

Australian Standard[®]

High chairs—Safety requirements



This Australian Standard® was prepared by Committee CS-003, Safety Requirements for Children's Furniture. It was approved on behalf of the Council of Standards Australia on 25 June 2009.

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The following are represented on Committee CS-003:

- Australian Chamber of Commerce and Industry
 - Australian Competition and Consumer Commission
 - Australian Industry Group
 - Australian Retailers Association
 - Commercial Furniture Industry Association of Australia
 - Consumer Affairs Victoria
 - CHOICE
 - Consumers Federation of Australia
 - Department of Health (South Australia)
 - Department of Tourism, Fair trading and Wine Industry Development, Qld
 - Furntech
 - Infant Nursery Products Association of Australia
 - Office of Fair Trading Department of Commerce, NSW
 - Westmead Children's Hospital
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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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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee CS-003, Safety Requirements for Children's Furniture. 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.

Compliance with this Standard does not guarantee compliance with ASTM F404, ISO 9221, Parts 1 and 2 and EN 14988, Parts 1 and 2 and vice versa. Additional requirements in this Standard include a more effective restraint system incorporating a crotch restraint plus some specific local marking requirements.

The terms 'harness' and 'restraint' can be used interchangeably to mean an assembly of straps round the torso and over the shoulder serving to retain the child in the chair.

The objective of this Standard is to provide regulatory authorities with essential safety requirements for high chairs used in domestic situations, restaurants, nurseries and institutions, and to provide manufacturers with functional durability, stability and performance criteria to meet these safety requirements, in order to reduce the likelihood of deaths or injuries to children using high chairs caused by, but not limited to, falls or strangulation.

The requirements for the restraint system are intended to reduce the hazards associated with high chair use by preventing the child standing in, or sliding under, the harness and falling or slipping out of the high chair. The crotch restraint is intended to prevent the child manoeuvring a leg across the seat so that both legs occupy the same leg hole and thus being able to slide under the harness.

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.

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STANDARDS AUSTRALIA

Australian Standard
High chairs—Safety requirements

1 SCOPE

This Standard specifies safety requirements for freestanding high chairs. These requirements include design, construction, performance, labelling and marking. The Standard is applicable to high chairs that may be converted to low chairs, and reclining chairs. When a chair is convertible to other purposes these additional functions are not covered by this Standard.

The Standard does not deal with accidents or injuries that might result from the interaction of older children with children in the high chair or accidents that might result from abuse or misuse by persons over three years of age.

2 REFERENCED DOCUMENTS

The following Standards are referred to in this Standard:

AS/NZS ISO

- | | |
|--------|---------------------------------------|
| 8124 | Safety of toys |
| 8124.3 | Part 3: Migration of certain elements |

ISO

- | | |
|--------|----------------------------------|
| 9221 | Furniture—Children's high chairs |
| 9221-1 | Part 1: Safety requirements |
| 9221-2 | Part 2: Test methods |

ASTM

- | | |
|------|---|
| F404 | Standard consumer specification for high chairs |
|------|---|

EN

- | | |
|---------|-----------------------------|
| 14988 | Children's high chairs |
| 14988-1 | Part 1: Safety requirements |
| 14988-2 | Part 2: Test methods |

3 DEFINITIONS

For the purpose of this Standard the definitions below apply.

3.1 Quick-release mechanism

A securing device that is released by the application of one force acting in one direction.

3.2 Structural failure

Observed breakage or failure that prevents operation or affects safety as required by this Standard or the relevant parts of the applicable Standard. These could be the ISO, EN or ASTM standard as specified in Clause 4.

4 HIGH CHAIR COMPLIANCE

In addition to Clauses 5, 6, 7, 8, 9 and 10 high chairs shall comply with at least one of the following Standards:

- (a) ISO 9221, Parts 1 and 2.

- (b) ASTM F404.
- (c) EN 14988, Parts 1 and 2.

In case of conflict between the requirements in one of the above Standards and the requirements of this Standard, the requirements in this Standard shall be fully complied with.

5 MIGRATION OF CERTAIN ELEMENTS

All material and coatings that are capable of being sucked, licked, mouthed, swallowed or handled when the child is restrained in the high chair shall comply with the maximum acceptable levels of element migration when tested in accordance with AS/NZS ISO 8124.3.

6 OCCUPANT RETENTION BY SAFETY RESTRAINT

6.1 General requirements

The following requirements and recommendation apply:

- (a) High chairs shall have an integral, permanently attached restraint system that can be adjusted to prevent the child standing in, or slipping out of, the chair. The harness should be able to be adjusted to fit the range of occupants for whom the chair is designed. Typical restraint systems are a 5-point harness, or a full body harness. Typical examples are given in Figures 1 and 2.
- (b) When correctly fitted to the child, the harness shall restrain the child in the designated seating or reclining position.
NOTE: In ASTM F404, this safety restraint section replaces ASTM clauses titled 'Restraint System' and 'Passive Crotch Restraint' and the associated test requirements.
- (c) The buckling device of any safety restraint system shall not include a quick-release mechanism, and shall be constructed so as to prevent removal of the buckling device from the strap.

