



**I-Can Nano™**

**CONSTRUCTION MANNUAL RULES AND REGULATION FOR CONTRACTORS**

**HEALTH, SAFETY, & ENVIRONMENTAL MANUAL (HSE)**

**INNOVATION CENTER FOR APPLIED NANOTECHNOLOGY**

**NANO TECHNOLOGY** **I-CanNano™**

**&**

**GREAT RESPONSE FROM**

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- 32 Years of Research**
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## **Contractors Rule and Regulation**

### **All the contractors and PMC has to follow the Following Rule and regulation of ICAN:-**

All the contractors and Workers has to Follow Policy Statement on Safety

All the contractors and Workers has to Follow their Duties and Responsibilities for Safety

Contractors Has to Follow Frequently Employee Safety Training

Contractors has to do proper Safety Communication Safety Communication

Contractors Has to Flow Enforcement of Safety Policies of ICAN

Contractors has to Do Hazard Identification and Evaluation

Contractors have do any Incident Investigation in they site with ICAN

All the RA Program Records has to summit regularly to ICAN

All the site must contain Emergency Medical Services and First Aid

All the RA bill and final bill has to submit in person ICAN nano Account Dept. in Kolkata Office with proper measurement Sheet certify by the owner of the project/authority.

Security Check or any ICAN Materials will not be miss issues and Security Cheque will return to Company

Any dispute arising out of or in connection with this agreement, including any question regarding its existence, validity or termination, shall be settled, if possible, through good faith negotiations between the parties. If such good faith negotiations are unsuccessful, either party may, after thirty days written notice to the other party, seek arbitration as per Indian Arbitration & Reconciliation Act 1996 and Rules framed there under and under exclusive jurisdiction of Kolkata High Court

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## **Policy Statement on Safety**

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The health and safety of each Cirks Construction Inc. employee is of primary importance to us. As a company, we are committed to maintaining a healthy and safe working environment. Management will provide necessary safeguards, programs, and equipment required to reduce the potential for incidents and injuries.

To achieve this goal, we have developed and implemented a comprehensive Health, Safety, & Environmental Manual (HSE), which incorporates all required components of an Injury and Illness Prevention Program (IIPP). This program is designed to prevent workplace incidents, injuries, and illnesses. A complete copy of the program is maintained at our corporate office and on all job site locations in written or electronic form. You may ask to review it at any time. A copy of relevant portions of the program that are applicable to your job will also be provided to you. You may also contact the company safety director if you have any questions or concerns.

It is the intent of TRIMATRIX IFRASTRUCTURES PVT. LTD to comply with all laws relating to occupational health and safety. To accomplish this, we require the active participation and assistance of all employees. The policies and procedures contained in this manual are mandatory. You should also be constantly aware of conditions in all work areas that can produce injuries or illness. No employee is required to work at a job that he or she knows is unsafe. Never hesitate to inform your supervisor or foreman of any potentially hazardous situation or condition that is beyond your ability or authority to correct immediately. No employee will be discriminated against for reporting safety concerns to management.

It is the responsibility of each employee to support the company safety program and to perform in a manner that assures his or her own personal safety and the safety of others, including customers, visitors, and other trades. To be successful in our endeavor, all employees at every level must adopt proper attitudes towards injury and illness prevention. We must also cooperate in all health and safety matters, not only between management and employees, but also between each employee and his or her respective co-workers. Only through such an effort can any safety program be successful. Our objective is a health and safety program that will reduce the total number of injuries and illnesses to an absolute minimum. Our ultimate goal is zero incidents.

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## **Duties and Responsibilities for Safety**

A successful Health, Safety, Environmental and Injury and Illness Prevention Program can only be achieved and maintained when there is active interest, participation, and accountability at all levels of the organization. It is a condition of employment that all employees are responsible for safety. To ensure this, delegates the following safety duties by job title. Please keep in mind that this is not an all-inclusive list. In some cases, employees will need to perform safety duties outside their regular responsibilities to prevent incidents.

***All employees of TRIMATRIX INFRASTRUCTURES PVT. LTD. will support and maintain an ongoing Health, Safety, Environmental and Injury and Illness Prevention Program through the following:***

1. Provide clear understanding and direction to all management, employees, and sub-contractors regarding the importance of safety through the development, implementation, monitoring, and revision of policies and procedures.
2. Provide financial support for the Injury and Illness Prevention Program through the provision of adequate funds for the purchase of necessary safety materials, safety equipment, proper personal protective equipment, adequate time for employee safety training, and maintenance of tools and equipment.
3. Oversee development, implementation, and maintenance of the IIPP and other required safety programs.
4. Maintain a company commitment to incident prevention by expecting safe conduct on the part of all managers, supervisors, and employees.
5. Hold all levels of management and employees accountable for incident prevention and safety.
6. Review all incident investigations to determine corrective action.

***The safety director for TRIMATRIX INFRASTRUCTURES PVT. LTD. acts as a safety resource for the company and is responsible for maintaining program records. He is also our primary person to deal with outside agencies regarding the safety program and its contents. Additional duties include:***

1. Coordinate all loss prevention activities as a representative of management.
  2. Act as a consultant to management in the implementation and administration of the Safety Program.
  3. Develop and implement loss prevention policies and procedures designed to insure compliance with the applicable rules and regulations of all federal, state, and local
-



agencies.

4. Review all incident reports to determine root cause and corrective action.
5. Conduct periodic reviews of the safety program and job sites to evaluate performance, discuss problems, and help solve them.
6. Consult with representatives of our insurance companies in order that their loss control services will support the safety program.
7. Review Workers' Compensation claims. Help supply the insurance carrier with information about injured employees in order to keep loss reserves to a minimum.

***Managers and supervisors play a key role in the prevention of incidents on the job. They have direct contact with the employees and know the safety requirements for various jobs. Safety responsibilities for these individuals include:***

1. Enforce all safety rules in the Code of Safe Practices, the posted job site rules, and ensure safe work procedures.
2. Verify corrective action has been taken regarding safety hazards and incident investigations.
3. Conduct periodic documented inspections of the work sites to identify and correct unsafe actions and conditions that could cause incidents.
4. Act as a leader in company safety policy and set a good example by following all safety rules.
5. Become familiar with federal, state, and local safety regulations. The safety director is available for assistance.
6. Under the guidance of the safety director, train all new and existing employees in proper safety procedures and the hazards of the job.
7. Instruct all employees under his or her supervision in safe work practices and job safety requirements.
8. Hold safety meetings with employees.
9. Ensure employee proficiency when assigning work requiring specific knowledge, special operations, or equipment.
10. Ascertain that all machinery, equipment, and workstations are maintained in safe working condition and operate properly.
11. Correct unsafe acts and conditions that could cause incidents.
12. Communicate with all employees about safety and incident prevention activities.

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13. Correct the cause of any incident as soon as possible.
14. Ascertain that proper first aid and firefighting equipment is maintained and used when conditions warrant its use.
15. Maintain good housekeeping conditions at all times.
16. Investigate all injuries and incidents to determine their cause and potential corrective action.
17. Ascertain that all injuries involving our employees that require medical attention are properly treated and promptly reported immediately following the procedures laid out in our post incident response protocol.

***Every employee is responsible for working safely, both for self-protection and for protection of fellow co-workers. Employees must also support all company safety efforts. Specific employee safety responsibilities include:***

1. If you are unsure how to do any task safely, ask your supervisor.
2. Read and abide by all requirements of the Health, Safety, Environmental Manual and Injury and Illness Prevention Program (IIPP).
3. Know and follow the Code of Safe Practices and all company safety policies and procedures.
4. Wear all required personal protective equipment (PPE).
5. Report all incidents and injuries, no matter how minor, to your supervisor immediately.
6. Do not operate any equipment you have not been trained on or authorized to use.
7. Report any safety hazards or defective equipment immediately to your supervisor.
8. Do not remove, tamper with, or defeat any guard, safety device, or interlock.
9. Never use any equipment with inoperative or missing guards, safety devices, or interlocks.
10. Never possess or be under the influence of alcohol or controlled substances while on the premises.
11. Never engage in horseplay or fighting.
12. Participate in and actively support the safety program.



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## **Employee Safety Training**

California law requires that employees be trained in the safe methods of performing their job. Company is committed to instructing all employees in healthy and safe work practices. Awareness of potential hazards, as well as knowledge of how to control them, is critical in maintaining a healthy and safe work environment in preventing injuries. To achieve this goal, we will provide training to each employee on general safety issues and safety procedures specific to that employee's work assignment.

Every new field employee will be given instruction by his or her supervisor in the general safety requirements of their job. A copy of our Code of Safe Practices shall also be provided to each employee.

Field managers, supervisors, and employees will be trained at least twice per year on various incident prevention topics.

Training provides the following benefits:

- Makes employees aware of job hazards
- Teaches employees to perform jobs safely
- Promotes two-way communication
- Encourages safety suggestions
- Creates interest in the safety program
- Fulfills CAL-OSHA requirements

Employee training will be provided at the following times:

1. New field employees will receive a safety orientation.
2. New field employees will be given a copy of the Code of Safe Practices and required to read and sign for it.
3. Employees given a new job assignment, for which training has not been previously provided, will be trained before beginning the new assignment.
4. Whenever new substances, processes, procedures, or equipment that represent a new hazard are introduced into the workplace.
5. Whenever Company is made aware of a new or previously unrecognized hazard.
6. Whenever management believes that additional training is necessary.
7. After all serious incidents.
8. When employees are not following safe work policies and procedures.

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Training topics will include, but are not be limited to:

- Code of Safe Practices
- Employee's safety responsibility
- General safety rules
- Safe job procedures
- Ergonomics
- Safe lifting and material handling practices
- Use of hazardous materials
- Use of equipment
- Emergency procedures
- Contents of the safety program

Documentation of Training:

All training will be documented on the following form:

**“New Employee Safety Orientation Form”**

The following training method should be used. Actual demonstrations of the proper way to perform a task are very helpful in most cases.

