

# AMERICAN NATIONAL STANDARD

ANSI/ASSE A10.42-2000 (R2010)
Safety Requirements
for Rigging Qualifications
and Responsibilities in the
Construction Industry

American National Standard Construction and Demolition Operations





ANSI® ANSI A10.42 - 2000 (R2010)

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Safety Requirements for Rigging Qualifications and Responsibilities in the Construction Industry

Secretariat

American Society of Safety Engineers 1800 East Oakton Street Des Plaines, Illinois 60018-2187

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American National Standards Institute, Inc.

# American National Standard

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# **Foreword** (This Foreword is not a part of American National Standard A10.42-2000 (R2010).)

This standard is one of a series of safety standards that have been formulated by the 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, a list of existing and proposed standards in the A10 series for Safety Requirements in Construction and Demolition Operations follows.

- A10.1 Pre-Planning for Construction Safety and Health (under development)
- A10.2 Safety, Health, and Environmental Training (under development)
- 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
- A10.15 Dredging
- A10.16 Tunnels, Shafts, and Caissons
- A10.17 Safe Operating Practices for Hot Mix Asphalt (HMA) Construction
- A10.18 Temporary Roof and Floor Holes, Wall Openings, Stairways, and Other Unprotected Edges
- A10.19 Pile Installation and Extraction Operations
- A10.20 Ceramic Tile, Terrazzo, and Marble Work
- A10.21 Safe Construction and Demolition of Wind Generation/Turbine Facilities (under development)
- A10.22 Rope-Guided and Non-Guided Workers' Hoists
- A10.24 Roofing Safety Requirements for Low-Sloped Roofs
- A10.25 Sanitation in Construction
- A10.26 Emergency Procedures for Construction Sites (under development)
- A10.27 Hot Mix Asphalt Facilities
- A10.28 Work Platforms Suspended from Cranes or Derricks
- A10.29 Aerial Platforms in Construction (under development)
- A10.31 Digger-Derricks
- A10.32 Personal Fall Protection Used in Construction and Demolition Operations
- A10.33 Safety and Health Program Requirements for Multi-Employer Projects
- A10.34 Public Protection
- A10.37 Debris Nets
- A10.38 Basic Elements of a Program to Provide a Safe and Healthful Work Environment
- A10.39 Construction Safety and Health Audit Program
- A10.40 Reduction of Musculoskeletal Problems in Construction
- A10.41 Equipment Operator and Supervisor Qualifications and Responsibilities (under development)
- A10.42 Rigging Qualifications and Responsibilities in the Construction Industry
- A10.43 Confined Spaces in Construction (under development)

A10.44 Lockout/Tagout in Construction

A10.46 Hearing Loss Prevention

A10.47 Highway Construction Safety

A10.48 Communication Tower Erection (under development)

A10.49 Control of Health Hazards (under development)

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 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 to the standard periodically (usually five years from the date of 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 a clarification of a specific requirement. Oral interpretations are not provided.

No one but the A10 Committee (through the A10 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.

Appendices: Appendices are included in most standards to provide the user with additional information related to the subject of the standard. Appendices 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 this standard was approved, the A10 Committee had the following members:

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Contents	SECTIONPAGE
	1. General       10         1.1 Scope       10         1.2 Purpose       10         1.3 Modifications and Exemptions       10         1.4 Limitations       10         1.5 Mandatory and Advisory Rules       10         1.6 Equivalent       10
	2. Definitions
	3. Performance Requirements       12         3.1 General       12         3.2 Critical Operations       12         3.3 Critical Operations       13         3.4 Requirement for a Qualified Rigger       13
	4. Operational Requirements       13         4.1 General Requirements       13         4.2 Signaling       13         4.3 Suspended Loads       14
	5. Personnel Qualification and Training       14         5.1 General       14         5.2 Qualifications       14         5.3 Training       14         5.4 Retraining       16         5.5 Recordkeeping       16
	Appendices:
	Appendix A - Standard Hand Signals for Controlling Crane Operations 17  Appendix B - Suggested Guidelines for Developing a Job-Specific  Procedure for a Critical Load Movement

# AMERICAN NATIONAL STANDARD A10.42 SAFETY REQUIREMENTS FOR RIGGING QUALIFICATIONS AND RESPONSIBILITIES

#### 1. GENERAL

- **1.1 Scope.** This standard establishes minimum criteria of knowledge and performance requirements for a qualified rigger in the construction industry.
- **1.2 Purpose.** This standard is designed to assist in achieving reasonable safety of all persons and materials during the process of, or as the result of, rigging, lifting, or moving of loads.
- 1.3 Modifications and Exemptions. In cases of practical difficulties, unnecessary hardships, or new developments, exceptions to the literal requirements may be granted by the enforcing authority to permit the use of other devices or methods, but only when it is clearly indicated that the equivalent protection is thereby secured.
- **1.4 Limitations.** This standard does not apply to the training required to be qualified as an operator of powered equipment. This standard does not apply to transportation of loads or maintenance or repair of powered or manual hoists, cranes, winches, or other hoisting equipment.

NOTE: While the qualified rigger is required to know the basic principles and limits of lifting and hoisting equipment, he or she is expected to rely on qualified operators. mechanics, suppliers, engineers, managers, and others involved for valid information, and for competent performance by these other persons in their respective roles. For instance, a rigger may be responsible to determine loads and the farthest radius of a pick, but then must rely on a crane operator to know the safe crane capacity for the configuration and setup of that crane. This principle also applies to operators of hoists, winches, helicopters, etc. Similarly, if a

rigger determines that a 5-ton picking beam is needed, he or she can rely on a manager, an engineer who provides specifications, or a supplier who provides a product for the rigger's use.

- **1.5 Mandatory and Advisory Rules.** Mandatory rules of this standard are characterized by the word "shall." If a rule is of an advisory nature, it is indicated by the word "should," or is stated as a recommendation or commentary. The Appendixes are advisory.
- 1.6 Equivalent. The word "equivalent" in this standard shall mean alternative materials, designs, or features that will provide an equal degree of strength and safety.

### 2. **DEFINITIONS**

- **2.1 ANSI.** American National Standards Institute
- **2.2 Attachment.** A device other than conventional forks or load backrest extension, mounted permanently or removably on the elevating mechanism of a fork truck for handling the load. Popular types are fork extension clamps, rotating devices, side shifters, load stabilizers, rams, and booms.
- **2.3 Cable.** A term loosely applied to wire ropes, wire strands, manila ropes, and electrical conductors.
- **2.4 Clip.** A fitting used to clamp two parts of wire rope (also known as wire rope clip, wire rope clamp).
- **2.5 Competent Person.** One who is capable of identifying existing and predictable hazards in the surroundings or