

# ANSI/ASSP A10.3-2020

Safety Requirements for Powder-Actuated  
Fastening Systems



AMERICAN SOCIETY OF  
**SAFETY PROFESSIONALS**



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**American National Standard  
Construction and Demolition Operations**

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

Secretariat

**American Society of Safety Professionals**  
520 N. Northwest Highway  
Park Ridge, Illinois 60068

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## **Foreword** (This Foreword is not a part of American National Standard A10.3-2020.)

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
- A10.10 Temporary and Portable Space Heating Devices
- A10.11 Personnel 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
- 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
- A10.27 Hot Mix Asphalt Facilities
- 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 (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
- 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)
- A10.102 Emerging Technology 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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**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 section 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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**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 ANSI approved this standard, the A10 Committee had the following members:

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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 low-velocity powder-actuated fastening tools that propel studs, pins, fasteners or other objects for the purpose of affixing them, by penetration, to hard structural materials (such as concrete, masonry or steel).

This standard does not apply to devices designed for attaching objects 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 safety for person(s) 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/ASSP 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 and Other References**

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/ASSP A10.18, Safety Requirements for Temporary Roof and Floors Holes, Wall Openings, Stairways, and Other Unprotected Edges in Construction and Demolition Operations*

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

*ANSI/ASSP A10.46 Hearing Loss Prevention for Construction and Demolition Workers*

*ANSI/ASSP A1264.1, Safety Requirements for Workplace Walking/Working Surfaces and Their Access; Workplace, Floor, Wall and Roof Openings; Stairs and Guardrail/Handrail Systems*

*ANSI/ISEA Z87.1, Occupational and Educational Personal Eye and Face Protection Devices*

*ANSI/ISEA Z89.1, Industrial Head Protection*

*ANSI/NEMA Z535.1, Safety Colors*

*ANSI/NEMA Z535.2, Environmental Facility and Safety Signs*

*ANSI/NEMA Z535.3, Criteria for Safety Symbols*

*ANSI/NEMA Z535.4, Product Safety Signs and Labels*

*ANSI/NEMA Z535, Safety Tags and Barricade Tapes (for Temporary Hazards)*