



CONSTRUCTION ENVIRONMENTAL HEALTH & SAFETY EXHIBIT

PERSONAL PROTECTIVE EQUIPMENT

I. General Requirements

- A. The hierarchy of controls shall be utilized wherever feasible. Engineering controls shall first be implemented, followed by administrative controls, followed lastly by personal protective equipment.
- B. All work involving the use of personal protective equipment shall, at a minimum, comply with OSHA 29CFR Part 1926.95 through 1926.134, including all appendices.
- C. Each Contractor requiring employees to use personal protective equipment is required to have a personal protective equipment safety program, specific to that Contractor's operations, which meets or exceeds the guidelines listed in this Standard.
- D. The employer's Competent Person shall ensure that all Employees potentially exposed to hazards associated with or mitigated by personal protective equipment possess the knowledge and skill required to perform the duties for which they are assigned. In addition, a hazard analysis shall be completed prior to any operation, hazards shall be clearly identified, and hazard controls defined. The hazard analysis shall be reviewed with the work crews prior to the start of work, and where conditions change.
- E. Where construction operations take place in existing facilities or buildings, each employee shall comply with the facility/building-specific requirements regarding personal protective equipment, where these requirements are more stringent than those outlined in this Standard.
- F. It is the responsibility of each Contractor to supply their employees with required personal protective equipment.
- G. Project personal protective equipment requirements shall be maintained from commencement of project activities through completion of the project. All persons within the defined project area are required to abide by the project's personal protective equipment requirements or this Standard, whichever is more stringent.

II. Clothing Requirements

- A. Appropriate work clothing shall always be worn to minimize common exposures including lacerations, abrasions, sun, cold, and contact with contaminants. Each contractor's Competent Person or Safety Representative shall assess the task at hand and shall determine the appropriate level of protection required. Loose clothing or jewelry that may catch or become entangled is prohibited.
- B. Shirts that cover the shoulders and torso, including four (4) inch sleeves (minimum) are acceptable. Tank tops and cut-offs are prohibited. NOTE: Full-arm shirts, coveralls, jackets, or additional arm protection (i.e. kevlar sleeves) may be required for operations where additional exposure is possible (i.e. demolition activities).
- C. Long work pants are required. Shorts and sweat pants are prohibited.
- D. Reflective vests meeting the requirements of ANSI 107-2015, Class II, shall be worn where employees are potentially exposed to heavy equipment or vehicular traffic. NOTE: The University presumes that all employees are potentially exposed to heavy equipment or vehicular traffic during certain phases of projects including utility work, excavation, foundations, structure erection (wood, steel, or concrete), and exterior sheathing/enclosure. During these phases of work, at a minimum, all project employees shall be required to don reflective vests.



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III. Eye and Face Protection

- A. At a minimum, safety glasses meeting the requirements of ANSI Z87.1, including side shields, shall always be worn on the construction project. Additional eye and face protection shall be required where flying objects, chemical hazards, or other recognized hazards are present.
- B. Each contractor's Competent Person or Safety Representative shall assess the task at hand and shall determine the appropriate level of protection required.
- C. The use of chain saws, grinders, demolition saws etc., requires the use of full face shields in addition to safety glasses.
- D. The use of powder-actuated tools requires the use of a full-face shield in addition to safety glasses or the use of tight-fitting goggles.
- E. Operations that require the employee to look in an upward direction, including drilling, cutting, etc., require the use of foam-lined safety glasses (i.e., spoggles), tight-fitting goggles or a face shield and safety glasses for protection against falling debris.
- F. Radiant energy filter lenses for cutting, welding and torch use will be selected to match the activity. When a welding helmet provides the filtering lens, impact protective lenses will be worn inside the helmet to prevent injury when the helmet is raised.

IV. Foot Protection

- A. In general, staff will use ASTM guidelines as indicated below. Those included in the craft payroll staff may wear foot protection in accordance with each union member's agency agreement or governing PLA agreement.
- B. Rigid toe-capped, ASTM-compliant, 6" work boots are required in all work areas.
- C. Rubber boots, unless ASTM-compliant themselves, will be worn over ASTM-compliant footwear.
- D. Additional anti-slip footwear (e.g. ice spikes) over the foot protection products may be warranted by inclement weather and worksite conditions.

