

BS 1722-18:2011



BSI Standards Publication

Fences

Part 18: Specification for
free-standing temporary steel mesh
perimeter fencing panels

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ISBN 978 0 580 68468 5

ICS 91.090

The following BSI references relate to the work on this standard:

Committee reference B/201

Draft for comment 11/30229203 DC

Publication history

First published (as DD 1722-18), January 2007

Second (present) edition, December 2011

Amendments issued since publication

Date	Text affected
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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 22, 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 31 December 2011. It was prepared by Technical Committee B/201, *Fences and gates*. A list of organizations represented on this committee can be obtained on request to its secretary.

This part of BS 1722 supersedes DD 1722-18:2007, which is withdrawn.

Relationship with other publications

BS 1722 is published in parts as follows:

- *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;*
- *Part 13: Chain link fences for tennis court surrounds ¹⁾;*
- *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 free-standing temporary steel mesh perimeter fencing systems.*

Information about this document

The HSE welcomes this British Standard and will be participating in the development of a British Standard on free-standing temporary steel mesh perimeter fencing systems.

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.

¹⁾ Obsolescent.

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 part of BS 1722 has been developed as a result of increasing concerns amongst industry stakeholders whose suggestions for further improvement of the product have been solicited and incorporated into this document.

NOTE 1 This process was supported by the HSE.

NOTE 2 This part of BS 1722 has been written to address the concerns of the construction industry regarding the quality and safety of free-standing temporary steel mesh perimeter fencing systems.

1 Scope

This part of BS 1722 specifies performance requirements for the manufacture of steel mesh site perimeter temporary fencing. It includes test methods for the verification that these requirements have been met. Information on the construction of a typical fence panel that would meet these requirements has also been included.

NOTE This part of BS 1722 complements and expands on the guidance given by the Health & Safety Executive in its guidance document HS G 151, Protecting the public, your next move [1]. This document is intended to assist the construction industry and ensure the safety of members of the public in the UK.

2 Terms and definitions

For the purposes of this part of BS 1722, the following terms and definitions apply.

2.1 climb-deterrent mesh

mesh that hinders climbing by making it difficult to gain foot-holds

3 Fence panel

3.1 Frame

When tested in accordance with Annex A, the frame, including any joints, shall withstand a force of 7 kN.

NOTE 1 7 kN is representative of the force that a fence frame joint will be subjected to in normal use conditions. Fence frames that resist such a force should provide a robust and durable structure.

NOTE 2 The frame is usually constructed from galvanized hollow section tube (see Note 3). If galvanizing, in accordance with BS EN ISO 1461, is carried out subsequent to fabrication then venting and draining holes should be included in accordance with Annex B of that standard.

NOTE 3 For guidance, electric welded tube of 35 mm diameter and 1 mm thickness in accordance with BS EN 10305-3 grades E220 or E235 or produced from pre-galvanized strip in accordance with BS EN 10326 grade S220GD will usually be of sufficient strength to meet these requirements.

3.2 Mesh

3.2.1 General

The mesh shall be attached to the frame in such a way that no hazard exists due to protruding wires or sharp edges.

3.2.2 Climb-deterrent mesh

In order to be marked as “climb-deterrent” (see also Clause 4) the mesh used in a fence panel shall withstand (6.0 ± 0.1) kg for 20 seconds when tested in accordance with Annex B.

NOTE 1 The mesh is close-spaced to make it difficult to gain hand- and foot-holds.

NOTE 2 Mild steel mesh with a minimum wire diameter of 2.3 mm and pre-galvanized in accordance with BS EN 10244-2 is usually considered to be sufficient to meet this requirement.

NOTE 3 Mild steel mesh with a maximum spacing of 42 mm between vertical wires and 254 mm between horizontal wires is usually considered to be sufficient to meet this requirement.

3.2.3 Non climb-deterrent fence panels

If the mesh is not tested in accordance with Annex B, or does not withstand (6.0 ± 0.1) kg for 20 seconds when tested in accordance with Annex B, it shall not be marked as “climb-deterrent” (see also Clause 4).

3.3 Complete panel

The size of the complete panel shall be as specified by the customer.

NOTE 1 Typical construction of fence panels are shown in Figure 1. A typical frame is 3.5 m in length and 2.0 m in height.

The gap between the bottom horizontal tube and the ground shall be a maximum of 160 mm.

When tested in accordance with Annex C, the complete panel shall carry 1 575 kg with no welds failing.

NOTE 2 The 1 575 kg load has been derived from the known forces and stresses between the mesh and panel frame through manual handling, erecting / dismantling and normal use of the product. Mesh to tube welding that resists such a load will provide a robust and durable product.

Figure 1 Typical construction of fence panels

