

SAFETY MANUAL



**BEDROCK
CONCRETE**

March 11, 2020 Revision Date

TO: All Bedrock Concrete LLC Employees, Subcontractors, and Suppliers

RE: Bedrock Concrete, LLC's Policy Statement

Safety in all Bedrock Concrete LLC operations is not just a corporate goal, it is a requirement!

We have written this policy to inform all of the safety operations of Bedrock Concrete LLC.

It is a condition of employment with Bedrock Concrete, LLC that employees adhere faithfully to the requirements of this policy, as well as the safety rules, instructions, and procedures issued in conjunction with it. Failure to do so will result in disciplinary action as outlined in the attached policy.

It is a condition of all subcontracts that this policy and the safety rules, instructions, and procedures issued in conjunction with it, as well as all applicable state, federal and local codes and regulations be followed. Failure to comply is a breach of terms.

All visitors to any Bedrock Concrete, LLC operation, including, but not limited, to employees, suppliers, owner representatives, agents of the architect or engineer, regulatory authorities, and insurance company representatives shall be required to follow all safety rules and regulations in effect during their visit.

Bedrock Concrete, LLC will make every effort to ensure that the operations of employees under our control do not endanger the safety of our employees. To this end all employees are required to report hazardous activities of other employees to appropriate Bedrock Concrete, LLC's officials.

Sincerely,

Beau Hahn and Jon Rhoades, owners
Bedrock Concrete LLC

EMPLOYEE RECEIPT

This manual is a tool to assist in management and employees of safety responsibilities. This manual does not resolve any employee of their responsibility for their own safety.

I have read and received the Bedrock Concrete LLC safety manual and understand the purpose and importance of safety.

Employee Signature/Date

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INTRODUCTION

Bedrock Concrete, LLC has developed this Safety Manual to act as a framework designed to coordinate the safety and health efforts of all employees and subcontractor employees (hereafter referred to as, "employee" or "employees") while performing work on the Bedrock Concrete, LLC premises or Bedrock Concrete, LLC's construction projects.

Each employee is required to develop, implement, and maintain a safety and health program which addresses the hazard(s) to which their employees are exposed. Each employee is charged with the responsibility for conducting their operations in a manner that will provide safe working conditions for all construction related employees, Bedrock Concrete, LLC's employees and for the protection of property and the general public within its scope of work.

In no way does this Safety Manual release employees from the responsibilities and conditions contained in employment documents. Employees are responsible for compliance with all federal, state, and local authority safety regulations which are applicable to each project.

Accident Reporting and Investigation

- All accidents, no matter how minor, shall be reported to management.
- All accident reports shall be submitted no later than the end of the day in which the accident occurred.
- Report needs to be completed prior to the injured employee seeking medical treatment.

TRANSITIONAL DUTY

- Should an injury occurs involving restricted work activity, Bedrock Concrete LLC agrees to evaluate overall work task availability and assign the worker to tasks which match his/her physical restrictions.

EMERGENCY ACTION PLAN

1. EVACUATION

- When notified of an emergency evacuation, employees should immediately evacuate work area or project site through the nearest exit.
- Employees will meet at predetermined meeting location, (parking lot) a minimum of 50ft away from jobsite or affected area in order for Safety team to perform head count.
- Employees will stay in designated area until an all clear is announced.

2. INJURY TO EMPLOYEE

- In the event of an injury 911 or local work place emergency will be called
- Do not allow injured party to be moved
- Only people trained in Basic First Aid shall administer emergency care to the Injured party.
- Directions, maps, phone numbers etc., for clinic can be obtained from the main office.

3. INJURY TO THE GENERAL PUBLIC

- In the event of the general public is injured during the Course of construction Bedrock Concrete LLC must be notified immediately.
- Do not allow person to be moved. (Unless imminent danger is present)
- Notify authorities

4. PROPERTY DAMAGE

- Any property damage on site must be promptly reported to Bedrock Concrete LLC manager. This would include Utility lines, vehicles, equipment, etc.

