

AS/NZS 2904:1995
(Incorporating Amendment Nos 1 and 2)

Australian/New Zealand Standard™

Damp-proof courses and flashings



AS/NZS 2904:1995

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-029, Damp-proof Courses and Flashings. It was approved on behalf of the Council of Standards Australia on 4 August 1995 and on behalf of the Council of Standards New Zealand on 14 August 1995. This Standard was published on 5 November 1995.

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Auckland Manufacturers Association
Australian Chamber of Commerce and Industry
Australian Institute of Building Surveyors
Australian Institute of Building
Clay Brick and Paver Institute (Australia)
Concrete Masonry Association of Australia
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Australian/New Zealand Standard™

Damp-proof courses and flashings

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-029, Damp-proof Courses and Flashings, to supersede AS 2904—1986. It is issued as a Joint Standard.

This Standard incorporates Amendment No. 1 (March 1995) and Amendment No 2 (February 2013). 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.

A2 | This Standard does not cover mortar-type damp-proof courses as these are covered in AS 3700, *Masonry structures*, and AS 4773.2, *Masonry in small buildings*, Part 2: *Construction*.

The Standard includes performance requirements and a list of commonly used materials deemed to be satisfactory. The Committee examined the range of damp-proof courses and flashings in common use. Since these materials have proved to be quite satisfactory for a long period of time, it seemed unreasonable that they should have to demonstrate full compliance with a set of performance requirements aimed primarily at new products.

There are five groups of materials in current use, viz. metals, bitumen-coated metals, polyethylene coated metals, bitumen-impregnated materials, and polyethylene. These are fully specified in this Standard together with relevant tests and any limitations on their use.

A1 | The performance requirements are based on the appropriate test methods from previous Standards, updated and metricated. An impact test originally used for polyethylene has been applied to all damp-proof courses and flashings to provide a suitable level of robustness.

The ‘deemed to satisfy’ provisions are specific to the materials detailed in Clause 7 of the Standard. Products not complying with these minimum manufacturing requirements would require full assessment of performance in the same way as any new material or combination of materials. New materials or combinations may require additional criteria of acceptance and this would be considered in future editions of the Standard.

The objective of this Standard is to provide manufacturers and users of damp-proof courses and flashings with specifications covering the manufacturer and performance of damp-proof courses and flashings for use in building applications.

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Australian/New Zealand Standard
Damp-proof courses and flashings

1 SCOPE

This Standard specifies requirements for damp-proof course and flashing materials of the sheet membrane, strip and collar type for use in building construction.

NOTES:

- A2 | 1 For mortar-type damp-proof courses, see AS 3700 and AS 4773.2. This Standard does not include vapour barriers.
- 2 Alternative methods for determining compliance with this Standard are given in Appendix A.

2 NEW MATERIALS

This Standard shall not be interpreted as preventing the use of materials that meet the performance requirements set out in the Standard, but are not specifically referred to herein.

3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

	AS	
	1199	Sampling procedures and tables for inspection by attributes
A2	1397	Continuous hot-dip metallic coated steel sheet and strip—Coatings of zinc and zinc alloyed with aluminium and magnesium
	1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes
	1463	Polyethylene pipe extrusion compounds
	1566	Copper and copper alloys—Rolled flat products
	1804	Soft lead sheet and strip
	2341	Methods of testing bitumen and related roadmaking products
	2341.8	Method 8: Determination of matter insoluble in toluene
	2341.12	Method 12: Determination of penetration of residual bitumen
	2341.18	Method 18: Determination of softening point of tar (ring and ball method)
A2	3700	Masonry structures
	4347	Damp-proof courses and flashings—Methods of test
	4347.1	Method 1: Determination of water permeability
	4347.2	Method 2: Determination of continuity of coating on metal centres
	4347.3	Method 3: Determination of pliability of bitumen coating on metal centres
	4347.4	Method 4: Determination of pliability—Materials with fabric or felt base
	4347.5	Method 5: Determination of compression properties
	4347.6	Method 6: Determining impact resistance
	4347.7	Method 7: Determination of thickness of bitumen coating and thickness or mass of metallic centre
	4347.8	Method 8: Preparation of coating bitumen for testing
	4347.9	Method 9: Determining thickness
	4347.10	Method 10: Determination of mass of desaturated base and percentage saturation

