



# AMERICAN NATIONAL STANDARD

*ANSI/ASSE A10.18-2007  
Safety Requirements  
for Temporary Roof and Floor  
Holes, Wall Openings, Stairways,  
and Other Unprotected Edges in  
Construction and Demolition  
Operations*

*American National Standard  
for Construction and  
Demolition Operations*

ANSI/ASSE A10.18-2007



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**ANSI A10.18 – 2007**

**American National Standard  
Construction and Demolition Operations**

**Safety Requirements for Temporary Roof and Floor Holes,  
Wall Openings, Stairways, and Other Unprotected Edges in  
Construction and Demolition Operations**

Secretariat

**American Society of Safety Engineers**  
1800 East Oakton Street  
Des Plaines, Illinois 60018-2187

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**American National Standards Institute, Inc.**

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**Foreword** (This Foreword is not a part of American National Standard A10.18-2007.)

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 in the A10 series for Safety Requirements in Construction and Demolition Operations follows.

- A10.1 Planning for Construction Safety and Health (under development)
- 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 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 Personnel and Debris 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 (under development)
- A10.20 Ceramic Tile, Terrazzo, and Marble Work
- A10.22 Rope-Guided and Non-Guided Workers' Hoists
- A10.24 Roofing – Safety Requirements for Low-Sloped Roofs
- A10.25 Sanitation in Construction (under development)
- A10.26 Emergency Procedures for Construction Sites (under development)
- A10.27 Hot Mix Asphalt Facilities
- A10.28 Work Platforms Suspended from Cranes or Derricks
- A10.29 Aerial Lifts in Construction (under development)
- A10.31 Digger-Derricks
- A10.32 Fall Protection Systems for Construction Industry Users
- A10.33 Safety and Health Program Requirements for Multi-Employer Projects
- A10.34 Public Protection
- A10.36 Railroad Construction Safety (under development)
- 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 (under development)
- A10.41 Equipment Operator and Supervisor Qualifications and Responsibilities (under development)
- A10.42 Rigging Qualifications and Responsibilities in the Construction Industry
- A10.43 Confined Spaces in Construction (under development)
- A10.44 Lockout/Tagout in Construction
- A10.46 Hearing Loss Prevention
- A10.47 Highway Construction Safety (under development)
- A10.48 Communication Tower Erection (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 to the standard periodically (usually five years from the date of the standard) to incorporate changes that 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 the reason for the proposal. Pertinent documentation would enable the A10 Committee to process the changes in a more timely manner.

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James Tomaseski, Vice Chairman  
Timothy R. Fisher, CSP, ARM, CPEA, Secretary  
Jennie Dalesandro, Administrative Technical Support

**Organization Represented**

**Name of Representative**

Accident Prevention Corporation	Frank Burg, CSP Michael Serpe
Aegis Corporation	Matthew J. Burkart, P.E. Judith Burkart
Allegheny Energy Supply	Richard P. Sanner Matthew J. Batis
Alstom Power	Robert Renney Ted P. Sharp
American Federation of Labor and Congress of Industrial Organizations	Jim E. Lapping, MS, P.E., CSP Edward Campbell
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Associated General Contractors of America, The	Pete Stafford Jim Platner, Ph.D., CIH Mike McCann, Ph.D., CIH
The Association of Union Constructors	Pete Stafford James Rhudy Wallace K. Melvin
A-Z Safety Resources, Inc.	Tim Sirofchuck Jack Duley
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Chicago Bridge & Iron Company	
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International Safety Equipment Association	J. Christopher Ronay
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Jack L. Mickle & Associates	James Tomaseski
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Marsh USA, Inc.	Michael W. Watson, CIH
Maryland Occupational Safety & Health	Janice Comer Bradley, CSP
Mechanical Contractors Association of America	Cristine Fargo
MYR Group, Inc.	Michael Kassman
National Association of Home Builders	Eileen Betit
National Association of Railroad Safety Consultants & Investigators	Emmett Russell
National Electrical Contractors Association	Steve Brown
National Institute for Occupational Safety & Health	Dan Penski
National Railroad Contractors & Maintenance Association	Brian Gustine
National Roofing Contractors Association	Jack Mickle, Ph.D., P.E.
National Society of Professional Engineers	Kelly E. Lapping
Operative Plasterers and Cement Masons International Association	Scott Schneider
Daniel M. Paine	Walter A. Jones, MS
Power Consultants, Incorporated	Timothy Bergeron, CSP
	Mischelle Vanreusel
	Linda J. Jaehnigen
	Peter Chaney
	Dennis Langley
	Steven Theis, CSP, CHMM, CUSA
	Joseph Branco
	Robert Matuga
	Kevin Cannon
	Lewis Barbe, P.E., CSP, CRSP
	H. Brooke Stauffer
	Thomas G. Bobick, Ph.D., P.E., CSP, CPE
	Jeffrey D. Meddin, CSP, CHCM
	Mike Hasenstab
	Harry Dietz
	Tom Shanahan
	C.E. Jackson, Jr., P.E.
	E. Ross Curtis, P.E., DFE
	Gerald Ryan
	Daniel M. Paine
	Barbara Paine
	David Goldsmith
	Steven Jecker



