



AMERICAN NATIONAL STANDARD

*ANSI/ASSE A10.22-1990
(R1998)
Safety Requirements for
Rope-Guided and Nonguided
Workers' Hoists—American
National Standard for
Construction and
Demolition Operations*

ANSI/ASSE A10.22-1990 (R1998)



AMERICAN SOCIETY OF
SAFETY ENGINEERS

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Revision of ANSI A10.22-1977

Safety Requirements for Rope-Guided and Nonguided Workers' Hoists—

American National Standard
for Construction and Demolition Operations

Secretariat

American Society of Safety Engineers
1800 East Oakton Street
Des Plaines, Illinois 60018-2187
(847) 699-2929 • www.asse.org

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Contents

	Page
Foreword	iii
1 General	1
1.1 Scope	1
1.2 Purpose	1
1.3 Exceptions	1
1.4 Design Qualifications	1
1.5 Training	1
2 Referenced and Related Standards and Publications	1
2.1 Referenced American National Standards.....	1
2.2 Referenced Publications	1
2.3 Related American National Standards	2
2.4 Related Publications	2
3 Definitions	2
4 Hoist Machine	3
4.1 Application.....	3
4.2 Power Up/Power Down	3
4.3 Source of Power.....	3
4.4 Deadman Control Switch	3
4.5 Line Speed Indicator	3
4.6 Braking System	3
4.7 Limit Switches	4
4.8 Location and Arrangement.....	4
4.9 Diameter of Drum.....	4
4.10 Minimum Rope Turns on Drum	4
4.11 Stability.....	4
4.12 Electrical System Protection	4
4.13 Grounding.....	4
4.14 Overspeed.....	4
5 Operation of Hoist	4
5.1 Operator	4
5.2 Speed Limitation	4
5.3 Communication	4
5.4 Operation.....	4
5.5 Overhead Protection	4
5.6 Exhaust Pipe and Muffler.....	4
5.7 Noise	4
6 Hoist Rope	4
6.1 Rope Specification	4
6.2 Rope Design Factor	5
6.3 Rope Attachment.....	5
6.4 Rotation Resistant Ropes and Swivels.....	5
6.5 Avoiding Line Run	5
6.6 Rope Protection	5
6.7 Splicing of Hoisting Rope.....	5
6.8 Removal Criteria	5
6.9 Used Hoisting Rope	6
6.10 Records.....	6

ANSI A10.22-1990 (R1998)

7	Footblocks.....	6
7.1	Type of Blocks.....	6
7.2	Footblock Diameter.....	6
7.3	Direction Change.....	6
7.4	Footblock Anchorage.....	6
7.5	Substitute for Footblock.....	6
8	Cathead and Sheaves.....	6
8.1	Sheave Supports.....	6
8.2	Sheave Diameter.....	6
8.3	Design Basis.....	7
8.4	Clearance.....	7
9	Guide Ropes.....	7
9.1	Number and Loading.....	7
9.2	Alignment Tension.....	7
9.3	Application of Tension.....	7
9.4	Guide Rope Specifications.....	7
9.5	Rope Design Factor.....	7
10	Cage.....	7
10.1	Rated Loading.....	7
10.2	Frame.....	7
10.3	Construction.....	7
10.4	Mesh Covering.....	7
10.5	Floor.....	8
10.6	Overhead Protection.....	8
10.7	Gate.....	8
10.8	Safety Clamps (Cage).....	8
10.9	Platform Guides.....	8
11	Emergency Escape Provisions.....	8
12	Nonguided Hoists.....	8
12.1	Hoisting.....	8
12.2	Speed Limitation.....	8
12.3	Working Platform.....	8
12.4	Lifeline.....	8
12.5	Rope Grabs (Lifeline).....	9
12.6	Size of Hoist Rope.....	9
12.7	Prevention of Line Run.....	9
12.8	Protection of Rope End.....	9
12.9	Wire Rope Removal Criteria.....	9
13	Inspection and Tests.....	9
13.1	Initial Inspection and Test.....	9
13.2	Daily Checks and Weekly Inspections.....	9
13.3	Quarterly Inspections.....	9
13.4	Repairs and Replacements.....	9
13.5	Records.....	9
Appendix		
	Survey of Job Site.....	10

Foreword [This Foreword is not part of American National Standard A10.22-1990 (R1998).]

