



Child use and care articles—Child seats for cycles—Safety requirements and test methods (EN 14344:2004, MOD)

AS 15194:2016, Child use and care articles—Child seats for cycles—Safety requirements and test methods (EN 14344:2004, MOD), is a modified adoption of EN 14344:2004, Child use and care articles—Child seats for cycles—Safety requirements and test methods, and is reproduced with the permission of CEN, Avenue Marnix 17, B-1000 Brussels, Belgium. All exploitation rights of the European Standards in any form and by any means are reserved world-wide to CEN and its National Members, and no reproduction may be undertaken without express permission in writing by CEN through Standards Australia Limited.



This Australian Standard® was prepared by Committee CS-110, Bicycles and Bicycle Accessories. It was approved on behalf of the Council of Standards Australia on 30 June 2016.

This Standard was published on 14 September 2016.

The following are represented on Committee CS-110:

- Association of Accredited Certification Bodies
 - Australian Chamber of Commerce and Industry
 - Australian Competition and Consumer Commission
 - Austroads
 - Bicycle Industries Australia
 - Bicycle NSW
 - Centre for Accident Research and Road Safety—Queensland
 - CHOICE
 - Consumers Federation of Australia
 - Cycling Australia
 - Ministry of Business, Innovation and Employment, NZ
 - Monash Injury Research Institute
 - National Retail Association
 - Retail Cycle Traders Australia
 - Royal Australian College of Surgeons
 - Transport for NSW
 - University of New South Wales
-

This Standard was issued in draft form for comment as DR AS 4287:2015.

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Standards may also be withdrawn.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[®]

**Child use and care articles—Child seats
for cycles—Safety requirements and
test methods (EN 14344:2004, MOD)**

First published as AS/NZS 4287:1995.
Revised and redesignated as AS 4287:2016.

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 552 4

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-110, Bicycles and Bicycle Accessories, to supersede AS/NZS 4287:1995, *Child carrier seats for pedal bicycles—Safety requirements*.

The objective of this Standard is to specify the safety requirements and test methods for child seats that are intended to be mounted on pedal cycles, and electrically power-assisted pedal cycles, in order to transport a child passenger who is capable of sitting unaided and who weighs not more than 22 kg.

The specified safety requirements and test methods aim to ensure that—

- (a) a child is well-restrained and not exposed to hazards while being transported in a child carrier seat on a pedal cycle, excluding hazards arising in a crash (i.e. fall or collision); and
- (b) the child with carrier seat represents as minimal a hazard as possible for the operator of the pedal cycle to which they are attached (e.g. change in centre of mass notwithstanding).

In particular, the performance specifications relate to retaining the child in the seat during normal operation, retaining the seat mounted on the bicycle during normal operation, protecting the child from hazards on the bicycle (e.g. moving parts), and minimising lateral sway of the bicycle (by preventing the child's CM falling too far laterally).

The performance specifications do not relate to the protection offered by a seat in a crash, and this function has not been evaluated.

In 2014 the CS-110 committee reviewed available anthropometric data for children and identified that a small proportion of children reached the maximum dimensions before the approximate age specified in Clause 1 and Clause C.1.4. This highlights the importance of considering size and weight in preference to age.

This Standard is an adoption with national modifications and has been reproduced from EN 14344:2004, *Child use and care articles—Child seats for cycles—Safety requirements and test methods* and has been varied as indicated to take account of Australian conditions. The modifications are specified in Appendix ZZ.

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

- (i) In the source text 'this European Standard' should read 'this Australian Standard'.
- (ii) A full point substitutes for a comma when referring to a decimal marker.

None of the normative references in the source document have been adopted as Australian or Australian/New Zealand Standards.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annexes or appendices 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

1	Scope	5
2	Normative references	5
3	Terms and definitions	5
4	Classification.....	7
5	General requirements and test conditions	8
5.1	Principle of the most onerous condition.....	8
5.2	Tolerances and test conditions.....	8
5.3	Order of tests	8
6	Construction.....	9
6.1	Dimensions.....	9
6.2	Edges, corners and projections	12
6.3	Entrapment	13
6.4	Small parts.....	13
6.5	Decals	15
7	Strength and durability	16
7.1	Requirements for strength and durability	16
7.2	Mounting method for strength and durability.....	16
7.3	Test equipment for strength and durability	17
7.4	Test methodology for strength and durability.....	18
8	Attachment of the seat to the cycle	20
8.1	General requirements for all seats.....	20
8.2	Additional requirements and test method for rear seats attached to luggage carriers	21
8.3	Additional requirements for front seats	21
9	Restraint system	21
9.1	General.....	21
9.2	Effectiveness of restraint system, roll-over test	21
9.3	Attachment of restraint system to the seat.....	23
9.4	Strength of fasteners	23
9.5	Micro-slip and strength of adjusting devices	23
9.6	Closure of restraint system	24
9.7	Child-proof retention	24
10	Foot guarding and retention.....	25
10.1	Methodology of foot guarding.....	25
10.2	Foot retention.....	27
11	Requirements for materials	27
11.1	Chemical hazards	27
11.2	Corrosion	27
11.3	Decay and insect attack	27
12	Marking	27
12.1	General requirements for marking.....	27
12.2	Marking requirements for rear seats	28
12.3	Marking requirements for rear seats attached to luggage carriers	28
12.4	Marking, test method.....	28
13	Purchase information.....	28