

Protection from Falls

The largest percentages of fatalities that occur each year are caused by falls.

Personal Fall Arrest System (PFAS)	Yes	Needs Action
Is the PFAS used to prevent falls from heights above 6 feet?		
Was the PFAS designed and installed by a qualified person to maintain a safety factor of two?		
Will the PFAS limit the maximum arresting forces imposed on an employee wearing a body harness to 1,800 pounds?		
Is the PFAS rigged in such a manner that an employee can neither free fall more than 6 feet nor contact any lower level?		

Safety Net Systems	Yes	Needs Action
Are safety nets installed as close as practicable but no more than 30 feet below the walking working surface?		
Are safety nets extended beyond the edges of the walking working surfaces 8 to 13 feet depending on the potential fall distance?		
Is the potential fall area from the walking working surfaces on bridges to nets unobstructed?		
Is a certification record available stating that a competent person has inspected untested nets?		

Guardrail Systems, Canopies and Covers	Yes	Needs Action
On walking working surfaces 6 feet or more in height, are guardrail systems used to prevent falls from unprotected sides, edges, holes, remote excavations, and wall openings?		
Are the top edge heights of guardrail system members 42 inches, plus or minus 3 inches, above the walking working surface?		
Are wire rope guardrail systems more than 1/4 of an inch in diameter or greater and flagged at 6 foot intervals?		
Are canopies, screens, or toeboards installed to prevent falling objects?		
Are labeled covers secured over holes?		

Lead in Construction	Yes	Needs Action
Has a determination been made as to the possibility of airborne lead exposure on the job? (Significant airborne lead exposures can occur when welding, cutting, grinding, and abrasive blasting are performed during structural steel demolition and renovation).		
<p>If it has been determined that employees may be exposed to airborne lead, have you:</p> <ul style="list-style-type: none"> a. designated a competent person? b. become familiar with the Lead Exposure in Construction standard (as modified by Maryland)? c. conducted representative personal monitoring to assess employee exposures? d. arranged for appropriate protection for employees during the assessment period? e. trained employees? f. provided handwashing facilities? g. determined if your activity is also covered by Maryland Department of the Environment regulations? 		

<p>If exposures exceed the action level:</p> <p>a. has a medical surveillance program been established?</p> <p>b. have provisions been made for the required periodic air monitoring?</p> <p>c. has additional training been provided?</p>		
<p>If exposures exceed the permissible exposure level, have the following additional requirements been met?</p> <p>a. use of engineering and work practice controls to reduce exposures</p> <p>b. use of adequate personal protective equipment, including respiratory protection</p> <p>c. prohibition of food and beverage consumption and smoking in exposed areas</p> <p>d. establishment of a change area with storage facilities</p> <p>e. provision of showering facilities</p> <p>f. posting of warning signs at the exposure area</p>		

Ladders	Yes	Needs Action
Are employees made aware that metal ladders are not to be used where they may contact electrical conductors or equipment?		
Are they also aware that metal ladders cannot be used when working on or near electrical equipment such as changing light bulbs or fluorescent tubes?		
Are ladders with broken or missing rungs or split side rails, tagged and taken out of service?		
Are metal ladders inspected for damage or signs of corrosion?		
Are portable wood ladders and metal ladders adequate for their purpose, in good condition, and provided with secure footing?		
Are areas around the top and bottom of the ladder kept clear?		
Are portable ladders used at such a pitch that the horizontal distance from the top bearing to the foot of the ladder is about 1/4 of the working length of the ladder?		
Are ladders prohibited from being used in a horizontal position as platforms, runways, or scaffolds?		
Are portable ladders tied, blocked or otherwise secured against movement?		
If simultaneous two-way traffic is expected is a double cleat ladder installed?		
Are the rungs of ladders uniformly spaced?		
Are the side rails of the ladder extending at least 36 inches above the landing?		
Did a competent person provide ladder safety training to all employees?		
Are stairways or ladders provided at all breaks in elevation 19 inches or higher to provide safe access for employees?		
Are stairways in good condition and are stair rails provided for stairways having four or more risers?		

