



SAFETY & LOSS CONTROL POLICY

GENERAL:

It is the policy of Dave Loden Construction, Inc. to provide a healthy and safe place of employment for all of our employees and for the public in all of this corporation's operations, and to abide by all safety regulations as they pertain to our industry. Safety shall take precedence over more expedient unsafe operations. Every attempt shall be made to provide equipment and create conditions that shall make for a safe work place. We shall provide safety education for our employees. Any employee who willfully disregards known safety practices as established could be subject to discipline and/or dismissal. Subcontractors shall be expected to abide by the provisions of this policy. All employees are expected to read and understand the Rules of Safety that apply to their trade and job site.

RESPONSIBILITIES:

A. Corporation: The Corporation recognizes the need for development of safe working practices for every job. It promotes the advancement of safety in all equipment, tools and a safe environment at all job site locations, as well as the warehouse, yard and office. The responsibility for the promotion and implementation of the Safety Program throughout all operations lies with Corporate Management. Specific responsibilities are shown on page 2.

B. Safety Committee: The Safety Committee, composed of Corporate Management, all Superintendents, and the Safety Officer is responsible for the development and implementation of the Safety Program. Specific responsibilities are shown on page 3.

C. Superintendents: All Superintendents shall consider it an essential part of their job to administer the Safety Program. In the absence of an appointed Safety Officer it will be the responsibility of the Superintendent to appoint or perform the Safety Officers duties. Specific responsibilities are shown on page 3.

D. Employee: All employees are required as a condition of employment to follow all established safety practices. Failure to comply shall be just cause for disciplinary action. Specific responsibilities are shown on page. All employees will thoroughly read the entire safety policy before starting work; they will also participate in all weekly safety meetings. Every single employee is responsible for contributing to a safe and healthful work environment.

E. Safety Officer: The safety officer is responsible for the implementation of the Safety and Loss Control policy. Specific responsibilities are shown on page 3.

TRAINING:

A continuous training program shall be a vital part of the Dave Loden Construction, Inc. Safety program. The objective of the training program is to insure that all employees recognize dangerous conditions and that hazards and exposure to illness or injury are eliminated insofar as possible. The training program shall include:

- A. An initial indoctrination of each employee on the company Safety program and the specific safety rules applicable to his specific trade. This is to include a quiz on general safety practices covered in this document to ensure the employee read it thoroughly.
- B. Weekly safety meetings will be held and will include training on hazard identification.
- C. First aid training for selected employees.
- D. Instruction on proper use of issued safety equipment.
- E. Instruction on safe handling of hazardous materials.
- F. The safety officer/Foreman will give a safety meeting specific to the job before commencing any work on the job. This will include training on the use of any Scaffolding, Ladders, Fall Protection, Power Tools, PPE or rigging that will be used for that job. This will include training on recognition and mitigation of hazards. Special hazards, such as electrical lines, roof openings, unsafe decking, radiation, flammable vapors, etc. shall be discussed with all crew members by the Superintendent prior to exposure to the hazards. These hazards will be identified and marked/protected during the job start-up safety training. If a special hazard is discovered, an appropriate certified person shall do an assessment prior to commencing work.
- G. record of safety meeting will be kept in the safety binder for a period of no less than 3 years.
- H. Record of employee's initial training will be kept in employee files for no less than 20 years.
- I. Employees are highly encouraged to get their 10 hour OSHA Safety certification. If this is done within the first 6 months of employment, DLC Inc will reimburse the cost of the certification and give a \$0.50/hr raise. This is a requirement to be promoted to a Foreman or Task Foreman position.
- J. Employees will be trained specifically on fall protection on or before their first day of work and annually after that date. Record of this training will be kept in the employee file.

INSPECTIONS:

A. The Safety Officer and Superintendents are charged with making frequent inspections of job sites and facilities to insure compliance with the Safety and Loss Control Policy. Violations shall be corrected promptly before work resumes. Serious violations or repeated violations shall be cause for disciplinary action against the responsible employee.

B. Safety Officers or Superintendents shall make regular inspections of company equipment to insure it is in safe operating condition. A report of the inspection shall be placed in the safety binder.

C. All job sites manned for more than two days shall have a job specific safety meeting at the start of the job and weekly thereafter.

ACCIDENT REPORTING:

A. All work related accidents or illness shall be reported immediately to the Corporate office. The office shall post the required information on OSHA Form 300. Serious accidents resulting in death or hospitalization shall be reported to the corporate office, Superintendents, and the President. All accident reports shall be reviewed by the Safety Committee at its regular meeting.

B. Any accident or near miss will be investigated by the safety committee to identify and eliminate the cause of the incident.

WORKERS COMPENSATION:

In order for an accident or illness to be covered by workers compensation, it must occur during the scope of employment. All pertinent details regarding the accident must be reported immediately to the corporate office. The company, at its discretion may use the Safety Officer, the insurance carrier and/or the company physician to investigate the eligibility of questionable claims and obtain additional medical opinions when necessary.

ANNUAL REVIEW:

An annual review of the company Safety program shall be conducted by the Safety Committee each year, a report shall be filed. All reported incidents and close calls and their following investigations will be presented. Any safety observation reports from the year will also be presented and reviewed. The committee will review any incidents or close calls and disseminate any lessons learned to all employees in the next weekly safety meeting.

DISCIPLINE:

Commission of unsafe acts or violations of the company Safety policy whether intentional or not, shall be just cause for disciplinary action. Steps in the disciplinary procedure are as follows:

- A. First Offense = Verbal warning
- B. Second Offense = Written warning
- C. Third Offense = Suspension for 3 to 5 work days depending on the gravity of the offense. Notice to be in writing
- D. Fourth Offense = Termination of employment. Notice to be in writing

SAMPLE:**SAFETY CITATION**

DATE JOB

VIOLATION

DATE CORRECTED (INITIALS)

SAFETY OFFICER FOREMAN

ALL VIOLATIONS ARE TO BE CORRECTED IMMEDIATELY UNLESS OTHERWISE INSTRUCTED

SPECIFIC DUTIES**CORPORATE MANAGEMENT RESPONSIBILITIES:**

The prevention of accidents is one of the prime responsibilities of management. In general, the following list of activities makes it possible to discharge this responsibility effectively.

1. Establish, publish and carry out a stated company Safety and Loss Control policy
2. Provide an efficient safety organization having an effective accident prevention program
3. Administer the Safety and Loss Control program
4. Review accident reports to keep informed of the accident experience trend in operations in order to judge the effectiveness of the safety effort and to indicate when additional accident prevention measures are necessary
5. Attend Safety Committee meetings periodically to aid in the formulation of overall safety policy and give direction to the Safety and Loss Control program
6. Periodically review the work of the safety organization to see that it is functioning effectively
7. Periodically perform safety inspections
8. Work with the insurance carrier's loss prevention personnel in matters relating to safety and accidents
9. Maintain accident records, making necessary records available for the Safety Committee meetings. In addition, insure that records are properly maintained for OSHA and insurance carrier
10. Promote safety through the dissemination of safety bulletins and other safety promotions
11. Make unannounced job site inspections on a regular basis
12. Make necessary coordination with government and industry officials
13. Provide safety equipment during job site inspections and when requested by company personnel
14. Provide personal safety indoctrination training to all new personnel hired
15. At least once annually, management will perform a documented observation of the crew's activities and write a report outlining safety procedures followed, any discrepancies and potential hazards observed.

SAFETY COMMITTEE RESPONSIBILITIES:

The Safety Committee shall be composed of Corporate Management, all Superintendents and the Safety Officer. The fullest measure of effective safety work in any operation can be accomplished only when the

Safety Committee cooperates wholeheartedly in the Safety program. The following is the list of Safety Committee obligations:

1. Familiarize themselves with the company Safety and Loss Control policy and their responsibilities in that connection
2. Assist in the development of departmental safety procedures, and assist the Safety officer in carrying out an effective Safety and Loss Control program
3. Review and discuss all accident reports having occurred since the last meeting. The committee should determine whether or not effective corrective action has been taken to prevent a reoccurrence
4. Make periodic inspections of the company facilities and make recommendations necessary to curb unsafe acts or unsafe conditions to the safety officer for implementation
5. Develop and implement an effective and continuous safety indoctrination and training program. Emphasis should be placed on those areas brought to light through the inspection program or prompted by OSHA rule changes
6. Make an annual review of the Safety program and file a report
7. Review annually the motor vehicle records for all approved drivers.