- **Instruct them** how to do the job safely.
- **Train them** how to do the job safely.
- **Have them tell you** how to do the job safely.
- **Have them show you** how to do the job safely.
- **Follow up** to ensure they are still performing the job safely.

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## **Safety Communication**

This section establishes procedures designed to develop and maintain employee involvement and interest in the HSE Manual and IIPP. These activities will also ensure effective communication between management and employees on safety related issues that is of prime importance to TRIMATRIX INFRASTRUCTURES PVT. LTD. The following are some of the safety communication methods that may be used:

1. New employee safety orientation and provision of the Code of Safe Practices.
2. Periodic safety meetings with employees that encourage participation and open two-way communication.
3. Provision and maintenance of employee notices discussing safety issues, incidents, and general safety suggestions.
4. Written communications from management or the safety director, including memos, postings, payroll stuffers, and newsletters.
5. Anonymous safety suggestion program.

Employees will be kept advised of highlights and changes relating to the safety program. Management shall relay changes and improvements regarding the safety program to employees, as appropriate. Employees will be involved in future developments and safety activities by requesting their opinions and comments be reviewed, as necessary.

**All employee initiated safety related suggestions shall be properly answered, either verbally or in writing, by the appropriate level of management. All employees are encouraged to bring any safety concerns they may have to the attention of management. Company will not discriminate against any employee for raising safety issues or concerns.**

Company welcomes anonymous notification whereby employees who wish to inform the company of workplace hazards without identifying themselves may do so by phoning or sending written notification to the safety director or company manager.

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## **Enforcement of Safety Policies**

The compliance of all employees with the Company HSE Manual and IIPP is mandatory and shall be considered a condition of employment.

The following programs will be utilized to ensure employee compliance with the safety program and all safety rules.

- Training programs
- Retraining
- Optional safety incentive programs
- Disciplinary action

### Training Programs

The importance of safe work practices and the consequences of failing to abide by safety rules will be covered in the New Employee Safety Orientation and safety meetings. This will help ensure that all employees understand and abide by Company safety policies.

### Safety Correction Notices

Employees or subcontractors that are observed performing unsafe acts or not following proper policies or procedures will be corrected by their supervisor. A Safety Correction Notice may be completed by the supervisor to document the infraction. If multiple employees are involved, additional safety training will be held.

### Safety Incentive Programs

Although strict adherence to safety policies and procedures is required of all employees, the company may choose to periodically provide recognition of safety-conscious employees and job sites without incidents through a safety incentive program.

### Disciplinary Action

The failure of an employee to adhere to safety policies and procedures established by Company can have a serious impact on everyone concerned. An unsafe act can not only threaten the health and well-being of the employee committing the unsafe act, but it can also affect the safety of his or her co-workers and customers. Accordingly, any employee who violates any of the Company's safety policies and procedures will be subject to disciplinary action or dismissal.

**Note:** Failure to promptly report any on-the-job incident or injury, on the same day as the occurrence, is considered a serious violation of the Company's Code of Safe Practices. Any employee who fails to immediately report a work-related incident or injury, no matter how minor, shall be subject to disciplinary action or dismissal.

Employees will be disciplined for infractions of safety policies and procedures where unsafe work practices are observed, not just those that result in an injury. Often, when an injury occurs, the incident investigation will reveal that the injury was caused because the employee

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violated an established safety policy or safe work practice. In any disciplinary action, the supervisor should be cautious that discipline is given to the employee for safety violations, and not simply because the employee was injured on the job or filed a Workers' Compensation claim.

Violations of safety rules and the Code of Safe Practices are to be considered equal to violations of other company policies.

As in all disciplinary actions, each situation is to be carefully evaluated and investigated. The particular step taken in the disciplinary process will depend on the severity of the violation, employee history, and regard to safety. Managers and supervisors should consult with the Human Resources Manager if there is any question about whether or not disciplinary action is justified. Employees may be terminated immediately for willful or extremely serious violations.

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## **Hazard Identification and Evaluation**

To assist in the identification and correction of hazards, Cirks Construction Inc. has developed the following procedures. These procedures are representative only and are not exhaustive of all the measures and methods that will be implemented to guard against injury from recognized and potential hazards in the workplace. As new hazards are identified or improved work procedures developed, they will be promptly incorporated into our Safety Manual. The following methods will be utilized to identify hazards in the workplace:

- Loss Prevention Self-Assessment
- Loss analysis of incident trends
- Incident investigations
- Employee observation
- Employee suggestions
- Regulatory requirements for our industry
- Periodic safety inspections at minimum monthly
- Documentation of inspections

### Loss Analysis

Periodic loss analyses will be conducted by the safety director and all superintendents. These will help identify areas of concern and potential job hazards. The results of these analyses will be communicated to management, supervisors, and employees through safety meetings and other appropriate means.

### Incident Investigations

All near loss incidents (NLI) must be reported. Incidents and injuries will be investigated in accordance with the guidelines contained in this program. Incident investigations will focus on causal factors and corrective action, including the identification and correction of hazards that may have contributed to the incident.

### Employee Observation

Superintendents and foremen shall be continually observing employees for unsafe actions or conditions and taking corrective action as necessary.

### Employee Suggestions

Employees are encouraged to report any hazard they observe to their supervisors. No employee of Company is to ever be disciplined or discharged for reporting any workplace hazard or unsafe condition. However, employees who do NOT report potential hazards or unsafe conditions that they are aware of will be subject to disciplinary action.

### Regulatory Requirements

All industries are subject to government regulations relating to safety. Many of these regulations are specific to our type of business. Copies of pertinent regulations can be obtained from the safety director.



## Periodic Safety Inspections

Periodic safety inspections ensure that physical and mechanical hazards are under control and identify situations that may become potentially hazardous. Inspections shall include a review of the work habits of employees in all work areas. These inspections will be conducted by the supervisor, manager, safety director, or other designated individual.

Periodic safety inspections will be conducted:

- When new substances, processes, procedures, or equipment are used.
- When new or previously unrecognized hazards are identified.
- Periodically by the supervisor.
- Periodically by the safety director.

These inspections will focus on both unsafe employee actions as well as unsafe conditions. The following is a partial list of items to be checked:

- Compliance with the Code of Safe Practices.
- The proper use, condition, maintenance, and grounding of all electrically operated equipment.
- The proper use, condition, and maintenance of safeguards for all power-driven equipment.
- Housekeeping and personal protective equipment (PPE).
- Hazardous materials.
- Proper material storage.
- Provision of first aid equipment and emergency medical services.

Any and all hazards identified will be corrected as soon as practical in accordance with the Cirks Construction Inc. hazard correction policy.

If imminent or life threatening hazards are identified which cannot be immediately corrected, all employees must be removed from the area, except those with special training required to correct the hazard. Employees with special training required to correct the hazard will be provided necessary safeguards.

## Documentation of Inspections

Safety inspections will be documented to include the following:

- Date on which the inspection was performed.
- The name and title of person who performed the inspection.
- Any hazardous conditions noted or discovered, and the steps or procedures taken to correct them.
- Signature of the person who performed the inspection.

One copy of the completed form should be sent to the office. All reports shall be kept on file for a minimum of two (2) years.

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## SAFETY AUDIT CHECKLIST

JOB NAME	
SUPERINTENDENT NAME	
INSPECTION DATE	
COMPLETION OF PROJECT	
INSPECTOR NAME	

GENERAL	YES	NO	N/A
KDC Signage			
Job Site Rules Posted			
Sign In Sheet			
Pedestrian Protection			
Perimeter Protection			
Duty To Warn – Duty To Protect – Duty to Control			
Accident Reporting Instructions			
Safety & Health Program (IIPP)			
Safety Data Sheets			
First Aid Kit			
Eye Wash Station			
Tailgate Meeting Documentation			
Plans/Specs/ Drawings of job			
Fire Extinguishers - Fire extinguishers inspected & tagged			
Emergency Evacuation Plan (EEP)			
Medical Clinic and Map			

JOB HAZARD ANALYSIS FOR CRITICAL WORK	YES	NO	N/A
Crane Activity			
Excavation 5 ft or greater			
Scaffold Work			
Confined Space Work			
Hot Work			
Working at heights in excess of 10ft			

PERSONAL PROTECTIVE EQUIPMENT (PPE)	YES	NO	N/A
Face shield being used when chipping, grinding, chop saw etc....			
Hard hat			
Safety Glasses			
Cut Resistant Gloves			



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Class II Vest			
Respiratory Protection			
<b>FALL PROTECTION</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Site Specific Fall Protection Plan (SFPP) available for review			
Rescue Plan Completed			
Retrieval Method Available			
Equipment Inspection Conducted			
Fall Protection ABC's followed			
Site Specific Fall Protection Plan (SFPP) available for review			
<b>SCAFFOLDING WORK</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Daily Signed Green tag by Comp Person			
Plumb			
Base Plates & Mudsills			
Plank Size, spacing and construction			
Guardrails			
Access Ladder			
<b>CRANE ACTIVITY</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
KDC Crane Plan Followed			
JHA			
Pic Plan Completed			
Rigging Plan			
<b>CONFINED SPACES</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
JHA completed			
Confined Space Plan (CSP)			
Use of sniffer			
Attendant			
Entrant			
CP Permit			
JHA completed			
<b>DIGGING</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Utility companies contacted and/or utilities located.			
Exact location of utilities marked when near excavation.			
Underground installations protected			
Precautions taken to protect employees from accumulation of water.			
Surface water controlled or diverted.			
Atmosphere tested			
Oxygen content is between 19.5% and 21%.			
Flammable gas build-up to 20% of lower explosive limit (LEL).			

