

ACCIDENT PREVENTION PROGRAM

for the

CONSTRUCTION INDUSTRY

SAMPLE

This sample will help you gain an understanding of the basic requirements of a safety management system within the construction industry. You may also use this as a template for your company's safety management plan.

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INSTRUCTIONS:

This sample program is provided to assist you as an employer in developing a program tailored to your own operation. We encourage employers to copy, expand, modify and change the sample as necessary to accomplish this.

Source: The Consultation Section of the Washington State Department of Labor and Industries.

GENERAL INSTRUCTIONS

A. Overview

Industrial injuries create a no-win situation for everyone involved. Employees experience pain, suffering and incapacitation while the company suffers from the loss of the injured person's contributions. This document is designed to assist all personnel in assuring that such an undesirable situation will not develop in this company. It provides information and guidance for the establishment and maintenance of an injury-free work environment.

B. Procedures

This document contains guidance for safety procedures to be followed and forms to be used. Supervisors are expected to integrate the procedures into the appropriate work activity and employees are expected to apply them on the job. The sample forms are to be used if they apply to the job concerned.

C. Dissemination

A copy of this statement will be issued to all supervisory and management personnel. A copy of the policy statement will be posted on company safety and health bulletin boards and at the following locations:

1. ***(Customize by entering location here)***
2. ***(Customize by entering location here)***

D. Regulations

Make sure copies of required documents are maintained on each job site.

COMPANY POLICY LETTER

SAFETY AND HEALTH POLICY FOR (Customize by adding company name here)

The purpose of this policy is to develop a high standard of safety throughout all operations of (Customize by adding company name here) and to ensure that no employee is required to work under any conditions, which are hazardous or unsanitary.

We believe that each employee has the right to derive personal satisfaction from his/her job and the prevention of occupational injury or illness is of such consequence to this belief that it will be given top priority at all times.

It is our intention here at (Customize by adding company name here) to initiate and maintain complete accident prevention and safety training programs. Each individual from top management to the working person is responsible for the safety and health of those persons in their charge and coworkers around them. By accepting mutual responsibility to operate safely, we will all contribute to the well being of our employees.

Signed, _____
(Customize by adding name of company president)

RESPONSIBILITIES

Responsibilities for safety and health include the establishment and maintenance of an effective communication system among workers, supervisors and management officials. To this end, all personnel are responsible to assure that their messages are received and understood by the intended receiver. Specific safety and health responsibilities for company personnel are as follows:

A. Management Officials

Active participation in and support of safety and health programs is essential. Management officials will display their interest in safety and health matters at every opportunity. At least one manager (as designated) will participate in the safety and health committee meetings, incident investigations and inspections. Each manager will establish realistic goals for implementing instructions for meeting the goals. Goals and implementing instructions shall be within the framework established by this document. Incentives will be included as part of the instructions.

B. Supervisors

The safety and health of the employees they supervise is a primary responsibility of the supervisors. To accomplish this obligation, supervisors will:

1. Assure that all safety and health rules, regulations, policies and procedures are understood and observed.
2. Require the proper care and use of all required personal protective equipment.
3. Identify and eliminate job hazards quickly through job safety analysis procedures. (See the sample Job Safety Analysis form attached to this document.)
4. Inform and train employees on the hazardous chemicals and/or procedures they MAY encounter under normal working conditions or during an emergency situation. (See the sample hazard communication program.)
5. Receive and take initial action on employee suggestions, awards or disciplinary measures.
6. Conduct crew/leader meetings the first five minutes of each work shift to discuss safety and health matters and work plans for the workday.
7. Conduct walk-around safety inspections at the beginning of each job, and at least weekly thereafter.
8. Train employees (new and experienced) in the safe and efficient methods of accomplishing each job or task as necessary.
9. Review injury trends and establish prevention measures.
10. Attend safety meetings and actively participate in the proceedings.
11. Participate in incident investigations and inspections.
12. Promote employee participation in the safety and health program.
13. Actively follow the progress of injured workers and display an interest in their rapid recovery and return to work.

C. Employees

Observe the items of responsibility established in this document as well as job safety rules which may apply to specific task assignments.

(Customize this page by adding any additional responsibilities and deleting those that may not apply to your company.)

Safety Disciplinary Policy

(Customize by adding company name here) believes that a safety and health Accident Prevention Program is unenforceable without some type of disciplinary policy. Our company believes that in order to maintain a safe and healthful workplace, the employees must be cognizant and aware of all company, State, and Federal safety and health regulations as they apply to the specific job duties required. The following disciplinary policy is in effect and will be applied to all safety and health violations.

The following steps will be followed unless the seriousness of the violation would dictate going directly to Step 2 or Step 3.

1. A first time violation will be discussed orally between company supervision and the employee. This will be done as soon as possible.
2. A second time offense will be followed up in written form and a copy of this written documentation will be entered into the employee's personnel folder.
3. A third time violation will result in time off or possible termination, depending on the seriousness of the violation.

(Customize this page by adding any additional disciplinary actions and deleting those that may not apply to your company.)

Procedure for Injury or Illness on the Job

A. Owner or lead person immediately takes charge

1. Supervise and administer first aid as you wish (Good Samaritan Law applies).
2. Arrange for transportation (ambulance, helicopter, company vehicle, etc.), depending on the seriousness of the injury. Protect the injured person from further injury.
3. Notify owner or top management, if not already present.
4. Do not move anything unless necessary, pending investigation of the incident.
5. Accompany or take injured person(s) to doctor, hospital, home etc. (depending on the extent of injuries).
6. Take injured person to family doctor, if available.
7. Remain with the injured person until relieved by other authorized persons (manager, EMT, doctor, etc.).
8. When the injured person's immediately family is known, the owner or supervisor should properly notify family members, preferable in person, or have an appropriate person do so.

B. Documentation

1. Minor injuries – requiring doctor or outpatient care: After the emergency actions following an injury, an investigation of the incident will be conducted by the immediate supervisor and any witness to determine the causes. The findings must be documented on our investigation form.
2. Major injuries – fatality or multiple hospitalizations: Top management must see that OSHA is notified as soon as possible, but at least within 8 hours of the incident. Top management will then assist the Department in the investigation.
3. The findings must be documented on our incident investigation report form and recorded on the OSHA 300 log, if applicable. (Sample incident investigation report form included in this document.)

C. Near Misses

1. All near-miss incidents (close calls) must be investigated.
2. Document the finding on the company incident investigation report form.
3. Review the findings at the monthly safety meetings or sooner if the situation warrants.

(Customize this page by adding any additional responsibilities and deleting those that may not apply to your company.)

Sample forms for Incident investigation and Employee's Report of Injury are available in the Appendix.

Basic rules for Incident Investigation

- The purpose of an investigation is to find the cause of an incident and prevent future occurrences, not to fix blame. An unbiased approach is necessary to obtain objective findings.
- Visit the incident scene as soon as possible – while facts are fresh and before witnesses forget important details.
- If possible, interview the injured worker at the scene of the incident and “walk” him or her through a re-enactment. Be careful not to actually repeat the act that caused the injury.
- All interviews should be conducted as privately as possible. Interview witnesses one at a time. Talk with anyone who has knowledge of the incident, even if they did not actually witness the mishap.
- Consider taking the signed statements in cases where facts are unclear or there is an element of controversy.
- Graphically document details of the incident: area, tools, and equipment. Use sketches, diagrams, and photos as needed, and take measurements when appropriate.
- Focus on causes and hazards. Develop an analysis of what happened, how it happened, and how it could have been prevented. Determine what caused the incident itself (unsafe equipment/condition, unsafe act, etc), not just the injury.
- How will you prevent such incidents in the future? Every investigation should include an action plan.
- If a third party or defective product contributed to the incident, save any evidence. It could be critical to the recovery of the claim costs.

SAFETY BULLETIN BOARD

A. Purpose: To increase employee's safety awareness and convey the company's safety message. If a proper place can be found for a bulletin board, this is a good tool.

B. The following items are required to be posted:

1. OSHA poster (required)
2. Industrial Insurance poster (required)
3. Wage and hour laws (required)
4. Citation and Notice (as appropriate)
If a Citation and Notice is received, it must be posted until all violations are abated.
5. Emergency Telephone Number Posted (as appropriate)
6. OSHA 300 Summary (required February 1 thru April 30 of each year)

C. Suggested Items:

1. Safety and health posters
2. Minutes of crew/leader safety meetings
3. Date, time, and place of next safety meeting
4. Information about any recent incidents
5. Safety awards/employee recognition
6. Hazard communication information
7. Pertinent safety concerns, news clippings and other off-the-job items that may be of significant importance to employees.

(Customize this page by adding any additional information and deleting any information that may not apply to your company.)

FIRST AID TRAINING, KITS, AND POSTER

- A. Purpose: To afford the employees immediate and effective attention should an injury result, **(Customize by adding name or title of responsible person)** will ensure that a certified first aider(s) will be available.
1. To meet the above objectives, the following procedures will be followed:
 - a. All supervisors or persons in charge of crews will be first aid trained unless their duties require them to be away from the jobsite. If so, other persons who are certified in first aid will be designated as the recognized first aider.
 - b. Other persons will be trained in order to augment or surpass the standard requirements.
 - c. Valid first aid cards are recognized as ones that include both first aid and cardiopulmonary resuscitation (CPR) and have not reached the expiration date.
 2. First aid training, kits, and procedures will be in accordance with the requirements of the general safety and health standards.
 - a. First aid kit locations at this jobsite include:
 1. **(Customize by adding location of first aid supplies at your location)**
 2. **(Customize by adding location of first aid supplies at your location)**
 3. **(Customize by adding location of first aid supplies at your location)**
 - b. **(Customize by adding name or title of responsible person)** is designated to ensure that the first aid kits are properly maintained and stocked.
 3. Posters listing emergency numbers, procedures, etc., will be strategically located, such as on the first aid kit, at telephones, and in other areas where employees have easy access.

FIRST AID PROCEDURES IN CONSTRUCTION

We have first aid qualified workers here but we do not have “designated” first aiders. First aid at the job site is done on a Good Samaritan basis.

If first aid trained personnel are involved in a situation involving blood, they should:

1. Avoid skin contact with blood/other potentially infectious materials by letting the victim help as much as possible, and by using gloves provided in the first aid kit.
2. Remove clothing, etc. with blood on it after rendering help.
3. Wash thoroughly with soap and water to remove blood. A 10% chlorine bleach solution is good for disinfecting areas contaminated with blood (spills, etc.).
4. Report such first aid incidents within the shift to supervisors (time, date, blood presence, exposure, names of others helping).

Hepatitis B vaccinations will be provided as soon as possible but not later than 24 hours after the first aid incident.

If an exposure incident occurs, we will immediately make available appropriate:

1. Post exposure evaluation
2. Follow-up treatment
3. Follow-up as listed in WAC 296-62, Part J, Biological Agents.

Training covering the above information should be conducted at job site safety meetings.

(Customize this page by adding any additional responsibilities and deleting those that may not apply to your company.)

CREW LEADER MEETINGS

We believe that hard work and perseverance are required for the prevention of injuries and illnesses, with the crew leader being the key to a successful result.

- A. Purpose: To assist in the detection and elimination of unsafe conditions and work procedures.
- B. Procedures:
The following guidelines will be followed:
- a. These meetings are held at the beginning of each job and at least weekly thereafter, according to the various circumstances involved or when necessary to clear working procedures. No set pattern will suit all cases. It is important that the crew leader talk daily on injury prevention and immediately upon witnessing an unsafe act.
 - b. The attendance and subjects discussed shall be documented and maintained on file for one year.
 - c. Copies of the minutes should be made available to the employees by posting or other means.
- C. Scope of Activities:
(certain employees, as may be designated by their supervisors, will assist)
1. Conduct in-house safety inspections with supervisor concerned.
 2. Investigate incidents to uncover trends.
 3. Review incident reports to determine means or elimination.
 4. Accept and evaluate employee suggestions.
 5. Review job procedures and recommend improvements (Job Safety Analysis Form is available in the Appendix)
 6. Monitor the safety program effectiveness.
 7. Promote and publicize safety.
- D. Documentation: The sample form (F417-049-000) in the Appendix is available to assist in documenting activities of crew/leader meetings. There is also a Safety Meeting Notice form that you can print out and copy to announce your next safety meeting.

(Customize this page by adding any additional responsibilities and deleting those that may not apply to your company.)

Construction Safety Meeting Suggestions

(The crew leader's guide)

Twelve good topics for construction safety meetings:

1. Fall protection/fall prevention
2. Personal protective equipment
 - a. Hard hats
 - b. Eye protection
 - c. Hearing protection
 - d. Footwear
 - e. Safety harness/belts
 - f. Respiratory protection
3. Housekeeping
4. Tool inspection
5. Emergency procedures
6. Electrical safety
7. Ladder safety
8. Scaffold safety
9. Fire prevention/fire extinguishers
10. Reporting injuries and unsafe conditions
11. Confined spaces
12. Lock-out procedures

Training programs, educational materials, films, videos and posters are available from the Department of Labor and Industries Consultation Section.

How to hold a *good* safety meeting

1. Be certain everyone knows the time and place of the next meeting. You may use the sample form on the next page if you wish.
2. Insist that everyone attend. Before the next meeting, remind those who were late or failed to attend that **attendance is not optional**.
3. Pick an appropriate topic. If you can't think of an appropriate topic, use one from the attached list (these usually apply to all projects).
4. Start the meeting on time.
5. Don't waste time – give the meeting your undivided attention.
6. Discuss the topic you have chosen and prepared. Don't wait until the meeting to choose your topic.
7. Use handouts or posters to illustrate your topic.
8. Discuss current job site safety events, injuries and close calls.
9. Encourage employees to discuss safety problems as they arise. Do not save safety concerns for the meeting. Allow some time for employee questions or input at the end of the meeting.
10. Invite managers or owners to speak. Ask fellow employees to speak on a safety topic.
11. If you prevented *one* injury, it is time well spent. Your topic may be one that some employees have heard many times, but there may be one person who is new or has never been told of the safety requirement for that topic. Repeating topics several times during the course of a project is beneficial as long as it applies to the work being done.
12. Follow up on employee concerns or questions and get back to them with the answer before the next meeting.
13. Be certain to document the attendance and the topics discussed.

WALK-AROUND SAFETY INSPECTIONS

Walk-around safety inspections will be conducted at the beginning of each job, and at least weekly thereafter.

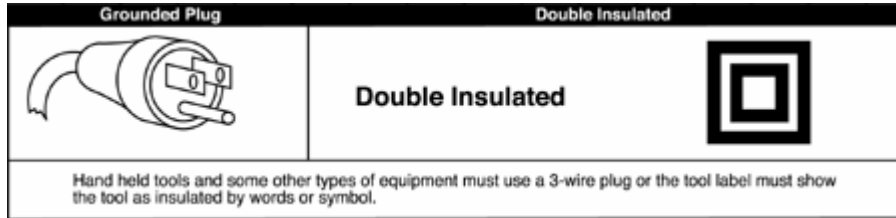
- The inspections will be conducted jointly by one member of management and one employee, elected by the employees, as their authorized representative.
- The inspections will be documented and the documentation will be made available for inspection by representatives of the Department of Labor and Industries.
- The records of the walk-around inspections will be maintained until the completion of the job.