SUPERINTENDENTS RESPONSIBILITIES:

In order for the safety program to operate effectively all Superintendents shall be responsible for the following:

1. In the absence of an appointed Safety Officer it is the responsibility of the Superintendent to appoint the Safety Officers duties to the Field Supervisor or perform them himself.
2. Safety inspect all new job sites and periodically inspect ongoing jobs to determine safety policy compliance
3. Provide each job site with all necessary safety equipment
4. Be familiar with and follow the company Safety and Loss Control policy
5. Serve as a member of the Safety Committee
6. Report all accidents immediately to the Corporate Office including all pertinent details
7. Account for all employees who do not show up for work
8. Indoctrinate newly hired employees to the Safety and Loss Control policy
9. Take prompt corrective action whenever an unsafe condition arises. Warn crew members when unsafe work practices are performed
10. "Sell" safety to all crew members through tool box safety talks and personal example
11. Notify corporate office of all OSHA inspections immediately
12. Be familiar with and follow the practical guidelines to control water damage
13. Be aware of and follow the theft prevention policy

SAFETY OFFICERS RESPONSIBILITIES:

In order for the safety program to be effective the safety officer will be responsible for the following:

1. Be sure the Superintendent has safety inspected all new job sites and has filled out the job specific safety meeting form
2. Be sure the Superintendent has provided each job site with all necessary safety equipment
3. Be familiar with and follow the company Safety and Loss Control policy
4. Serve as a member of the safety committee
5. Keep minutes of all items discussed at all of the safety meetings and file them in the safety policy book
6. Take prompt corrective action whenever an unsafe condition arises. Warn all crew members when unsafe work practices are performed
7. Be sure all new employees have had their indoctrination to the Safety and Loss Control policy
8. Replenish and replace first aid kits as proscribed in First Aid section
9. Receive minimum training of 10 hour OSHA safety course.
10. Visually check all fire extinguishers once every month and have them re-filled annually.

EMPLOYEE RESPONSIBILITIES:

Good safety practice and accident prevention is the responsibility of every employee. Each employee is responsible for knowing and following the general provisions of the company Safety policy.

All employees shall abide by the following rules:

1. Report unsafe conditions to your Superintendent
2. Report ALL injuries IMMEDIATELY to your Superintendent and call the Corporate office
3. Wear hard hats when working below the roof line
4. Use eye and face protection where there is danger from flying objects or particles, such as when grinding, chipping, burning and welding, etc.
5. Dress properly: Wear appropriate work clothes, gloves and shoes or boots. Loose clothing and jewelry should not be worn
6. Never operate a machine unless all guards and safety devices are in place and in proper operating condition
7. Keep all tools in safe working condition. Never use defective tools or equipment. Report any defective tools or equipment to your Superintendent
8. Properly care for, and be responsible for all personal protection equipment
9. Keep out from under overhead loads
10. Do not operate machinery if you are not trained to do so
11. Do not leave material in aisles, walkways, stairways, roads, or other paths of travel
12. Practice good housekeeping at all times
13. Riding any moving equipment is prohibited except on seats provided
14. Place ladders on a substantial base. Do not use ladders with broken, split or missing rungs or rails. All ladders are to extend at least three feet above the landing platform and be securely fastened. Proper ladder placement is: one quarter total height equals base length
15. All flammable liquids must be stored in a safety container. Engines must be shut off when refueling
16. Smoking is prohibited anywhere near flammable liquids
17. Compressed gas cylinders (propane, oxygen, acetylene, etc.) must be secured in an upright position. When not in use, caps must be securely in place
18. When burning or welding is being done, a fire extinguisher must be close at hand at all times
19. The use or possession of, or being under the influence of alcohol or drugs while on the job is prohibited and subject to immediate dismissal
20. All safety rules must be obeyed
21. Comply at all times with all know federal, state and local safety laws, employer regulations and policies
22. Horseplay causes accidents and will not be tolerated
23. Wear seat belts at all times in company owned vehicles

Violations of any of these rules may be cause for immediate disciplinary action as described on page 2.

SAFETY EQUIPMENT AVAILABLE:

The following safety equipment is available to all company personnel. Additional equipment shall be made available as the need arises.

1. SAFETY HARNESSES AND FALL ARREST SYSTEMS
2. RESPIRATORS
3. EYE GOGGLES
4. BACK BRACES
5. HARD HATS
6. SAFETY ROPES
7. EARPLUGS
8. PARAPET FENCE
9. SAFETY GATE FOR SHOOT
10. CONES
11. FIRST AID KITS
12. FIRE EXTINGUISHERS

13. WARNING LINES

14. RAPELLING GEAR OR POSITIONING EQUIPMENT

WAREHOUSE AND YARD SAFETY:

Liquid Propane Storage:

1. No smoking or open flames shall be permitted within 50 feet of the LP gas storage
2. An ABC rated fire extinguisher shall be available in the LP gas storage area at all times. Check the extinguisher on a quarterly basis and initial the inspection tag
3. Filled LP gas cylinders shall be stored in an upright position and chained
4. Safety gates shall be open while anyone is inside the LP gas fence
5. All LP gas cylinders shall have a safety collar and be in sound condition
6. Defective LP gas cylinders shall not be filled and should be tagged for repair

MAINTENANCE SHOP SAFETY:

Power Operated Hand Tools

1. Electrical power operated tools shall either be of the approved double insulated type or grounded by use of a 3 wire plug
2. Pneumatic power tools shall be secured to the house by a positive means to prevent the tools from becoming accidentally disconnected. Safety clips or retainers shall be securely installed and maintained on pneumatic impact tools to prevent attachments from being accidentally expelled
3. Safety glasses shall be used during all chipping and grinding operations and when using compressed air for cleaning purposes

Batteries

1. Batteries shall be stored in a ventilated area to prevent explosions
2. Any acid spills in the shop area shall be flushed and neutralized
3. Charging:
 - A. Battery charging shall be done in a well-ventilated area
 - B. Battery fill caps shall be removed during charging
 - C. On sealed batteries, the charger shall be set on low charge. Charging shall continue until the charging voltage drops below 14 volts and the amperage drops below 4 AMPS or until 30 minutes has elapsed
 - D. An emergency eye wash station shall be located and maintained in the vicinity of the battery charging area

Gasoline

1. No more than 10 gallons of gasoline shall be temporarily stored in the shop area and shall be stored in approved safety cans
2. Gasoline shall not be used as a cleaning solvent in the maintenance shop
3. No smoking shall be permitted during fueling operations and engines shall be shut down

Prior to dispatch to job sites, equipment shall be inspected to insure that it is in operational order and all required safety devices are in place and functional. Equipment that is inoperable or unsafe shall be red tagged to prevent dispatch to job sites.

When vehicle engines are running, the overhead shop doors shall remain open or the exhaust vented to the outside.

Kettles that are fired for cleaning shall not be left unattended. An ABC rated fire extinguisher shall be immediately available at the cleaning site. Employees engaged in kettle cleaning shall be suitably attired to include long sleeve shirt, work gloves and safety goggles.

Tag-Outs

If at any time any tool or piece of equipment is found to be unsafe it must be immediately "Tagged-Out" and removed from the active work area. This is to include:

- Missing, broken or defective safety equipment ie guard
- Cracked or exposed electrical cord
- Load supporting member that is bent, cracked, broken or otherwise damaged
- Frays or tears
- Any other damage that would negatively affect the safe use or operation

“tag-Out” will be defined as marking the item with red tape in a conspicuous manner and attaching a note regarding its reason for being “tagged-out.” Any person may tag-out any piece of equipment at any time. No one is to remove the red tape unless they have personally talked to the person who tagged it out and have remedied all issues. A ladder, or fall protection device should not be tagged out, but simply destroyed or rendered unusable by cutting it in half.

Blood borne Pathogens-GENERAL POLICY:

- No person should ever clean up, or physically encounter blood or other bodily fluid without proper protective gloves.
- No person should administer First Aid care without proper protective gloves.
- DLC Inc recommends that all employees have an annual physical check-up including blood work to maintain good health and monitor possible blood borne diseases.
- All employees must inform the employer of any health conditions that could be spread to other employees including blood borne pathogens that could be transmitted through bodily fluids.
- In the event of blood or bodily fluid contamination of a jobsite, all work must cease in that area until it has been thoroughly cleaned with appropriate cleaners.
- A hepatitis B vaccine will be available to any employee who requests one at no cost to the employee.
- Lavatory facilities including hand washing/sanitizing station will be made available on every job site.
- A copy of the Safety and Loss control policy including the Blood Bourne Pathogens Exposure Plan will be store in the safety binder on the jobsite and will be available to all employees at any time.
- If you are exposed to blood or other bodily fluids, wash the area immediately and then have a blood test performed by a medical professional. This test will be provided at no cost to the employee.
- Any record of vaccine, exposure, or other medical record will be kept in the employee file for 30 years after end of employment.
- Safety goggles are available in the job box and rubber gloves will be available to all employees in the first aid kits store in all company vehicles and job boxes. All other appropriate PPE will be available on site. If it is not, it will be provided immediately on request.

