

Australian Standard[®]

**Elastomeric seals—Material
requirements for pipe joint seals used in
water and drainage applications**

**Part 3: Cellular materials of vulcanized
rubber**



This Australian Standard® was prepared by Committee WS-010, Flexible Jointing Gaskets. It was approved on behalf of the Council of Standards Australia on 3 July 2007. This Standard was published on 5 February 2008.

The following are represented on Committee WS-010:

- Australasian Plastics and Rubber Institute
 - Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Certification Interests (Australia)
 - Plastics Industry Pipe Association of Australia
 - Rubber Manufacturers Association of Australasia
 - Water Services Association of Australia
-

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PREFACE

This Standard was prepared by the Standards Australia Committee WS-010, Flexible Jointing Gaskets to set out requirements for a wide range of thermoplastic elastomer and thermoplastic vulcanised seals used in gravity sewerage, drainage and rainwater harvesting systems, including the material requirements for specific application.

This Standard is identical with, and has been reproduced from EN 681-3—2000, *Elastomeric seals—Material requirements for pipe joint seals used in water and drainage applications, Part 3: Cellular materials of vulcanized rubber*.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text ‘EN 681-3’ should read ‘AS 681.3’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.
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References to International Standards should be replaced by references to Australian Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
37	Rubber, vulcanized or thermoplastic—Determination of tensile stress-strain properties	1683	Methods of test for elastomers
		1683.11	Tension testing of vulcanized or thermoplastic rubber
188	Rubber, vulcanized or thermoplastic—Accelerated ageing and heat resistance tests	1683.26	Rubber, vulcanized or thermoplastic—Accelerated ageing and heat resistance tests
471	Rubber—Temperatures, humidities and times for conditioning and testing	1683.20	Standard temperatures, humidities and times for conditioning and testing
1431-1	Rubber, vulcanized or thermoplastic; resistance to ozone cracking; Part 1: static strain test	1683.24	Methods of test for rubber—Determination of the resistance of vulcanized or thermoplastic rubbers to ozone cracking—Static strain test
1817	Rubber, vulcanized—Determination of the effect of liquids	1683.23	Rubber—Vulcanized—Determination of resistance to liquids
2859-1	Sampling procedures for inspection by attributes—Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	1199	Sampling procedures for inspection by attributes
		1199.1	Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection
3951	Sampling procedures and charts for inspection by variables for percent nonconforming	2490	Sampling procedures and charts for inspection by variables for percent nonconforming

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STANDARDS AUSTRALIA

Australian Standard

Elastomeric seals—Material requirements for pipe joint seals used in water and drainage applications

Part 3: Cellular materials of vulcanized rubber

1 Scope

This standard specifies requirements for materials used in vulcanized rubber seals of cellular materials for non-pressurized drainage, sewerage and rainwater systems and non-pressure non-potable water supply (continuous flow up to 45 °C).

General requirements for the finished joint seals are also given; any additional requirements called for by the particular application are specified in the relevant product standards taking into account that the performance of pipe joints is a function of the seal material properties, seal geometry and pipe joint design.

This standard is applicable to joint seals for pipeline materials of vitrified clay, fibre cement, concrete, reinforced concrete, plastics and glass-reinforced plastics.

Joint seals made with an enclosed void as part of their design are included in the scope of this European Standard.

2 Normative references

This European Standard incorporates by dated or undated references, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ISO 37,	<i>Rubber, vulcanized or thermoplastic - Determination of tensile stress-strain properties</i>
ISO 188,	<i>Rubber, vulcanized - Accelerated ageing or heat-resistance tests</i>
ISO 471,	<i>Rubber - Temperatures, humidities and times for conditioning and testing</i>
ISO 815,	<i>Rubber, vulcanized or thermoplastic - Determination of compression set at ambient, elevated or low temperatures</i>
ISO 1431-1,	<i>Rubber, vulcanized or thermoplastic - Resistance to ozone cracking - Part 1: Static strain test</i>