

SINGAPORE STANDARD

**Specification for steel fabric for the
reinforcement of concrete**



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of concrete**

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Building and Construction Authority
Housing & Development Board
Nanyang Technological University
National University of Singapore
NatSteel Holdings Pte Ltd
Setsco Services Pte Ltd

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Foreword

This Singapore Standard was prepared by the Technical Committee on Building Structure and Sub-structure under the purview of the Building and Construction Standards Committee.

This standard is an adoption of BS 4483:2005 'Steel fabric for the reinforcement of concrete – Specification' (incorporating Amendment 1 dated 30 April 2007) and is implemented with the permission of British Standards Publishing Ltd. The modifications made to the BS include the type of fabric used under 'Shear force of welded joints' (7.2.4) and the addition of Table A.2 and Annex D.

Included in Annex D (Informative) is a specification to limit ionising radiation from steel for the reinforcement of concrete, which has been updated based on IAEA Safety Guide Standards Series No. RS-G-1.7 (2004). The specification is introduced to address concerns of possible radioactive contamination during the manufacturing process and the risk to health through exposure to radioactivity from the finished steel product.

Table 1 is reproduced from EN 10080 : 2005 with permission of CEN, Avenue Marnix 17, 1000 Brussels.

Acknowledgement is made to BSI and CEN for the use of materials from the above publications.

This standard has been written so that it can be used in conjunction with BS EN 10080:2005 'Steel for the reinforcement of concrete – Weldable reinforcing steel – General'.

Unless otherwise specified, the steel fabrics that are manufactured to this standard with bars of diameter 8 mm and above are conforming to the ductility Class A in Annex C of SS EN 1992-1-1:2008.

This SS 561 : 2010 and SS 560 : 2010 – 'Steel for the reinforcement of concrete – Weldable reinforcing steel – Bar, coil and decoiled product' are intended for use with SS EN 1992-1-1 : 2008 – 'Design of concrete structures – Part 1-1: General rules and rules for buildings'. There will be a co-existence period of SS CP 65 – 'Code of practice for structural use of concrete' (Part 1 : 1999 and Part 2 : 1996) with SS EN 1992-1-1 : 2008. SS CP 65 and their references SS 2, 18 and 32 (Parts 1 and 2) on steel reinforcements will be withdrawn on a date to be announced by the regulator.

Attention is drawn to the possibility that some of the elements of this Singapore Standard may be the subject of patent rights. Enterprise Singapore shall not be held responsible for identifying any or all of such patent rights.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*
2. *An SS or TR is voluntary in nature except when it is made mandatory by a regulatory authority. It can also be cited in contracts making its application a business necessity. Users are advised to assess and determine whether the SS or TR is suitable for their intended use or purpose. If required, they should refer to the relevant professionals or experts for advice on the use of the document. Enterprise Singapore shall not be liable for any damages whether directly or indirectly suffered by anyone or any organisation as a result of the use of any SS or TR.*
3. *Compliance with a SS or TR does not exempt users from any legal obligations.*

Specification for steel fabric for the reinforcement of concrete

1 Scope

This Singapore Standard specifies requirements for sheets of factory-made machine-welded steel fabric for the reinforcement of concrete, manufactured from ribbed bars conforming to SS 560 : 2010.

NOTE – Where the term “bar” is used in this standard, it includes bar or decoiled product conforming to SS 560 : 2010.

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.

SS 560 : 2010	Specification for steel for the reinforcement of concrete – Weldable reinforcing steel – Bar, coil and decoiled product
BS EN 10080:2005	Steel for the reinforcement of concrete – Weldable reinforcing steel – General
BS EN ISO 15630-1	Steel for the reinforcement and prestressing of concrete – Test methods – Part 1 : Reinforcing bars, wire rod and wires
BS EN ISO 15630-2	Steel for the reinforcement and prestressing of concrete – Test methods – Part 2 : Welded fabric