(Customize this page by adding any additional responsibilities and deleting those that may not apply to your company.)

General Safety Rules for Construction

1. Always store materials in a safe manner. Tie down or support piles if necessary to prevent falling, rolling, or shifting.
2. Shavings, dust scraps, oil or grease should not be allowed to accumulate. Good housekeeping is a part of the job.
3. Trash piles must be removed as soon as possible. Trash is a safety and fire hazard.
4. Remove or bend over the nails in lumber that has been used or removed from a structure.
5. Immediately remove all loose materials from stairs, walkways, ramps, platforms, etc.
6. Do not block aisles, traffic lanes, fire exits, gangways, or stairs.
7. Avoid shortcuts – use ramps, stairs, walkways, ladders, etc.
8. Standard guardrails must be erected around all floor openings and excavations must be barricaded. Contact your supervisor for the correct specifications.
9. Do not remove, deface or destroy any warning, danger sign, or barricade, or interfere with any form of protective device or practice provided for your use or that is being used by other workers.
10. Get help with heavy or bulky materials to avoid injury to yourself or damage to material.
11. Keep all tools away from the edges of scaffolding, platforms, shaft openings, etc.
12. Do not use tools with split, broken, or loose handles, or burred or mushroomed heads. Keep cutting tools sharp and carry all tools in a container.
13. Know the correct use of hand and power tools. Use the right tool for the job.
14. Know the location and use of fire extinguishing equipment and the procedure for sounding a fire alarm.
15. Flammable liquids shall be used only in small amounts at the job location and in approved safety cans.
16. Proper guards or shields must be installed on all power tools before use. Do not use any tools without the guards in their proper working condition. No “homemade” handles or extensions (cheaters) will be used!
17. All electrical power tools (unless double insulated), extension cords, and equipment must be properly grounded.

- 18. All electrical power tools and extension cords must be properly insulated. Damaged cords must be replaced.
- 19. Do not operate any power tool or equipment unless you are trained in its operation and authorized by your firm to do so.
- 20. All electrical power equipment and tools must be grounded or double insulated.



- 21. Use tools only for their designed purpose.

(Customize these pages by adding any additional rules and deleting those that may not apply to your company.)

Ladder Safety Rules

General:

- Inspect before use for physical defects.
- Ladders are not to be painted except for numbering purposes.
- Do not use ladders for skids, braces, workbenches, or any purpose other than climbing.
- When you are ascending or descending a ladder, do not carry objects that will prevent you from grasping the ladder with both hands.
- Always face the ladder when ascending and descending.
- If you must place a ladder over a doorway, barricade the door to prevent its use and post a warning sign.
- Only one person is allowed on a ladder at a time.
- Do not jump from a ladder when descending.
- All joints between steps, rungs, and side rails must be tight.
- Safety feet must be in good working order and in place.
- Rungs must be free of grease and/or oil.

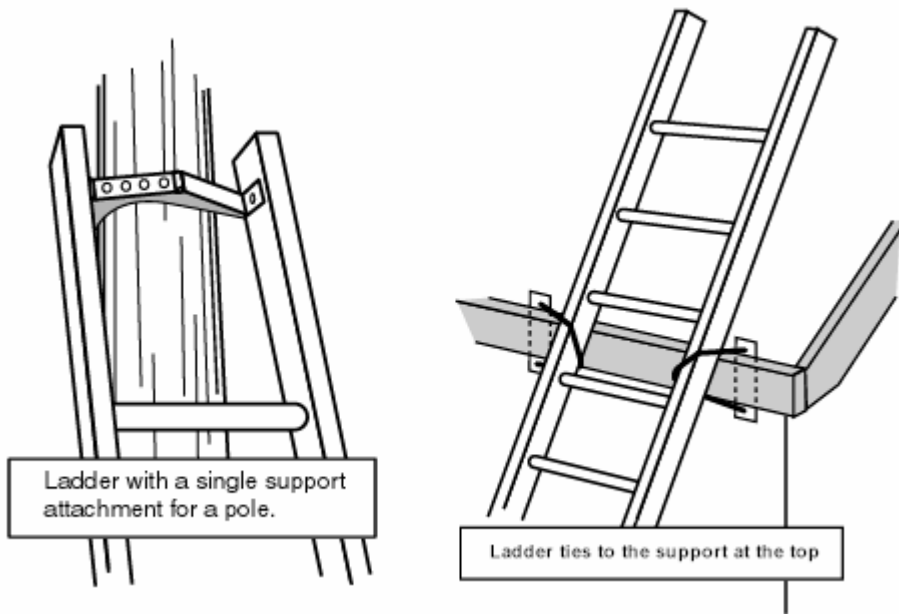
Stepladders

- Do not place tools or materials on the steps or platform of a stepladder
- Do not use the top two steps of a stepladder as a step or stand.
- Always level all four feet and lock spreaders in place.
- Do not use a stepladder as a straight ladder.

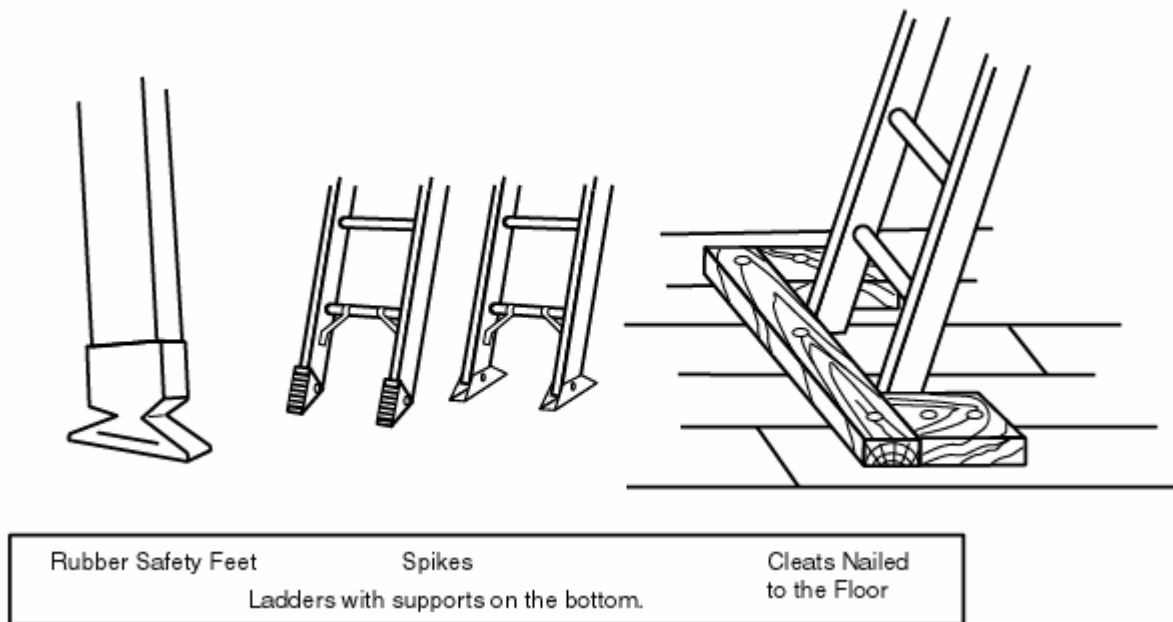
Straight type or extension ladders

- All straight or extension ladders must extend at least three feet beyond the supporting object when used as an access to an elevated work area.

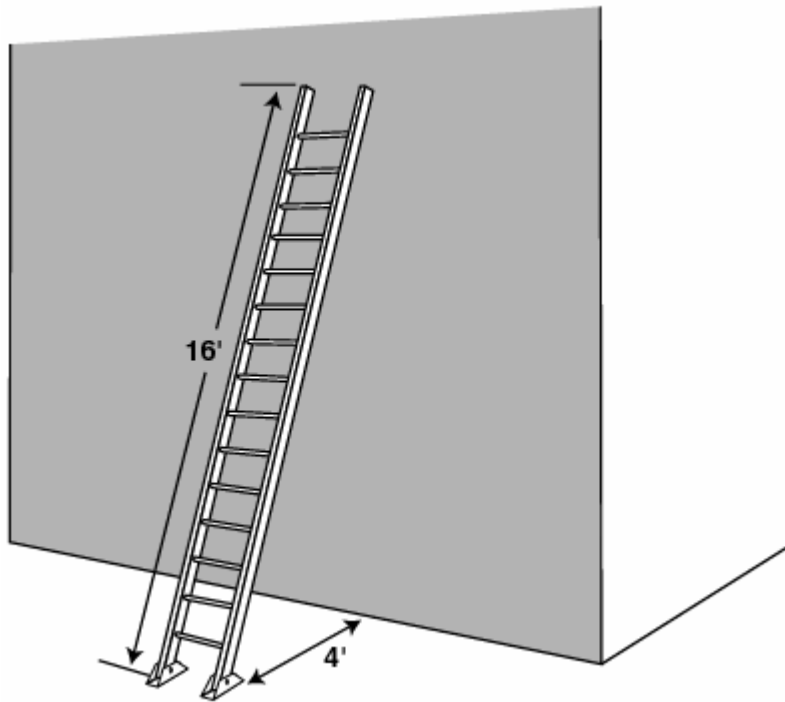
- After raising the extension portion of a two or more stage ladder to the desired height, check to ensure that the safety dogs or latches are engaged.
- All extension or straight ladders must be secured or tied off at the top.



- All ladders must be equipped with safety (non-skid) feet.



- Portable ladders must be used at such a pitch that the horizontal distance from the top support to the foot of the ladder is about one-quarter of the working length of the ladder.



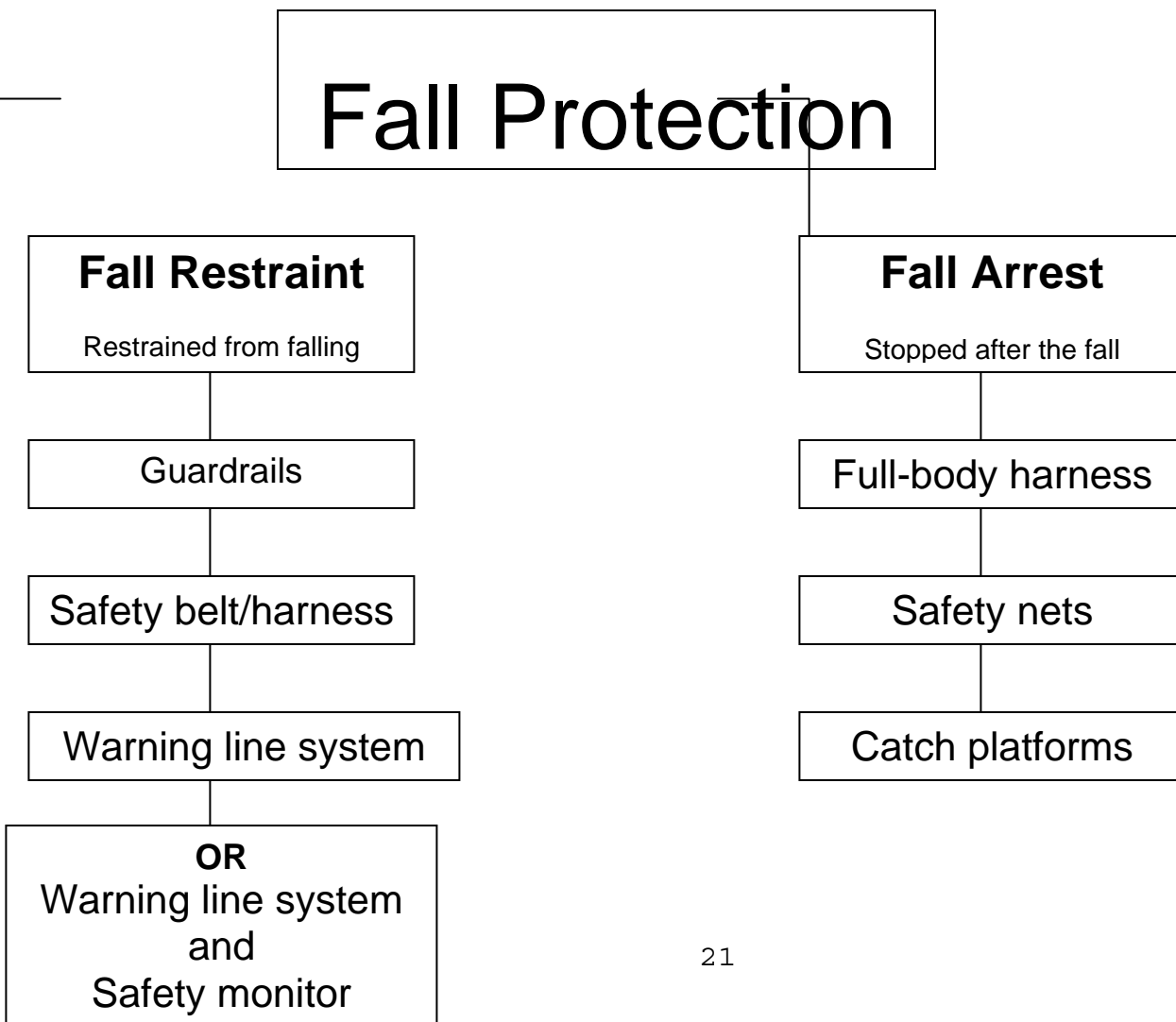
Fall Protection Safety Rules

Falls from elevation are a major cause of injuries and deaths in the construction industry. We at **(Customize by adding company name)** are committed to eliminating injuries caused by fall hazards by instituting a program of 100% fall protection for all fall hazards 10 feet or greater.

All work sites with fall hazards of 10 feet or more will have a site-specific fall protection work plan completed before any employees begin work. The employees on that specific job will be trained in the fall hazards and the method used to implement fall protection. The attached training guide will be used to train employees in the inspection and maintenance of their fall protection equipment, as well as fall protection selection criteria. All employees will use fall protection when there is exposure to a fall hazard of 10 feet or more. Employees who fail to follow this policy are subject to disciplinary action, up to and including dismissal.

The evaluation of the jobsite and the completion of the fall protection work plan will be done by a designated "competent person," who has an understanding of WISHA fall protection requirements, the fall protection systems available for use, and has the authority to take corrective action to eliminate employee exposure to fall hazards.

Fall protection will be provided either through the use of a fall arrest system or a fall restraint system as shown below and thoroughly described in the fall protection work plan available on site for review.



FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Safety Belt, Harness and Lanyard Inspection and Maintenance

I. ANSI Classification:

- Class I Body belts – used to restrain a person from falling.
- Class II Chest harness – used for restraint purposes (NOT for vertical free fall hazards).
- Class III Full body harness – used for fall arrest purposes. Can also be used for fall restraint.
- Class IV Suspension/position belt – used to suspend or support the worker. If a fall arrest hazard exists this must be supplemented by use of a safety harness.

II. Inspection Guidelines:

To maintain their service life and high performance, all belts and harnesses must be inspected prior to each use for mildew, wear, damage and other deteriorations. Visual inspection before each use is just common sense. Periodic tests by a trained inspector for wear, damage or corrosion should be part of the safety program. Inspect your equipment daily and replace it if any of the defective conditions in this manual are found.