This standard applies to temporary rope-guided and nonguided worker's hoists for use on construction or maintenance projects in special situations, as defined in the scope. It describes a type of worker's hoist that has been used on chimney silos, towers, stacks, and similar projects. It is not applicable to temporary or permanently installed personnel hoists having rigid guides.

This edition is a reaffirmation of A10.22-1990. This standard is one of a series of safety standards that have been formulated by Accredited Standards Committee on Safety in Construction and Demolition Operations, A10.

It is expected that the standards in the A10 series will find a major application in industry, serving as a guide to contractors, labor, and equipment manufacturers. For the convenience of users, existing and proposed standards in the A10 series for safety requirements in construction and demolition operations are as follows.

- A10.2 Safety, Health, and Environmental Training
- A10.3 Powder-Actuated Fastening Systems
- A10.4 Personnel Hoists and Employee Elevators
- A10.5 Material Hoists
- A10.6 Demolition Operations
- A10.7 Transportation, Storage, Handling, and Use of Commercial Explosives and Blasting Agents
- A10.8 Scaffolding
- A10.9 Concrete and Masonry Construction
- A10.10 Temporary and Portable Space Heating Devices
- A10.11 Personnel and Debris Nets
- A10.12 Excavation
- A10.13 Steel Erection
- A10.14 Safety Belts, Harnesses, Lanyards, and Lifelines
- A10.15 Dredging
- A10.16 Tunnels, Shafts, and Caissons
- A10.17 Safe Operating Practices for Hot Mix Asphalt (HMA) Construction
- A10.18 Temporary Floor Holes, Wall Openings, Stairways, and Other Unprotected Edges
- A10.19 Pile Installation and Extraction Operations (under development)
- A10.20 Ceramic Tile, Terrazzo, and Marble Work
- A10.21 Proper Cleaning and Disposal of Contaminated Work Clothing
- A10.22 Rope-Guided and Nonguided Workers' Hoists
- A10.23 Back Injury Prevention Programs
- A10.24 Roofing (under development)
- A10.27 Safety Requirements for Hot Mix Asphalt Facilities
- A10.28 Work Platforms Suspended from Cranes or Derricks
- A10.31 Digger Derricks
- A10.32 Fall-Protection Systems for Construction Industry Users (under development)
- A10.33 Safety and Health Program Requirements for Multi-Employer Projects
- A10.34 Public Protection (under development)
- A10.35 High Pressure Hydro Blasting (under development)
- A10.37 Debris Nets (under development)
- A10.38 Basic Elements of a Program to Provide a Safe and Healthful Work Environment
- A10.39 Safety and Health Audit Program
- A10.41 Equipment Operator and Supervisor Qualifications and Responsibilities (under development)
- A10.42 Rigging Supervisor, Riggers, and Signalmen Qualifications and Responsibilities (under development)

ANSI A10.22-1990 (R1998)

One purpose of these standards is to serve as guides to governmental authorities having jurisdiction over subjects within the scope of the A10 Committee standards. If these standards are adopted for governmental use, the reference of other national codes or standards in the individual volumes may be changed to refer to the corresponding regulations.

Revisions: The A10 Committee welcomes proposals for revisions to this standard. Revisions are made periodically (usually 5 years from the date of the standard) to the standard to incorporate changes that appear necessary or desirable, as demonstrated by experience gained from the application of the standard. Proposals should be as specific as possible, citing the relevant paragraph number(s), the proposed wording, and the reason for the proposal. Pertinent documentation would enable the A10 Committee to process the changes in a more timely manner.

