

# ASSP/A10 GUIDANCE DOCUMENT

For Construction and Demolition Operations

ASSP A10.0-2021

The Construction and Demolition Operations  
Compendium of Standards



AMERICAN SOCIETY OF  
**SAFETY PROFESSIONALS**

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**ASSP A10.0 – 2021**

**ASSP/A10 Guidance Document**

**A10 Construction and Demolition Operations  
Compendium of Standards**

Secretariat

**American Society of Safety Professionals**  
520 N. Northwest Highway  
Park Ridge, Illinois 60068

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## Foreword (This Foreword is not a part of ASSP A10.0-2021.)

This document is not an American National Standard but serves as a guideline to 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 ANSI/ASSP 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 and technical materials in the A10 series for Safety Requirements in Construction and Demolition Operations follows.

A10.0	The Construction and Demolition Compendium of Standards
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	Use, Storage, Handling and Site Movement of Commercial Explosives and Blasting Agents
A10.8	Scaffolding
A10.9	Concrete and Masonry Construction
A10.11	Personnel Nets
A10.12	Excavation
A10.13	Steel Erection
A10.15	Dredging
A10.16	Tunnels, Shafts and Caissons
A10.18	Temporary Roof and Floor Holes, Wall Openings, Stairways and Other Unprotected Edges
A10.19	Pile Installation and Extraction Operations
A10.21	Safe Construction and Demolition of Wind Generation/Turbine Facilities
A10.22	Rope-Guided and Non-Guided Workers' Hoists
A10.23	Safety Requirements for the Installation of Drilled Shafts
A10.24	Roofing – Safety Requirements for Low-Sloped Roofs
A10.25	Sanitation in Construction
A10.26	Emergency Procedures for Construction Sites
A10.28	Work Platforms Suspended from Cranes or Derricks
A10.29	Pre-Planning, Installation, Inspection and Use of Fall Protection for Construction and Demolition (under development)
A10.30	Installation of Anchors and Micropiles
A10.31	Digger-Derricks
A10.32	Personal Fall Protection Systems Used in Construction and Demolition Operations
A10.33	Safety and Health Program Requirements for Multi-Employer Projects
A10.34	Public Protection
A10.35	Pressure Testing of Steel and Copper Piping Systems
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
A10.42	Rigging Qualifications and Responsibilities in the Construction Industry
A10.43	Confined Spaces in Construction and Demolition Operations
A10.44	Lockout/Tagout in Construction
A10.46	Hearing Loss Prevention
A10.47	Highway Construction Safety
A10.48	Communication Structures
A10.49	Control of Health Hazards
A10.50	Heat Stress Management in Construction and Demolition Operations (under development)
A10.100	Prevention through Design in Construction
A10.101	Drones in Construction (under development)

- A10.102 Emerging Technology in Construction (under development)
- A10.103 Lagging and Leading Indicators Used in Construction (under development)
- A10.104 Pandemics and Infectious Diseases on Construction and Demolition Sites (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.

**Normative Requirements:** This document uses the single column format common to many international standards. The normative requirements appear aligned to the left margin. To meet the requirements of this standard, machinery, equipment and process suppliers and users must conform to these normative requirements. These requirements typically use the verb “shall.”

*NOTE: The informative or explanatory notes in this standard appear indented, in italics, in a reduced font size, which is an effort to provide a visual signal to the reader that this is informative note, not normative text, and is not to be considered part of the requirements of this standard; this text is advisory in nature only. The suppliers and users are not required to conform to the informative note. The informative note is presented in this manner in an attempt to enhance readability and to provide explanation or guidance to the sections they follow.*

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**ASSP/A10 GUIDANCE DOCUMENT A10.0  
A10 CONSTRUCTION AND DEMOLITION OPERATIONS  
COMPENDIUM OF STANDARDS**

**1. Scope, Purpose and Application**

**1.1 Scope**

**1.1.1** The *A10 Construction and Demolition Compendium of Standards* is a set of standards that covers a series of American National Standards addressing the protection of workers on construction and demolition sites. This guidance document identifies those specific standards and establishes their role in the Compendium and their interdependence.

**1.2 Purpose and Application**

**1.2.1** This guidance document identifies those specific standards and establishes their role in the compendium and their interdependence.

**2. Definitions**

For information on definitions and nomenclature, please refer to the specific standard(s) or to the ASSP/A10 Document, *Definitions and Nomenclature Used for Construction and Demolition Operations*, for definitions of terms used in this guidance document and all referenced ANSI/ASSP A10 standards.

**3. Compliance**

**3.1 General**

A construction and demolition occupational safety and health program shall be in compliance with the *A10 Construction and Demolition Compendium of Standards*. The applicable requirements of the referenced ANSI/ASSP A10 standards are met based upon the remediation of hazards and exposures identified on a site resulting from an applicable risk assessment(s) as addressed in the specific ANSI/ASSP A10 standard.

## APPENDIX A

The following is a list of all current [ANSI/ASSP A10](#) standards with their respective information from Section 1 included.

### **[ANSI/ASSP A10.1-2011 \(R2017\) Pre-Project & Pre-Task Safety and Health Planning](#)**

#### 1. GENERAL

1.1 Scope. This standard establishes the elements and activities for pre-project and pre-task safety and health planning in construction.

1.2 Purpose. The primary purpose of this standard is to assist construction owners, project constructors and contractors in making pre-project and pre-task safety and health planning a standard part of their planning processes. This standard is also intended to assist owners in establishing a process for evaluating project constructor candidate safety and health performance and planning practices.

#### 1.3 Exceptions.

1.3.1 In cases of practical difficulties, unnecessary hardships or new developments, the construction owner or project constructor may grant exceptions to literal requirements of this standard. These exceptions may permit use of other methods, but only when it is clearly indicated and documented that the chosen alternative method(s) provides adequate workplace safety and health protection.