VEHICLE SAFETY-GENERAL POLICY:

The following specific rules apply to the operation of all company vehicles owned or leased.

1. All drivers shall follow the rules established by the state in which they are operating
2. All employees shall drive in a courteous manner and employ defensive driving techniques
3. Posted speed limits shall be followed. In the yard and at construction sites speed shall be limited to 10 mph
4. Vehicles shall not be operated while under the influence of alcohol or drugs. Violation will be just cause for dismissal
5. In the event of an accident involving bodily injury or property damage the driver shall:
 - A. Stop immediately
 - B. Take all necessary precautions to prevent further accidents at the scene
 - C. Render reasonable assistance to injured persons
 - D. Provide on demand your name and address, the name and address of the company, the vehicle tag number and if requested exhibit your license
 - E. As soon as possible report all details of the accident to the corporate office
 - F. If involved in an accident with an unattended vehicle and the owner cannot be located, the operator shall leave in or on the vehicle his name and address and the name and address of the company
 - G. Obtain names and addresses of any witnesses
6. Towed loads shall be attached to the vehicle using an approved hitch. In addition, two safety chains or cables shall be attached between the vehicle and towed load. Trailers must have operating lights, brake lights, turn signals and when necessary, brakes
7. All cargo carried in open truck beds shall be secured to prevent shifting or falling from the vehicle. Any material or equipment whose centerline falls above the side boards or tailgate of the vehicle shall be secured by use of tie downs
 - A. On long hauls the driver shall inspect the load after the first 25 miles to insure the load is still properly secured

- B. LP gas cylinders shall be secured in the vehicle in an upright position
8. Trucks with a restricted view to the rear shall be equipped with a backup alarm or the vehicle operator shall use an observer to indicate when it is safe to back up
 9. All vehicles shall be inspected daily for oil level and tire pressure and wear. All vehicles shall be inspected weekly for: oil level, tire pressure and wear, brakes, all lights and turn signals, steering mechanism, cleanliness of bed and cab. All serious problems shall be reported immediately to the maintenance department
 10. All employees driving company owned or leased vehicles shall wear the safety belts provided in their vehicle at all times
 11. All operators shall inspect their crane at the start of each day to insure proper operating condition

VEHICLE SAFETY-FORKLIFT AND FRONT END LOADER:

1. The forklifts, front end loaders and all similar rental equipment are to be operated only by company approved and trained personnel
2. Forklift and front end loader vehicles on job sites are not to have the keys left in them unattended
3. Wear safety belt at all times especially during loading and unloading from trailers and when lifting heavy loads
4. Exceeding the operating limitations may cause damage to the vehicle and/or cause it to overturn resulting in serious injury or death
5. Except for the operator, no one else is allowed on the vehicle when it is in motion
6. Avoid lifting in the vicinity of electrical power lines. When this is impractical, use extreme caution and an observer is necessary
7. Always keep lifted loads clear of overhead obstructions
8. Loads shall not be lifted on un-level or shifting surfaces
9. Avoid high speed operation especially in vehicles which steer with the rear wheels
10. The operator shall use an observer whenever his vision is obstructed from the loads being lifted
11. All forklift and front end loader vehicles are to be inspected daily to insure proper operating condition

RIGGING SAFETY-GENERAL POLICY:

- All rigging (chains, straps, platforms and hoist material) must be thoroughly inspected before each use and after any snag or hang-up during use.
- If damaged, rigging material should be immediately rendered incapable of use by cutting them in half and disposing of them.
- Riggins hold never be used to lift a load greater than its printed rated capacity.
- Rigging should be stored in a designate location either on-site or in the shop. It should not be left in a place where it can be trod upon or otherwise damaged.
- Rigging must not be used for anything other than its intended purpose.
- All loads must have a tag line attached and attended while suspended
- Only hooks with an automatically engaging latch may be used in rigging.
- No person should ever walk under a suspended load, nor should any load ever be hoisted over a place where people are located. All people must be evacuated from underneath the suspended loads path of travel before beginning lift.
- The loads path of travel must be marked off to keep people out during entire lift operation.

RECORDS AND COMMUNICATION – GENERAL POLICY:

- Safety records, medical history, and training records will be maintained and kept in the employee file for no less than 30 years.
- An employee may request and be granted access or copies of their personal records at any time.
- Any employee may request and will be granted a copy of the current OSHA 300 form or any previous OSHA 300a form from the past 3 years.
- OSHA 300a form from the previous year shall be conspicuously posted in the shop

HAZARDOUS MATERIALS - GENERAL POLICY:

It is the policy of Dave Loden Construction, Inc. to train its employees in the safe and proper handling of all hazardous materials. This training shall be accomplished by initial indoctrination training for all new employees and annual recurrence training for all current employees. This training shall include: an inventory of all hazardous materials used, the physical and health hazards associated with these materials, the availability and use of protective equipment, the required labeling of hazardous materials and content and availability of material safety data sheets.

1. Hazardous Material Inventory, Physical and Health Hazards and Personal Protection Equipment

A. There are many materials used in roofing operations that can be hazardous to your health if used improperly. These hazards can be physical hazards such as fire, reactivity or explosion and health hazards meaning potential damage to your body

B. Flammables and Solvents - Solvents such as xylene, mineral spirits, methyl ethyl ketone. Fuels such as gasoline and diesel and the adhesives, primers, cleaners and caulks used in single ply roofing are flammable with a flashpoint of less than 100F: Physical hazards are fire and explosion. These materials shall be stored and transported in an approved safety can or if the material is very thick and hard to pour it may be kept in its original container provided that it is properly labeled. No smoking or open flames shall be allowed in the vicinity of flammable materials. Breathing the fumes of these materials can cause nausea, headaches, dizziness, weakness and in extreme cases unconsciousness, brain damage, lung and other forms of cancer and death. Work up wind and in well-ventilated area whenever possible. Wear a vapor type respirator in poorly ventilated areas or whenever vapors are noticeably present. Skin or eye contact can cause irritation, redness, inflammation and increased sensitivity. Skin surfaces should be washed with soap and water and eyes should be flushed with water or eye solution for 15 minutes. Call for medical help if necessary. Wash contaminated clothing before reuse. Wear safety glasses, rubber gloves and long sleeve shirt when handling these materials. Swallowing these materials can cause nausea, vomiting and death. Do not induce vomiting. Keep person calm, warm and lying down. Call for medical help immediately.

C. Corrosives - Strong alkali or acid base cleaners are used to clean masonry and other surfaces. Avoid all personal contact with these materials. Wear safety goggles, appropriate rubber clothing, gloves and boots to cover all exposed areas. Skin or eye contact can cause irritation and severe burns. Skin surfaces should be washed with soap and water and eyes should be flushed with water for 15 minutes. Call for medical help if necessary. Wash all contaminated clothing before reuse. Breathing the fumes of these materials can cause irritation and inflammation. Work upwind and in a well-ventilated area whenever possible. Wear a vapor type respirator in poorly ventilated areas or whenever vapors are noticeably present. Swallowing these materials can cause irritation and severe burns. Drink large amounts of water. Do not induce vomiting. Keep person calm, warm and lying down. Call for medical help immediately. Physical hazards are reactivity with some organic materials, oxidizers, metals and other acids and alkalis. Consult the specific material safety data sheet for more information.

Hazardous material Communications-GENERAL POLICY

- SDS for all hazardous material used will be kept both on site in the safety binder and in the office. A copy of SDS sheets will be provided for any employee or customer who requests one.
- On sites with multiple employers or multiple trades, SDS sheets will be provided to the principle or prime contractor to be distributed to all other companies.
- The superintendent must keep written record of all hazardous materials on any particular site and be prepared to provide this to customers or management upon request.

- All hazardous materials must be stored in containers retaining the hazardous material markings and warning. No label or warning should be removed from any container containing hazardous material.
- Any container used to transport or administer chemicals must also have appropriate warning and marking labels.
- Any hazardous chemical waste must be stored in an appropriately labeled sealed container and properly disposed of at an approved facility. Burning, throwing away, pouring out or any other method of disposal is specifically prohibited.

