



BSI Standards Publication

Fences

Part 17: Specification for electric security fences – Design, installation and maintenance

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Summary of pages

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 28 February 2017. It was prepared by Technical Committee B/201, *Fences*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This part of BS 1722 supersedes BS 1722-17:2006, which is withdrawn.

Relationship with other publications

This standard is not intended to cover the installation of any carrier fence or supporting structure and is therefore to be read in conjunction of the appropriate part of BS 1722 for the type of carrier fence employed.

BS 1722 is published in the following parts:

- Part 1: *Specification for chain link fences;*
- Part 2: *Specifications for strained wire and wire mesh netting fences;*
- Part 4: *Specification for cleft chestnut pale fences;*
- Part 5: *Specification for close-boarded and wooden palisade fences;*
- Part 7: *Specification for wooden post and rail fences;*
- Part 8: *Specification for mild steel (low carbon steel) continuous bar fences and hurdles;*
- Part 9: *Specification for mild steel (low carbon steel) fences with round or square verticals and flat horizontals;*
- Part 10: *Specification for anti-intruder fences in chain link and welded mesh;*
- Part 11: *Specification for prefabricated wood panel fences;*
- Part 12: *Specification for steel palisade fences;*
- Part 14: *Specification for open mesh steel panel fences;*
- Part 16: *Specification for organic powder coatings to be used as a plastics finish to components and mesh;*
- Part 17: *Specification for electric security fences – Design, installation and maintenance;*
- Part 18: *Specification for steel mesh site perimeter temporary fencing systems.*

Information about this document

Due to the increasing number of electric security fencing installations in the UK and the various and sometimes conflicting codes of practice in operation, this British Standard has been produced in order to provide a specification that can be used across the electric security fencing industry.

The specification is applicable in situations where the electric security fence is designed to provide both a deterrent effect and a physical security barrier. It therefore sets out the minimum criteria for the physical characteristics for the wire to be used in the barrier.

The British Standard does the following:

- a) addresses the specification and quality for manufactured products;

- b) provides guidance for the client in their selection of installation companies which, by their compliance with this standard, have the ability to design, install and maintain an electric security fence system; and
- c) addresses competences and training requirements of electric security fence installers.

Use of this document

It has been assumed in the drafting of this part of BS 1722 that the execution of its provision is entrusted to appropriately qualified and experienced people. Before installation commences the Lead installer and all other operatives i.e. assistant installers should hold a current FISS/CSCS registration card (green card) or equivalent.

At the time of publication of this British Standard the registration cards are validated by the Joint Fencing Industry Skills Scheme (FISS) and Construction Scheme Skills Certification Scheme (CSCS). FISS/CSCS maintains a national register of fence installers and operatives. There might be other schemes available.

NOTE For further information on training, see 6.1.

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 the *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.

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1 Scope

This British Standard specifies requirements for the design, installation and maintenance of electric security fences.

It is applicable to installations where the electric security fence is to provide both a deterrent effect and a physical barrier.

It does not outline the specific method to be used in construction. Construction specifics are covered in the appointed approved manufacturer's installation courses and material available only to accredited installation dealers and marketing partners.

2 Normative references

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

BS 4737 (all parts), *Intruder alarm systems in buildings*

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

BS EN ISO 6892-1, *Metallic materials – Tensile testing – Part 1: Method of test at ambient temperature*

BS EN 10244-2, *Steel wire and wire products – Non-ferrous metallic coatings on steel wire – Part 2: Zinc or zinc alloy coatings*

BS EN 50131-1, *Alarm systems – Intrusion systems – Part 1: General requirements*

BS EN 60335-2-76:2005+A2:2015, *Household and similar electrical appliances – Safety – Particular requirements for electric fence energizers*

BS EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*

PD 6662, *Scheme for the application of European Standards for intruder and hold-up alarm systems*

3 Terms and definitions

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

3.1 accessory equipment

ancillary equipment required for operation of the electrified security system

EXAMPLE Switching equipment, expansion modules, interface modules.

3.2 ancillary equipment

electrical equipment used in the security installation

3.3 assistant installer

person directly under the supervision of the installer

NOTE See Foreword for the recommended skill level.

3.4 back-up battery

battery source to facilitate the activation and transmission of an alarm condition for a short duration if the normal power supply has been tampered with