



AMERICAN NATIONAL STANDARD

*ANSI/ASSE A10.18 – 2007 (R2012)
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 (R2012)



AMERICAN SOCIETY OF
SAFETY ENGINEERS

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ANSI/ASSE A10.18 – 2007 (R2012)

**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 Standard

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Foreword (This Foreword is not a part of American National Standard A10.18-2007 (R2012).)

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 Pre-Project & Pre-Task Safety & Health Planning
- 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
- A10.20 Ceramic Tile, Terrazzo, and Marble Work
- A10.21 Safe Construction and Demolition of Wind Generation/Turbine Facilities (under development)
- A10.22 Rope-Guided and Non-Guided Workers' Hoists
- A10.23 Safety Requirements for the Installation of Drilled Shafts (under development)
- A10.24 Roofing – Safety Requirements for Low-Sloped Roofs
- A10.25 Sanitation in Construction
- A10.26 Emergency Procedures for Construction Sites
- A10.27 Hot Mix Asphalt Facilities
- A10.28 Work Platforms Suspended from Cranes or Derricks
- A10.29 Aerial Platforms in Construction (under development)
- A10.31 Digger-Derricks
- A10.32 Personal Fall Protection Used in Construction and Demolition Operations
- A10.33 Safety and Health Program Requirements for Multi-Employer Projects
- A10.34 Public Protection
- 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
- 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

A10.48 Communication Tower Erection (under development)

A10.49 Control of Health Hazards (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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No one but the A10 Committee (through the A10 Secretariat) is authorized to provide any interpretation of this standard.

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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, the A10 Committee had the following members:

Richard King, CSP, Chair
 James Tomaseski, Vice Chair
 Timothy R. Fisher, CSP, CHMM, ARM, CPEA, Secretary
 Jennie Dalesandro, Administrative Technical Support

Organization Represented	Name of Representative
Accident Prevention Corporation	Frank Burg, CSP, P.E.
Aegis Corporation	Michael Serpe, CSP Matthew J. Burkart, P.E.
Alstom Power	Judith Burkart Robert Renney Ted P. Sharp
American Insurance Services Group	Thad Nosal
ASCE - Construction Institute Committee	James G. Borchardt, CSP, CPE, CRIS William R. Nash, P.E.
American Society of Safety Engineers	Harlan Fair Ken Shorter, CSP, ARM
American Wind Energy Association	A. David Brayton, CSP, CPC
American Work Platform Training, Inc.	Michele Myers Mihelic
Asbestos Workers International Union	Dennis W. Eckstine Terry Lynch
Associated Builders and Contractors, Inc.	Jim E. Lapping, MS, P.E., CSP
Associated General Contractors of America, The	Chris Williams Charlie Bird
Association of Union Constructors, The	Kevin Cannon Wayne Creasap, II Brian Doran
A-Z Safety Resources, Inc.	Jane F. Williams, CPEA, CCA
Barton-Malow Company	Mark Klimbal, CSP, ARM Clayton Shafer
Black & Veatch	Richard F. King, CSP John H. Johnson, CSP
Bovis Lend Lease	Joel C. Pickering
Building & Construction Trades Department	Pete Stafford
CPWR - Center for Construction Research & Training	Jim Platner, Ph.D., CIH Chris Trahan, CIH
Capital Safety Group	Pete Stafford Scott C. Casebolt
Clark Construction Group	J. Thomas Wolner, P.E. Tim Sirofchuck, CSP
Cole-Preferred Safety Consulting, Inc.	Kurt Dunmire
Philip L. Colleran	Barry Cole
Construction & Realty Safety Group, Inc.	Philip L. Colleran, CSP Ron Lattanzio
ECI Safety Services Co.	Frank Marino Anthony Merisola
Edison Electric Institute	Patrick Brennan, CSHM, CSSM R. Lee Reed, Jr.
E. I. Dupont de Nemours & Company	Charles Kelly Gary Birchall
Elevator Industry Preservation Fund	Ronald Probasco, CSP Garry Kosinski Rod Gilles