Belt inspection:

1. Beginning at one end, holding the body side of the belt toward you, grasp the belt with your hands six to eight inches apart. Bend the belt in an inverted “U” . The resulting surface tension makes damaged fibers or cuts easier to see.
2. Follow this procedure the entire length of the belt or harness. Watch for frayed edges, broken fibers, pulled stitches, cuts, or chemical damage.
3. Special attention should be given to the attachment of buckles and Dee Rings to webbing. Note any unusual wear, frayed or cut fibers, or distortion of the buckles or Dees.
4. Inspect for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut, or burned stitches will be readily seen.
5. Rivets should be tight and immovable with fingers. Body side rivet base and outside rivet burr should be flat against the material. Bent rivets will fail under stress.

Especially note condition of Dee Ring rivets and Dee Ring metal wear pads (if any). Discolored, pitted or cracked rivets indicate chemical corrosion.

6. The tongue, or billet, of the belt receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted, or broken grommets. Belts using punched holes without grommets should be checked for torn or elongated holes, causing slippage of the buckle tongue.

FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Safety Belt, Harness and Lanyard Inspection and Maintenance cont'd

7. Tongue Buckle:

Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges.

8. Friction Buckle:

Inspect the buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment to points of the center bar.

9. Sliding Bar Buckle:

Inspect buckle frame and sliding bar for cracks, distortions, or sharp edges.

Sliding bar should move freely. Knurled edge will slip if worn smooth. Pay special attention to corners and ends of sliding bar.

Lanyard inspection:

When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked. Spliced ends require particular attention. Hardware should be examined under procedures also detailed below, i.e., Snaps, Dee Ring, and Thimbles.

1. Steel

While rotating the steel lanyard, watch for cuts, frayed areas, or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyards.

2. Webbing

While bending webbing over a pipe or mandrel, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discolorations, cracks, and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching.

3. Rope

Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break-in-period.

FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Fall Protection System Considerations

Below are guidelines for worker protection where fall arrest or fall restraint systems are used. Some of this material may be suitable for adding to the written fall protection work plan specified in WAC 296-155-24505. Also reference WAC 296-24-88050, Appendix C, Personal Fall Arrest System.

1. Selection and use considerations:

The kind of personal fall arrest system selected should match the particular work situation, and any possible free fall distance should be kept to a minimum. Consideration should be given to the particular work environment. For example, the presence of acids, dirt, moisture, oil, grease, etc., and their effect on the system, should be evaluated. Hot or cold environments may also have an adverse affect on the system. Wire rope should not be used where an electrical hazard is anticipated. As required by the standard, the employer must plan to have means available to promptly rescue an employee should a fall occur, since the suspended employee may not be able to reach a work level independently.

Where lanyards, connectors, and lifelines are subject to damage by work operations such as welding, chemical cleaning, and sandblasting, the component should be protected, or other securing systems should be used. The employer should fully evaluate the work conditions and environment (including seasonal weather changes) before selecting the appropriate personal fall protection system. Once in use, the system's effectiveness should be monitored. In some cases, a program for cleaning and maintenance of the system may be necessary.

2. Testing considerations:

Before purchasing or putting into use a personal fall arrest system, an employer should obtain from the supplier information about the system based on its performance during testing so that the employer can know if the system meets this standard. Testing should be done using recognized test methods. WAC 296-24-88050, Appendix C, Part II, contains test methods recognized for evaluating the performance of fall arrest systems. Not all systems may need to be individually tested; the performance of some systems may be based on data and calculations derived from testing of similar systems, provided that enough information is available to demonstrate similarity of function and design.

3. Component compatibility considerations:

Ideally, a personal fall arrest system is designed, tested, and supplied as a complete system. However, it is common practice for lanyards, connectors, lifelines, deceleration devices, and body harnesses to be interchanged since some components wear out before others. The employer and employee should realize that not all components are interchangeable. For instance, a lanyard should not be connected between a body harness and a deceleration device of the self-retracting type since this can result in additional free fall for which the system was not designed. Any substitution or change to a personal fall arrest system should be fully evaluated or tested by a competent person to determine that it meets the standard, before the modified system is put in use.

FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Fall Protection System Considerations cont'd

4. Employee training considerations:

Thorough employee training in the selection and use of personal fall arrest systems is imperative. As stated in the standard, before the equipment is used, employees must be trained in the safe use of the system. This should include the following: Application limits; proper anchoring and tie-off techniques; estimation of free fall distance, including determination of deceleration distance, and total fall distance to prevent striking a lower level; methods of use; and inspection and storage of the system. Careless or improper use of the equipment can result in serious injury or death. Employers and employees should become familiar with this material, as well as manufacturer's recommendations, before a system is used. Of uppermost importance is the reduction in strength caused by certain tie-offs (such as using knots, tying around sharp edges, etc.) and maximum permitted free fall distance. Also, to be stressed are the importance of inspections prior to use, the limitations of the equipment, and unique conditions at the worksite which may be important in determining the type of system to use.

5. Instruction considerations:

Employers should obtain comprehensive instructions from the supplier as to the system's proper use and application, including, where applicable:

- a. The force measured during the sample force test;
- b. The maximum elongation measured for lanyards during the force test;
- c. The deceleration distance measured for deceleration devices during the force test;
- d. Caution statements on critical use limitations;
- e. Application limits;
- f. Proper hook-up, anchoring and tie-off techniques, including the proper dee-ring or other attachment point to use on the body harness for fall arrest;
- g. Proper climbing techniques;
- h. Methods of inspection, use, cleaning, and storage; and
- i. Specific lifelines that may be used. This information should be provided to employees during training.

6. Inspection considerations:

Personal fall arrest systems must be regularly inspected. Any component with any significant defect, such as cuts, tears, abrasions, mold, or undue stretching; alterations or additions which might affect its efficiency; damage due to deterioration; contact with fire, acids, or other corrosives; distorted hooks or faulty hook springs; tongues unfitted to the shoulder of buckles; loose or damaged mountings; nonfunctioning parts; or wearing or internal deterioration in the ropes must be withdrawn from service immediately, and should be tagged or marked as unusable, or destroyed.

FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Fall Protection System Considerations cont'd

7. Rescue considerations:

When personal fall arrest systems are used, the employer must assure that employees can be promptly rescued or can rescue themselves should a fall occur. The availability of rescue personnel, ladders or other rescue equipment should be evaluated. In some situations, equipment that allows employees to rescue themselves after the fall has been arrested may be desirable, such as devices that have descent capability.

8. Tie-off considerations:

- a. One of the most important aspects of personal fall protection systems is fully planning the system before it is put into use. Probably the most overlooked component is planning for suitable anchorage points. Such planning should ideally be done before the structure or building is constructed so that anchorage points can be incorporated during construction for use later for window cleaning or other building maintenance. If properly planned, these anchorage points may be used during construction, as well as afterwards.
- b. Employers and employees should at all times be aware that the strength of a personal fall arrest system is based on its being attached to an anchoring system which does not significantly reduce the strength of the system (such as a properly dimensioned eye-bolt/snap-hook anchorage). Therefore, if a means of attachment is used that will reduce the strength of the system, that component should be replaced by a stronger one, but one that will also maintain the appropriate maximum arrest force characteristics.
- c. Tie-off using a knot in a rope lanyard or lifeline (at any location) can reduce the lifeline or lanyard strength by 50 percent or more. Therefore, a stronger lanyard or lifeline should be used to compensate for the weakening effect of the knot, or the lanyard length should be reduced (or the tie-off location raised) to minimize free fall distance, or the lanyard or lifeline should be replaced by one which has an appropriately incorporated connector to eliminate the need for a knot.
- d. Tie-off of a rope lanyard or lifeline around an "H" or "I" beam or similar support can reduce its strength as much as 70 percent due to the cutting action of the beam edges. Therefore, a webbing lanyard or wire core lifeline should be used around the beam; or the lanyard or lifeline should be protected from the edge; or free fall distance should be greatly minimized.

FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Fall Protection System Considerations cont'd

- e. Tie-off where the line passes over or around rough or sharp surfaces reduces strength drastically. Such a tie-off should be avoided or an alternative tie-off rigging should be used. Such alternatives may include use of a snap-hook/dee-ring connection, wire rope tie-off, an effective padding of the surfaces, or an abrasion-resistance strap around or over the problem surface.
- f. Horizontal lifelines may, depending on their geometry and angle of sag, be subjected to greater loads than the impact load imposed by an attached component. When the angle of horizontal lifeline sag is less than 30 degrees, the impact force imparted to the lifeline by an attached lanyard is greatly amplified. For example, with a sag angle of 15 degrees, the force amplification is about 2:1 and at 5 degrees sag, it is about 6:1. Depending on the angle of sag, and the line's elasticity, the strength of the horizontal lifeline and the anchorages to which it is attached should be increased a number of times over that of the lanyard. Extreme care should be taken in considering a horizontal lifeline for multiple tie-offs. The reason for this is that in multiple tie-offs to a horizontal lifeline, if one employee falls, the movement of the falling employee and the horizontal lifeline during arrest of the fall may cause other employees to also fall. Horizontal lifeline and anchorage strength should be increased for each additional employee to be tied-off. For these and other reasons, the design of systems using horizontal lifelines must only be done by qualified persons. Testing of installed lifelines and anchors prior to use is recommended.
- g. The strength of an eye-bolt is rated along the axis of the bolt and its strength is greatly reduced if the force is applied at an angle to this axis (in the direction of shear). Also, care should be exercised in selecting the proper diameter of the eye to avoid accidental disengagement of snap-hooks not designed to be compatible for the connection.
- h. Due to the significant reduction in the strength of the lifeline/lanyard (in some cases, as much as a 70 percent reduction), the sliding hitch knot should not be used for lifeline/lanyard connections except in emergency situations where no other available system is practical. The "one-and-one" sliding hitch knot should never be used because it is unreliable in stopping a fall. The "two-and-two," or "three-and-three" knot (preferable), may be used in emergency situations; however, care should be taken to limit free fall distance to a minimum because of reduced lifeline/lanyard strength.

9. Vertical lifeline considerations.

As required by the standard, each employee must have a separate lifeline when the lifeline is vertical. The reason for this is that in multiple tie-offs to a single lifeline, if one employee falls, the movement of the lifeline during the arrest of the fall may pull other employees' lanyards, causing them to fall as well.

FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Fall Protection System Considerations cont'd

10. Snap-hook considerations:

- a. Required by this standard for all connections, locking snap-hooks incorporate a positive locking mechanism in addition to the spring loaded keeper, which will not allow the keeper to open under moderate pressure without someone first releasing the mechanism. Such a feature, properly designed, effectively prevents roll-out from occurring.
- b. The following connections must be avoided (unless properly designed locking snap-hooks are used) because they are conditions which can result in roll-out when a nonlocking snap-hook is used:
 - Direct connection of a snap-hook to a horizontal lifeline.
 - Two (or more) snap-hooks connected to one dee-ring.
 - Two snap-hooks connected to each other.
 - A snap-hook connected back on its integral lanyard.
 - A snap-hook connected to a webbing loop or webbing lanyard.
 - Improper dimensions of the dee-ring, rebar, or other connection point in relation to the snap-hook dimensions which would allow the snap-hook keeper to be depressed by a turning motion of the snap-hook.

11. Free fall considerations:

The employer and employee should at all times be aware that a system's maximum arresting force is evaluated under normal use conditions established by the manufacturer, and in no case using a free fall distance in excess of 6 feet (1.8 m). A few extra feet of free fall can significantly increase the arresting force on the employee, possibly to the point of causing injury. Because of this, the free fall distance should be kept at a minimum, and, as required by the standard, in no case greater than 6 feet (1.8 m). To help assure this, the tie-off attachment point to the lifeline or anchor should be located at or above the connection point of the fall arrest equipment to harness. (Since otherwise additional free fall distance is added to the length of the connecting means (i.e. lanyard).) Attaching to the working surface will often result in a free fall greater than 6 feet (1.8 m). For instance, if a 6-foot (1.8 m) lanyard is used, the total free fall distance will be the distance from the working level to the body harness attachment point plus the 6 feet (1.8 m) of lanyard length. Another important consideration is that the arresting force that the fall system must withstand also goes up with greater distances of free fall, possibly exceeding the strength of the system.

FALL PROTECTION TRAINING GUIDE FOR EMPLOYEES

Fall Protection System Considerations cont'd

12. Elongation and deceleration distance considerations. Other factors involved in a proper tie-off are elongation and deceleration distance. During the arresting of a fall, a lanyard will experience a length of stretching or elongation, whereas activation of a deceleration device will result in a certain stopping distance. These distances should be available with the lanyard or device's instructions and must be added to the free fall distance to arrive at the total fall distance before an employee is fully stopped. The additional stopping distance may be very significant if the lanyard or deceleration device is attached near or at the end of a long lifeline, which may itself add considerable distance due to its own elongation. As required by the standard, sufficient distance to allow for all of these factors must also be maintained between the employee and obstructions below, to prevent an injury due to impact before the system fully arrests the fall. In addition, a minimum of 12 feet (3.7 m) of lifeline should be allowed below the securing point of a rope grab type deceleration device, and the end terminated to prevent the device from sliding off the lifeline. Alternatively, the lifeline should extend to the ground or the next working level below. These measures are suggested to prevent the worker from inadvertently moving past the end of the lifeline and having the rope grab become disengaged from the lifeline.

13. Obstruction considerations:

The location of the tie-off should also consider the hazard of obstructions in the potential fall path of the employee. Tie-offs that minimize the possibilities of exaggerated swinging should be considered.

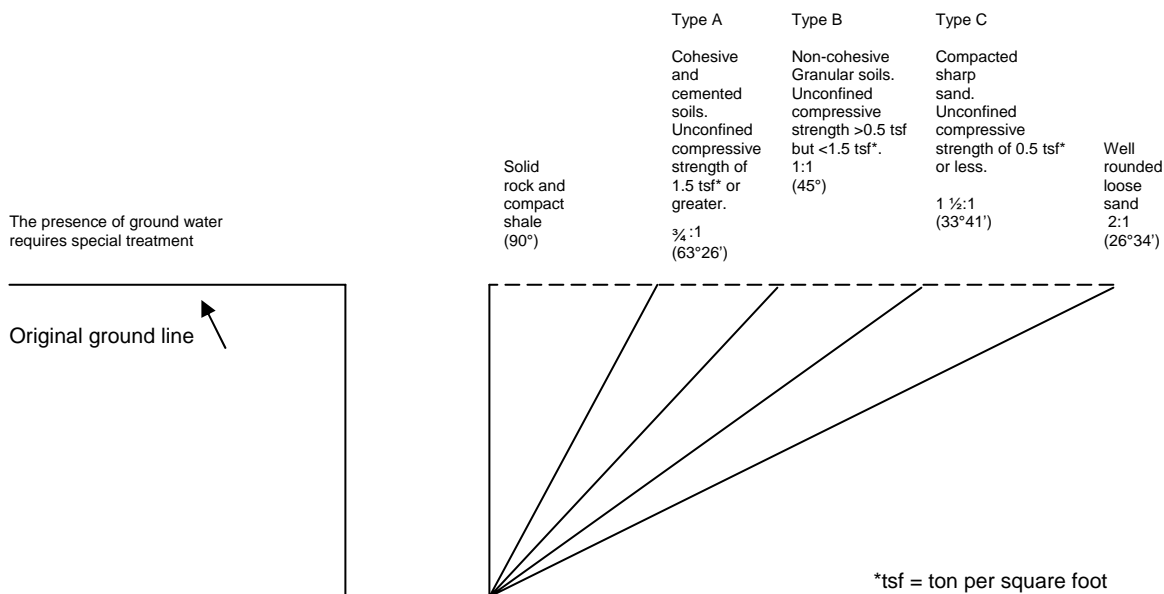
14. Other considerations:

Because of the design of some personal fall arrest systems, additional considerations may be required for proper tie-off. For example, heavy deceleration devices of the self-retracting type should be secured overhead in order to avoid the weight of the device having to be supported by the employee. Also, if self-retracting equipment is connected to a horizontal lifeline, the sag in the lifeline should be minimized to prevent the device from sliding down the lifeline to a position that creates a swing hazard during fall arrest. In all cases, manufacturer's instructions should be followed.

