



BSI Standards Publication

## Fences

Part 14: Specification for open mesh steel panel

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### Summary of pages

This document comprises a front cover, and inside front cover, pages i to iv, pages 1 to 28, an inside back cover and a back cover.

# Foreword

## Publishing information

This part of BS 1722 was published by BSI and came into effect on 30 November 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This part of BS 1722 supersedes BS 1722-14:2006, which is withdrawn.

## Relationship with other publications

BS 1722 is published in the following parts:

- *Part 1: Specification for chain link fences;*
- *Part 2: Specification 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 – Manufacturing and installation – Specification;*
- *Part 14: Specification for open mesh steel panel fences;*
- *Part 16: Specification for powder coatings used as a plastics finish to components and mesh;*
- *Part 17: Specification for electric security fences – Design, installation and maintenance;*
- *Part 18: Specification for free-standing temporary steel mesh perimeter fencing panels.*

## Information about this document

No attempt has been made to standardize fences or gates of a purely decorative nature, nor to specify requirements for “patent” proprietary fencing systems. It is recommended, however, that such fences or gates are designed in accordance with the relevant clauses of this part of BS 1722.

The principal changes introduced in this revision are to bring the requirements up to date with other parts of BS 1722 and to accommodate changes in cross references to other standards. This revision includes requirements for high security fences and for posts for fences.

## 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, for whose use it has been produced.

Before installation commences the Lead Installer should hold a current FISS/CSCS registration card skilled level (blue card) or equivalent and all other operatives should hold the basic fence operative 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.

### **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 **G.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.**

## Introduction

This standard aims to establish minimum performance requirements for materials and workmanship. It specifies requirements for open mesh steel panel fences of four types:

- a) Category 1: General purpose fences;
- b) Category 2: Boundary/perimeter fences;
- c) Category 3: Security fences; and
- d) Category 4: Higher security fences.

The general purpose fence is intended for use as a boundary marker or for those locations where it is deemed necessary merely to deter the casual intruder or trespasser.

The boundary/perimeter fence is intended for use as a first level of security.

The security fence is designed for use in areas where greater protection is required from vandalism or trespass, and can be considered suitable for use for general industrial security such as for industrial estates, airfields and oil installations.

The higher security fence is designed for areas where protection against determined intrusion is required. However, it is not possible to install a fence that cannot be penetrated by a determined intruder given adequate time, freedom from observation and suitable climbing aids or tools for forcing an entry.

Choosing a fence is affected by factors such as the intended purpose, desired service life, aesthetic consideration and availability of components. The specifier should match a suitable choice of fence to its intended purpose by referring to [Table 1](#), [Table 2](#) and [Table 3](#) and also inform those installing the fence of the basic characteristics required.

Ground conditions might indicate that a variation in the length of a post or strut, or the depth to which it should be set, is desirable. The post and strut setting depths specified in this standard are intended for use in normal ground conditions but if special conditions exist that warrant a change in the specification, e.g. the ground is softer or firmer than usual, such a change is to be agreed with the specifier.

*NOTE* The service life/durability is dependent on environmental conditions and can vary considerably. For this reason service life/durability is not included in this standard. For information relating to finishes and durability refer to the manufacturer's literature. However, regular inspection of any installation in line with the manufacturer's instructions is recommended. This is particularly important for gate installations where injuries can occur.

This standard specifies requirements for fence materials and their combination and installation to provide a serviceable fence. Because a fence is made up of a number of separate components, of which the particular features can vary, a number of permissible combinations are available to the user. When preparing a specification for a fence, it is therefore important to give precise details of the requirements of the fence and of the site. [Annex A](#) provides details of the fence requirements and installation site to be agreed between the fence supplier and client. However, this is not an exhaustive list as conditions vary from site to site.

## 1 Scope

This part of BS 1722 specifies design, installation, testing and performance requirements for the following categories of open mesh steel panel fences:

- a) Category 1: General purpose fences;
- b) Category 2: Boundary/perimeter fences;
- c) Category 3: Security fences; and
- d) Category 4: Higher security fences.

*NOTE 1* See [3.1](#) for definitions.

Maintenance of the fence after installation is outside the scope of this standard.

*NOTE 2* [Annex A](#) lists items to be agreed between the fence supplier and the client.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions 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 1722-16, *Fences — Part 16: Specification for powder coatings used as a plastics finish to components and mesh*

BS 8500-1, *Concrete — Complementary British Standard to BS EN 206 — Part 1: Method of specifying and guidance for the specifier*

BS 8500-2, *Concrete — Complementary British Standard to BS EN 206 — Part 2: Specification for constituent materials and concrete*

BS EN 1011-1, *Welding — Recommendations for welding of metallic materials — Part 1: General guidance for arc welding*

BS EN 1011-2, *Welding — Recommendations for welding of metallic materials — Part 2: Arc welding of ferritic steels*

BS EN 10025-2, *Hot rolled products of structural steels — Part 2: Technical delivery conditions for non-alloy structural steels*

BS EN 10056-1, *Structural steel equal and unequal leg angles — Part 1: Dimensions*

BS EN 10210-1, *Hot finished structural hollow sections of non-alloy and fine grain steels — Part 1: Technical delivery requirements*

BS EN 10210-2, *Hot finished structural hollow sections of non-alloy and fine grain steels — Part 2: Tolerances, dimensions and sectional properties*

BS EN 10219-1, *Cold formed welded structural hollow sections of non-alloy and fine grain steels — Part 1: Technical delivery requirements*

BS EN 10219-2, *Cold formed welded structural hollow sections of non-alloy and fine grain steels — Part 2: Tolerances, dimensions and sectional properties*

BS EN 10240, *Internal and/or external protective coatings for steel tubes — Specification for hot dip galvanized coatings applied in automatic plants*