AS/NZS 1754:2004
(Incorporating Amendment No. 1)

AS/NZS 1754:2004

Australian/New Zealand Standard™

Child restraint systems for use in motor vehicles

STANDARDS AUSTRALIA

STANDARDS NEW ZEALAND
Paerewa Aotearoa

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CS-085, Child Restraints for Use in Motor Vehicles. It was approved on behalf of the Council of Standards Australia on 8 October 2004 and on behalf of the Council of Standards New Zealand on 22 October 2004.
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The following are represented on Committee CS-085:

Australian Automobile Association
Australian Automotive Aftermarket Association
Australian Chamber of Commerce and Industry
Australian Competition and Consumer Commission
Australian Industry Group
Australian Retailers Association
Business New Zealand
Certification Interests (Australia)
Commonwealth Department of Transport and Regional Services (Australia)
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-085, Child Restraints for Use in Motor Vehicles, to supersede AS/NZS 1754:2000.

*This Standard incorporates Amendment No. 1 (*December 2004*). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.*

This Standard has undergone a considerable number of changes and revisions. Details of the publishing history can be obtained from Standards Australia's Information Centre (and from Standards New Zealand's Information Centre).

Major changes in this edition include:

(a) Introduction of more rigorous side impact testing including the use of a simulated door.

(b) Change to Type A2 testing to allow the use of a P1½ test dummy with mass increased to 12 kg (achieved by using clothing, shoes, and head and chest transducers).

(c) Labelling requirement for booster cushions stating that the device offers no side impact protection and recommends that the booster cushion should not be used in the outboard seating position.

Statements expressed in mandatory terms in footnotes to tables are deemed to be requirements of this Standard.

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

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FOREWORD

For many years the design and performance criteria specified in the Australia/New Zealand Standard for child restraints (AS/NZS 1754) have been considered the most demanding in the world. In comparison to other published standards, AS/NZS 1754 has additional requirements for dynamic testing including side impact, and inverted impacts for roll over/ejection assessment.

New side impact test

A new dynamic side impact test with a simulated side door has been introduced in this Standard. To comply with the new test, the head of the dummy is not allowed direct contact with the door. Experience with this test has been gained on most child restraints following its use in the Child Restraint Evaluation Program (CREP). Booster cushions (Type E) and child harnesses (Type C) are currently not required to undergo this new test, because there is no practical method of protecting the head in a side impact.

The current side impact test which simulates the child restraint mounted in the centre rear of a vehicle, and which assesses the performance of the harness system to retain the dummy, is retained.

Change in specified dummy

It is a requirement that test dummies used in dynamic testing are no lighter than the maximum recommended mass for the child restraint. The previous edition of this Standard introduced a new Type A2 category of child restraint allowing children up to 12 kg to be rearward facing. At that time the only test dummy available for dynamic testing was the TNO P3 which weighs 15 kg and is too big for some of the child restraints being tested. A more suitable smaller dummy, the TNO P1½, which weighs slightly less than 12 kg, has now been specified for use in the Standard. In order to bring it up to 12 kg, it is fitted with head and chest transducers, and clothed in winter weight clothing.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Child restraint systems for use in motor vehicles

S E C T I O N 1 S C O P E A N D G E N E R A L

1.1 SCOPE

This Standard specifies requirements for restraining devices for child occupants of passenger cars and their derivatives, such devices being intended, when properly selected, correctly installed and correctly adjusted, to reduce the risk of bodily injury in a vehicle impact. The devices may also have application to other types of vehicles.

NOTE: This Standard does not cover child restraints which are an integrated feature of a motor vehicle.

1.2 OBJECTIVE

The objective of the Standard is to provide minimum design, construction and performance requirements for child restraint systems in order to promote the provision of a high level of protection for children travelling in motor vehicles.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS
1753 Webbing for restraining devices for occupants of motor vehicles

2001 Methods of test for textiles
2001.5.4 Method 5.4: Dimensional change—Determination of dimensional change in laundering of textile fabrics and garments—Automatic machine method

2282 Methods for testing flexible cellular polyurethane
2282.8 Method 8: Determination of force deflection

2331 Methods of test for metallic and related coatings
2331.3.1 Method 3.1: Corrosion and related property tests—Neutral salt spray (NSS) test

2700 Colour Standards for general purposes

2755 Textile fabrics—Burning behaviour
2755.2 Method 2: Measurement of flame spread properties of vertically oriented specimens
2755.3 Method 3: Determination of surface burning time

AS/NZS
2465 Unified hexagon bolts, screws and nuts (UNC and UNF threads)

3629 Methods of testing child restraints
3629.1 Method 1: Dynamic testing
3629.2 Method 2: Determination of hazardous throat contact in abnormal situations
3629.3 Method 3: Dynamic testing of upper anchorage components
3629.4 Method 4: Determination of the force required to adjust a harness