AMERICAN NATIONAL STANDARD

ANSI/ASSE A10.5 – 2013
Safety Requirements
for Material Hoists

American National Standard
for Construction and
Demolition Operations

ANSI/ASSE A10.5 – 2013

AMERICAN SOCIETY OF
SAFETY ENGINEERS

ANSI®
ANSI/ASSE A10.5 – 2013

American National Standard
Construction and Demolition Operations

Safety Requirements for Material Hoists

Secretariat

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

Approved February 28, 2013

American National Standards Institute, Inc.

American National Standard

Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer. Consensus is established when, in the judgment of the ANSI Board of Standards Review, directly and materially affected interests have reached substantial agreement. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution. The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he/she has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards. The American National Standards Institute does not develop standards and will in no circumstance give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretation shall be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

Caution Notice: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken periodically to reaffirm, revise, or withdraw this standard. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Published April, 2013 by

American Society of Safety Engineers
1800 East Oakton Street
Des Plaines, Illinois 60018-2187
(847) 699-2929 • www.asse.org

Printed in the United States of America

Foreword

(This Foreword is not a part of American National Standard A10.5 – 2013.)

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 section 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.

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 section number(s) and phrased as a request for a 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.

Appendices: Appendices are included in most standards to provide the user with additional information related to the subject of the standard. Appendices are not part of the approved standard.

Checklists: Checklists included in A10 standards may be copied and used in non-commercial settings only.

Committee Meetings: The A10 Committee meets twice per 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 ANSI approved this standard, 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.
	Michael Serpe, CSP
Aegis Corporation	Judith Burkart
Alstom Power	Robert Renney
	Ted P. Sharp
American Insurance Services Group	Thad Nosal
	James G. Borchardt, CSP, CPE, CRIS
ASCE - Construction Institute Committee	William R. Nash, P.E.
	Harlan Fair
American Society of Safety Engineers	Ken Shorter, CSP, ARM, TCDS
	A. David Brayton, CSP, CPC
American Wind Energy Association	Michele Myers Mihelic
American Work Platform Training, Inc.	Dennis W. Eckstine
Associated Builders and Contractors, Inc.	Ralph Riley
	Chris Williams
Associated General Contractors of America, The	Charlie Bird
	Kevin Cannon
Association of Union Constructors, The	Wayne Creasap, II
	Rusty Brown, CSP
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
	Michael Lentz
Building & Construction Trades Department	Pete Stafford
	Jim Platner, Ph.D., CIH
CPWR - Center for Construction Research & Training	Chris Trahan, CIH
	Pete Stafford
Capital Safety Group	Scott C. Casebolt
	J. Thomas Wolner, P.E.
Clark Construction Group	Tim Sirofchuck, CSP
	Kurt Dunmire
Cole-Preferred Safety Consulting, Inc.	Barry Cole
Philip L. Colleran	Philip L. Colleran, CSP
Construction & Realty Safety Group, Inc.	Ron Lattanzio
	Frank Marino
ECI Safety Services Co.	Anthony Merisola
	Patrick Brennan, CSHM, CSSM
Edison Electric Institute	R. Lee Reed, Jr.
	Charles Kelly
E. I. Dupont de Nemours & Company	Gary Birchall
	Ronald Probasco, CSP
Elevator Industry Preservation Fund	Garry Kosinski
	Michael D. Morand
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	Richard Hislop Shawn Bradfield
Independent Electrical Contractors, Inc.	John P. Masarick Bob Baird
Institute of Makers of Explosives	Lon D. Santis Susan JP Flanagan
Insulators International Union	Terry Lynch Jim E. Lapping, MS, P.E., CSP
International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers	Steven Rank Robert Migliaccio, Sr.
International Brotherhood of Boilermakers	Brian Loftus Bridget Connors
International Brotherhood of Electrical Workers	James Tomaseski
International Brotherhood of Teamsters	LaMont Byrd, CIH Julie Plavka, CIH
International Safety Equipment Association	Cristine Fargo
International Union of Bricklayers & Allied Craftworkers	Michael Kassman, CHST Gerard Scarano
International Union of Operating Engineers	Barbara McCabe Steve Brown
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, CIH
Marsh USA, Inc.	Timothy Bergeron, CSP
Maryland Occupational Safety & Health	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	Lewis Barbe, P.E., CSP, CRSP
National Electrical Contractors Association	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	Jeffrey D. Meddin, CSP, CHEP, CHCM
National Roofing Contractors Association	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	Deven Johnson Rob Mason
Daniel M. Paine	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
	Anthony Brown
Property Casualty Insurers Association of America	John Rabovsky, MS, CSP, ARM
	Daniel Lavoie, CSP, ARM
Ryland Group, Inc., The	Bob Masterson, CSP
Scaffolding, Shoring & Forming Institute	Chris Johnson
Shafer Safety Solutions, LLC	Carmen Shafer, CSP, CHST, CRIS
Sheet Metal & Air Conditioning Contractors' National Association	Mike McCullion, CSP, ARM
	Joe Visgaitis
Sheet Metal Workers International Association	Charles Austin, MS
SPA, Incorporated	Stanley Pulz, CSP, P.E.
	Richard B. Loucks, Ph.D., P.E.
Turner Construction Company	Cindy L. DePrater, ALCM
	Paul Huntley
United Association of Plumbers and Pipefitters	Laurie Shadrick
	Bruce Dantley
United Brotherhood of Carpenters and Joiners of America	William Irwin
	Thomas L. Kavicky
United Union of Roofers, Waterproofers and Allied Workers	John Barnhard
U.S. Department of the Army – Corps of Engineers	Brian Becker, MS
	Ellen B. Stewart, CSP
U.S. Department of Energy	Leslie Bermudez
	Joseph Hopkins
West Virginia University Extension Service	Brandon Takacs, CSHM
	Mark Fullen, Ed.D., CSP
Winchester Homes Inc.	Thomas Trauger
	Larry Freiert
ZBD Constructors (Zurn Industries)	Greg Thompson, CSP
	Jeffrey D. Meddin, CSP, CHEP, CHCM