A2	AS	
	4773	Masonry in small buildings
	4773.2	Part 2: Construction
	ISO 9000	Quality management and quality assurance standards
	ISO 9000.11	Part 1: Guidelines for selection and use
	ISO 9004	Quality management and quality system elements
	ISO 9004.1	Part 1: Guidelines
	SAA/SANZ	
	HB18	Guidelines for third-party certification and accreditation
	HB18.144	Guide 44—General rules for ISO or IEC international third-party certification schemes for products
	BS	
	849	Plain sheet zinc roofing
	ASTM	
	D1894	Method of test for coefficients of friction of plastic film

4 DEFINITIONS

For the purpose of this Standard, the following definitions apply:

4.1 Bitumen

Includes residual petroleum bitumen which may or may not have been processed, naturally occurring asphalt, derivatives of coal or a mixture thereof.

4.2 Concealed

Any damp-proof course or flashing that, when installed, is concealed within the structure and is not exposed directly to the weather.

4.3 Damp-proof course

Barrier of impervious material built into a wall or pier to prevent moisture movement to any part of the wall or pier.

4.4 Exposed

Any damp-proof course or flashing that, when installed, is continuously open to the weather.

4.5 Flashing

Barrier of impervious material, built-in to prevent moisture movement to any part of a building requiring protection (usually the part below it). It includes a waterproof strip barrier around an opening in a wall or, at a roof junction, or at a roof penetration to prevent the ingress of water to the inner parts of a building. In some instances, the flashing can act as a damp-proof course.

5 GENERAL REQUIREMENTS

5.1 Suitability and maintenance-free life

Damp-proof courses and flashings shall be suitable for their particular application. They shall be manufactured from materials which ensure a substantial maintenance-free life for these components, when installed in or on buildings.

NOTE: This will generally be achieved by compliance with the relevant performance requirements set out in Clause 6. As failure of a damp-proof course in a building may cause great difficulties and expenses in rectification, it is considered essential that damp-proof courses should have a long, maintenance-free life.

5.2 Form of specification

Damp-proof courses and flashings shall be specified by and shall comply with one of the following options:

- (a) The appropriate performance values required that are taken from the properties and tests given in Clause 6.
- (b) The particular types of manufacturing material(s) that are taken from those deemed satisfactory and listed in Clause 7.

5.3 Classification

Damp-proof courses and flashings shall be classified in accordance with the options in Items (a) or (b) of Clause 5.2 and, if applicable, as complying with Clause 6.8.

6 PERFORMANCE REQUIREMENTS

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6.1 General

Damp-proof courses and flashings shall comply with the relevant performance criteria set out in Clauses 6.2 to 6.7, and where specified, in Clause 6.8.

Table 1 gives a listing of the performance and manufacturing requirements, with a cross-reference to the related Clause in this Standard and the appropriate test method.

TABLE 1
SCHEDULE FOR ASSESSMENT OF COMPLIANCE

Characteristic	Specification	Test method
<i>Performance requirements</i>		
Impermeability to water	Clause 6.2	AS/NZS 4347.1
Continuity of coating	Clause 6.3	AS/NZS 4347.2
Pliability—protective-coated metal	Clause 6.5(b)	AS/NZS 4347.4
Pliability—impregnated materials	Clause 6.5(a)	AS/NZS 4347.3
Compressive modulus and compression set	Clause 6.6	AS/NZS 4347.5
Impact resistance	Clause 6.7	AS/NZS 4347.6
<i>Manufacturing requirements</i>		
Metal centre—thickness	Clause 7.2.2	AS/NZS 4347.7
Bitumen coating on metal—		
• Thickness	Clause 7.3.3(a)	AS/NZS 4347.7
• Penetration	Clause 7.3.3(b)	AS 2341.12
• Softening point	Clause 7.3.3(b)	AS 2341.18
• Inert mineral matter	Clause 7.3.3(c)	AS 2341.8
Polyethylene-coated metal—		
• Polyethylene, thickness	Clause 7.4.4(a)	AS/NZS 4347.9
• Polyethylene, impact resistance	Clause 7.4.4(b)	AS/NZS 4347.6
• Polyethylene, coefficient of friction	Clause 7.4.4(c)	ASTM D1894
• Polyethylene, pigment	Clause 7.4.5	AS 1463, (Appendix B)
• Finished laminate, mass	Clause 7.4.6(a)	
• Finished laminate, thickness	Clause 7.4.6(b)	AS/NZS 4347.9
Fabric or felt-based materials—		
• Mass of base	Clause 7.5.2	AS/NZS 4347.10
• Saturation, percentage	Clause 7.5.3	AS/NZS 4347.10
• Saturating bitumen, penetration	Clause 7.5.4	AS 2341.12
Coating on fabric or felt base—		
• Penetration	Clause 7.5.5(a)	AS 2341.12
• Softening point	Clause 7.5.5(b)	AS 2341.18
Polyethylene—		
• Thickness	Clause 7.6.2	AS/NZS 4347.9
• Mass	Clause 7.6.3	
• Pigment	Clause 7.6.4	AS 1463, (Appendix B)

