Singapore Standards Council

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(ICS 77.140.15; 91.080.40)

SINGAPORE STANDARD

Specification for steel for the reinforcement of concrete – Plain bars

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This Singapore Standard was approved by Building and Construction Standards Committee on behalf of the Standards Council of Singapore on 31 May 2011.

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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*:

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Co-Convenor		Mr Yusoof Aynuddin
Members	:	Er. Thung Sek Kwang (Secretary)
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The organisations which the experts are involved in are:

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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.

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