

Australian/New Zealand Standard™

Bunk beds and other elevated beds



AS/NZS 4220:2010

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee CS-003, Safety Requirements for Children's Furniture. It was approved on behalf of the Council of Standards Australia on 11 March 2010 and on behalf of the Council of Standards New Zealand on 19 March 2010. This Standard was published on 6 April 2010.

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
Consumer Affairs Victoria
Consumers Federation of Australia
CHOICE
Department of Commerce Consumer Protection
Department of Health (South Australia)
Department of Tourism, Fair trading and Wine Industry Development, Qld
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee CS-003, Safety Requirements for Children's Furniture to supersede AS/NZS 4220:2003. The original edition was motivated by concern expressed by the then South Australian Department of Human Services and Departments of Fair Trading about the number and severity of injuries suffered by children falling from or otherwise injured by bunk beds. Similar concerns had been expressed overseas.

The objective of this Standard is to provide regulatory authorities with safety requirements 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.

The following were the major objectives for this revision:

- (a) To increase the minimum vertical distance between the upper surface of the guardrail and the upper surface of the mattress base to a minimum of 360 mm from the 260 mm specified in the 2003 edition.
- (b) To discourage the creation of large gaps in guardrails in order to prevent the inadvertent formation of dangerous smaller gaps that may arise when a mattress is fitted. Of particular concern were gaps formed where the top, outside edge of the mattress forms the bottom edge of an entrapping space.
- (c) To place a maximum limit on the number of permissible access openings in guardrails.
- (d) To expand and improve the section on climbing access.
- (e) To reduce from 800 mm to 700 mm the maximum height above the floor of the upper surface of the mattress base, i.e. the minimum height at which the provisions of this Standard apply.
- (f) To increase the severity of load testing of guardrails.
- (g) To improve both the accuracy and clarity of the figures used in the Standard.

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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1 SCOPE

This Standard specifies safety requirements for bunk beds and other elevated beds. These include material, construction, design, and performance requirements.

NOTE: Where this Standard uses term 'bunk bed' it includes all beds within the scope of this Standard.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 2281 Flexible cellular polyurethane for seat cushioning and bedding
4685 Playground equipment
4685 Part 1: General safety requirements and test methods

AS/NZS

- 4491 Timber—Glossary of terms in timber-related Standards

AS/NZS ISO

- 8124 Safety of toys
8124.1 Part 1: Safety aspects related to mechanical and physical properties
(ISO 8124-1:2000, MOD)
8124.3 Part 3: Migration of certain elements

3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

3.1 Access device

A rung-type ladder, step-type ladder, or other style of climbing aid provided for any bed in which the upper surface of the mattress base is more than 700 mm from the floor.

3.2 Access opening

Opening in the guardrail that may or may not be accompanied by an access device.

3.3 Bunk bed and elevated bed**3.3.1 Bunk bed**

A set of components that is or can be assembled as beds, one stacked over the other (see Figure 1); or

3.3.2 Elevated bed

Any elevated bed, other than a hospital bed, in which the upper surface of any mattress base is 700 mm or higher above the floor surface.

3.4 Climbing access opening

Opening in the guardrail that accommodates an access device.