



**NSAI**  
Standards

Irish Standard  
I.S. EN 10080:2005

# Steel for the reinforcement of concrete - Weldable reinforcing steel - General

## I.S. EN 10080:2005

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

I.S. EN 10080:2005/NA:2010

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

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SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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## I.S. EN 10080:2005

### National Foreword

This Irish Standard is the national version of European Standard EN 10080 *Steel for the reinforcement of concrete – Weldable reinforcing steel – General* and includes a national annex that provides additional information and guidance to complement EN 10080.

The National Annex was prepared by Working Group 1 of NSAI Construction Products Standards Committee and subsequently sent for public consultation. The appended National Annex represents the final agreed text following this public consultation.

Requirements for the intended use of weldable reinforcing steel are detailed in National Annex NA of I.S. EN 10080.

I.S. EN 10080 does not include all the requirements to fully specify reinforcing steel. It is intended that I.S. EN 10080 should be used in conjunction with a Technical Specification in which the details of the performance characteristics are specified.

It is recommended that I.S. EN 10080 is used in conjunction with the following British Standards:

- BS 4449, *Steel for the reinforcement of concrete — Weldable reinforcing steel — Bar, coil and decoiled product — Specification*
- BS 4482, *Steel wire for the reinforcement of concrete products — Specification*
- BS 4483, *Steel fabric for the reinforcement of concrete — Specification*

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with an Irish Standard does not of itself confer immunity from legal obligations.**

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| In line with international standards the decimal point is shown as a comma (,) throughout this document. |
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I.S. EN 10080:2005

EUROPEAN STANDARD

EN 10080

NORME EUROPÉENNE

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English version

## Steel for the reinforcement of concrete - Weldable reinforcing steel - General

Aciers pour l'armature du béton - Aciers soudables pour  
béton armé - Généralités

Stahl für die Bewehrung von Beton - Schweißgeeigneter  
Betonstahl - Allgemeines

This European Standard was approved by CEN on 21 April 2005.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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## Foreword

This document (EN 10080:2005) has been prepared by Technical Committee ECISS/TC 19 “Concrete reinforcing and pre-stressing steels - Properties, dimensions, tolerances and specific tests”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2005, and conflicting national standards shall be withdrawn at the latest by May 2007.

This document has been prepared under Mandate M/115 given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of the EU Construction Products Directive (89/106/EEC).

For relationship with the EU Construction Products Directive, see informative Annex ZA, which is an integral part of this document.

This document does not apply to non-weldable reinforcing steel.

This document does not define technical classes. Technical classes should be defined in accordance with this document by specified values for  $R_e$ ,  $A_{gt}$ ,  $R_m/R_e$ ,  $R_{e,act}/R_{e,nom.}$  (if applicable), fatigue strength (if required), bendability, weldability, bond strength, strength of welded or clamped joints (for welded fabric or lattice girders) and tolerances on dimensions.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

## 1 Scope

**1.1** This European Standard specifies general requirements and definitions for the performance characteristics of weldable reinforcing steel used for the reinforcement of concrete structures, delivered as finished products in the form of:

- bars, coils (rod, wire) and de-coiled products;
- sheets of factory-made machine-welded fabric;
- lattice girders.

**1.2** Steels according to this European Standard have a ribbed, indented or smooth surface.

**1.3** This European Standard does not apply to:

- non-weldable reinforcing steel;
- galvanized reinforcing steel;
- epoxy-coated reinforcing steel;
- corrosion resistant reinforcing steel;
- prestressing steels (see prEN 10138-1 to -4);
- indented strip;
- further processing, e.g. cutting or cutting and bending.

## 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.

EN 10020:2000, *Definition and classification of grades of steel*

EN 10079:1992, *Definition of steel products*

EN ISO 377, *Steel and steel products — Location and preparation of samples and test pieces for mechanical testing (ISO 377:1997)*

EN ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension / compression testing machines — Verification and calibration of the force-measuring system (ISO 7500-1:2004)*

EN ISO 15630-1, *Steel for the reinforcement and prestressing of concrete — Test methods — Part 1: Reinforcing bars, wire rod and wires (ISO 15630-1:2002)*

EN ISO 15630-2, *Steel for the reinforcement and prestressing of concrete — Test methods — Part 2: Welded fabric (ISO 15630-2:2002)*

NOTE See also C.2 and D.2.



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