Interpretations: Upon a request in writing to the Secretariat, the A10 Committee will render an interpretation of any requirement of the standard. The request for interpretation should be clear, citing the relevant paragraph number(s) and phrased as a request for clarification of a specific requirement. Oral interpretations are not provided.

No one but the A10 Committee (through the Secretariat) is authorized to provide any interpretation of this standard.

Approval: Neither the A10 Committee nor American National Standards Institute (ANSI) "approves," "certifies," "rates," or "endorses" any item, construction, proprietary device, or activity.

Appendixes: Appendixes are included in most standards to provide the user with additional information related to the subject of the standard. Appendixes are not part of the approved standard.

Committee Meetings: The A10 Committee meets twice a year. Persons wishing to attend a meeting should contact the Secretariat for information.

Standard Approval: This standard was processed and approved for submittal to ANSI by the American National Standards Committee on Safety in Construction and Demolition Operations, A10. Approval of the standard does not necessarily imply (nor is it required) that all committee members voted for its approval. At the time it approved this standard, the A10 Committee had the following members:

Matthew J. Burkart, Chairman	Secretariat: A10 Committee
Jim E. Lapping, Vice Chairman	American Society of Safety Engineers
Timothy P. Kennedy, Secretary	1800 East Oakton Street
	Des Plaines, IL 60018-2187

<i>Organization Represented</i>	<i>Name of Representative</i>
ABB-Combustion Engineering Services, Inc.	Richard E. Peterson
Accident Prevention Corp.	Frank Burg
Aegis Corporation	Matthew J. Burkart
Allegheny Power System	Philip L. Stewart
Alliance of American Insurers	Robert S. Gosnell
Allsafe Consultants	Ronald Lattanzio
American Federation of Labor and Congress of Industrial Organizations	Jim E. Lapping
American Institute of Architects	Jim Dinegar
American Institute of Steel Construction	Thomas Schlafly
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American Society of Safety Engineers	Ernest B. Jorgenson, Jr.
American Subcontractors Association	Dante Pulignani
Asbestos Workers International Union	John Keane
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Astec Industries, Inc.	Malcolm Swanson
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Building and Construction Trades Dept.	Bradley Sant
Business Roundtable, The	Ronald M. Howard
Center to Protect workers' Rights, The	Pete Stafford
Clark Construction Group	Harry W. Galer
Cole, Dossey & Assoc.	Barry Cole
Philip L. Colleran	Philip L. Colleran
Consolidated Edison Co.	Michael Reilly
ECl Safety Services	Anthony J. Merisola
Edison Electric Institute	R. Lee Reed
E. I. duPont de Nemours & Company	R. S. Krzywicki (alt.)
Engineering Contractors Association	Bill Skillern
Gilbane Building Co.	John P. O'Donovan
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Human Factors Society	Lewis C. Barbe
Industrial Safety Equipment Association	Janice Bradley
Institute of Makers of Explosives	Roger N. Prescott
International Association of Bridge, Structural and Ornamental Iron Workers	Stephen D. Cooper
International Brotherhood of Boilermakers	Perry Day
International Brotherhood of Electrical Workers	Manuel A. Mederos
International Brotherhood of Painters and Allied Trades	Dennis W. Bond
International Union of Operating Engineers	William Smith
Jack L. Mickle & Assoc.	Jack Mickle
Joint Trade Board	Frank D. Tooze
Laborers International Union of North America	Kelly E. Lapping
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National Asphalt Pavement Association	Tom Brumagin
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National Electrical Contractors Association	David L. Potts
National Erectors Association	William Treharne
National Roofing Contractors Association	Tom Shanahan
National Society of Professional Engineers	Nick Wright
Operative Plasterers & Cement Masons, Int'l. Assn.	William J. Schell
Daniel M. Paine	Daniel M. Paine
People's Gas, Light & Coke Co., The	Glen Armstrong
Pitt-Des Moines, Inc.	Thurman E. Yost, Sr.
Power Consultants, Inc.	David Goldsmith
Professional Safety Consultants, Inc.	Timothy T. Palmer
Ryland Group, The	Bob Masterson
Scaffolding, Shoring and Forming Institute	Mike D'Alessio
Sheet Metal Workers Int'l. Assn.	Gary Batykefer
Sigma Associates, Ltd.	A. J. Scardino, Jr.
Sinco, Inc.	David Denny
SPA Inc.	Stanley D. Pulz
State Group, Swanson-Nunn Division	Jack Buttrum
TIC-The Industrial Company	Stephen H. Gale
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United Union of Roofers, Waterproofers and Allied Workers	Robert J. Krul
U.S. Department of the Army	James T. Patton
U.S. Department of Energy	Pat Finn
U.S. Department of Labor-OSHA	Camille Villanova
West Virginia University - Extension Service	Paul Becker
Z Con	Ingo Zeise
Zurn Industries	Jeffrey D. Meddin

