



AMERICAN NATIONAL STANDARD

ANSI/ASSE A10.27-1998 (R2005)
Safety Requirements for
Hot Mix Asphalt Facilities —

American National Standard
for Construction and
Demolition Operations

ANSI/ASSE A10.27-1998 (R2005)



AMERICAN SOCIETY OF
SAFETY ENGINEERS

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ANSI A10.27 – 1998 (R2005)

American National Standard
Construction and Demolition Operations
Safety Requirements for Hot Mix Asphalt Facilities

Secretariat

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

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Foreword (This Foreword is not a part of American National Standard A10.27-1998 (R2005).)

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 (under development)
- 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 Marine Dredging
- A10.16 Tunnels, Shafts, and Caissons
- A10.17 Safe Operating Practices for Hot Mix Asphalt (HMA) Construction
- A10.18 Temporary Floor Holes, Wall Openings, Stairways, and Other Unprotected Edges
- A10.19 Pile Installation and Extraction Operations (under development)
- A10.20 Ceramic Tile, Terrazzo, and Marble Work
- A10.22 Rope-Guided and Non-Guided Workers' Hoists
- A10.23 Back Injury Prevention Programs (under development)
- A10.24 Roofing – Safety Requirements for Low Sloped Roofs (under development)
- 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)
- A10.30 Construction Workplace Security
- 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
- A10.35 High Pressure Hydro Blasting (under development)
- 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 Ergonomics 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 (under development)

A10.46 Hearing Loss Prevention (under development)
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.

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AMERICAN NATIONAL STANDARD A10.27 SAFETY REQUIREMENTS FOR HOT MIX ASPHALT FACILITIES

1. GENERAL

1.1 Scope. This standard provides recommendations concerning the design, manufacture, operating processes, and equipment associated with the production of hot asphalt (HMA) mixing facilities. Included are raw material handling and storage, equipment operation to produce asphalt mixtures, and the delivery of mixes into vehicles for transport to users. Routine maintenance housekeeping and allied functions are included.

2. PURPOSE

The purpose of this standard is to provide operational/design safety and health guidelines to protect the HMA facility operators, employees, and other persons from injury.

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.

3. DEFINITIONS

3.1 Asphalt, Cold Mix. A mixture of unheated mineral aggregate and emulsified asphalt.

3.2 Asphalt, Hot Mix (HMA). a blend of heated and dried aggregate, heated asphalt cement and, in some cases, other liquid or solid additives.

3.3 Asphalt Burns. Injury to flesh caused by direct contact of flesh with hot asphalt. The nature of asphalt causes it to adhere to flesh and the resulting continued contact can greatly increase the severity of injury.

3.3.1 Asphalt Burns, Non-Serious. Injury to only very small areas of flesh on relatively non-sensitive areas of the body by small quantities of asphalt. If the injured person shows any evidence of nausea or faintness, the burn should be considered serious.

3.3.2 Asphalt Burns, Serious. Injury to significant areas of flesh especially to the head, face, or extremities and/or when large amounts of asphalt are involved.

3.4 Asphalt Fumes. The cloud of small particles created by condensation for the gaseous state after volatilization of asphalt.

3.5 Combustible Hazards. Presence of combustible material, which creates a high risk of fire by its nature and/or the proximity of a potential ignition source.

3.6 Combustible Material. Any substance that may be ignited by normally available means and that will sustain combustion when the source of ignition is removed.

3.7 Confined Space. A space that is large enough and so configured that an employee can bodily enter and perform assigned work; has a limited or restricted means of entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, or pits that may have limited means of entry); and is not designed for continuous employee occupancy.

3.8 Cut Back. Asphalt cement that has been diluted or liquefied by adding or blending petroleum solvents.

3.9 Direct Fired Tank. A tank that uses an LP #2 or natural gas flame as its heating medium.