the purposes of this British Standard the following terms and definitions apply.

NOTE BS EN 13878 is also a useful guide to some terms and definitions.

3.1 equivalent area of ventilation

area of a sharp edged circular orifice through which the same volume flow rate of air would pass as the opening in the ventilator on which the equivalent area is marked, under an identical applied pressure difference

3.2 free area of ventilation

geometric open area of the aperture of a ventilator, typically 25% greater than its equivalent area

3.3 habitable area

area used for living purposes which is not solely a utility room (a room limited in function to a washing machine and/or a tumble dryer), bathroom, shower room, WC, walk-in storage or hallway

3.4 residential park home

caravan used as a permanent place of residence

NOTE Attention is drawn to:

- the Caravan Sites and Control of Development Act 1960, as amended [7];
- the Caravan Sites Act 1968, as amended [8]; and
- The Caravan Sites Act 1968 and Social Landlords (Permissible Additional Purposes) (England) Order 2006 (Definition of Caravan) (Amendment) (England) Order 2006 [11].

3.5 wet rooms

rooms used for domestic activities such as cooking, laundry and bathing which give rise to the production of airborne moisture, such as WCs, utility rooms, bathrooms and shower rooms

4 Design

4.1 Occupancy

The occupancy shall be designated as the number of both standard and additional berths provided and shall be used to determine the ventilation requirements.

4.2 Accommodation

The accommodation shall provide as a minimum, a: living area; dining area; kitchen area; bedroom; bathroom and/or shower room; and WC.

4.3 Dimensions

All floor areas shall be determined by internal measurements taken at floor level, between external and/or partition walls, excluding floor to ceiling fitted furniture and skirting boards.

The total floor area of the residential park home shall be not less than 23 m².

For a flat ceiling, the internal ceiling height shall be not less than 2.135 m, excluding floor coverings.

For a pitched ceiling, the average internal ceiling height shall be not less than 2.135 m, excluding floor coverings.

The overall height of the living accommodation, measured internally from the floor at the lowest level to the ceiling at the highest level, shall not exceed 3.05 m, excluding floor coverings.

4.4 External doors and windows

If the total floor area of the residential park home is less than 40 m², then a minimum of one external door shall be provided.

If the total floor area of the residential park home is greater than or equal to 40 m², then no fewer than two external doors shall be provided.

All habitable areas (see 3.3) shall be provided with windows or glazed external doors (or both) of which the total glazed area shall be not less than 10% of the room floor area (see 4.3). The glazed area shall include any glazing bars and lead strip decoration.

All habitable areas (see 3.3) shall be provided with windows or external doors (or both) of which the total open-able area shall be not less than 5% of the room floor area (see 4.3).

Hinged windows shall open not less than 30°. Sliding windows shall open to not less than 5% of the room floor area (see 4.3).

In rooms designated as sleeping areas, if purge ventilation is provided by a door, the extent of opening shall be limitable by suitable means to ensure that the security of the residential park home is maintained.

Windows shall be fitted with means to prevent inadvertent opening.

4.5 Means of escape

4.5.1 General

All habitable areas (see 3.3) shall be provided with a means of escape, either through an emergency door or emergency window giving direct access to the open air, which shall not require the use of a key or tool. Any opening which is provided as a means of escape shall conform to 4.5.2 or 4.5.3. In a kitchen, if any part of an external door or window is within 1 m of any fixed hob, cooker or grill, an alternative means of escape shall be provided. The clear opening of an entrance door or a means of escape shall not be obstructed by any fixed part of furniture or equipment.

4.5.2 Emergency doors

Emergency doors shall be vertically hinged or slide horizontally and shall have a clear opening of not less than 1.9 m in height and 0.7 m in width. Where hinged, doors shall open not less than 85°.

4.5.3 Emergency windows

Emergency windows shall have a clear opening of not less than 0.45 m × 0.45 m, and not less than 0.33 m² in area. No casement stay or casement fastener shall project into the clear opening.

Emergency windows shall be capable of being easily and quickly opened from the inside. The lower edge of the clear opening shall be not more than 0.9 m above floor level, except in kitchens and utility rooms, where the clear opening shall be not more than 1 m above floor level.

Emergency windows shall be not horizontally hinged on their lower edge. Where top hung they shall be capable of staying open to not less than 70° without needing to be held by the person escaping. Handles of top hung emergency windows shall be located more than three quarters of the height of the window below the upper edge.

4.6 External walls

External walls shall conform to 4.9.3, 4.9.4 and 5.2.

4.7 Internal walls and internal doors

Internal walls shall conform to 5.3.

Internal doors shall be vertically hinged or slide horizontally to fit the aperture as closely as is practicable. Where hinged, doors shall open not less than 85°.

In order to ensure adequate transfer of air between rooms, there shall be openings at low level totalling an area not less than 7 600 mm².

NOTE Consideration should be given to means of reducing sound transmission between rooms.

4.8 Glazing

The glass in external doors and windows shall conform to BS 6262-4 and BS EN 12600. Glass in domestic and kitchen storage units and worktops shall conform to BS EN 14749. Glass in tables shall conform to BS EN 12521.

4.9 Construction design criteria

4.9.1 Structure

The external construction shall be designed to prevent penetration of weather and damp under normal conditions.

The structure shall be capable of transmitting the dead and imposed loads to which it might be subjected to the ground. It shall also be capable of supporting the dead and imposed loads during normal use.

The axle, wheel and tyre configuration shall be designed to support the ex-works mass of the residential park home and the dead and imposed loads during transportation and manoeuvring.

Wheeled residential park homes greater than 10.9 m in overall length, excluding drawbars, or with a mass which imposes a load greater than 5 400 kg on the wheels shall be fitted with no fewer than two axles per section, positioned to ensure that the residential park home is manoeuvrable. Where multiple axles are fitted, the maximum spacing between the axle centres shall be not greater than twice the outside diameter of the tyre.

If the nose weight is greater than 25 kg, a warning notice making reference to the *Manual Handling Operations Regulations* [10] shall be displayed adjacent to the coupling head in a position that is readily visible.

4.9.2 Stability (resistance to overturning)

The residential park home shall be provided with holding down points, each capable of resisting a load of 10 kN. Holding down points shall be located at each corner of the residential park home and within (1 ± 0.2) m of the ends of the chassis.