

AS 1576.2—1991

Australian Standard[®]

Scaffolding

Part 2: Couplers and accessories

This Standard was prepared by Committee BD/36, Scaffolding. It was approved on behalf of the Council of Standards on 21 August 1991 and published on 7 October 1991.

The following interests are represented on Committee BD/36:

A.C.T. Administration, Office of City Management
Aluminium Development Council
Australian Federation of Construction Contractors
Confederation of Australian Industry
Department of Industrial Affairs, Qld
Department of Labour and Industry, Tas.
Department of Labour, S.A.
Department of Labour, Vic.
Department of Occupational Health Safety and Welfare, W.A.
Master Builders Construction and Housing Association Australia
Metal Trades Industry Association of Australia
National Association of Scaffolding and Formwork Contractors
Workcover Authority, N.S.W.
Work Health Authority, N.T.

Review of Australian Standards. To keep abreast of progress in industry, Australian Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

All details of all Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Australian Standards, addressed to the head office of Standards Australia, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

Australian Standard[®]

Scaffolding

Part 2: Couplers and accessories

First published as part of AS 1575—1974.
Revised and redesignated in part as AS 1576.2—1991.

Incorporating:
Amdt 1—1992

PREFACE

This Standard was prepared by the Standards Australia Committee on Scaffolding, to supersede (in part) AS 1575—1974, *Tubes, couplers and accessories used in metal scaffolding*, which will be withdrawn on June 30, 1992.

This edition incorporates the following major changes from the previous edition:

- (a) Minimum material requirements are given for aluminium.
- (b) Changes to the general design requirements for couplers.
- (c) The design and performance requirements for adjustable legs has replaced those requirements for adjustable baseplates.
- (d) A limit has been placed on the distortion of a tube when tested with a coupler.

Requirements for steel tube and aluminium tube are incorporated in AS 1576.3.

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	4
1.2 REFERENCED DOCUMENTS	4
1.3 DEFINITIONS	4
1.4 MARKETING	5
SECTION 2 MATERIALS	
2.1 PROPERTIES	6
2.2 STEEL	6
2.3 ALUMINIUM	7
SECTION 3 DESIGN REQUIREMENTS	
3.1 GENERAL	7
3.2 COUPLERS	7
3.3 ACCESSORIES	7
SECTION 4 PERFORMANCE REQUIREMENTS	
4.1 COUPLERS	10
4.2 ADJUSTABLE LEG	10
4.3 ADJUSTABLE BASEPLATE	10
4.4 CASTOR	10
4.5 PUTLOG BLADE	10
4.6 FLANGE CLAMP	10
APPENDICES	
A SLIP TEST FOR RIGHT-ANGLE AND SWIVEL COUPLER	11
B DISTORTION TEST FOR RIGHT-ANGLE AND SWIVEL COUPLER ...	13
C STRENGTH TEST FOR SWIVEL AND PUTLOG COUPLER	15
D SLIP TEST FOR PUTLOG COUPLER	17
E SLIP TEST FOR END-TO-END COUPLER	19
F SPLICING TEST FOR PARALLEL COUPLERS	21
G TEST FOR ADJUSTABLE LEG AND ADJUSTABLE BASEPLATE	23
H TEST FOR CASTOR	25
I TEST FOR PUTLOG BLADE	26
J STRENGTH TEST FOR FLANGE CLAMP	28
K SLIP TEST THROUGH RIGID AND SWIVEL FLANGE CLAMPS	30
L SLIP TEST OF RIGID AND SWIVEL FLANGE CLAMPS	32

STANDARDS AUSTRALIA

Australian Standard
Scaffolding

Part 2: Couplers and accessories

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for couplers and accessories for light, medium and heavy duty scaffolding, in accordance with AS 1576.1.

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 |
| 1237 | Flat metal washers for general engineering purposes (metric series) |
| 1444 | Wrought alloy steels—Standard and hardenability (H) series |
| 1576 | Scaffolding |
| 1576.1 | Part 1: General requirements |
| 1594 | Hot-rolled low carbon steel plate, sheet and strip |
| 1734 | Aluminium and aluminium alloys—Flat sheet, coiled sheet and plate |
| 1866 | Aluminium and aluminium alloys—Extruded rod, bar, solid and hollow shapes |
| 1874 | Aluminium and aluminium alloys—Ingots and castings |
| 3678 | Hot-rolled structural steel plate floor plate and slabs |
| 3679 | Hot-rolled structural steel bars and sections |

1.3 DEFINITIONS For the purpose of this Standard the definitions given in AS 1576.1 and those below apply.

1.3.1 Adjustable baseplate—a baseplate embodying an adjustable leg.

1.3.2 Adjustable castor—a castor incorporating a height-adjusting device that fits inside the standard or vertical member of a scaffold.

1.3.3 Adjustable leg—a threaded bar or tube with nut, designed to fit inside a standard to support the load from a standard, and which is for levelling purposes, in conjunction with a baseplate, forkhead or castor.

1.3.4 Coupler—a fitting which joins two tubes.

1.3.5 End-to-end coupler—a coupler for joining two tubes end-to-end.

1.3.6 Flange clamp—a load-bearing clamp for connecting a tube to the flange of a structural member. Flange clamp may be rigid or swivelling.

1.3.7 Fork head—a U-shaped housing to support and locate a standard over a bearer or a bearer over a standard. A fork head may be fixed or adjustable.

1.3.8 Joint pin—an internal end-to-end coupler for joining two tubes.

1.3.9 Parallel coupler—a load-bearing coupler for making a lap or spliced joint between two tubes.

1.3.10 Pintle—a projection at the top of the castor used to locate the vertical members of the mobile scaffold frame.

1.3.11 Putlog coupler—a coupler for fixing a putlog to a ledger.

1.3.12 Putlog blade—a fitting that is fixed to the end of a putlog permitting it to be located and supported in a joint of a wall.

1.3.13 Right-angle coupler—a non-swivel load-bearing coupler, other than a putlog coupler, for connection two tubes at right angles.

1.3.14 Sleeve coupler—an external end-to-end coupler for joining two tubes.

1.3.15 Swivel coupler—a coupler for connecting two tubes at any angle.