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Toxic Levels of gases are below limits set on gas monitor.			
Ventilation blowing into space and air intake placed away from vehicle exhaust			

<b>EXCAVATION/TRENDING/SHARING</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Pre-Excavation Report			
JHA			
Soil Test – Type (circle one)ABC			
Protective device			
Atmospheric Testing			
Current Conditions N/A Description or Measure Comments / Observations			
Terrain, Weather, Water accumulation			
Traffic conditions			
Heavy equipment location			
Spoils location			
Trench width			
Trench depth			
Access / egress conditions			

<b>ELECTRICAL</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Lock Out Tag Out			
JHA			
Tailgate Meeting			

<b>FLAMMABLE &amp; COMBUSTIBLE LIQUIDS</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Stored and handled in appropriately container			
Labeled Correctly			
Right To Know Poster			

<b>MOBILE EQUIPMENT</b>	<b>YES</b>	<b>NO</b>	<b>N/A</b>
Daily inspection conducted on all mobile equipment - documented			
Owner's manual secured in all mobile equipment			
Seat belts functional and worn on mobile equipment (as required)			
Proper attachments used on all mobile equipment			



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## **Hazard Correction**

The following procedures will be used to evaluate, prioritize, and correct identified safety hazards. Hazards will be corrected in order of priority; the most serious hazards will be corrected first.

### **Hazard Evaluation**

Factors that will be considered when evaluating hazards include:

- **Potential severity** - The potential for serious injury, illness, or fatality.
- **Likelihood of exposure** - The probability of the employee coming into contact with the hazard.
- **Frequency of exposure** - How often employees come into contact with the hazard.
- **Number of employees exposed**
- **Possible corrective actions** - What can be done to minimize or eliminate the hazard?
- **Time necessary to correct** - The time necessary to minimize or eliminate the hazard.

### **Techniques for Correcting Hazards**

1. **Engineering Controls:** Could include machine guarding, ventilation, noise reduction at the source, and provision of material handling equipment. These are the first and preferred methods of control.
2. **Administrative Controls:** The next most desirable method would include rotation of employees or limiting exposure time.
3. **Personal Protective Equipment:** Includes hard hats, hearing protection, respirators, and safety glasses. These are often the least effective controls for hazards and should be relied upon only when other controls are impractical.

### **Documentation of Corrective Action**

All corrective action taken to mitigate hazards should be documented. Depending on the circumstances, one of the following forms should be used:

- Safety contact report
- Safety meeting report
- Memo or letter
- Safety inspection form

All hazards noted on safety inspections will be re-checked on each subsequent inspection and notations made as to their status.



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## **Incident Investigation**

The supervisor, manager, or other designated individual will investigate all work-related incidents in a timely manner. This includes minor incidents and "near loss incidents," as well as serious injuries. An incident is defined as any unexpected occurrence that results in injury to personnel, damage to equipment, facilities, material, or interruption of normal operations.

### **Responsibility for Incident Investigation**

Immediately upon being notified of an incident, the supervisor, manager, or other designated individual shall conduct an investigation. The purpose of the investigation is to determine the cause of the incident and corrective action to prevent future reoccurrence; not to fix blame or find fault. An unbiased approach is necessary in order to obtain objective findings.

### **The Purpose of Incident Investigations**

- To prevent or decrease the likelihood of similar incidents.
- To identify and correct unsafe work practices and physical hazards. Incidents are often caused by a combination of these two factors.
- To identify training needs. This makes training more effective by focusing on factors that are most likely to cause incidents.

### **What Types of Incidents Do We Investigate**

- Fatalities
- Serious injuries
- Minor injuries
- Property damage
- Near losses

### **Procedures for Investigation of Incidents**

Immediately upon being notified of an incident the supervisor, manager, or other designated individual will:

1. Visit the incident scene, as soon as possible, while facts and evidence are still fresh and before witnesses forget important details and to make sure hazardous conditions to which other employees or customers could be exposed are corrected or have been removed.
2. Provide for needed first aid or medical services for the injured employee(s).
3. If possible, interview the injured worker at the scene of the incident and verbally "walk" him or her through a re-enactment. All interviews should be conducted as privately as possible. Interview all witnesses individually and talk with anyone who has knowledge of the incident, even if they did not actually witness it.
4. Report the incident to the safety director and supervisors immediately. All serious incidents will be reported to the insurance carrier as soon as possible.



5. Consider taking signed statements in cases where facts are unclear or there is an element of controversy.
6. Thoroughly investigate the incident to identify all incident causes and contributing factors. Document details graphically. Use sketches, diagrams and photos as needed. Take measurements when appropriate.
7. All incidents involving death, disfigurement, amputation, loss of consciousness, or hospitalization for more than 24 hours must be reported to CAL-OSHA immediately.
8. 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, not just the injury.
9. Every investigation must also include an action plan. How can such incidents be prevented in the future?
10. In the event a third party or defective product contributed to the incident, save any evidence as it could be critical to the recovery of claim costs.

#### Accurate and Prompt Investigations

- Ensures information is available
- Causes can be quickly corrected
- Helps identify all contributing factors
- Reflects management concerns
- Reduces chance of recurrence

#### Investigation Tips

- Avoid placing blame
- Document with photos and diagrams, if needed
- Be objective, get the facts
- Reconstruct the event
- Use open-ended questions

#### Questions to Ask

When investigating incidents, open-ended questions such as; who, what, when, where, why, and how, will provide more information than closed-ended questions such as "Were you wearing gloves?"

Examples include:

- How did it happen?
- Why did it happen?
- How could it have been prevented?
- Who was involved?



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- Who witnessed the incident?
- Where were the witnesses at the time of the incident?
- What was the injured worker doing?
- What was the employee working on?
- When did it happen?
- When was the incident reported?
- Where did it happen?
- Why was the employee assigned to do the job?

**The single, most important question that must be answered as the result of any investigation is:**

"What do you recommend to be done (or have you done) to prevent this type of incident from recurring?"

Once the Incident Investigation is completed

- Take or recommend corrective action
- Document corrective action
- Management and the safety director will review the results of all investigations
- Consider safety program modifications
- Information obtained through incident investigations can be used to update to improve our current program

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### **Program Records**

The safety director will ensure the maintenance of all HSE Manual and IIPP records, for the listed periods, including:

1. New Employee Safety Orientation Forms	Length of Employment
2. Code of Safe Practices Receipt	Length of Employment
3. Disciplinary Actions for Safety	Length of Employment
4. Safety Inspections	2 years
5. Safety Meeting Reports	2 years
6. Safety Correction Notices	2 years
7. Incident Investigations	5 years
8. CAL-OSHA Log of Injuries	5 years
9. Inventory of Hazardous Materials (if any)	Indefinitely
10. Employee Exposure or Medical Records	Indefinitely

Note: Records are available for review upon request.

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## **Emergency Medical Services and First Aid**

Cirks Construction Inc. will ensure the availability of emergency medical services for its employees at all times. We will also ensure the availability of a suitable number of appropriately trained persons to render first aid. The safety director will maintain a list of trained individuals and take steps to provide training for those that desire it.

### First-Aid Kits

Every work site shall have access to at least one first-aid kit in a weatherproof container. The first-aid kit will be inspected regularly to ensure that it is well stocked, in sanitary condition, and any used items are promptly replaced. The contents of the first-aid kit shall be arranged to be quickly found and remain sanitary. First-aid dressings shall be sterile and in individually sealed packages. The following minimum first-aid supplies shall be kept.

#### Type of Supply Required by Number of Employees

Dressings in adequate quantities consisting of:	1-5	6-15	16-200	200+
Adhesive dressings	X	X	X	X
Adhesive tape rolls, 1-inch wide	X	X	X	X
Eye dressing packet	X	X	X	X
1-inch gauze bandage roll or compress		X	X	X
2-inch gauze bandage roll or compress	X	X	X	X
4-inch gauze bandage roll or compress		X	X	X
Sterile gauze pads, 2-inch square	X	X	X	X
Sterile gauze pads, 4-inch square	X	X	X	X
Sterile surgical pads suitable for pressure dressings			X	X
Triangular bandages	X	X	X	X
Safety pins	X	X	X	X
Tweezers and scissors	X	X	X	X
Cotton-tipped applicators*			X	X
Forceps*			X	X
Emesis basin*			X	X
Flashlight*			X	X
Magnifying glass*			X	X
Portable oxygen and its breathing equipment*				X
Tongue depressors*				X
Appropriate record forms*	X	X	X	X
First-aid textbook, manual or equivalent*	X	X	X	X

\*To be readily available but not necessarily within the first-aid kit.

Drugs, antiseptics, eye irrigation solutions, inhalants, medicines, or proprietary preparations shall not be included in Company first-aid kits unless specifically approved, in writing, by an employer-authorized licensed physician. Other supplies and equipment, if provided, shall be in accordance with the documented recommendations of an employer-authorized licensed physician upon consideration of the extent and type of emergency care to be given based upon the anticipated incident and nature of injuries and illnesses and availability of transportation to medical care.

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## First Aid

The designated first aid person on each site will be available to render appropriate first aid for injuries and illnesses. Proper equipment for the prompt transportation of the injured or ill person to a physician or hospital where emergency care is provided, or an effective communications system for contacting hospitals or other emergency medical facilities, physicians, ambulance, and fire services, shall also be provided. The telephone numbers of the following emergency services in the area shall be posted near the job telephone, or otherwise made available to the employees where no job site telephone exists:

1. A company authorized physician or medical clinic, and at least one alternate if available.
2. Hospitals.
3. 911.
4. Fire-protection services.
5. Police services.

Prior to the commencement of work at any site, the supervisor or manager shall locate the nearest preferred medical facility and establish that transportation or communication methods are available in the event of an employee injury.

Each employee shall be informed of the procedures to follow in case of injury or illness through our new employee orientation program, Code of Safe Practices, and safety meetings.