Trenching and Excavating

1. The determination of the angle of slope and design of the supporting system shall be based on careful evaluation of pertinent factors, such as:
 - a. Depth and/or cut/soils classification
 - b. Possible variation in water content of the material while excavation is open
 - c. Anticipated changes in materials from exposure to air, sun, water, or freezing
 - d. Loading imposed by structures, equipment, or overlaying or stored material
 - e. Vibration from equipment, blasting, traffic, or other sources

Approximate Angle of Slope For sloping of sides of excavations



2. Walkways or bridges with standard railings **must be provided** when employees or equipment are required to cross over excavations.
3. The walls and faces of all excavations in which employees are exposed to danger from moving ground **must be guarded** by a shoring system, sloping of the ground, or some other equivalent means.
4. **No person must be permitted** under loads handled by power shovels, derricks, or hoists.
5. **All employees must be protected** with personal protective equipment for the protection of the head, eyes, respiratory system, hands, feet, and other parts of the body.

(Customize by adding any additional rules your company may have and deleting any that do not apply.)

For other rules and regulations regarding trenching and excavating, please refer to Part N of the Construction Safety Standard, WAC 296-155.

Scaffold Safety Rules

1. General

Before starting work on a scaffold, inspect it for the following:

- a. Are guardrails, toeboards, and planking in place and secure?
 - b. Are locking pins at each joint in place?
 - c. Are all wheels on moveable scaffolds locked?
2. Do not attempt to gain access to a scaffold by climbing on it (unless it is specifically designed for climbing – always use a ladder).
 3. Scaffolds and their components must be capable of supporting four times the maximum intended load.
 4. Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders, etc., damaged or weakened in any way, must be immediately repaired or replaced.
 5. Scaffold planks must extend over their end supports not less than 6 inches nor more than 12 inches, unless otherwise specifically required.
 6. Scaffold platforms must be at least 18 inches wide unless otherwise specifically required or exempted.
 7. Where persons are required to work or pass under the scaffold, scaffolds shall be provided with a screen between the toeboard and guardrail, extending along the entire opening. The screen must be made of No. 18 gauge U.S. Standard wire, ½ inch mesh or equivalent protection.
 8. All scaffolds must be erected level and plumb, and on a solid footing.
 9. Do not change or remove scaffold members unless authorized.
 10. Do not allow workers to ride on a rolling scaffold when it is being moved. Remove or secure all materials and tools on deck before moving.
 11. Do not alter any scaffold member by welding, burning, cutting, drilling, or bending.

(Customize by adding any additional rules your company may have and deleting any that do not apply.)

For other rules and regulations regarding scaffolding, please refer to the Construction Safety Standard, Part J-1 of Chapter 296-155 WAC, and Scaffolds, Chapter 296-874 WAC.

Motorized vehicles and equipment

1. Do not ride on motorized vehicles or equipment unless a proper seat is provided for each rider.
2. Always be seated when riding authorized vehicles (unless they are designed for standing).
3. Do not operate any motorized vehicle or equipment unless you are specifically authorized to do so by your supervisor.
4. Always use your seat belts in the correct manner.
5. Obey all speed limits and other traffic regulations.
6. Always be aware of pedestrians and give them the right-of-way.
7. Always inspect your vehicle or equipment before and after daily use.
8. Never mount or dismount any vehicles or equipment while they are still in motion.
9. Do not dismount any vehicle without first shutting down the engine, setting the parking brake and securing the load.
10. Do not allow other persons to ride the hook or block, dump box, forks, bucket or shovel of any equipment.
11. Each operator must be knowledgeable of all hand signals and obey them.
12. Each operator is responsible for the stability and security of his/her load.

(Customize by adding any additional rules your company may have and deleting any that do not apply.)

For other rules and regulations regarding motor vehicles, mechanized equipment and marine operations, please refer to Part M of the construction Safety Standard, WAC 296-155.

General Materials Handling Safety

General material storage safety:

- Make sure that all materials stored in tiers are stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse.
- Post conspicuously the maximum safe load limits of floors within buildings and structures, in pounds per square foot, in all storage areas, except for floor or slab on grade. Do not exceed the maximum safe loads.
- Keep aisles and passageways clear to provide for the free and safe movement of material handling equipment or employees. Keep these areas in good repair.
- Do not store materials on scaffolds or runways in excess of supplies needed for immediate operations.
- Use ramps, blocking, or grading when a difference in road or working levels exists to ensure the safe movement of vehicles between the two levels.
- Do not place materials stored inside buildings under construction within 6 feet of any hoistway or inside floor openings, or within 10 feet of an exterior wall which does not extend above the top of the material stored.
 - (i) Anchor and brace temporary floors used in steel erection, concrete forms, and shoring and other “in-process equipment” that are to be left overnight or for longer periods of time to prevent their displacement in any direction. While in “interim storage,” this equipment is subject to the provisions in WAC 296-155-325(2)(i) (see previous bullet point: Do not place materials stored inside buildings under construction within 6 feet of any hoistway or inside floor openings, or within 10 feet of an exterior wall which does not extend above the top of the material stored.)
- When working on stored materials in silos, hoppers, tanks, and similar storage areas, use personal fall arrest equipment meeting the requirements of Chapter 296-155 Part C-1.
- Segregate non-compatible materials in storage.
- Stack bagged materials by stepping back the layers and cross-keying the bags at least every ten bags high.
 - (i) Carefully handle cement and lime delivered in paper bags to prevent the bags from bursting.
 - (ii) Do not pile cement and lime bags more than ten bags high except when stored in bins or enclosures built for the purpose of storage.
 - (iii) When bags are removed from the pile, keep the length of the pile at an even height and maintain the necessary step backs every five bags.

- (iv) When handling cement and lime bags, wear eye protection preventing any contact with the substance (such as goggles or other sealed eye protection) and wear long sleeve shirts with close fitting collar and cuffs.
 - (v) Do not wear clothing that has become hard and stiff with cement.
 - (vi) Make sure to report any susceptibility of skin to cement and lime burns.
 - (vii) Make sure that a hand cream or Vaseline and eyewash is provided and kept ready for use to prevent burns.
 - (viii) Store lime in a dry place to prevent a premature slacking action that may cause fire.
- Do not stack bricks more than 7 feet high. When a loose brick stack reaches a height of 4 feet, taper it back 2 inches for every foot of height above the 4-foot level.
 - (i) Never stack bricks, for storage purposes, on scaffolds or runways.
 - (ii) Always stack blocks; do not throw in a loose pile.
 - When stacking masonry blocks higher than 6 feet, taper back the stack one-half block per tier above the 6-foot level.
 - (i) When stacking inside a building, distribute the piles to prevent overloading the floor.
 - (ii) Do not drop or throw blocks from an elevation or deliver blocks through chutes.
 - Do not stack lumber more than 20 feet high; if handling lumber manually, do not stack more than 16 feet high.
 - (i) Remove all nails from used lumber before stacking.
 - (ii) Stack lumber on level and solidly supported sills, and such that the stack is stable and self-supporting.
 - (iii) Stack stored lumber on timber sills to keep it off the ground. Sills must be placed level on solid supports.
 - (iv) Place cross strips in the stacks when they are stacked more than 4 feet high.
 - If not racked, stack and block structural steel, poles, pipe, bar stock, and other cylindrical materials as to prevent spreading or tilting.
 - (i) Wear heavy gloves when handling reinforcing steel.
 - (ii) When bending reinforcing steel on the job, use a strong bench set up on even dry ground or a floor to work on.

- (iii) Carefully pile structural steel to prevent danger of members rolling off or the pile toppling over.
- (iv) Keep structural steel in low piles, giving consideration to the sequence of use of its members.
- (v) Stack corrugated and flat iron in flat piles, with the piles not more than 4 feet high; place spacing strips between each bundle.
- Frequently inspect stock piles of sand, gravel, and crushed stone to prevent their becoming unsafe by continued adding to or withdrawing from the stock.
 - (i) Do not remove frozen material in a manner that would produce an overhang.

General Rigging Equipment Safety:

- Inspect rigging equipment for material handling prior to use on each shift and as necessary during its use to ensure that it is safe. Remove defective rigging equipment from service.
- Never load rigging equipment in excess of its recommended safe working load.
- Remove rigging equipment when not in use from the immediate work area so as not to present a hazard to employees.
- Mark special rigging accessories (i.e., spreader bars, grabs, hooks, clamps, etc.) or other lifting accessories with the rated capacity. Proof test all components to 125% of the rated load prior to the first use. Maintain permanent records on the job site for all special rigging accessories.

Disposal of waste materials:

- Whenever materials are dropped more than 20 feet to any point lying outside the exterior walls of the building, use an enclosed chute of wood or equivalent material.
- When debris is dropped without the use of chutes, make sure that the area onto which the material is dropped is completely enclosed with barricades at least 42 inches high and 20 feet back from the projected edge of the opening above. Post at each level warning signs of the hazard of falling materials. Do not remove debris in this lower area until debris handling ceases above.
- Remove all scrap lumber, waste material, and rubbish from the immediate work area as the work progresses.
- Make sure to comply with local fire regulations if disposing of waste material or debris by burning.

- Keep all solvent waste, oily rags, and flammable liquids in fire-resistant covered containers until removed from the work site.

Forklift safety

Click on the link below to access basic forklift training. Employees must be trained on specific equipment that they will be operating in addition to this basic information.

[\(Click here to access forklift training on the web.\)](#)

(Customize by adding any additional rules your company may have and deleting any that do not apply.)

Lockout/Tagout of Electrical Circuits

WAC 296-155-429.

- Controls that are deactivated during the course of work on energized or de-energized equipment or circuits must be tagged and padlocked in the open position.
- Equipment or circuits that are de-energized must be rendered inoperative and have tags and locked padlocks attached at all points where such equipment or circuits can be energized.
- Tags must be placed to identify plainly the equipment or circuits being worked on.
- While any employee is exposed to contact with parts of fixed electric equipment or circuits which have been de-energized, the circuits energizing the parts must be locked out or tagged or both according to the requirements of this section. The requirements must be followed in the order in which they are presented (i.e., (a) of this subsection first, then (b) of this subsection).

Note 1: As used in this section, fixed equipment refers to equipment fastened in connected by permanent wiring methods.

Note 2: Lockout and tagging procedures that comply with [chapter 296-24 WAC](#), Part A-4 will also be deemed to comply with this subsection provided that:

- 1. The procedures address the electrical safety hazards covered by this part; and*
- 2. The procedures also incorporate the requirements of (c)(iv) and (d)(ii) of this subsection.*

- (a) The employer must maintain a written copy of the procedures outlined in this subsection and shall make it available for inspection by employees and by the director and his/her authorized representative.

Note: The written procedures may be in the form of a copy of this section, [WAC 296-155-429](#).

(b) De-energizing equipment.

- (i) Safe procedures for de-energizing circuits and equipment must be determined before circuits or equipment are de-energized.
- (ii) The circuits and equipment to be worked on must be disconnected from all electric energy sources. Control circuit devices, such as push buttons, selector switches, and interlocks, must not be used as the sole means for de-energizing circuits or equipment. Interlocks for electric equipment must not be used as a substitute for lockout and tagging procedures.
- (iii) Stored electric energy that might endanger personnel must be released. Capacitors must be discharged and high capacitance elements must be short-circuited and grounded, if the stored electric energy might endanger personnel.

Note: If the capacitors or associated equipment are handled in meeting this

requirement, they must be treated as energized.

- (iv) Stored non-electrical energy in devices that could re-energize electric circuit parts must be blocked or relieved to the extent that the circuit parts could not be accidentally energized by the device.

(c) Application of locks and tags.

- (i) A lock and a tag must be placed on each disconnecting means used to deenergize circuits and equipment on which work is to be performed, except as provided in (c)(iii) and (v) of this subsection. The lock must be attached to prevent persons from operating the disconnecting means unless they resort to undue force or the use of tools.
- (ii) Each tag must contain a statement prohibiting unauthorized operation of the disconnecting means and removal of the tag.
- (iii) If a lock cannot be applied, or if the employer can demonstrate that tagging procedures will provide a level of safety equivalent to that obtained by the use of a lock, a tag may be used without a lock.
- (iv) A tag used without a lock, as permitted by item (iii) of this subsection, must be supplemented by at least one additional safety measure that provides a level of safety equivalent to that obtained by the use of a lock. (Examples of additional safety measures include the removal of an isolating circuit element, blocking of a controlling switch, or opening of an extra disconnecting device.)
- (v) A lock may be placed without a tag only under the following conditions:
 - (A) Only one circuit or piece of equipment is de-energized; and
 - (B) The lockout period does not extend beyond the work shifts; and
 - (C) Employees exposed to the hazards associated with reenergizing the circuit or equipment are familiar with this procedure.

(d) Verification of de-energized condition. The requirements of this subsection must be met before any circuits or equipment can be considered and worked as de-energized.

(i) A qualified person must operate the equipment operating controls or otherwise verify that the equipment cannot be restarted.

(ii) A qualified person must use test equipment to test the circuit elements and electrical parts of equipment to which employees will be exposed and must verify that the circuit elements and equipment parts are de-energized. The test must also determine if any energized conditions exist as a result of inadvertently induced voltage or unrelated voltage backfeed even though specific parts of the circuit have been de-energized and presumed to be safe. If the circuit to be tested is over 600 volts, nominal, the test equipment must be checked for proper operation immediately before and immediately after this test.

(e) Reenergizing equipment. These requirements must be met, in the order given, before circuits or equipment are reenergized, even temporarily.

(i) A qualified person must conduct tests and visual inspections, as necessary, to verify that all tools, electrical jumpers, shorts, grounds, and other such devices have been removed, so that the circuits and equipment can be safely energized.

(ii) Employees exposed to the hazards associated with reenergizing the circuit or equipment must be warned to stay clear of circuits and equipment.

(iii) Each lock and tag must be removed by the employee who applied it or under his or her direct supervision. However, if this employee is absent from the work place, then the lock or tag may be removed by a qualified person designated to perform this task provided that:

(A) The employer ensures that the employee who applied the lock or tag is not available at the work place; and

(B) The employer ensures that the employee is aware that the lock or tag has been removed before he or she resumes work at that work place.