Ellis Fall Safety Solutions	J. Nigel Ellis, Ph.D., P.E., CSP, CPE John Whitty, P.E.
Gilbane Building Co.	Anthony O'Dea, CSP, CHST Charles Praul, Jr., CSP
Richard D. Hislop Independent Electrical Contractors, Inc.	Richard Hislop John P. Masarick Bob Baird
Institute of Makers of Explosives	Lon D. Santis Susan JP Flanagan
International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers	Steve Rank Robert Migliaccio, Sr.
International Brotherhood of Boilermakers	Brian Loftus Bridget Connors
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Jack L. Mickle & Associates	Jack Mickle, Ph.D., P.E. Steve Stock, P.E., PLS
Laborers' International Union of North America	Scott Schneider, MS, CIH Walter A. Jones, MS
Marsh USA, Inc. Maryland Occupational Safety & Health	Timothy Bergeron, CSP Mischelle Vanreusel Eric Uttenreither
Mechanical Contractors Association of America	Peter Chaney, MS, CSP Dennis Langley
National Association of Home Builders	Robert Matuga Dylan Hardison
National Association of Railroad Safety Consultants & Investigators National Electrical Contractors Association	Lewis Barbe, P.E., CSP, CRSP Michael J. Johnston Jerry Rivera
National Institute for Occupational Safety & Health	Thomas G. Bobick, Ph.D., P.E., CSP, CPE Matt Gillen, CIH
National Railroad Contractors & Maintenance Association National Roofing Contractors Association	Jeffrey D. Meddin, CSP, CHCM, CHEP Harry Dietz Tom Shanahan
National Society of Professional Engineers	E. Ross Curtis, P.E., DFE Paul Swanson, P.E.
Operative Plasterers and Cement Masons International Association Daniel M. Paine	Gerald Ryan Daniel M. Paine Barbara Paine
Phoenix Fabricators and Erectors, Inc.	Robert E. Clouse, CSP, CHST Frank Massey
Powder Actuated Tool Manufacturer's Institute	James A. Borchers David Jablonski
Power Consultants, Incorporated	David Goldsmith Camille Villanova
Professional Safety Consultants, Inc.	Jim E. Lapping, MS, P.E., CSP

Property Casualty Insurers Association of America	Anthony Brown John Rabovsky, MS, CSP, ARM Daniel Lavoie, CSP Bob Masterson, CSP Chris Johnson Carmen Shafer, CSP, CHST, CRIS
Ryland Group, Inc., The Scaffolding, Shoring & Forming Institute Shafer Safety Solutions, LLC Sheet Metal & Air Conditioning Contractors' National Association	Mike McCullion, CSP, ARM Joe Visgaitis Gary Batykefer Charles Austin, MS Stanley Pulz, CSP, P.E. Richard B. Loucks, Ph.D., P.E. Cindy L. DePrater, ALCM Paul Huntley Laurie Shadrick Bruce Dantley
Sheet Metal Workers International Association	
SPA, Incorporated	
Turner Construction Company	
United Association of Plumbers and Pipefitters	
United Brotherhood of Carpenters and Joiners of America	William Irwin Thomas L. Kavicky
United Union of Roofers, Waterproofers and Allied Workers U.S. Department of the Army – Corps of Engineers	John Barnhard Brian Becker, MS Ellen B. Stewart, CSP Leslie Bermudez Brandon Takacs Mark Fullen, Ed.D., CSP Thomas Trauger Larry Friert Greg Thompson, CSP Jeffrey D. Meddin, CSP, CHCM, CHEP
U.S. Department of Energy West Virginia University Extension Service	
Winchester Homes Inc.	
ZBD Constructors (Zurn Industries)	

Subgroup A10.18 had the following members:

Gary Birchall (Chair)
Thomas G. Bobick, Ph.D., P.E., CSP, CPE (Liaison)
Barbara Bielaski
Barry Cole
Richard King, CSP
Robert Krzywicki
Robert Matuga
Mike McCullion
Ronald McKenzie
John Neil
Daniel Paine
Ronald Probasco, CSP

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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 jurisdiction 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. 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 1 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 toprails, midrails, toeboards and their supports.

2.5 Handrail. A rail used to provide a handhold for support.