

Occupational safety code for work in compressed air environments



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Standards Update Service

Z275.3-09

October 2009

Title: *Occupational safety code for work in compressed air environments*

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Z275.3-09

***Occupational safety code for work in
compressed air environments***



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*Published in October 2009 by CSA Group
A not-for-profit private sector organization
178 Rexdale Boulevard, Toronto, Ontario, Canada M9W 1R3*

*To purchase standards and related publications, visit our Online Store at store.csagroup.org
or call toll-free 1-800-463-6727 or 416-747-4044.*

ISBN 978-1-55491-237-7

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Contents

Technical Committee on Diving and Caisson Systems v

Subcommittee on Work in Compressed Air Environments vii

Preface viii

1 Scope 1

2 Reference publications 1

3 Definitions 2

4 Duties of the employer 3

5 Duties of the person in authority 3

- 5.1 Qualification of the person in authority 3
- 5.2 Responsibility of the person in authority 3

6 Duties of lock tenders 3

- 6.1 Supervision of controls 3
- 6.2 Duties and emergency preparedness 3
- 6.3 Responsibility to tend one lock at a time 4
- 6.4 Tending more than one lock 4

7 Requirements for compressed air workers 4

- 7.1 Worker awareness 4
- 7.2 Medical qualification of workers 5
 - 7.2.1 Medical certification 5
 - 7.2.2 Medical records 5
 - 7.2.3 Worker fitness 5
 - 7.2.4 Medical examinations 5
- 7.3 Lock tenders 5
- 7.4 Compressor operators 5
- 7.5 Hyperbaric chamber operators 5

8 Compressors and air supply 6

- 8.1 Compressor operation 6
- 8.2 Number of compressors 6
- 8.3 Source of energy 6
- 8.4 Air quality 6
- 8.5 Air temperature 6
- 8.6 Maximum pressure 7

9 Air locks and working chambers 7

- 9.1 General 7
- 9.2 Bulkheads 7
- 9.3 Design criteria 7
- 9.4 Horizontal air locks 7
- 9.5 Ancillary air locks 8
- 9.6 Vertical air locks 9
- 9.7 Observation window 9

9.8	Provision for seating and heating	9
9.9	Supply of air	9
9.10	Controls	10
9.11	Automatic controls	10
9.12	Automatic recording gauges	10
9.13	Thermometer and gauges	10
9.14	Smoke stacks	11
9.15	Drainage of water	11
10	Telephones and communication systems	11
11	Lighting and electricity supply	12
11.1	General	12
11.2	Auxiliary power and emergency lighting	12
12	Decompression sickness	12
13	Medical facilities	13
13.1	Medical services	13
13.2	Examination of workers	13
13.3	Re-examination following absence due to illness	13
13.4	Record keeping	14
13.5	Reporting illness	14
13.6	Hyperbaric chambers	14
13.7	First aid	15
13.8	Emergency and rescue plans	15
14	Identification badges	15
15	Fire prevention	15
16	Notice to public authorities	16
17	Work periods	17
17.1	Maximum work periods	17
17.2	Rest period	17
17.3	Work period limits	17
17.4	Allowance for decompression time as part of rest period	17
17.5	Minimum period between work periods	17
17.6	Post-compression manual labour restriction	17
17.7	Posting of work period restrictions	17
18	Compression and decompression procedures	17
Annexes		
A	(informative) — Decompression tables	21

Figures

1	— Record of compressed air worker	18
2	— Record of pre-employment history	19
3	— Record of the examination	20

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Preface

This is the third edition of CSA Z275.3, *Occupational safety code for work in compressed air environments*. It supersedes the previous editions, published in 1986 and 1974 under the title *Occupational Safety Code For Construction Work in Compressed Air*.

This Standard is one of a series of CSA Standards on diving and caisson systems covering hyperbaric facilities, commercial diving, and construction work in a pressurized air environment.

Current requirements for work in a pressurized air environment vary from province to province (and territory to territory), particularly in the area of limiting working periods and controlling decompression procedures. The various methods also differ greatly from those in many other parts of the world. The Technical Committee therefore decided to produce this Standard as a foundation for the development of uniform requirements governing the control of hazards associated with construction work in a pressurized air environment across Canada.

This Standard was prepared by the Subcommittee on Work in Compressed Air Environments, under the jurisdiction of the Technical Committee on Diving and Caisson Systems and the Strategic Steering Committee on Occupational Health and Safety, and has been formally approved by the Technical Committee.

October 2009

Notes:

- (1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- (2) Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.
- (3) This publication was developed by consensus, which is defined by CSA Policy governing standardization — Code of good practice for standardization as “substantial agreement”. Consensus implies much more than a simple majority, but not necessarily unanimity”. It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this publication.
- (4) CSA Standards are subject to periodic review, and suggestions for their improvement will be referred to the appropriate committee.
- (5) All enquiries regarding this Standard, including requests for interpretation, should be addressed to Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6.
Requests for interpretation should
 - (a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
 - (b) provide an explanation of circumstances surrounding the actual field condition; and
 - (c) be phrased where possible to permit a specific “yes” or “no” answer.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA's periodical Info Update, which is available on the CSA Web site at www.csa.ca.

Z275.3-09

Occupational safety code for work in compressed air environments

1 Scope

1.1

This Standard applies to all work in compressed air environments at pressures above 20 kPa (3 psig) and sets forth requirements for the health and safety of workers exposed to these environments.

Note: *In addition to the requirements of this Standard for the protection of workers, requirements can be prescribed by the authority having jurisdiction.*

1.2

This Standard applies to every shaft, tunnel, caisson, enclosure, and similar type of work site in which a worker is, or is likely to be, subjected to working in compressed air.

1.3

This Standard does not apply to divers or workers employed in diving bells (see CAN/CSA-Z275.2) and to hyperbaric treatment facilities (see CSA Z275.1).

1.4

In CSA Standards, “shall” is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; “should” is used to express a recommendation or that which is advised but not required; and “may” is used to express an option or that which is permissible within the limits of the standard. Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material. Notes to tables and figures are considered part of the table or figure and may be written as requirements. Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

1.5

The values given in SI units are the units of record for the purposes of this Standard. The values given in parentheses are for information and comparison only. All air pressures specified in this Standard are expressed in kPa gauge (above atmospheric pressure) with the equivalent psi gauge units shown in parentheses.

2 Reference publications

This Standard refers to the following publications, and where such reference is made, it shall be to the edition listed below, including all amendments published thereto.

CSA (Canadian Standards Association)

CAN/CSA-Z180.1-00 (R2005)

Compressed breathing air and systems

Z275.1-05

Hyperbaric facilities