(iv) There must be a visual determination that all employees are clear of the circuits and equipment.

Welding and Cutting Safety Rules

1. Always follow the manufacturer's recommendations for setting up and operating equipment, selection of tip size, and gas cylinder operating pressures.
2. Always use a regulator to reduce gas cylinder pressure to the operating pressures recommended by the equipment manufacturer. All piping and equipment must meet the standards of the Compressed Gas Association.
3. Always ensure that all connections are leak tight. Each time connections are loosened and retightened each connection should be checked with a soap and water solution (oil free soap). Do not check with flame.
4. Before "lighting up" clear out each line by letting a small amount of gas flow (separately) to remove any mixed gases that might be in the lines.
5. Never use defective, worn or leaky equipment. Repair it or take it out of service.
6. Never use acetylene in excess of 15 psi pressure. Higher pressures with acetylene are dangerous. If the cylinder is not fitted with a hand wheel valve control, any special wrench required must be placed on the cylinder while the cylinder is in service. On manifolds, one wrench for each manifold will suffice.
7. Always have an appropriate fire extinguisher in good operating condition readily available when operating welding or cutting equipment.
8. Never perform welding, cutting, brazing, or heating operations in a poorly ventilated area. Avoid breathing fumes from these operations at all times, particularly when zinc, cadmium, or lead coated metals are involved.
9. Never perform welding or cutting operations near combustible materials (gasoline cans, paints, paper, rags, etc.).
10. Always protect yourself, others present, welding hoses, gas cylinders, and flammable materials in the area from hot slag and sparks from the welding and cutting operations.
11. The welder and spectators must always wear goggles to protect the eyes from injurious light rays, sparks and hot molten metal during welding, cutting, and heating operations. Eye protection must comply with the established ANSI Standards.
12. Always wear clean, oil free clothing during welding and cutting operations. Protect the hands with leather welding gloves to avoid burns from radiation and hot molten slag. Low cut shoes and trousers with cuffs or open pockets should not be worn.
13. Never use a match or cigarette lighter to light a cutting or welding torch. Always use a spark igniter. Fingers are easily burned by the igniting gas when a match or cigarette lighter is used.

14. Ensure that the material being welded or cut is secure and will not move or fall on anyone.
15. Never use a welding, cutting, or heating torch on a container that has held a flammable liquid. Explosive vapors can accumulate and linger in closed containers for extended periods of time.
16. Never use a regulator for gasses other than those for which it was designed for by the manufacturer since the diaphragm and seat materials may not be compatible with other gasses.
17. Never attempt to adapt and use a fuel gas or inert gas regulator on an oxygen cylinder. A special protective device is incorporated on the oxygen regulator to harmlessly dissipate the heat caused by the recompression when the cylinder valve is quickly opened. Such a protective device is not furnished on fuel gas and inert gas regulators.
18. Never tamper with the safety devices on cylinders, fuse plugs, safety discs, etc. and do not permit torch flames or sparks to strike the cylinder.
19. Always refer to the various gasses by their proper names. (Do not refer to oxygen as "air" or acetylene as "gas".)
20. All cylinders, particularly acetylene, should be restrained securely in an upright position to prevent accidents. A non-vertical position for an acetylene cylinder in use would allow the discharge of acetone through the regulator and into the cutting torch, clogging the mixer passages and creating a fire hazard. It would reduce the efficiency of the flame and contaminate the weld area. It also can cause voids in the porous material inside the cylinder, which can lead to acetylene explosions.
21. Store all gas cylinders not in use away from excessive heat sources, such as stoves, furnaces, radiators, the direct rays of the sun, and the presence of open flames. Cylinders in storage should always be secured in an upright position.
22. Keep all burning or flammable substances away from the oxygen or fuel gas storage area (at least 20 feet) and post "No Smoking" signs.
23. Upon completion of a welding, heating, or cutting operation immediately inspect the surrounding areas for smoldering embers. Allow at least one half hour to elapse before leaving the area and conduct another thorough inspection just before leaving. Also alert other personnel of fire possibilities.
24. Always have the properly fitted wrench to fasten a regulator to a cylinder. Never tighten the regulator by hand.
25. Always leave the fuel gas cylinder valve wrench in place when the cylinder valve is open so that it can be closed quickly in an emergency. Do not open acetylene valves more than one-quarter (1/4) turn.

26. Before connecting a regulator to a gas cylinder, open the cylinder valve for a moment. Called cracking the cylinder valve, this will blow out any foreign material that may have lodged in the valve during transit. Do not stand in front of the valve when “cracking”.
27. After attaching a regulator to a gas cylinder, be sure the regulator adjusting screw is fully released (backed off in a counter clockwise direction so that it swivels freely) before the cylinder valve is opened. Never stand in front of a regulator when you are opening a cylinder valve.
28. Always open the cylinder valve slowly so that gas pressure will build up slowly in the regulator (particularly in the oxygen cylinder). Quick opening of the cylinder valve causes a build up of heat due to recompression of the gas. When combined with combustible materials, ignition and explosion may result.
29. If a leak develops in a fuel gas cylinder that cannot be stopped by closing the valve, immediately place the cylinder outside of the building away from possible fire or ignition sources in a location that is free from wind currents that might carry the gas to an ignition source.
30. Never attempt to mix gasses in a cylinder or fill an empty one from another (particularly oxygen cylinders). Mixture of incompatible gasses and/or heat caused by recompression of the gas or gasses may result in ignition and fire. Only the owner of a cylinder may mix gasses in it.
31. When a gas cylinder is ready for return to the supplier, be certain the cylinder valve is closed to prevent internal contamination and the shipping cap is in place to protect the cylinder valve. Identify empty cylinders.
32. Never use oxygen or other gasses as a substitute for compressed air in operation of air-operated tools, blowing off parts, or for ventilation purposes. The only exception to this rule is where oxygen is used to blow out port passages and talcum powder or dust from welding hoses when setting up new or old “dusty” equipment.
33. Do not attempt to do your own repair on welding equipment. Equipment that is improperly repaired can cause leaks and other hazardous conditions. Repairs must be performed by qualified repair personnel.
34. Never repair welding hose with tape. Use of tape and many hose splicers can reduce the pressure to the torch and can cause hazardous conditions. Welding hose must meet the specifications of the Compressed Gas Association.
35. Use the shortest length of hose possible. Longer hoses require higher gas pressures and can be hard to handle.
36. Never use oil or grease on any part of welding or cutting equipment and never let it come into contact with oil or grease. This includes gas cylinders, work bench, regulators, torches, tips, threads on bottles, and clothes that are worn, such as jackets, gloves, and aprons. Oxygen and oil or grease can cause explosions and fire.

37. Never use a hammer on the valve cover caps to loosen them. Use a piece of wood to soften the impact and prevent sparks and damage to the cap.
38. When moving gas cylinders always roll them on their bottom edges or in a cart designed for their movement. Sliding or dragging them or rolling causes excessive wear and may weaken their walls by metal erosion. Slings and electromagnets are not authorized when transporting cylinders.
39. Never use cylinders as rollers to move material. Do not let them bump into each other or let them fall.
40. Fuel gas and liquefied fuels must be stored and shipped valve end up.
41. Do not hammer on any cylinder. Do not tamper with the relief valves. If you have trouble, contact the supplier for assistance.
42. Suitable eye protection must be worn for all welding and cutting operations.
43. Cylinders must be secured. Valves must be closed when unattended and caps must be on the cylinders when the regulators are not on the cylinders.
44. Cylinders must be upright when they are transported in powered vehicles.
45. All cylinders with a water weight of over 30 lbs. must have caps or other protection.
46. All fuel gases must be used through a regulator on cylinder or manifold.
47. Compressed gas cylinders must be upright except for short periods for transportation.
48. Repair work on gauges and regulators must be done by qualified personnel.
49. Only 4 inches of hose per foot may be covered with tape. Defective hoses must be removed from service.
50. Oxygen must not be used for ventilation.
51. Oxygen regulators must be marked "Use No Oil". Regulators and fittings must meet the specifications of the Compressed Gas Association.
52. Union nuts on regulators must be checked for damage.
53. Before removing a regulator, shut off cylinder valve and release gas from regulator. Equipment must be used only as approved by the manufacturer.
54. Caps must be on cylinders unless they are transported on a special carrier.
55. Hot warnings on materials are required.

56. Fire is the biggest hazard in welding. The area should be cleared for a radius of 35 feet. Fire shields should be used. The area should be monitored for 30 minutes or more after end of work to ensure there is no delayed ignition.
57. Proper personal protective equipment must be worn by all welders and assisting personnel.
58. All welding personnel should be advised of the hazards from heating zinc, lead, cadmium, and any other substances that could cause health problems from the welding activity.

(The following apply to arc welding)

59. Chains, wire ropes, hoists, and elevators must not be used to carry welding current.
60. Leather capes should be used for overhead welding.
61. The neck and ears must be protected from the arc.
62. Conduits with electrical conductors in them must not be used to complete a welding circuit.
63. Welding shields must be used to protect other workers from injurious light rays.
64. Welding leads must be inspected regularly for damage to insulation. Only proper splicing will be authorized. There should be no splices in stinger lead within 10 feet of the stinger and the leads should never be wrapped around the body.

(Customize by adding any additional rules your company may have and deleting any that do not apply.)

Hazard Communication Program

Purpose:

The purpose of the Hazard Communication Program is to ensure that the hazards of all chemicals produced or imported by chemical manufacturers or importers are evaluated. Information concerning the hazards must be transmitted to affected employers and employees before they use the products.

Procedure:

- Inventory Lists – Know the hazardous chemicals in your workplace that are a potential physical or health hazard. Make an inventory list of these hazardous chemicals; this list must be a part of your written program.
- MSDS – Make sure there is a material safety data sheet (MSDS) for each chemical and that the inventory list and labeling system reference the corresponding MSDS for each chemical.
- Labeling System – Each container entering the workplace must be properly labeled with the identity of the product, the hazardous warning, and the name and address of the manufacturer.
- Written Program – Develop, implement, and maintain a comprehensive written hazard communication program at the workplace that includes provisions for container labeling, material safety data sheets, and an employee training program **(see the editable sample in the Appendix, page M1-2)**.

Employees must be made aware of where hazardous chemicals are used in their work areas. They must also be informed of the requirements of the Hazard Communication Standard, the availability and location of the written program, the list of hazardous chemicals, and the material safety data sheets.

The code specifically requires employers to train employees in the protective practices implemented in their workplace, the labeling system used, how to obtain and use MSDSs, the physical and health hazards of the chemicals and the recognition, avoidance and prevention of accidental entrance of hazardous chemicals into the work environment.

Respirator Program

Purpose:

The purpose of the Respirator Program is to ensure that all employees are protected from exposure to respiratory hazards. Engineering controls such as ventilation and substitution of less toxic materials are the first line of defense. However, engineering controls are not feasible for some operations or do not completely control the identified hazards. In these situations, respirators and other protective equipment must be used. Respirators are also utilized for protection during emergencies.

Procedure:

This program applies to all employees who are required to wear respirators during normal work operations and during certain non-routine or emergency operations. Employees participating in the respiratory protection program do so at no cost to them. The expense associated with medical evaluations, training, and respiratory protection equipment will be borne by the company.

Employees who voluntarily choose to use a cartridge style respirator when the respirator is not required are subject to the medical evaluation, cleaning, maintenance, and storage elements only of this program. These individuals will also receive training covering proper procedures for cleaning, maintenance and storage of their respirators.

[Click here for an editable Sample Respiratory Protection Program](#)

Hearing Conservation Program

Purpose:

The purpose of the Hearing Conservation Program is to ensure that all employees are protected from exposure to noise hazards. Employers whose workers are exposed to high noise levels must have an active program for protecting their employees' hearing.

Procedure:

An effective hearing conservation program should first assess company wide noise exposures in order to identify any employee or group of employees exposed to noise. Noise is measured with a sound level meter or noise dosimeters, which measure average noise levels over time. Employees who are exposed to noise at or above an eight-hour time-weighted average of 85 dB (decibels) must be covered under a hearing conservation program. For these employees, the employer must develop, implement, and maintain (at no cost to the employees) a program consisting of

1. Mandatory audiometric testing
2. Making hearing protectors available and ensuring their use.
3. Comprehensive training explaining hearing loss, hearing protective devices, and the employer's hearing conservation program.
4. Installation of warning signs for high noise areas (115 dBA or higher).
5. Keeping accurate records.
6. Ensuring employee access to their records.

Additionally, the employer must post a copy of the hearing conservation standard or post a notice to affected employees or their representatives that a copy of the standard is available at the workplace for their review.

If you need assistance in noise measurements, you can contact the Consultation Section of the Department of Labor and Industries; the industrial hygiene consultants can help you free of charge.

[Click here for an editable Sample Hearing Conservation Program.](#)

CONFINED SPACES

Fatalities and injuries constantly occur among construction workers who, during the course of their jobs, are required to enter confined spaces. In some circumstances, these workers are exposed to multiple hazards, any of which may cause bodily injury, illness, or death. Workers are injured and killed from a variety of atmospheric factors and physical agents.

The construction standard (WAC 296-155-203) requires that companies follow WAC 296-809, when working in confined spaces. There is an exception for work on sewer systems under construction.

Employers must consult with employees and their authorized representatives on the development and implementation of all aspects of the permit required confined space entry program required by the Confined Space Standard, (WAC 296-809).

All information required by the Confined Space Standard must be available to employees affected by the standard (or their authorized representatives).

You must first determine if you have any confined space situations. A confined space has three characteristics; it must have **all three** characteristics to be considered a confined space:

1. Large enough to get your body entirely inside to do your work
2. Not designed or intended for continuous occupation
3. Restricted entry or exit

If you do have any confined spaces, you must not enter them until you have carefully evaluated the hazards inside to determine what type of entry procedure may be used for each confined space you have:

- Non-permit-required confined space (NPRCS)
- Permit-required confined space (PRCS)
- Alternate Entry

[Click here to link to a Confined Space Guide and Sample Written Program to help you in developing your program.](#)

APPENDIX

Job Orientation Guide

Company: (Enter Company Name) Employee: (Enter Employee Name)
 Trainer: (Enter Name of Trainer) Hire Date: (Enter Employee's Hire Date)
 Date (Enter Date of Orientation) Position: (Enter Employee's Job Title)

This checklist is a guideline for conducting employee safety orientations for employees new to (Customize by adding the name of your company). Once completed and signed by both supervisor and employee, it serves as documentation that orientation has taken place.

