



Safe working on new lift installations in new constructions



This Australian Standard® was prepared by Committee ME-004, Lift Installations. It was approved on behalf of the Council of Standards Australia on 19 February 2019. This Standard was published on 5 March 2019.

The following are represented on Committee ME-004:

- Association of Consultants in Access Australia
 - Australasian Fire and Emergency Service Authorities Council
 - Australian Building Codes Board
 - Australian Chamber of Commerce and Industry
 - Australian Elevator Association
 - Australian Industry Group
 - Communications, Electrical and Plumbing Union—Electrical Division
 - Engineers Australia
 - Lift Engineering Society of Australia
 - Property Council of Australia
 - Safe Work Australia
-

This Standard was issued in draft form for comment as DR AS 4431:2017.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that 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Standards may also be withdrawn.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 that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard®

**Safe working on new lift installations in
new constructions**

Originated as AS/NZS 4431:1996.
Revised and designated as AS 4431:2019.

COPYRIGHT

© Standards Australia Limited

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, unless otherwise permitted under the Copyright Act 1968.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee ME-004, Lift Installations, to supersede AS/NZS 4431:1996, *Guidelines for safe working on new lift installations in new constructions*.

After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide those responsible for lift installations in new buildings with guidelines to safe working provisions and practices.

The objective of the revision is to upgrade from a guidance document to a specification.

This document includes commentary on some of the Clauses of the Standard. The commentary directly follows the relevant clause is designated by 'C' preceding the Clause number and is printed in italics in a box. The commentary is for information and guidance and does not form part of the Standard.

CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	5
1.2 REFERENCED DOCUMENTS.....	5
1.3 DEFINITIONS.....	6
SECTION 2 HAZARDS	
2.1 GENERAL.....	9
2.2 ACCESS TO WORK AREAS	9
2.3 PERIODIC SITE ASSESSMENT	9
SECTION 3 SITE ESTABLISHMENT	
3.1 SITE ESTABLISHMENT SAFETY	10
3.2 ARRANGEMENT OF LIFTWELL DECKING.....	10
3.3 ENTRANCE PROTECTION FOR LIFTWELL ENCLOSURES	10
3.4 LIGHTING AND POWER	11
3.5 TEMPORARY VENTILATION.....	12
3.6 WEATHERPROOFING	12
3.7 CONSTRUCTION OPENINGS.....	12
3.8 COMMUNICATION	13
SECTION 4 INSTALLATION METHODS IN LIFTWELLS	
4.1 MAINTENANCE AND INSPECTION PROCEDURE FOR GUIDED WORK PLATFORMS AND SWING STAGES	15
4.2 SUSPENDED SCAFFOLDING (SWING STAGE).....	16
4.3 FALSE CAR (GUIDED WORK PLATFORM).....	17
4.4 LIFT CAR PLATFORM WITH AND WITHOUT CAR ENCLOSURE FITTED	18
4.5 FIXED PLATFORM.....	19
4.6 JUMP FORM, SLIP FORM OR SIMILAR CONSTRUCTION.....	19
4.7 MAST CLIMBING WORK PLATFORMS	19
4.8 SCAFFOLDING IN LIFTWELL	20
SECTION 5 MECHANICAL HANDLING	
5.1 WEIGHTS—EQUIPMENT	21
5.2 LIFTING BEAMS AND POINTS	21
5.3 IDENTIFICATION.....	21
5.4 EQUIPMENT SELECTION	21
5.5 INSPECTION	21
5.6 SUSPENDED WORK PLATFORM.....	21
SECTION 6 PITS	
6.1 ACCESS.....	22
6.2 WATER HAZARD.....	22
6.3 BUFFERS	22
SECTION 7 MACHINE AREAS	
7.1 TEMPORARY, PREFABRICATED OR PERMANENT MACHINE ROOM.....	23
7.2 ELECTRICAL SUPPLY.....	23
7.3 WARNING SIGN	23
7.4 MACHINE ROOM GUARDING	23

SECTION 8 CARS	
8.1	CAR ROOF 24
8.2	SAFETY GEAR..... 24
8.3	OVERSPEED DEVICE/GOVERNOR ROPE ATTACHMENT 24
8.4	CAR TO COUNTERWEIGHT BALANCE..... 24
8.5	BRAKE SETTING 24
SECTION 9 COUNTERWEIGHT	
9.1	GENERAL..... 25
9.2	FRAME AND TANK 25
9.3	SOLID COUNTERWEIGHTS..... 25
9.4	COUNTERWEIGHT SAFETY GEAR..... 25
SECTION 10 LIFTWELLS	
10.1	RAIL INSTALLATION 26
10.2	WALL FIXINGS 26
10.3	FIRE PREVENTION 26
10.4	MULTILIFT INSTALLATIONS..... 26
10.5	CAR SUPPORT DURING CONSTRUCTION..... 26
10.6	SIGNAGE..... 26
10.7	TEMPLATES 26
10.8	OPERATING A LIFT AT FAST SPEED 27
SECTION 11 SUSPENSION MEANS	
11.1	METHODS OF SUSPENSION..... 28
11.2	STORAGE..... 28
11.3	HANDLING 28
11.4	BALANCE/TRACTION AND BALANCE SETTING..... 28
SECTION 12 TRAINING	
12.1	GENERAL..... 29
12.2	TRAINING AND COMPETENCE..... 29

STANDARDS AUSTRALIA

Australian Standard

Safe working on new lift installations in new constructions

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies safe working provisions and practices for those responsible for, and involved in, new lift installations in new liftwells.

NOTE: It is intended that this Standard be supported by training, and documented installation procedures.

The requirements relate to the safety of persons when entering and leaving the work area on a lift installation and while working there; they also relate to the safety of others in the vicinity, whether working or not, who may be endangered by the actions of those working on lifts.

NOTE: The Standard that applies to a particular type of lift will specify additional requirements.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1319	Safety signs for the occupational environment
1418	Cranes (including hoists and winches)
1418.7	Part 7: Builders' hoists and equipment
1418.16	Part 16: Mast climbing work platforms
1657	Fixed platforms, walkways, stairways and ladders—Design, construction and installation
1735	Lifts, escalators and moving walks
1735.1	Part 1: General requirements

AS and AS/NZS

4024	Safety of machinery (series)
------	------------------------------

AS/NZS

1576	Scaffolding
1576.1	Part 1: General requirements
1576.4	Part 4: Suspended scaffolding
3000	Electrical installations (known as the Australian/New Zealand Wiring Rules)
3012	Electrical installations—Construction and demolition sites
3190	Approval and test specification—Residual current devices (current-operated earth-leakage devices)