6.2 Impermeability to water

When tested in accordance with AS/NZS 4347.1, damp-proof courses and flashings shall show no moisture due to penetration on the exposed surface of the membrane.

6.3 Continuity of protective coating

When tested in accordance with AS/NZS 4347.2, damp-proof courses or flashings made of protective-coated metal, shall not show any signs of reaction or pitting in the surface of the metal.

6.4 Corrosion resistance

Damp-proof courses and flashings shall be resistant to corrosion and weathering.

NOTE: For corrosion and weathering requirements, see AS 3700 and AS 4773.2.

Table 2 specifies instances where materials are not suitable for certain applications. These are designated U/S in the Table.

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6.5 Pliability

Pliability shall be determined as follows:

- (a) *Impregnated materials with fabric or felt base* When tested in accordance with AS/NZS 4347.4, the damp-proof course shall show no surface ruptures greater than 3 mm in length.
- (b) *Materials not covered by Clause 6.5(a)* When tested in accordance with AS/NZS 4347.3, the coating of a damp-proof course or flashing shall show no sign of cracking.

6.6 Compressive modulus and compression set

When determined in accordance with AS/NZS 4347.5, the compressive elastic modulus and compression set of all damp-proof courses with a manufacturing thickness of 5 mm or more shall be as follows:

- (a) Compressive elastic modulus between 0.3 MPa and 6.0 MPa.
- (b) Compression set. not greater than 20%.

6.7 Impact resistance

When determined in accordance with AS/NZS 4347.6 at a drop height of 660 mm and a load of 600 grams, at least three of the five tests on the sample shall be required to pass the test for a material pass to be recorded.

6.8 Ultraviolet (UV) stabilized

Any material that is used as an exposed flashing shall be UV stabilized.

7 MATERIALS DEEMED TO BE SATISFACTORY

7.1 General

Materials specified in this Clause shall be deemed to satisfy the performance requirements for damp-proof courses and flashings given in Clauses 6.2 to 6.7, except where otherwise stated.

NOTE: The provisions in this Clause (7) are intended to apply to materials that are in common use as damp proof courses or flashings at the time of publication of this Standard.

Other materials, combinations or thicknesses may also be used, provided that they satisfy the requirements of Clauses 6.2 to 6.8 and Table 2.

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TABLE 2
MINIMUM MANUFACTURING THICKNESSES FOR DAMP-PROOF
COURSES AND FLASHINGS

