AS 3996—1992

# Australian Standard®

# Metal access covers, road grates and frames

This Australian Standard was prepared by Committee CE/29, Access Covers and Road Grates. It was approved on behalf of the Council of Standards Australia on 25 November 1991 and published on 16 March 1992.

The following interests are represented on Committee CE/29:

Association of Consulting Engineers, Australia

Australian Foundry Institute

Australian Local Government Engineers Association

Australian Precast Concrete Manufacturers Association

AUSTROADS

Board of Works, Melbourne

Confederation of Australian Industry

Metal Trades Industry Association of Australia

Water Authority of Western Australia

Water Board, Sydney-Illawarra-Blue Mountains

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#### PREFACE

This Standard was prepared by the Standards Australia Committee on Access Covers and Road Grates. Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

#### CONTENTS

		Page
SECTIO	N 1 SCOPE AND GENERAL	
$     \begin{array}{r}       1.1 \\       1.2 \\       1.3 \\       1.4 \\       1.5 \\       1.6 \\       \end{array} $	SCOPE REFERENCED DOCUMENTS USE OF ALTERNATIVE MATERIALS DEFINITIONS CLASSIFICATION AND TYPE MARKING	3 3 4 4
SECTIO	N 2 MATERIALS	
2.1 2.2 2.3 2.4 2.5 2.6 2.7	GENERAL	6 6 6 6
SECTIO	N 3 DESIGN CONSIDERATIONS	
3.1 3.2 3.3	DESIGN LOADS DESIGN FEATURES DIMENSIONS	. 7
SECTIO	N 4 COMPLIANCE AND TESTING	
4.1 4.2	GENERAL REQUIREMENTS	12 12
APPEND	VICES	
A B C D E F	PURCHASING GUIDELINESMETHODS FOR DEMONSTRATING COMPLIANCE WITH THIS STANDARDMETHODS OF LOAD TESTING FOR COVERS AND GRATESMETHOD OF TESTING COVERS AND GRATES FOR BICYCLE SAFETYMETHOD OF TESTING COVERS FOR WATERTIGHTNESSMETHOD OF TESTING COVERS FOR GASTIGHTNESS	14 15 16 19 20 21

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## STANDARDS AUSTRALIA

### Australian Standard

### Metal access covers, road grates and frames

## SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard sets out the requirements for access covers, inspection covers, road grates, and frames which are intended for use in drainage structures for the conveyance of sewage and stormwater, and for utilities.

It applies to components manufactured from iron castings and fabricated mild steel.

This Standard excludes inspection covers and grates with clear openings of less than 450 mm  $\times$  450 mm or 450 mm diameter, or greater than  $1.3 \text{ m} \times 1.3 \text{ m}$  or 1.3 m diameter.

- NOTES
- 1 Guidelines to purchasers on information needing to be supplied at the time of calling for tenders or quotations are detailed in Appendix A.
- 2 Alternative means for determining compliance with this Standard are given in Appendix B.
- **1.2 REFERENCED DOCUMENTS** The following documents are referred to in this Standard:
- AS

	1111	ISO metric hexagon commercial bolts and screws
	1112	ISO metric hexagon nuts, including thin nuts, slotted nuts and castle nuts
	1199	Sampling procedures and tables for inspection by attributes
	1275	Metric screw threads for fasteners
	1379	Ready-mixed concrete
	1399	Guide to AS 1199—Sampling procedures and tables for inspection by attributes
	1554 1554.1	Structural steel welding Part 1: Welding of steel structures
	1627 1627.4 1627.5	Metal finishing—Preparation and pretreatment of surfaces Part 4: Abrasive blast cleaning Part 5: Pickling steel surfaces
	1650	Hot-dipped galvanized coatings on ferrous articles
	1830	Iron castings—Grey cast iron
	1831	Iron castings—Spheroidal or nodular graphite cast iron
	2193	Methods for calibration and grading of force-measuring systems of testing machines
	2837	Wrought alloy steels-Stainless steel bars and semi-finished products
	3678	Hot-rolled structural steel plates, floorplates and slabs
	3679 3679.1	Structural steel Part 1: Hot-rolled bars and sections
	3900	Quality systems—Guide to selection and use
	3904	Quality management and quality system elements
	SAA HB18 HB18.44	Guidelines for third-party certification and accreditation Guide 44—General rules for ISO or IEC international third-party certification schemes for products
	BS 3416	Specification for bitumen-based coatings for cold application, suitable for use in contact with potable water
	4147	Specification for bitumen-based hot-applied coating materials for protecting iron and steel, including suitable primers where required
AUSTROADS Bridge design specification		

**1.3 USE OF ALTERNATIVE MATERIALS** 

1.3.1 General Provided that the requirements of Clause 2.7 and Sections 3 and 4 are met, this Standard shall not be interpreted so as to prevent the use of materials or methods of manufacture not specifically referred to herein.



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