



AMERICAN NATIONAL STANDARD

*ANSI/ASSE A10.18-1996
Safety Requirements for
Temporary Floor Holes,
Wall Openings, Stairways and
Other Unprotected Edges –*

*American National Standard
for Construction and
Demolition Operations*

ANSI/ASSE A10.18-1996



AMERICAN SOCIETY OF
SAFETY ENGINEERS

ANSI®
A10.18-1996

**Safety Requirements for
Temporary Floor Holes,
Wall Openings, Stairways and
Other Protected Edges –**

American National Standard for
Construction and Demolition Operations

Secretariat

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American National Standard

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Foreword [This Foreword is not part of American National Standard for Safety Requirements for Temporary Floor Holes, Wall Openings, Stairways and Other Unprotected Edges, A10.18-1996.]

This standard identifies rules and safety requirements for the protection of employees and the public related to temporary floor holes and wall openings, stairs, and other unprotected edges.

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 and Employee Elevators for Construction and Demolition Operations
- A10.5 Material Hoists
- A10.6 Demolition Operations
- A10.7 Transportation, Storage, Handling and Use 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 Safety Nets
- A10.12 Excavation (under development)
- A10.13 Steel Erection
- A10.14 Requirements for Safety Belts, Harnesses, Lanyards, and Lifelines
- A10.15 Dredging
- A10.16 Tunnels, Shafts and Caissons
- A10.17 Hot Mix Construction
- A10.18 Temporary Floor Holes, Wall Openings, Stairways and Other Unprotected Edges
- A10.19 Pile Installation and Extraction Operations (under development)
- A10.20 Ceramic Tile, Terrazzo and Marble Work
- A10.22 Rope-Guided and Nonguided Worker's Hoists
- A10.24 Roofing (under development)
- A10.27 Asphalt Mixing Plants (under development)
- A10.28 Work-Platforms Suspended from Cranes or Derricks
- A10.31 Digger-Derricks
- A10.32 Fall Protection System for Construction Industry Users (under development)
- A10.33 Safety and Health Program Requirements for Multi-Employer Projects
- A10.34 Public Protection (under development)
- A10.35 High Pressure Hydro Blasting (under development)
- A10.37 Debris Nets
- A10.38 Basic Elements of a Program to Provide a Safe and Healthful Work Environment
- A10.39 Safety and Health Audit Program
- 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 A10 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 which 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.

Appendixes: Appendixes are included in most standards to provide the user with additional information related to the subject of the standard. Appendixes 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.

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

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American National Standard for

Safety Requirements for Temporary Floor Holes, Wall Openings, Stairways and Other Unprotected Edges

1 General

1.1 Scope. This standard prescribes rules and establishes minimum safety requirements for the protection of employees and the public from hazards arising out of or associated with temporary floor holes, wall openings, stair and other unprotected edges including low-slope roofs during construction and demolition activities.

1.1.1 This standard does not apply to scaffolds or scaffold stairs used as temporary access. (See ANSI A10.8 - Scaffolding.)

1.1.2 This standard does not apply to steel erection. (See ANSI A10.13 - Steel Erection.)

1.1.3 This standard does not apply to the application of roofing materials.

1.2 Purpose. This standard has been formulated to provide direction to those responsible for its application and to act as a guide to federal, state, and municipal or other regulatory bodies in the formation of laws and regulations.

1.3 Exceptions and Interpretations. In case of practical difficulties, new developments, or unnecessary hardship, the administrative or regulatory authority may grant exceptions from the literal requirements or may permit the use of alternate designs or methods that will provide and ensure that an equivalent degree of protection is thereby secured.

1.3.1 This standard requires the guarding of unprotected floor holes, wall openings, and other unprotected edges or the use of safety nets or personal fall arrest systems when guardrail systems are not in place.

2 Definitions

2.1 competent person: Competent person means one whom 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 authority to take prompt corrective measures to eliminate them.

2.2 deck plates: A metal plate used for decking or flooring having sufficient structural strength to support the design load.

2.3 grating: A grating with holes of not more than one inch (2.5 cm) in their smallest dimension used for decking or flooring and having sufficient structural strength to support the design load.

2.4 guardrail system: A rail system erected along the open sides and ends of platforms. The rail system consists of a toprail, midrail, toeboards, and their supports.

2.5 handrail: A rail used to provide a handhold for support.

2.6 hole: A void or gap more than two inches (5.1 cm) in its least dimension any horizontal walking/working surface through which persons or materials may fall.

2.7 opening: A void or gap 30 inches (76.2 cm) or more high and 18 inches (45.7 cm) or more wide in a vertical surface such as a wall or partition through which persons may fall.

2.8 platform: An elevated floor or horizontal surface raised above the level of the adjacent area.

2.9 roof, low-slope: A roof with a maximum slope of 4 inches (10.2 cm) in 12 inches (30.5 cm).

2.10 runway: A passageway above the surrounding floor or ground level.

2.11 shall: Denotes a mandatory requirement.

2.12 stairways: One or more flights of stairs, and the necessary landings and platforms connecting them to form a continuous and uninterrupted passage from one floor to another.