millimetres

Material		Core/base			Coating		Total (including embossing and adhesive where applicable)			
		Uncoated	Bitumen coated	Polyethylene coated	Bitumen	Polyethylene	Uncoated	Bitumen coated†	Polyethylene coated	
Aluminium	DPC	—	0.3	0.1	$\geq 0.13 \leq 0.25$	0.1	—	0.56	0.7	
	Flash	C 0.3	C 0.3	C 0.1	$\geq 0.13 \leq 0.25$	0.1	C 0.3	C 0.56	C 0.56	
		E 0.6	E 0.55	E U/S	$\geq 0.13 \leq 0.25$	0.1	E 0.6	E 0.81	E/U/S	
Copper	DPC	0.25	0.15	—	$\geq 0.13 \leq 0.25$	—	0.25	0.41	—	
	Flash	0.5	0.15	—	$\geq 0.13 \leq 0.25$	—	0.5	0.41	—	
Lead	DPC	0.9*	0.9*	—	$\geq 0.13 \leq 0.25$	—	0.9*	1.16*	—	
	Flash	C 0.9*	0.9*	—	$\geq 0.13 \leq 0.25$	—	C 0.9*	1.16*	—	
		E 1.8*	U/S	—	U/S	—	E 1.8*	U/S	—	
Zinc	DPC	U/S	—	—	—	—	U/S	—	—	
	Flash	C 0.6	—	—	—	—	C 0.6	—	—	
		E 0.7	—	—	—	—	E 0.7	—	—	
Steel, zinc-coated, aluminium/ zinc-coated or aluminium/ zinc/magnesium alloy coated	DPC	U/S	—	—	—	—	U/S	—	—	
	Flash	0.6	—	—	—	—	0.6	—	—	
Polyethylene		Standard	DPC	0.5	—	—	—	0.75	—	—
	Flash		C 0.5	—	—	—	—	C 0.75	—	—
			E U/S	—	—	—	—	E U/S	—	—
	Heavy	DPC	0.75	—	—	—	—	1.0	—	—
		Flash	C 0.75	—	—	—	—	C 1.0	—	—
			E U/S	—	—	—	—	E U/S	—	—

* These thicknesses are approximate conversions of the standard unit masses of both 10 kg/m² and 20 kgm², as given in AS 1804.

† This Table represents minimum thickness, however, bitumen coating also has a maximum thickness that cannot be exceeded.

LEGEND

U/S = Unsuitable

C = Concealed or internal

E = Exposed to the weather

— = Combinations that are deemed to be not applicable

7.2 Metals

7.2.1 Quality

Metals for use in damp-proof courses and flashings, whether uncoated or coated, shall be of the following quality:

- (a) *Aluminium* Alloy of not less than 99.00% aluminium content, produced as coiled sheet or foil, in the annealed temper condition.

(b) *Copper* Material not less than 99.9% copper, complying with the requirements for material designation 110 or 122 given in AS 1566.

(c) *Lead* Alloy of not less than 99.8% lead, complying with AS 1804.

NOTE: Single laid sheets of lead should not exceed 1.5 m in length or 1.5 m² in area.

(d) *Zinc* Alloy of not less than 99.95% zinc, produced as sheet, complying with BS 849.

(e) *Coated steels*

(i) *Zinc-coated steel* Complying with the requirements for Grade G2, coating Class Z350 sheets, given in AS 1397.

(ii) *Aluminium/zinc-coated steel* Complying with the requirements for Grade G300, coating Class AZ150 sheets, given in AS 1397.

(iii) *Aluminium/zinc/magnesium alloy coated steel* Complying with the requirements of AS 1397 for Grade G300, coating Class AM125 for bare metallic sheets, or coating Class AM100 for factory pre-painted sheets.

NOTE: Metals in Items (a), (d) and (e) are not suitable for use as damp-proof courses without additional protective coatings.

7.2.2 Thickness

When determined in accordance with AS/NZS 4347.7, the manufacturing thickness of metals complying with Clause 7.2.1, and with coatings complying with Clause 7.3 or 7.4, shall be not less than that given in Table 2 for the specified use.

7.3 Bitumen-coated metals

7.3.1 General

Clauses 7.3.2 to 7.3.4 apply to damp-proof courses and flashings consisting of a metal centre coated on both sides with bitumen.

7.3.2 Metal centre

The metal centre shall be unbroken, extending the full length and width of the roll of material. The quality of metal shall be in accordance with Clause 7.2.1 and its thickness shall be in accordance with Table 2.

7.3.3 Bitumen coating

The material used for forming the coatings shall be bitumen which may be fluxed and may contain inert mineral matter.

The coating material shall have the following characteristics:

(a) *Thickness* When determined in accordance with AS/NZS 4347.7, the thickness of the coating film on each side of the metal centre, exclusive of any surfacing material, shall be not less than 0.13 mm nor more than 0.25 mm (see Table 2).

(b) *Physical constants* When prepared in accordance with AS/NZS 4347.8, and determined in accordance with both AS 2341.12 and AS 2341.18, the physical constants of the coating material, including any filler material incorporated in manufacture but with surfacing material carefully removed, shall be as follows:

(i) Penetration (AS 2341.12)between 1.0 mm and 3.0 mm.

