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

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Contents

Summary of pages
This document comprises a front cover, and inside front cover, pages i to iv, pages 1 to 32, an inside back cover and a back cover.

Foreword

Publishing Information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 December 2020. It was prepared by Technical Committee, ISE/104, *Concrete reinforcing and pre-stressing steels*. A list of organizations represented on this committee can be obtained on request to the committee manager.

Supersession

This British Standard supersedes BS 8666:2005 incorporating Amendment No.1:2008, which is withdrawn.

Information about this document

This is a full revision of the standard, and introduces the following principal changes:

- restructure and renaming of clauses and tables;
- addition of shape code specified in BS EN 1992-1-1;
- revision to terms and definitions;
- revision to Table 1 to include dowel bars and the note to stainless steel;
- revisions to form of schedule **5.1** and **5.2**;
- revisions to text of form of bar or fabric labels;
- revision to form of schedule, Figure 1;
- revision to purpose made fabric example, Figure 3;
- revision to dimensions, **7.2**, **7.4** and **7.5**;
- revision to scheduling, Figure 4, 5 and 6 additional dimensioning added;
- revision to scheduling, Figure 7 added;
- revision of Table 2 to include an allowance for spring back;
- addition of Table 3;
- revision of Table 4 to include both Z-bars and U-bars;
- addition in Table 5 of new shape codes 48 and 52;
- addition in Table 5 of extra dimensions on most shapes with sloping legs;
- revision to Table 5 to update the length formulae and dimension limits on some shapes;
- amendment of Table 6 areas;
- revision of Table 7 to allowable deviations on cutting and bending dimensions;
- addition of note to Table 7;
- revision of Table 8; and
- revision to fabrication and routine inspection, **12.3**.

Assessed capability. Users of this are advised to consider the desirability of quality system assessment and registration against the appropriate standard in the BS EN ISO 9000 series by an accredited third-party certification body.

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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.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. "organization" rather than "organisation").

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.

1 Scope

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

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[1]. 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+A3:2016, *Carbon steel bars for the reinforcement of concrete – Specification*

BS 4483, *Steel fabric for the reinforcement of concrete – Specification*

BS 6744, *Stainless steel bars – Reinforcement of concrete – Requirements and test methods*

BS 8110-1, *Structural use of concrete – Code of practice for design and construction*

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, *Writing paper and certain classes of printed matter – Trimmed sizes – A and B series*

BS EN 10080, *Steel for the reinforcement of concrete – Weldable reinforcing steel – General*

BS EN 13877-3, *Concrete pavements – Specification for dowels to be used in concrete pavements*

3 Terms, definitions and symbols

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

3.1.1 bar

steel product of any cross section

NOTE Where the term "bar" is used in this British Standard, it refers to a bar conforming to either BS 4449 or BS 6744.

3.1.2 bend angle

angle by which a bar leg is bent out of line from the preceding leg

3.1.3 nominal size

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

3.1.4 bar mark

identifying mark which cross-refers individual line entries on the schedule to the detailed drawing

NOTE 1 The bar mark also appears on the delivery label.

NOTE 2 The bar mark is also known as the fabric mark.

[1] Documents that are referred to solely in an informative manner are listed in the Bibliography.