On-Site Consultation Services

On-Site Consultation is a free program to assist smaller businesses in identifying and correcting occupational safety or health hazards or potential hazards and in instituting safety and health programs. [At the employer's request](#), a consultant will meet with you and explain how the service works and what is involved in a survey of your facility. The consultant will answer questions regarding occupational safety and health.

On-Site Consultation Service is provided at not cost to employers through federal and state funds. Employers can request the free service by contacting: Division of Labor and Industry, Maryland Occupational Safety and

Health, Consultation Services, 1827 Washington Boulevard, Baltimore, MD 21230 or by phone (410) 537-4500.

Lift Trucks	Yes	Needs Action
Before being placed into service are powered industrial trucks examined for any conditions that may adversely affect the safety of the vehicle?		
Are defective powered industrial trucks immediately repaired or removed from service?		
Are the high lift rider trucks equipped with an overhead guard to protect the operator?		
Is the vertical load backrest provided to prevent raised loads from falling rearward?		
Are powered industrial trucks provided with an audible warning device to alert others in the area of their presence?		
Are only trained and qualified personnel permitted to operate powered industrial trucks?		
Are the rated load capacities of the powered industrial trucks clearly marked and not exceeded?		
Are raised loads kept as close to the ground as possible to prevent tipping while traveling?		
Are trucks driven with the load facing up grade when ascending or descending grades in excess of 10 percent?		
Are the load engaging means fully lowered, controls neutralized, power shut off, and brakes set on unattended powered industrial trucks?		
Are unauthorized riders prohibited from riding on lift trucks?		
Are seat belts being worn by operators?		

Material Hoists	Yes	Needs Action
Are workers prohibited from riding the hoist?		
Is overhead protection provided over the cage or platform and the operator's position?		
Is the load rating plate attached to the hoist?		
Has wire rope been inspected for harmful defects?		
Are there at least three full wraps on the winding drum when the platform is at the lowest point of travel?		
Is there at least three feet of clearance between the cathead sheave and the top of cage when it is at the uppermost terminal or landing?		
Are sheave bearings well lubricated?		
Are brakes capable of stopping and holding 125 percent of the rated load?		
Does the operator remain at the controls while the load is suspended or the master clutch is engaged?		
Are gears on the hoisting machine well guarded?		
Are entrances to hoistway guarded or barricaded?		

Flagpersons	Yes	Needs Action
Are flagpersons provided with and made to wear orange or red garments while working in vehicular traffic?		
Are the warning garments of reflectorized material?		
Are flagpersons knowledgeable of standard flag signals to control traffic effectively?		

Trenches and Excavations	Yes	Needs Action

Has the utility company been notified of intended digging?		
Are daily inspections made of the excavation to determine the possibility of cave-in and are necessary steps taken to protect employees?		
Are shoring or sloping systems used to support the walls and faces of the excavations sufficient to ensure against cave-ins?		
Is there a ladder in the excavation?		

Cranes	Yes	Needs Action
Are cranes and derricks restricted from operating within ten feet of any electrical powerline?		
Are rated load capacities, operating speed and instructions posted and visible to the operator?		
Does the operator understand and use the load chart?		
Is the operator able to determine the angle and length of the crane boom at all times?		
Is the crane machinery and other rigging equipment inspected daily prior to use to make sure that it is in good condition?		
Are accessible areas within the swing radius barricaded?		
Are tag lines being used to prevent dangerous swing or spin of materials when raised or lowered by crane or derrick?		
Is a fire extinguisher of at least 5BC rating provided on the crane?		
Are illustrations of hand signals to crane and derrick operators posted on the job site?		
Does the hook-man use correct signals for the crane operator to follow?		
Are crane outriggers used as required?		
Do crane platforms and walkways have anti-skid surfaces?		
Is broken, worn or damaged wire rope removed from service?		
Are exhaust pipes guarded or insulated where employees might contact them?		
Are guardrails, hand holds and steps provided for safe and easy access to all areas of the crane?		
Are trolley and two block limits on hammerhead tower cranes working?		
Have tower bolts been properly torqued?		
Have overload limits been tested and correctly set?		
Do personal platforms suspended from crane hooks conform to MOSH requirements?		
Does the crane operation comply with manufacturer's specifications?		