JOB SITE SAFETY-GENERAL POLICY:

1. Each job site is to be inspected weekly by the Superintendent. An inspection report shall be filed in the job file
2. Special hazards, such as electrical lines, roof openings, unsafe decking, radiation, flammable vapors, etc. shall be discussed with all crew members by the Superintendent prior to exposure to the hazards. These hazards will be identified and marked/protected during the job start-up safety training.
3. All field personnel shall wear personal protective equipment when necessary such as long sleeve shirts, gloves, safety glasses, ear plugs, etc.
4. All mechanical equipment shall be inspected daily by the Superintendent to insure that it is in proper working order and that all required safety devices are in place and working. Inoperable or unsafe equipment shall be removed from the job site as soon as practical and turned in for repair
5. An ABC rated fire extinguisher shall be readily available for each operation using hot bitumens, open flames, mechanical equipment, power tools or flammable liquids
6. All personnel working below the roof line shall wear a hard hat
7. All personnel shall leave the roof when electrical storms or high winds are present, except for emergency repairs
8. An adequately stocked first aid kit shall be kept on the roof whenever two or more persons are on a job site for two or more days. Refills are available from the corporate office
9. All flammable liquids shall be stored in an approved safety can
10. All job sites lasting two or more days shall have the emergency telephone numbers posted in a prominent location
11. Unusual job conditions that could endanger the life of any employee or bystander or cause property damage shall be reported to the Safety Officer immediately. Specific safety orders covering the unusual condition shall be written and provided to the crew
12. Heavy objects of approximately 100 pounds and over shall be lifted by more than one person. Lift heavy objects by keeping your back erect and lifting with your legs
13. A safety citation shall be issued to the job site Superintendent if the Safety Officer finds any safety violations during his inspection. All violations shall be corrected immediately unless otherwise instructed
14. Sanitary drinking water shall be available on all job sites at all times
15. Rope used to support personnel or as a lifeline shall be synthetic such as nylon, Dacron or polypropylene and of 500LBS rating or greater.
16. All operators of spray equipment shall warn building owners and other of the possibility of over spray. They shall be aware of wind speed and direction before starting to spray. Spray operations shall not be done during moderate or high winds
17. No employee is ever allowed to perform any task or operate any tool or equipment that they have not specifically been trained on. If you need to do something you have not been trained on, immediately inform your supervisor to receive training or have someone who has been trained do the task.
18. No material, tool, or other object shall ever be place on top of a parapet wall or within 2' of an open edge.

JOB SITE SAFETY- FIRE PREVENTION:

1. An ABC rated fire extinguisher shall be readily available for each:
 - A. Open flame torching operation
 - B. Kettle in operation
 - C. Job site using mechanical equipment, power tools, flammable liquids or hot bitumens

2. All flammable liquids shall be stored in approved safety cans. Hard to pour liquids may be stored in their original containers provided that they are properly labeled
3. All flammable materials and containers shall be stored in a manner to prevent fire and/or explosion
4. Engines shall be shut down before refueling. Spilled fuel shall be cleaned up prior to restarting
5. Specific fire prevention policies regarding torch applied systems, kettles, mechanical equipment. LP gas, and hazardous materials can be found in their safety section
6. No smoking or open flames shall be allowed in the vicinity of flammable materials
7. All fire extinguishers should be checked on the first work day of each month and must be re-certified/filled on the first work day of the year.

JOB SITE SAFETY - FIRE EXTINGUISHER USE:

1. Pull out discharge pin to arm fire extinguisher
2. Stand back the recommended number of feet, approximately 3-6 feet depending on the size and type of the extinguisher
3. Discharge extinguisher in a slow sweeping motion at the base of the fire until extinguished
4. Maintain fire watch for minimum of one hour to insure that the fire is out
5. All fire extinguishers are to be replaced or recharged before resuming operation

JOB SITE SAFETY - LP GAS CYLINDER SAFETY:

1. Specific LP gas cylinders policies regarding torch applied systems, kettles and the LP gas yard facility can be found in their safety sections
2. Cylinders shall be stored and transported firmly secured in an upright position with the valve closed and a safety collar in place around the valve
3. Cylinders shall not be dropped or allowed to strike each other
4. Cylinders shall be moved while secured to a hand truck or rolled on the bottom edge. They shall not be laid down and rolled or dragged
5. All cylinders, hoses, burners and regulators shall be inspected daily prior to use for proper functioning
6. No smoking or open flames shall be permitted within ten feet of any cylinder
7. Cylinders shall not be hoisted to the roof by the safety collar unless it is welded to the bottle. Cylinders with screw on type collars shall be hoisted by means of a two position choker while upright or in an approved container
8. Cylinders shall not be defrosted by application of heat in any way

JOB SITE SAFETY - FALL PROTECTION:

- A fall protection system is to be used any time any person is working on a surface that has an unprotected edge that is at a height at or greater than 6 feet. This fall protection system must meet all criteria for OSHA 29 CFR subpart M.
 - Every employee will complete a fall protection training certification on or before their first day of work and annually after that date. A copy of the fall protection training is attached at the end of this document.
 - Fall protection systems will be assessed and designed on a site to site basis by the superintendent and the safety officer but, shall generally consist of the following:
1. Low Slope Roofs (Over 6 feet high)
 - A. During the performance of roofing operations on low slope roofs greater than 50 feet in width, with a parapet of less than 42", a warning line system, railing system, personal fall arrest systems, or combination of the three will be used.
 - A warning line shall be erected and maintained. The warning line system shall be erected on all sides of the work area not less than six feet from the roof edge. When mechanical equipment is being used the warning line shall be a minimum of ten feet from the edge on the sides perpendicular to the direction of travel of the mechanical equipment
 - The railing system shall have a top rail height of at least 42" +3" above the work surface and will have intermediate rails spaced no more than 19" apart.
 - Personal fall arrest systems shall consist of an anchor capable of supporting 5000LBS, Life-line, rope grab, shock absorbing lanyard and full body harness.

- B. On roofs less than 50 feet in width, a safety monitoring system can be used instead of a warning line. One member of the crew, who is in a position to observe, shall be designated to warn other crew members when they are in danger of falling
- C. Mechanical equipment shall not be operated or stored within six feet of the roof edge
- D. Materials shall not be stored within six feet of the roof edge
- E. Hoisting areas and bitumen pipe outlet areas shall be guarded by four feet of guardrail on each side
- F. All roof openings shall be guarded by a standard railing or a cover that is secured against accidental displacement and capable of supporting a minimum of 200 pounds
- G. All unsafe decking shall be guarded by a standard railing or covered in such a way as to make the appropriate human, material and equipment travel safe

2. High Slope Roofs (Over 6 feet high)

- A. Personnel working on high slope roofs shall be protected by:
 - 1. A safety harness, lanyard and lifeline secured to an anchorage or structural member capable of supporting a dead load of 5400 pounds. Lifelines and lanyards shall be minimum of 3/4 inch synthetic rope and secured in a manner that prevents a fall of more than six feet from the roof edge or:
 - 2. A standard railing along all open sides of work area or:
 - 3. A scaffold or work platform that conforms to the standards described under scaffold safety
 - 4. A parapet wall no less than 42 inches high
- B. All roof openings shall have a cover that is secured against accidental displacement and is capable of supporting a minimum of 200 pounds
- C. All unsafe decking shall be covered in such a way as to make the appropriate human and material travel safe
- D. Mechanical equipment shall not be used on high slope roofs

*In the event someone should fall and be caught by a fall arrest harness system, every effort must be made to evacuate them as soon as possible.

- Emergency services should be notified immediately and informed that the situation is very time sensitive.
- If an individual who is certified in high angle rescue is present they should immediately begin rescue procedures such as their training instructed.
- No one who has not been trained and certified in high angle rescue should ever attempt to rescue someone hanging from a harness.

DEFINITIONS:

- 1. Low slope roof: A roof with a slope of less than 3 inches in 12 inches
- 2. High slope roof: A roof with a slope 3 inches in 12 inches or greater
- 3. Warning lines: Rope, wire or chain, flagged with visible material every six feet and supported by stanchions in such a manner that the low point is approximately three feet above the roof surface
- 4. Open side roof: Any roof edge where there is no parapet three feet or more in height
- 5. Mechanical equipment: All motor and human propelled wheelbarrows and mop carts
- 6. Standard railing: A railing capable of supporting a load of 200 pounds and consisting of a top rail, and intermediate rail and toe board. The top rail shall be 42 inches high and the toe board shall have a height of 4 inches

JOB SITE SAFETY - ELECTRICAL PROTECTION:

- 1. All 110 volt electrical power used during company operations, including portable generators, shall have a functioning ground fault circuit interrupter in use to prevent electrocution. This unit shall be placed at the source of the electrical power
- 2. All ground fault circuit interceptors shall be checked daily with the integral test switch to insure proper functioning. Return faulty units to the shop for repair
- 3. All extension cords used during company operations shall be a minimum of 12 gauge and have three operating prongs at the outlet
- 4. All electric hand tools shall have three operating prongs at the plug outlet unless specifically marked as being double insulated

5. All electric hand tools and extension cords shall be inspected daily before use to determine that the cords are in good shape and that all three prongs are in place and operating. Return faulty equipment to the shop for repair
6. All guidelines including safe working distance from powerlines included in the attached electrical safety pamphlet must be adhered to.