1.3.2 This standard is not intended for owners of residential property contracting for work to build or work on their personal residence.

### **[ANSI/ASSP A10.3-2020 Safety Requirements for Powder-Actuated Fastening Systems](#)**

#### 1. General

##### 1.1 Scope

This standard provides safety requirements for low-velocity powder-actuated fastening tools that propel studs, pins, fasteners or other objects for the purpose of affixing them, by penetration, to hard structural materials (such as concrete, masonry or steel).

This standard does not apply to devices designed for attaching objects to soft construction materials (such as wood, plaster, tar and dry wallboard) or very hard or brittle construction materials (such as cast iron, glazed tile, hardened steel, glass block, natural rock, hollow tile and most brick).

##### 1.2 Purpose

The purpose of this standard is to provide safety for person(s) and property by establishing requirements for design, construction, operation, service and storage of powder-actuated

fastening tools, fasteners and powder loads. Existing powder-actuated fastening tools and accessory equipment meeting the mechanical criteria of previous versions of this ANSI/ASSP A10.3 standard need not be modified to conform to this version unless such modification is required by the regulatory agency having jurisdiction.

### 1.3 Modifications and Exemptions

In cases of practical difficulty and unnecessary hardship, the regulating body having jurisdiction may make exceptions to the literal requirements of this standard, but only when it is clearly evident that equivalent protection is thereby assured.

## **ANSI/ASSP A10.4-2016 Safety Requirements for Personnel Hoists and Employee Elevators on Construction and Demolition Sites**

### 1. GENERAL

#### 1.1 Scope.

1.1.1 This standard applies to the design, construction, installation, operation, inspection, testing, maintenance, alterations and repair of hoists and elevators that (1) are not an integral part of buildings, (2) are installed inside or outside buildings or structures during construction, alteration, or demolition operations and (3) are used to raise and lower workers and other personnel connected with or related to the structure. These personnel hoists and employee elevators may also be used for transporting materials under specific circumstances defined in this standard.

1.1.2 This standard does not apply to the following:

1. Permanent elevators that are temporarily installed in the hoistways during the construction of buildings, and which incorporate a part of the permanent elevator that will be installed later.
2. Hoists for raising and lowering materials that have no provision for carrying personnel.
3. Manlifts of the counter-balanced and endless-belt types.
4. Mine hoists.
5. Wire-rope-guided or non-guided hoists.
6. Transport Platforms

1.2 Purpose. The purpose of this standard is to set forth minimum requirements intended to provide for the safety of life, limb and property of those engaged in occupations requiring the use of personnel hoists or employee elevators. The requirements of this standard are the minimum for that purpose.

1.3 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, the enforcing authority may grant exceptions to literal requirements of this standard. These exceptions may permit use of other devices or methods, but only when it is clearly indicated that equivalent safety and permanent installation are thereby secured.

**ANSI/ASSP A10.5-2020 - 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, maintenance or demolition. It is not applicable to the temporary use of permanently installed personnel elevators as material hoists.

1.2 Purpose

The purpose of this standard is to set forth minimum requirements intended to provide for the safety of life, limb and property of those engaged in occupations requiring the use of material hoists. The requirements of this standard are the minimum for that purpose.

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.

**ANSI/ASSP A10.6-2006 (R2016) Safety & Health Program Requirements for Demolition Operations**

1. GENERAL

1.1 Scope. This standard applies to the demolition of buildings and other structures. This standard is intended to be complete in itself, except that any device, equipment and activity incidental to demolition operations shall be conducted, installed, inspected, maintained and operated in accordance with the requirements in American National Standards for Safety in Construction and Demolition Operations A10 Series, other American National Standards listed in Section 2 and other appropriate standards.

1.2 Purpose. The purpose of this standard is to provide minimum requirements to protect and safeguard the public and employees and to prevent damage to property resulting from demolition operations.

1.3 Application. This standard is intended to serve as a guide for regulatory bodies and administrative agencies in the formation of laws and regulations. It should be used by demolition contractors or others performing this work.

1.4 Exceptions. Where completion of these requirements is impractical or would present significant hardship or where other extenuating circumstances exist, the enforcing authority may grant exception to the literal requirements of this standard or may permit alternative methods, but only when it is clearly evident and documented that equivalent methods and means of protection are used.

**ANSI/ASSP A10.7-2018 Safety and Health Requirements for Construction and Demolition Use, Storage, Handling and Site Movement of Commercial Explosives and Blasting Agents**

1. Scope and Purpose

1.1 Scope

1.1.1 This standard is applicable to all entities involved in any construction or demolition project that requires the use of commercial explosives and blasting agents.

1.1.2 This standard is intended to work with the other federal, state and local regulations for use of commercial explosives and blasting agents.

1.1.3 The requirements of this standard do not apply to display or consumer pyrotechnics, small-arms ammunition or explosive power packs in the form of explosive-activated or explosive-charged construction devices such as explosive rivets, explosive bolts, explosive charges for driving pins or studs, cartridges for explosive-actuated power tools, and powder-actuated fastening systems.

1.2 Purpose

The purpose of this standard is to provide the construction industry with recommendations for establishing and maintaining a level of safety and health for the off-highway transportation, storage, storage, and use of commercial explosives and blasting agents for construction and demolition.

**ANSI/ASSP A10.8-2019 Scaffolding Safety Requirements**

1. General

1.1 Scope

This standard establishes safety requirements for the construction, operation, maintenance and use of scaffolds used in the construction, alteration, demolition and maintenance of buildings and structures. This standard does not cover permanently installed suspended scaffold systems or aerial platforms.

1.2 Purpose

This standard is designed to provide minimum guidelines for the safe erection, use and dismantling of scaffolding.

1.3 Exceptions

In cases of practical difficulties, unnecessary hardships or new developments, exceptions to the literal requirements may permit the use of other devices or methods, but only when it is clearly indicated and documented by a qualified person that the equivalent protection is thereby secured.