(ii) Softening point (AS 2341.18)between 80°mm and 110°mm.

(c) *Inert matter* When prepared in accordance with AS/NZS 4347.8, and determined in accordance with AS 2341.8, the quantity of inert mineral matter insoluble in toluene shall be not greater than 30%.

A1 | **7.3.4 Surfacing material**

The surfacing material, where provided, shall consist of finely divided inert inorganic matter.

NOTE: Surfacing material is provided to prevent the roll from sticking.

So as to prevent damage to the membrane when it is placed under load, the maximum particle size in the surfacing material shall be not greater than 100 microns.

7.4 Polyethylene-coated metals

7.4.1 General

Clauses 4.2 to 7.4.6 apply to damp-proof courses and non-exposed flashings consisting of a metal centre, coated on both sides with bitumen adhesive and surfaced with a polyethylene film.

Polyethylene-coated metals are not deemed suitable for exposed flashings.

7.4.2 Metal centre

The metal centre shall be unbroken, extending the full length and width of the roll. The quality of metal shall be in accordance with Clause 7.2.1 and its thickness shall be in accordance with Table 2.

7.4.3 Bitumen adhesive

Material used in the manufacture of bitumen adhesive shall be unfilled bitumen which may be fluxed. The bitumen adhesive shall be not less than 0.2 mm thick and not more than 0.3 mm thick on each face of the metal centre. For assessment by weighing, 0.2 mm of bitumen can be taken as equivalent to 192 g/m².

7.4.4 Polyethylene

Polyethylene shall be—

- A1 |
- (a) black flexible polyethylene film with an average thickness of not less than 0.1 mm when measured in accordance with AS/NZS 4347.9;
 - (b) when tested in accordance with AS/NZS 4347.6 at a drop height of 600 mm and a load of 225 grams, at least three of the five tests on the sample shall be required to pass the test for a material pass to be recorded; and
 - (c) low slip, with a kinetic coefficient of friction of film greater than 0.40, when determined by either of the methods described in ASTM D1894 using the apparatus specified therein or other approved apparatus.

It shall be embossed on each side of the metal centre during the laminating process, with a regular pattern.

7.4.5 Pigment

Pigment material shall be carbon black, finely divided and uniformly dispersed in the film with a concentration of 2.5 ± 0.5% by mass, determined in accordance with Appendix B of AS 1463.

7.4.6 Finished embossed laminate

Finished embossed laminate shall have—

- (a) a mass per unit area, for any rectangular piece of area approximately 1 m², of not less than 780 g/m²; and
- (b) a thickness after embossing, when measured in accordance with AS/NZS 4347.9, of not less than 0.75 mm (see Table 2).

7.5 Bitumen-impregnated materials without metal centre

7.5.1 General

Clauses 7.5.2 to 7.5.7 apply to damp-proof courses and internal flashings consisting of bitumen-impregnated fabric or felt base, coated on both sides with a layer of bitumen and surfaced with talc or other suitable material.

Bitumen impregnated materials without metal centres are not deemed suitable for exposed flashings.

7.5.2 Base

The base shall consist of an absorbent sheet of fabric or felt made from animal, vegetable, synthetic or inorganic materials, or a mixture of these. When determined in accordance with AS/NZS 4347.10, the mass of the desaturated base shall be not less than 250 g/m².

NOTE: The minimum thickness for normal materials is about 1 mm.

7.5.3 Percentage saturation of the base

The base shall be uniformly impregnated with saturating material. When determined in accordance with AS/NZS 4347.10, the minimum saturation shall be 125% of the mass of the dry base.

7.5.4 Saturating material

The material used for impregnating the base shall be asphaltic bitumen. When determined in accordance with AS 2341.12, it shall have a penetration of not less than 2.0 mm.

7.5.5 Bitumen coating

The material used for forming the coatings shall be bitumen which may contain inert mineral matter. When prepared in accordance with AS/NZS 4347.10, and determined in accordance with both AS 2341.12 and AS 2341.18, the physical constants of the coating material, including any filler material incorporated in manufacture but with surfacing material carefully removed, shall be as follows:

- (a) Penetration (AS 2341.12).....between 1.0 mm and 2.0 mm.
- (b) Softening point (AS 2341.18) between 80°C and 110°C.