V. Hand Protection Policy

- A. Hand protection shall always be worn on the construction project, except where the hands are not used or exposed to hazards (i.e. walking, standing, or writing). NOTE: It is presumed by the University that all employees' hands are exposed to hazards (laceration, abrasion, puncture, crushing, chemical contact, electrical, etc.) when being used to touch or handle tools, equipment, materials, or debris. Exception: the use of hand protection while using certain rotating or reciprocating equipment may cause a hazard of the glove becoming entangled in the equipment. This hazard must be assessed by the Competent Person. Where it is determined that this potential exists, hand protection may be foregone. Suitable alternative protection or guarding and/or increased levels of training may be required to minimize/eliminate physical hazards to the hands in these isolated cases.
- B. Each contractor's Competent Person or Safety Representative shall assess the task at hand and shall determine the appropriate level of protection required. It is the responsibility of each Contractor to determine the appropriate type of hand protection required for each task.



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- C. Where puncture or contact with sharp objects is possible (i.e. handling metal studs, ductwork, using utility knives, etc.), employees shall don cut-resistant or cut-proof gloves.
- D. Where dermal contact with substances known or anticipated to cause adverse reactions with the skin (i.e. concrete work, paints, epoxies, etc.), or where skin absorption of a hazardous material is possible, employees shall don chemical-resistant gloves appropriate to the potential exposure.

VI. Head Protection

- A. At a minimum, non-conductive hard hats meeting the requirements of ANSI Z.89.1 shall always be worn on the construction project.
- B. Where other protective equipment is worn on the head, face, neck, eyes, or ears, it shall not interfere with the fit or use of the hard hat.
- C. Each contractor's Competent Person or Safety Representative shall assess the task at hand and shall determine the appropriate level of protection required.
- D. A hardhat will be replaced if it is damaged, cracked, or has received a heavy blow.

VII. Hearing Conservation

- A. Hearing Conservation shall comply with the requirements of 29CFR Part 1926.52.
- B. Where hearing protection is worn to minimize noise-induced hearing loss, the noise-reduction rating (NRR) of the hearing protection shall effectively reduce the noise level to below 90 dBA. For construction, noise-reduction ratings shall be one-half (1/2) of the listed rating.
Example: The listed NRR for a brand of earplug is 32 dBA. The earplug will be considered to effectively reduce noise by 16 dBA. NOTE: This practice of reducing the NRR by one-half is considered to effectively compensate for field conditions, improper fitting, and changes in noise levels.
- C. It is the responsibility of the Contractor to determine/prove that hearing protection standards are acceptable and practical.
- D. As a general rule, any operation that produces noise levels where one must raise one's voice to be heard from a distance of three (3) feet will be considered to be above the permissible exposure level of 90 dBA and will require the use of engineering controls or hearing protection to effectively reduce noise levels.

VIII. Respiratory Protection

- A. Where engineering or administrative controls fail or are inadequate to prevent potentially harmful inhalation exposures to employees, the employer shall provide respiratory protection in accordance with 29CFR Part 1926.103 (1910.134). NOTE: This requires that the employer has assessed, either through an initial or negative exposure assessment, the levels of contamination present during the operation. Where the employer assumes that the employee is overexposed to the contaminant(s) of concern, the employee shall be protected as if in a worst-case scenario until proven otherwise.
- B. Where employees are not required to wear respiratory protection but do so voluntarily for their own comfort or perceived protection, the guidelines listed in 29CFR Part 1910.134 Appendix D shall be followed. The training listed in Appendix D shall be documented and retained in the project files.



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- C. The University does not recognize the use of disposable dust masks as protection from silica or any other contaminant exposure for the purposes of construction activities.

IX. References

1926 Subpart E, Personal Protective and Life Saving Equipment