

Australian/New Zealand Standard™

Structural steel welding

Part 2: Stud welding (steel studs to steel)

AS/NZS 1554.2:2003

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WD-003, Welding of Structures. It was approved on behalf of the Council of Standards Australia on 3 June 2003 and on behalf of the Council of Standards New Zealand on 4 June 2003. It was published on 5 August 2003.

The following are represented on Committee WD-003:

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Electricity Supply Association of Australia
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PREFACE

This Standard was prepared by the Standards Australia Committee WD-003, *Welding of Structures*, to supersede AS 1554.2—1993.

This Standard incorporates Amendment No. 1 (December 2003). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide requirements for the stud welding of steel studs to steel elements.

This edition includes requirements for the welding of coated steels, including—

- (a) reference to AS 3597, AS/NZS 4360 and IEC 60974-1 (see Appendix B); and
- (b) amending Item 3.1(b) and the second paragraph of Clause 5.5.

Following publication of this edition, the Committee also intends to commence a full revision of the Standard.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements to this Standard.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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to steel)**

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard prescribes requirements for the stud welding of steel studs to steel elements, such steel studs being used for the attachment of members and connection devices to concrete (as concrete anchors and as shear connectors in composite steel/concrete construction), and for the fastening of other members and appurtenances. It also applies to the stud welding of steel studs through light-gauge steel sheet either coated or not coated, and includes requirements for the stud material, the parent material, the qualification of stud bases, stud welding procedure and operators, and the workmanship and testing of the finished welds.

This Standard does not apply to the welding of studs to pressure vessels.

A list of matters for resolution between the principal and fabricator is given in Appendix A.

1.2 INNOVATION

Any novel materials, welding processes or consumables, or methods of construction that do not comply with a specific requirement of this Standard, or are not mentioned in it, but which give equivalent results to those specified, are not necessarily prohibited. The Standards Australia Committee on Welding of Structures can act in an advisory capacity concerning equivalent suitability, but specific approval remains the prerogative of the inspecting authority.

1.3 REFERENCED DOCUMENTS

A list of documents referred to in this Standard is given in Appendix B.

1.4 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 2812 and those below apply.

1.4.1 Fabricator

The person or organization responsible for the welding of the structure during fabrication or erection.

1.4.2 Inspecting authority

The building authority having statutory powers to control the design and erection of buildings or structures.

NOTE: Where the structure is not subject to statutory jurisdiction, the principal is deemed to be the inspecting authority.