

Introduction



The following checklists are provided in an effort to avoid common hazards that could result in injuries, illnesses and fatalities to The Ohio State University (OSU) Employees. All employees involved with construction activities on the OSU Campus should become familiar with the Code of Federal Regulations (CFR) publications 29 CFR, Part 1910: Occupational Safety and Health Administration (OSHA) General Industry and Health Standards and 29 CFR, Part 1926: OSHA Construction Industry Standards.

Contractors performing construction activities on the OSU Campus may use this checklist as an informational resource. All contractors performing construction activities on the OSU Campus are required to submit a written copy of their company's safety and health program as well as the site specific safety and health plan in accordance with Facilities Operations and Development's (FOD) Building Design Standards, Appendix V.



Personal Protective Equipment (PPE)

Foot and Hand Protection

Construction workers should wear work shoes or boots with slip-resistant and puncture-resistant soles.

Safety-toed footwear is worn to prevent crushed toes when working around heavy equipment or falling objects.

Gloves should fit snugly.

Workers wear the right gloves for the job (for example, heavy-duty rubber gloves for concrete work, welding gloves for welding, insulated gloves and sleeves when exposed to electrical hazards).

Head Protection

Workers shall wear hard hats where there is a potential for objects falling from above, bumps to their heads from fixed objects, or of accidental head contact with electrical hazards.

Hard hats are routinely inspected for dents, cracks or deterioration.

Hard hats are replaced after a heavy blow or electrical shock.

Hard hats are maintained in good condition.

Eye and Face Protection

Safety glasses or face shields are worn anytime work operations can cause foreign objects getting into the eye such as during welding, cutting, grinding, nailing (or when working with concrete and/or harmful chemicals or when exposed to flying particles).

Eye and face protectors are selected based on anticipated hazards.

Safety glasses or face shields are worn when exposed to any electrical hazards including work on energized electrical systems.



Scaffolding / Elevated Surfaces

Scaffolding	
Scaffolds should be set on sound footing.	
Scaffolds are not altered.	
All scaffolds should be fully planked.	
Scaffolds are not moved horizontally while workers are on them unless they are designed to be mobile and workers have been trained in the proper procedures.	
Employees are not permitted to work on scaffolds when covered with snow, ice, or other slippery materials.	
Scaffolds are not erected or moved within 10 feet of power lines.	
Employees are not permitted to work on scaffolds in bad weather or high winds unless a competent person has determined that it is safe to do so.	
Ladders, boxes, barrels, buckets or other makeshift platforms are not used to raise work height.	
Extra material is not allowed to build up on scaffold platforms.	
Scaffolds should not be loaded with more weight than they were designed to support.	

Elevated Surfaces	
Signs are posted, when appropriate, showing the elevated surface load capacity.	
Surfaces elevated more than 48 inches above the floor or ground have standard guardrails.	
All elevated surfaces (beneath which people or machinery could be exposed to falling objects) have standard 4-inch toeboards.	
A permanent means of entry and exit with handrails is provided to elevated storage and work surfaces.	
Material is piled, stacked or racked in a way that prevents it from tipping, falling, collapsing, rolling or spreading.	



Electrical Safety

Electrical Safety	
Work on new and existing energized (hot) electrical circuits is prohibited until all power is shut off and grounds are attached.	
An effective Lockout / Tagout system is in place.	
Frayed, damaged or worn electrical cords or cables are promptly replaced.	
All extension cords have grounding prongs.	
Protect flexible cords and cables from damage. Sharp corners and projections should be avoided.	
Use extension cord sets used with portable electric tools and appliances that are the three-wire type and designed for hard or extra-hard service. (Look for some of the following letters imprinted on the casing: S, ST, SO, STO.)	
All electrical tools and equipment are maintained in safe condition and checked regularly for defects and taken out of service if a defect is found.	
Do not bypass any protective system or device designed to protect employees from contact with electrical energy.	
Overhead electrical power lines are located and identified.	

Electrical Safety Cont'd	
Ensure that ladders, scaffolds, equipment or materials never come within 10 feet of electrical power lines.	
All electrical tools must be properly grounded unless they are of the double insulated type.	
Multiple plug adapters are prohibited.	



Hazard Communication / Fire Prevention

Hazard Communication

A list of hazardous substances used in the workplace is maintained and readily available at the worksite.	
There is a written hazard communication program addressing Safety Data Sheets (SDS), labeling and employee training.	
Each container of a hazardous substance (vats, bottles, storage tanks) is labeled with product identity and a hazard warning(s) (communicating the specific health hazards and physical hazards).	
Safety Data Sheets are readily available at all times for each hazardous substance used.	
There is an effective employee training program for hazardous substances.	



Fire Prevention

Combustible scrap, debris, and waste materials (oily rags, etc.) stored in covered metal receptacles and removed from the worksite promptly.	
Approved containers and tanks used for the storage and handling of flammable and combustible liquids.	
Liquefied petroleum gas stored, handled, guarded and used in accordance with safe practices and standards.	
Appropriate fire extinguishers mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of any inside storage area for such materials.	
Extinguishers free from obstructions or blockage.	
Extinguishers serviced, maintained and tagged at intervals not to exceed 1 year.	
"NO SMOKING" signs posted where appropriate in areas where flammable or combustible materials are used or stored.	