JOB SITE SAFETY - TEAR OFF SAFETY:

1. A tear off chute shall be used whenever the distance to be dropped is greater than 20 feet
2. Whenever tear off is being dropped without a chute, that landing area shall be roped off
3. Clean-up of the landing area will only be permitted when dropping of tear off debris is stopped
4. All exposed decking shall be inspected by the foreman to determine its ability to withstand roofing traffic. Unsafe decking will be covered or protected in such a way as to safely allow for necessary roofing traffic
5. Safety glasses or goggles shall be worn by all members of the crew during tear off operations
6. Crew members exposed to pitch, dust or fumes are encouraged to cover as much exposed flesh as possible
7. Dust masks shall be worn by all crew members exposed to dusty conditions

JOB SITE SAFETY - LADDER SAFETY:

1. All ladders used by company personnel shall:
 - A. Be placed on a firm base 1/4 of the building height away from the building
 - B. Have safety feet at the base to prevent slippage
 - C. Be firmly secured to the edge to prevent sliding
 - D. Extend a minimum of three feet above the roof edge
 - E. be rated class 3 or have a weight rating of no less than 300lbs.
 - F. Meet all OSHA requirements for weight rating and rung spacing.
2. All ladders shall be inspected daily for loose or broken rungs, split side rails, etc. Faulty ladders shall be returned to the yard for repair or destroyed
3. Avoid using aluminum ladders in the vicinity of electrical power lines. When this is impractical, use with extreme caution
4. Wooden ladders shall be coated with linseed oil when new and periodically when dried out
5. Ladders shall be taken down at the end of the day to prevent access to the roof
6. All ladders must only be used for their intended use. I.E. Never use a step ladder for access, only as a work platform.

JOB SITE SAFETY - CONVEYOR AND HOIST SAFETY:

1. All hoists shall be counter balanced with a mechanically attached metal pan and iron or concrete weights only. The amount of counter balance shall be no less than one half the amount being hoisted
2. The weight hoisted by a motorized or hand hoist shall not exceed the manufacturer's recommended limit
3. Hoist support frames shall be placed on plywood or planking to spread the load and prevent damage to the roof
4. All hoists and conveyors shall be inspected daily before use for frayed cables, broken welds, bent struts, etc. Faulty hoists or conveyors shall be removed from service immediately
5. Hoists shall be positioned so that loads are lifted straight up and not pulled at an angle
6. Ground personnel involved in hoisting and conveying operations shall wear hard hats and remain clear of suspended loads. Use a tag line when necessary to control hoisted loads
7. Engine fuel level shall be checked frequently on motorized hoists and conveyors to prevent engine stoppage during lifting operations
8. Loads shall not be lifted unless roof personnel are positioned to receive them
9. Hoist lines shall be secured at the end of the day
10. Hoist and conveyor operators shall be completely familiar with proper operation before operating
11. Hoisting or conveying or personnel is forbidden
12. Ground areas around hoists and conveyors shall be roped off to keep out pedestrians

JOB SITE SAFETY - SCAFFOLD SAFETY:

In addition to those procedures contained in the general policy, the following rules apply to the use of scaffolding: Only scaffolding erected under the standards described in this enclosure are authorized for use. Other work platforms required by unusual job conditions shall be cleared by the company Safety Officer and erected under the supervision of the field Superintendent

- A. All scaffolding will be inspected prior to use by the safety officer to ensure all precautions are taken to ensure proper weight bearing rating as well as protection from falling objects, falls, and other hazards such as electrical lines.
- B. Before working on or off of scaffolding, every employee will partake in a job specific safety training that includes scaffold load capacity, fall hazards, electrical hazards, falling objects, and the proper use of personal fall arrest systems.

1. Tubular Welding Frame Scaffold:

*NO SCAFFOLD WILL EVER BE ASSEMBLED, DISASSEMBLED, OR ALTERED EXCEPT UNDER THE SUPERVISION OF A COMPETANT PERSON TRAINED IN SCAFFOLD ERECTION.

A. A metal tubular scaffold, including all accessories such as braces, screw jack, leveling shoes and ladders shall be constructed to safely support four times the minimum load

B. Tubular frames shall be spaced no more than seven feet apart in width

C. Diagonal braces shall be used to connect all tubular frames, front and rear. Braces shall be attached to the frames so that the scaffold remains square, plumb and rigid

D. The scaffold shall be square to the ground and to the building. On un-level ground use screw jack leveling shoes to level the scaffold. On soft or shifting ground use two inch by ten inch planks below the leveling shoes for stability

E. Tubular frames shall be placed on top of each other by using collar type coupling pins

F. Where there is danger of uplift, tubular frames shall be locked together vertically by use of number 12 hanger wire

G. Scaffolds over 26 feet in height or 30 feet in length shall be secured to the building. Securement intervals shall be every 26 feet for height and 30 feet for length

H. All planks shall be minimum two inch by ten inch scaffold grade lumber

I. All planks shall extend a minimum of six inches and a maximum of 12 inches past the frame or overlap a minimum of 12 inches with both planks supported by the frame

J. All scaffold work platform shall be protected by a standard railing

K. Use a ladder or interior access whenever possible to gain access to the roof. When this is not possible, a scaffold tower may be used for access only if it is built in the following manner:

1. Ladder rungs are continuous on one side of the scaffold tower

2. The work platform is built with one complete frame section above it to allow for an easier transition from climbing to stepping onto the platform. If this is done with only one scaffold tower, then this tower shall be designated as the tower to be climbed for access to the roof

2. Manually Propelled Mobile Scaffold

A. A manually propelled mobile scaffold is a tubular welded frame scaffold constructed as outlined in paragraph two above, but with the following additional requirements.

B. The height of the scaffold shall not exceed four times the minimum base dimension of the scaffold. If the scaffold is to be moved with workmen on the work platform, the height shall not exceed V_i the minimum base dimension

C. Casters must be strong enough to support four times the minimum base dimension of the scaffold. All casters shall be provided with a positive locking device to hold the scaffold in position

D. The work platform shall be tightly planked the entire width of the scaffold except for an entrance opening

E. A ladder or stairway shall be built into the scaffold and located in such a manner that its use shall not cause the scaffold to tip

F. No employee shall ride a moving scaffold unless:

1. The surface is level, smooth and free of obstructions

2. The casters are equipped with rubber or resilient tires

3. All tools and materials are secured or moved from the work platform

- G. Force to move the scaffold shall be applied as close to the base as practical
4. Roof (chicken) Ladder
- A. A roof ladder is a plank with evenly spaced cleats used for movement of workmen but not materials
 - B. The crawl board plank shall be a minimum of ten inches wide and one inch thick
 - C. Cleats shall be a minimum of one inch by 1 1/4 inch and equal in length to the width of the crawl board. Cleats shall be equally spaced and not more than two feet apart
 - D. Nails shall be driven through the cleats and clinched on the underside of the crawl board
 - E. The crawl board shall be secured to the roof by a ridge hook or other effective means
 - F. A firmly fastened lifeline of 3/4 inch rope shall be strung beside the crawl board for use as a hand hold
 - G. The roof edge shall be protected by a 42 inch parapet standard guardrail, scaffold platform or employees shall use personal fall arrest systems
5. Roofing Brackets
- A. Roofing brackets shall be adjusted to fit the pitch of the roof and spaced a maximum of ten feet
 - B. Brackets shall be secured in place by multiple nails capable of supporting twice the maximum load anticipated
 - C. All planks shall be a minimum two inch by ten inch scaffold grade lumber
 - D. All planks shall extend a minimum of six inches and a maximum of 12 inches past the brackets or overlap a minimum of 12 inches with both planks supported by the brackets
 - E. The roof edge shall be protected by a 42 inch parapet standard guardrail, scaffold platform or employees shall use personal fall arrest systems
6. Inspections
- A. Scaffolding or any work platform shall be inspected by the competent person trained in scaffold erection each day before use to insure that it is safe

JOB SITE SAFETY - MECHANICAL EQUIPMENT SAFETY:

