

SINGAPORE STANDARD

**Specification for steel for the
reinforcement of concrete – Plain bars**



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concrete – Plain bars**

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The Building and Construction Standards Committee appointed by the Standards Council consists of the following members:

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	Dr Tam Chat Tim	<i>Individual Capacity</i>
	Mr Tang Pei Luen	<i>JTC Corporation</i>
	Mr Teoh Wooi Sin	<i>Singapore Institute of Surveyors and Valuers</i>
Co-opted Member	: Prof Choo Yoo Sang	<i>National University of Singapore</i>

The Technical Committee on Building Structure and Sub-structure appointed by the Building and Construction Standards Committee and responsible for the preparation of this standard consists of representatives from the following organisations:

	Name	Capacity
Chairman	: Dr Tan Guan	<i>Member, Building and Construction Standards Committee</i>
Co-Chairman	: Er. Chew Keat Chuan	<i>Building and Construction Authority</i>
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	Mr Sze Thiam Siong	<i>Setsco Services Pte Ltd</i>
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	Prof Tan Kiang Hwee	<i>National University of Singapore</i>
	Er. Tang Pei Luen	<i>JTC Corporation</i>
	Assoc Prof Susanto Teng	<i>Nanyang Technological University</i>
Co-opted Members	: Dr Tam Chat Tim	<i>Individual Capacity</i>
	Dr Tan Teng Hooi	<i>Individual Capacity</i>

The Working Group appointed by the Technical Committee to assist in the preparation of this standard comprises the following experts who contribute in their *individual capacity*:

	Name
Convener	: Mr Wong Swee Khian
Co-Convener	Mr Yusoo Aynuddin
Members	: Er. Thung Sek Kwang (Secretary)
	Mr Eric Cheng Theng How
	Mr Ong Lian Teck
	Dr Qian Xudong
	Dr Tam Chat Tim
	Dr Susanto Teng
	Mr Joseph Yong

The organisations which the experts are involved in are:

Angkasa Hong Leong Pte Ltd
BRC Asia Limited
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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National 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 resulted from the review of SS 2 : Part 1 : 1999. The revised standard is intended to provide for the use of reinforcement for concrete products.

SS 566 is a modified adoption of ISO 6935-1:2007 – ‘Steel for the reinforcement of concrete - Part 1 : Plain bars’. It has been redrafted and the modifications are given as follows:

- Defines only one steel grade, B300B-P. Requirements and tables in the ISO standard that are not applicable to this grade of steel have been removed.
- Includes bar diameters and bar grade commonly used locally (Tables 2 and 3 respectively) and mandrel diameter for bend test (Table 4).
- Includes Annex A (Informative), a specification to limit ionising radiation from steel for the reinforcement of concrete, 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.

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.*
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Specification for steel for the reinforcement of concrete – Plain bars

1 Scope

This Singapore Standard specifies technical requirements for plain bars to be used as reinforcement in concrete.

One steel grade, B300B-P, is defined. The production process is at the discretion of the manufacturer. It also applies to plain bars supplied in coil form. The requirements of this standard apply to straightened product. The steel grade is designated in accordance with ISO/TS 4949.

NOTE – The first “B” stands for steel for reinforcing concrete. The next 3 digits represent the specified characteristic value of upper yield strength. The fifth letter stands for ductility class (4.4). The last “P” stands for plain bar.

This standard covers products delivered in straight lengths.

Plain bars produced from finished products, such as plates and railway rails, are excluded.

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.

ISO 404	Steel and steel products - General technical delivery requirements
ISO/TS 4949	Steel names based on letter symbols
ISO/TR 9769	Steel and iron – Review of available methods of analysis
ISO 10144	Certification scheme for steel bars and wires for the reinforcement of concrete structures
ISO 14284	Steel and iron - Sampling and preparation of samples for the determination of chemical composition.
ISO 15630-1	Steel for the reinforcement of concrete and prestressing of concrete—Test methods – Part 1: Reinforcing bars, wire rod and wire