ACCIDENT Instructions

- a) Call 911 and secure first aid for the injured person if necessary.
- b) Retrieve a manager on duty.
- c) Secure name, address, and telephone number of the injured person and all the details of how the injury or damage occurred.
- d) Witness's name, address, and telephone number.
- e) Details of conversations and the attitudes of the involved parties will be of help.
- f) Report incident to Management of Bedrock Concrete LLC. Management will then report accident to insurance company if necessary.

Employee Conduct

For the safety of all employees employee conduct is important. Please refrain from these actions:

- No gambling, fighting or horseplay
- No smoking in any Bedrock Concrete LLC building, jobsite, company vehicle or near fuel areas. Ask supervisors for permitted smoking areas.
- No weapons while on company grounds or in a company owned vehicle.
- No cameras without prior approval from management on Jobsites or in buildings.

The following procedures will be followed in the event of employee misconduct.

- 1st offense- Verbal warning will be given
- 2nd offense- Verbal warning, written warning for employee file
- 3rd offense- Employee will be subject to termination pending a decision from Bedrock Concrete LLC Management.

Drug & Alcohol Policy

In response to federal requirements for drug-free workplaces, and keeping with Bedrock Concrete, LLC's concern for the health & safety of its workforce, Bedrock Concrete, LLC has instituted the following Drug-Free Workplace Policy.

The Drug-Free Workplace Act specifically requires Bedrock Concrete, LLC to notify each employee that, as a condition of employment, each employee must:

1. Comply with the company's Drug-Free Workplace Policy and
2. Notify Bedrock Concrete, LLC of any conviction for a drug-related offense committed in the workplace with 2 days of the conviction.

The following is a list of prohibitions:

- Being under the influence of a controlled substance on company premises or while on company business, or while in company supplied vehicles.
- Use, possession, manufacture, distribution or sale of illegal drugs on company premises or company, business, in company vehicles or during working hours.
- Unauthorized use or possession, or any manufacture, distribution, dispensation, or sale of a controlled substance on company premises, or while on company business, or while in company supplied vehicles.
- Storing in a locker, desk, company owned automobile or other repository on company premises.
- Failure to notify Bedrock Concrete LLC of any conviction under criminal drug statutes for a workplace within 2 days of conviction
- Failure to sign a statement to abide by Bedrock Concrete LLC's Drug-free work place.

Authorized Use of Prescribed Medications

- An employee undergoing prescribed medical treatment with any drug which may alter his/her physical or mental ability must report this treatment immediately to Bedrock Concrete LLC management who will determine if a temporary job assignment change is necessary during the prescribed treatment.

Drug Awareness Program

- Employees with drug abuse problems should request assistance from management; Bedrock Concrete will treat such requests as confidential and will refer the employee to the appropriate

treatment and counseling services. Employees, who voluntarily request Bedrock Concrete's assistance in dealing with the abuse problem may do so without jeopardizing their continued employment, provided they strictly adhere to the terms of their treatment. These terms include immediate cessation of any use of drugs where required in the program and periodic unannounced testing for a twenty four month period following enrollment in the program.

Voluntary requests for assistance from employees will not, however prevent disciplinary action for violation of Bedrock Concrete's drug free workplace policy.

A violation of Bedrock Concrete's Drug-Free workplace policy is subject to disciplinary action, upto and including termination of employment at the company's sole discretion.

PROGRAM COMPONENTS

Bedrock Concrete, LLC's goal is to achieve an accident-free work environment. The realization of this goal depends heavily upon the active participation and cooperation of all Bedrock Concrete, LLC's employees. For any safety and health program to be successful, at a minimum, the following major components must exist:

Attitude/Culture-It must be clearly defined that safety is everyone's responsibility. Upper management must be fully committed to safety efforts and constantly strive to educate employees on the importance of performing work in a safe manner. Management must routinely demonstrate to employees that the safety measures taken aren't an added burden, but rather are important and an expected part of the process. Employee safety and health must take priority over all other influences during the day-to-day decision-making process.

