



AMERICAN NATIONAL STANDARD

ANSI/ASSE A10.13 – 2011
Safety Requirements
for Steel Erection

American National Standard
for Construction and
Demolition Operations

ANSI/ASSE A10.13 – 2011



AMERICAN SOCIETY OF
SAFETY ENGINEERS

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ANSI/ASSE A10.13 – 2011

**American National Standard
Construction and Demolition Operations**

Safety Requirements for Steel Erection

Secretariat

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

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Foreword (This Foreword is not a part of American National Standard A10.13-2011.)

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-Project/Pre-Task Safety & Health Planning (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
- A10.23 Safety Requirements for the Installation of Drilled Shafts (under development)
- 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 section 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.

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AMERICAN NATIONAL STANDARD A10.13 SAFETY REQUIREMENTS FOR STEEL ERECTION

1. SCOPE, PURPOSE, AND EXCEPTIONS

1.1 Scope. This standard establishes safety requirements for erecting, handling, fitting, fastening, reinforcing and dismantling of structural steel, plate steel, steel joist, and metal deck at a final in-place field site during construction, maintenance and dismantling operations.

1.2 Purpose. This standard is designed to:

1. Reduce the incidence of workplace fatalities, workers injuries, and property damage by prescribing minimum safety requirements.
2. Provide direction to persons concerned with, or responsible for, its applications.
3. Guide governments and other regulatory bodies in the development and promulgation of appropriate safety directives.

1.3 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, the enforcing authority may grant exceptions to literal requirements of this standard. These exceptions may permit use of other devices or methods, but only when it is clearly indicated that equivalent safety and permanent installation are thereby secured.

2. REFERENCED AND RELATED STANDARDS

2.1 Referenced American National Standards. This standard is intended to be used in conjunction with the latest approved

revision of all the American National Standards.

3. DEFINITIONS

3.1 Anchored Bridging. The steel joist bridging that is connected to a bridging terminus point.

3.2 Bolted Diagonal Bridging. Diagonal bridging which is bolted to a steel joist or joists.

3.3 Bridging Clip. A device that is attached to the steel joist to allow the bolting of the bridging to the steel joist.

3.4 Choker. A wire rope or synthetic fiber rigging assembly used to attach a load to a hoisting device.

3.5 Clipped Connection. The connection material on the end of a structural member intended for use in a double connection, which has a notch at the bottom and/or top to allow the bolt(s) of the first member placed on the opposite side of the central member to remain in place. The notch(es) fits around the nut or bolt head of the opposing member to allow the second member to be bolted up without removing the bolt(s) holding the first member.

3.6 Cold-Formed Joist. An open web joist fabricated with cold-formed steel components.

3.7 Cold Forming. The process of using press brakes, rolls, or other methods to shape steel into desired cross sections at room temperature.

3.8 Come-A-Long. A portable, hand-operated device consisting of a housing, a length of chain or wire rope, two hooks, and