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Criteria for Safety Practices with the Construction, Demolition, Modification and Maintenance of Communication Structures

AMERICAN SOCIETY OF
SAFETY PROFESSIONALS

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Construction and Demolition Operations

Criteria for Safety Practices with the Construction, Demolition, Modification and Maintenance of Communication Structures

Secretariat

American Society of Safety Professionals
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Foreword (This Foreword is not a part of American National Standard A10.48-2023.)

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 and technical materials in the A10 series for Safety Requirements in Construction and Demolition Operations follows.

A10.0 The Construction and Demolition Compendium of Standards
A10.1 Pre-Project & Pre-Task Safety & Health Planning
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 Use, Storage, Handling and Site Movement of Commercial Explosives and Blasting Agents
A10.8 Scaffolding
A10.9 Concrete and Masonry Construction
A10.11 Personnel Nets
A10.12 Excavation
A10.13 Steel Erection
A10.15 Dredging
A10.16 Tunnels, Shafts and Caissons
A10.18 Temporary Roof and Floor Holes, Wall Openings, Stairways and Other Unprotected Edges
A10.19 Driven Pile Installation and Extraction Operations
A10.21 Safe Construction and Demolition of Wind Generation/Turbine Facilities
A10.22 Rope-Guided and Non-Guided Workers' Hoists
A10.23 Safety Requirements for the Installation of Drilled Shafts
A10.24 Roofing – Safety Requirements for Low-Sloped Roofs
A10.25 Sanitation in Construction
A10.26 Emergency Procedures for Construction Sites
A10.28 Work Platforms Suspended from Cranes or Derricks
A10.29 Pre-Planning, Installation, Inspection and Use of Fall Protection for Construction and Demolition (under development)
A10.30 Installation of Anchors and Micropiles
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
A10.35 Pressure Testing of Steel and Copper Piping Systems
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
A10.42 Rigging Qualifications and Responsibilities in the Construction Industry
A10.43 Confined Spaces in Construction and Demolition Operations
A10.44 Lockout/Tagout in Construction
A10.46 Hearing Loss Prevention
A10.47 Highway Construction Safety
A10.48 Communication Structures
A10.49 Control of Health Hazards
A10.50 Heat Stress Management in Construction and Demolition Operations (under development)
A10.100 Prevention through Design in Construction
A10.101 Drones in Construction (under development)

A10.103 Lagging and Leading Indicators Used in Construction (under development)
A10.104 Pandemics and Infectious Diseases on Construction and Demolition Sites (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.

Normative Requirements

This standard uses the single column format common to many international standards. The normative requirements appear aligned to the left margin. To meet the requirements of this standard, machinery, equipment and process suppliers and users must conform to these normative requirements. These requirements typically use the verb “shall.”

> *NOTE: The informative or explanatory notes in this standard appear indented, in italics, in a reduced font size, which is an effort to provide a visual signal to the reader that this is informative note, not normative text, and is not to be considered part of the requirements of this standard; this text is advisory in nature only. The suppliers and users are not required to conform to the informative note. The informative note is presented in this manner in an attempt to enhance readability and to provide explanation or guidance to the sections they follow.*

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AMERICAN NATIONAL STANDARD A10.48
CRITERIA FOR SAFETY PRACTICES WITH THE CONSTRUCTION, DEMOLITION, MODIFICATION AND MAINTENANCE OF COMMUNICATION STRUCTURES

1. General

1.1 Scope. This standard establishes minimum criteria for safe work practices and training for personnel performing work on communication structures including antenna and antenna supporting structures, broadcast and other similar structures supporting communication related equipment.

1.2 Exceptions. This standard does not address specific work practices or personnel training requirements involving crane applications which are covered explicitly within the OSHA regulations and other ANSI standards. At a minimum, all construction activities on communication structures involving cranes shall include direct communication with the crane company and/or operator to establish construction plan requirements and key designated personnel to ensure individual roles and responsibilities are fully understood. When working with cranes the following designated personnel shall include but not limited to; a crane operator, signal person, spotter when applicable and qualified rigger(s) responsible for attaching and detaching the lifted loads from the crane's hook.

The language in the standard regarding personnel riding the load line on a base mounted hoist is specific to this standard and does not apply to any other industry or standard.

1.3 Application. The information contained in this standard was obtained from sources as referenced and represents the accepted industry safe practices for work on communication structures.

While it is believed to be accurate, this information should not be relied upon for a specific application without competent professional examination and verification of its accuracy, suitability, and applicability.

1.4 Interpretation. Users of this standard are advised that understanding and application of content presented within a specific section may require knowledge of content presented in preceding and/or subsequent sections for proper context and understanding.

1.5 Notable Revisions. The 2016 A10.48 standard was written using the term Rigging Plan to broadly refer to all the major elements of consideration for construction operations on communications structures. While construction planning does require specific considerations regarding rigging when utilized to complete a given scope of work, rigging does not encompass all areas of concern within the planning process. To accurately represent the intent, this standard utilizes the term Construction Plan which includes all elements of consideration previously identified under the term Rigging Plan. Reference Section 4.4.5 for a list of considerations required. Construction Plan classifications are consolidated into Class II, III, and IV (see Section 4).

The term Qualified Engineer in the body of this standard references Qualified Engineer, Communication Structures as defined in Section 3.

1.6 History. The criteria for loading, analysis and design, along with means and methods criteria related to the construction, installation, alteration and maintenance of communication structures were originally contained in the ANSI/TIA-1019-A, *Standard for Installation, Alteration and Maintenance of Antenna Supporting Structures and Antennas*. In response to industry initiatives, separate standards have been developed to provide greater clarity to the industry