Crane Safety

Crane Safety	
Cranes and derricks are restricted from operating within 10 feet of any electrical power line.	
The upper rotating structure supporting the boom and materials being handled is provided with an electrical ground while working near energized transmitter towers.	
Rated load capacities, operating speed and instructions are posted and visible to the operator.	
Cranes are equipped with a load chart.	
The operator understands and uses the load chart.	
The operator can determine the angle and length of the crane boom at all times.	
Crane machinery and other rigging equipment is inspected daily prior to use to make sure that it is in good condition.	
Accessible areas within the crane's swing radius are barricaded.	
Tag lines are used to prevent dangerous swing or spin of materials when raised or lowered by a crane or derrick.	
Illustrations of hand signals to crane and derrick operators are posted on the job site.	
Load testing reports/certifications are available.	
The signal person uses correct signals for the crane operator to follow.	
Crane outriggers are extended when required.	

Crane Safety Cont'd	
Crane platforms and walkways have antiskid surfaces.	
Broken, worn or damaged wire rope is removed from service.	
Guardrails, hand holds and steps are provided for safe and easy access to and from all areas of the crane.	
Tower crane mast bolts are properly torqued to the manufacturer's specifications.	
Overload limits are tested and correctly set.	
The maximum acceptable load and the last test results are posted on the crane.	
Initial and annual inspections of all hoisting and rigging equipment are performed and reports are maintained.	
Only properly trained and qualified operators are allowed to work with hoisting and rigging equipment.	



Forklifts

Forklift Safety	
Forklift truck operators are competent to operate these vehicles safely as demonstrated by their successful completion of training and evaluation.	
No employee under 18 years old is allowed to operate a forklift.	
Forklifts are inspected daily for proper condition of brakes, horns, steering, forks and tires.	
Powered industrial trucks (forklifts) meet the design and construction requirements established in American National Standards Institute (ANSI) for Powered Industrial Trucks, Part II ANSI B56.1-1969.	
Written approval from the truck manufacturer is obtained for any modification or additions which affect capacity and safe operation of the vehicle.	
Capacity, operation and maintenance instruction plates, tags or decals are changed to indicate any modifications or additions to the vehicle.	
Battery charging is conducted in areas specifically designated for that purpose.	
Material handling equipment is provided for handling batteries, including conveyors, overhead hoists or equivalent devices.	
Reinstalled batteries are properly positioned and secured in the truck.	
Smoking is prohibited in battery charging areas.	

Forklift Safety Cont'd	
Precautions are taken to prevent open flames, sparks or electric arcs in battery charging areas.	
Refresher training is provided and an evaluation is conducted whenever a forklift operator has been observed operating the vehicle in an unsafe manner and when an operator is assigned to drive a different type of truck.	
Load and forks are fully lowered, controls neutralized, power shut off and brakes set when a powered industrial truck is left unattended.	
There is sufficient headroom for the forklift and operator under overhead installations, lights, pipes, sprinkler systems, etc.	
Overhead guards are in place to protect the operator against falling objects.	
Trucks are operated at a safe speed.	
All loads are kept stable, safely arranged and fit within the rated capacity of the truck.	
Unsafe and defective trucks are removed from service.	



Hand & Power Tools / Floor & Wall Openings

Hand & Power Tools Safety	
All tools and equipment (both company and employee owned) used by employees at their workplace in good condition.	
Worn or bent wrenches replaced regularly.	
Appropriate handles used on files and similar tools.	
Tools stored in dry, secure locations where they won't be tampered with.	
Grinders, saws and similar equipment provided with appropriate safety guards.	
Portable circular saws equipped with guards above and below the base shoe.	
All cord-connected, electrically operated tools and equipment effectively grounded or of the approved double insulated type.	
Effective guards in place over belts, pulleys, chains, sprockets, on equipment such as concrete mixers, and air compressors.	
Portable fans provided with full guards or screens having openings ½ inch or less.	
Ground-fault circuit interrupters provided on all temporary electrical 15 and 20 ampere circuits, used during periods of construction.	
Pneumatic and hydraulic hoses on power operated tools checked regularly for deterioration or damage.	
No power actuated tools will be used unless all requirements of <u>OSU Building Design Standard Appendix V: Safety Health & Environment, Section 1.6 Part D</u> have been completed	

Floor & Wall Opening Safety	
Floor openings (12 inches or more) are guarded by a secured cover, a guardrail or equivalent on all sides (except at entrances to stairways).	
Toeboards are installed around the edges of permanent floor openings (where persons may pass below the opening).	



Hearing & Respiratory Protection

Hearing Protection

Consider noise sources around the employee, not just the employee's tasks when deciding when to wear hearing protectors.	
If the noise exposure is intermittent, use banded earplugs or earmuffs. They are easy to put on and take off.	
All hearing protectors are labeled with a Noise Reduction Rating (NRR) in decibels. The NRR is usually about twice as high as the protection the employee will actually get.	
Hearing protectors should be kept with employees at all times so they have them when needed.	



Respiratory Protection

Respirators are to be selected on the basis of the hazard.	
All respirator users are to be medically certified as capable of wearing a respirator.	
Disposable respirators are to be properly disposed of.	
Reusable respirators are to be thoroughly cleaned and disinfected after each use.	
All employees are to be trained on use, limitations, and care of respirators.	
All employees with beards, facial hair, and pertinent factors that may interfere with facial fits are to be prohibited from wearing respirators.	
Only NIOSH or MSHA approved respirators are to be used.	

