

# Australian/New Zealand Standard™

## Scaffolding

### Part 1: General requirements



## **AS/NZS 1576.1:2010**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee BD-036, Scaffolding. It was approved on behalf of the Council of Standards Australia on 2 October 2009 and on behalf of the Council of Standards New Zealand on 5 March 2010.

This Standard was published on 19 March 2010.

---

The following are represented on Committee BD-036:

ACT WorkCover  
Australian Aluminium Council  
Australian Chamber of Commerce and Industry  
Australian Council of Trade Unions  
Australian Industry Group  
Construction Safety Managers and Officers Association  
Department of Industries and Business NT  
Department of Infrastructure, Energy and Resources (Tasmania)  
Department of Labour New Zealand  
Engineers Australia  
Housing Industry Association  
Labour Council of New South Wales  
Master Builders Australia  
New Zealand Contractors Federation  
New Zealand Employers and Manufacturers Association  
Plywood Association of Australasia  
Scaffolding and Rigging Association New Zealand  
Scaffolding Association (Qld)  
Scaffolding, Rigging and Industrial Rope Access Industries Training  
Victorian WorkCover Authority  
WorkCover New South Wales

---

### **Keeping Standards up-to-date**

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at [www.saiglobal.com.au](http://www.saiglobal.com.au) or Standards New Zealand web site at [www.standards.co.nz](http://www.standards.co.nz) and looking up the relevant Standard in the on-line catalogue.

For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

---

*This Standard was issued in draft form for comment as DR 04429.*

---

# Australian/New Zealand Standard™

## Scaffolding

### Part 1: General requirements

Originally published as AS 1576—1974.  
Revised and redesignated in part as AS 1576.1—1991.  
Jointly revised and designated as AS/NZS 1576.1:1995.  
Second edition 2010.

#### **COPYRIGHT**

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6140

ISBN 978 0 7337 9435 3

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD-036, Scaffolding, to supersede AS/NZS 1576.1:1995.

The scaffolding series of Standards comprises the following:

### AS

- 1576 Scaffolding
- 1576.4 Part 4: Suspended scaffolding

### AS/NZS

- 1576 Scaffolding
- 1576.1 Part 1: General requirements (this Standard)
- 1576.2 Part 2: Couplers and accessories
- 1576.3 Part 3: Prefabricated and tube-and-coupler scaffolding
- 1576.5 Part 5: Prefabricated splitheads and trestles
- 1576.6 Part 6: Metal tube-and-coupler scaffolding—Deemed to comply with AS/NZS 1576.3

The objective of this Standard is to provide users, manufacturers and designers of scaffolding systems with acceptable unified rules for the design and detailing of scaffolding systems using the principles of engineering design as detailed in this Standard.

This edition incorporates all advances made in the scaffolding industry so as to bring all users and designers up to date with the current scaffold systems used in the workplace.

Scaffolding required to also act as roof edge protection is now linked to AS/NZS 4994.1, Loadings.

This edition incorporates the following major changes to the 1995 edition:

- (a) An expanded list of defined terms, including additional definitions qualifying the term 'bay'.
- (b) An expanded listing of the types of scaffold.
- (c) Inclusion of limit state design principles.
- (d) Expanded design requirements for stair access systems.
- (e) The addition of commentary on some clauses to clarify the intent of those clauses.
- (f) A redefinition of 'special duty' category.
- (g) Reference to revised AS/NZS 1170 (all parts).
- (h) Revised edge protection requirements.
- (i) Guidance in the form of flow charts for the design of components and design check of erected scaffold in Appendices B and C respectively.
- (j) The inclusion of void scaffolds.
- (k) A new category—minor scaffolds.
- (l) Requirements for materials and components from AS/NZS 1576.3 are included and expanded upon.
- (m) Requirements for marking and product information are included.
- (n) Changes to bay dimensions relating to duty ratings.
- (o) Trestle ladders are also covered by the Scope.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

*This Standard incorporates a Commentary on some Clauses. The Commentary directly follows the relevant clause, is designated by ‘C’ preceding the clause number and is printed in italics in a panel. The Commentary is intended to help readers understand the background to the clause but does not form part of the clause.*

## CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE .....	5
1.2 NORMATIVE REFERENCES .....	5
1.3 DEFINITIONS .....	7
1.4 TYPES OF SCAFFOLD .....	13
1.5 MARKING OF SCAFFOLDING EQUIPMENT .....	14
1.6 PRODUCT INFORMATION .....	15
1.7 ALTERNATIVE DESIGN METHODS AND MATERIALS .....	16
SECTION 2 DESIGN REQUIREMENTS	
2.1 SCOPE OF SECTION .....	17
2.2 DESIGN METHODS .....	17
2.3 MATERIAL AND TUBE COMBINATIONS .....	18
2.4 SYSTEM COMBINATIONS .....	18
2.5 ACTIONS .....	19
2.6 INSTALLATION DESIGN .....	27
2.7 COMBINATIONS OF ACTIONS .....	28
2.8 DESIGN CONSIDERATIONS .....	31
2.9 SUPPORTING STRUCTURE .....	36
2.10 CHECK COUPLERS .....	37
SECTION 3 OPERATIONAL REQUIREMENTS	
3.1 SCOPE OF SECTION .....	38
3.2 ERECTION TOLERANCE .....	38
3.3 SOLEPLATES .....	38
3.4 PLATFORMS .....	38
3.5 WORKING PLATFORM .....	39
3.6 BAY EXTENSION PLATFORM .....	40
3.7 BAY AND PLATFORM DIMENSIONS .....	42
3.8 SLOPE OF PLATFORMS .....	43
3.9 CATCH PLATFORMS .....	43
3.10 EDGE PROTECTION .....	43
3.11 ACCESS .....	48
3.12 ADDITIONAL REQUIREMENTS FOR MOBILE SCAFFOLDS .....	52
3.13 ADDITIONAL REQUIREMENTS FOR MINOR SCAFFOLDS .....	53
3.14 MINOR SCAFFOLD SUPPORTS .....	53
3.15 STABILITY AND RIGIDITY OF A MINOR SCAFFOLD .....	54
3.16 WHEELED MOVEMENT OF UNLOADED MINOR SCAFFOLDS .....	54
3.17 COMPONENT MODIFICATION .....	54
3.18 TUBE EXTENSION .....	54
APPENDICES	
A MATERIALS AND DESIGN CONSIDERATIONS—GENERAL SCAFFOLDS ....	55
B MATERIALS, DESIGN CONSIDERATIONS AND MANUFACTURE— MINOR SCAFFOLDS .....	59
C FLOWCHART FOR DESIGN OF NEW COMPONENTS OR A GROUP OF COMPONENTS .....	61
D FLOWCHART FOR STRUCTURAL DESIGN CHECK OF A SCAFFOLD .....	62
BIBLIOGRAPHY .....	64

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

\_\_\_\_\_  
**Australian/New Zealand Standard**  
**Scaffolding**  
 \_\_\_\_\_

\_\_\_\_\_  
**Part 1: General requirements**  
 \_\_\_\_\_

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard sets out design and operational requirements for scaffolding systems, scaffolding equipment and scaffolds. It also includes the specifications for catch platforms erected on scaffolds. The stairway details also apply to temporary stairways for use on a general construction site.

Where specified, particular requirements of other parts of this series of Standards will take precedence over specific requirements of this Part.

**WARNING: THE USE OF STANDARDS FROM ANOTHER COUNTRY WHEN IMPORTING SCAFFOLDING EQUIPMENT AND/OR COMPONENTS MAY NOT RESULT IN COMPLIANCE WITH AS/NZS 1576 SERIES. DESIGN, PERFORMANCE AND/OR TEST CRITERIA MAY BE OF A LESSER LEVEL IN OTHER STANDARDS. IT IS IMPERATIVE TO ENSURE THAT A STANDARD FROM ANOTHER COUNTRY MEETS ALL THE REQUIREMENTS OF AS/NZS 1576 SERIES BEFORE REFERENCING SCAFFOLDING EQUIPMENT TO BE IN COMPLIANCE WITH THIS STANDARD.**

## NOTES:

- 1 For the purposes of this Standard some types of equipment that incorporate temporary working platforms may not be considered to be a scaffold. Examples of these types of equipment may include the following:
  - (a) Equipment covered in other standards, for example—
    - (i) elevating work platforms, AS 1418.10(Int);
    - (ii) mast climbing work platforms, AS 1418.16;
    - (iii) portable ladders, AS/NZS 1892; and
    - (iv) formwork constructed primarily to support concrete, AS/NZS 3610.
  - (b) Stools under 1 m in height which may allow for height adjustment but do not require assembly prior to use.
- 2 Trestle ladders are covered in the AS/NZS 1892 suite of Standards. Upon the review of AS/NZS 1576.5, trestle ladder requirements will be removed from the AS/NZS 1892 suite of Standards and incorporated into AS/NZS 1576.5.

**1.2 NORMATIVE REFERENCES**

The following are the normative documents referenced in this Standard:

NOTE: Document referenced for informative purposes are listed in the Bibliography.

AS	
1170	Structural design actions
1170.4	Part 4: Earthquake actions in Australia
1391	Metallic materials—Tensile testing at ambient temperature

**This is a free preview. Purchase the entire publication at the link below:**

- 
- ▶ [Looking for additional Standards? Visit SAI Global Infostore](#)
  - ▶ [Subscribe to our Free Newsletters about Australian Standards® in Legislation; ISO, IEC, BSI and more](#)
  - ▶ [Do you need to Manage Standards Collections Online?](#)
  - ▶ [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
  - ▶ [Do you want to know when a Standard has changed?](#)
  - ▶ [Want to become an SAI Global Standards Sales Affiliate?](#)

Learn about other SAI Global Services:

- ▶ [LOGICOM Military Parts and Supplier Database](#)
- ▶ [Metals Infobase Database of Metal Grades, Standards and Manufacturers](#)
- ▶ [Materials Infobase Database of Materials, Standards and Suppliers](#)
- ▶ [Database of European Law, CELEX and Court Decisions](#)

---

Need to speak with a Customer Service Representative - [Contact Us](#)