Accountability-Measurable performance criteria must exist and be routinely analyzed by upper management, in order to ensure all parties are executing their work at an acceptable level with regards to safety. All levels of management and field employees shall be held accountable for safety performance.

Pre-Job planning- Preplanning of all work to minimize the potential for personal injury and property damage. Develop the "Plan" in a project specific nature, which is designed to anticipate and identify hazards before work begins. The plan should help to make all employees aware of the possible dangers involved on a daily basis.

Communication-Proper communication between Bedrock Concrete, LLC and all employees involved in constructing the project is critical. Unexpected hazardous acts and condition on the project site must be immediately reported. Information pertaining to scope specific hazards must be discussed and shared with all affected parties. Bedrock Concrete, LLC empowers each of its employees with "stop work authority" when any immediate hazards are identified.

Training-Bedrock Concrete LLC will develop and implement an educational program designed to stimulate and maintain interest and cooperation of all field management personnel and employees through applicable safety meetings and safety training programs. Training will be conducted on an ongoing basis as determined by Bedrock Concrete, LLC's management.

Evaluation-Management shall periodically review the comprehensive safety measures to determine their overall effectiveness in controlling losses. Prompt investigations must be conducted of all accidents, near misses, and injuries in order to ultimately determine the root cause(s) of the incident, to take appropriate corrective action and to prevent recurrence.

SAFETY TRAINING

Bedrock Concrete LLC will be responsible for providing a safety orientation training session for all workers before they are allowed to work on the project sites. These training sessions will include a summarization of the Safety Manual requirements, as well as, hazards that may be encountered at any stage of construction.

Upon completion of Bedrock Concrete LLC's orientation, documentation of the employee training will be placed in the employee file.

Weekly toolbox talks must also be conducted by each subcontractor for its employees. A copy of the completed toolbox talk form with attendee' names and the topic(s) discussed must be submitted to the Safety Manager on a weekly basis.

Bedrock Concrete LLC expects each employee to adequately train their employees according to applicable safety standards, at a minimum. This training includes but it not limited to: fall protection, fire watch, scaffolds, forklifts, excavation, ladders, confined space entry, respiratory protection, etc.

EMERGENCY ACTION PLAN

In order to maintain a safe and healthful working environment in emergency situations Bedrock Concrete, LLC has developed this emergency action plan to safeguard employees while working on Bedrock Concrete, LLC's site or project sites.

General Evacuation Procedures

When notified of an emergency evacuation employees shall immediately evacuate work areas and project site using the nearest exit to them.

All employees shall meet at the predetermined meeting location (parking lot, etc.) in order for management to conduct a head count and confirm that all employees have safely evacuated the project site. Only trained personnel shall re-enter the site for emergency rescue operations and/or to administer first aid.

Depending on the type of emergency, evacuated employees should be a minimum of 50 feet away from the jobsite/affected area or an equivalent safe distance. Employees should not return to work until management has deemed no further hazards are present.

Proper authorities will be notified of the emergency as soon as possible.

At the evacuation site, the project management personnel shall account for their crews and report any missing personnel to emergency rescuers and the management of Bedrock Concrete, LLC.

Injury to an Employee

In the event that the injury is severe or life threatening, 911 or the local work place emergency number will be called, and the injured party will be transported via ambulance to the nearest emergency care facility.

Do not allow the injured party to be moved (unless imminent danger is present).

Only people having been trained in Basic First Aid or beyond shall administer emergency medical care to the injured party.

Transportation of the injured party, to and from the clinic or hospital, is the responsibility of Bedrock Concrete, LLC.

Injury to the General Public

In the event that a member of the general public is injured during the course of construction, a member of Bedrock Concrete, LLC's management must be notified immediately.

Do not allow the injured party to be moved (unless imminent danger is present).

Only people having been trained in Basic First Aid or beyond shall administer emergency medical care to the injured party.

Proper authorities (fire, police, etc.) shall be notified immediately.

Fire

All employees must comply with the fire safety requirements of the Safety Manual.

Firefighting equipment shall be conspicuously located throughout the jobsite, and readily accessible at all times.

