



Freight containers

Part 3: Corner fittings (ISO 1161:1984, MOD)



This Australian Standard® was prepared by Committee ME-068, Freight Containers. It was approved on behalf of the Council of Standards Australia on 12 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/NZS 3711.3:2015.

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Standards may also be withdrawn.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 3: Corner fittings
(ISO 1161:1984, MOD)**

Originated in Australia as AS E45—1969.
Originated in New Zealand as NZS/ISO 1161:1984.
Previous edition AS/NZS 3711.3:1993.
Revised and designated as AS 3711.3:2015.

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

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

ISBN 978 1 76035 149 6

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-068, Freight Containers, to supersede AS/NZS 3711.3:1993, *Freight containers, Part 3: Corner fittings*. 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 establish the basic dimensions and the functional and strength requirements of corner fittings for freight containers.

This Standard is an adoption with national modifications and has been reproduced from ISO 1161:1984, *Series 1 freight containers—Corner fittings—Specification*, its Technical Corrigendum 1 (1990) and its Amendment 1 (2007), which have been added at the end of the source text. Appendix ZZ lists the variations to ISO 1161:1984 for the application of this Standard in Australia.

This Standard is Part 3 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) (this Standard)
3711.4	Part 4: General purpose containers (ISO 1496-1:2013, MOD)
3711.5	Part 5: Thermal containers (ISO 1496-2:2008, MOD)
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 ‘this International Standard’ 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>	
ISO		AS	
668	Series 1 freight containers— Classification, external dimensions and ratings	3711	Freight containers
1496	Series 1 freight containers— Specification and testing	3711.1	Part 1: Classification, dimensions and ratings (ISO 668:2013, MOD)
1496-1	Part 1: General cargo containers for general purposes	3711.4	Part 4: General purpose containers (ISO 1496-1:2013, MOD)

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

CONTENTS

0	Introduction	1
1	Scope and field of application	1
2	References	1
3	Dimensional requirements	2
4	Strength requirements	2
5	Design requirements	2
6	Minimum bearing area — Top corner fitting	3
7	Corner fitting marking	3
	Figures 1 to 6	4
Annexes		
A	Examples of overall dimensions of box-shaped corner fittings	9
B	Typical examples of twistlock lifting devices	10
C	Guide on the choice of sizes for, and the positioning of, twistlock tie-down devices for securing series 1 freight containers to carrying vehicles	12

AUSTRALIAN STANDARD

Freight containers**Part 3:
Corner fittings (ISO 1161:1984, MOD)****0 Introduction**

This International Standard on corner fittings is the result of the efforts of technical and operational personnel drawn from all phases of the transportation industry. The figures show the fittings for the top and bottom corners of series 1 freight containers which will provide compatibility in interchange between transportation modes. Care has been taken to limit consideration only to those details vital to this function.

The size and configuration of corner fitting apertures are specified. The faces of the corner fittings having apertures for the engagement of handling and securing devices have specified thickness and tolerances as shown in figures 1, 2, 3 and 4. The thickness of the blank walls is not specified since they are not involved in the engagement of the handling and securing devices, provided that their inner surfaces do not protrude into the corner fitting cavity reserved for the engaging devices; however, typical overall dimensions of box-shaped top and bottom corner fittings are given in annex A by way of example. These overall dimensions are not mandatory.

The purpose of this International Standard is to define some details of design vital to container interchange in automatic, semi-automatic and conventional systems.

The strength and testing requirements specified in this International Standard do not take any account of the stresses which may result from the practice of end-to-end coupling of containers.

Typical examples of twistlock lifting devices which may be fitted on handling devices are given in annex B.

A guide on the choice of sizes of twistlock tie-down devices and their positioning for securing series 1 freight containers to carrying vehicles is given in annex C.

NOTE — The requirements of this International Standard do not preclude the provision of additional facilities for lifting either from the top or at the base of the freight container.

1 Scope and field of application

This International Standard establishes the basic dimensions and the functional and strength requirements of corner fittings for series 1 freight containers, i.e. containers which conform to ISO 668 and ISO 1496 with the exception of air mode containers (see ISO 8323).

2 References

ISO 668, *Series 1 freight containers — Classification, external dimensions and ratings.*

ISO 1496/1, *Series 1 freight containers — Specification and testing — Part 1: General cargo containers for general purposes.*

ISO 8323, *Freight containers — Air/surface (intermodal) general purpose containers — Specification and tests.*¹⁾

1) At present at the stage of draft.