1. All mechanical equipment shall be inspected daily before use to insure proper functioning
2. All motorized equipment shall have the oil lever checked daily and changed at recommended intervals and fuel level checked frequently to prevent engine stoppage. Other daily maintenance items include: grease moving parts and clean cooling fins
3. Engines shall be shut down prior to refueling. All spilled fuel shall be cleaned up prior to restarting
4. Safety glasses or goggles and over the ankle boots shall be worn by the operator and all crew members in the vicinity of: roof cutters, roof sweepers, power spudders, power tear off, circular and chain saws and any other equipment capable of throwing debris
5. All operators of motorized equipment shall make themselves familiar with the proper operation of the equipment before operating
6. Mechanical equipment shall not be used or stored within six feet of any open roof edge
7. Operators of power riding or power driven equipment shall not operate their vehicles in a manner which could cause loss of control or overturn
8. Power riding equipment shall not be operated on a slope which could easily cause overturn. One way to determine this is to park the vehicle with the direction of travel perpendicular to the slope and have the operator, while remaining seated, begin to lean as far down slope as he can. If any of the wheels leave the ground, the slope is too great for safe operation
9. An ABC rated fire extinguisher shall be readily available any time motorized equipment is in use
10. All exposed moving parts shall be properly guarded
11. Mechanical equipment shall not be repaired while it is in operation. Replace all guards after maintenance is finished

JOB SITE SAFETY – First Aid:

- Any person who carries a certificate from a nationally recognized program ie red cross is considered to be a first responder and may administer aid according to their training.
- DLC Inc will pay for any employee who wishes to receive first aid or medical training up to and including the BEC test. It is the responsibility of the employee to find and register for the course. First aid kits that meet the basic OSHA requirements for a construction site first aid kit will be kept in all company vehicles as well as the “job box” and the “safety box.”

- The Safety Officer is responsible for restocking the first aid kit after every use.
- First Aid kits will be entirely replaced once yearly following the annual safety committee meeting.
- In the event a person is injured and requiring care beyond that available on the jobsite, the safety officer is responsible for escorting that person to the nearest emergency care or assigning another uninjured competent and licensed driver to do so.
- In the event of severe injury, emergency services should be summoned to the scene immediately.
- Water will be kept on site at all times to be used for flushing of eyes or drenching of the body in the event of contact with hazardous substance or irritant.

JOB SITE SAFETY - POWDER ACTUATED TOOLS:

1. Only employees who have been trained shall be allowed to operate powder actuated tools
2. Powder actuated tools shall be tested each day before loading to insure that the safety devices are in proper working condition
3. Tools shall not be pointed at any employees. Hands shall be kept clear of the open barrel end
4. Fasteners shall not be driven into cast iron, glazed tile, surface hardened steel, glass block, live rock, face brick, or hollow tile
5. Easily penetrated surfaces shall be backed by a substance that will prevent the pin or fastener from becoming a flying missile
6. Tools will not be used in an explosive or flammable atmosphere

JOB SITE SAFETY –HAND AND/OR POWER TOOLS:

- Safety glasses must be worn at all times while operating hand or power tools
- No safety device or guard should ever be removed or disabled from a power or hand tool
- Hand and/or power tools should be inspected before each use to insure that all guards are in place, the cord is not damaged and the tool is in proper working order.
- If a tool is deemed unsafe or found to have had a safety device or guard removed or tampered with, it should be tagged out and removed from the work area immediately.

JOB SITE SAFETY –PPE – Personal Protective Equipment:

- All personal protective equipment is to be maintained in clean working order free from accumulated dirt, grease or damage
- DLC Inc will provide required PPE for all employees. All employees will be provided with safety glasses, high-visibility vest and a hard hat. Face shields and ear protection will be made available for any activity requiring them. If you have not already been provided with the PPE you feel is necessary, immediately request it from a supervisor and it will be provided.
- Personally owned PPE may be used. DLC Inc takes no responsibility for any damage to personally owned PPE.
- DLC Inc is responsible for ensuring that personally owned PPE is adequate for the task and meets all ANSI and OSHA requirements, as such the foreman or superintendent may inspect personal PPE at any time and will determine if it will be allowed in substitution of Company supplied PPE.
- All PPE must be properly fitting, snug but not tight.
- Damaged PPE should be disposed of and replaced immediately.

JOB SITE SAFETY - SPECIAL HAZARDS:

The following is a list of some of the special hazards that you may encounter on your job site. The foreman shall be responsible to make all crew members aware of all special hazards. Additional special hazards requiring special safety precautions shall be brought to attention of the Safety Officer.

1. Electrical power lines or conduits on or near roof or near material access areas shall be shut off , protected with a warning line, or insulated by a qualified electrician.
2. All roof openings shall be securely covered or protected with a standard railing
3. All unsafe decking shall be properly covered to support the necessary traffic
4. See the building owner or manager if you suspect radiation or flammable vapor hazards on the roof
These hazards shall be neutralized before beginning work

JOB SITE SAFETY - THEFT PREVENTION:

Theft prevention is everyone's responsibility. Here are some guidelines to help you prevent theft at your job site:

1. Keep all valuable materials, tools, and equipment in locked area whenever possible or; on the roof or, in a well-lit area that is difficult to conceal activity
2. Have materials delivered to the job site in a manner to allow for their ready installation
3. Report all suspected thefts immediately to the corporate office

General Rules for Construction Electrical Safety

MAJOR PROTECTIVE METHODS FROM ELECTRICAL HAZARDS

Protection from electrical hazards generally includes the following methods:

- DISTANCE:** Commonly used with regard to power lines.
- ISOLATION AND GUARDING:** Restricting access, commonly used with high voltage power distribution equipment.
- ENCLOSURE OF ELECTRICAL PARTS:** A major concept of electrical wiring in general, e.g., all connections are made in a box.
- GROUNDING:** Required for all non-current carrying exposed metal parts, unless isolated or guarded as above. (However, corded tools may be either grounded OR be double-insulated.)
- INSULATION:** Intact insulation allows safe handling of everyday electrical equipment, including corded tools. Category also includes insulated mats and sleeves.
- DE-ENERGIZING AND GROUNDING:** Protective method used by electrical unities and also in conjunction with electrical lockout/tagout.
- PERSONAL PROTECTIVE EQUIPMENT (PPE):** Using insulated gloves and other apparel to work on energized equipment, limited to qualified and trained personnel working under very limited circumstances.



Electrical Safety Overview

- CORD AND PLUG OPERATED** electric tools with exposed metal parts must have a three-prong grounding plug – **AND** be grounded – or else be double-insulated.
- EQUIPMENT GROUNDING** only works when there is a permanent and continuous electrical connection between the metal shell of a tool and the earth.
- PROPER POLARITY IN ELECTRICAL WIRING IS IMPORTANT:** hot to hot, neutral to neutral, equipment ground to equipment ground. Polarized plugs have a wider neutral blade to maintain correct polarity. **Reversed polarity can kill.**
- CIRCUITS MUST BE EQUIPPED WITH FUSES OR CIRCUIT BREAKERS** to protect against dangerous overloads. Fuses melt, while circuit breakers trip to turn off current like a switch. **Overcurrent protection devices protect wiring and equipment from overheating and fires.** They may, or may not, protect you.
- MOST 120 VOLT CIRCUITS** are wired to deliver up to 15 or 20 amps of current. Currents of 50 – 100 milliamperes can kill you. (1 mA = 1/1,000 of 1 Amp.)
- WET CONDITIONS LOWER SKIN RESISTANCE,** allowing more current to flow through your body. Currents above 75 milliamperes can cause ventricular fibrillation, which may be fatal. Severity of a shock depends on: path of current, amount of current, duration of current, voltage level, moisture and your general health.
- A GROUND FAULT CIRCUIT INTERRUPTER (GFCI)** protects from a ground-fault, the most common electrical hazard. GFCIs detect differences in current flow between hot and neutral. They trip when there is current leakage – such as through a person – of about 5 milliamperes and they act within 1/40 of a second. Test a GFCI every time you use it. It must "Trip" and it must "Reset."
- EXTENSION CORD WIRES MUST BE HEAVY ENOUGH** for the amount of current they will carry. For construction, they must be UL approved, have strain relief and a 3-prong grounding plug, be durable, and be rated for hard or extra-hard usage.
- OVERHEAD POWER LINES CAN KILL.** The three major methods of protection are: maintaining a safe distance, de-energizing AND grounding lines, having the power company install insulating sleeves. Have a power company rep on the site.
- UNDERGROUND POWER LINES CAN KILL.** Call before you dig to locate all underground cables. Hand dig within three feet of cable location!

