AS 3711.5:2015

Australian STANDARD

Freight containers

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

STANDARDS Australia

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.

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

This Standard was issued in draft form for comment as DR AS 3711.5:2014.

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.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

Freight containers

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

Originated in Australia as AS 1780—1975.
Originated in New Zealand as NZS/ISO 1496.2:1988.
Previous edition AS 3711.5—2000.
Third edition AS 3711.5:2015.

Published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 978 1 76035 151 9

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 grappler 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:

(a) In the source text ‘this part of ISO 1496’ should read ‘this Australian Standard’.

(b) 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:

Reference to International Standard		*Australian Standard*	
ISO		AS	
668	Series 1 freight containers—Classification, dimensions and ratings	3711	Freight containers
		3711.1	Part 1: Classification, dimensions and ratings (ISO 668:2013, MOD)
830	Freight containers—Vocabulary	3711.2	Part 2: Terminology (ISO 830:1999, MOD)
1161	Series 1 freight containers—Corner fittings—Specification	3711.3	Part 3: Corner fittings (ISO 1161:1984, MOD)
6346	Freight containers—Coding, identification and marking	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.

CONTENTS

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