

Australian/New Zealand Standard™

Structural steel

Part 2: Welded I sections



AS/NZS 3679.2:2016

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 13 January 2016 and on behalf of the Council of Standards New Zealand on 21 January 2016.

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The following are represented on Committee BD-023:

Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Steel Association
Australian Steel Institute
Austroads
Bureau of Steel Manufacturers of Australia
Business New Zealand
New Zealand Heavy Engineering Research Association
Steel Construction New Zealand
University of New South Wales
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This Standard was issued in draft form for comment as DR AS/NZS 3679.2.

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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 3679.2:2010.

The objective of this Standard is to specify requirements for manufacturers and suppliers of 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.

This edition includes the following major changes from the previous edition:

- (a) Requirements for type testing and minimum production testing and inspections have been included in the normative Appendix on product conformity.
- (b) Test certificates with the listed minimum requirements are required to be available for all products produced to this Standard.
- (c) Labelling requirements have been added to enable products compliant with this Standard to be traceable back to their corresponding test certificate.
- (d) Definitions, clause numbering and layout across the four steel-product Standards AS/NZS 1163, AS/NZS 3678, AS/NZS 3679.1 and AS/NZS 3679.2 are consistent wherever practicable.

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.

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

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1 SCOPE

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

This Standard is intended for general structural and engineering applications. All grades specified in this Standard are suitable for—

- (a) welding in accordance with AS/NZS 1554, parts 1, 2, 5 and 7; and
- (b) fastening as specified in, AS 3990, AS 4100, AS/NZS 4600, AS 5100.6 and NZS 3404.

This Standard does not cover the following:

- (i) Structural steel—Hot-rolled bars and sections.
- (ii) Built-up I sections fabricated in accordance with AS 3990, AS 4100 or NZS 3404.1.

Requirements for product conformity to this Standard is specified in Appendix B.

NOTE: Guidelines for 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 given in Appendix A.

2 NORMATIVE REFERENCES

The following normative documents are referenced in this Standard:

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

AS	
1391	Metallic materials—Tensile testing at ambient temperature
2706	Numerical values—Rounding and interpretation of limiting values
3990	Mechanical equipment—Steelwork
4100	Steel structures
5100	Bridge design
5100.6	Part 6: Steel and composite construction
AS/NZS	
1365	Tolerances for flat-rolled steel products
1554	Structural steel welding
1554.1	Part 1: Welding of steel structures
1554.2	Part 2: Stud welding (steel studs to steel)
1554.5	Part 5: Welding of steel structures subject to high levels of fatigue loading
1554.7	Part 7: Welding of sheet steel structures
3678	Structural steel—Hot-rolled plates, floor plates and slabs
4600	Cold-formed steel structures