#### 1.4 Mandatory and Advisory Rules

Mandatory rules of this standard are characterized by the word “shall”. If a rule is of an advisory nature, it is indicated by the word “should” or is stated as a recommendation.

#### 1.5 Equivalent

The word “equivalent” in this standard shall mean alternative materials, designs or features that will provide an equal degree of strength and safety.

### **ANSI/ASSP A10.9-2013 (R2018) Safety Requirements for Concrete & Masonry Work**

#### 1. GENERAL

1.1 Scope. This standard establishes safety requirements pertaining to concrete construction and masonry work in construction. The requirements contained in this standard cover all on-site concrete construction and masonry work including design, erection, operation and maintenance of aggregate processing plants, concrete mixing plants and conveyances. It also contains safety requirements pertinent to the specialty concrete operations of prestressing by pretensioning or post-tensioning, lift-slab construction, tilt-up construction and slipforms.

1.2 Purpose. The purpose of this standard is to establish reasonable and practical safety requirements and practices for concrete construction and masonry work.

1.3 Interpretation. In cases where additional explanation or interpretation of this standard is required, such requests should be referred to Standards Committee A10, American Society of Safety Professionals, 520 N. Northwest Highway, Park Ridge, Illinois 60068.

### **ANSI/ASSP A10.11-2010 (R2016) Safety Requirements for Personnel Nets**

#### 1. GENERAL

1.1 Scope. This standard establishes safety requirements for the selection, installation and use of personnel nets during construction, repair and demolition operations.

1.2 Purpose. The purpose of this standard is to provide minimum design, testing and use requirements for personnel nets.

1.3 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, the enforcing authority may grant exceptions to literal requirements of this standard. These exceptions may permit use of other devices or methods, but only when it is clearly indicated that equivalent safety and permanent installation are thereby secured.

**ANSI/ASSP A10.12-1998 (R2016) Safety Requirements for Excavation**

**1. SCOPE, APPLICATION**

**1.1 Scope and Application.**

This standard applies to all open excavations made in the earth's surface that require worker and/or property protection. See Section 3, Requirements for Protection Systems. Excavations are defined to include trenches.

**ANSI/ASSP A10.13-2011 (R2017) Safety Requirements for Steel Erection**

**1. SCOPE, PURPOSE AND EXCEPTIONS**

**1.1 Scope.** This standard establishes safety requirements for erecting, handling, fitting, fastening, reinforcing and dismantling of structural steel, plate steel, steel joist, and metal deck at a final in-place field site during construction, maintenance and dismantling operations.

**1.2 Purpose.** This standard is designed to:

1. Reduce the incidence of workplace fatalities, workers injuries, and property damage by prescribing minimum safety requirements.
2. Provide direction to persons concerned with, or responsible for, its applications.
3. Guide governments and other regulatory bodies in the development and promulgation of appropriate safety directives.

**1.3 Exceptions.** In cases of practical difficulties, unnecessary hardships or new developments, the enforcing authority may grant exceptions to literal requirements of this standard. These exceptions may permit use of other devices or methods, but only when it is clearly indicated that equivalent safety and permanent installation are thereby secured.

**ANSI/ASSP A10.15-1995 (R2017) Safety Requirements for Dredging**

**1. GENERAL**

**1.1 Scope.** This standard applies to construction dredging operations.

**1.2 Purpose.** This standard contains performance requirements in the safe and healthful process of conducting dredging operations:

1. For the preservation of life, limb, and property;
2. To provide direction to employers, supervisors and others concerned with, or responsible for, its application; and

3. To assist governments and other regulatory bodies in the development, promulgation and enforcement of appropriate safety directives.

1.3 Exceptions. This standard does not apply to the following:

1. Oil rigs-petroleum and chemical industry.
2. Deepwater mining and dredging on the outer continental shelf.
3. Fishing operations, including shell fishing.
4. Earthmoving equipment that is not on or part of a vessel.
5. Metallic and nonmetallic mining and sand and gravel operations.
6. Mining of clam or reef shells or both.

1.4 Application. This standard applies to dredging operations in connection with activities such as flood control, harbor maintenance, etc.

#### **ANSI/ASSP A10.16-2009 (R2016) Safety Requirements for Tunnels, Shafts and Caissons**

##### **1. GENERAL**

1.1 Scope. This standard establishes safety requirements pertaining to the construction of tunnels, shafts and caissons. The requirements set forth in this standard cover environmental control; related facilities; fire prevention; hoisting; haulage; and electrical, drilling and blasting, and compressed air work. This standard is not intended for application to mining or quarrying operations.

1.2 Purpose. The purpose of this standard is to establish reasonable and practical safety requirements and practices for the construction of tunnels, shafts and caissons.

1.3 Exceptions. The enforcing authority may grant an exception to the literal requirements of this standard or may permit alternative methods if compliance with these requirements presents a greater hazard or significant hardship, is impractical or involves other extenuating circumstances.

#### **ANSI/ASSP A10.18-2007 (R2012) Safety Requirements for Temporary Roof and Floors, 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 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/ASSP A10.8, *Scaffolding Safety Requirements*).

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

1.1.3 This standard does not apply to the application of membrane roofing materials. See ANSI/ASSP 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.

### **ANSI/ASSP A10.19-2017 Safety Requirements for Pile Installation and Extraction Operations**

#### **1. GENERAL**

1.1 Scope. This standard establishes safety requirements for the installation and extraction of piles during construction and demolition operations.

1.2 Application. This standard applies to employment and places of employment where employees are exposed to hazards associated with pile installation and extraction operations during construction and demolition operations. This standard applies to piles comprised of hot and cold rolled steel, concrete, wood and composite materials. This standard does not apply to structural steel erection covered by ANSI/ASSP A10.13 or jacking or caisson operations covered by ANSI/ASSP A10.16.

