

## AMERICAN NATIONAL STANDARD

ANSI/ASSE A10.28-1998 Safety Requirements for Work Platforms Suspended from Cranes or Derricks –

American National Standard for Construction and Demolition Operations



ANSI® A10.28-1998

# Safety Requirements for Work Platforms Suspended from Cranes or Derricks –

American National Standard for Construction and Demolition Operations

Secretariat

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**Foreword** (This Foreword is not part of American National Standard for Safety Requirements for Work Platforms Suspended from Cranes or Derricks, A10.28-1998.)

The standard provides recommendations to the construction industry with regards to platforms suspended from the load lines of cranes or derricks in order to perform work at elevations that cannot normally be reached by other types of scaffolds or aerial work platforms; or transport personnel to elevations where other means of access are unsafe or impractical because of design or worksite conditions.

This standard was first approved and published in 1983. It was first revised in 1990.

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.

- operations follows. Safety, Health, and Environmental Training A10.2 Powder-Actuated Fastening Systems A10.3 A10.4 Personnel Hoists and Employee Elevators A10.5 Material Hoists A10.6 **Demolition Operations** Transportation, Storage, Handling, and Use of Commercial Explosives A10.7 and Blasting Agents A10.8 Scaffolding A10.9 Concrete and Masonry Construction Temporary and Portable Space Heating Devices A10.10 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 Safe Operating Practices for Hot Mix Asphalt (HMA) Construction A10.17 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 Proper Cleaning and Disposal of Contaminated Work Clothing A10.21 Rope-Guided and Nonguided Workers' Hoists A10.22 A10.23 Back Injury Prevention Programs A10.24 Roofing (under development) A10.28 Hot Mix Asphalt Facilities A10.28 Work Platforms Suspended from Cranes or Derricks A10.31 Digger-Derricks Fall Protection Systems for Construction Industry Users (under development) A10.32 Safety and Health Program Requirements for Multi-Employer Projects A10.33
- A10.41 Equipment Operator and Supervisor Qualifications and Responsibilities (under development)
  A10.42 Rigging Supervisor, Riggers, Signalman Qualifications and Responsibilities (under development)

A10.38 Basic Elements of a Program to Provide a Safe and Healthful Work Environment

(under development)

**Debris Nets** 

A10.34 A10.35

A10.37

A10.39

Public Protection (under development)

Safety and Health Audit Program

High Pressure Hydro Blasting (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 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 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.

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 revised this standard, the A10 Committee had the following members:

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#### **AMERICAN NATIONAL STANDARD**

**ANSI A10.28-1998** 

American National Standard for Construction and Demolition Operations—

## Safety Requirements for Work Platforms Suspended from Cranes or Derricks

### 1 Scope

### 1.1 Application

This standard shall apply to platforms suspended from the load lines of cranes or derricks in order to:

- 1) perform work at elevations that cannot normally be reached by other types of scaffolds or aerial work platforms, or
- 2) transport personnel to elevations where other means of access are unsafe or impractical because of design or worksite conditions.

Safe use of such equipment is dependent upon the user following all provisions contained herein.

## 1.2 General Requirements

The use of a crane or derrick to hoist employees on a personnel platform is prohibited, except when the erection, use, and dismantling by conventional means, of reaching the worksite would be more hazardous or is not possible because of structural design or worksite conditions. Conventional means are considered to be such means as a personnel hoist, ladder, stairway, aerial lift, elevating work platform, or scaffold.

A competent person shall perform a job safety analysis (JSA) on all equipment to be used to suspend platforms from cranes and derricks including the platforms. A copy of the JSA shall be maintained at the jobsite.

#### 1.3 Exclusion

This standard shall not apply to platforms that are welded, bolted, pinned, or otherwise directly attached to a crane boom.

#### 2 Definitions

**2.1 competent person:** One who is capable of identifying existing and predictable hazards in

the surroundings or working conditions that are unsanitary, hazardous, or dangerous to employees, and who has the authorization to take prompt corrective measures to eliminate them.

- **2.2 controlled load lowering:** System or device on the power train, other than the load hoist brake, that can regulate the rate of speed of the hoist mechanism during lowering.
- **2.3 live boom:** Boom in which lowering is controlled by a brake without aid from other lowering-retarding devices.
- 2.4 manufacturer: Crane or derrick manufacturer.
- **2.5** rated capacity: Maximum live load the object has been designed to carry.
- **2.6 rotation resistant wire rope:** Wire rope consisting of a left lay inner rope covered by regular lay strands laid in the direction opposite to the inner rope.
- **2.7 shall:** Denotes a mandatory requirement.
- **2.8 should:** Denotes a recommendation.
- **2.9 two-blocking:** Condition in which the load block or hook assembly is drawn tightly to the boom point.
- **2.10 two-blocking damage prevention:** System that will stall when two-blocking occurs without causing damage to the hoist rope or crane machinery components.
- **2.11 qualified engineer:** One who has a professional engineering registration from any state and who has successfully demonstrated the ability to design mechanical or structural objects.
- **2.12 qualified person:** One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve problems relating to the subject matter.