



# AMERICAN NATIONAL STANDARD

*ANSI/ASSE A10.3-2006  
Safety Requirements  
for Powder-Actuated  
Fastening Systems-*

*American National Standard  
for Construction and  
Demolition Operations*

ANSI/ASSE A10.3-2006



AMERICAN SOCIETY OF  
SAFETY ENGINEERS

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**ANSI A10.3 – 2006**

**American National Standard  
Construction and Demolition Operations**

**Safety Requirements for  
Powder-Actuated Fastening Systems**

Secretariat

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

**Approved June 12, 2006**

**American National Standards Institute, Inc.**

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## **Foreword** (This Foreword is not a part of American National Standard A10.3-2006.)

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 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 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
- A10.22 Rope-Guided and Non-Guided Workers' Hoists
- A10.23 Back Injury Prevention Programs (under development)
- A10.24 Roofing – Safety Requirements for Low-Sloped Roofs
- A10.25 Sanitation in Construction (under development)
- 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 Lifts in Construction (under development)
- A10.30 Construction Workplace Security
- A10.31 Digger-Derricks
- A10.32 Fall Protection Systems for Construction Industry Users
- A10.33 Safety and Health Program Requirements for Multi-Employer Projects
- A10.34 Public Protection
- A10.35 High Pressure Hydro Blasting (under development)
- A10.36 Railroad Construction Safety (under development)
- 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 (under development)
- 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 (under development)  
A10.46 Hearing Loss Prevention (under development)  
A10.47 Highway Construction Safety (under development)  
A10.48 Communication Tower Erection (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.*

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*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.

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## AMERICAN NATIONAL STANDARD A10.3 SAFETY REQUIREMENTS FOR POWDER-ACTUATED FASTENING SYSTEMS

### 1. GENERAL

**1.1 Scope.** This standard provides safety requirements for powder-actuated fastening tools that propel studs, pins, fasteners, or other objects for the purpose of affixing it, by penetration, to hard structural material (such as concrete, masonry, or steel).

This standard does not apply to devices designed for attaching object to soft construction materials (such as wood, plaster, tar, and dry wallboard) or very hard or brittle construction materials (such as cast iron, glazed tile, hardened steel, glass block, natural rock, hollow tile, and most brick).

**1.2 Purpose.** The purpose of this standard is to provide reasonable safety for person and property by establishing requirements for design, construction, operation, service and storage of powder-actuated fastening tools, fasteners, and powder loads. Existing powder-actuated fastening tools and accessory equipment meeting the mechanical criteria of previous versions of this ANSI/ASSE A10.3 standard need not be modified to conform to this version unless such modification is required by the regulatory agency having jurisdiction.

**1.3 Modifications and Exemptions.** In cases of practical difficulty and unnecessary hardship, the regulating body having jurisdiction may make exceptions to the literal requirements of this standard, but only when it is clearly evident that equivalent protection is thereby assured.

### 2. RELATED AMERICAN NATIONAL STANDARDS

The following American National Standards contain additional information that may be of interest to some users, but they are not essential for the completion of the requirements of this standard.

*ANSI/ASSE A10.18, Safety Requirements for Temporary Floors, Holes, Wall Openings, Stairways, and Other Unprotected Edges*

*ANSI/ASSE A10.34, Protection of the Public on or Adjacent to Construction Sites*

*ANSI/ASSE A1264.1, Safety Requirements for Workplace Floor and Wall Openings, Stairs and Railing Systems*

*ANSI/ISEA Z87.1, Practice for Occupational and Educational Eye and Face Protection*

*ANSI/AIHA Z88.2, Practices for Respiratory Protection*

*ANSI/ISEA Z89.1, Personal Protection – Protective Headwear for Industrial Workers*

*ANSI/NEMA Z535.1 to .5, Safety Color Code – Environmental Facility Safety Signs – Criteria for Safety Symbols – Product Safety Sign and Labels and Accident Prevention Tags*

### 3. DEFINITIONS

**3.1 Angle Control.** A safety feature designed to prevent a tool from operating when tilted beyond a predetermined angle.

**3.2 Cased Powder Load.** A powder load with the propellant contained in a closed case.