1.3 Purpose. The prevention of injuries and illnesses to persons exposed to hazards associated with pile driving and extraction operations.

1.4 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, exceptions to the literal requirements of this standard 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.

1.5 Mandatory and Advisory Rules. Mandatory rules of this standard are characterized by the word “shall.” If a rule is of an advisory nature, it is indicated by the word “should,” or is stated as a recommendation.

1.6 Equivalent. In this standard, the word “equivalent” shall mean alternative materials, designs or features that will provide an equal degree of strength and safety.

**ANSI/ASSP A10.21-2018 Safety Requirements for Safe Construction and Demolition of Wind Generation/Turbine Facilities**

**1. GENERAL**

1.1 Scope. This standard establishes the minimum requirements for protecting the safety and health of persons involved in construction and demolition operations addressing utility-scale land-based wind generation/turbine facilities.

1.2 Purpose. The purpose of this standard is to establish minimum safety requirements and provide recommended best practices for the construction and demolition of wind energy projects.

1.3 Application. This standard is intended to serve as a guide to employers engaged in the construction or demolition of wind energy projects. It can also serve as a reference to regulatory agencies in whose jurisdictions wind energy projects may be built or demolished. This standard is intended to apply during the construction and demolition phases of wind energy projects, not during the development or operations phases. This standard does not cover offshore wind energy projects, nor activities occurring off-site, nor the construction or demolition of small wind turbine systems.

1.4 Modifications and Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, exceptions to the literal requirements may be granted by the enforcing authority to permit the use of other devices or methods, but only when it is clearly indicated that the equivalent protection is thereby secured.

1.5 Mandatory and Advisory Rules. Mandatory rules of this standard are characterized by the word “shall.” If a rule is of an advisory nature, it is indicated by the word “should,” or is stated as a recommendation or commentary. The appendices are advisory.

**ANSI/ASSP A10.22-2007 (R2017) Safety Requirements for Rope-Guided & Non-Guided Workers' Hoists**

**1. GENERAL**

1.1 Scope. This standard establishes minimum safety requirements for temporary personnel hoisting systems used for the transportation of persons to and from working elevations during normal construction and demolition operations, including maintenance, and is restricted to use in special situations, such as:

1. Work in chimneys, chimney linings, silos, towers, stacks, shafts and similar projects.
2. When necessary, to hoist or lower a person in a boatswain's chair or equivalent and the height is too great for practical use of a block and falls (see Section 12).
3. For transportation of materials, but not concurrently with hoisting of personnel.

The requirements of this standard are in addition to, or in lieu of, applicable provisions specified by ANSI/ASSP A10.5, *Safety Requirements for Material Hoists*.

1.2 Purpose. This standard is intended to provide safety for those requiring the use of rope-guided and non-guided worker's hoists in special situations as set forth in 1.1.

1.3 Exceptions. In cases of practical difficulties, unnecessary hardships or new development, 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.

1.4 Design Qualifications. Rope-guided worker's hoists shall be designed by a qualified engineer competent in this field, and shall be constructed and rated in accordance with such design and the limitations of this standard.

1.5 Training. Prior to using the hoisting system described herein, both supervisory and operation personnel shall be instructed in the provisions of this standard and in the operational characteristics relating to the particular worker's hoisting system in use. Recommendations of the equipment manufacturer and system designer(s) shall be followed. The equipment manufacturer shall provide instructional material for training on their equipment. Records of training shall be maintained.

### **ANSI/ASSP A10.23-2019 Safety Requirements for the Installation of Drilled Shafts**

#### **1. SCOPE, PURPOSE, APPLICATION AND EXCEPTIONS**

1.1 Scope. This standard establishes safety requirements for the installation of drilled shafts during construction and demolition operations.

1.2 Purpose. This standard is intended for use as a guideline for protecting workers from hazards associated with installation of drilled shafts.

1.3 Application. This standard applies to employment and places of employment where employees are exposed to hazards associated with the construction of drilled shafts for foundations and earth retention elements. This standard does not apply to driven piles covered by ANSI/ASSP A10.19 or caissons covered by ANSI/ASSP A10.16.

1.4 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, the enforcing authority may grant exceptions to literal requirements of this standard. These exceptions may permit use of other devices or methods, but only when it is clearly indicated that equivalent safety and permanent installation are thereby secured.

### **ANSI/ASSP A10.24-2014 Roofing Safety Requirements for Low-Sloped Roofs**

#### **1. GENERAL**

1.1 Scope. This standard establishes safe operating practices for the installation, maintenance and removal of membrane roofing that is seamed or seamless on low-sloped roofs, which means the roof has a slope that is less than or equal to 4 in 12 (18°). These types of roofs include but are not necessarily limited to: hot and cold built-up roofing, single-ply roofing, spray polyurethane foam (SPF) roofing, liquid-type roofing (Hypalon®, polyurethane, etc.) and modified bitumens.

*NOTE: This standard does not apply to roofs with slopes greater than 4 in 12 (18°). The materials that are normally installed on such roofs are composition or wood shingles, slate and tile products.*

1.2 Application. The requirements of this standard apply to all situations encountered in the installation, maintenance and removal of seamed and seamless membrane roofing.

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.

### **ANSI/ASSP A10.25-2017 Sanitation in Construction**

#### **1. GENERAL**

1.1 Scope. This standard shall apply to all construction and demolition job sites. The standard covers potable water, toilet and general hand washing facilities on a job site.

This standard does not apply to the handling of hazardous chemicals. The employer shall provide washing facilities that conform to the specifications of Safety Data Sheet (SDS) for hazardous product handling used on the job site.

1.2 Purpose. The minimum purpose of this standard is to assure that employees are provided with adequate potable water, general hand washing and sanitary toilet facilities.

