

Australian Standard<sup>®</sup>

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**Fixed platforms, walkways,  
stairways and ladders — Design,  
construction and installation**

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This Australian Standard was prepared by Committee SF/13, Platforms, Gangways, Stairways and Ladders. It was approved on behalf of the Council of Standards Australia on 9 September 1992 and published on 16 November 1992.

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The following interests are represented on Committee SF/13:

Aluminium Development Council  
Bureau of Steel Manufacturers of Australia  
Confederation of Australian Industry  
Department of Employment, Vocational Education, Training and Industrial Relations, Qld  
Department of Labour and Industry, Tas.  
Master Builders Construction and Housing Association of Australia  
Pacific Power  
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Fourth edition 1971.  
Revised and redesignated AS 1657-1974.  
Second edition 1985.  
Third edition 1992.

## PREFACE

This Standard was prepared by the Standards Australia Committee on Platforms, Gangways, Stairways and Ladders, to supersede AS 1657-1985.

Changes to the Standard include —

- (a) reducing the minimum wall thickness of steel piping which may be used;
- (b) incorporating a minimum tensile yield stress requirement for aluminium alloys;
- (c) deleting references to specific aluminium alloys and tempers;
- (d) updating the dimensions of steel sections other than piping, to reflect current manufacturing practices; and
- (e) provision of test methods to determine the integrity of guardrail systems, and the strength of the connection between guardrail posts and the supporting structure.

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## STANDARDS AUSTRALIA

## Australian Standard

**Fixed platforms, walkways, stairways, and ladders —  
Design, construction and installation**

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard sets out requirements for the design, construction, and installation of fixed platforms, walkways, stairways, and ladders which are intended to provide means of safe access to and safe working at places normally used by operating, inspection, maintenance, and servicing personnel.

The Standard does not apply to situations where special provision is made in appropriate building or other regulations, e.g. means of escape from fire. Requirements for portable ladders are not included in this Standard.

**1.2 APPLICATION** The design, construction, and installation of a platform, walkway, stairway, or ladder shall comply with the appropriate requirements of Section 2 and the specific requirements for the type of structure, as follows:

- (a) Platforms and walkways: Section 3.
- (b) Stairways: Section 4.
- (c) Fixed ladders: Section 5.

The application of the relevant Sections and the limits of slope are illustrated in Figure 1.1.

Where it is not reasonably practicable to meet the full requirements of this Standard, advice should be sought from the regulatory authority.

## NOTES:

- 1 Some structures and vehicles will be unable to comply with all the requirements of this Standard. Special structures include radio masts, towers, portable on farm light-weight silos, and the like. Vehicles include road tankers, waste disposal trucks, and the like.
- 2 Structures and vehicles which are unable to comply with all the requirements of this Standard should comply with the relevant design Codes for loading.

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

## AS

1170	SAA Loading Code
1170.1	Part 1: Dead and live loads and load combinations
1170.2	Part 2: Wind loads
1192	Electroplated coatings — Nickel and chromium
1538	SAA Cold-formed Steel Structures Code
1554	SAA Structural Steel Welding Code
1554.1	Part 1: Welding of steel structures
1604	Preservative treatment for sawn timber, veneer and plywood
1650	Hot-dipped galvanized coatings on ferrous articles
1664	SAA Aluminium Structures Code
1665	SAA Aluminium Welding Code
1720	SAA Timber Structures Code
1720.1	Part 1: Design methods
1734	Aluminium and aluminium alloys — Flat sheet, coiled sheet and plate
1782	Flooring milled from Australian-grown conifers (softwoods) (excluding radiata pine and cypress pine)
1789	Electroplated coatings — Zinc on iron or steel
1790	Electroplated coatings — Cadmium on iron or steel
1810	Flooring milled from cypress pine
1866	Aluminium and aluminium alloys — Extruded rod, bar, solid and hollow shapes
1892	Portable ladders
1892.2	Part 2: Timber
2105	Inorganic zinc silicate paint