## Incident Procedures

These procedures are to be followed in the event of an employee injury in the course of employment:

1. For severe incidents call 911 and request the Paramedics.
2. Employees must report all work related injuries to their supervisor immediately even if they do not feel that it requires medical attention. Failure to do so may result in a delay of Workers' Compensation benefits and disciplinary action could be taken.
3. The supervisor and employee should determine whether or not outside medical attention is needed.
4. If medical attention is not desired or the employee refuses treatment, you must still fill out a Company. "Incident Report" in case complications arise later.
5. In all cases, if the employee cannot transport himself or herself for any reason, transportation should be provided.
6. In the event of a serious incident involving hospitalization for more than 24 hours, amputation, permanent disfigurement, loss of consciousness, or death, phone contact should be made with the office immediately. Contact must also be made by the safety director with the nearest CAL-OSHA office within 8 hours.





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## **Hazard Communication Program – Materials & Chemicals**

### Introduction

It is the policy of Cirks Construction Inc. that the first consideration of work shall be the protection of the health and safety of all employees. We have developed this Hazard Communication Program to ensure that all employees receive adequate information about the possible hazards that may result from the various materials used in our operations. This Hazard Communication Program will be monitored by our safety director, who will be responsible for ensuring that all facets of the program are carried out, and that the program is effective.

Our program consists of the following elements:

1. Hazardous material inventory
2. Collection and maintenance of Safety Data Sheets (SDS)
3. Container labeling
4. Employee training

The following items are not required to be included in the program and are therefore omitted:

- Foods, drugs, cosmetics, and tobacco
- Untreated wood products
- Hazardous waste
- Consumer products packaged for sale to and use by the general public provided that our exposure is not significantly greater than typical consumer exposure

### Hazardous Material Inventory

The job site superintendent maintains a list of all hazardous materials used in our operations. This list contains the name of the product, the type of product (solvent, adhesive, etc.), and the name and address of the manufacturer.

### Safety Data Sheets (SDS)

Copies of SDS for all hazardous substances, to which our employees may be exposed, will be kept in a binder at the job site and stored electronically at the office. SDS will be made available to all employees, at all times, upon request. Copies of the most commonly used products will also be kept by the supervisor at the work site.

The safety director and on-site superintendent will be responsible for reviewing incoming SDS for new and significant health and safety information. They will ensure that any new information is passed on to the affected employees.

They will also review all incoming SDS for completeness. If an SDS is missing or obviously incomplete, a new SDS will be requested from the manufacturer. CAL-OSHA will be notified if a complete SDS is not received and the manufacturer will not supply one.

New materials will not be introduced into the shop or field until a SDS has been received. The employees purchasing materials will make it an ongoing part of their function to obtain SDS for all new materials when they are first ordered.

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## Container Labeling

No container of hazardous substances will be used unless the container is correctly labeled and the label is legible.

All chemicals in cans, bags, drums, pails, etc., will be checked by the receiving department to ensure the manufacturer's label is intact, is legible, and has not been damaged in any manner during shipment. Any containers found to have damaged labels will be held until a new label has been installed. New labels will be obtained from the manufacturer.

The label must contain:

- The chemical name of the contents
- The appropriate hazard warnings
- The name and address of the manufacturer

All secondary containers will be labeled as to their contents with a reference to the original label.

## Employee Information and Training

All employees will be provided information and training on the following items through the Cirks Construction Inc. safety training program and prior to starting work with hazardous substances:

1. An overview of the requirements of the Hazard Communication Standard, including their rights under this regulation.
2. Information regarding the use of hazardous substances in their specific work areas.
3. The location and availability of the written hazard communication program. The program will be available from the job site specific superintendent.
4. The physical and health hazards of the hazardous substances in use.
5. Methods and observation techniques used to determine the presence or release of hazardous substances in the work area.
6. The controls, work practices, and personal protective equipment that is available for protection against possible exposure.
7. Emergency and first aid procedures to follow if employees are exposed to hazardous substances.
8. How to read labels and Safety Data Sheets (SDS) to obtain the appropriate hazard information.

## Hazardous Non-Routine Tasks

Infrequently, employees may be required to perform hazardous non-routine tasks. Prior to starting this work, each involved employee will be given information by his or her supervisor about hazards to which they may be exposed during such activity.

This information will include:

- The specific hazards
- Protective and safety measures which must be utilized

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- The measures the company has taken to lessen the hazards, including special ventilation, respirators, the presence of another employee, emergency procedures, etc.

## Informing Outside Contractors and Vendors

To ensure that outside contractors are not exposed to our hazardous materials, and to ensure the safety of the contractor's employees, it will be the responsibility of the supervisor to provide outside contractors the following information:

- The hazardous substances under our control that they may be exposed to while at the work site.
- The precautions the contractor's employees must take to lessen the possibility of exposure.

We will obtain from outside contractors and vendors the name of any hazardous substances the contractor's employees may be using at a work site or bringing into our facility. The contractor must also supply a copy of the material safety data sheet relevant to these materials.

## Employee Rights Under The Hazard Communication Standard

At any time, an employee has the right to:

- Access the SDS folder, and the Hazard Communication Program.
- Receive a copy of any environmental sampling data collected in the workplace.
- See their employment medical records upon request.

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## Written Hazard Communication Plan

The management of KDC Construction is committed to preventing accidents and ensuring the safety and health of our employees. We will comply with all applicable federal and state health and safety rules and provide a safe, healthful environment for all our employees. This written hazard communication plan is available at the following location for review by all employees: [Intranet, Office & at each job site location.

### **Identifying hazardous chemicals**

Found within the SDS Master Book is a list that identifies all hazardous chemicals with a potential for employee exposure at this workplace. Detailed information about the physical, health, and other hazards of each chemical is included in a Safety Data Sheet (SDS); the product identifier for each chemical on the list matches and can be easily cross-referenced with the product identifier on its label and on its Safety Data Sheet.

### **Identifying containers of hazardous chemicals**

All hazardous chemical containers used at this workplace will either the original manufacturer's label -- that includes a product identifier, an appropriate signal word, hazard statement(s), pictogram(s), precautionary statement(s) and the name, address, and telephone number of the chemical manufacturer, importer, or other responsible party -- OR a label with the appropriate label elements just described; OR workplace labeling that includes the product identifier and words, pictures, symbols, or combination that provide at least general information regarding the hazards of the chemicals.

### **Keeping Safety Data Sheets (previously known as Material Safety Data Sheets)**

Safety Data Sheets are readily available to all employees during their work shifts. Employees can review Safety Data Sheets for all hazardous chemicals used at this workplace.

### **Training employees about chemical hazards**

Before they start their jobs or are exposed to new hazardous chemicals, employees must attend a hazard communication training that covers the following topics:

- An overview of the requirements in OSHA's hazard communication rules.
- Hazardous chemicals present in their workplace.
- Any operations in their work area where hazardous chemicals are used.
- The location of the written hazard communication plan and where it may be reviewed.
- How to understand and use the information on labels and in Safety Data Sheets.
- Physical and health hazards of the chemicals in their work areas.



- Methods used to detect the presence or release of hazardous chemicals in the work area.
- Steps we have taken to prevent or reduce exposure to these chemicals.
- How employees can protect themselves from exposure to these hazardous chemicals through use of engineering controls/work practices and personal protective equipment.
- An explanation of any special labeling present in the workplace.
- Emergency procedures to follow if an employee is exposed to these chemicals.

### **Informing contractors and other employers about our hazardous chemicals**

If employees of other employer(s) may be exposed to hazardous chemicals at our workplace (for example, employees of a construction contractor working on-site) It is the responsibility of the job site superintendent to provide contractors and their employees with the following information:

- The identity of the chemicals, how to review our Safety Data Sheets, and an explanation of the container and pipe labeling system.
- Safe work practices to prevent exposure.

The job site superintendents will also obtain a Safety Data Sheet for any hazardous chemical a contractor brings into the workplace.

### **Hazard Communication Safety Data Sheets**

The Hazard Communication Standard (HCS) requires chemical manufacturers, distributors, or importers to provide Safety Data Sheets (SDSs) (formerly known as Material Safety Data Sheets or MSDSs) to communicate the hazards of hazardous chemical products. As of June 1, 2015, the HCS will require new SDSs to be in a uniform format, and include the section numbers, the headings, and associated information under the headings below:

**Section 1, Identification** includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

**Section 2, Hazard(s) identification** includes all hazards regarding the chemical; required label elements.

**Section 3, Composition/information on ingredients** includes information on chemical ingredients; trade secret claims.

**Section 4, First-aid measures** includes important symptoms/ effects, acute, delayed; required treatment.

**Section 5, Fire-fighting measures** lists suitable extinguishing techniques, equipment; chemical hazards from fire.

**Section 6, Accidental release measures** lists emergency procedures; protective equipment; proper methods of containment and cleanup.



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**Section 7, Handling and storage** lists precautions for safe handling and storage, including incompatibilities.

**Section 8, Exposure controls/personal protection** lists OSHA's Permissible Exposure Limits (PELs); Threshold Limit Values (TLVs); appropriate engineering controls; personal protective equipment (PPE).

**Section 9, Physical and chemical properties** lists the chemical's characteristics.

**Section 10, Stability and reactivity** lists chemical stability and possibility of hazardous reactions.

**Section 11, Toxicological information** includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity.

Section 12, Ecological information\*

Section 13, Disposal considerations\*

Section 14, Transport information\*

Section 15, Regulatory information\*

Section 16, Other information, includes the date of preparation or last revision.

\*Note: Since other Agencies regulate this information, OSHA will not be enforcing Sections 12 through 15(29 CFR 1910.1200(g)(2)).

Employers must ensure that SDSs are readily accessible to employees.

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## **Fall Protection**

Company has the following requirements for fall protection at all of our worksites.