Scaffolding	Yes	Needs Action
Is the footing of the scaffold sound, rigid, and capable of carrying 4 times the maximum intended load?		
Is the scaffold erected under the supervision of someone competent in scaffold erection?		
Are guardrails provided on scaffolds more than 10 feet above the ground?		
Are heavy loads placed over or near the bearers and not in the center of the plank?		
Is planking of sufficient stress grade or scaffold grade timber?		
Is planking of platforms overlapped not less than 6 inches or more than 12 inches or secured from movement?		
Where persons work under scaffold, is a 1/2 inch mesh screen provided between toeboard and guardrail?		
Are poles, legs or uprights of scaffolds plumb and securely braced to prevent swaying and displacement?		

Are defective parts on scaffold immediately replaced or repaired?		
Are guardrails and toeboards installed on all open sides and ends of scaffold platforms?		
Are scaffolds equipped with toeboards wherever there is a possibility that falling material could cause a hazard?		
Are toeboards at least four inches in height?		
When employees are working on suspended scaffolds, are life lines firmly anchored to an overhead structure and not to the scaffold?		
Are employees wearing body harnesses attached to life lines?		

Accidents with hand tools comprise five percent to ten percent of compensable injuries. Many of these injuries could be avoided with the proper care, maintenance and use of hand tools.

Tools: Hand and Power Tools	Yes	Needs Action
Are hand tools and other equipment regularly inspected for safe condition?		
Are tool handles free of splits and cracks?		
Are handles wedged tightly in the heads of all tools?		
Are impact tools free of mushroomed heads?		
Are the heads of chisels or punches ground periodically to prevent mushrooming?		
Are cutting edges kept sharp so the tool will move smoothly without binding or skipping?		
Is sharpening, redressing or repairing tools done properly, using tools suited to each purpose?		
When compressed air is used for cleaning purposes is nozzle pressure safely reduced to less than 30 psi?		
Are power saws and similar equipment provided with safety guards?		
Are tools used with the correct shield, guard, or attachments recommended by the manufacturer?		
Are abrasive wheel grinders provided with safety guards which cover the spindle ends, nut and flange projections?		
Are work rests and tongue guards properly set?		
Are portable circular saws equipped with guards above and below the base or shoe?		
Are saw guards checked to assure they are not wedged up thereby leaving an unguarded lower portion of the blade?		
Are springs checked for wear?		
Are guards kept in place and in working order?		
Are rotating or moving parts of equipment guarded to prevent contact by employees?		
Do operators wear eye and face protection when grinding?		
Is the pneumatic hose line secured to the pneumatic tool?		
Are tool bits secured by use of safety clips or retainers to prevent accidental disconnecting?		
Are appropriate ground-fault circuit interrupters provided at the job site?		
OR		
Is an assured equipment grounding conductor program established and implemented at the job site?		
Are electric powered tools double-insulated or properly grounded?		

Is eye and face protection used when driving hardened or tempered studs or nails?		
Are tools stored in a dry, secure location where they won't be tampered with?		

Powder Actuated Tools	Yes	Needs Action
Do all users of powder actuated tools possess an "Operator's Card" to demonstrate that they have been trained?		
Are tools left unloaded until they are ready for immediate use?		
Are tools inspected each day for defects or obstructions prior to use?		
Are the following types of personal protective equipment used by operators and others in area of tool use? a. Hard hats? b. Safety goggles? c. Safety shoes? d. Ear protection when making fastenings in confined areas such as small rooms, tanks, vaults or ship compartments?		