At least one fire extinguisher shall be located on the jobsite for every 1,000 square feet of protected area.

Fire extinguishers shall be periodically tested, inspected, and maintained in operating conditions.

The travel distance from any point of the jobsite to the nearest fire extinguisher, shall not exceed 50 linear feet.

In the event of an emergency evacuation due to fire, the General Evacuation Procedures described above shall be utilized.

Property Damage

Any property damage on the site must be promptly report to Bedrock Concrete, LLC management regardless of who owns the property.

Certain incidents involving property damage may require an employee evacuation from the jobsite.

Public Demonstrations

Any public demonstration (including but not limited to: Parades, any form of rioting, labor disputes, marches, public or organizational protests, etc.) that may affect normal construction activities on the project site, will be addressed at the time of occurrence by Bedrock Concrete, LLC's management.

If necessary, normal construction activity (the may include employee parking, delivery and visitor traffic, entrances and exits to the jobsite, etc.) will be altered, in order to ensure public safety during demonstrations near the Bedrock Concrete, LLC's offices or projects.

If any public demonstration poses a threat to employee safety, necessary steps will be taken to protect those employees. This includes, but is not limited to, notifying authorities of any unlawful acts being committed.

Bomb Threats

In the event that a bomb threat is placed with Bedrock Concrete, LLC, any employee(s) working on site, naming any areas of the jobsite or any combination thereof, the jobsite must immediately be evacuated by all personnel, using the steps outlined above in General Evacuation Procedures.

Proper authorities shall be notified immediately. The jobsite shall remain evacuated of all personnel until a complete investigation is conducted and the situation is deemed free of hazard by the acting authorities.

Weather Related Emergencies

When experiencing lightning, severe thunderstorms, flooding, or tornado threatening weather, Bedrock Concrete, LLC will warn all employees of the current weather conditions, as well as, closely monitor up the minute forecasts and instructions issued by local or state authorities.

When seeking shelter from a tornado, the preferred choice should be as far below the ground's surface as possible. (cellar, basement, etc.)

Employees should not use equipment and small structures as a means of shelter from a tornado, nor should they position themselves in an area where there are materials, tools or equipment being stored nearby or overhead.

Media Contacts

At no time shall any unauthorized person speak to the media regarding jobsite emergencies of any other publicized affair related to Bedrock Concrete, LLC. If necessary, proper statements will be issued by Bedrock Concrete, LLC's management or by an appointed representative of Bedrock Concrete, LLC.

BLOOD BORNE PATHOGENS EXPOSURE CONTROL PROGRAM

Objective

To eliminate or minimize the exposure, of Bedrock Concrete, LLC's employees, to Hepatitis B Virus, Human Immunodeficiency Virus (HIV) or other blood borne pathogens.

Responsibility

1. This plan applies to any employee who may be, in performance of their duties, anticipated to be in contact with skin, eye, mucous membrane, blood or other potentially infectious materials. Any employee whose duties involve providing first aid or medical assistance or janitorial service must be covered by 29CFR 1910.1030.
2. To ensure that Bedrock Concrete LLC, has an exposure control plan, as required by OSHA, in position on all job sites.
3. Bedrock Concrete, LLC supervision will be responsible for ensuring and coordinating compliance with the standard. These are:
 - Review and update the exposure control plan annually or to update whenever necessary to reflect new or modified tasks which affect occupational exposures and to reflect new or revised employee positions with occupational exposures.
 - Ensure that a copy of the exposure control plan is available to employees upon request (in accordance with 20CFR 1910.20).
 - Ensure employees receive proper training.
 - Assure that personal protective equipment is available.
 - Ensure that Hepatitis B vaccination series is offered to each employee with occupational exposure.
 - Ensure that training and medical records are properly maintained.
4. Employees who have occupational exposure are responsible for:
 - Attending training sessions.
 - Using personal protective equipment and following safety work practices.
 - Making doctors' appointments for vaccination series.

