AS/NZS 1576.3:1995

# Australian/New Zealand Standard

Scaffolding

Part 3: Prefabricated and tube-and-coupler scaffolding

#### AS/NZS 1576.3:1995

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD/36, Scaffolding. It was approved on behalf of the Council of Standards Australia on 24 October 1994 and on behalf of the Council of Standards New Zealand on 7 November 1994. It was published on 5 January 1995.

The following interests are represented on Committee BD/36:

A.C.T. Occupational Health and Safety Office Aluminium Development Council, Australia Australian Chamber of Commerce and Industry Australian Institute of Building Surveyors Department of Employment, Vocational Education, Training and Industrial Relations, Qld Department of Labour, New Zealand Department of Occupational Health, Safety and Welfare, W.A. Master Builders Australia Metal Trades Industry Association of Australia National Association of Scaffolding and Formwork Contractors, Australia New Zealand Contractors Federation New Zealand Engineering Federation Occupational Health and Safety Authority, Vic. Tasmania Development and Resources Work Health Authority, N.T. WorkCOver Authority, N.S.W.

**Review of Standards.** To keep abreast of progress in industry, Joint Australian/New Zealand 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.

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which subscribing members receive, and which give details of new publications, new editions and amendments, and of withdrawn Standards.

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

# Australian/New Zealand Standard

## Scaffolding

## Part 3: Prefabricated and tube-and-coupler scaffolding

First published as part of AS 1575—1974. AS 1576 first published 1974. AS 1575—1974 and AS 1576—1974 revised,

amalgamated and redesignated in part as

- AS 1576.3—1991.
- Jointly revised and designated as Joint Standard AS/NZS 1576.3:1995.

STANDARDS AUSTRALIA 1 The Crescent, Homebush NSW 2140 Australia

STANDARDS NEW ZEALAND Level 10, Standards House, 155 The Terrace, Wellington 6001 New Zealand

#### PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/36 on Scaffolding to supersede AS 1576.3—1991. It is issued as a joint Standard under the terms of the Active Cooperation Agreement between Standards Australia and Standards New Zealand.

This series incorporates the following major changes from the 1991 edition:

- (a) The referenced Standards have been updated.
- (b) Clauses 3.3, 4.2.4 and 4.2.5 have been amended.
- (c) The formulae in Items A4(b)(i) and B4(b)(i) and Figures A1 and B1 have been corrected.
- (d) Paragraph C4 of Appendix C has been amended.
- (e) Much of Appendix D, including Figure D1, has been amended.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

#### © Copyright — STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND Users of Standards are reminded that copyright subsists in all Standards Australia and Standards New Zealand publications and software. Except where the

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

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

Inclusion of copyright material in computer software programs is also permitted without 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 or Standards New Zealand at any time.

## CONTENTS

### Page

SECT	ION 1 SCOPE AND GENERAL	
1.1	SCOPE	4
1.2	REFERENCED DOCUMENTS	4
1.3	NEW MATERIALS AND METHODS	5
1.4	DEFINITIONS	5
1.5	TYPES OF PREFABRICATED SCAFFOLDING	6
1.6	INFORMATION FROM SUPPLIER	6
SECT	ION 2 MATERIALS AND COMPONENTS	
2.1	CAST STEEL COMPONENTS	10
2.2	CAST IRON COMPONENTS	10
2.3	ALUMINIUM	10
2.4	STEEL TUBE	10
2.5	ALUMINIUM TUBE	11
2.6	TUBE DIAMETERS	11
2.7	COUPLERS AND ACCESSORIES	11
2.8	STRUCTURAL PLYWOOD	11
SECT	ION 3 SPECIFIC REQUIREMENTS	
3.1	MODULAR SCAFFOLDING	12
3.2	FRAME SCAFFOLDING	12
3.3	STABILITY OF FREESTANDING SCAFFOLD	12
3.4	PREFABRICATED PLATFORM	12
3.5	MOBILE SCAFFOLDS	12
SECT	ION 4 PERFORMANCE REQUIREMENTS	
4.1	GENERAL	13
4.2	TESTING	13
APPE	NDICES	
А	TEST ON ASSEMBLED TOWER	14
В	TEST ON ASSEMBLED FRAME, MODULAR AND TUBE–AND–COUPLER SCAFFOLD	17
С	TEST ON LOAD–BEARING COMPONENTS	20
D	STIFFNESS TEST ON ASSEMBLED FREESTANDING SCAFFOLDS	22
E	TEST OF PREFABRICATED PLATFORM UNIT	24

#### STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

## Australian/New Zealand Standard Scaffolding

Part 3: Prefabricated and tube-and-coupler scaffolding

SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard specifies performance requirements for prefabricated and tube-and-coupler scaffolding. It is to be read in conjunction with AS/NZS 1576.1.

**1.2 REFERENCED DOCUMENTS** The following documents are referred to in this Standard:

AS 1163 Structural steel hollow sections 1444 Wrought alloy steels-Standard and hardenability (H) series 1576 Scaffolding Part 2: Couplers and accessories 1576.2\* 1594 Hot-rolled steel flat products 1650\* Hot-dipped galvanized coatings on ferrous articles 1664 Rules for the use of aluminium in structures 1734\* Aluminium and aluminium alloys-Flat sheet, coiled sheet and plate 1831\* Iron castings-Spheroidal or nodular graphite cast iron 1832\* Iron castings-Malleable cast iron 1833\* Iron castings-Austenitic cast iron 1866\* Aluminium and aluminium alloys—Extruded rod, bar, solid and hollow shapes 1874\* Aluminium and aluminium alloys-Ingots and castings 2074\* Steel castings 2269 Structural plywood 2848 Aluminium and aluminium alloys-Compositions and designations Part 1: Wrought products 2848.1 3678\* Structural steel-Hot-rolled plates, floorplates and slabs 3679 Structural steel Part 1: Hot-rolled bars and sections 3679.1\* AS/NZS 1576 Scaffolding Part 1: General requirements 1576.1

<sup>\*</sup> New Zealand has declared this to be a harmonized Standard with an NZS/AS designation.



# The remainder of this document is available for purchase online at <u>www.saiglobal.com/shop</u>

SAI Global also carries a wide range of publications from a wide variety of Standards Publishers:















Click on the logos to search the database online.