Concrete	Yes	Needs Action
Is formwork and shoring adequate to support all intended loads during concrete placement?		
Are protruding rebars covered or bent over where work must be performed overhead?		
Do employees wear gloves and eye protection during stripping operations?		
Are nails removed or bent over from stripped forms?		
Are clear pathways maintained through stripping areas?		

Lasers	Yes	Needs Action
Are only trained and qualified employees assigned to operate laser equipment?		
Do laser operators carry proof of qualification?		
Are employees who may be potentially exposed provided with anti-laser eye protection?		
Are placards warning of lasers posted in the laser use area?		
When the laser is not in use are beam shutters or caps used or is the unit turned off?		
Is it a strict requirement that the laser beam shall never be directed at employees?		

Protecting the Workers' Health

Although many safety hazards are apparent upon a simple examination of equipment and procedures, occupational health hazards require a more thorough evaluation. **Identification and recognition of the hazard, evaluation of the potential problem and the workplace control of exposures** are key elements in protecting workers' health.

RECOGNITION - Read the labels from all materials in the workplace for material, composition, and precautions. Request a "material safety data sheet" for each material from a distributor or from the manufacturer. Listed will be corresponding OSHA/MOSH exposure limits (PELs) or "threshold limit values" (TLVs) and information on personal protective equipment such as respirators, gloves, aprons, safety glasses, emergency spills, labeling criteria and emergency information.

EVALUATION - Study the work process in which the material is used to determine if a hazard has been created. Evaluate the way workers handle the material. Does the worker breathe this substance or does the substance

go through his or her skin? Are workers exposed to enough of this substance to create a problem?

WORKPLACE CONTROL - In order to prevent health problems before they start, certain measures can be taken to control exposure. Are ventilation or process controls used when feasible? If the material is extremely toxic, can a less toxic substance be substituted? Are hazardous substances labeled and are workers knowledgeable of the hazard? Are appropriate personal protective devices provided when engineering and/or administrative controls are not adequate or feasible? Are medical exams provided when workers are exposed to certain substances?

Asbestos	Yes	Needs Action
Are materials containing more than 1% asbestos (ACM) handled in accordance with the construction asbestos standard?		
Are thermal system insulation and surfacing material found in buildings constructed before 1980 treated as presumed asbestos containing materials (PACM), unless demonstrated to be otherwise using the protocol of the construction asbestos standard?		
Are class I, II and III asbestos work operations being conducted in regulated areas? Regarding regulated areas: a. are they properly enclosed and posted? b. is access limited to authorized personnel? c. are appropriate respirators worn by entrants? d. is eating, drinking, smoking and gum chewing prohibited? e. is there an adjacent clean room and decontamination area? f. are operations supervised by a competent person?		
Do work practices and methods of control conform to the construction asbestos standard?		
Is an exposure assessment conducted by the competent person immediately before or at the initiation of operations to determine expected exposures?		
Is air monitoring conducted in the manner and at the frequency specified in the construction asbestos standard?		
Do work practices and methods of control keep employee exposures below an 8-hour TWA of 0.1 f/cc?		
In addition, are all 30-minute exposures maintained below 1 f/cc?		
Are respirators and protective clothing properly selected and used?		
Are waste containers impermeable and sealed prior to disposal?		
Has an employee information and training program been implemented?		
Have other on-site employers been informed of the nature of the asbestos-related activity and of measures to take to prevent exposure?		
If required, has an employee medical surveillance program been implemented?		
Are all activities involving asbestos being conducted in compliance with regulations established by the Department of the Environment?		

