



## Freight containers

### Part 5: Thermal containers (ISO 1496-2:2008, MOD)

STANDARDS  
Australia

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This Australian Standard® was prepared by Committee ME-068, Freight Containers. It was approved on behalf of the Council of Standards Australia on 16 June 2015. This Standard was published on 30 June 2015.

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The following are represented on Committee ME-068:

- Australasian Railway Association (RISSB)
  - Australian Industry Group
  - Australian Logistics Council
  - Australian Maritime Safety Authority
  - Container Owners Association
  - ICHCA Australia
  - Ports of Auckland
  - Royalwolf Trading New Zealand
  - Shipping Australia
- 

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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<sup>®</sup>

**Freight containers**

**Part 5: Thermal containers  
(ISO 1496-2:2008, MOD)**

Originated in Australia as AS 1780—1975.  
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## PREFACE

This Standard was prepared by the Standards Australia Committee ME-068, Freight Containers, to supersede AS 3711.5—2000, *Freight containers, Part 5: Thermal containers*. 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.

The objective of this Standard is to provide the basic specifications and testing requirements for ISO series 1 thermal containers which are suitable for international exchange and for conveyance of goods by road, rail and sea, including interchange between these forms of transport.

The objective of this revision is to adopt the latest edition of the corresponding International Standard.

This Standard is an adoption with national modifications and has been reproduced from ISO 1496-2:2008, *Series 1 freight containers—Specification and testing, Part 2: Thermal containers*. Appendix ZZ lists the variations to ISO 1496-2:2008 for the application of this Standard in Australia.

Additional Appendices ZA and ZB have been added to specify the dimensions of grapple arm lifting areas and straddle lifting areas for series R containers.

This Standard is Part 5 of the AS/(NZS) 3711 series. The series comprises the following:

## AS

3711	Freight containers
3711.1	Part 1: Classification, dimensions and ratings (ISO 668:2013, MOD)
3711.2	Part 2: Terminology (ISO 830:1999, MOD)
3711.3	Part 3: Corner fittings (ISO 1161:1984, MOD)
3711.4	Part 4: General purpose containers (ISO 1496-1:2013, MOD)
3711.5	Part 5: Thermal containers (ISO 1496-2:2008, MOD) (this Standard)
3711.6	Part 6: Tank containers
3711.8	Part 8: Platform containers
3711.9	Part 9: Coding, identification and marking
3711.10	Part 10: Handling and securing

## AS/NZS

3711	Freight containers
3711.7	Part 7: Dry bulk containers

As this Standard is reproduced from an International Standard, the following applies:

- In the source text, the part of ISO 1496' should read 'this Australian Standard'.
- A full point substitutes for a comma when referring to a decimal marker.

References to International Standards should be replaced by references to Australian Standards, as follows:

<i>Reference to International Standard</i>	<i>Australian Standard</i>
ISC	AS
668	3711 Freight containers
668	3711.1 Part 1: Classification, dimensions and ratings (ISO 668:2013, MOD)
830	3711.2 Part 2: Terminology (ISO 830:1999, MOD)
1161	3711.3 Part 3: Corner fittings (ISO 1161:1984, MOD)
6346	3711.9 Part 9: Coding, identification and marking

Only normative references that have been adopted as Australian Standards have been listed.

