

Australian/New Zealand Standard™

Work in compressed air and hyperbaric facilities

Part 2: Hyperbaric Oxygen facilities



AS/NZS 4774.2:2019

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee SF-046, Non-Diving Work in Compressed Air and Hyperbaric Treatment Facilities. It was approved on behalf of the Council of Standards Australia on 4 April 2019 and by the New Zealand Standards Approval Board on 3 April 2019.

This Standard was published on 6 May 2019.

The following are represented on Committee SF-046:

Australia and New Zealand Hyperbaric Medicine Group
Australian and New Zealand College of Anaesthetists
Engineers Australia
Hyperbaric Engineering Industry Forum
Hyperbaric Technicians and Nurses Association
Hyperbaric Technicians and Nurses Association New Zealand
SafeWork NSW
South Pacific Underwater Medicine Society
Waitemata District Health Board

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Originated in Australia as AS 4774.2—2002.
Jointly revised and designated as AS/NZS 4774.2:2019.

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ISBN 978 1 76072 446 7

PREFACE

This Standard was prepared by Joint Standards Australia/Standards New Zealand Committee SF-046, Non-Diving Work in Compressed Air and Hyperbaric Treatment Facilities, to supersede AS 4774.2—2002.

This Standard was prepared in response to a request from the Hyperbaric Technicians and Nurses Association (HTNA).

The objective of this Standard is to provide designers, manufacturers, operators and maintainers of hyperbaric Oxygen facilities with requirements and recommendations so that safe hyperbaric exposures of all persons involved in the operation of such facilities may be conducted.

The inclusion of roles and responsibilities in AS/NZS 4774.2:2018, was approved by the Standards Development and Accreditation Committee (SDAC) on 2 August 2018, as a one-off exemption to the directives of Standardization Guide SG-006, Section 35, due to the safety and jurisdiction issues associated.

The principle differences between this and the previous edition are as follows:

- (a) Defined roles, duties and qualifications of hyperbaric facility staff, including definition of a hyperbaric safety director.
- (b) Updates to maintenance schedules and operational processes, to reflect changes in evolving practices and technologies
- (c) Inclusion of monoplace and multiplace chamber operator requirements
- (d) Processes for in-house training of hyperbaric chamber operator.
- (e) The introduction of the positions of hyperbaric medical officer (HMO) and senior hyperbaric medical officer (SHMO).

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

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SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard sets out requirements for the design, construction, operation and maintenance of hyperbaric facilities and pressure vessels used for human occupancy, other than those used in conjunction with, and support of, underwater diving operations. The Standard also provides provisions for staffing and training of personnel.

Both monoplace and multiplace hyperbaric chambers are covered.

This Standard does not address hypobaric chambers.

Facilities such as sporting domes and medical or industrial clean rooms which operate at very low increased pressures are excluded from the scope of this Standard.

1.2 APPLICATION

This Standard is intended to be used by health authorities, hospitals, and health providers establishing or operating hyperbaric Oxygen facilities for clinical purposes. It is also intended to guide those societies and academic bodies involved in the provision of training or training curriculum for hyperbaric personnel. This Standard may also be used as a reference by those operating hyperbaric Oxygen facilities for land-based but non-clinical purposes, such as research or testing of personnel for fitness for work at pressure.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1210	Pressure vessels
1271	Safety valves, other valves, liquid level gauges and other fittings for boilers and unfired pressure vessels
1345	Identification of the contents of pipes, conduits and ducts
1894	The storage and handling of non-flammable cryogenic and refrigerated liquids
2896	Medical gas systems—Installation and testing of non-flammable medical gas pipeline systems
3873	Pressure equipment—Operation and maintenance
AS ISO/IEC	
17025	
AS/NZS	
1200	Pressure equipment