### Fall Protection is Required

**When working where there is a hazard of falling 6 ft. or more from the perimeter of a structure, unprotected sides and edges, leading edges, through shaft ways and openings, sloped roof surfaces steeper than 7:12, or other sloped surfaces steeper than 40 degrees not otherwise adequately protected, fall protection is 100% mandatory, in addition it is also required when working on all temporary elevated platforms (example: scissor and boom lifts).**

### Fall Protection Types

One of the following four types of fall protection systems will be used when our employees are exposed to fall hazards of 6 feet or more:

1. Standard guardrails, safety cables, or floor hole covers
2. Personal fall arrest systems
3. Positioning device systems
4. Personal fall restraint systems

### Standard Guardrails, Safety Cables, or Covers

These are the easiest and most cost effective methods of providing fall protection and have a very high success rate. Standard guardrails, safety cables, floor hole, and sky light covers are our preferred means of fall protection on job sites. The following rules will be followed when using them:

1. Railings shall be constructed of wood or in an equally substantial manner from other materials. They shall consist of a top rail, not less than 42 inches or more than 45 inches in height, measured from the upper surface of the top rail to the floor, platform, runway, or ramp level. The mid-rail shall be halfway between the top rail and the floor, platform, runway, or ramp. "Selected lumber" free from damage that affects its strength shall be used.
2. Wooden posts shall be no less than 2 inches by 4 inches in cross section, spaced at 8-foot or closer intervals.
3. Wooden top railings shall be smooth and of 2-inch by 4-inch or larger material. Double, 1-inch by 4-inch members may be used for this purpose provided that one member is fastened in a flat position on top of the posts and the other fastened in an edge-up position to the inside of the posts and the side of the top member. Mid-rails shall be of at least 1-inch by 6-inch material.
4. The rails shall be placed on the side of the post that will afford the greatest support and protection.



5. All railings, including their connections and anchorage, shall be capable of withstanding, without failure, a force of at least 250 pounds applied to the top rail within 3 inches of the top edge in any outward or downward direction at any point along the top edge. When the 250 pound test load is applied in a downward direction, the top edge of the guardrail should not deflect to a height less than 42 inches above the walking/working level.
6. Mid-rails, screens, mesh, intermediate vertical members, solid panels, and equivalent members shall be capable of withstanding, without failure, a force of at least 150 pounds applied in any downward or outward direction at any point along the mid-rail, screen, mesh, or other intermediate member.
7. Railings exposed to heavy stresses from employees trucking or handling materials shall provide additional strength by the use of heavier stock, closer spacing of posts, bracing, or by other means.
8. The ends of the rails will not overhang the terminal posts, except where such overhang does not constitute a projection hazard.
9. Railings will be of a smooth surface to prevent injury to an employee from punctures or lacerations, and to prevent snagging of clothing.
10. Steel banding and plastic banding shall not be used as top rails or mid-rails.
11. Railings receiving heavy stresses from employees trucking or handling materials shall provide additional strength by the use of heavier stock, closer spacing of posts, bracing, or by other means.
12. Floor, roof, and skylight openings shall be guarded by a standard railing with toe boards or a cover. Coverings shall be capable of safely supporting the greater of 400 pounds or twice the weight of worker(s) and material(s) placed thereon.
13. Coverings shall be secured in place to prevent incidental removal or displacement, and they should bear a pressure sensitized, painted, or stenciled sign with legible letters not less than one inch high, stating: "Opening--Do Not Remove." Markings of chalk or keel should not be used.
14. Ladder-way floor openings or platforms shall be guarded by standard railings with standard toe boards on all exposed sides, except at the entrance to the opening, with the passage through the railing either provided with a swinging gate or so offset that a person cannot walk directly into the opening.
15. Floor holes, into which persons can incidentally walk, shall be guarded by either a standard railing with standard toe boards on all exposed sides, or a floor hole-cover of standard strength and construction that is secured against incidental displacement. While the cover is not in place, the floor hole should be protected by standard railings.
16. Wall openings, from which there is a drop of more than 4 feet, and the bottom of the opening is less than 3 feet above the working surface, shall be guarded with either a standard rail or intermediate rail or both.





17. An extension platform outside a wall opening onto which materials can be hoisted for handling shall have side rails or equivalent guards of standard specifications. One side of an extension platform may have removable railings in order to facilitate handling materials.
18. Wall opening protection barriers shall be of such construction and mounting that, when in place at the opening, the barrier is capable of withstanding a load of at least 250 pounds applied in any direction (except upward).
19. All elevator shafts in which cages are not installed and which are not enclosed with solid partitions and doors shall be guarded on all open sides by standard railings and toeboards.
20. A full body harness and lanyard are required when using scissor and boom

#### lifts. Personal Fall Arrest Systems

Personal fall arrest systems consist of a full body harness and the most appropriate connecting device attached to suitable anchorage. The system does not actually stop you from falling, but catches you and safely stops you from hitting the level below. Fall arrest systems will be our preferred means of protection when standard guardrails, safety cables, or covers are not practical. The following rules, in addition to the manufacturer's requirements and OSHA regulations, will be observed:

1. Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body harnesses shall be made from synthetic fibers except when they are used in conjunction with Hot Work where the lanyard may be exposed to damage from heat or flame.
2. Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds per employee attached, or shall be designed, installed, and used as part of a complete personal fall arrest system which maintains a safety factor of at least two; and under the supervision of a qualified person.
3. The attachment point of the body belt shall be located in the center of the wearer's back. The attachment point of the body harness shall be located in the center of the wearer's back near shoulder level or above the wearer's head.
4. Where practical, the anchor end of the lanyard shall be secured at a level not lower than the employee's waist, limiting the fall distance to a maximum of 4 feet.
5. Harnesses, lanyards, and other components shall be used only for employee protection as part of a personal fall arrest system and not to hoist materials.
6. Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.



7. Cirks Construction Inc. shall provide for prompt rescue of employees in the event of a fall or shall assure that employees are able to rescue themselves.
8. Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.
9. Any lanyard, safety harness, or drop line subjected to in-service loading, as distinguished from static load testing, shall be immediately removed from service and shall not be used again for employee safeguarding.
10. Personal fall arrest systems shall not be attached to guardrails, unless the guardrail is capable of safely supporting the load.
11. Each personal fall arrest system shall be inspected not less than twice annually by a competent person in accordance with the manufacturer's recommendations. The date of each inspection shall be documented.
12. Personal fall arrest systems will be rigged such that an employee can neither free fall more than 4 feet, nor contact any lower level.
13. Personal fall arrest systems will bring an employee to a complete stop. They will also limit maximum deceleration distance an employee travels to 3.5 feet and have sufficient strength to withstand twice the potential impact energy of an employee free-falling a distance of 6 feet, or the free-fall distance permitted by the system, whichever is less.

### Positioning Device Systems

Positioning device systems are designed to allow employees to work with both hands free at elevated locations. By their very nature, they provide some level of fall protection. They are not as effective as railings or fall arrest systems. Positioning device systems may be used together with a fall arrest system for greater safety. Their use shall conform to the following provisions:

1. Positioning devices shall be rigged such that an employee cannot free fall more than 2 feet.
2. Positioning device systems shall be inspected prior to each use for wear, damage, and other deterioration and defective components shall be removed from service.
3. Body belts, harnesses, and components shall be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials.
4. The use of non-locking snap hooks is prohibited.
5. Anchorage points for positioning device systems shall be capable of supporting two times the intended load or 5,000 pounds, whichever is greater.

### Personal Fall Restraint Systems

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Fall restraint systems are designed to prevent the wearer from reaching the edge or danger area and thus prevent them from falling. Only full body personal fall arrest systems may be used for personal fall restraint.

1. Body belts shall be at least one and five-eighths (1-5/8") inches wide.
2. Anchorage points used for fall restraint shall be capable of supporting 5,000 lbs.
3. Restraint protection shall be rigged to allow the movement of employees only as far as the sides of the working level or working area.

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## **Aerial Lift Safety Procedures**

### Standard Procedures

To ensure safe practices, the following general procedure is used when an authorized user uses an aerial platform lift:

1. Obtain any necessary authorization to use the lift.
2. Check the last pre-start inspection for any comments or notes.
3. Perform a pre-start inspection on the lift, document the inspection, and place it in the reserved storage location on the lift.
4. Perform a workplace inspection in the area that the lift will be used.
5. Inspect and place your personal fall arrest systems. Note: Self-retracting lifelines are prohibited in scissor lifts.
6. Extend and adjust the outriggers, stabilizers, extendible axles, or other stability enhancing means.
7. Ensure that the guardrails are installed and are in place.
8. Ensure that the load being placed on the lift is within the rated capacity of the lift.
9. Test the controls of the lift.
10. Ensure that all personnel on the lift have been trained and authorized to operate or work on the platform.

### Platform Qualifications

These are the specifications for platforms and the following criteria shall be met to be an approved platform on a lift:

1. Platform width shall be not less than 24 inches and shall have a slip resistant surface.
2. The platform shall have a guardrail system around its periphery. It is removable or can be lowered. The means used to secure it in the normal operating position shall be readily accessible for inspection and maintenance.
3. The guardrail system shall include a top rail that is between 42 and 45 inches high, a mid-rail that is approximately half-way from the platform to the top rail, and a toe board that is at least 3 ½ inches high.

### When to use personal fall protection

When operating articulating or boom type lifts that are equipped with lanyard tie off points, the

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use of fall protection equipment is required. If special circumstances exist that encourage the

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operator to use fall protection on vertical aerial platform lifts, they must tie off to a proper tie off point that is not attached to or part of the aerial platform lift itself.

**ANSI A92.6 series** states that a worker need only be protected from falling by a properly designed and maintained guardrail system. However, if the guardrail system is less than adequate or the worker leaves the safety of the work platform, an additional fall protection device would be required. The general scaffolding fall protection provision found in **1926.451(g)(1)(vii)** reads in part, "[f]or all scaffolds not otherwise specified in this section, each employee shall be protected by the use of personal fall arrest systems or guardrails systems."

### Markings and Decals

**In addition to any other markings or decals that are placed on the lift by the manufacturer, the following information shall be displayed on all aerial platform lifts in a clearly visible, accessible area, and in a durable manner:**

1. The make, model, serial number, and manufacturer's name and address.
2. The rated workload, including rated number of occupants.
3. The maximum platform height.

