Table of Contents

3 Introduction
4 About the A10.12 Standard
5 What Does the Standard Include
7 Excavation Safety Resources
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.
THE A10.12-2022 STANDARD
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 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**

Trenching and Excavation - Additional Resources | Occupational Safety and Health Administration

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: How Government Agencies Use Industry Consensus Standards | Lauren Bauerschmidt, ASSP standards development

ASSP Podcast Episode 1: Industry Consensus Standards | Tim Fisher, ASSP standards and technical services
Working together for a safer, stronger future.