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

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## CONTENTS

<b>1</b>	<b>Scope</b> .....	<b>1</b>
<b>2</b>	<b>Normative references</b> .....	<b>1</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>1</b>
<b>4</b>	<b>Classification</b> .....	<b>3</b>
<b>5</b>	<b>Marking</b> .....	<b>3</b>
<b>6</b>	<b>Dimensions and ratings</b> .....	<b>5</b>
<b>7</b>	<b>Design requirements</b> .....	<b>5</b>
<b>8</b>	<b>Testing</b> .....	<b>9</b>
<b>9</b>	<b>Electrical aspects of thermal containers</b> .....	<b>24</b>
<b>Annex A</b> (normative)	<b>Diagrammatic representation of capabilities appropriate to all types and sizes of thermal containers, except where otherwise stated</b> .....	<b>27</b>
<b>Annex B</b> (normative)	<b>Details of requirements for load-transfer areas in base structures of containers</b> .....	<b>33</b>
<b>Annex C</b> (normative)	<b>Dimensions of fork-lift pockets (where provided)</b> .....	<b>40</b>
<b>Annex D</b> (normative)	<b>Dimensions of gooseneck tunnels (where provided)</b> .....	<b>42</b>
<b>Annex E</b> (normative)	<b>Cooling water connections</b> .....	<b>43</b>
<b>Annex F</b> (normative)	<b>Air inlets and outlets</b> .....	<b>46</b>
<b>Annex G</b> (normative)	<b>Mounting of clip-on units</b> .....	<b>51</b>
<b>Annex H</b> (normative)	<b>Air temperature measurement points</b> .....	<b>54</b>
<b>Annex I</b> (normative)	<b>Steady-state conditions for heat leakage test (Test No. 14)</b> .....	<b>56</b>
<b>Annex J</b> (normative)	<b>Phase connections to container plugs and sockets</b> .....	<b>57</b>
<b>Annex K</b> (normative)	<b>Electric plug and socket, four-pin, 380/440 V, 50/60 Hz, 32 A</b> .....	<b>58</b>
<b>Annex L</b> (normative)	<b>Electrical power supplies for thermal containers (9.2)</b> .....	<b>62</b>
<b>Annex M</b> (normative)	<b>General requirements for 220 volt and dual voltage equipment</b> .....	<b>63</b>
<b>Annex N</b> (informative)	<b>Conversion of SI units to non-SI units</b> .....	<b>64</b>
	<b>Bibliography</b> .....	<b>65</b>

## INTRODUCTION

The following grouping of container types is used for specification purposes in ISO 1496:

Part 1		
General purpose		00 to 09
Specific purpose		
closed, vented/ventilated		10 to 19
open top		50 to 59
Part 2		
Thermal		30 to 49
Part 3		
Tank		70 to 79
Bulk, pressurized		85 to 89
Part 4		
Bulk, non-pressurized (box type)		20 to 24
Bulk, non-pressurized (hopper type)		80 to 84
Part 5		
Platform (container)		60
Platform-based, with incomplete superstructure and fixed ends		61 and 62
Platform-based, with incomplete superstructure and folding ends		63 and 64
Platform-based, with complete superstructure		65 to 69

NOTE Container groupings for parts 1 and 3 to 5 inclusive are described in detail in the relevant parts of ISO 1496.

## AUSTRALIAN STANDARD

**Freight containers**

## Part 5:

## Thermal containers (ISO 1496-2:2008, MOD)

**1 Scope**

This part of ISO 1496 gives the basic specifications and testing requirements for ISO series 1 thermal containers for international exchange and for conveyance of goods by road, rail and sea, including interchange between these forms of transport.

NOTE For the convenience of users of this part of ISO 1496, the conversion of values expressed in SI units to values expressed in non-SI units is given in Annex N.

**2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 668:1995, *Series 1 freight containers — Classification, dimensions and ratings*

ISO 830:1981, *Freight containers — Vocabulary*

ISO 1161:1984, *Series 1 freight containers — Corner fittings — Specification*

ISO 6346:1995, *Freight containers — Coding, identification and marking*

ISO 10368:2006, *Freight thermal containers — Remote condition monitoring*

IEC 60947-1, *Low-voltage switchgear and controlgear — Part 1: General rules*

**3 Terms and definitions**

For the purposes of this document, the general terms and definitions given in ISO 830 and the following apply.

**3.1****thermal container**

freight container having insulating walls, doors, floor and roof designed to retard the rate of heat transmission between the inside and the outside of the container

**3.2****insulated container**

thermal container having no devices for cooling and/or heating, either permanently installed or attached