6.2 Waist straps

Waist straps shall have a minimum width of 20 mm.

Waist straps and fittings for waist straps shall be secured to the frame of a high chair either directly or by their securement to the seat, which shall be secured to the frame of the high chair in such a way that the seat cannot be pulled away from the frame of the high chair by pulling the restraint straps.

6.3 Shoulder straps

Shoulder straps shall have a minimum width of 15 mm and shall comply with either of the following:

- (a) Shoulder straps shall meet the seat back with a maximum distance of 150 mm between their inside edges at the point at which they meet the seat back.
- (b) Shoulder straps shall be attached to an adjustable strap that is incorporated with the front waist strap so as to encircle the child's torso. The shoulder straps shall be joined and shall meet the part of the strap that is adjacent to the child's back in such a way that the straps do not fall off the occupant's shoulder.

NOTE: The intention is to prevent shoulder straps falling off the occupants shoulders but allow forward movement.

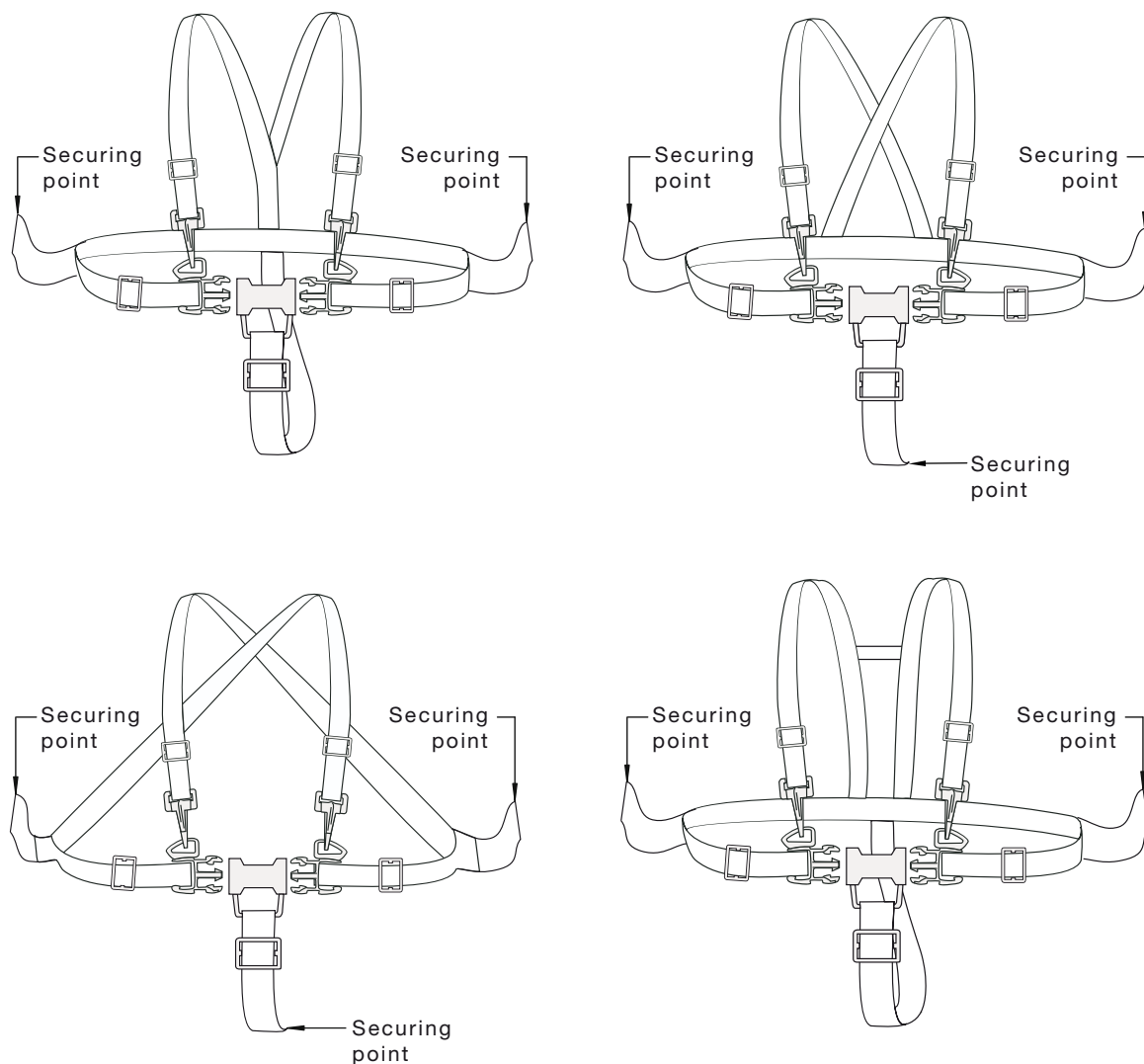


FIGURE 1 EXAMPLES OF 5-POINT HARNESS ASSEMBLY

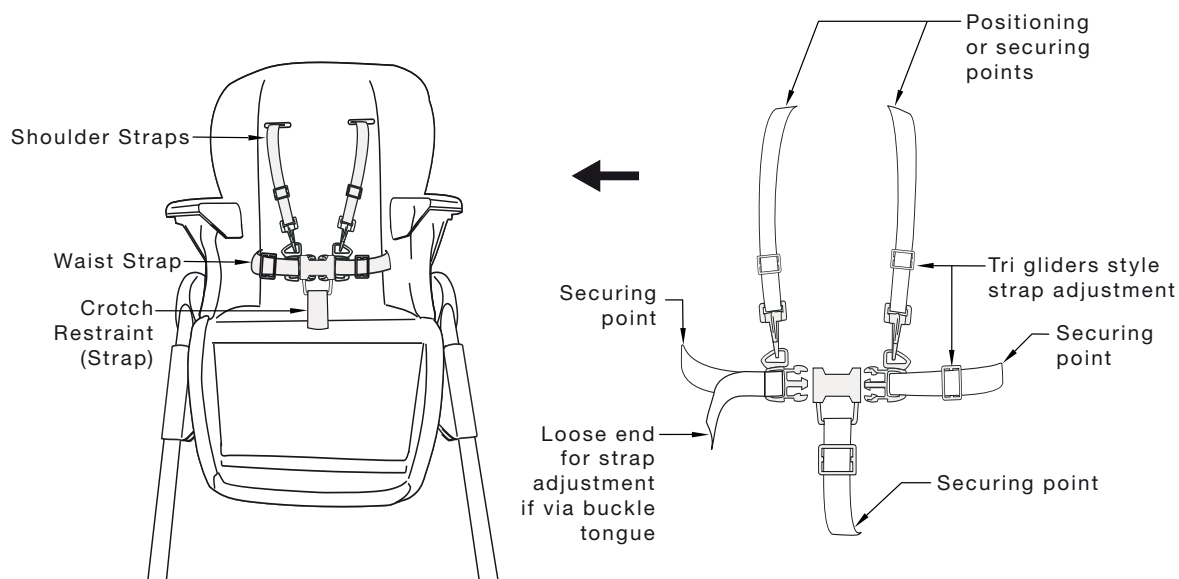


FIGURE 2 EXAMPLE OF A FULL BODY HARNESS

6.4 Crotch restraint

The crotch restraint shall have a minimum width of 20 mm.

When determined in accordance with Appendix A, the test gauge shall touch the crotch restraint.

If the crotch restraint is a strap, one end shall be linked to the front waist strap and the other end shall be secured to the seat. In case of the body harness, one end of the crotch strap shall be linked to the front waist strap and the other end secured to the rear waist strap or to the seat.

6.5 Occupant retention—Performance of safety restraint