Professional Safety Consultants, Inc.	Jim E. Lapping, MS, P.E., CSP
Property Casualty Insurers Association of America	Michael Patsche
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Scaffolding, Shoring & Forming Institute	Bob Masterson, CSP
Sheet Metal & Air Conditioning Contractors' National Association	Ron Lattanzio
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TIC – The Industrial Company	Mike McCullion, CSP, ARM
Turner Construction Company	Gary Batykefer
United Association of Plumbers and Pipefitters	Charles Austin
United Brotherhood of Carpenters and Joiners of America	Stanley D. Pulz, CSP, P.E.
United Union of Roofers, Waterproofers and Allied Workers	Richard B. Loucks, Ph.D., P.E.
U.S. Department of the Army – Corps of Engineers	Brett Richardson
U.S. Department of Energy	William Lanus
U.S. Department of Labor – OSHA	Dennis Falvey, CSP
West Virginia University Extension Service	Brian Peterson
ZBD Constructors (Zurn Industries)	William E. Lille
	William Irwin
	Thomas L. Kavicky
	Robert J. Krul
	John Barnhard
	Brian Becker
	Ellen B. Stewart
	Patrick Finn
	Leslie Bermudez
	Camille Villanova
	Stewart C. Burkhammer
	Mark Fullen
	Brandon Takacs
	Greg Thompson
	Jeffrey D. Meddin, CSP, CHCM

Subgroup A10.18 had the following members:

Gary Birchall (Chairman)  
Thomas G. Bobick, Ph.D., P.E., CSP, CPE (Liaison)  
Barbara Bielaski  
Barry Cole  
Michael W. Hayslip, Esq., P.E., CSP  
Richard King, CSP  
Robert Krzywicki  
Robert Matuga  
Mike McCullion  
John Neil  
Daniel Paine  
Ingo Zeise

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**AMERICAN NATIONAL STANDARD A10.18  
SAFETY REQUIREMENTS FOR TEMPORARY ROOF AND FLOOR HOLES,  
WALL OPENINGS, STAIRWAYS, AND OTHER UNPROTECTED EDGES IN  
CONSTRUCTION AND DEMOLITION OPERATIONS**

**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 roof and floor holes, wall openings, stairways, and other unprotected sides and edges, roofs, during construction and demolition activities. This standard applies only to those instances when the leading edge work is inactive and is not currently under construction and is, therefore, considered an "unprotected side and edge".

**1.1.1** This standard does not apply to scaffolds or scaffold stairs used as temporary access. (See ANSI/ASSE A10.8, *Scaffolding Safety Requirements*.)

**1.1.2** This standard does not apply to steel erection. (See ANSI/ASSE A10.13, *Safety Requirements for Steel Erection*.)

**1.1.3** This standard does not apply to the application of membrane roofing materials. See ANSI/ASSE A10.24, *Roofing – Safety Requirements for Low-Sloped Roofs* for membrane roofing operations on low-sloped roofs.

**1.2 Purpose.** The purpose of this standard is to establish reasonable and practical safety requirements to protect employees and the public from falls through temporary roof and floor holes, wall openings, stairways, active and inactive leading edges, and other unprotected edges.

**1.3 Exceptions.** In cases of practical difficulties, unnecessary hardships or new developments, the authority having juris-

diction may grant exceptions to the literal requirements of this standard or permit the use of other devices or methods, but only when it is clearly evident that an equivalent degree of protection is thereby secured.

**1.4 Requirements for Fall Protection.** This standard requires the guarding of unprotected roof and floor holes, wall openings, and other unprotected sides or 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 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 authority to take prompt corrective measures to eliminate them.

**2.2 Deck Plate.** 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 (2.54cm) in their smallest dimension, used for decking or flooring and having sufficient structural strength to support the design load.

**2.4 Guardrail System.** A barrier system erected along the open sides and ends of platforms as well as along the perimeter of unguarded roofs, floors, and roof and floor holes. The rail system consists of top rails, midrails, toeboards and their supports.