	Date	Initials
1. Explain the company safety program, including:		
Orientation	_____	_____
On-the-job training	_____	_____
Safety meetings	_____	_____
Incident investigation	_____	_____
Disciplinary action	_____	_____
2. Use and care of personal protective equipment (Hard hat, fall protection, eye protection, etc.)	_____	_____
3. Line of communication and responsibility for immediately reporting injuries.		
A. When to report an injury	_____	_____
B. How to report an injury	_____	_____
C. Who to report an injury to	_____	_____
D. Filling out incident report forms	_____	_____
4. General overview of operation, procedures, methods and hazards as they relate to the specific job	_____	_____
5. Pertinent safety rules of the company and WISHA	_____	_____
6. First aid supplies, equipment and training		
A. Obtaining treatment	_____	_____
B. Location of Facilities	_____	_____
C. Location and names of First-aid trained personnel	_____	_____
7. Emergency plan		
A. Exit location and evacuation routes	_____	_____
B. Use of fire fighting equipment (extinguishers, hose)	_____	_____
C. Specific procedures (medical, chemical, etc.)	_____	_____
8. Vehicle safety	_____	_____
9. Personal work habits		
A. Serious consequences of horseplay	_____	_____
B. Fighting	_____	_____
C. Inattention	_____	_____
D. Smoking policy	_____	_____
E. Good housekeeping practices	_____	_____
F. Proper lifting techniques	_____	_____

NOTE TO EMPLOYEES: Do not sign unless ALL items are covered and ALL questions are satisfactorily answered.

The signatures below document that the appropriate elements have been discussed to the satisfaction of both parties, and that both the supervisor and the employee accept responsibility for maintaining a safe and healthful work environment.

Date: _____ Supervisor's Signature: _____

Date: _____ Employee's Signature: _____

Employee's Report of Injury Form

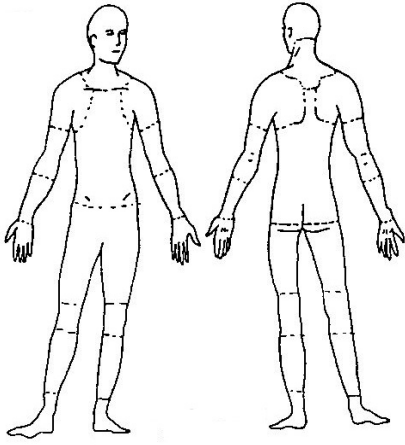
Instructions: Your employees may use this form to report all work related injuries, illnesses, or “near miss” events (which could have caused an injury or illness) – *no matter how minor*. This helps you to identify and correct hazards before they cause serious injuries. This form should be completed by employees as soon as possible and given to a supervisor for further action.

I am reporting a work related: <input type="checkbox"/> Injury <input type="checkbox"/> Illness <input type="checkbox"/> Near miss	
Your Name:	
Job title:	
Supervisor:	
Have you told your supervisor about this injury/near miss? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Date of injury/near miss:	Time of injury/near miss:
Names of witnesses (if any):	
Where, exactly, did it happen?	
What were you doing at the time?	
Describe step by step what led up to the injury/near miss. (continue on the back if necessary):	
What could have been done to prevent this injury/near miss?	
What parts of your body were injured? If a near miss, how could you have been hurt?	
Did you see a doctor about this injury/illness? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, whom did you see?	Doctor's phone number:
Date:	Time:
Has this part of your body been injured before? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, when?	Employer:
Your signature (optional):	Date:

Incident Investigation Report

Instructions: Complete this form as soon as possible after an incident that results in serious injury or illness.
 (Optional: Use to investigate a minor injury or near miss that *could have resulted in a serious injury or illness.*)

This is a report of a: <input type="checkbox"/> Death <input type="checkbox"/> Lost Time <input type="checkbox"/> Dr. Visit Only <input type="checkbox"/> First Aid Only <input type="checkbox"/> Near Miss	
Date of incident:	This report is made by: <input type="checkbox"/> Employee <input type="checkbox"/> Supervisor <input type="checkbox"/> Team <input type="checkbox"/> Final Report

Step 1: Injured employee (complete this part for each injured employee)		
Name:	Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female	Age:
Department:	Job title at time of incident:	
Part of body affected: (shade all that apply) 	Nature of injury: (most serious one) <input type="checkbox"/> Abrasion, scrapes <input type="checkbox"/> Amputation <input type="checkbox"/> Broken bone <input type="checkbox"/> Bruise <input type="checkbox"/> Burn (heat) <input type="checkbox"/> Burn (chemical) <input type="checkbox"/> Concussion (to the head) <input type="checkbox"/> Crushing Injury <input type="checkbox"/> Cut, laceration, puncture <input type="checkbox"/> Hernia <input type="checkbox"/> Illness <input type="checkbox"/> Sprain, strain <input type="checkbox"/> Damage to a body system: <input type="checkbox"/> Other _____	This employee works: <input type="checkbox"/> Regular full time <input type="checkbox"/> Regular part time <input type="checkbox"/> Seasonal <input type="checkbox"/> Temporary Months with this employer: Months doing this job: (e.g.: nervous, respiratory, or circulatory systems)

Step 2: Describe the incident	
Exact location of the incident:	Exact time:
What part of employee's workday? <input type="checkbox"/> Entering or leaving work <input type="checkbox"/> Doing normal work activities <input type="checkbox"/> During meal period <input type="checkbox"/> During break <input type="checkbox"/> Working overtime <input type="checkbox"/> Other	
Names of witnesses (if any):	

Number of attachments:	Written witness statements:	Photographs:	Maps / drawings:
What personal protective equipment was being used (if any)?			
Describe, step-by-step the events that led up to the injury. Include names of any machines, parts, objects, tools, materials and other important details.			
Description continued on attached sheets: <input type="checkbox"/>			

Step 3: Why did the incident happen?	
Unsafe workplace conditions: (Check all that apply) <input type="checkbox"/> Inadequate guard <input type="checkbox"/> Unguarded hazard <input type="checkbox"/> Safety device is defective <input type="checkbox"/> Tool or equipment defective <input type="checkbox"/> Workstation layout is hazardous <input type="checkbox"/> Unsafe lighting <input type="checkbox"/> Unsafe ventilation <input type="checkbox"/> Lack of needed personal protective equipment <input type="checkbox"/> Lack of appropriate equipment / tools <input type="checkbox"/> Unsafe clothing <input type="checkbox"/> No training or insufficient training <input type="checkbox"/> Other: _____	Unsafe acts by people: (Check all that apply) <input type="checkbox"/> Operating without permission <input type="checkbox"/> Operating at unsafe speed <input type="checkbox"/> Servicing equipment that has power to it <input type="checkbox"/> Making a safety device inoperative <input type="checkbox"/> Using defective equipment <input type="checkbox"/> Using equipment in an unapproved way <input type="checkbox"/> Unsafe lifting by hand <input type="checkbox"/> Taking an unsafe position or posture <input type="checkbox"/> Distraction, teasing, horseplay <input type="checkbox"/> Failure to wear personal protective equipment <input type="checkbox"/> Failure to use the available equipment / tools <input type="checkbox"/> Other: _____
Why did the unsafe conditions exist?	
Why did the unsafe acts occur?	
Is there a reward (such as “the job can be done more quickly”, or “the product is less likely to be damaged”) that may have encouraged the unsafe conditions or acts? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe:	
Were the unsafe acts or conditions reported prior to the incident? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Have there been similar incidents or near misses prior to this one? <input type="checkbox"/> Yes <input type="checkbox"/> No	

Step 4: How can future incidents be prevented?

What changes do you suggest to prevent this injury/near miss from happening again?

- Stop this activity Guard the hazard Train the employee(s) Train the supervisor(s)
- Redesign task steps Redesign work station Write a new policy/rule Enforce existing policy
- Routinely inspect for the hazard Personal Protective Equipment Other: _____

What should be (or has been) done to carry out the suggestion(s) checked above?

Description continued on attached sheets:

Step 5: Who completed and reviewed this form? (Please Print)

Written by:

Title:

Department:

Date:

Names of investigation team members:

Reviewed by:

Title:

Date:



CREW LEADER SAFETY MEETING

Firm Name		Address	
Date	Time	# of employees	
Subject discussed			

Minutes:

Crew Leader Comments:

Provided by Dept. of Labor & Industries
WISHA Services

SAFETY MEETING NOTICE

DATE: _____

TIME: _____

PLACE:

FALL PROTECTION WORK PLAN – SAMPLE ONE

INSTRUCTIONS

A written fall protection work plan must be implemented by each employer on a job site where a fall hazard of 10 feet or greater exists, in accordance with Department of Labor and Industries, WISHA Regulations. **The plan must be specific for each work site. THIS WORK PLAN WILL BE AVAILABLE ON THE JOB SITE FOR INSPECTION.** Attached is a sample of a model fall protection work plan that may be filled out by each employer who has employees exposed above 10 feet. The following steps will help you fill out your plan.

1. FILL OUT THE SPECIFIC JOB INFORMATION.

Company Name:

Job Name:	Date:
Job Address:	City:
Job Foreman:	Jobsite Phone:

2. FALL HAZARDS IN THE WORK AREA INCLUDE LOCATIONS AND DIMENSIONS FOR HAZARDS

Elevator shaft:	Stairwell:
Leading edge:	Window opening:
Outside static line:	Roof eave height:
Perimeter edge:	Roof perimeter dimensions:
Other fall hazards in the work area:	

3. METHOD OF FALL ARREST OR FALL RESTRAINT

(For fall protection equipment include details, such as manufacturer etc.)

Full body harness:

Body belt (Restraint only):

Lanyard:

Dropline:

Lifeline:

Restraint line:

Horizontal lifeline:

Rope grab:

Deceleration device:

Shock absorbing lanyard:

Locking snap hooks:

Safety nets:

Guard rails:

Anchorage points:

Catch platform:

Scaffolding platform:

Safety monitor:

Name of monitor, if used:

Other:

4. ASSEMBLY, MAINTENANCE, INSPECTION, DISASSEMBLY PROCEDURE

Assembly and disassembly of all equipment will be done according to manufacturers' recommended procedures. (Include copies of manufacturer's data for each specific type of equipment used.)

Specific types of equipment on the job are:

A visual inspection of all safety equipment will be done daily or before each use, as stated in the Employee Training Packet. Any defective equipment will be tagged and removed from use immediately. The manufacturer's recommendations for maintenance and inspection will be followed.

5. HANDLING, STORAGE & SECURING OF TOOLS AND MATERIAL

Toe boards will be installed on all scaffolding to prevent tools and equipment from falling from scaffolding.

Other specific handling, storage and securing is as follows:

6. OVERHEAD PROTECTION

Hard hats are required on all job sites with the exception of those that have no exposure to overhead hazards. Warning signs will be posted to caution of existing hazards whenever they are present. In some cases, debris nets may be used if a condition warrants additional protection.

Additional overhead protection will include:

Toe boards (at least 4 inches in height) will be installed along the edge of scaffolding and walking surfaces for a distance sufficient to protect employees below. Where tools, equipment or materials are piled higher than the top of the toe board, paneling or screening will be erected to protect employees below.

7. INJURED WORKER REMOVAL

Normal first aid procedures should be performed as the situation arises. If the area is safe for entry, the first aid should be done by a foreman or other certified individual.

Initiate Emergency Services – Dial 911 (where available)

Phone location: _____

First aid location: _____

Elevator location: _____

Crane location: _____

Other: _____ Location: _____

Rescue considerations. When personal fall arrest systems are used, the employer must assure that employees can be promptly rescued or can rescue themselves should a fall occur. The availability of rescue personnel, ladders, or other rescue equipment should be evaluated. In some situations, equipment that allows employees to rescue themselves after the fall has been arrested may be desirable, such as devices that have descent capability.

Describe methods to be used for the removal of the injured worker(s):

8. TRAINING AND INSTRUCTION PROGRAM

All new employees will be given instructions on the proper use of fall protection devices before they begin work. They will sign a form stating they have been given this information. This form becomes part of the employee's personnel file.

The written fall protection work plan will be reviewed before work begins on the job site. Those employees attending will sign below. The fall protection equipment use will be reviewed regularly at the weekly safety meetings.

Date: _____

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Foreman or Job Superintendent: _____

Prior to permitting employees into areas where fall hazards exist, all employees must be trained regarding fall protection work plan requirements. Inspection of fall protection devices/systems must be made to ensure compliance with WAC 296-155-24510.

Fall Protection Work Plan Sample Two - Instructions

Why do I need a fall protection work plan?

- Falls from elevation are a major cause of injuries in the construction industry.
- WISHA Regulations require you to evaluate your worksite to identify fall hazards.
- You must then eliminate or control the fall hazards you identify.
- If fall hazards of 10 feet or more exist, you must provide a written plan which identifies:
 - All fall hazards in the work area
 - The methods you and your employees will use to eliminate and control them
 - Correct procedures for assembly, maintenance, inspection, and disassembly of fall protection systems used
 - Correct procedures for handling, storage, and securing of tools and materials
 - The method of providing overhead protection
 - The method for prompt, safe removal of injured workers
 - Training methods for the employees working on the jobsite
- The fall protection work plan must be specific to the work site
- The fall protection work plan must be available on the work site for review
- The documentation of training must be available on the work site for review

How do I write the plan?

- Use the attached template to assist you
- Have a “competent employee” complete the template to make it work site specific
- Customize the template as needed by adding missing information and/or deleting unnecessary information
- **NOTE: The plan form and individual site plans must accurately describe the conditions at your worksite and the methods you will use. A compliance officer will, in addition to ensuring that your plan contains all the required elements, determine if it describes what you actually do. If it does not, you may be subject to citation and monetary penalty!**

Fall Protection Work Plan

Fall Hazard Identification and Protection Selection Worksheet

On the table below, identify each fall hazard of 10 feet or more that exists or will exist during this construction project and then select the protection method from the options identified below the table.

✓	Hazard Type	General Location(s)	Fall Protection Method	Overhead Protection Method
	Roof > 4/12 Pitch			
	Roof < 4/12 Pitch			
	Skylight Openings			
	Roof Openings			
	Floor Openings			
	Window Openings			
	Open-sided Floors			
	Decks			
	Balconies			
	Leading Edge Work			
	Mobile Lift Work			
	Excavation Edges			
	Grade Drop-Offs			
	Other _____			

Fall Protection Methods: Select a fall protection method from the list below for each hazard identified above. Assembly and implementation instructions for the method(s) used are located elsewhere in this document.

- | | | |
|-------------------------------|---------------------|-----------------------------|
| Standard Guardrails | Fall Arrest Harness | Fall Restraint Harness/Belt |
| Warning Line System | Safety Net | Cover or Hatch |
| Warning Line & Safety Monitor | Positioning Belt | Other: _____ |

Overhead Hazard Protection Methods: For each overhead hazard identified, specify the method(s) of protection for workers below. Refer to the "Overhead Protection" Section of this plan for any special installation instructions.

- | | |
|--------------------------|-------------------------------------|
| Hard Hats Required | Screens on Guardrails |
| Overhead Hazard Signs | Barricade to Control Access to Area |
| Debris Nets | Other: _____ |
| Toe Boards on Guardrails | Other: _____ |

Fall Protection Work Plan

Fall Protection System Assembly and Maintenance

Fall protection systems will be assembled and maintained according to manufacturer's instructions when using a manufactured system. A copy of those instructions is available on-site for reference. Any fall protection system used will meet WISHA regulations as contained in WAC 296-155 Part C-1. Assembly and maintenance instructions unique to this worksite such as components, placement of systems, anchor points, areas where systems are particularly subject to damage, etc., are specified below.

Standard Guardrails must:

- be 39" to 45" above the work surface at top rail with midrail and toe board.
- be able to withstand 200 pounds of pressure on the top rail in any direction.
- not have significant deflection.
- be inspected regularly for damaged or missing components.

