

MIOSHA Fact Sheet



Excavation, Trenching, and Shoring Updates

Effective January 3, 2024, MIOSHA amended Construction Standard [Part 9, Excavation, Trenching, and Shoring](#). Below are some of the significant changes that were made to the standard. For a full list of all changes made, MIOSHA has created a strike-bold version of the standard, which is available [online](#).

Definitions Added

- “**Competent person**” means an individual who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
- “**Protective system**” means a method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.
- “**Registered professional engineer**” means a person who is registered as a professional engineer in the state where the work is to be performed. However, a professional engineer, registered in any state is deemed to be a registered professional engineer within the meaning of this standard when approving designs for manufactured protective systems or tabulated data to be used in interstate commerce.
- “**Structural ramp**” means a ramp built of steel or wood, usually used for vehicle access. Ramps made of soil or rock are not considered structural ramps.
- “**Tabulated data**” means tables and charts approved by a registered professional engineer and used to design and construct a protective system.

New Egress, Protective and Supporting Systems Rules

- **Rule 933(6)** Structural ramps that are used solely by employees as a means of access or egress from excavations shall be designed by a competent person. Structural ramps used for access or egress of equipment shall be designed by a competent person qualified in structural design and shall be constructed in accordance with the design.
- **Rule 942(8)** Protective systems for use in excavations more than 20 feet in depth must be designed by a registered professional engineer. **Note:** Use of Table 1 angle of repose specifications must be reviewed and approved by a registered professional engineer at depths more than 20 feet.
- **Rule 943(5)** Support systems shall be installed and removed in a manner that protects employees from cave-ins, structural collapses, or from being struck by members of the support system.

Updated and New Trenching Boxes and Shields

- **Rule 945(3)** An employee shall not be allowed in shields when shields are being installed, removed, or moved vertically.
- **Rule 945(6)** Employees shall be protected from the hazard of cave-ins when entering or exiting the areas protected by shields.

For questions regarding this update, please contact MIOSHA’s Consultation Education and Training (CET) Division at 517-284-7720. Construction safety and health standards, including strike bolds, can be viewed on MIOSHA’s website at www.michigan.gov/mioshastandards.

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Consultation Education and Training (CET) Division
530 W. Allegan Street • P.O. Box 30643 • Lansing, Michigan 48909-8143
www.michigan.gov/miosha • (517) 284-7720
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