

Fall arresters and vertical lifelines



Currently in preview, click buy full version

Legal Notice for Standards

Canadian Standards Association (CSA) standards are developed through a consensus standards development process approved by the Standards Council of Canada. This process brings together volunteers representing varied viewpoints and interests to achieve consensus and develop a standard. Although CSA administers the process and establishes rules to promote fairness in achieving consensus, it does not independently test, evaluate, or verify the content of standards.

Disclaimer and exclusion of liability

This document is provided without any representations, warranties, or conditions of any kind, express or implied, including, without limitation, implied warranties or conditions concerning this document's fitness for a particular purpose or use, its merchantability, or its non-infringement of any third party's intellectual property rights. CSA does not warrant the accuracy, completeness, or currency of any of the information published in this document. CSA makes no representations or warranties regarding this document's compliance with any applicable statute, rule, or regulation.

IN NO EVENT SHALL CSA, ITS VOLUNTEERS, MEMBERS, SUBSIDIARIES, OR AFFILIATED COMPANIES, OR THEIR EMPLOYEES, DIRECTORS, OR OFFICERS, BE LIABLE FOR ANY DIRECT, INDIRECT, OR INCIDENTAL DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES, HOWSOEVER CAUSED, INCLUDING BUT NOT LIMITED TO SPECIAL OR CONSEQUENTIAL DAMAGES, LOST REVENUE, BUSINESS INTERRUPTION, LOST OR DAMAGED DATA, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER THEORY OF LIABILITY, ARISING OUT OF OR RESULTING FROM ACCESS TO OR POSSESSION OR USE OF THIS DOCUMENT, EVEN IF CSA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES.

In publishing and making this document available, CSA is not undertaking to render professional or other services for or on behalf of any person or entity or to perform any duty owed by any person or entity to another person or entity. The information in this document is directed to those who have the appropriate degree of experience to use and apply its contents, and CSA accepts no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained in this document.

CSA is a private not-for-profit company that publishes voluntary standards and related documents. CSA has no power, nor does it undertake, to enforce compliance with the contents of the standards or other documents it publishes.

Intellectual property rights and ownership

As between CSA and the users of this document (whether it be in printed or electronic form), CSA is the owner, or the authorized licensee, of all works contained herein that are protected by copyright, all trade-marks (except as otherwise noted to the contrary), and all inventions and trade secrets that may be contained in this document, whether or not such inventions and trade secrets are protected by patents and applications for patents. Without limitation, the unauthorized use, modification, copying, or disclosure of this document may violate laws that protect CSA's and/or others' intellectual property and may give rise to a right in CSA and/or others to seek legal redress for such use, modification, copying, or disclosure. To the extent permitted by licence or by law, CSA reserves all intellectual property rights in this document.

Patent rights

Attention is drawn to the possibility that some of the elements of this standard may be the subject of patent rights. CSA shall not be held responsible for identifying any or all such patent rights. Users of this standard are expressly advised that determination of the validity of any such patent rights is entirely their own responsibility.

Authorized use of this document

This document is being provided by CSA for informational and non-commercial use only. The user of this document is authorized to do only the following:

If this document is in electronic form:

- load this document onto a computer for the sole purpose of reviewing it;
- search and browse this document; and
- print this document if it is in PDF format.

Limited copies of this document in print or paper form may be distributed only to persons who are authorized by CSA to have such copies, and only if this Legal Notice appears on each such copy.

In addition, users may not and may not permit others to

- alter this document in any way or remove this Legal Notice from the attached standard;
- sell this document without authorization from CSA; or
- make an electronic copy of this document.

If you do not agree with any of the terms and conditions contained in this Legal Notice, you may not load or use this document or make any copies of the contents hereof, and if you do make such copies, you are required to destroy them immediately. Use of this document constitutes your acceptance of the terms and conditions of this Legal Notice.



