



## **Portable ladders**

### **Part 1: Performance and geometric requirements**



This Australian Standard® was prepared by Committee SF-034, Portable Ladders. It was approved on behalf of the Council of Standards Australia on 31 July 2018. This Standard was published on 28 September 2018.

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The following are represented on Committee SF-034:

- Australian Aluminium Council
  - Australian Industry Group
  - Consumers Federation of Australia
  - Engineers Australia
  - Ladder Manufacturers Association of Australia
  - Master Builders Australia
  - National Retail Association
  - Safety Institute of Australia
  - Victorian Department of Health and Human Services
  - Working at Height Association
- 

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Australian Standard®

## Portable ladders

### Part 1: Performance and geometric requirements

Originated as part of AS 1892—1977.  
Previous editions AS/NZS 1892.1:1996 and AS/NZS 1892.3:1996.  
Revised, amalgamated and redesignated as AS 1892.1:2018.

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-034, Portable Ladders, to supersede AS/NZS 1892.1:1996, *Portable ladders, Part 1: Metal* and AS/NZS 1892.3:1996, *Portable ladders, Part 3: Reinforced plastic*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

This Standard is Part 1 in a series of Standards covering the safe design, manufacture and use of portable ladders and attachments. Other Standards in the series are as follows:

AS 1892.2, *Portable ladders, Part 2: Timber*

AS/NZS 1892.5, *Portable ladders, Part 5: Selection, safe use and care*

In this edition Parts 1 and 3 have been consolidated into a single document. Design and performance requirements for metal and fibreglass ladders remain the same, except for the following:

- (a) Addition of test reporting requirements (Clause 1.7).
- (b) Additional labelling requirements (Clause 2.8).
- (c) Addition a new classification for ladders with 'higher stability' (Clause 1.5.33).
- (d) Addition of test and performance criteria for 'higher stability' ladders (Appendices GG, HH and II).
- (e) Clarification of which test methods apply to each type of ladder (Section 8).
- (f) Addition of particular requirements for work platforms (Section 9).
- (g) Addition of particular requirements for step stools (Section 10).

In this edition, the test methods have been included as a set of appendices. The test methods have not changed greatly; however, in the light of experience gained from the previous editions, they have been clarified.

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

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# STANDARDS AUSTRALIA

## Australian Standard Portable ladders

### Part 1: Performance and geometric requirements

#### SECTION 1 SCOPE AND GENERAL

##### 1.1 SCOPE

This Standard sets out requirements for the design and manufacture of portable ladders from various materials and combinations of materials, such as metal, plastic, reinforced plastic, other composites, ceramics, timber and engineered wood.

The Standard provides two duty ratings for industrial ladders and domestic ladders, which are assigned minimum load ratings.

The Standard provides two stability ratings; for stability and higher stability, which may relate to industrial ladders and domestic ladders. Any such stabilizing device or devices shall be an integral part of the ladder and shall not be removable.

The Standard covers single and multiple-section ladders, multipurpose ladders, combination ladders and those special-purpose ladders defined in Clause 1.5 and to other ladders that can be set up in configuration equivalent to the foregoing ladders.

The Standard does not fully cover ladder accessories. Examples of accessories not covered may include, but are not limited to, ladder levellers, ladder stabilizers, stand-off devices, ladder jacks, ladder straps, hooks, castors, shelves, safety gates that may be installed on, or used in conjunction with ladders.

NOTE: Accessories should not lessen the performance and test requirements of ladders to which they are attached.

##### 1.2 OBJECTIVE

The objective of this Standard is to provide designers, manufacturers and regulatory authorities with the minimum performance and dimensional requirements for portable ladders, in order to minimize the risk to the safety of portable ladder users. Performance requirements include strength, stability and durability criteria for the evaluation of portable ladders.

##### 1.3 APPLICATION

Portable ladders shall conform to the relevant requirements of Section 2, General requirements, and with the specific requirements of the Section(s) appropriate to the type of ladder, as follows:

- (a) Single ladders: Section 3.
- (b) Extension ladders: Section 4.
- (c) Stepladders: Section 5.
- (d) Trestle ladders: Section 6.
- (e) Multipurpose ladders: Section 7.