### Safe Operation During Operation

1. Attention shall be given towards the direction of travel, clearances above, below and on all sides.
2. Employees shall not sit or climb on the guardrails of the aerial lift.
3. Planks, ladders, or other devices shall not be used on the work platform.
4. An aerial lift shall not be moved when the boom is elevated in a working position with employees in the basket.
5. Aerial lift shall not be placed against another object to steady the elevated platform.
6. Aerial lift shall not be used as a crane or other lifting device.
7. Aerial lift devices shall not be operated on grades, side slopes, or ramps that exceed the manufacturer's recommendations.
8. The brakes shall be set and outriggers, when used, shall be positioned on pads or a solid surface.
9. Speed of aerial lift devices shall be limited according to the conditions of the ground surface, congestion, visibility, slope, location of personnel, and other factors that may cause hazards to other nearby personnel.
10. Stunt driving and horseplay shall not be permitted.

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11. Booms and elevated platform devices shall not be positioned in an attempt to jack the wheels off the ground.
12. The area surrounding the elevated platform shall be cleared of personnel and equipment prior to lowering the elevated platform.
13. All equipment must be secured on the inside of the aerial lift.
14. Operators are to call for assistance if the platform or any part of the machine becomes entangled.

## Inspections

The inspection process is a critical step in preventing aerial lift incidents that are caused from faulty or worn out equipment. Aerial platform lifts that are not in proper operating condition shall be removed from service until the problems have been corrected by an authorized and trained maintenance technician.

## Pre-Start Inspections

Before each day's use or at the beginning of each shift that the aerial platform lift is used it shall be given a pre-start inspection, which is a visual inspection and functional test that includes the following criteria:

1. Operating and emergency controls.
2. Safety devices.
3. Personal protective devices.
4. Air, hydraulic, and fuel system leaks.
5. Cables and wiring harness.
6. Loose or missing parts.
7. Tires and wheels.
8. Placards, warnings, control markings, and operating manual(s).
9. Outriggers, stabilizers, and other structures.
10. Guardrail system and other items specified by manufacturer.



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## Aerial Platform Lift Pre-start Inspection Form

The pre-start inspection shall be performed prior to each day's or shift's use of the aerial platform lift by an authorized and trained user of the lift.

*Check off the items that have been inspected or mark the N/A box if the item does not apply to the lift being inspected. Place any comments in the space provided below. If there are any of these items that are not satisfactory place the lift out of service until the item is corrected.*

Lift Provider: \_\_\_\_\_

Make of lift: \_\_\_\_\_ Model of lift: \_\_\_\_\_ Serial #: \_\_\_\_\_

Inspector's Name: \_\_\_\_\_ Date of Inspection: \_\_\_\_\_

<u>Item Inspected</u>	<u>Okay</u>	<u>Not Okay</u>	<u>N/A</u>
Operating controls			
Emergency controls			
Safety devices			
Personal protective devices			
Pneumatic system (leaks)			
Hydraulic system (leaks)			
Fuel system (leaks)			
Cables			
Wiring harness			
Loose/missing parts (locking pins/bolts...)			
Tires and wheels			
Placards and Warnings			
Operational Manual			
Outriggers/Stabilizers			
Guardrail system and locking gate			
Other items:			

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Inspector's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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## **Electrical Safety & Lock-out / Tag-out Program**

Cirks Construction Inc. has developed the following procedures to protect our employees and reduce the risk of incidents. We will also conduct a periodic review of electrical safety, energy control procedures, and lock-out / tag-out, at least annually, to ensure that the procedure and the requirements of this section are being followed.

This procedure is binding upon all employees. All employees will be instructed in the significance of electrical safety, energy control procedures, and lock-out / tag-out. Each new employee shall be instructed by their supervisor in the purpose and use of these procedures.

### **All Equipment and Installations**

1. Only trained, qualified, and authorized employees will be allowed to make electrical repairs or work on electrical equipment or installations.
2. All electrical equipment and systems shall be treated as energized until tested or otherwise proven to be de-energized.
3. All energized equipment and installations will be de-energized prior to the commencement of any work. If the equipment or installation must be energized for test or other purposes, special precautions will be taken to protect against the hazards of electric shock.
4. All equipment shall be locked out to protect against incidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device bearing a lock.
5. Safety grounds shall always be used where there is a danger of shock from back feeding or other hazards.
6. Polyester clothing or other flammable types of clothing shall not be worn near electrical circuits. Cotton clothing is much less likely to ignite from arc blast. Employees working on live circuits shall be provided Nomex or equivalent fire resistant clothing.
7. Suitable eye protection must be worn at all times while working on electrical equipment.
8. Always exercise caution when energizing electrical equipment or installations. Take steps to protect employees from arc blast and exploding equipment in the event of a fault.
9. All power tools will be grounded or double insulated. Tools with defective cords or wiring shall not be used.
10. Suitable temporary barriers or barricades shall be installed when access to open enclosures containing exposed energized equipment is not under the control of an authorized person.

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## Energized Equipment or Systems

Work shall not be performed on exposed energized parts of equipment or systems until the following conditions are met:

1. Responsible supervision has determined that the work is to be performed while the equipment or systems are energized.
2. All work is conducted in accordance with the requirements of NFPA Standard 70E for Electrical Safety.
3. Involved personnel have received instructions on the work techniques and hazards involved in working on energized equipment and appropriate equipment to perform the job has been provided.
4. Suitable personal protective equipment has been provided and is used. Suitable insulated gloves shall be worn for voltages in excess of 300 volts, nominal.
5. Suitable eye protection, including face shield and safety glasses or goggles, has been provided and is used.
6. Suitable arc flash and arc blast protection is provided for high voltage work.
7. Fire resistant clothing such as Nomex suits shall be worn.
8. Where required, suitable barriers, barricades, tags, or signs are in place for personnel protection.

After the required work on an energized system or equipment has been completed, an authorized person shall be responsible for:

1. Removing from the work area any personnel and protective equipment.
2. Reinstalling all permanent barriers or covers.

## De-energized Equipment or Systems

A qualified person shall be responsible for completing the following **before** working on de-energized electrical equipment or systems, unless the equipment is physically removed from the wiring system:

1. Notifying all involved personnel.
2. Locking the disconnecting means in the "open" position with the use of lockable devices, such as padlocks, combination locks, or disconnecting of the conductor(s) or other positive methods or procedures which will effectively prevent unexpected or inadvertent energizing of a designated circuit, equipment, or appliance.
3. Tagging the disconnecting means with suitable incident prevention tags.

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4. Effectively blocking the operation or dissipating the energy of all stored energy devices which present a hazard, such as capacitors or pneumatic, spring-loaded and like mechanisms. This may require the installation of safety grounds.
5. Testing the equipment to ensure it is de-energized.

### Energizing (or Re-energizing) Equipment or Systems

A qualified and authorized person shall be responsible for completing the following before energizing equipment or systems that have been de-energized:

1. Determining that all persons are clear from hazards which might result from the equipment or systems being energized including arc blast or explosions caused by unexpected faults.
2. Removing locking devices and tags. Only the employee who placed them may remove locking devices and tags. Locking devices and tags shall be removed upon completion of the work and after the installation of the protective guards or safety interlock systems.

### Incident Prevention Tags

Suitable incident prevention tags shall be used to control a specific hazard. Such tags shall provide the following minimum information:

1. Reason for placing tag.
2. Name of person placing the tag and how that person may be contacted.
3. Date tag was placed.

### Lock-out / Tag-out

Machinery or equipment capable of **movement** shall be stopped and the power source de-energized or disengaged, and locked out. If necessary, the moveable parts shall be mechanically blocked or secured to prevent inadvertent movement during cleaning, servicing or adjusting operations unless the machinery or equipment must be capable of movement during this period in order to perform the specific task. If so, the hazard of movement shall be minimized.

Equipment or power driven machines equipped with lockable controls, or readily adaptable to lockable controls, shall be locked out or positively sealed in the "off" position during repair work and setting-up operations. In all cases, incident prevention signs or tags shall be placed on the controls of the equipment or machines during repair work.

Cirks Construction Inc. will ensure a competent person provides a sufficient number of incident prevention signs or tags and padlocks, seals, or other similarly effective means that may be required by any reasonably foreseeable repair.



## Sequence of Lockout Procedure

1. Notify all affected employees that a lockout is required and the reason therefore.
2. If the equipment is operating, shut it down by the normal stopping procedure (such as: depress stop button, open toggle switch).
3. Operate the switch, valve, or other energy isolating devices so that the energy source(s) (electrical, mechanical, hydraulic, other) is disconnected or isolated from the equipment.
4. Stored energy, such as that in capacitors, springs, elevated machine members, rotating fly wheels, hydraulic systems, and air, gas, steam or water pressure, must also be dissipated or restrained by methods such as grounding, repositioning, blocking, or bleeding down.
5. Lockout energy isolating devices with an assigned individual lock.
6. After ensuring that no personnel are exposed and as a check on having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. **CAUTION:** Return operating controls to neutral position after the test.

## Procedure Involving More Than One Person

If more than one individual is required to lock out equipment, each shall place his or her own personal lock on the energy isolating device(s). One designated individual of a work crew or a supervisor, with the knowledge of the crew, may lock out equipment for the whole crew. In such cases, it may be the responsibility of the individual to carry out all steps of the lockout procedure and inform the crew when it is safe to work on the equipment. Additionally, the designated individual shall not remove a crew lock until it has been verified that all individuals are clear.

## Testing Equipment During Lockout

In many maintenance and repair operations, machinery may need to be tested, and for that purpose energized, before additional maintenance work can be performed. This procedure must be followed:

1. Clear all personnel to safety.
2. Clear away tools and materials from equipment.
3. Remove lockout devices and re-energize systems, following the established safe procedure.
4. Proceed with tryout or test.
5. Neutralize all energy sources once again, purge all systems, and lockout prior to continuing work.