1.3 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, the enforcing authority may grant exceptions to literal requirements of this standard. These exceptions may permit use of other devices or methods, but only when it is clearly indicated that equivalent means of sanitation are achieved.

### **ANSI/ASSP A10.26-2011 (R2016) Emergency Procedures for Construction and Demolition Sites**

#### **1. GENERAL**

1.1 Scope. This standard applies to those emergency procedures involving:



1. Fires, collapses, hazardous spills and other emergencies that could endanger workers;
2. Emergency rescue of injured or ill workers or other persons, or of uninjured workers unable to rescue themselves;
3. Onsite provision of first aid and emergency medical care;
4. Evacuation and transportation of injured or ill workers to appropriate emergency medical facilities;
5. Pre-planning and coordination of emergency plan with emergency medical facilities; and
6. Training on emergency procedures/plans for workers and other groups.

1.2 Purpose. The purpose of this standard is to provide guidelines for the development of emergency procedures for construction sites.

1.3 Exceptions. Where completion of these requirements is impractical or would present significant hardship, or where other extenuating circumstances exist, the enforcing authority may permit alternative methods, but only when it is clearly evident and documented that equivalent methods and means of protection are used.

### **ANSI/ASSP A10.28-2018 Safety Requirements for Work Platforms Suspended from Cranes or Derricks**

#### **1. Scope**

This standard applies to platforms suspended from the load lines of cranes or derricks in order to:

1. perform work at elevations that cannot be reached in a safe manner by other types of scaffolds or aerial work platforms; or
2. transport personnel to elevations where other means of access are unsafe or impractical because of design or worksite conditions.

#### **1.1 Application**

This standard shall apply to platforms hoisted by cranes or derricks in order to:

1. perform work at elevations that cannot be reached in a safe manner by other types of scaffolds or aerial work platforms, as determined by a qualified person; or
2. transport personnel to elevations where other means of access are unsafe or impractical because of design or worksite conditions. Safe use of such equipment is dependent upon the user following all provisions contained herein.



## 1.2 General Requirements

The use of a crane or derrick to hoist employees on a personnel platform is acceptable only after the qualified person (person responsible for the lift) has completed a job safety analysis (JSA) that includes consideration of conventional means of access such as a personnel hoist, ladder, stairway, aerial lift, elevating work platform or scaffold as a practical alternative. The JSA shall also include the following at a minimum and shall be maintained on the jobsite:

1. Jobsite information including physical description of area (north, east, south, west).
2. Reasons for lift including factors prohibiting the use of scaffolds, aerial work platforms, ladders or other such equipment; such as considerations related to environmental and work factors such as ability to reach work area in a feasible manner; impact of ice, snow, oil on ladders, steps or runways; structural stability, etc.
3. Steps to be followed to complete the lift.
4. Hazards associated with each step in the process.
5. Controls associated with each hazard.

## 1.3 Critical Lift Plan

A critical lift plan identifying the following must be prepared in advance and signed by the qualified person.

### 1.3.1 A critical lift plan shall include the following:

- Make, model and serial number of crane or derrick.
- Configuration of crane or derrick including boom length, jib, counterweight, wire rope allowable line pull and capacities at maximum expected radius.
- Ground conditions and blocking required for stability, proximity to power lines and other overhead hazards.
- Platform weight and capacity, number of occupants and approximate weight of occupants and tools.
- Reason for using suspended personnel platform rather than conventional means.
- Special considerations such as tag lines, radio communication, weather, equipment or workers over or under platform operations, underground or overhead utilities.
- Names of qualified persons and competent persons in charge of the lift, including: crane operator(s), signal person(s), rigger(s) and platform occupant(s), at a minimum.
- A copy of the critical lift plan shall be maintained on the jobsite.

**ANSI/ASSP A10.30-2020 Safety Requirements for the Installation of Ground Anchors and Micropiles**

1. Scope, Purpose, Application and Exceptions

1.1 Scope

This standard establishes safety requirements for the installation of ground anchors and micropiles during construction and demolition operations.

1.2 Purpose

This standard is intended for use as a guideline for protecting workers from hazards associated with installation of ground anchors and micropiles.

1.3 Application

This standard applies to employment and places of employment where employees are exposed to hazards associated with the construction of ground anchors and micropiles for foundations and earth retention elements.

1.4 Exceptions

In cases of practical difficulties, unnecessary hardships or new developments, the enforcing authority may grant exceptions to literal requirements of this standard. These exceptions may permit use of other devices or methods, but only when it is clearly indicated that equivalent safety and permanent installation are thereby secured.

**ANSI/ASSP A10.31-2019 Safety Requirements, Definitions & Specifications for Digger Derricks**

1. Scope, Purpose, Requirements, Application and Exceptions

1.1 Scope

1.1.1 Equipment Covered. This standard applies to special multipurpose vehicle-mounted machines, commonly known as digger derricks. These machines are primarily designed to accommodate components that dig holes and/or set poles and position materials and apparatus.

*NOTE: Depending on their use, digger derricks may be defined as a crane by government regulations, and operator's certification may be required.*

1.1.2 Equipment Excluded. Excluded from this standard are general-purpose cranes, designed only for lifting service and machines primarily designed for digging holes.

1.1.3 Uniform Specification Data. This standard establishes uniform requirements for design, specifications and dimensions.

1.1.4 Responsibilities. This standard defines the respective responsibilities of the manufacturer, dealer, installer, owner, user, operator, lessor or lessee, and broker of the digger derrick.

## 1.2 Purpose

This standard applies to the establishment of criteria for design, manufacture, testing, inspection, installation, maintenance, use, training and operation of vehicle-mounted digger derricks to achieve the following objectives:

1. prevention of personal injuries and accidents
2. uniformity in ratings
3. understanding by manufacturers, dealers, installers, owners, users, operators, lessors or lessees, and brokers of their respective responsibilities

## 1.3 Requirements

The requirements of this standard shall be met or exceeded.

