

Australian Standard<sup>®</sup>

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**SHIPBUILDING—  
EMBARKATION LADDERS**

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This Australian Standard was prepared by Committee ME/59, Shipbuilding. It was approved on behalf of the Council of the Standards Association of Australia on 11 February 1987 and published on 4 May 1987.

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Association of Australian Port and Marine Authorities  
Australian Chamber of Shipping  
Australian Fishing Industry Council  
Australian Shipbuilders Association  
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## PREFACE

This Standard was prepared by the Association's Committee on Shipbuilding. It is identical with and has been reproduced from ISO 5489—1986, Shipbuilding—Embarkation Ladders. It supersedes (in part) AS 1267—1975, Ships Pilot and Embarkation Ladders.

The purpose of this Standard is to specify requirements for an embarkation ladder which is provided for passengers and crew to gain access to a survival craft in an emergency.

For the purpose of this Australian Standard, the text of the ISO Standard used herein should be modified as follows:

- (a) *Terminology.* The words 'Australian Standard' should replace the words 'International Standard' wherever they appear.
- (b) *Cross-references.* The reference to the International Standard ISO 799, Shipbuilding—Pilot Ladders, should be replaced by a reference to Australian Standard AS 2933, Shipbuilding—Pilot Ladders.

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STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard  
for  
SHIPBUILDING—EMBARKATION LADDERS**

**1 Scope and field of application**

This International Standard specifies requirements for an embarkation ladder which is provided for passengers and crew to gain access to a survival craft in an emergency.

**2 References**

ISO 799, *Shipbuilding — Pilot ladders.*  
ISO 1181, *Three or four-strand manila and sisal ropes.*

**3 Dimensions**

The dimensions of the assembled embarkation ladder and of the components shall be in accordance with figures 1 and 2.

**4 Materials**

**4.1** The materials of components shall be in accordance with the table. Metal parts shall not be used in the embarkation ladder construction, except for item 4 of the table.

**4.2** Steps shall be made from one piece of hardwood (ash, oak, elm, beech or teak) free from knots, or from other materials having equivalent relative density, strength, durability and buoyancy. The lowest four steps may be made of rubber of sufficient strength and stiffness, or of other suitable material of equivalent characteristics. Steps shall have an efficient non-slip surface.

**4.3** The seizing for side ropes shall consist of two- or three-ply marline of minimum breaking strength 800 N, or other suitable material of equivalent strength.

**5 Construction**

**5.1** The embarkation ladder shall be assembled in accordance with figure 1 to have an equal step spacing of  $310 \pm 5$  mm.

**5.2** Steps shall be constructed from one piece to the dimensions given in figure 2. Their non-slip upper surfaces shall be provided by either

- a) longitudinal grooving, or
- b) the application of an approved non-slip coating.

**5.3** Side ropes shall have a diameter of 20 mm (circumference 64 mm) and shall be seized together as closely as possible above and below each step by a

figure-of-eight racking seizing. The side ropes below the bottom step shall have a double racking seizing as shown in figure 1. A racking seizing shall be applied below the fibre rope thimbles.

**5.4** All rope ends shall be whipped for a distance of 25 mm with waxed sailmaker's twine or equivalent material.

**6 Designation**

Embarkation ladders conforming to this International Standard shall be designated by the following indications, in the order given :

- number of this International Standard;
- a capital "S" followed by the number of steps.

*Example:*

The designation for an embarkation ladder consisting of 14 steps is:

**Embarkation ladder ISO 5489-S14**

NOTE — The length of an embarkation ladder determined by the designation shall include an allowance for a 15° adverse list.

Spare or additional components shall be designated by reference to the relevant International Standard.

*Example:*

The designation for a spare step is :

**Step ISO 799**

since the steps in ladders to ISO 5489 are identical to those defined in table 1 of ISO 799.

NOTE — However, this should not be confused with ladder identification which is specified in clause 7 of this International Standard.

**7 Marking**

Embarkation ladders conforming to this International Standard shall be permanently marked under the two top steps by the number of this International Standard: ISO 5489.

**Table — Components and materials**

Item	Component	Material	Specification
1	Step	Hardwood	See 4.2
2	Side ropes	Manila	ISO 1181, Quality 1
3	Side rope seizing	Marline	See 4.3
4	Fibre rope thimble	Steel, galvanized	Nominal size 20