7.5.6 Surfacing material

The surfacing material shall consist of finely divided inert inorganic matter, such as talc or other suitable non-stick material.

7.5.7 Mass per unit area

The mass of the damp-proof course or flashing shall be not less than 1.5 kg/m², exclusive of the surfacing material.

7.6 Polyethylene

7.6.1 Material

Polyethylene damp-proof course shall be black, flexible and have an impact resistance in accordance with Clause 7.6.5. It shall be embossed with a repeating pattern evident on both faces, with dimensions between 3 mm minimum and 10 mm maximum, in both the machine direction and the transverse direction. The material shall be either standard or heavy duty.

Polyethylene is not deemed suitable for exposed flashings.

7.6.2 Thickness

When measured in accordance with AS/NZS 4347.9, the average thickness of standard and heavy duty material shall be as follows:

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- (a) *Standard*
 - (i) Prior to embossing not less than 0.5 mm.
 - (ii) After embossing not less than 0.75 mm.
- (b) *Heavy*
 - (i) Prior to embossing not less than 0.75 mm.
 - (ii) After embossing not less than 1.00 mm.

If the thickness prior to embossing is not able to be obtained, it may be calculated from the mass per unit area (see Clause 7.6.3).

Thickness for polyethylene materials are given in Table 2.

7.6.3 *Mass per unit area*

The mass of any rectangular piece of area approximately 1 m² shall be not less than 425 g/m² for standard duty and 640 g/m² for heavy duty.

7.6.4 *Pigment*

Pigment shall comply with Clause 7.4.5.

7.6.5 *Impact resistance*

Impact resistance shall be determined for standard and heavy duty materials as follows:

- (a) *Standard* When tested in accordance with AS/NZS 4347.6 at a drop height of 660 mm and a mass of 640 g, at least three of the five tests on the sample shall be required to pass the test for a material pass to be recorded.
- (b) *Heavy* When tested in accordance with AS/NZS 4347.6 at a drop height of 660 mm and a mass of 750 g, at least three of the five tests on the sample shall be required to pass the test for a material pass to be recorded.

8 PACKING AND MARKING

8.1 Packing

Materials shall be packed so that damage in handling and transportation is minimized. When packed, rolls of finished damp-proof course and flashing materials shall be free from joints.

8.2 Labelling

Damp-proof courses and flashings or their finished rolls shall be labelled with the following information:

- (a) Name and address of the manufacturer or distributor, or both.
- (b) Statement of compliance with this Standard, noting also who performed the type testing or which certification scheme applies.
- (c) The length and width of the material in the roll.
- (d) The classification as being for any or all of the following:
 - (i) Damp-proof course.
 - (ii) Concealed flashing.
 - (iii) Exposed flashing.
- (e) Production batch number or equivalent information.

Appendix B gives an example of a label that would satisfy the requirements of this Clause.

APPENDIX A
MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARD
(Informative)

A1 SCOPE

This Appendix sets out the following different means by which compliance with this Standard can be demonstrated by the manufacturer or supplier:

- (a) Evaluation by means of statistical sampling.
- (b) The use of a product certification scheme.
- (c) Assurance using the acceptability of the supplier's quality system.
- (d) Other such means proposed by the manufacturer or supplier and acceptable to the customer.

A2 STATISTICAL SAMPLING

Statistical sampling is a procedure which enables decisions to be made about the quality of batches of items after inspecting or testing only a portion of those items. This procedure will only be valid if the sampling plan has been determined on a statistical basis and the following requirements are met:

- (a) The sample shall be drawn randomly from a population of product of known history.
The history shall enable verification that the product was made from known materials at essentially the same time, by essentially the same processes and under essentially the same system of control.
- (b) For each different situation, a suitable sampling plan needs to be defined. A sampling plan for one manufacturer of given capability and product throughput may not be relevant to another manufacturer producing the same items.

In order for statistical sampling to be meaningful to the customer, the manufacturer or supplier needs to demonstrate how the above conditions have been satisfied. Sampling and the establishment of a sampling plan should be carried out in accordance with AS 1199, guidance to which is given in AS 1399.