## 1.4 Application

The design and manufacturing requirements of this standard apply to all digger derricks manufactured on or after the effective date. All other provisions apply to new or existing units in use on or after the effective date of this standard, regardless of their date of manufacture.

### [\*\*ANSI/ASSP A10.32-2012 Personal Fall Protection Used in Construction and Demolition Operations\*\*](#)

## 1. GENERAL

1.1 Scope. This standard establishes performance criteria for personal fall protection equipment and systems in construction and demolition and provides guidelines, recommendations for their use and inspection. It includes, but is not limited to; fall arrest, restraint, positioning, climbing, descending, rescue, escape and training activities.

Exceptions: This standard does not include lineman's body belts, pole straps, window washer's belts, chest/waist harnesses and sports equipment.

1.2 Purpose. The purpose of this standard is to provide minimum guidelines to users of personal fall protection equipment.

1.3 Application. This standard applies to users of personal fall protection equipment; to those personnel responsible for the selection, procurement, inspection, use, care and maintenance of the equipment; and to those responsible for training and supervision of the users.

1.4 Resolutions. In order to provide for superior protection to the user, this standard permits:

1.4.1 Only full body harnesses shall be used for fall arrest. The fall arrest attachment point of the body harness shall be at the center of the user's back near shoulder level.

1.4.2 Maximum arresting force imposed on the user's body shall not exceed 1,800 pounds (8kN).

1.4.3 All equipment used in a fall protection system shall be compatible to limit force levels, maintain system strength and prevent accidental disengagement.

1.4.4 Equipment serviced by the manufacturer or their authorized representative shall be capable of meeting all performance requirements of this standard.

1.5 Exceptions. In cases of practical difficulty or undue hardship, the responsible authority 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 personnel and equipment protection is assured.

### **ANSI/ASSP A10.33-2020 Safety & Health Program Requirements for Multi-Employer Projects**

#### **1. General**

##### **1.1 Scope**

This standard sets forth the minimum elements and activities of a program that defines the duties and responsibilities of the parties involved in a multi-employer construction site.

##### **1.2 Purpose**

The purpose of this standard is to assist owners/clients, construction manager - agents, project constructors and contractors in establishing and managing an effective safety program on a multi-employer worksite.

##### **1.3 Philosophy**

Worker safety on construction and demolition projects is achieved when the entire project hierarchy, from the owner through to the craft workers, are engaged in the safety initiative of the project. Challenges in a multi-employer environment versus that of a single-employer environment are conveying the message that safety is important, overcoming perceived conflicts between safety and production, and communicating work activities, inherent safety hazards and controls between employers.

The program elements addressed in this standard are based on a composite of best practices drawn from a variety of organizations in the construction and demolition industry that have consistently executed successful safety programs that were characterized by the absence of undesirable occurrences and personal injuries. Owners and contractors who have implemented such programs have also experienced improved project quality, productivity, and profit.

## 1.4 Exception

This standard is not intended for homeowners contracting to build or have work done on their personal residence.

### **ANSI/ASSP A10.34-2021 Protection of the Public on or Adjacent to Construction Sites**

#### 1. General

##### 1.1 Scope

This standard provides the required elements and activities on construction and demolition projects to protect the public.

##### 1.2 Purpose

This standard is intended for use as a system to protect the public.

##### 1.3 Responsibility

The project constructor shall implement this standard based on the specific size and location of the project and degree of potential hazards to the public.

1.3.1 Whenever the project constructor or other responsible party (agent) delegates their responsibility, they are not relieved of accountability for oversight (of the activities that were delegated). If the project constructor or its agent becomes aware of a situation where an entity that has been delegated responsibility fails to or cannot perform the delegated responsibility adequately, then the project constructor or its agent shall be responsible for correction of the deficiency.

### **ANSI/ASSP A10.35-2020 Requirements for Pressure Testing Steel and Copper Piping Systems**

#### 1. Scope, Purpose and Exceptions

##### 1.1 Scope

This standard establishes the elements and activities for the safe pressure testing of steel and copper piping systems.

##### 1.2 Purpose

The primary purpose of this standard is to provide construction companies that are engaged in the installation, modification, or repair of steel and/or copper piping systems with the safe work practices and procedures that are necessary to help prevent injuries resulting from pressure testing failures.

### 1.3 Exceptions

1.3.1 This standard does not apply to piping systems made from cast iron, fiberglass, plastic, PVC, CPVC or any materials other than steel and copper.

1.3.2 In cases of practical difficulties, unnecessary hardships or new developments, the construction owner or project constructor may grant exceptions to literal requirements of this standard. These exceptions may permit use of other methods, but only when it is clearly indicated and documented that the chosen alternative method(s) provides adequate workplace safety and health protection.

1.3.3 This standard is not intended for residential construction.

### **ANSI/ASSP A10.37-2016 Debris Net Systems Used During Construction and Demolition Operations**

#### 1. GENERAL

1.1 Scope. This standard establishes safety requirements for the design, selection, installation and use of debris net systems during construction, demolition operations and for the temporary containment of debris from deteriorating structures.

1.2 Purpose. The purpose of this standard is to provide the criteria for debris net selection and use and to provide design, test and installation requirements for debris nets.

1.3 Exceptions. For cases of practical difficulty and unnecessary hardship, or where other extenuating circumstances exist, the competent person may grant exception to the literal requirements of this standard and permit alternate methods, but only when it is clearly evident that equivalent safeguards are being provided.

### **ANSI/ASSP A10.38-2013 Basic Elements of an Employer's Program to Provide a Safe and Healthful Work Environment**

#### 1. GENERAL

1.1 Scope. This standard establishes the minimum elements of a program for protecting the safety and health of employees involved in construction activities.

1.2 Purpose. The purpose of this standard is to assist employers in their efforts to provide a safe and healthful work environment.

