172 - 1981 SUPERSEDED BY AS 2172 - 1983 Dup
Under Revision see DR 82138 of Aug 1982

AS 2172—1981
UDC 645.422.004.4

Australian Standard 2172—1981

DROPSIDE COTS FOR DOMESTIC USE
(SAFETY REQUIREMENTS)

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AUSTRALIAN STANDARD

DROPSIDE COTS FOR DOMESTIC USE (SAFETY REQUIREMENTS)

AS 2172—1981

First published 1978
Second edition 1981

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.

ISBN 0 7262 2324 7

11 AUG 1981

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PREFACE

This edition of this standard was prepared by the Association's Committee on Safety Requirements for Children's Furniture to supersede the 1978 edition. It is one of a series of standards prepared at the request of the Consumer Advisory Committee in relation to safety requirements for children's furniture. It is based on the 1981 edition of AS 2130, Metal Dropside Cots for Day Nurseries, Hospitals and Institutions. Others in the series are—

AS 2195 Folding Portable Cots for Use in Domestic Situations and Day Nurseries

AS 2196 Carry Cots and Stands

Dimensions of mattresses for use in institutional and domestic cots will be specified in a standard in course of preparation.

The committee responsible for these standards considered South African Standard SABS 521—1965, Hospital Beds and Cots, Israeli Standard SI 683—1967, Metal Cots for Infants, British Standard BS 1753, Safety Requirements for Children's Cots; and the Canadian Government Regulations covering the advertising, sale and importation of cots. The strength and durability test from the Canadian Regulations has been incorporated in this standard.

Safety aspects covered include the fastening devices for the dropside mechanism and the use of non-toxic materials and coatings.

Dimensions which the committee considered related directly to a child's safety and to the safety and comfort of persons responsible for the care of the child have been specified.

Beyond the foregoing, the standard limits design only to the extent of not permitting cross-bars or decoration between the filling bars which could provide a foothold and thus allow a child to climb out of the cot.

This edition introduces more stringent requirements in relation to the strength and durability of components of cot enclosures, the fixing means used to retain them and testing of the dropside assembly, its guidance and attachment means. A fatality has occurred owing to the failure of a bottom bracket on the dropside of a domestic cot. It is therefore recommended that manufacturers pay special attention to the design of bottom brackets where the rod is not permanently fastened to the bracket, to eliminate the possibility of the dropside floating free owing to deformation of the bracket and detachment of the bottom of the guide rod.

It is strongly recommended that in view of the nature of this standard, manufacturers and purchasers should make use of the scheme operated by the Standards Association of Australia (see Note in Clause 12) whereby the product may bear the certification mark of the SAA.

This standard may require reference to the following Australian standards:

AS 1192 Electroplated Coatings of Nickel and Chromium

AS 1443 Carbon Steels and Carbon-manganese Steels—Bright Bars

AS 1449 Wrought Alloy Steels—Stainless and Heat-resisting Steel Plate, Sheet and Strip

AS 1450 Circular and Non-circular Carbon Steel Tubes for Mechanical and General Engineering Purposes

AS 1580 Methods of Test for Paints and Related Materials
Method 301.1—Non-volatile Content

AS 1627 Code of Practice for Preparation and Pretreatment of Metal Surfaces Prior to Protective Coating
Part 6—Phosphate Treatment of Iron and Steel Surfaces

AS 1647 Children's Toys (Safety Requirements)

AS 1728 Types of Timber Surfaces

AS 1866 Wrought Aluminium and Aluminium Alloy Extruded Rod, Bar, Solid and Hollow Shapes for General Engineering Purposes

AS 1867 Wrought Aluminium and Aluminium Alloy Drawn Tubes for General Engineering Purposes

AS 1956 Anodic Oxidation Coatings on Aluminium for Decorative and Automotive Applications

AS 1961 Industrial Wheels and Castors (Dimensions and Capacities)

AS 2098 Methods of Test for Veneer and Plywood
2098.2—Bond Quality of Plywood (Chisel Test)

AS K88 Synthetic Resin Adhesives for Plywood (Phenolic and Aminoplastic)

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STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard for DROPSIDE COTS FOR DOMESTIC USE (SAFETY REQUIREMENTS)

1 SCOPE. This standard specifies requirements for dropside cots relating to the safety and welfare of babies and children, and performance tests to establish the stability and durability of cot construction.