Effects of Electric Current in the Human Body

Current / Reaction
(1,000 milliamperes = 1 amp; therefore, 15,000 milliamperes = 15 amp circuit)
Below 1 milliampere Generally not perceptible
1 milliampere Faint tingle
5 milliampere Slight shock felt; not painful but disturbing. Average individual can let go. Strong involuntary reactions can lead to other injuries.
6-25 milliamperes (women) Painful shock, loss of muscular control
9-30 milliamperes (men) The freezing current or "let-go" range. Individual cannot let go, but can be thrown away from the circuit if extensor muscles are stimulated.
50-150 milliamperes Extreme pain, respiratory arrest, severe muscular contractions. Death is possible.
1,000 - 4,300 milliamperes Rhythmic pumping action of the heart ceases. Muscular contraction and nerve damage occur; death likely.
10,000 milliamperes Cardiac arrest, severe burns; death probable



Construction Focus Four: Electrocutation
Directorate of Training and Education
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Arlington Heights, IL 60005

Some content adapted from: Central New York COSH, 2007, Construction Safety & Health Electrocutation hazards: Granite module, Grant Number SH-16336-07-06-F-36 from OSHA.

General Rules for Electrical Work

- Non-conductive PPE is essential for electricians. NO METAL PPE!** Class B hard hats provide the highest level of protection against electrical hazards, with high-voltage shock and burn protection (up to 20,000 volts). Electrical hazard, safety-toe shoes are nonconductive and will prevent the wearers' feet from completing an electrical circuit to the ground.
 - Be alert to electrical hazards, especially when working with ladders, scaffolds and other platforms.
 - Never bypass electrical protective systems or devices.
 - Disconnect cord tools when not in use and when changing blades, bits or other accessories.
 - Inspect all tools before use.
 - Use only grounded extension cords.
 - Remove damaged tools and damaged extension cords from use.
 - Keep working spaces and walkways clear of electrical cords.
- RULES FOR TEMPORARY WIRING AND LIGHTING**
- Use Ground Fault Circuit Interrupters (GFCIs) on all 15-Amp and 20-Amp temporary wiring circuits.
 - Protect temporary lights from contact and damage.
 - Don't suspend temporary lights by cords, unless the temporary light is so designed.



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Construction Focus Four: Electrocutation Safety Tips for Workers

Contents:

- Electrical Safety Overview
- General Rules for Electrical Work
- Condensed Electrical Glossary
- General Rules for Construction Electrical Safety
- Effects of Electric Current in the Human Body

Condensed Electrical Glossary

- AMPERE OR AMP:** The unit of electrical current (flow of electrons). • One milliamper (mA) = 1/1,000 of 1 Amp.
- CONDUCTORS:** Materials, such as metals, in which electrical current can flow.
- ELECTRICAL HAZARDS** can result in various effects on the body, including: • **SHOCK** – The physical effects caused by electric current flowing in the body. • **ELECTROCUTION** – Electrical shock or related electrical effects resulting in death. • **BURNS** – Often occurring on the hands, thermal damage to tissue can be caused by the flow of current in the body, by overheating of improper or damaged electrical components, or by an arc flash. • **FALLS** – A common effect, sometimes caused by the body's reaction to an electrical current. A non-fatal shock may sometimes result in a fatal fall when a person is working on an elevated surface.
- EXPOSED LIVE PARTS:** Energized electrical components not properly enclosed in a box or otherwise isolated, such that workers can touch them and be shocked or killed. Some of the common hazards include: missing knockouts, unused openings in cabinets and missing covers. Covers must not be removed from wiring or breaker boxes. Any missing covers must be replaced with approved covers.
- INSULATORS:** Materials with high electrical resistance, so electrical current can't flow.
- LOCKOUT/TAGOUT:** The common name for an OSHA standard. "The control of hazardous energy (lockout/tagout)." Lockout is a means of controlling energy during repairs and maintenance of equipment, whereby energy sources are de-energized, isolated, and then locked out to prevent unsafe start-up of equipment which would endanger workers. Lockout includes – but is not limited to – the control of electrical energy. Tagout means the placing of warning tags to alert other workers to the presence of equipment that has been locked out. Tags alone DO NOT LOCK OUT equipment. Tagout is most effective when done in addition to lockout.
- OHM or Ω:** The unit of electrical resistance (opposition to current flow).
- OHM'S LAW:** A mathematical expression of the relationship among voltage (volts), current (amps) and resistance (ohms). This is often expressed as: $E = I \times R$. In this case, E = volts, I = amps and R = ohms. (The equation, Amps = Volts/Ohms, as used in this curriculum, is one form of Ohm's Law.)
- VOLT:** The unit of electromotive force (emf) caused by a difference in electrical charge or electrical potential between one point and another point. The presence of voltage is necessary before current can flow in a circuit (in which current flows from a source to a load – the equipment using the electricity – and then back to its source).
- WET CONDITIONS:** Rain, sweat, standing in a puddle – all will decrease the skin's electrical resistance and increase current flow through the body in the event of a shock. Have a qualified electrician inspect any electrical equipment that has gotten wet before energizing it.

Dave Loden Construction Fall Protection Training Certification

Name of Person Conducting the training _____

Name of Person Receiving Training _____

The above named individual, as an employee of Dave Loden Construction, has completed instruction and training on the following items:

- Review of OSHA regulation 1926.500, 1926.501, 1926.502, 1926.503:
 - https://www.osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=STANDARDS&p_toc_level=1&p_keyvalue=1926
- The danger of fall hazards
- Identification of fall hazards
- Identification of when fall protection is necessary
 - Any height or potential fall of 6 feet or greater not protected by a rail of at least 42” in height.
- Proper erection, inspection and maintenance of fall protection devices used by Dave Loden Construction
 - Fall Arrest Systems
 - Positioning Systems
 - Guardrail System
 - Warning Line System
- Proper use and limitations of fall protection devices/methods used by Dave Loden Construction
 - Fall Arrest Systems
 - Anchor
 - Life-Line
 - Rope Grab / Positioning Device
 - Shock absorbing lanyard
 - Harness
 - Positioning Systems
 - Guardrail System
 - Warning Line System
 - Safety Monitoring System
 - Controlled Access Areas
- The safety monitoring system including the responsibilities and duties of both the safety monitor and workers
- Procedures for protecting those below from overhead dangers
 - Correct procedures for setting up fall protection at height
 - Correct procedures for handling, securement, and storage of materials, tools, equipment at height

Signature of Owner, Safety Officer or Foreman Conducting Training _____

Signature of Employee _____ Date _____



Substance Abuse Policy

Purpose

Dave Loden Construction Inc., henceforth referred to as DLC, values its employees and recognizes their need for a safe and healthy work environment. Employees abusing drugs and/or alcohol are less productive and are often a critical risk to the safety, security and productivity of our Company. The establishment of a Drug-Free Workplace Policy is consistent with our desired culture and is in the best interest of our company.

Policy

It is the policy of DLC to maintain a workplace free from the use and abuse of drugs and alcohol. Compliance with this policy is a condition of continued employment. It supersedes any other Company policy or practice on this subject. At any time, DLC may unilaterally, at its discretion, amend, supplement, modify, or change any part of this policy. The policy does not represent an expressed or implied contract, and it does not affect your status as an at-will employee. If you have any questions about this policy, please direct them to Erick Loden or Dave Loden.

To maintain a Drug and Alcohol-Free Workplace, DLC has established the following policy effective 6/11/12 with regard to the use, possession, and sale of drugs and/or alcohol. Testing of current employees will begin as appropriate. The policy covers all employees of DLC. Drug and alcohol testing practices will be adopted to identify employees or applicants using drugs and/or alcohol.

Drug and Alcohol Prohibitions

"Illegal Drug" means: any drug (1) that is not legally obtainable, or (2) that is legally obtainable but has not been legally obtained, or (3) that is a controlled substance. The term includes prescribed drugs not legally obtained, prescribed drugs not being used for prescribed purposes, or prescribed drugs exceeding the recommended prescribed dosage.

1. Any employee engaged in any of the activities listed below is in violation of Company policy and subject to disciplinary action:
 - b.) bringing illegal drugs onto Company premises or property, including Company owned or leased vehicles, or a DLC customer's premises;
 - c.) having possession of, being under the influence of, or having in one's system illegal drugs;
 - d.) using, consuming, transporting, distributing or attempting to distribute, manufacturing or dispensing illegal drug;
 - e.) Switching, tampering with, altering or adulterating any specimen or sample collected under this policy or attempting to do so.
 - f.) Operating a company vehicle, rental vehicle (under the company name), or personal vehicle used for company purposes under the influence of alcohol at any time while representing DLC.
2. The Company strictly prohibits the abuse of prescription drugs. (See "Illegal Drugs" previously mentioned.)
3. The company prohibits the use of alcohol on the job or use of alcohol prior to the start of the work day. No employee shall perform any work tasks for DLC while under the influence of alcohol.
4. Any employee refusing to cooperate with or submit to questioning, medical or physical tests or examinations, when requested or conducted by the Company or its designee, is in violation of Company policy and subject to disciplinary action.