Exposure Determinations

Following is a list of job classifications in which employees could have occupational exposure:

1. Safety Supervisors
2. Nurses or EMT's
3. Employees responsible for handling trash or other materials that could contain potentially infectious materials.

Control Methods

1. Universal precautions-A method to prevent contact with blood or other potentially infectious materials, universal precautions, is to assume that all human blood and certain human body fluids are infectious. If there is a question as to which body fluids are questionable then all body fluids shall be considered infectious.
2. Personal Protective Equipment (PPE)-Expose employees shall be provided, without cost, proper personal protective equipment. Such equipment as gloves, gowns, eye protection, masks.
3. General Work Practices-
 - a. Before administering first aid, employees must put on appropriate PPE. PPE is appropriate only if it does not permit blood or other potentially infectious materials to pass through or reach employees clothing, skin, eyes, mouth, or other mucous membranes.
 - b. Disposable gloves may not be reused and must be replaced if torn or its ability to function as a barrier is comprised.
 - c. If a garment is penetrated by blood or other potentially infectious materials, the garment should be removed as soon as possible.
 - d. Employees should wash their hands as soon as possible after removal of personal protective equipment. If this is not possible then disinfect hands with antiseptic hand cleanser in conjunction with cloth/paper towels or antiseptic towelettes.
 - e. If employee's hands or any part of the skin comes into contact with blood or other potentially infectious materials, the employee must wash his/her hands and skin thoroughly with soap and water.
 - f. When personal protective equipment is removed it must be placed in appropriately labeled or color-coded "regulated waste" container for laundering or disposal.
4. Waste Disposal-One appropriately labeled or color-coded container for disposal of regulated waste must be available at the plant site. Regulated waste must be disposed of in accordance with federal or state guidelines.
5. Labeling-Warning labels, of fluorescent orange or orange-red color with lettering or symbols in a contrasting color, must be affixed to containers of regulated waste. Red bags or red containers may be substituted for labels.
6. Contaminated Laundry Handling-One appropriately labeled or color-coded bag or container must be available for depositing contaminated clothing for laundering. Laundering shall be done at a facility aware of universal precautions or that has been informed of the potential hazards associated with handling the contaminated clothing.

Employee Training

All employees with occupational exposure will participate in a training program which is provided at no cost to the employee.

Exposure Incidents

1. Post-Exposure Evaluation and Follow-up
 - a. All employees who have had an exposure incident are eligible for immediate follow-up treatment. The follow-up treatment is available at no cost to the employee and includes a confidential medical evaluation.
 - b. The following information must be provided to the health care professional following an exposure incident:
 - A copy of blood borne pathogens standard program.
 - i. How the exposure occurred.
 - ii. Results of source individual's blood testing, if available.
 - iii. All relevant medical records, including vaccination status.
 - iv. Within 15 days of the post-exposure evaluation and follow-up, employees are provided with doctor's written evaluation.

2. Exposure Incident Investigation Procedure- Exposure incidents must be investigated and documented. These items must be addressed:
 - a. How did the incident occur?
 - b. What condition or procedure caused the incident?
 - c. What specific personnel or job factor resulted in the potential exposure?

Record Keeping

1. Medical Records-The safety director will establish and maintain an accurate record for each employee with occupational exposure in accordance with 29CFR 1910.20. This record will include Employee name, social security number and Hepatitis B vaccination status.
2. Medical Record Confidentiality-Employee medical records must be kept confidential and cannot be disclosed or reported without an employee's express written consent to any person within or outside the workplace, except as required by law.
3. Medical Record Maintenance-Medical records must be maintained for at least the duration of the employee's employment plus 30 years and be made available, upon the request of employees, the Assistant Secretary and director of the Occupational Safety & Health Administration for their

examination, review and copying.

4. Medical records must be accompanied by the written consent of the employee before being released.
5. Training records-Training records include the following information:
6. Dates of training sessions
7. Contents or summary of training sessions
8. Names & qualifications of persons conducting the training
9. Names & Job titles of all employees attending the sessions.
10. Training records must be retained for three (3) years from the date on which training occurred.
11. Training records are available in accordance with 29CFR 1910 (h)(3).

