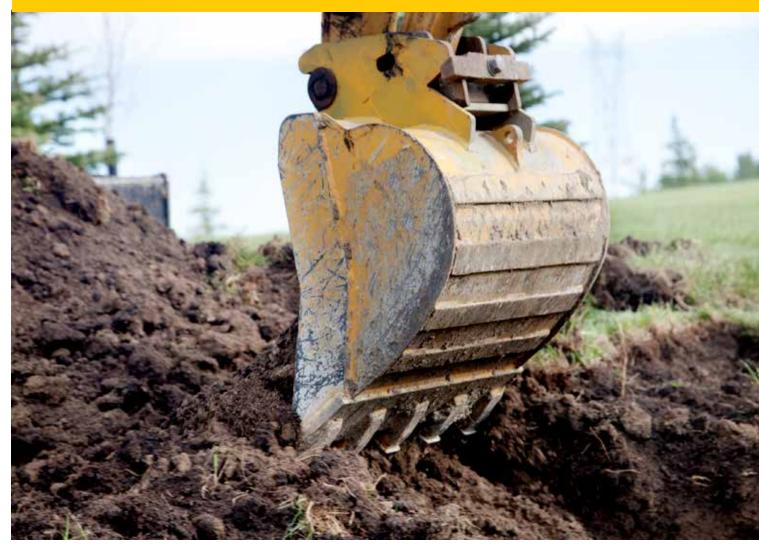
# TECHNICAL BRIEF FOR ANSI/ASSP A10.12-2022

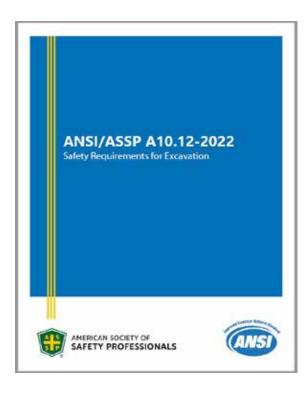
An Overview of the Voluntary Consensus Standard:
Safety Requirements for Excavation





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On March 29, 2022 the American National Standards Institute (ANSI) announced the approval of the updated A10.12 excavation safety standard titled:

# ANSI/ASSP A10.12-2022 SAFETY REQUIREMENTS FOR EXCAVATION

This standard provides the details to design an excavation plan, including general responsibilities, training and duties of excavation competent person, assessing underground utilities, water accumulation, and stability of adjacent structures, and protecting workers from falls, cave-ins, and confined spaces.

This standard applies to all open excavations made in the earth's surface that require worker and/or property protection. Excavations are defined to include trenches.

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. ANSI requires the secretariat of a standard revise or reaffirm the standard within five to ten years of publication.





#### A10.12: WHAT'S INCLUDED

#### Table of Contents

- 1. Scope and Application
- 2. Definitions
- 3. General Responsibilities
  - 3.1 Owner's Responsibilities
  - 3.2 Contractor's Responsibilities
  - 3.3 Project Constructor's Responsibilities
- 4. Site Work
  - 4.1 Public Entry
  - 4.2 Surface Encumbrances
  - 4.3 Survey Work
- 5. Excavation Competent Person: Necessary Training and Required Duties
  - 5.1 Necessary Training
  - 5.2 Required Duties
- 6. Inspections
- 7. Excavation Atmosphere
  - 7.1 Excavation Atmosphere Testing and Control
- 8. Protection of Employees
- 9. Access and Egress
- 10. Underground Utilities
- 11. Excavation Equipment



### A10.12: WHAT'S INCLUDED

- 12. Vehicles and Equipment
- 13. Material Handling
- 14. Water Accumulation in Excavations
- 15. Stability of Adjacent Structures
- 16. Fall Protection
- 17. Emergency Rescue from Falls, Cave-Ins, and Confined Spaces
- 18. Requirements for Excavation Protective Systems
- 19. Sloping, Benching and Shoring
- 20. Materials and Equipment
- 21. Installation and Removal of Protective Systems
- 22. Shield (Trench Box) Systems
- Appendix A Soil Classification
- Appendix B Sloping and Benching
- Appendix C Timber Shoring for Trench Excavations
- Appendix D Aluminum Hydraulic Shoring for Trenches
- Appendix E Alternative Worker Protection Systems
- Appendix F Excavations
- Appendix G Angle of Repose
- Appendix H Slope and Grade
- References and Sources of Other Detailed Information





#### **Excavation Safety Resources**

Excavation and trenching are some of the most dangerous activities in construction, but the hazards can be preventable. The following is a compilation of materials offering background and guidance on excavation and trenching safety.

#### **ASSP Articles, Webinars and Podcast**

ASSP Article 3 Keys to Trenching and Excavation Safety

ASSP Article Safety News You Need: Trenching and Excavation Safety

ASSP Article Keeping Workers Safe During Trenching and Excavation

ASSP Podcast Episode 46: Trenching and Excavation Safety | Eric Voight, ANSI/

**ASSP A10 Committee** 

Webinar OSHA-ASSP Trench Safety Stand Down

Webinar OSHA and ASSP Share Trenching Safety Webinar

Learn more about the ANSI/ASSP A10.12 Excavation Safety standard here:

ASSP A10 Construction and Demolition Operations website

Purchase the ANSI/ASSP A10.12-2022 standard

#### **OSHA and ANSI Safety Standards**

Memorandum of Understanding between OSHA and ANSI

Office of Management and Budget Circular OMB-A119 - How Governmental Agencies like OSHA use Voluntary National Consensus Standards

What's the Difference Between an OSHA Rule and an ANSI Standard?





#### **OSHA Recognition**

<u>Trenching and Excavation - Additional Resources | Occupational Safety and Health</u>
<u>Administration</u>

Allowable gap requirement between the trench shield and trench sides

Excavations

#### **NIOSH Recognition**

The National Institute for Occupational Safety and Health (NIOSH) Trenching and Excavation

## **U.S. Army Corps of Engineers Recognition**

EM 385-1-1: Safety and Health Requirements Manual

#### **State and Private Sector Recognition**

**Trench Safety Resources** 

Texas Department of Insurance: Excavation Safety

CPWR – Trenching Safety

University of Delaware - Environmental Health and Safety Protocol



## **Standards Development Information**

Links and information related to American National Standards:

Essential Requirements Used by ANSI

The links below explain how voluntary national consensus standards are used in regulatory settings.

Voluntary consensus standards can transform your safety program from a compliance-driven cost center into a corporate sustainability initiative that can save lives and boost profits

ASSP Podcast Episode 3: <u>How Government Agencies Use Industry Consensus Standards</u> | Lauren Bauerschmidt, ASSP standards development

ASSP Podcast Episode 1: <u>Industry Consensus Standards</u> | Tim Fisher, ASSP standards and technical services



ANSI/ASSP standards promote recognized best practices that prevent worker injuries, illnesses and fatalities

# Working together for a safer, stronger future.®