Subcommittee A10.22, which reaffirmed this revision, had the following members:

Jeffrey D. Meddin (Chairman)	Bob Duncan	Ed Smith
	Larry Means	Mike Terensinski
	Giancarlo (John) Micacchi	Chuck Williams

ANSI A10.22-1990 (R1998)

American National Standard for Construction and Demolition Operations—

Safety Requirements for Rope-Guided and Nonguided Workers' Hoists

1 General

1.1 Scope

This standard establishes minimum safety requirements for temporary personnel hoisting systems used for the transportation of persons to and from working elevations during normal construction and demolition operations, including maintenance, and is restricted to use in special situations, such as:

- 1) Work in chimneys, chimney linings, silos, towers, stacks, shafts, and similar projects
- 2) When it is necessary to hoist or lower a person in a boatswain's chair or equivalent, and the height is too great for practical use of a block and falls (see Section 12)
- 3) For transportation of materials, but not concurrently with hoisting of personnel

The requirements of this standard are in addition to, or in lieu of, applicable provisions specified by American National Standard Safety Requirements for Material Hoists, ANSI A10.5-1992.

1.2 Purpose

This standard is intended to provide safety for those requiring the use of rope-guided and nonguided workers' hoists in special situations as set forth in 1.1.

1.3 Exceptions

In cases of practical difficulties, unnecessary hardships, or new development, exceptions to the literal requirements shall be permitted by the enforcing authority to allow the use of other devices or methods, but only when it is clearly established that equivalent protection is thereby obtained.

1.4 Design Qualifications

Rope-guided worker's hoists shall be designed by a qualified engineer competent in this field and

shall be constructed and rated in accordance with such design and the limitations of this standard.

1.5 Training

Prior to using the hoisting system described herein, both supervisory and operating personnel shall be instructed in the provisions of this standard and in the operational characteristics relating to the particular worker's hoisting system in use. Recommendations of the equipment manufacturer, if provided, and system designer(s) shall be followed. Records of training shall be maintained.

2 Referenced and Related Standard and Publications

2.1 Referenced American National Standards

This standard is intended to be used with the following American National Standards. When these referenced standards are superseded by a revision approved by the American National Standards Institute, Inc., the revision shall apply.

ANSI/AWS D1.1-1990, Structural Welding Code — Steel

ANSI/NFPA 70-1990, National Electrical Code

2.2 Referenced Publications

This standard is also intended to be used with the following publications:

AISC Manual of Steel Construction (8th Edition). (Available from the American Institute of Steel Construction, 400 North Michigan Avenue, Chicago, IL 60611-4185.)

OSHA 29 CFR, Part 1926.52, Occupational Noise Exposure (Available from U.S. Government Printing Office, Washington, DC 20402.)