Drug and Alcohol Testing

DLC asserts its legal right and prerogative to test any employee for drug and/or alcohol abuse. Employees may be asked to submit to a medical examination and/or submit to urine, saliva, breath, sweat, and/or hair testing for drugs and/or alcohol. Any information obtained through such examinations may be retained by DLC and is the property of DLC.

In particular, DLC reserves the right, in its discretion and within the limits of federal and state laws, to examine and test for the presence of drugs and alcohol in situations such as, but not limited to, the following:

1. **Pre-Employment:** All offers of employment will be made subject to the results of a drug test. Applicants will be required to voluntarily submit to a test and sign an acknowledgment form that will release DLC from liability. The Company will not discriminate against applicants for employment because of past drug abuse. It is the current abuse of drugs which prevents employees from properly performing their jobs.

2. **Post-Accident:** A drug and/or alcohol test will be conducted on all employees involved in accidents occurring during work time or while on company property. Covered accidents include, but are not limited to, accidents that the employee caused or contributed to that involve:
 - a. personal injury to employees or others which necessitates medical attention (beyond first aid) or results in lost work time; and/or
 - b. damage to company property.

Employees are expected to make themselves available for post-accident testing. If circumstances require an employee to leave the scene of an accident, the employee must make a good-faith attempt to be tested and to notify the company of his/her location.

Failure to report any accident that meets the post-accident testing criteria is in violation of Company policy and subject to disciplinary action. Employees testing positive may be ineligible for workers' compensation and unemployment compensation benefits.

3. **Random** - All employees are subject to random, periodic, unannounced drug tests at any time the company deems necessary to maintain a Drug-Free Workplace. This testing is done to ensure public and employee safety; and to protect the company profitability, image, and reputation as a drug-free organization. The rate of random selection will be a percentage of the annual average employee or consortium base. Every employee has an equal chance of being chosen every time a random selection is made.

4. **Reasonable Suspicion:** Any employee may be asked to submit to a drug and/or alcohol test if reasonable cause exists to suggest that the employee's health, safety, or ability to perform expected job duties is currently impaired.

5. **Follow-Up:** Any employee who has been removed voluntarily or otherwise from his/her job duties on the basis of a verified positive drug test, and is later re-hired after passing the Pre-Employment test, will be subject to unannounced drug testing to determine whether he/she is under the influence of drugs. The testing can continue for up to 24 months from the return-to-work date.

Procedures

The drug test will be performed from specimens collected at a qualified collection site or at a company facility using an on-site testing kit. A breath or saliva test will be performed for all post-accident and reasonable-cause situations to determine alcohol levels.

The collection site will take necessary steps to avoid any dilution or alteration of specimens. However, the test shall be conducted in a professional and sanitary manner with due regard for the individual's privacy, dignity, and confidentiality. Proper handling of the specimens will be maintained so that the specimen results can be traced to the proper individual.

The specimen will be tested by Big Horn Urgent Care in Sheridan, WY. They will be tested with a 5 panel rapid test. This test covers the following controlled substances:

- * Cannabinoids (marijuana)
- * Cocaine
- * Phencyclidine (PCP)
- * Opiates (heroin, morphine, codine)
- * Amphetamines (stimulants such as Benzedrine & Dridex)

If the rapid test is positive for drug use, the test will be confirmed by a certified, professional laboratory. Any positive results from this test will be reviewed by a Medical Review Officer (MRO). The MRO will give the employee the opportunity to rebut a positive test result and provide evidence of the proper use of prescription drugs. This will ensure that positive results are not due to legally obtained prescription drugs or other factors which the MRO feels justify the presence of controlled substances.

Any employee who is tested will have the right, upon request, to see the results of his/her test. The employee may also request a retest of the original specimen at a different certified laboratory. The arrangements of this retest will be the employee's responsibility and the test will be performed at the employee's expense. The re-test must occur within 10 business days of

being notified of a positive test result. All drug and alcohol information regarding the test results or failure to complete rehabilitation will remain confidential and will only be given out on a strict need-to-know basis. The company's workers' compensation carrier will be notified of results from post-accident tests that may affect compensability under DLC insurance program.

Disciplinary Actions

The Company reserves the right to use disciplinary actions, up to and including termination of employment, depending upon the seriousness of the violation, the employee's present job assignment, the employee's record with the Company, and other factors, including the impact of the violation upon the conduct of Company business.

DLC maintains a strict zero tolerance drug policy. A positive test result for the use of any illicit drug will result in termination of employment.

Positive test results confirming the use of prescribed drugs will initiate an investigation. The employee will be given an opportunity to provide an explanation and prescription for the drug's use. If it is found that the prescribed drugs are not prescribed to the individual in question, are being used for a purpose other than prescribed or in a dose greater than is prescribed employment will be terminated.

An individual who's employment has been terminated for substance abuse may later re-apply to be re-hired at a time when they can pass the pre-employment drug screening. Such an individual will then be subject to Follow-up testing as described above.

Acknowledgment

As a condition of continued employment, employees must sign the attached acknowledgment form.

**Acknowledgment of Receipt, Understanding, and adherence to Dave Loden
Constructions Safety and Loss Control Policy.**

I hereby acknowledge receipt of Dave Loden Construction’s Safety and Loss control Policy. I have read and understand the policy. I understand that refusal to submit to any portion of this policy may result in disciplinary action up to and including termination.

Initial_____

I have reviewed and was given a copy of the Dave Loden Construction, Inc. Substance Abuse Policy. I understand the contents of the policy as it is presented. I understand that the document is not all inclusive and is subject to change. I understand that refusal to submit to any portion of this policy may result in disciplinary action up to and including termination.

Initial_____

I recognize that the Company's policy for Safety and Loss Control does not constitute an expressed or implied contract of employment.

EMPLOYEE NAME _____

(Printed)

EMPLOYEE SIGNATURE _____

DATE _____

Safety Policy Quiz

This quiz is not all-inclusive or designed to cover all you need to know to be safe. Its purpose is to test that you have thoroughly read the above safety policy and are informed of the safe practices it establishes.

Name: _____ Date: _____

- 1) Who is responsible for maintaining a safe work environment?
 - a. Upper management staff
 - b. Foreman on site
 - c. Laborers and Roofers
 - d. Every employee in the company
- 2) How many rungs (feet) must an extension ladder protrude above the roof level to be considered safe?
 - a. Top of ladder must be flush with top of roof so you can step off over the top
 - b. 1 rung must protrude
 - c. 3 rungs must protrude
 - d. 5 rungs must protrude
- 3) How much Xylene or other chemical can you put into a can for application purposes before it requires a safety label?
 - a. 1 gallon
 - b. ½ gallon
 - c. 1 pint
 - d. NONE
- 4) When is it okay to work without some form of fall protection (adequate parapet, railing, fall arrest system, warning line, safety monitor system, etc.)
 - a. Only for small repairs
 - b. Never
 - c. Only in an emergency repair situation
 - d. Only if you feel really safe doing so
- 5) How many Gallons of gas can you store in a vehicle, in the shop, or in on site?
 - a. 5
 - b. 10
 - c. 15
 - d. 20
- 6) How often will safety meeting be held?
 - a. Yearly
 - b. Monthly
 - c. Weekly
 - d. Daily

- 7) What is the minimum gage wire required for extension cords?
 - a. 8
 - b. 10
 - c. 12
 - d. 14
- 8) When is it okay to operate a power tool or piece of equipment that you have not specifically been trained to use?
 - a. Only when the foreman isn't around
 - b. If no one on-site has been trained
 - c. If it looks really easy
 - d. Never
- 9) What equipment can you fuel up while it is running?
 - a. None
 - b. Only grounded equipment
 - c. Only equipment that stays running throughout the day
 - d. Only equipment without rubber wheels.
- 10) What slope qualifies as "steep slope"?
 - a. 1/12 and greater
 - b. 3/12 and greater
 - c. 4/12 and greater
 - d. 6/12 and greater
- 11) Who must inspect scaffolding for hazards before use?
 - a. The foreman
 - b. The person using the scaffolding
 - c. No One
 - d. The Safety Officer
- 12) How often must your safety training be renewed?
 - a. Annually
 - b. Monthly
 - c. Never
 - d. Always ongoing through weekly trainings and job-start trainings
- 13) Where do you aim a fire extinguisher when trying to put out a fire?
 - a. Over the flames to cover them
 - b. Directly into the biggest flames
 - c. At the base of the flames
 - d. You don't, always evacuate in case of a fire and call emergency help
- 14) When must you wear a seat belt?
 - a. Anytime you are moving in a company owned or leased vehicle or on company time
 - b. When driving on the interstate
 - c. When driving on public roads
 - d. ALL OF THE ABOVE