Hazard Communication Program

This hazard communication program is an important part of Bedrock Concrete, LLC's overall safety program and policies, which are provided to ensure a safe and healthful workplace. The objective of this program is to familiarize employees with the overall hazards associated with chemicals and how to obtain specific information about handling these.

This program will provide the means of transmitting information to all employees regarding any hazardous chemicals to which they may be exposed in the work place by working with, near to, or around as they perform their job tasks. This program is available, upon request to all employees, their designated representative, emergency responders, and interested members of the community.

List of Hazardous Chemicals

A list of hazardous chemicals used, stored or transported onto company property or onto the project site will be maintained by Bedrock Concrete, LLC at all times. This list is available to all employees, their representatives, employees and subcontractor employees, emergency responders, and member of the community upon request.

Labeling

All containers of hazardous chemicals used, stored or transported on the job must be labeled or tagged. Original labels on containers of hazardous chemicals are not to be removed unless a different material is placed in the container. If the material is removed and replaced by another chemical the label must be changed to designate the true contents of the container. If a hazardous material is removed from a container, which is labeled and placed into a smaller container for use, the smaller container must be labeled unless the person removing the material will use all of the contents of the smaller container and never leave the container unattended before all the contents are used. The label or tag must contain the name of the chemical, the appropriate hazard warning, and the name and address of the chemical manufacturer or distributor.

Safety Data Sheets (SDS)

A file will be maintained of all material safety data sheets (SDS) covering all hazardous chemicals on company property and/or the project site. This file will be available to all employees and other interested parties; the file will contain an index listing of all SDS. An SDS will be required to accompany each hazardous chemical, which is introduced on company property or the jobsite. This file shall under no circumstances be kept in a location so as to discourage employees from reviewing the material.

Employee Information and Training

The training will include information on physical and health hazards of chemicals in the work area. Employees

will be encouraged at all times to ask questions concerning potential exposure on the job.

All new employees being exposed to a new hazard in the work place will receive training on methods and observations that may be used to dictate the presence of, or the release of hazardous chemicals in their work area.

This may be accomplished by using formal classroom training, a training video, or selected written materials.

General Procedures

Employees are responsible for their safety and the safety of their co-workers. To protect employees while handling hazardous materials, four simple rules should always be followed.

1. Pay attention to warning signs.
2. Read and follow all warning labels and information carefully.
3. Get additional information when in doubt.
4. Ask your supervisor whenever you have any questions about handling or working with any hazardous material.

Materials can be hazardous in several ways. Below is a listing of what makes some materials hazardous:

- Toxic-Most chemicals are toxic at some level of exposure. If allowed to enter the body through the nose, mouth, or skin, these can make you sick. Fumes, dust, and vapors from toxic materials can be especially harmful because these can be allowing the poisons to circulate throughout the body.
- Corrosive-Materials like strong acids and bases can eat right through other substances—including clothing. If splashed on the skin or eyes, these can serious burns. Some of these materials can break down into poisonous gases, making these doubly hazardous.
- Explosives-Some materials can explode when exposed to heat or flames. Included in this category are materials like flammable liquids and compressed gases, which can explode under certain conditions.
- Flammable-This category includes all materials that catch fire easily, burn rapidly, spread

quickly, and give off intense heat. Many materials used and stored in the workplace are flammable, including solvents and lubricants.

- Reactive- These materials have to be isolated, stored in special containers, and used with extreme caution. Some can burn when exposed to air or water- and some when mixed with other substances. It is important to note that reactive materials do not have to be near heat or flames to burn. These burn spontaneously. These can also give off vapors that can be hazardous if inhaled.

- Chemical Usage- Overexposure to hazardous materials can cause dizziness, nausea, eyes, nose and/or throat irritation, skin rashes, and nervousness, agitation or sluggishness. When you follow the proper precautions, you can work safely and effectively with hazardous materials.

