

Australian Standard[®]

**Boat and ship design and
construction**

Part 2: Aluminium construction

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The following interests are represented on Committee ME/59:

American Bureau of Shipping
Australian Chamber of Shipping
Australian Maritime Safety Authority
Australian National Maritime Association
Australian Shipbuilders Association
Bureau Veritas
Department of Defence
Department of Transport, Qld
Det Norske Veritas
Institute of Marine Engineers
Lloyds Register of Shipping
Royal Institution of Naval Architects
University of New South Wales

Additional interests participating in preparation of Standard:

Aluminium Development Council
Department of Marine and Harbours, S.A.
Department of Transport and works, N.T.
Maritime Services Board of New South Wales

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PREFACE

This Standard was prepared by the Standards Australia Committee on Shipbuilding following a request by the Australian Transport Advisory Council, to replace the relevant specification in the *Uniform Shipping Laws Code*.

It is Part 2 of a series of Standards on boat and ship design and construction, the other Parts being—

Part 1: *Design loadings*

Part 3: *Fibre-reinforced plastics construction*

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STANDARDS AUSTRALIA

Australian Standard

Boat and ship design and construction

Part 2: Aluminium construction

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies the structural requirements for aluminium vessels not exceeding 35 m in length.

It includes multi-hull vessels but excludes novel types of vessels such as surface-effect ships (SES), hovercraft, hydrofoils and small-water-plane-area twin-hull (SWATH) vessels.

1.2 APPLICATION This Standard is intended for use by manufacturers building aluminium vessels in accordance with the Australian Transport Advisory Council *Uniform Shipping Laws Code*.

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

AS

- 1664 SAA Aluminium Structures Code
- 1665 Welding of aluminium structures
- 1734 Aluminium and aluminium alloys—Flat sheet, coiled sheet and plate
- 1865 Aluminium and aluminium alloys—Drawn wire, rod, bar and strip
- 1866 Aluminium and aluminium alloys—Extruded rod, bar, solid and hollow shapes
- 1867 Aluminium and aluminium alloys—Drawn tubes
- 1874 Aluminium and aluminium alloys—Ingots and castings
- 2837 Wrought alloy steels—Stainless steel bars and semi-finished products
- 2848 Aluminium and aluminium alloys—Compositions and designations
- 2848.1 Part 1: Wrought products
- 4132 Boat and ship design and construction
- 4132.1 Part 1: Design loadings

Aluminium Development Council of Australia
Aluminium standards and data—Wrought products

Australian Transport Advisory Council
Uniform Shipping Laws Code

1.4 DEFINITIONS For the purpose of this Standard, the definitions given in AS 4132.1 apply.



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