A3 PRODUCT CERTIFICATION

The purpose of product certification is to provide independent assurance of the claim by the manufacturer that products comply with the stated Standard.

The certification scheme should meet the criteria described in SAA HB18.28 (SANZ HB18.28) in that, as well as full type testing from independently sampled production and subsequent verification of conformance, it requires the manufacturer to maintain effective quality planning to control production.

The certification scheme serves to indicate that the products consistently conform to the requirements of the Standard.

A4 SUPPLIER'S QUALITY SYSTEM

Where the manufacturer or supplier can demonstrate an audited and registered quality management system complying with the requirements of the appropriate or stipulated Australian or international Standard for a supplier's quality system or systems, this may provide the necessary confidence that the specified requirements will be met. The quality assurance requirements need to be agreed between the customer and supplier and should include a quality or inspection and test plan to ensure product conformity.

Guidance in determining the appropriate quality management system is given in AS/NZS ISO 9000.1:1994 and AS/NZS ISO 9004.1:1994.

A5 OTHER MEANS OF ASSESSMENT

If the above methods are considered inappropriate, determination of compliance with the requirements of this Standard may be assessed by being based on the results of testing coupled with the manufacturer's guarantee of product conformance.

Irrespective of acceptable quality levels (AQLs) or test frequencies, the responsibility remains with the manufacturer or supplier to supply products that conform with the full requirements of the Standard.

In the absence of a recognized approved quality system it is recommended that the test sampling guidelines specified in Table A1 be used.

A1

TABLE A1
SAMPLING

Rolls in consignment or lot			Minimum number of rolls to be sampled
2	to	15	2
16	to	40	3
41	to	65	5
66	to	111	7
111	to	181	10
181	to	301	15
301	to	501	25
501	to	801	35
801	to	1300	50

APPENDIX B
ROLL LABELLING
(Informative)

This Appendix gives an example of the label that would satisfy the requirements of Clause 8.2.

Name and address of manufacturer and/or distributor _____ _____
This product has been changed and manufactured to comply with: AS/NZS 2904:1995 — Damp-proof courses and flashings
Length: _____
Width: _____
Application: _____ (Damp-proof course and/or flashing)
Classification: _____ (Exposed and/or concealed)
Production batch number or equivalent: _____
A sample of this material has been tested by: _____
This product is certified as complying under the _____ Certification Scheme

AMENDMENT CONTROL SHEET**AS/NZS 2904:1995**

Amendment No. 1 (1998)

REVISED TEXT

SUMMARY: This Amendment applies to the Preface, Clauses 6.1, 6.7, 7.3.4, 7.4.4, 7.6.1, 7.6.5, and Paragraph A5.

Published on 5 November 1998.

Amendment No. 2 (2013)

REVISED TEXT

SUMMARY: This Amendment applies to the Preface, Clauses 1, 3, 6.4, 7.2.1 and Table 2.

Published on 1 February 2013.

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Standards Australia

Standards Australia is an independent company, limited by guarantee, which prepares and publishes most of the voluntary technical and commercial standards used in Australia. These standards are developed through an open process of consultation and consensus, in which all interested parties are invited to participate. Through a Memorandum of Understanding with the Commonwealth government, Standards Australia is recognized as Australia's peak national standards body.

Standards New Zealand

The first national Standards organization was created in New Zealand in 1932. The Standards Council of New Zealand is the national authority responsible for the production of Standards. Standards New Zealand is the trading arm of the Standards Council established under the Standards Act 1988.

Australian/New Zealand Standards

Under a Memorandum of Understanding between Standards Australia and Standards New Zealand, Australian/New Zealand Standards are prepared by committees of experts from industry, governments, consumers and other sectors. The requirements or recommendations contained in published Standards are a consensus of the views of representative interests and also take account of comments received from other sources. They reflect the latest scientific and industry experience. Australian/New Zealand Standards are kept under continuous review after publication and are updated regularly to take account of changing technology.

International Involvement

Standards Australia and Standards New Zealand are responsible for ensuring that the Australian and New Zealand viewpoints are considered in the formulation of international Standards and that the latest international experience is incorporated in national and Joint Standards. This role is vital in assisting local industry to compete in international markets. Both organizations are the national members of ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission).

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