Note: A guardrail does not protect a person standing on a ladder, box, or other surface above the work surface.

Post Material: _____

Rail Material: _____

Post Spacing (8' max): _____

Anchor Method: _____

Other Instructions: _____

Fall Arrest Harness:

- Must have anchor points capable of withstanding a 5000 pound shock unless a deceleration device in use limits fall to 2 feet, in which case a 3000 pound anchor point may be used.
- Free fall may not exceed 6'.
- A lower level may not be contacted during a fall.
- Lifelines must be placed or protected to prevent abrasion damage.
- Snap hooks may not be connected to each other, or to loops in webbing.
- Inspect components for deformation, wear, and mildew.

System Component List: _____

Anchor Point at this worksite: _____

Configuration and placement sketch attached? Yes _____ No _____

Other Instructions: _____

Positioning Belt:

- Employees must not be able to fall more than 2 feet.
- The anchorage must be able to sustain 4 times the intended load.
- Snap hooks must not be connected to each other, or to loops in webbing.

System Component List: _____

Anchor Point at this worksite: _____

Other Instructions: _____

Fall Protection Work Plan

Fall Restraint Harness/Belt:

Anchor points:

- must withstand 4 times the intended load.
- must **always** prevent a free fall from the work surface. (Several alternate anchor points may be necessary to achieve this requirement.)
- Inspect components for deformation, wear and mildew.

System Component List: _____

Anchor Point at this worksite: _____

Configuration and placement sketch attached? Yes _____ No _____

Other Instructions: _____

Safety Nets must:

- be installed within 30 feet vertically of the work surface.
- extend out from the outermost projection of the work surface as specified below.
- must be tested or certified to withstand a 400 pound object dropped from the highest work surface.
- Mesh at any point must not exceed 36 square inches with the largest opening being 6 inches side to side.
- Inspect weekly for mildew, wear or damage and remove any objects in net as soon as possible.

A person falling into the net cannot contact any object below the net.

System Component List: _____

Anchor Point at this worksite: _____

Maximum Fall Distance from Work Surface to Net: _____ Feet

Distance from Outer Edge of Net to Outermost Edge of Work Surface:

_____ Up to 5' Fall = 8 Feet _____ 5' to 10' Fall = 10 Feet _____ > 10' Fall = 13 Feet

Configuration and placement sketch attached? Yes _____ No _____

Other Instructions: _____

Covers or Hatches must:

- Be able to support twice the weight of employees and equipment that would be on it at the same time or twice the maximum axle load of the largest vehicle that would cross it.
- Be secured to prevent accidental displacement.
- Be marked with the word "Cover" or "Hole".

Material to use: _____

Other Instructions: _____

Fall Protection Work Plan

Warning Line Systems must:

- Block access to all fall hazards in the work area.
- Be placed 6 feet back from the edge.
- Be made of rope wire or chain between 39" and 45" above the surface height.
- Be flagged at 6 foot intervals
- Be attached to stanchions such that pulling on one section of chain will not take up slack in the other sections.
- Have stanchions that are able to withstand a 16-pound force applied horizontally at 30" high.

System Component List: _____

Configuration and placement sketch attached? Yes _____ No _____

Other Instructions: _____

Controlled Access Zones must:

- Meet the "Warning Line System" requirements described above, 6' to 25' back from the edge *plus the following when employees work between the fall hazard and the warning line ("control zone")*.
- Have a competent person designated as "Monitor" who
 - Wears a high-visibility vest marked "Monitor".
 - Is in visual and voice range of employees in the control zone
 - Is on the same working surface
 - Has no other duties except watching, warning and directing employees regarding fall hazards.
 - Has a maximum of eight employees working in the control zone (all of whom also wear high-visibility vests and are easily distinguishable from the Monitor).

This system is not to be used in adverse weather conditions such as snow, rain, or high wind, nor after dark.

Monitor(s): _____

Control Zone Employees:

_____	_____
_____	_____
_____	_____
_____	_____

Other Fall Protection System: Provide a description of how the system is to be assembled, disassembled, operated, inspected, and maintained, including specifications for materials to be used in its construction:

Fall Protection Work Plan

Emergencies and Injuries:

First Aid Trained Employee(s) On Site:

Name: _____ Title: _____

Name: _____ Title: _____

First Aid Kit Location(s): _____

Nearest Medical Facility: _____

Emergency Services Phone Numbers:

Medical: _____ Fire: _____ Police: _____

Location of Nearest Telephone: _____

If a crew member is injured at elevation, the supervisor will evaluate the employee's condition and administer first aid. Emergency services will be called as needed. If an injured employee can't return to ground level, the employee will be brought down to a lower level by emergency services. The following equipment is available on site to facilitate lowering the injured worker:

Employee Training:

All employees must be instructed on the provisions of this plan and have been trained in the proper use of the fall protection equipment involved. By signing this document, the employees acknowledge that they understand the plan and have been trained in the use of the equipment.

Name:	Signature:	Date:

The competent person's signature verifies that the hazard analysis has been done, the employees informed of the plan's provisions and that employees have received training in the fall protection systems in use:

Name:	Signature:	Date:

Construction Self-Inspection Guide

- Power lines:** Minimum 10' clearance / insulate – de-energize, under 50 kw; over 50 kw – refer to Chapter 155
- Trench/excavation:** Any trench four feet or more must be sloped, shored or braced
- Guardrails:** Any opening four feet or more above ground level must be guarded
- Standard guardrail:** Top rail = 39" to 45" above working surface. Midrail = halfway between top rail and floor. Toeboard = 4".
- Scaffold:** Fully planked
- Scaffold:** Fall protection provided if fall hazards over 10 feet exist
- Stairs:** Four or more risers must have handrails
- Fall protection:** Any exposure to fall hazards of 10' or greater must be eliminated by the use of safety harness/belt, lanyard or lifeline, horizontal lines, or cantenary lines. Positive fall restraint/protection must be utilized at all times. Two lanyards may be necessary at the beam/upright traverse points. No exposure at any time is allowed.
- Fall protection work plan:** Job specific, in writing; available on-site for all fall hazards above 10'.
- Open belts and pulleys, chains and sprockets, points of operation** must be guarded to prevent accidental contact. Air compressors and electric motor pulleys are the most common hazards.
- Radial saws:** Cutting head must return easily to start position when released; blade must not extend past the edge of the worktable; off/on switch should be at front of operator's position.
- Table saws:** Upper hood guard; anti-kickback, push stick, belt and pulley guarded
- Circular saws:** Blade guard instantly returns to covering position
- Never wedge or pin a guard.**
- Chain saw:** Ballistic nylon leg protection; eye, ear, face protection; hard hat
- Angle grinders:** 180-degree guard required
- Ladders:** Extended 36" above landing and secured to prevent displacement
- Articulating boomlift:** Safety harness and lanyard at all times
- Floor holes/openings:** Covered and secured; be sure no tripping hazards in the area.
- Extension cords/electric power tools:** Marked/covered by Assured Grounding Program
- Clothing:** Minimum of short sleeve shirts, long pants, and substantial footwear; no recreational shoes
- Hard hats:** readily accessible at all times; worn when overhead hazard exists
- Oxygen/acetylene storage areas:** Cylinders chained and separated
- Personal protective equipment:** Head, eye, ear, respiratory, and leg protection – high visibility vests when required
- Housekeeping:** Workers are responsible for their own area of exposure
- First aid/fire extinguishers:** Available and readily accessible
- First aid trained personnel:** Minimum of one person on-site at all times with first aid CPR training.
- Accident Prevention Program:** In written format
- Crew Leader Meetings:** At beginning of each job and at least weekly thereafter. Documented
- Chemical hazard communication program**

(Customize the self-inspection guide above as needed to tailor it to your business and location.)

For specific information, refer to the safety and health standards, Chapters 800, 24, 62 and 155.

Safety and Health Inspection Check List – Sample 1

Job site: _____ Date: _____

This format is intended only as a reminder to look for unsafe practices, potential and/or near miss incidents.

(S) indicates **S**atisfactory

(U) indicates **U**nsatisfactory

Date of inspection/walk around																				
Machinery																				
Point of operation guard																				
Belts, pulleys, gears, shafts, etc.																				
Oiling, cleaning, and adjusting																				
Maintenance and oil leaks																				
Pressure equipment																				
Steam equipment																				
Air Receivers and Compressors																				
Gas cylinders and hoses																				
Unsafe Practices																				
Excessive speed of vehicles																				
Improper lifting																				
Smoking in dangerous places																				
Horseplay																				
Running in aisles or on stairs																				
Improper use of air hoses																				
Removing machine guards																				
Working under suspended loads																				
Working on machines in motion																				
First aid																				
First aid kits																				
Stretchers and fire blankets																				
Emergency showers																				
Eyewash stations																				
All injuries and illnesses reported																				
Hazard Communications																				
Acids and caustics																				
Solvents																				
Dusts, vapors, or fumes																				
Radiation																				
New chemicals/processes																				

Safety and Health Inspection Check List – continued

Job site: _____ Date: _____

(S) indicates Satisfactory

(U) indicates Unsatisfactory

Date of inspection/walk around																				
Tools																				
Power tools, wiring and grounding																				
Hand tools (condition)																				
Use and storage of tools																				
Personal protective equipment																				
Goggles or face shield																				
Substantial footwear																				
Hard hats																				
Gloves																				
Respirators																				
Fall protection equipment																				
Other protective clothing																				
Fire protection																				
Extinguishing equipment																				
Exits, stairs, and signs																				
Storage of flammable materials																				
Material Handling Equipment																				
Power trucks and hand trucks																				
Elevators																				
Cranes and hoists																				
Conveyors																				
Cables, ropes, chains, slings																				
Housekeeping																				
Aisles, stairs and floors																				
Storage and piling of materials																				
Wash and locker rooms																				
Light and ventilation																				
Disposal of water																				
Yards and parking lots																				
Bulletin boards																				
Only safety and health materials posted																				
Neat and attractive																				
Display regularly changed																				
Well-illuminated																				

(Customize the checklist above with any additional information.)

Safety and Health Inspection Check List – Sample 2

A = Adequate at time of inspection

B = Needs immediate attention

A B

1. JOB SITE INFORMATION

- WISHA and other job site warning posters posted
- Scheduled safety meetings held and documented
- Adequate employee training – general and specific
- Medical services, first aid equipment, stretchers and a qualified first aider available
- Emergency telephone numbers posted (medical services, fire department, police)

2. HOUSEKEEPING AND SANITATION

- Working areas generally neat
- Waste and trash regularly disposed
- Enclosed chute provided when material dropped outside of building from over 20 feet
- Lighting adequate for all work tasks
- Projecting nails removed or bent over
- Oil and grease removed from walkways and stairs
- Waste containers provided and used
- Sanitary facilities adequate and clear
- Potable water available for drinking
- Disposable drinking cups and container for used cups provided

3. FIRE PREVENTION

- Fire protection program developed
- Fire instructions provided to personnel
- Proper type and number of fire extinguishers, identified, checked and accessible
- Phone number of fire department posted
- Hydrants clear, access open
- NO SMOKING signs posted and enforced where needed
- Temporary heating devices safe. Adequate ventilation provided

4. ELECTRICAL INSTALLATIONS

- Adequate wiring, well insulated, grounded, protected from damage
- Assured grounding program followed (**OR**)
- Ground fault circuit interrupters used
- Terminal boxes equipped with required covers

5. HAND TOOLS

- Proper tools being used for each job
- Safe carrying practices used
- Company and employees' tools regularly inspected and maintained

Safety and Health Inspection Check List – continued

A = Adequate at time of inspection

B = Needs immediate attention

A B

6. POWER TOOLS

- Good housekeeping where tools are used
- Tools and cords in good condition
- Proper grounding of all tools (**OR**)
- Double insulated tools used
- Proper instruction in use provided
- All mechanical guards in use
- Tools neatly stored when not in use.
- Right tool being used for the job at hand
- Wiring properly installed

7. POWDER-ACTUATED TOOLS

- All operators licensed
- Tools and charges protected from unauthorized use
- Competent instruction and supervision provided
- Tools used only on recommended materials
- Flying hazards checked by backing up, removal of personnel, or use of captive stud tool

8. LADDERS

- Ladders inspected and in good condition
- Ladders properly secured to prevent slipping, sliding or falling
- Side rails extended 36" above the top of landing
- Job-built ladders properly constructed
- Stepladders fully open when in use
- Metal ladders not used around electrical hazards
- Ladders not painted
- Ladders properly stored
- Ladder safety feet in use

9. HEAVY EQUIPMENT

- Inspection and maintenance records up to date
- Lights, brakes, warning signals operative
- Wheels chocked when necessary
- Haul roads well maintained and properly laid out
- Equipment is properly secured when not in use
- Shut-off devices on hose air lines, in case of hose failure
- Noise arrestors in use
- ROPS in place

Safety and Health Inspection Check List – continued

A = Adequate at time of inspection

B = Needs immediate attention

A B

10. SCAFFOLDING

- Erection properly supervised
- All structural members meet safety factors
- All connections secure
- Scaffold tied in to the structure when required
- Working areas free of debris, snow, ice and grease
- Foot sills and mud sills provided
- Workers protected from falling objects
- Scaffolds plumb and square, with cross-bracing
- Guard rails, intermediate rails, and toeboards in place
- Adequate, sound planking provided
- Scaffold equipment in good working order
- Ropes and cables in good condition

11. MOTOR VEHICLES

- Roadways or walkway hazards effectively barricaded
- Barricades illuminated or reflectorized at night
- Traffic control devices used when appropriate
- Inspection and maintenance records up to date
- Operators qualified for vehicles in use
- Local and state vehicle laws and regulations observed
- Brakes, lights, warning devices operative
- Weight limits and load sizes controlled
- Personnel transported in a safe manner
- All glass in good condition
- Back-up signals provided
- Fire extinguishers installed where required
- SLOW MOVING VEHICLE signs used when required

12. HOISTS, CRANES AND DERRICKS

- Cables and sheaves regularly inspected
- Slings and chains, hooks and eyes inspected before each use
- Equipment firmly supported
- Outriggers used if needed
- Power lines inactivated, removed, or at a safe distance
- Proper loading for capacity at lifting radius. Rated load capacities posted?
- All equipment properly lubricated and maintained
- Signalpersons where needed
- Signals posed, understood, and observed
- Inspection and maintenance logs maintained
- Hazard signs posted and visible to operator

Safety and Health Inspection Check List – continued

A = Adequate at time of inspection

B = Needs immediate attention

A B

13. BARRICADES

- Floor and wall openings planked over or barricaded
- Roadways or walkway hazards effectively barricaded
- Barricades illuminated or reflectorized at night
- Traffic control devices used when appropriate

14. HANDLING AND STORAGE OF MATERIALS

- Materials properly stored or stacked
- Passageways clear
- Stacks on firm footings, not too high
- Materials protected against weather conditions
- Trash chutes safeguarded and properly used
- Dust protection observed
- Traffic controlled in the storage area