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Equipment design and performance limitations may dictate that effective alternative worker protection be provided when the established lock-out procedure is not feasible.

### Restoring Equipment to Service

After the work is completed and the equipment is ready to be returned to normal operation, this procedure must be followed:

1. Remove all non-essential items.
2. See that all equipment components are operationally intact, including guards and safety devices. Repair or replace defective guards before removing lockouts.
3. Remove each lockout device using the correct removal sequence.
4. Make a visual check before restoring energy to ensure that everyone is physically clear of the equipment.

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## **Code of Safe Practices – Job Site Rules**

1. All employees and all visitors must wear hard hats and safety vests at all times while on jobsite. **(Exceptions can be made by superintendents ONLY)**
2. All visitors must check in with jobsite supervisor immediately.
3. Access to the site is restricted to employees and those authorized by Cirks Construction Inc.
4. Use or possession of intoxicants, alcohol, or drugs is strictly prohibited.
5. Maintain good housekeeping; help keep the jobsite clean orderly.
6. Long pants and shirts with a minimum of 4" sleeves are to be worn at all times.
7. Work boots; no tennis shoes are to be worn.
8. Eye, ear, and respiratory protection devices must be worn at all times when required.
9. PFAS and correct fall protection measures shall be used when exposed to a 6ft. fall or greater.
10. Radios or earphones are only permitted on site if they don't interfere with communication.
11. Only authorized personnel are permitted to operate equipment.
12. No riders are allowed on machinery or equipment; riders in trucks are to remain seated while vehicle is moving.
13. All machinery must have operable backup alarms at all times.
14. No one shall enter a trench or excavation site unless it is properly shored or sloped.
15. For excavations 5ft. in depth or greater an Excavation Permit must be completed and approved by the superintendent or the safety director.
16. All power tools and extension cords with defects will be removed from site. All safety guards must be in place.
17. All ladders must be properly secured. Maintain 3 points of contact at all times.
18. Safety rails must be maintained at all times in all openings, stairways, and at the building perimeter.
19. Horseplay is strictly prohibited.
20. All incidents and unsafe conditions or practices must be reported immediately to Cirks Construction Inc. project superintendent.

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21. All work on any type of scaffold must have a JHA prior to work commencing.
22. Follow instructions. Do not take chances. If you do not know, ASK.

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## **Code of Safe Practices – General Safety Rules**

1. All persons shall follow this Code of Safe Practices and render every possible aid to safe operations.
2. Failure to abide by the Code of Safe Practices may result in disciplinary action up to and including termination.
3. Immediately report any unsafe conditions, incidents, injuries, or illness to your supervisor or manager.
4. If you are unsure of the safe method to do your job, STOP and ask your supervisor. Ignorance is no excuse for a safety violation.
5. No one shall be knowingly permitted to work while the employee's ability or alertness is impaired by fatigue, illness, and prescription or over the counter drugs. Employees who are suspected of being under the influence of illegal or intoxicating substances, impaired by fatigue or an illness, shall be prohibited from working.
6. Never work while under the influence of an illegal or intoxicating substance, fatigued, or ill.
7. Anyone known to be under the influence of any drugs or intoxicating substances which impair the employee's ability to safely perform the assigned duties shall not be allowed on the job.
8. Horseplay, scuffling, fighting, and other acts that tend to have an adverse influence on the safety or well-being of the employees are prohibited.
9. Work shall be well planned and supervised to prevent injuries in the handling of materials and in working together with equipment.
10. Keep your work area clean, free of debris, electrical cords, and other hazards.
11. Immediately clean up spilled liquids.
12. Always notify all other individuals in your area who might be endangered by the work you are doing.
13. Do not operate equipment that you are not familiar with. Do not attempt to use such equipment until you are fully trained and authorized.
14. You are responsible for ensuring all safety guards are operable and in place. If they are not, STOP working and tell your supervisor.
15. Never bring firearms, weapons, illegal drugs, or alcoholic beverages on company or customer property or the job site.
16. A red tag system identifies equipment that is NOT to be operated, energized, or used. All lock-out or tag-out notices and procedures must be observed and obeyed.

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17. Do not block exits, fire doors, aisles, fire extinguishers, first aid kits, emergency equipment, electrical panels, or traffic lanes.
18. Do not leave tools, materials, or other objects on the floor that might cause others to trip and fall.
19. Do not run on the work site, in the shop, or the office area.
20. Do not distract others while working. If conversation is necessary, make sure eye contact is made prior to communicating.
21. Employees shall not enter manholes, underground vaults, chambers, tanks, silos, or other similar places that receive little ventilation, unless it has been determined that it is safe to enter.
22. Employees shall ensure that all guards and other protective devices are in proper places and adjusted, and shall report deficiencies promptly to the supervisor or manager.
23. Materials, tools, or other objects shall not be thrown from buildings or structures until proper precautions are taken to protect others from the falling objects.
24. Employees shall cleanse thoroughly after handling hazardous substances and follow special instructions from authorized sources.
25. Gasoline or other flammable liquids shall not be used for cleaning purposes.
26. No burning, welding, or other source of ignition shall be applied to any enclosed tank or vessel, even if there are some openings, until it has first been determined that no possibility of explosion exists and authority for the work is obtained from the supervisor or manager.



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## **Code of Safe Practices – Electrical Safety**

1. Only trained, qualified, and authorized employees are allowed to make electrical repairs or work on electrical equipment or installations.
2. All electrical equipment and systems shall be treated as energized until tested or otherwise proven to be de-energized.
3. All energized equipment and installations will be de-energized prior to the commencement of any work. If the equipment or installation must be energized for test or other purposes, special precautions will be taken to protect against the hazards of electric shock.
4. All equipment shall be locked out to protect against incidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch, valve, or other energy-isolating device bearing a lock.
5. Safety grounds shall always be used where there is a danger of shock from back feeding or other hazards.
6. Polyester clothing or other flammable types of clothing shall not be worn near electrical circuits. Cotton clothing is much less likely to ignite from arc blast. Employees working on live circuits shall be provided Nomex or equivalent fire resistant clothing.
7. Suitable eye protection must be worn at all times while working on electrical equipment.
8. Always exercise caution when energizing electrical equipment or installations. Take steps to protect yourself and other employees from arc blast and exploding equipment in the event of a fault.
9. All power tools will be grounded or double insulated. Tools with defective cords or wiring shall not be used.
10. Metal jewelry should not be worn around energized circuits.
11. Extension and temporary power cords must be heavy duty and grounded. Frayed or defective cords shall not be used.
12. Electrical installations must be protected from incidental contact by enclosures or tight fitting covers.
13. Circuits shall not be overloaded with equipment or extension cords.

### Lock-out / Tag-out

1. All machinery and electrical equipment shall be locked out and tagged prior to repair, cleaning, or adjustment unless power is necessary to perform the work. If so, other precautions, specified by your supervisor, will be taken.
2. Use your own lock and key. No one else should have a key for your lock. Destroy all



- duplicate keys.
3. Maintain control of your key at all times to prevent unauthorized use.
  4. Never remove another employee's lock or energize tagged equipment.
  5. If multiple employees are working on the same equipment, each employee should install their own lock.
  6. Notify all affected employees that a lock-out/tag-out is required and the reasons for it.
  7. If the equipment is operating, shut it down by the normal stopping procedure (depress stop button, open toggle switch, etc.).
  8. Operate the switch, valve, or other energy isolating devices so that the energy source(s) (electrical, mechanical, hydraulic, etc.) is disconnected or isolated from the equipment.
  9. Stored energy, such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas or water pressure, etc. must also be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
  10. Lock-out all energy isolation devices with an individual lock.
  11. After ensuring that no employees are exposed and as a check of having disconnected the energy sources, operate the push button or other normal operating controls to make certain the equipment will not operate. **Caution: Return operating controls to neutral position after the test.**
  12. The equipment is now locked-out. Install red lock-out tag on operating controls.
  13. After repair is complete and the equipment is ready for testing or normal operation, check the equipment to see that all cover plates and safety devices have been reinstalled.
  14. When the equipment is clear, remove all locks and tags. The energy isolating devices may be operated to restore energy to the equipment.



## **Code of Safe Practices – Company Vehicles**

1. Only authorized employees are permitted to operate company vehicles. Do not let anyone else drive your company vehicle unless authorized.
2. Drive defensively and obey all traffic and highway laws.
3. Always wear your seat belt, whether you are a driver or a passenger.
4. Report all incidents as soon as possible to your supervisor and obtain a police report.
5. Keys must be removed from all unattended vehicles and the vehicles must be locked, unless parking inside the facility.
6. Do not jump from the cab or bed of company vehicles. Always use the stairs or a ladder.
7. Inspect your vehicle and report any defects or operating problems to your supervisor so that repairs can be made.
8. No smoking while refueling.
9. Smoking is prohibited in company vehicles.
10. If your driver's license is revoked or expired, immediately notify your supervisor and do not drive.
11. Employees shall not engage in any activities that distract them from driving while operating vehicles. This includes eating, reading maps, texting, looking for reports or files, and talking on a cell phone without a hands free device.



