AMERICAN NATIONAL STANDARD

ANSI/ASSE A10.13-2001
Safety Requirements for Steel Erection—American National Standard for Construction and Demolition Operations

ANSI/ASSE A10.13-2001

AMERICAN SOCIETY OF SAFETY ENGINEERS

ANSI®
A10.13-2001

American National Standard
for Construction and Demolition Operations

Safety Requirements for Steel Erection

Secretariat

American Society of Safety Engineers
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Foreword (This Foreword is not part of American National Standard A10.13-2001.)

This standard establishes safety requirements for the erection, handling, fitting, fastening, reinforcing, and dismantling of structural steel, plate steel, steel joists, and metal deck at a final, in-place field site.

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.

A10.2 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
A10.14 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)
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A10.37 Debris Net Systems
A10.38 Basic Elements of a Program to Provide a Safe and Healthful Work Environment
A10.39 Construction Safety and Health Audit Program
A10.41 Equipment Operator and Supervisor Qualifications and Responsibilities (under development)
A10.42 Rigging Qualifications and Responsibilities in the Construction Industry

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.

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Matthew J. Burkart, Chair
Jim E. Lapping, Vice-Chair
Timothy P. Kennedy, Secretary

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American National Standard for Construction and Demolition Operations – Safety Requirements for Steel Erection

1 Scope and application

1.1 Scope

This standard establishes safety requirements for the erection, 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) Guard against and minimize injury to workers and otherwise provide for the protection of life, limb, and property by prescribing minimum safety requirements;

2) Provide direction to persons concerned with, or responsible for, its applications, and;

3) Guide governments and other regulatory bodies in the development and promulgation of appropriate safety directives.

2 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 bridging terminus point: A wall, beam, tandem joists (with all bridging installed and a horizontal truss in the plane of the top chord), or other element at an end or intermediate point(s) of a line of bridging that provides an anchor point for the steel joist bridging.

3.5 choker: A wire rope or synthetic fiber rigging assembly used to attach a load to a hoisting device.

3.6 clipped connection: The connection material on the end of a structural member intended for use in a double connection that 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.

3.7 cold formed joist: An open web joist fabricated with cold formed steel components.

3.8 cold forming: The process of using press brakes, rolls, or other methods to shape steel into desired cross sections at room temperature.

3.9 come-along: A portable, hand-operated device consisting of a housing, chain or wire rope, two hooks, and a ratcheting lever, that is used for miscellaneous pulling or to facilitate movement of materials through leverage.

3.10 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 authorization to take prompt corrective measures to eliminate them.

3.11 composite joists: Steel joists designed to act in composite action with concrete floor and/or concrete roof slabs. Typically, a portion of the top chord of the joist (or a lug or similar device attached to