# Scheduling, dimensioning, bending and cutting of steel reinforcement for concrete — Specification

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# Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee ISE/9, Steel for concrete reinforcement, to Subcommittee ISE/9/1, Bars, wire and fabric for concrete reinforcement, upon which the following bodies were represented:

British Coatings Federation British Precast Concrete Federation Concrete Society Department of Transport — Highways Agency Galvanizers Association Institution of Structural Engineers UK Certification Authority for Reinforcing Steels UK Steel Association

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#### Amendments issued since publication

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Amendment No. 1	31 January 2008	Changes to Table 1.

The following BSI references relate to the work on this standard: Committee reference ISE/9/1 Draft for comment 04/30109898 DC

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# Foreword

This British Standard has been prepared by Subcommittee ISE/9/1. It supersedes BS 8666:2000, which is withdrawn.

The start and finish of text introduced or altered by Amendment No. 1 is indicated in the text by tags  $A_1$   $A_2$ .

The standard has been revised to incorporate:

- shape codes available under BS EN ISO 3766:2003;

- revised notation in accordance with BS 4449:2005 and BS EN 10080:2005;

— revisions to BS 4449:2005 (including the omission of grade 250 and grade 460 reinforcement), BS 4482:2005 and BS 4483:2005; the requirements of BS 4483:2005 have caused the withdrawal of standard fabrics A98 and B196, and changes to standard fabrics C503, C385 and C283;

— the provisions of BS EN 1992-1-1 (including the preclusion of wire to BS 4482:2004 for use for structural purposes);

— rationalization of notes to the table of standard shapes (Table 3);

— electronic data files;

- revisions to *fabrication* and *routine* inspection.

*Assessed capability*. Users of this British Standard are advised to consider the desirability of quality system assessment and registration against BS EN ISO 9001:2000 by an accredited third-party certification body (see Annex A).

This standard comes into effect on 1 January 2006.

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.

#### Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 26, an inside back cover and a back cover.

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## 1 Scope

This British Standard specifies requirements for the scheduling, dimensioning, bending, and cutting of steel for the reinforcement of concrete conforming to BS 4449:2005, BS 4483:2005 and BS 6744, designed to BS EN 1992-1-1, BS EN 1992-2, BS EN 1992-3 and BS 8110.

# 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 4449:2005, Carbon steel bars for the reinforcement of concrete — Specification.

BS 4483:2005, Steel fabric for the reinforcement of concrete — Specification.

BS 6744, Austenitic stainless steel bars for the reinforcement of concrete — Specification.

BS 8110-1, Structural use of concrete — Code of practice for design and construction.

BS EN 1992-1-1, Eurocode 2: Design of concrete structures — Part 1.1: General rules and rules for buildings.

BS EN 1992-2, Eurocode 2: Design of concrete structures — Part 2: Concrete bridges — Design and detailing rules.

BS EN 1992-3, Eurocode 2: Design of concrete structures — Part 3: Liquid retaining and containment structures.

BS EN ISO 216:2001, Writing paper and certain classes of printed matter — Trimmed sizes. A and B series. BS EN ISO 3766:2003, Construction drawings — Simplified representation of concrete reinforcement.

# **3 Terms and definitions**

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

# 3.1

#### bar

steel product of any cross-section conforming to BS 4449:2005 or BS 6744

### $\mathbf{3.2}$

## nominal size

### nominal diameter

diameter of a circle, d, with an area equal to the effective cross-sectional area of the bar, sometimes referred to as its size

#### 3.3

#### bar mark fabric mark

identifying mark which cross-refers individual line entries on the schedule to the detailed drawing NOTE The bar (or fabric) mark also appears on the delivery label.

### **3.4**

### shape code

two-digit coded designation of the reinforcement shape NOTE See Table 3.

#### $\mathbf{3.5}$

### pitch

centre-to-centre spacing of bars in a sheet of fabric

## 3.6

#### mesh

rectangle defined by the pitch of the longitudinal bars and the pitch of the cross bars in a sheet of fabric