## **Code of Safe Practices – Ladder Safety**

1. Inspect the ladder before using it. If it is broken, throw it out. Never repair a broken ladder, get a new one. Keep portable stairways, ladders and step stools in good condition and use them only in a safe manner.
2. Use the proper ladder for the job. Do not use “A” frame ladders as straight ladders. Make sure the ladder is tall enough to reach the work area. Do not use metal ladders for electrical work.
3. Do not place ladders in passageways, doorways, or any location where they might be hit or jarred, unless protected by barricades or guards.
4. Ladders should only be placed on hard level surfaces. Make sure the ladder feet are not placed on sandy, slippery, or sloping surfaces. Clean or sweep the area where the ladder feet will be and make sure the rubber feet are in good shape.
5. Ladder rungs and steps must be kept free of grease, oil, mud, or other slippery substances.
6. Arrange your work so you are able to face the ladder and use both hands while climbing. Do not carry tools or equipment while climbing a ladder. Climb the ladder, and then hoist the tools or equipment with a line or a hoisting device.
7. Avoid temporary ladders. Always use a commercially made, construction grade ladder of the proper length for the work being performed.
8. Secure portable ladders in place and at a pitch so the leveling indicator is in alignment or the distance from the wall to the base of the ladder is at least 1' for every 4' of height.
9. Straight ladders shall be tied off the top of the ladder to prevent slipping.
10. Be aware of objects below you, move or cover sharp objects in case you fall.
11. Do not stand on or work from the 2nd rung from the top or above. Also, do not reach too far from the ladder. Keep your belt buckle between the side rails.
12. Extension ladders shall extend at least 36" above the level being accessed.
13. On all ladders, do not step on cross bracing that is not intended to be used for climbing.
14. All manufacturers' safety labels must be legible.



## **Code of Safe Practices – Personal Protective Equipment (PPE)**

1. Use the correct PPE for each job assignment. If you don't know, ask.
2. PPE shall be maintained in good condition and cleaned regularly.
3. PPE shall be stored properly when not in use to protect it from damage.
4. Damaged or broken PPE must be returned to your supervisor for replacement.
5. Hard hats must be worn on job sites at all times.
6. ANSI approved safety glasses must be worn when working with power tools, compressed air or gasses, chemicals, or any other item that creates an eye injury hazard.
7. Face shields with safety glasses are recommended when grinding or working with hazardous chemicals.
8. Employees must wear industrial work shoes in the warehouse and on the job site. The shoes must have complete leather uppers and skid resistant soles and be in good condition. Steel toe or composite toe protection is recommended.
9. Athletic style shoes, tennis shoes, open toe shoes, plastic or vinyl shoes, or shoes with decorative accessories are not allowed.
10. Hearing protectors must be worn when working with loud equipment such as cut off saws, chain saws, air hammers, or grinders.
11. Be sure the protective clothing you wear will not hamper or restrict freedom of movement due to improper fit.
12. Long pants of heavy-duty material must be worn. No shorts or sweat pants are allowed.
13. Do not wear loose, torn or frayed clothing, dangling ties, finger rings, dangling earrings, jewelry items, or long hair unless contained in a hair net, while operating any machine that could cause entanglement.
14. If required, wear approved respiratory protection when applying adhesives, paint, welding, grinding, or working with chemicals. Read the SDS to find out which types of respirators are required. Facial hair may not be permitted in certain circumstances.



## **Code of Safe Practices – Hand and Power Tools**

1. Proper eye protection must be worn when using hand and power tools.
2. Know your hand and power tool applications and limitations. Always use the proper tool for the job.
3. Inspect cords and tools prior to use. Do not use tools that are faulty in any way. Exchange them for safe tools immediately.
4. Power tools must be grounded or double insulated. All power tools are to be plugged into a grounded GFCI outlet.
5. Do not use power tools in damp, wet, or explosive atmospheres.
6. Do not lift, lower, or carry portable electrical tools by the power cord.
7. Keep all safety guards in place and in proper working order.
8. Use clamps or vises to secure work pieces.
9. Do not force hand power tools. Apply only enough pressure to keep the unit operating smoothly.
10. Return all tools and other equipment to their proper place after use.
11. Unplug all power tools before changing bits or grinding disks.
12. Never leave chuck keys in the tool during operation.
13. Do not use a screwdriver as a chisel.
14. Before using sledges, axes, or hammers, be sure the handles are securely fastened with a wedge made of sound material.
15. Do not use a handle extension on any wrench.
16. Files should be equipped with handles and should not be used as a punch or pry.



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## **Code of Safe Practices – Hazardous Materials and Chemicals**

1. Read all warning labels and Safety Data Sheets (SDS) before using any chemicals. SDS includes personal protective equipment and safety information. SDS are available from your supervisor.
2. Hazardous materials shall be handled in accordance with the SDS and label. If protective equipment is required, use it.
3. Eye protection must be worn when working with hazardous materials or chemicals.
4. Mixing of chemicals is prohibited at all times unless required by the label. Before you mix - review all SDS.
5. Always wash your hands thoroughly after handling chemicals and before eating or smoking, even if you were wearing protective gloves.
6. Never use solvents for hand cleaning. Use the non-toxic hand cleaners provided.
7. Store all hazardous materials properly in suitable containers that are properly labeled.
8. Use chemicals only in well-ventilated areas.
9. When using secondary containers, ensure that they are labeled as to their contents and hazards.
10. Do not disturb any asbestos. STOP work and tell your supervisor. If you are not sure, STOP and ask.
11. Do not cut or weld stainless steel or galvanized metal without respiratory protection. These items create toxic fumes.
12. Work with lead, asbestos, cadmium, and other toxic compounds require special precautions. Do not attempt to perform this work without special equipment and training.

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## **Code of Safe Practices – Fire Prevention and Housekeeping**

1. Always take precautions to prevent fires which may be started, particularly from oily waste, rags, gasoline, flammable liquids, acetylene torches, improperly installed electrical equipment, and trash.
2. Firefighting equipment is to be inspected on a regular basis. All discharged, damaged, or missing equipment is to be immediately reported to a supervisor. Tampering with fire equipment is prohibited.
3. Access to fire extinguishers must be kept clear at all times. Make note of the location of firefighting equipment in your work area.
4. Never use gasoline or flammable solvents for cleaning purposes.
5. Smoking is prohibited within 50 feet of where flammable substances are present.
6. In case of fire, employees shall consider the safety of themselves and other individuals before saving property.
7. Keep your work areas free of debris. Remove useless material from the work area as fast as required to help reduce tripping hazards.
8. Maintain awareness of potential hazards when walking about the work site.
9. Keep tools, materials, and equipment out of walkways and stairways at all times.
10. Sharp wires or protruding nails must be kept bent.

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### **Code of Safe Practices – Traffic Safety**

1. All employees exposed to traffic hazards are required to wear orange flagging garments (shirts, vests, or jackets) at all times.
2. When possible, company vehicles are to be placed between the employees and traffic to prevent vehicles from entering the work area and hitting members of the crew.
3. All traffic controls will be established in accordance with the State of California Manual of Traffic Controls for Construction and Maintenance Work Zones.
4. Traffic controls are to be properly maintained throughout the workday. Signs and cones must be kept upright, visible, and in their proper position at all times.

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## **Code of Safe Practices – Welding and Cutting**

1. Make sure your welding equipment is installed properly, grounded, and in good working condition.
2. Always wear protective clothing suitable for the welding or cutting to be done.
3. Always wear #5 eye protection while welding, brazing, soldering, or flame cutting. Once you remove your welding helmet, put on safety glasses.
4. Keep your work area clean and free of hazards. Make sure that no flammable, volatile, or explosive materials are in or near the work area.
5. Handle all compressed gas cylinders with extreme care. Keep caps on when not in use. Make sure that all compressed gas cylinders are secured to the equipment carriage, wall, or other structural supports. When compressed gas cylinders are empty close the valve, install the cap, and return to correct bottle storage area.
6. Store compressed gas cylinders in a safe place with good ventilation. Acetylene cylinders and oxygen cylinders should be kept at least 20 feet apart.
7. Do not weld or cut in confined spaces without special precautions and your supervisor's authorization.
8. Do not weld on containers that have held combustibles or flammable materials.
9. Use mechanical exhaust ventilation at the point of welding when welding lead, cadmium, chromium, manganese, brass, bronze, zinc, or galvanized metals. These metals are highly toxic and their fumes should not be breathed.
10. Make sure all electrical connections are tight and insulated. Do not use cables with frayed, cracked, or bare spots in the insulation.
11. When the electrode holder or cutting torch is not in use, hang it on the brackets provided. Never let it touch a compressed gas cylinder.
12. Dispose of electrode and wire stubs in proper containers since stubs and rods on the floor are a safety hazard.
13. Use weld curtains to shield others from the light rays produced by your welding.
14. Make sure all compressed gas connections are tight and check for leaks. Do not use hoses with frayed or cracked spots.
15. Keep your leads orderly and out of walkways. Suspend them whenever possible.
16. DO NOT WELD if leads or machine are in or near water.
17. Make sure a portable fire extinguisher is nearby.
18. Keep your work area clean and free of hazards. When flame cutting, sparks can travel

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- 30-40 feet. Do not allow flame cut sparks to hit hoses, regulators, or cylinders.
19. Use oxygen and acetylene or other fuel gases with the appropriate torches and tips only for the purpose intended.
  20. Never use acetylene at a pressure in excess of 15 pounds per square inch. Higher pressure can cause an explosion.
  21. Never use oil, grease, or any other material on any apparatus or thread fitting in the oxyacetylene or oxy-fuel gas system. Oil and grease in contact with oxygen will cause spontaneous combustion.
  22. Always use the correct sequence and technique for assembling and lighting the torch. Always use the correct sequence and technique for shutting off a torch.
  23. Check valves must be used on all compressed gas cylinders to prevent back flow of the gas.

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## **Code of Safe Practices Receipt**

This is to certify that I have received a copy of the Cirks Construction Inc. Code of Safe Practices. I have read these instructions, understand them, and will comply with them while working for the company.

I also understand that I am to report any injury to my supervisor or manager immediately and report all safety hazards.

I understand that failure to abide by these rules may result in disciplinary action and possible termination of my employment with Cirks Construction Inc..

I further understand that I have the following rights:

- I am not required to work in any area that I feel is unsafe.
- I am entitled to information on any hazardous material or chemical that I am exposed to while working
- I am entitled to see a copy of the Cirks Construction Inc. Health, Safety, & Environmental Manual and Injury and Illness Prevention Program.
- I will not be discriminated against for reporting safety concerns.

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