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.

**ANSI/ASSP A10.39-1996 (R2017) Construction Safety and Health Audit Program**

1. SCOPE

This standard identifies the minimum performance elements that, when properly utilized, will allow for a competent evaluation of a construction safety and health program. Further, it will identify those areas where systems, records and performance elements are required in order to produce a quality audit.

2. PURPOSE

The purpose of this standard is to establish an internal method of measuring compliance with an organization's written safety and health program requirements.

2.1 Exceptions. In cases of practical difficulty or undue hardship, the responsible authority 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 personnel and equipment protection is assured.

**ANSI/ASSP A10.40-2007 (R2018) Reduction of Musculoskeletal Problems in Construction**

1. SCOPE AND PURPOSE

1.1 Scope. This standard applies to construction work where there may be risk factors, which could lead to musculoskeletal problems for construction workers. This standard does not apply to office or administrative work performed by construction companies.

1.2 Purpose. The purpose of this standard is to reduce occupational contributions to musculoskeletal problems in construction workers.

*NOTE: Implementing this standard can help reduce the risk of musculoskeletal problems, but may not eliminate them due to the complex etiology of musculoskeletal problems and non-occupational risk factors. Note also that the mere presence of occupational risk factors may not constitute a problem.*

*NOTE: This standard is not intended to be and should not be used by governmental authorities in any enforcement procedures or as a basis for enforceable standards. The committee understands that there is not complete agreement about the causes and solutions to musculoskeletal problems in construction.*

1.3 Modifications and Exemptions. In cases of practical difficulty, infeasibility, new developments and/or unnecessary hardship, exceptions may be made to the literal requirements of this standard, but only when it is clearly evident that equivalent protection is thereby assured.

**ANSI/ASSP A10.42-2000 (R2017) Safety Requirements for Rigging Qualifications and Responsibilities**

**1. GENERAL**

1.1 Scope. This standard establishes minimum criteria of knowledge and performance requirements for a qualified rigger in the construction industry.

1.2 Purpose. This standard is designed to assist in achieving reasonable safety of all persons and materials during the process of, or as the result of, rigging, lifting, or moving of loads.

1.3 Modifications and Exemptions. In cases of practical difficulties, unnecessary hardships, or new developments, exceptions to the literal requirements may be granted by the enforcing authority to permit the use of other devices or methods, but only when it is clearly indicated that the equivalent protection is thereby secured.

1.4 Limitations. This standard does not apply to the training required to be qualified as an operator of powered equipment. This standard does not apply to transportation of loads or maintenance or repair of powered or manual hoists, cranes, winches, or other hoisting equipment.

*NOTE: While the qualified rigger is required to know the basic principles and limits of lifting and hoisting equipment, he or she is expected to rely on qualified operators, mechanics, suppliers, engineers, managers, and others involved for valid information, and for competent performance by these other persons in their respective roles. For instance, a rigger may be responsible to determine loads and the farthest radius of a pick, but then must rely on a crane operator to know the safe crane capacity for the configuration and setup of that crane. This principle also applies to operators of hoists, winches, helicopters, etc. Similarly, if a rigger determines that a 5-ton picking beam is needed, he or she can rely on a manager, an engineer who provides specifications, or a supplier who provides a product for the rigger's use.*

1.5 Mandatory and Advisory Rules. Mandatory rules of this standard are characterized by the word "shall." If a rule is of an advisory nature, it is indicated by the word "should," or is stated as a recommendation or commentary. The Appendixes are advisory.

1.6 Equivalent. The word "equivalent" in this standard shall mean alternative materials, designs, or features that will provide an equal degree of strength and safety.

**ANSI/ASSP A10.43-2016 Confined Spaces in Construction and Demolition Operations**

**1. SCOPE, PURPOSE AND EXCEPTIONS**

1.1 Scope. This standard sets forth the minimum elements and activities of a program that defines the duties and responsibilities of construction and demolition employers to be followed while entering, exiting and working in confined spaces at normal atmospheric pressure.



Exception: This standard does not pertain to underground mining, tunneling, caisson work or other similar tasks that have established national consensus standards.

1.2 Purpose. The purpose of this standard is to establish minimum requirements and procedures for the safety and health of employees who work in, in connection with, and around (in such proximity that would affect employees) confined spaces on construction and demolition projects.

1.3 Exceptions. In cases of practical difficulties, unnecessary hardships or new developments, exceptions to the literal requirements may permit the use of other means and methods, but only when it is clearly indicated by a qualified person that the equivalent protection is thereby secured.

### **ANSI/ASSP A10.44-2020 Control of Energy Sources (Lockout/Tagout) for Construction and Demolition Operations**

#### **1. Scope and Purpose**

##### **1.1 Scope**

This standard establishes the minimum requirements for the control of energy sources to prevent release of harmful energy that could cause death, injury or illness to personnel performing construction and demolition work.

This standard does not cover the following:

Installations under the exclusive control of electric utilities for the purpose of power generation, transmission and distribution, including related equipment for communication or metering; exposure to electrical hazards from work on, near or with conductors or equipment in electric utilization installations.

##### **1.2 Purpose**

The purpose of this standard is to establish procedures for the protection of property and personnel from injury due to the:

- unexpected energization;
- start-up;
- inadequate insulation;
- inadequate isolation; or
- release of active or stored energy

of machines, equipment, vehicles, tools, etc. in, on or around machines, tools or equipment during repair, maintenance, servicing, installation, testing and associated construction and demolition activities.

The purpose is to ensure that before any worker services, maintains, works on or near equipment where the potential exists for exposure to un-isolated energy or unexpected

energization, start-up of equipment or the release of stored energy, that the machine, equipment, vehicles or tools, etc. is isolated from the energy source and rendered inoperative.

