

AS/NZS 17420.1:2022



Australian/New Zealand Standard™

Respiratory protective devices — Performance requirements

Part 1: General (ISO 17420-1:2021, MOD)



AS/NZS 17420.1:2022

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- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Institute of Health & Safety
- Australian Institute of Occupational Hygienists
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- National Measurement Institute
- New Zealand Institute of Safety Management
- New Zealand Occupational Hygiene Society
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Preface

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee SF-010, Occupational Respiratory Protection.

The objective of this document is to specify general requirements for the performance and testing of respiratory protective devices (RPD) in accordance with their classification and for use in the workplace to protect the wearer from hazardous atmospheres and/or environments.

The requirements are based on human factors and are for complete respiratory systems.

Requirements for marking and information supplied by the RPD manufacturer are also included.

Additional requirements for special applications such as fire services, marine, mining, abrasive blasting, welding and escape, as well as RN (Radiological, Nuclear), CBRN (Chemical, Biological, Radiological, Nuclear) and CBRN Escape RPD are addressed in ISO 17420-5 to SA/SNZ TS 17420.9.

This document does not apply to respiratory devices for —

- (a) underwater diving application;
- (b) military application;
- (c) use in aircraft and spacecraft;
- (d) medical life support applications;
- (e) resuscitators.

This document is an adoption with national modifications, and has been reproduced from, ISO 17420-1:2021, *Respiratory protective devices — Performance requirements — Part 1: General*.

The modifications are additional requirements and are set out in [Appendix ZZ](#), which has been added at the end of the source text.

[Appendix ZZ](#) lists the modifications to ISO 17420-1:2021 for the application of this document in Australia and New Zealand.

As this document has been reproduced from an International document 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.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 94, *Personal safety — Personal protective equipment*, Subcommittee SC 15, *Respiratory protective devices*.

A list of all parts in the ISO 17420 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

To apply the standards properly consider the following:

- ISO 17420-1 specifies the general requirements for supplied breathable gas RPD and filtering RPD and cannot be used as a standard for "certification" alone. Therefore, compliance with the requirements and tests of ISO 17420-2 or ISO 17420-4 is required in addition.
- Should supplied breathable gas RPD and filtering RPD also be used for special applications, take into account the requirements of ISO 17420-5 to ISO 17420-9 addition to the requirements of ISO 17420-1 and ISO 17420-2 or ISO 17420-4.

The structure of the standards is as follows:

ISO 17420-1 specifies the general requirements for RPD.

ISO 17420-2 and ISO 17420-4 gives requirements for filtering RPD or supplied breathable gas RPD and give information if any of the general requirements in Part 1 needs an addition.

EXAMPLE for ISO 17420-4 5.8.1 General

ISO 17420-1:2021, 5.8.1 applies with the following in addition:

ISO 17420-5 to ISO 17420-9 gives requirements for supplied breathable gas RPD or filtering RPD — Special application and some of the requirements will supersede requirements specified in ISO 17420-2 or ISO 17420-4.

EXAMPLE for ISO 17420-6 7.2.1 Contact with hot and cold surfaces generated by the RPD

This clause supersedes ISO 17420-4:2021, 6.7.

For more information see also the introduction in the other parts of the ISO 17420 series.

NOTES