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Australian Standard®

**Waterproofing of wet areas within
residential buildings**

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STANDARDS AUSTRALIA



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Adhesives and Sealants Manufacturers Association of Australia
Aluminium Development Council
Australian Institute of Building Surveyors
Australian Wood Panels Association
Building Services Corporation
Confederation of Australian Industry
Department of Housing, N.S.W.
Housing Industry Association, New South Wales Division
Housing Industry Association, Victorian Division
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Australian Standard®

**Waterproofing of wet areas within
residential buildings**

First published as AS 3740—1989.

PREFACE

This Standard was prepared by the Standards Australia Committee on Wet Areas in Buildings as a result of numerous complaints regarding leaking shower compartments in residential buildings.

This Standard sets out requirements for the waterproofing of wet areas in residential buildings. Construction details that will satisfy these requirements are provided in an appendix.

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STANDARDS AUSTRALIA

Australian Standard

Waterproofing of wet areas within residential buildings

1 SCOPE. This Standard sets out requirements for the waterproofing of wet areas within residential buildings. Where appropriate, construction materials and methods are specified.

NOTES:

1. Additional information and discussion on the recommended materials and techniques is provided in Appendix A.
2. Figures illustrating terminology used and general layouts of shower enclosures are provided in Appendix B.
3. Construction details for various floor/wall combinations that will satisfy these waterproofing requirements are provided in Appendix C.

2 APPLICATION. This Standard applies to all residential buildings as classified in Local Building Regulations.

NOTE: It may also apply to other buildings where the use of wet areas is similar to that in residential buildings.

3 REFERENCED DOCUMENTS. The documents below are referred to in this Standard.

- AS
- 1250 SAA Steel Structures Code
 - 1397 Steel sheet and strip—Hot-dipped zinc-coated or aluminium/zinc coated
 - 1449 Wrought alloy steels—Stainless and heat-resisting steel plate, sheet and strip
 - 1526 One-part polysulphide-based sealing compounds for the building industry
 - 1527 Two-part polysulphide-based sealing compounds for the building industry
 - 1538 SAA Cold-formed Steel Structures Code
 - 1566 Copper and copper alloys—Rolled flat products
 - 1604 Preservative treatment for sawn timber, veneer and plywood
 - 1684 SAA Timber Framing Code
 - 1720 SAA Timber Structures Code
 - 1730 Washbasins
 - 1859 Flat pressed particleboard
 - 1860 Code of practice for installation of particle board flooring
 - 1889 PVC floor tiles
 - 2023 Baths for domestic purposes
 - 2055 PVC sheet floor-covering
 - 2269 Structural plywood
 - 2271 Plywood and blockboard for exterior use
 - 2311 The painting of buildings
 - 2329 Mastic adhesives for fixing wallboards
 - 2334 Steel nails—Metric series
 - 2358 Adhesives for ceramic wall tiles and mosaics
 - 2733 Concrete masonry units
 - 2870 Residential slabs and footings
 - 2924 Decorative thermosetting laminated sheet
 - 3553 Adhesives for floor and wall applications—Resilient vinyl, linoleum and rubber sheet and tiles—Interior and exterior use
 - 3566 Screws—Self-drilling—For the building and construction industries

- 3588 Shower bases and shower modules
- 3600 Concrete structures
- 3700 SAA Masonry Code
- A123 Mortar for masonry construction
- ASTM
- C 630 Specification for water-resistant gypsum backing board
- BS
- 5385 Wall and floor tiling
- 6431 Ceramic floor and wall tiles

4 DEFINITIONS. For the purpose of this Standard, the definitions below apply.

4.1 Approved—approved by a Regulatory Authority.

4.2 Hob—the upstand at the entrance to a shower enclosure.

4.3 Prefinished wall panels—predecorated sheets or thermosetting laminated sheets which are designed for use as the final wall finish of the wet area.

4.4 Regulatory Authority—a body with the right to administer Acts of Parliament or Regulations under such Acts.

4.5 Shower base—a preformed vessel which is installed as the finished floor of a shower compartment and which is provided with a connection point to an approved drainage system.

NOTE: Shower bases are commonly made of plastics, composite materials, vitreous enamelled pressed steel, stainless steel or vitreous china.

4.6 Shower tray—a vessel used as a waterproof liner which is installed in a shower compartment prior to the application of the floor and wall finishing system and from which connection is made to an approved drainage system.

4.7 Vessel—a concave article capable of holding water for domestic use, usually for the purpose of washing.

4.8 Wet area—an area within a building supplied with water from a water supply system which is drained to an approved system of drainage.

5 CLASSIFICATION OF SHOWER TRAYS. Shower trays are classified according to their construction as follows (see Appendix B)—

- (a) internal tray—in which the sides of the tray are applied to the front face of the wall lining sheets (the tray is inside the wall lining); and
- (b) external tray—in which the sides of the tray pass up behind the wall lining (the tray is outside the wall lining).

NOTES:

1. Internal trays are normally formed *in situ*, and are constructed of brushed-on, rolled-on, or trowelled-on waterproof plastics or rubber, with or without reinforcement.
2. External trays may be—
 - (a) prefabricated, usually from copper, stainless steel or plastics;
 - (b) built *in situ* over perimeter flashing angles using material such as that given in Note 1 above; or
 - (c) built from sheet materials, for example synthetic rubber.
3. In all instances, shower trays are overlaid with the final floor finishing system.