AS EN 14974:2021
EN 14974:2019

Australian STANDARD®

STANDARDS Australia

Skateparks — Safety requirements and test methods

This national standard is the identical adoption of EN 14974:2019 with the permission of the European Committee for Standardization — CEN, Rue de la Science 23, B — 1040 Brussels, Belgium.

AS EN 14974:2021

This Australian Standard ® was prepared by CS-101, Sports and recreational facilities and equipment. It was approved on behalf of the Council of Standards Australia on 4 January 2021.

This Standard was published on 22 January 2021.

The following are represented on Committee CS-101:

Australian Chamber of Commerce and Industry
Australian Competition and Consumer Commission
Australian Industry Group
Engineers Australia
Institute of Public Works Engineering Australasia
Kidsafe Australia
Parks and Leisure Australia
Play Australia
Scouts Australia
Sports and Recreation Victoria
Sydney Children's Hospitals Network
University of Technology Sydney

This Standard was issued in draft form for comment as DR AS EN 14974:2020.

Keeping Standards up-to-date

Ensure you have the latest versions of our publications and keep up-to-date about Amendments, Rulings, Withdrawals, and new projects by visiting:
www.standards.org.au

ISBN 978 1 76113 156 1

Skateparks — Safety requirements and test methods

First published as AS EN 14974:2021.

COPYRIGHT

© CEN 2021 — All rights reserved
© Standards Australia Limited 2021

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 (Cth).

Preface

This Standard was prepared by the Standards Australia Committee CS-101, Sports and recreational facilities and equipment.

The objective of this document is to specify safety requirements and requirements for testing and marking, information supplied by the manufacturer, information for users, as well as for inspection and maintenance to protect users and third parties (e.g. spectators) from hazards, as far as possible, when using a skatepark as intended, or as can be reasonably expected.

This document applies to skateparks for public use intended for the use of skateboards, other roller sports equipment and BMX bikes.

This document does not apply to bike facilities modelled from ground, gravel or rock

This document is identical with, and has been reproduced from, EN 14974:2019, *Skateparks — Safety requirements and test methods.*

As this document has been reproduced from an International Standard, the following applies:

(a) In the source text "this European Standard" should read "this document".

(b) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific Standards.

The terms "normative" and "informative" are used in Standards to define the application of the appendices or annexes to which they apply. A "normative" appendix or annex is an integral part of a Standard, whereas an "informative" appendix or annex is only for information and guidance.

© Standards Australia Limited 2021

NOTES

Contents

Page

European foreword ... 4

Introduction ... 5

1 Scope ... 6

2 Normative references ... 6

3 Terms and definitions ... 7

4 Materials ... 9
4.1 General ... 9
4.2 Timber and associated products ... 9
4.2.1 General ... 9
4.2.2 Solid wood ... 9
4.2.3 Laminated wood ... 10
4.2.4 Plywood panel ... 10
4.2.5 Oriented strand boards (OSB) ... 10
4.2.6 Particle boards (chipboards) ... 10
4.3 Metals ... 10
4.4 Concrete ... 10
4.5 Asphalt ... 11
4.6 Other materials ... 11

5 Fastenings ... 11
5.1 General ... 11
5.2 Bonding ... 11
5.3 Metal fastenings ... 11

6 Safety requirements ... 11
6.1 General requirements ... 11
6.2 Design/construction ... 13
6.2.1 Structural integrity and stability ... 13
6.2.2 Ground conditions ... 15
6.2.3 Drainage ... 15
6.2.4 Rolling surface ... 15
6.2.5 Grinding surface ... 15
6.2.6 Barriers ... 15
6.2.7 Copings ... 17
6.3 Specific requirements for different skate elements and skateparks ... 17
6.3.1 General ... 17
6.3.2 Rail ... 18
6.3.3 Skate elements with platform or table ... 19
6.3.4 Skate elements without platform ... 20
6.3.5 Wall ride ... 21
6.3.6 Mini ramp/vert ramp (half-pipe) ... 21
6.3.7 Bowl ... 24
6.4 Safety zone ... 24

7 Testing/Test report ... 24

8 Marking ... 25

© Standards Australia Limited 2021

9 Information supplied by the manufacturer **25**
9.1 General **25**
9.2 Installation/construction **26**
10 Inspection and maintenance **26**
10.1 General **26**
10.2 Implementation **27**
11 Information for users **27**
Bibliography **28**

© Standards Australia Limited 2021

European foreword

This document (EN 14974:2019) has been prepared by Technical Committee CEN/TC 136 "Sports, playground and other recreational facilities and equipment", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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

This document supersedes EN 14974:2006+A1:2010.

This edition contains the following technical changes in regards to EN 14974:2006+A1:2010:

— requirements revised;

— test methods revised;

— document restructured;

— editorially updated.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

© Standards Australia Limited 2021

Introduction

This standard primarily targets planners, manufacturers, constructors, public authorities, operators, technical experts and inspectors of skate elements and/or skateparks.

The purpose of this European Standard is to specify the safety requirements, which to a large extent protect users and third parties (e.g. spectators) from hazards.

The use of skateparks is connected with sporting risks. Sporting skills and the use of suitable roller sports equipment in combination with appropriate protective equipment essentially reduces the risk of accident.

Not all possible forms of design, combinations, materials and/or structural elements of skateparks and/or skate elements will be specified within this European Standard, as they are constantly developing. Skateparks are often characterised by interconnected flowing rolling surfaces and elements. With regard to these specific skate elements the general requirements of this standard need to be considered.

It is essential that the development, construction and maintenance are carried out by competent persons with sufficient training, experience and knowledge of this standard, as well as an understanding of roller sports.

© Standards Australia Limited 2021

1 Scope

This document applies to skateparks for public use intended for the use of skateboards, other roller sports equipments and BMX bikes.

It specifies safety requirements and requirements for testing and marking, information supplied by the manufacturer, information for users, as well as for inspection and maintenance to protect users and third parties (e.g. spectators) from hazards, as far as possible, when using a skatepark as intended, or as can be reasonably expected.

This standard does not apply to bike facilities modelled from ground, gravel or rock.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 206, *Concrete — Specification, performance, production and conformity*

EN 300:2006, *Oriented Strand Boards (OSB) — Definitions, classification and specifications*

EN 312, *Particleboards — Specifications*

EN 335:2013, *Durability of wood and wood-based products — Use classes: definitions, application to solid wood and wood-based products*

EN 338:2016, *Structural timber — Strength classes*

EN 351-1, *Durability of wood and wood-based products — Preservative-treated solid wood — Part 1: Classification of preservative penetration and retention*

EN 599-1, *Durability of wood and wood-based products — Efficacy of preventive wood preservatives as determined by biological tests — Part 1: Specification according to use class*

EN 636, *Plywood — Specifications*

EN 789, *Timber structures — Test methods — Determination of mechanical properties of wood based panels*

CEN/TS 1099, *Plywood — Biological durability — Guidance for the assessment of plywood for use in different use classes*

EN 1992-1-1, *Eurocode 2: Design of concrete structures — Part 1-1: General rules and rules for buildings*

EN 10020, *Definition and classification of grades of steel*

EN 13670, *Execution of concrete structures*

EN 14487 (all parts), *Sprayed concrete*

© Standards Australia Limited 2021