Subgroup A10.5 had the following members:

Garry Kosinski (Chair)	Jim E. Lapping, MS, P.E., CSP
Richard Hislop (Liaison)	Jeffrey Meddin, CSP, CHEP, CHCM
Robert Brewton	Michael D. Morand
Thomas Chambers	John O'Connor
Mike D'Alessio	Todd Sharpe
J. Nigel Ellis	James White
Charles Ernstes	
Richard Gregory	
Terry Haug	
Greg Janda	
Peter Juhren	
John Quackenbush (In memoriam)	

Contents

AMERICAN NATIONAL STANDARD A10.5
SAFETY REQUIREMENTS FOR MATERIAL HOISTS

1. GENERAL

1.1 Scope. This standard applies to material hoists used to raise or lower materials during construction, alteration or demolition. It is not applicable to the temporary use of permanently installed personnel elevators as material hoists.

This standard shall not apply to:

1. Elevators constructed and operated in conformance with ANSI/ASME A17.1, *Safety Code for Elevators and Escalators*.

2. Personnel hoists constructed and operated in conformance with ANSI/ASSE A10.4, *American National Standard Safety Requirements for Personnel Hoists and Employee Elevators for Construction and Demolition Operations*.

3. Manlifts constructed and operated in conformance with ANSI/ASME A90.1, *Safety Standard for Belt Manlifts*.

4. Transport platforms and overhead winch systems are not subject to this standard.

1.2 Purpose. This standard defines safety requirements for the use and operation of material hoists used in construction.

1.3 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, exceptions to the literal requirements shall be permitted by the enforcing authority to allow the use of other devices or methods, but only when it is clearly established that equivalent protection is thereby obtained.

2. RELATED STANDARDS

2.1 Related American National Standards. This standard is intended for use in conjunction with the following American National Standards (see Section 24 for additional information):

ANSI/ASSE A10.4, *Safety Requirements for Personnel Hoists on Construction and Demolition Sites.*

ANSI/ASSE A10.8, *Scaffolding Safety Requirements*.

ANSI/ASSE A10.10, *Safety Requirements for Temporary and Portable Space Heating Devices and Equipment*.

ANSI/ASSE A10.32, *Personal Fall Protection Used in Construction and Demolition Operations.*

ANSI Z97.1 Standard - *Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test*

ANSI Z535.1, *Safety Color Code*.

ANSI Z535.2, *Environmental and Facility Safety Signs*.

ANSI Z535.3, *Criteria for Safety Symbols*.

ANSI/ASME A90.1, *Safety Standard for Belt Manlifts*.

NFPA 10, *Standard for Portable Fire Extinguishers*.

NFPA 70, *National Electrical Code*.

ANSI/ASME B15.1, *Safety Standard for Mechanical Power Transmission Apparatus*.