



# AMERICAN NATIONAL STANDARD

*ANSI/ASSE A10.3-1995  
Safety Requirements for  
Powder-Actuated Fastening  
Systems—American National  
Standard for Construction  
and Demolition Operations*

ANSI/ASSE A10.3-1995



AMERICAN SOCIETY OF  
SAFETY ENGINEERS

**ANSI®**  
**A10.3-1995**  
Revision of  
ANSI A10.3-1985

American National Standard  
for Construction and Demolition —

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

Secretariat

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This is a preview of "ANSI/ASSE A10.3-1995". [Click here to purchase the full version from the ANSI store.](#)

**Foreword** (This Foreword is not a part of American National Standard A10.3-1995.)

This standard covers design requirements, fasteners, operations, uses, maintenance, storage, powerloads, and operator qualification for powder-actuated fastening systems, intended for hard structural material.

This standard does not apply to devices designed for attaching objects to soft construction material.

This standard does not apply to stud-welding equipment.

The first edition of this standard was approved and published by ANSI in 1966 under the title, American National Standard Safety Requirements for Explosive-Actuated Fastening Tools. The standard was revised in 1970, 1972, 1977 and 1985.

This standard is one in a series of safety standards formulated by the American National Standards Committee on Safety in Construction and Demolition Operations, A10. It is expected that the standards will find a major application in industry, serving as a guide to contractors, labor, and equipment manufacturers. For the convenience of the users, existing and proposed standards in the A10 series are listed below:

- A10.3 Powder-Actuated Fastening Systems
- A10.4 Personnel Hoists
- A10.5 Material Hoists
- A10.6 Demolition Operations
- A10.7 Blasting
- A10.8 Scaffolding
- A10.9 Concrete & Masonry Construction
- A10.10 Space Heating Devices
- A10.11 Safety Nets
- A10.12 Excavation (under development)
- A10.13 Steel Erection
- A10.14 Safety Belts and Life Lines
- A10.15 Marine Dredging
- A10.16 Tunnels, Shafts and Caissons
- A10.17 Asphalt/Pavement Construction (under development)
- A10.18 Temporary Floor and Wall Openings Railings and Toeboards
- A10.19 Pile Installation & Extraction Operations (under development)
- A10.20 Ceramic Tile, Terrazzo and Marble Work
- A10.22 Rope Guided and Nonguided Hoists
- A10.24 Roofing (under development)
- A10.27 Asphalt Mixing Plants (under development)
- A10.28 Crane or Derrick Suspended Work-Platforms
- A10.31 Digger-Derricks
- A10.32 Fall Protection System for Construction Industry Users (under development)
- A10.33 Safety and Health Programs
- A10.34 Public Protection (under development)
- A10.35 High Pressure Hydro Blasting (under development)
- A10.37 Debris Nets (under development)
- A10.38 Safety Program Elements
- A10.39 Safety Audits (under development)
- A10.41 Equipment Operator and Supervisor Qualifications and Responsibilities (under development)
- A10.42 Rigging Supervisor, Riggers Signalmen Qualifications and Responsibilities (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 Committee welcomes proposals for revisions to this standard. Revisions are made periodically (usually 5 years from 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 a description of 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 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.**

**Approval:** Neither the A10 Committee nor American National Standards Institute (ANSI) "approves," "certifies," "rates," or "endorses" any item, construction, proprietary device, or activity.

**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.

**Committee Meetings:** The A10 Committee meets twice a year. Persons wishing to attend a meeting should contact the Secretariat for information.

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 it approved this standard, the A10 Committee had the following members:

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American National Standard  
for Construction and Demolition —

Powder-Actuated Fastening  
Systems —  
Safety Requirements

**1 Scope and Purpose**

**1.1 Scope**

This standard provides safety requirements for a powder-actuated fastening system (tool or machine) that propels a stud, pin, fastener, or other object for the purpose of affixing it, by penetration, to hard structural material (such as floors, walls, ceilings, and framing members).

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). This standard also does not apply to stud-welding equipment.

**1.2 Purpose**

The purpose of this standard is to provide reasonable safety for life, limb, 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 ANSI A10.3-1985 need not be modified to conform to this version unless such modification is required by the regulatory agency.

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 A10.18-1983, Construction Safety Requirements for Temporary Floor and Wall Openings, Flat Roofs, Stairs, Railings, and Toeboards*

*ANSI A1264.1-1989, Safety Requirements for Workplace Floor and Wall Openings, Stairs, and Railing Systems*

*ANSI Z87.1-1989, Practice for Occupational and Educational Eye and Face Protection*

*ANSI Z88.2-1992, Respiratory Protection*

*ANSI Z89.1-1986, Protective Headwear for Industrial Workers*

*ANSI Z535.1 to .5-1991, Safety Color Code Signs, Symbols, Labels, and Logos*

**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.

**3.3 caseless powder load:** A powder load with the propellant in solid form not requiring closed containment.

**3.4 chamber (noun):** The location in the tool into which the powder load is placed and in which it is actuated.

**3.5 chamber (verb):** To fit the chamber according to manufacturer's specifications.