When determined in accordance with Appendix B, all components of the restraint system shall show no signs of structural failure, waist and shoulder straps and crotch restraint shall not become unfastened, and any slippage of adjustable straps shall be not more than 6 mm.

7 STABILITY

When tested in accordance with Appendix C the high chair shall not tip over. The high chair shall be tested in all possible configurations of use and with any accessory supplied or recommended by the manufacturer that is likely to reduce stability.

8 CASTORS OR GLIDES

When castors or glides are provided, these shall be limited to one of the following arrangements:

- (a) Two castors.
- (b) Two glides.
- (c) Two castors, both having brakes, and two glides.
- (d) Four castors, of which at least two have brakes.

9 PACKAGING AND INFORMATIVE LABELLING

9.1 General

Packages that are intended to be opened by the consumer shall be so constructed as to minimize the hazards from fasteners during the opening process.

9.2 Flexible plastics packaging

9.2.1 Large packaging

Where the flexible plastics packaging is in the form of a bag or in the form of wrapping that when removed from the package is capable of being formed into a bag that has, or is capable of having, an opening with a circumference of 350 mm or more and a depth of 130 mm or more, both dimensions being measured after the packaging has been stretched to its fullest extent, then the packaging shall either—

- (a) be perforated with round holes of at least 5 mm in diameter, or other shaped holes of equivalent area, so that when the whole of a square test template, measuring 150 mm along each side, is placed anywhere on the packaging, the template will completely cover at least one hole; or
- (b) be made from a plastics material that has a thickness of 38 µm or more and carry a legible cautionary label similar to the following: