



Built-in components for masonry construction

Part 3: Lintels and shelf angles (durability requirements)

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- Australian Institute of Building Surveyors
- Australian Stainless Steel Development Association
- Australian Steel Institute
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Preface

This Standard was prepared by the Standards Australia Committee BD-028, Masonry Wall Ties and Accessories, to supersede AS/NZS 2699.3—2002.

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

AS 2699.1, *Built-in components for masonry construction, Part 1: Wall ties*

AS 2699.2, *Built-in components for masonry construction, Part 2: Connectors and accessories*

AS 2699.3, *Built-in components for masonry construction, Part 3: Lintels and shelf angles (durability requirements)*

The objective of this Standard is to provide manufacturers of lintels and shelf angles with specifications to achieve durability requirements, and methods for testing corrosion resistance.

Durability requirements for lintels and shelf angles are specified in AS 3700, *Masonry structures* and AS 4773.1, *Masonry in small buildings, Part 1: Design*, and AS 4773.2, *Masonry in small buildings, Part 2: Construction*.

The terms "normative" and "informative" are used in Standards 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 conformance with them is not a requirement of the Standard.

This Standard includes a commentary on some of the clauses and tables. The commentary directly follows the relevant clause or table, is designated by "C" preceding the clause/table number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the Standard.

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Section 1 Scope and general

1.1 Scope

This Standard specifies requirements for the durability performance of steel lintels and shelf angles to be built into masonry.

This Standard applies to lintels and shelf angles used in masonry construction described in AS 3700, AS 4773.1 and AS 4773.2.

NOTE 1 AS 2699.1 specifies the durability performance and test procedures for structural performance of wall ties used in masonry construction.

NOTE 2 AS 2699.2 specifies the durability performance and test procedures for structural performance of connectors and accessories used in masonry construction.

NOTE 3 Throughout this Standard, lintel signifies lintel or shelf angle, unless stated otherwise.

NOTE 4 The durability classifications employed in this Standard are compatible with the environments specified in ISO 9223, AS 4312—2008, AS 3700, AS 4773.1 and AS 4773.2.

NOTE 5 This Standard does not cover requirements for structural design or the method of its determination. Details for these are given by AS 3700, AS 4773.1, AS 4100 and AS/NZS 4600.

NOTE 6 Design and installation requirements for lintels and shelf angles are specified in AS 3700, AS 4773.1 (design) and AS 4773.2 (construction).

1.2 Normative references

The following documents are referenced in the text in such a way that some or all of their content constitute requirements of this document:

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

AS 1627.4, *Metal finishing—Preparation and pretreatment of surfaces, Part 4: Abrasive blast cleaning of steel*

AS 2331.1.4, *Methods of test for metallic and related coatings, Method 1.4: Local thickness tests—Magnetic induction and eddy current methods*

AS 3700, *Masonry structures*

AS 3904.3, *Site testing of protective coatings, Method 3: Determination of dry film thickness*

AS 4773.1, *Masonry in small buildings, Part 1: Design*

AS 4773.2, *Masonry in small buildings, Part 2: Construction*

AS/NZS 3750.6, *Paints for steel structures, Part 6: Full gloss polyurethane (two-pack)*

AS/NZS 3750.9, *Paints for steel structures, Part 9: Organic zinc-rich primer*

AS/NZS 3750.9, *Paints for steel structures, Part 14: High-build epoxy (two-pack)*

AS/NZS 4680, *Hot-dip galvanized (zinc) coatings on fabricated ferrous articles*