



**Plain washers for metric bolts, screws
and nuts for general purposes**

Part 1: General plan



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- Australian Chamber of Commerce and Industry
 - Australian Industry Group
 - Australian Institute of Steel Construction
 - Bureau of Steel Manufacturers of Australia
 - Electricity Supply Association of Australia
 - Federal Chamber of Automotive Industries
 - Institute of Materials Engineering Australasia
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Australian Standard[®]

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Originally as part of AS 1237—1973.
Revised and redesignated in part as AS 1237.1—2002.
Revised incorporating Amendment No. 1 (April 2015).

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-029, Fasteners to supersede AS 1237—1973, *Flat metal washers for general engineering purposes (metric series)*, in part.

This Standard incorporates Amendment No. 1 (April 2015). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to provide manufacturers, suppliers and users with the nominal dimensions for plain washers, product grades A and C for use with metric general-purpose bolts, screws and nuts with nominal thread diameters from 1 mm to 150 mm inclusive.

This Standard is identical with and has been reproduced from ISO 887:2000, *Plain washers for metric bolts, screws and nuts for general purposes—General plan* and Corrigendum 1 (2006), which follows the main source text.

The term ‘informative’ has been used in this Standard to define the application of the annex to which it applies. An ‘informative’ annex is only for information and guidance.

Attention is drawn to the possibility that some of the elements of this Standard may be the subject of patent rights. Standards Australia shall not be held responsible for identifying any or all such patent rights.

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- (a) Its number does not appear on each page of text and its identify is shown only on the cover and title page.
- (b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

There are no equivalent Australian Standards to the normative reference given in Clause 2 and the International Standards given in Table 3 of AS 1237.2, *Plain washers for metric bolts, screws and nuts for general purposes, Part 2: Tolerances*, which is identical with and has been reproduced from ISO 4759-3, which is referred to in Clause 6.

AUSTRALIAN STANDARD

Plain washers for metric bolts, screws and nuts for general purposes

Part 1:

General plan

1 Scope

This International Standard specifies the full range of the nominal dimensions of product-grade-A and -C plain washers for general-purpose bolts, screws and nuts of nominal thread diameters ranging from 1 mm to 150 mm inclusive.

This International Standard is not applicable to washers for screw and washer assemblies in relation to hole diameters and thicknesses.

Information on the use of plain washers is given in annex A.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 273:1979, *Fasteners — Clearance holes for bolts and screws*.

3 Clearance holes

The clearance hole diameters d_1 for washers (see Figure 1) shall be chosen in accordance with those specified in ISO 273, as follows:

- fine series for washers of product grade A and with a nominal thickness of less than 6 mm, i.e. for nominal sizes < 39 mm;
- medium series for washers of product grade A with a nominal thickness equal to or greater than 6 mm, i.e. for nominal sizes ≥ 39 mm and for washers of product grade C.

NOTE The tolerances for clearance holes given in ISO 273 for information are not applicable to plain washers of product grades A and C; see clause 6.