

Australian/New Zealand Standard™

**Built-in components for masonry
construction**

Part 1: Wall ties



S t a n d a r d s Australia



STANDARDS
NEW ZEALAND
Pūnaha Aotearoa

AS/NZS 2699.1:2000

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Australian Paint Manufacturers Federation
Australian Stainless Steel Development Association
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Australian/New Zealand Standard™

Built-in components for masonry construction

Part 1: Wall ties

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/28, Masonry Wall Ties and Accessories, to supersede AS 2699—1984, *Wall ties for masonry construction*, and, in part, NZS 4210:1989, *Code of practice for masonry construction: materials and workmanship*.

This Standard is the first of a three-part series on masonry wall ties, connectors and accessories, and lintels and shelf angles. The series comprises the following:

AS/NZS

2699 Built-in components for masonry construction

2699.1 Part 1: Wall ties

2699.2 Part 2: Connectors and accessories

2699.3 Part 3: Lintels and shelf angles (durability requirements)

The objective of this Standard is to provide manufacturers with requirements for the classification of wall ties into three duty ratings. Type A cavity wall ties and veneer wall ties are classified according to characteristic strength only. Type B seismic-resistant veneer ties are classified according to stiffness and characteristic strength which are functions of serviceability, ultimate strength and ductility or toughness. All ties are classified for their corrosion resistance. Provisions are also included for remedial (retrofitted) ties.

Test methods are given for determination of—

- (a) resistance to water transfer;
- (b) characteristic strength and stiffness; and
- (c) corrosion resistance.

The types and spacings of ties necessary to meet design requirements are specified in AS 3700, *Masonry structures*, and NZS 4210, *Code of practice for masonry construction materials and workmanship*.

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

Notes to clauses in this Standard are for information and guidance only and compliance with them is not a requirement of the Standard.

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Australian/New Zealand Standard**Built-in components for masonry construction****Part 1: Wall ties**

SECTION 1 GENERAL

1.1 SCOPE AND APPLICATION This Standard specifies the requirements for wall ties for use in tying together—

- (a) the leaves of cavity masonry walls;
- (b) masonry veneer walls and load-bearing frames; and
- (c) masonry veneer walls against a strong backing wall.

NOTES:

- 1 AS/NZS 2699.2 specifies the durability performance and test procedures for structural performance of connectors and accessories used in masonry construction.
- 2 AS/NZS 2699.3 specifies the requirements for durability of lintels and shelf angles.
- 3 This Standard gives categories of wall ties, and classifies wall ties by characteristic strength and durability and, where applicable, characteristic stiffness.
- 4 The durability classifications employed in this Standard are compatible with the environments specified in AS/NZS 2312, NZS 3604 and AS 3700.
- 5 Design and installation of wall ties are specified in AS 3700, NZS 4210 and NZS 4230.

This Standard applies to ties used in masonry described in AS 3700, NZS 4210 and NZS 4230, including those used in thin-jointed masonry (for example, autoclaved aerated concrete (AAC) blockwork).

1.2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1199	Sampling procedures and tables for inspection by attributes
1397	Steel sheet and strip—Hot-dipped zinc-coated or aluminium/zinc-coated
1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes
1449	Wrought alloy steels—Stainless and heat-resisting steel plate, sheet and strip
1580	Paints and related materials—Methods of test
1580.481	Coatings
1580.481.1.9	Method 481.1.9: Exposed to weathering—Degree of blistering
1580.481.1.10	Method 481.1.10: Exposed to weathering—Degree of flaking and peeling
1580.481.3	Method 481.3: Exposed to weathering—Degree of corrosion of coated metal substrates
2193	Methods for calibration and grading of force-measuring systems of testing machines