Silica	Yes	Needs Action
Is adequate exhaust provided to remove silica dust particles from the work area or operation?		
Are respirators provided to employees who may be over-exposed to silica dust particles?		
Can certain grinding, sandblasting or mixing operations be performed by wet method to reduce the		

airborne silica hazard?		
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Carbon Monoxide	Yes	Needs Action
Are salamanders and fire pots vented to the outside atmosphere?		
Are exhaust manifolds, pipes and mufflers in good repair to eliminate harmful leakage of the engine exhaust?		
Is equipment maintained in good repair to reduce the amount of unburned hydrocarbons which result in the manufacture of carbon monoxide?		
Are pipings to the outdoors used when engines must be run for repair or adjustments while they are in enclosed areas?		
Are carbon monoxide levels checked regularly?		
Is employee exposure well below the allowable 50 parts per million?		
Is natural or mechanical ventilation provided to remove harmful carbon monoxide gases?		

Noise	Yes	Needs Action
Are hearing protectors and a hearing conservation program provided for noise levels above 90 decibels?		
Have administrative or engineering controls been applied to eliminate or reduce the excessive noise?		
If administrative or engineering controls are not feasible, is personal hearing protection provided to reduce sound levels?		
Is the use of hearing protection equipment enforced?		
Is hearing protection equipment correctly fitted and maintained in a clean and sanitary condition?		
Is an audiometric testing program in effect?		
Are employees instructed in the effects of noise on hearing, the signs of over-exposure to noise, and proper use of hearing protectors?		

Dust, Gases, Vapors, Fumes and Mists	Yes	Needs Action
Are material safety data sheets maintained on each product in use at the construction site?		
Are agents identified which may cause harm by inhalation, ingestion, skin absorption or contact?		
Can a less harmful method or product be used?		
Is adequate ventilation provided?		
Is protective equipment used to protect against over-exposure?		
Are employees made knowledgeable of the hazards when working with harmful agents?		

Lighting	Yes	Needs Action
Are 5 foot candles of illumination provided throughout the general construction area?		
Are the workshops and storerooms provided with 10 foot candles of illumination?		
Is the first aid station illuminated to 30 foot candles?		
Are light guards provided where there is a possibility of breakage?		

Are wire guards grounded to the electrical grounding system?		
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Confined Spaces	Yes	Needs Action
Is the internal atmosphere tested to assure an oxygen level of not less than 19.5%?		
If the confined space is a manhole, is it impossible for vehicular exhaust or carbon monoxide to creep into the space?		
Has the space been examined for decaying vegetation or animal matter which may produce methane?		
Has the space been surveyed for possible industrial waste which may contribute to the accumulation of a toxic or combustible atmosphere?		
When there is inadequate natural air movement and adequate forced ventilation is not provided, is the internal atmosphere tested for combustible gas and air contaminants?		
Has an adequate oxygen concentration been assured prior to testing for combustible gas and air contaminants?		
Is the space ventilated to a safe level before employees enter?		
If ventilation does not reduce or remove the hazardous substance, do employees wear an appropriate approved respirator to enter the space?		
Are employees trained in the use of respirators?		
Are electrical services other than lights made inoperable by padlock and tagging?		
Are employees inside and outside the confined space trained in rescue and CPR procedures?		
Is rescue equipment readily available for immediate use?		
Is there constant communication with employees in the immediate vicinity who are not in the confined space?		
Is there a written procedure covering entry under emergency conditions?		
If you are a subcontractor:		
a. have you orally notified the Commissioner of Labor and Industry of the start of work in a confined space?		
b. have you submitted written notification to the Commissioner within 24 hours of your oral notification?		

Access to Information About Hazardous and Toxic Substances	Yes	Needs Action
Have you evaluated your work site for compliance with this Law?		
Has a chemical information list been compiled?		
Have material safety data sheets (MSDS) been obtained or developed for all substances on the chemical information list?		
Has the list been sent to the Department of the Environment?		
Are MSDS readily accessible to employees?		
Is the chemical information list accessible to employees?		

Are copies provided within 5 days of a request?		
When new substances are brought on-site, are additional MSDS obtained?		
Is the chemical information list updated?		
Has each employer provided for the exchange of information regarding hazardous chemicals used or stored on-site with all other employers at that site?		
Have employees been trained about the hazards of the substances, appropriate work practices, control programs, protective measures and emergency procedures?		