### **ANSI/ASSP A10.46-2020 Hearing Loss Prevention for Construction & Demolition Workers**

#### **1. General**

##### **1.1 Scope**

This standard applies to all construction and demolition workers with potential noise exposures (continuous, intermittent and impulse) of 85 dBA and above.

##### **1.2 Purpose**

This standard is intended to help employers prevent occupational hearing loss among construction and demolition workers.

### **ANSI/ASSP A10.47-2015 Work Zone Safety for Highway Construction**

#### **1. GENERAL**

**1.1 Scope.** This standard covers employees engaged in construction, utility work, maintenance or repair activities on any area of a highway.

**1.2 Purpose.** Establishes the minimum requirements for the construction and maintenance of public and private highways and roads to achieve the following objectives:

1. Prevent employee injuries and illnesses resulting from working in work zones.
2. Establish safe work practices in highway work zones.
3. Prevent vehicular crashes in highway work zones.

### **ANSI/ASSP A10.48-2016 Criteria for Safety Practices with the Construction, Demolition, Modification and Maintenance of Communication Structures**

#### **1. GENERAL**

**1.1 Scope.** This standard establishes minimum criteria for safe work practices and training for personnel performing work on communication structures including antenna and antenna supporting structures, broadcast and other similar structures supporting communication related equipment.

This standard does not address specific work practices or personnel training requirements involving crane applications which are covered explicitly within other ANSI and OSHA standards and regulations. At a minimum, all construction activities on communication structures involving cranes shall include direct communication with the crane company and/or operator to establish

rigging plan requirements and key designated personnel to ensure individual roles and responsibilities are fully understood. At a minimum, designated key personnel, where applicable, shall include the crane operator, signal person, spotter and qualified rigger(s) responsible for attaching and detaching the lifted loads from the crane's hook.

The language in the standard regarding personnel riding the load line on a base mounted hoist is specific to this standard and does not apply to any other industry or standard.

1.2 Application. The information contained in this standard was obtained from sources as referenced, and represents the accepted industry best practices for work on communication structures.

While it is believed to be accurate, this information should not be relied upon for a specific application without competent professional examination and verification of its accuracy, suitability and applicability.

1.3 History The criteria for loading, analysis and design, along with means and methods criteria related to the construction, installation, alteration and maintenance of communication structures were originally contained in the ANSI/TIA-1019-A, *Standard for Installation, Alteration and Maintenance of Antenna Supporting Structures and Antennas*. In response to industry initiatives, separate standards have been developed to provide greater clarity to the industry stakeholders. Means and methods provisions related to construction are now contained in this standard and loading, analysis and design provisions are contained in ANSI/TIA-322, *Loading Criteria, Analysis, and Design Related to the Installation, Alteration and Maintenance of Communication Structures*.

In addition to the official publication of the ANSI/TIA-322 standard, this standard makes specific reference to the ANSI/TIA-1019-A standard for topics related to loading, analysis and engineering design provisions.

With the publication of ANSI/ASSP A10.48 and ANSI/TIA-322, ANSI/TIA 1019-A will become obsolete.

## **ANSI/ASSP A10.49-2015 Control of Chemical Health Hazards in Construction and Demolition Operations**

### **1. GENERAL**

1.1 Scope. This standard establishes the minimum requirements for controlling health risks from chemicals and toxic substances used or encountered in construction and demolition operations. It establishes procedures for identifying and evaluating chemical hazards and exposures, and for selecting and using appropriate controls and practices to reduce health risks.

1.2 Purpose. The objective of this standard is to reduce the risk to workers of adverse occupational health effects from exposure to chemicals and toxic substances in construction and demolition operations.

1.3 Application. This standard is applicable to construction owners, project constructors, contractors and workers.

1.4 Exceptions. This standard does not cover:

- non-work-related health hazards;
- hazardous waste health hazards;
- Chemical physical hazards (unstable, reactive, flammable, explosive as defined by the Occupational Safety and Health Administration (OSHA) in 29 CFR 1910.1200(c));
- biological hazards;
- ergonomic hazards;
- physical hazards (radiation, magnetic fields, noise, pressure or temperature extremes);
- indoor air quality;
- psychological hazards (stress, workplace violence);
- safety hazards; or
- those addressed by specific ANSI/ASSP A10 American National Standards.

**[ASSP TR-A10.100-2018 Technical Report: Prevention through Design – A Life Cycle Approach to Safety and Health in the Construction Industry](#)**

1. SCOPE, PURPOSE AND APPLICATION

Scope

This technical report provides guidance on including prevention through design concepts regarding the application of occupational safety and health principles in the construction industry. Through the application of these concepts, occupational hazards and risks can be identified, avoided, reduced, and/ or eliminated before, during and after a building or structure is constructed, renovated, and/or demolished.

This technical report complements but is not intended to replace existing specific standards and procedures, but rather to support those that meet related performance objectives.

The goals of applying prevention through design concepts in an occupational setting are:

- A. Achieve that state in which the hazards are identified early, and the exposures to those hazards are reduced to the lowest extent possible to minimize risks.
- B. Reduce the occurrence of occupational injuries, illnesses, and fatalities.
- C. Reduce the cost of retrofitting necessary to mitigate hazards and risks that were not addressed in the design or redesign processes.

- D. To develop a proactive and collaborative team approach between owners/operators, designers and contractors to develop a safe functioning building and work environment throughout the life of the facility.

### Purpose

The purpose of this technical report is to reduce injuries, illnesses and fatalities in the construction industry by incorporating methods and features in the design stage and /or construction planning phase of a new construction project and/or renovation or retrofit of an existing building or facility to make a building or structure safer and healthier to build, maintain, and decontaminate, decommission, deconstruct and ultimately demolish. This document is intended to provide guidance for designers, architects, engineers, constructors and owners/developers on these methods and features.

### Application

The concepts discussed in this technical report may be applied in any occupational setting but concentrate on the construction industry.

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