15. EXPLOSIVES

- Qualified operators and supervision during all explosives operations
- Proper transport vehicles as required by Department of Transportation and WISHA
- State and local laws and regulations observed
- Storage magazines constructed per regulations
- Cases opened ONLY with wooden tools
- NO SMOKING signs posted and observed where appropriate
- Detonators tested before each shot
- All personnel familiar with signals; signals properly used at all times
- Inspection after each shot
- Proper protection and accounting for all explosives at all times
- Proper disposition of wrappings, waste, and scrap
- Nearby residents advised of blasting and danger
- Radio frequency hazards checked

16. WELDING AND CUTTING

- Operators qualified
- Screens and shields used when needed
- Goggles, welding helmets, gloves, clothing used as required
- Equipment in safe operating condition
- Electrical equipment grounded
- Power cables and hoses protected and in good repair
- Fire extinguishers of proper type nearby
- Surrounding area inspected for fire hazards
- Flammable materials protected or removed
- Gas cylinders secured upright
- Cylinder caps in use

Safety and Health Inspection Check List – continued

A = Adequate at time of inspection

B = Needs immediate attention

A B

17. FLAMMABLE GASES AND LIQUIDS

- All containers approved and clearly identified
- Proper storage practices observed
- Fire hazards checked
- Proper types and number of extinguishers nearby
- Proper method for moving cylinders used

18. EXCAVATION AND SHORING

- Adjacent structures properly shored
- Excavation shored, shielded, or sloped as required
- Roads and sidewalks supported and protected
- Material stored away from excavations
- Excavation barricades and lighting adequate
- Equipment a safe distance from edge of excavation
- Ladders provided
- Equipment ramps adequate
- Observer(spotter) provided during trenching operations

19. STEEL ERECTION

- Fall protection provided with safety nets, planked floors, or personnel restraint devices
- Hard hats worn as required
- Tools and materials secured from falling
- Fire hazards at rivet, forge, and welding operations eliminated
- Floor openings covered or barricaded
- Ladders, stairs, or other safe access provided
- Daily inspection of hoisting apparatus
- Employees prohibited from riding the ball or loads

20. PERSONAL PROTECTIVE EQUIPMENT MONITORED BY SUPERVISORS

- Hard hats available on-site; worn when overhead hazards exist
- Eye protection
- Face shields
- Written respirator program; respirators fit-tested; replacement cartridges; cleaning and maintenance
- Helmets and hoods
- Hearing protection – noise monitoring; written program
- Foot protection
- Rubber or plastic gloves, aprons, and sleeves for chemical protection
- Electrician's rubber gloves and protectors

Safety and Health Inspection Check List – continued

A = Adequate at time of inspection

B = Needs immediate attention

A B

21. HIGHWAY CONSTRUCTION

- Laws and ordinances observed
- Competent flaggers properly instructed and dressed; area posted
- Adequate traffic control devices used throughout construction area
- Equipment cleared from right-of-way
- Adequate marking and maintenance of detours approaching construction area
- Dust controlled
- Adequate lighting for night crews

22. CONCRETE CONSTRUCTION

- Forms properly installed and braced
- Adequate shoring, plumbed and cross-braced
- Shoring remain in place until strength is attained
- Proper curing period and procedures followed
- Heating devices checked for fire safety
- Mixing and transport equipment supported; traffic planned and routed
- Adequate runways and ramps provided for concrete placement equipment
- Employees protected from cement dust
- Hard hats, boots, gloves, eye protection, and skin protection worn at all times
- Nails bent over or removed and stripped material removed from area

23. LIFTING AND BACK SAFETY

- Team lifting used for heavy or awkward loads
- Mechanical lifting devices used when appropriate
- Back care training provided to all employees
- Bent-knee lifting used by workers
- Work hardening program used for returning time-loss employees
- Employees do “warm up” exercises before strenuous work

24. HAZARD COMMUNICATION PROGRAM

- Chemical inventory list developed and maintained
- Containers properly labeled
- Material Safety Data Sheets collected and available
- Adequate employee information and training provided
- Written program available

Safety and Health Inspection Check List – continued

A = Adequate at time of inspection

B = Needs immediate attention

A B

25. MASONRY

- Scaffolding procedures meet at least minimum requirements
- Masonry saws properly equipped and grounded, dust protection provided
- Hoisting equipment in safe operating condition and used by qualified personnel
- Limited access zone established
- Walls over 8 feet in height adequately braced

26. CONFINED SPACE

- Written confined space program
- Competent instruction and supervisors provided
- Hot work permits obtained, if needed, prior to entry and work
- Evaluation and monitoring – sampling devices adequate, calibrated, and used
- Ventilation adequate, testing and monitoring during operation
- Respirators, standby person , harness/lifeline at the site

27. DEMOLITION

- Written demolition plan
- Protection of adjacent structures
- Material chutes used. Floor openings for material disposal barricaded
- Sidewalk and other public protection provided
- Clear opening space for trucks and other vehicles
- Adequate access ladders or stairs maintained

28. PILE DRIVING

- Stored piles properly secured
- Unloading only by properly instructed workers
- Steam lines, slings, etc., in safe operating condition
- Piledriving rigs properly supported
- Cofferdams maintained and inspected
- Adequate pumping available

(Customize the checklist above by adding any additional areas or equipment and deleting the information that does not apply to your business.)

Equipment Safety Inspection Checklist

Date: _____

Project: _____

Equipment: _____

All guards and fenders	_____	OK	_____	Needs Repair
Brakes	_____	OK	_____	Needs Repair
Lights – front, rear, side, dash	_____	OK	_____	Needs Repair
Back-up alarm – horn	_____	OK	_____	Needs Repair
Ladders, stairs, hand holds	_____	OK	_____	Needs Repair
ROPS (Roll-over protection)	_____	OK	_____	Needs Repair
Seat belts	_____	OK	_____	Needs Repair
Fire extinguisher	_____	OK	_____	Needs Repair
Glass	_____	OK	_____	Needs Repair
Tires	_____	OK	_____	Needs Repair
Electrical cords	_____	OK	_____	Needs Repair
Ground fault circuit interrupters	_____	OK	_____	Needs Repair
Electrical hand tools	_____	OK	_____	Needs Repair
Powder actuated tools	_____	OK	_____	Needs Repair
Pneumatic condition of all hand tools	_____	OK	_____	Needs Repair

Other Items Checked:

Oil level and leaks	_____	OK	_____	Needs Repair	_____	Add	_____	Change
Hydraulic oil level and leaks	_____	OK	_____	Needs Repair	_____	Add	_____	Change
Anti-freeze level and leaks	_____	OK	_____	Needs Repair	_____	Add	_____	Change
Fuel level and leaks	_____	OK	_____	Needs Repair	_____	Add	_____	Change
First aid kit	_____	OK	_____	Needs Repair	_____	Add	_____	Change

Repaired by: _____

Checked by: _____

JOB SAFETY ANALYSIS WORKSHEET

TITLE OF JOB OPERATION: _____ Date: _____

Title of person who does job: _____

Employee observed: _____ Location: _____

Analysis made by: _____ Analysis approved by: _____

Sequence of basic job steps	Potential injuries or hazards	Recommended safe job procedures

Personal protective equipment required for this position:

Sample Chemical Hazard Communication Program

A. Company Policy

(Add Name of Employer) is committed to the prevention of exposures that result in injury and/or illness; and to comply with all applicable state health and safety rules. To make sure that all affected employees know about information concerning the dangers of all hazardous chemicals used by (Add Name of Employer), the following hazardous chemical communication program has been established.

All work units of (Add Name of Employer) will participate in the hazard communication program. This written program will be available in (Specify the location) for review by any interested employee.

B. Container Labeling

(Add name of person and title) is responsible for container labeling procedures, reviewing, and updating. The labeling system used at (Add Name of Employer) is as follows:

(Describe the labeling system, including the labels or other forms of warning used, and written alternatives to labeling, if any.)

The procedures for proper labeling of all containers, and reviewing and updating label warnings are as follows:

(Also include a description of the procedures for labeling of secondary containers used, including making sure that they have the appropriate identification and hazard warning, etc.; description of procedures for reviewing and updating label warnings, how often the review is conducted, and the name of the person and position who is responsible for reviewing and updating label warnings.)

(Describe the procedure for labeling, as described above.)

It is the policy of (Add Name of Employer) that no container will be released for use until the above procedures are followed.

C. Material Safety Data Sheets (MSDS)

(Add name of person and title) is responsible to establish and monitor the employer's MSDS program. This person will make sure procedures are developed to obtain the necessary MSDSs and will review incoming MSDSs for new or significant health and safety information. This person will see that any new information is passed on to affected employees.

The procedures to obtain MSDSs and review incoming MSDSs for new or significant health and safety information are as follows:

(Include procedures on how to make sure copies are current and updated, how any new information is passed on to affected employees, and the procedures for employee access in work areas.)

(Describe the procedure for obtaining and updating MSDSs, as described above.)

Copies of MSDSs for all hazardous chemicals in use will be kept in (Specify the location). MSDSs will be available to all employees during each work shift. If an MSDS is not available or a new chemical in use does not have an MSDS, immediately contact:

(Add name of person and title).

Note:

If an alternative to printed Material Safety Data Sheets is used (such as computer data), provide a description of the format.

D. Employee Information and Training

(Add name of person and title) is responsible for the employee training program.

The procedures for how employees will be informed and trained are as follows:

(Include the methods used for general and site-specific training, and how employees will be informed when non-routine tasks arise. If your employees work at other employers' job sites, then specify where and how these employees will have access to MSDSs and labels, and how they will be informed of precautionary measures to take during normal or emergency operations, if any.)

(Describe the procedure for employee training, as described above.)

(Add name of person and title) will make sure that before starting work, each new employee of (Add Name of Employer) will attend a health and safety orientation that includes information and training on the following:

- An overview of the requirements contained in the Hazard Communication Standard.
- Hazardous chemicals present at his or her work places.
- Physical and health risks of the hazardous chemical.
- The symptoms of overexposure.
- How to determine the presence or release of hazardous chemicals in his or her work area.
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices, and personal protective equipment.
- Steps the employer has taken to reduce or prevent exposure to hazardous chemicals.
- Procedures to follow if employees are overexposed to hazardous chemicals.

- How to read labels and review MSDSs to obtain hazard information.
- Location of the MSDS file and written hazard communication program.
- An overview of the requirements contained in the Hazard Communication Standard.

Before introducing a new chemical hazard into any section of this employer, each employee in that section will be given information and training as outlined above for the new chemical.

E. Hazardous non-routine tasks

Periodically, employees are required to perform hazardous non-routine tasks. (Some examples of non-routine tasks are confined space entry, tank cleaning, and painting reactor vessels.) Non-routine tasks that are performed at (Add Name of Employer) include:

1. (Add any non-routine tasks performed by employees)
2. (Add any non-routine tasks performed by employees)
3. (Add any non-routine tasks performed by employees)

Prior to starting work on such projects, each affected employee will be given information by (Add name of person and title) about the hazardous chemicals he or she may encounter during these activities:

(For each activity, list the specific chemical hazards, protective and safety measures the employee can use, and the steps the employer has taken to reduce the hazards, including ventilation, respirators, presence of another employee, and emergency procedures.)

(For each non-routine task identified, list the information indicated above.)

F. Multi-employer work places

It is the responsibility of (Add name of person and title) to provide employers of any other employees at the work site with the following information:

- Copies of MSDSs (or make them available at a central location) for any hazardous chemicals that the other employer(s)' employee may be exposed to while working.
- Inform other employers of any precautionary measures that need to be taken to protect employees during normal operating conditions or in foreseeable emergencies.
- Provide other employers with an explanation of the labeling system that is used at the work site.

It is also the responsibility of (Add name of person and title) to identify and obtain MSDSs for the chemicals the contractor is bringing into the work place.

G. List of hazardous chemicals

The following is a list of all known hazardous chemicals used by our employees. Further information on each chemical may be obtained by reviewing MSDSs located at (Specify location).

MSDS identity:

(Here is where you put the chemical list developed during the inventory. Arrange this list so that you are able to cross-reference it with your MSDS file and the labels on your containers.)

The criteria (e.g., label warnings, MSDS information, etc.) used to evaluate the chemicals are:

(Include a description of a plan for how you will update the list.)

Chemical Name	Manufacturer	Location Used
<u>(Insert information here)</u>	<u>(Insert information here)</u>	<u>(Insert information here)</u>

Hazard Communication checklist

- ___ 1. Have we prepared a list of all the hazardous chemicals in our workplace?
- ___ 2. Are we prepared to update our hazardous chemical list?
- ___ 3. Have we obtained or developed a material safety data sheet for each hazardous chemical we use?
- ___ 4. Have we developed a system to ensure that all incoming hazardous chemicals are checked for proper labels and data sheets?
- ___ 5. Do we have procedures to ensure proper labeling or warning signs for containers that hold hazardous chemicals?
- ___ 6. Are our employees aware of the specific information and training requirements of the Hazard Communication Standard?
- ___ 7. Are our employees familiar with the different types of chemicals and the hazards associated with them?
- ___ 8. Have our employees been informed of the hazards associated with performing non-routine tasks?
- ___ 9. Are employees trained about proper work practices and personal protective equipment in relation to the hazardous chemicals in their work area?
- ___ 10. Does our training program provide information on appropriate first aid, emergency procedures, and the likely symptoms of overexposure?
- ___ 11. Does our training program include an explanation of labels and warnings that are used in each work area?
- ___ 12. Does the training describe where to obtain data sheets and how employees may use them?
- ___ 13. Have we worked out a system to ensure that new employees are trained before beginning work?
- ___ 14. Have we developed a system to identify new hazardous chemicals before they are introduced into a work area?
- ___ 15. Do we have a system for informing employees when we learn of new hazards associated with a chemical?

Hazardous Substances Employee Orientation Checklist

Employee Name: (Add Name of Employee here)

Title: (Add title of employee here)

Date hired: (Add Date Hired here)

Trainer Name: (Add name of person conducting training here)

This checklist is to inform employees of (Add company name here) of its Hazard Communication Program. Place a check in each box to indicate that the subject has been covered.

The supervisor has reviewed the following information with the employee:

1. The purpose of the hazard communication standard is to require chemical manufacturers or importers to assess the hazards of chemicals they produce or import. All employers must provide information to their employees about the hazardous chemicals to which they may be exposed.

Employees must be informed about the hazard communication program, labels and other forms of warning, and material safety data sheets, and they must have training on the hazardous substances they may encounter.

2. The supervisor has reviewed the hazardous chemical list with the employee.

3. The supervisor has shown the employee the following:

- Location of hazardous chemicals within the employee's work site.
- Location of the written Hazard Communication Program.
- Location of the material safety data sheets for all hazardous chemicals in the employee's assigned work area.
- Location of the list of person(s) trained and authorized to handle the hazardous chemicals.

The signature below documents that the appropriate elements have been talked over to the satisfaction of both parties and that both the supervisor and employee accept responsibility for maintaining a safe and healthful work environment.

Date: (Enter date of orientation) Supervisor's signature: _____

Date: (Enter date of orientation) Employee's signature: _____

- NOTE TO SUPERVISOR: If this employee is expected to actually handle chemicals, please notify **(Customize by adding the name of the person responsible for training.)** for training before employee begins actual work.

You are at the end of the Sample Construction Accident Prevention Program. Please be sure that you have added all the required information to make it specific to your business. If you have any further information to add, please do so. Otherwise press the Delete key to delete this message .