

ANSI/ASSP A10.35-2020

Safety Requirements for Pressure Testing
Steel and Copper Piping Systems

PREVIEW ONLY



AMERICAN SOCIETY OF
SAFETY PROFESSIONALS



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ANSI/ASSP A10.35 – 2020

American National Standard
Construction and Demolition Operations
Safety Requirements for Pressure Testing
Steel and Copper Piping Systems

Secretariat

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

Approved October 1, 2020

American National Standards Institute

American National Standard

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Published October 2020 by:

American Society of Safety Professionals
520 N. Northwest Highway
Park Ridge, IL 60068
(847) 699-2929 • www.assp.org

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Printed in the United States of America

Foreword (This Foreword is not a part of American National Standard A10.35-2020.)

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
- A10.30 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 Steel and Copper Piping Systems
- 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)

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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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 of approval of this standard, the A10 Committee had the following members:

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AMERICAN NATIONAL STANDARD A10.35 SAFETY REQUIREMENTS FOR PRESSURE TESTING STEEL AND COPPER PIPING SYSTEMS

1. Scope, Purpose and Exceptions

1.1 Scope

This standard establishes the elements and activities for the safe pressure testing of steel and copper piping systems.

1.2 Purpose

The primary purpose of this standard is to provide construction companies that are engaged in the installation, modification, or repair of steel and/or copper piping systems with the safe work practices and procedures that are necessary to help prevent injuries resulting from pressure testing failures.

1.3 Exceptions

1.3.1 This standard does not apply to piping systems made from cast iron, fiberglass, plastic, PVC, CPVC or any materials other than steel and copper.

1.3.2 In cases of practical difficulties, unnecessary hardships or new developments, the construction owner or project constructor may grant exceptions to literal requirements of this standard. These exceptions may permit use of other methods, but only when it is clearly indicated and documented that the chosen alternative method(s) provides adequate workplace safety and health protection.

1.3.3 This standard is not intended for residential construction.

2. References

The most current versions of the following ASME codes and one ANSI/ASSP standard are referenced in this standard.

ASME B31.1, *Power Piping* (piping in power stations)

ASME B31.3, *Process Piping* (industrial processes, i.e., petrochemical, fuels, etc.)

ASME B31.5, *Refrigeration Piping and Heat Transfer Components*

ASME B31.9, *Building Services Piping*

ASME Article 501 – For more information about energy generated by pneumatic pressure, refer to the five pages from ASME Article 501, *Pressure and Tightness Testing of Piping and Equipment* – ASME PCC-2-2018, *Repair of Pressure Equipment and Piping*, in Appendix G

ANSI/ASSP A10.44 Lockout/Tagout in Construction

3. Definitions

Affected Worker. Any worker or supervisor who will be actively participating in a pressure testing operation or any other worker who is not at least the safe distance away from all applicable parts of the pressure test as specified in Appendix G.

Building Services Piping. Piping systems designed for industrial, institutional, commercial, and public buildings, and multi-unit residences, which do not require the range of sizes, pressures and temperatures required in power piping applications.