CANADIAN STANDARDS
ASSOCIATION

CSA Standards Update Service

Z259.2.5-12

January 2012

Title: *Fall arresters and vertical lifelines*

Pagination: **24 pages** (ix preliminary and 15 text), each dated **January 2012**

To register for e-mail notification about any updates to this publication

- go on-line to **shop.csa.ca**
- click on **E-mail Services** under **MY ACCOUNT**
- click on **CSA Standards Update Service**

The **List ID** that you will need to register for updates to this publication is **2421642**.

If you require assistance, please e-mail techsupport@csa.ca or call 416-747-2233.

Visit CSA's policy on privacy at csagroup.org/legal to find out how we protect your personal information.

Currently in preview, click buy full version

CSA Standard

Z259.2.5-12

Fall arresters and vertical lifelines



**CANADIAN STANDARDS
ASSOCIATION**

®Registered trade-mark of Canadian Standards Association

*Published in January 2012 by Canadian Standards Association
A not-for-profit private sector organization
5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6
1-800-463-6727 • 416-747-4044*

Visit our Online Store at shop.csa.ca



The Canadian Standards Association (CSA) prints its publications on Rolland Enviro100, which contains 100% recycled post-consumer fibre, is EcoLogo and Processed Chlorine Free certified, and was manufactured using biogas energy.

To purchase CSA Standards and related publications, visit CSA's Online Store at shop.csa.ca or call toll-free 1-800-463-6727 or 416-747-4044.

ISSN 1978-1-55491-839-3

© Canadian Standards Association — 2012

All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

Contents

Technical Committee on Fall Protection v

Subcommittee on Fall Arresters and Vertical Lifelines viii

Preface ix

1 Scope 1

2 Reference publications 1

3 Definitions 2

4 Design requirements 3

- 4.1 General 3
- 4.2 Materials 3
- 4.3 Fall arresters 3
- 4.4 Connecting means 4
- 4.5 Vertical lifelines 4

5 Test procedures 5

- 5.1 Samples 5
 - 5.1.1 General 5
 - 5.1.2 Lifelines for testing 5
 - 5.1.3 Lanyards for testing 5
- 5.2 Test equipment 5
 - 5.2.1 Test mass 5
 - 5.2.2 Test wire rope lanyard 5
 - 5.2.3 Quick release 6
 - 5.2.4 Drop test structure 6
 - 5.2.5 Cable tie 6
- 5.3 Specific tests 6
 - 5.3.1 General 6
 - 5.3.2 Dynamic performance test 6
 - 5.3.3 Dynamic strength test 6
 - 5.3.4 Residual static strength test 7
 - 5.3.5 Mobility test 7
 - 5.3.6 Panic grab performance test 7
 - 5.3.7 Test evaluation 7

6 Test performance 8

- 6.1 Dynamic performance and strength 8
 - 6.1.1 Dynamic performance of synthetic rope fall arresters 8
 - 6.1.2 Dynamic performance of wire rope fall arresters 8
 - 6.1.3 Dynamic strength of synthetic rope fall arresters 8
 - 6.1.3.1 Dynamic strength of wire rope fall arresters 8
 - 6.1.4 Dynamic performance of panic grab feature 8
 - 6.1.5 Dynamic performance of synthetic rope fall arresters with a park feature 8
 - 6.1.6 Dynamic performance of synthetic rope fall arresters with a park feature 8
 - 6.1.7 Residual static strength 8
- 6.2 Mobility 8
- 6.3 Slope test 8

7 Markings and informational material 9

- 7.1 Fall arrester markings 9
 - 7.2 Lifeline markings 9
 - 7.3 Informational material 9
-

Figures

- 1** — Dynamic test arrangement 10
- 2** — Residual static strength test arrangement 11
- 3** — Mobility test arrangement 12
- 4** — Panic grab performance test arrangement 13
- 5A** — Slope test (before) 14
- 5B** — Slope test (after) 15