

Australian/New Zealand Standard™

Structural steel

Part 2: Welded I sections



AS/NZS 3679.2:2010

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-023, Structural Steel. It was approved on behalf of the Council of Standards Australia on 28 October 2010 and on behalf of the Council of Standards New Zealand on 5 November 2010.

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The following are represented on Committee BD-023:

Austrroads
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Steel Association
Australian Steel Institute
Bureau of Steel Manufacturers of Australia
Business New Zealand
Steel Construction New Zealand
The University of New South Wales
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Part 2: Welded I sections

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Jointly revised and designated AS/NZS 3679.2:1996.
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-023, Structural Steel to supersede AS/NZS 3679.2:1996.

The objective of this Standard is to specify requirements for welded I sections for general structural and engineering functions. These functions include the possibility of such welded I sections being subjected to dynamic and other special loads.

The contents of this edition align with:

AS

3597 Structural and pressure vessel steel—Quenched and tempered plate

AS/NZS

1163 Structural steel hollow sections

3678 Structural steel—Hot-rolled plates, floorplates and slabs

3679 Structural steel

3679.1 Part 1: Hot-rolled bars and sections

This edition incorporates the following major changes to the previous edition:

- (a) Redundant grades 250, 250L0, 250L15, 350, 350L0 and 350L15 have been removed.
- (b) The mandatory requirement for test reports and test certificates to be performed by third-party accredited laboratories.
- (c) The introduction of mandatory minimum information required on test certificates.
- (d) The inclusion of Appendix B on product conformity as a mandatory provision for conformance with this Standard.
- (e) The web-to-flange testing frequency has been revised and moved to Appendix B
- (f) Section dimensions has been moved to the new Appendix C.

To permit the steel industry time to adjust to the new edition of the Standard, the 1996 edition of AS/NZS 3679.1 will remain ‘available superseded’ and will be withdrawn 12 months from the date of publication of this Standard.

A statement expressed in mandatory terms in a note to a table is deemed to be a requirement of this Standard.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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Australian/New Zealand Standard
Structural steel**Part 2: Welded I sections****1 SCOPE**

This Standard specifies requirements for the production and supply of welded I sections for general structural and engineering purposes.

This Standard does not cover the following:

- (a) Structural steel—Hot-rolled bars and sections.
- (b) Steel plates for pressure equipment.
- (c) Structural steel—Hot-rolled plates, floorplates and slabs.
- (d) Carbon steels and carbon-manganese steels—Hot-rolled bars and semifinished products.
- (e) Structural steel hollow sections.
- (f) Steel reinforcing bars for concrete.
- (g) Structural and pressure vessel steel—Quenched and tempered plate.
- (h) Built-up I sections fabricated in accordance with AS 3990, AS 4100 or NZS 3404.

NOTE: Guidelines to purchasers on requirements that should be specified by the purchaser and those that should or may be agreed on at the time of enquiry and order are specified in Appendix A.

Product conformity with this Standard is specified in Appendix B.

For New Zealand only, additional requirements for welded steel sections for fracture critical applications are specified in Appendix E.

2 NORMATIVE REFERENCES

The following documents are indispensable for the application of this Standard:

NOTE: References for informative purposes are included in the Bibliography.

AS

- 1365 Tolerances for flat-rolled steel products
- 1391 Metallic materials—Tensile testing at ambient temperature
- 2706 Numerical values—Rounding and interpretation of limiting values

AS/NZS

- 1554 Structural steel welding
- 1554.1 Part 1: Welding of steel structures
- 3678 Structural steel—Hot-rolled plates, floor plates and slabs

NZS

- 3404 Steel structures Standard
- 3404.1 Part 1: Materials, fabrication, and construction