2 APPLICATION. The standard is applicable to metal and timber cots for use in domestic situations.

3 DEFINITIONS. For the purpose of this standard the following definitions apply:

Depth—the measurement vertically from the top of the mattress-base frame to the top of the dropside in its fully raised position.

Dropside—the side panel of the cot, so constructed and incorporated into the cot that it slides up and down in a vertical plane.

Filling bars—the vertical rods or bars and panels in the end or side frames of the cot.

Mattress-base frame—the framework for the mattress seat.

Mattress seat—the filling of the mattress-base frame which supports the mattress.

Non-volatile content—that portion of a paint or tinter as determined by the method laid down in Method 301.1 of AS 1580.

Soluble—that which is capable of being dissolved by the method described in Appendix B.

4 DIMENSIONS. The following dimensions relating to the safety of babies and children shall apply:

(a) Depth of cot ..... 600 mm min.

(b) Space between filling bars .... 60 mm min. 90 mm max.

(c) Distance, measured vertically, from the horizontal plane of the mattress-base frame to the lower edges of the side and end frames (see Fig. 1) ..... 30 mm max.

(d) Space between the mattress-base frame and bottom rail of dropside or end frames, measured horizontally (see Fig. 1) ..... 15 mm max.

(e) Diameter of filling bars—
(i) Metal: Steel.....6 mm min.
.....12 mm max.
Aluminium .....12 mm min.
(ii) Wood .....12 mm min.

(f) Wooden slats ..... 32 mm × 8 mm min.

(g) Wooden horizontal members .....20 mm × 42 mm min.

(h) Wooden corner posts.. 32 mm × 42 mm min.

NOTE: Timber sizes are minimum finished.

Where castors are fitted they shall be not less than 30 mm and not more than 50 mm in diameter.

5 MATERIALS.

5.1 Toxicity. Only materials known to be non-toxic to a child shall be used.

5.2 Metals.

5.2.1 *General.* All metal parts, including springs, nuts, bolts and washers shall either be made of corrosion-resistant material or be protected against corrosion. Where two or more metals are in contact, the galvanic potential difference shall not exceed 0.5 V.

5.2.2 *Aluminium alloy.* Aluminium alloy sections or tubes shall be manufactured either from Alloy 6061, Temper T6, or Alloy 6063, Tempers T5 and T6 specified in AS 1866, or from Alloy 6061, Tempers T6 and T8, or Alloy 6063, Tempers T6, T81, T82 and T83, specified in AS 1867.

5.2.3 *Carbon steel.* Carbon steel sections or tubes shall be manufactured from steel complying with the requirements for Grade 17 specified in AS 1450; bars shall be manufactured from steel complying with the requirements for Grade S3 specified in AS 1443.

5.2.4 *Stainless steel.* Stainless steel sections, tubes or plate shall be manufactured from stainless steel complying with the requirements for Grade 302 specified in AS 1449.

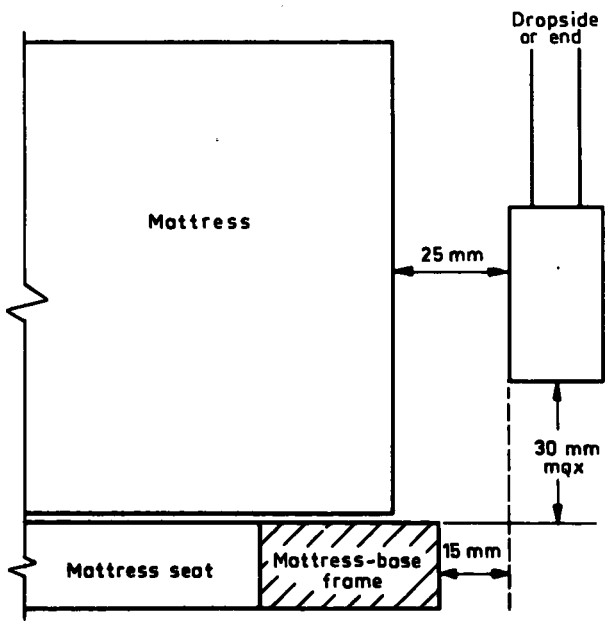

Fig. 1. DIMENSIONS BETWEEN MATTRESS-BASE FRAME AND COT SIDES AND ENDS

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