Before you start the job:

- Obtain any required personal protective equipment
- Pay attention to warning signs
- Read the label on the containers you handle.
- Take all precautions recommended on the label
- Make sure you know how to get help in case of an emergency
- Review first-aid procedures and know where emergency stations are located
- Make sure you know where fire extinguishers are located
- Know where the nearest emergency exits are located

While you are working:

- Follow established work procedures to the letter
- Keep alert, concentrate and watch for potential hazards
- Be careful when moving containers with hazardous materials
- Do not take short cuts
- Check for adequate ventilation
- Eat and drink only in designated areas
- Keep alert for signs of trouble-unusual odors, hidden leaks, etc.
- Double check containers to make certain that they are not leaking
- Clean up any spill immediately, following procedures on label
- Wash hands carefully after handling any container that contains hazardous materials

HOW TO READ & UNDERSTAND THE SDS

Under the OSHA Hazard Communication Standard, employees are entitled to receive information about the toxic substances that are used or stored in their workplace. This information is available to employees in the form of a Safety Data Sheets (SDS)—a technical fact sheet that describes the health effects and safe uses of toxic products on the job. The SDS is written by the product manufacturer who must provide a copy to employers. In turn, the employer must make the SDS available to employees or their representatives upon request.

This portion of the manual is to be used as a guide to the different sections of SDS. It will help employees become more familiar with the technical language they are likely to find there. SDS's may take many different forms, but the format shown is typical of what you will encounter. This SDS is divided into sections. Each section of the SDS is briefly explained in the following paragraphs. All the technical terms are defined in an additional handout, "Glossary of SDS Terms", which is located in this section.

Under the OSHA standard, there is a base list of about 1200 chemicals; other chemicals may be added to the list by the state where you are located. Any material sold to employers that has any of the ingredients covered by the applicable law (s) is a regulated material. If employees are exposed to a regulated material, they are entitled to all the protection of the law.

There are three sources of information available to employees under OSHA's Hazard Communication regulation.

1. Safety Data Sheets
2. Container Labels
3. Employee Training

The SDS is of prime importance because it is the source of information for labeling containers. It is also used as the basis for training programs on the hazards of workplace exposure and on the safe handling practices for the chemicals.

Not all manufacturers place the required information in the same SDS format, so it is a good idea to check each section for all the details. For more information on health problems associated with overexposure, it may be necessary to look up the chemicals with which employees work. The employer will ensure that every SDS on file is properly completed.

SDS's can be very useful tools in carrying out the goals of the health & safety laws. The main goal of the programs is to prevent occupational disease by informing employees about the hazards of toxic substances. Learning chemical identities, health effects, and protection from the dangers listed on a SDS can put employees in a better position to correct or prevent any potential hazards.

Under the provisions of the law, Bedrock Concrete LLC will train its employees to read and understand the SDSs. This manual is but one part of a special training program prepared in order to assist employees in learning the parts and terms of a SDS. The material herein briefly explains the different sections of the SDS.

SECTION 1: PRODUCT IDENTITY

The product identity section provides information employees need to match the Safety Data Sheet with the corresponding product at the workplace. It lists the manufacturer's (or supplier's) name and address, as well as, the product name as it appears on the container label.

- Identity-This is the name of the product as it appears on the label and in the inventory of hazardous chemicals. The inventory is a list of all the hazardous chemicals used or stored at employer's location. Under the Hazard Communication Standard, the employer is required to compile and update this list regularly.
- Manufacturer's Information-This information includes the manufacturer's name, address and phone number, the date the SDS was prepared, and an emergency phone number to call after business hours. If employees have any questions about the information on the SDS or want to know how the manufacturer determines the hazard levels, call the office phone number and ask to speak to the person or department prepared the SDS. The emergency phone number should be used only for obtaining instructions in the event of an accidental exposure. Do not wait for an emergency! Call ahead and get any questions answered if there is unclear information on the SDS.

SECTION II: HAZARDOUS INGREDIENTS

This is a very important section of the SDS. It provides the information on what specific hazardous chemicals are present in the product. If the product is a pure single chemical, no ingredients need to be listed. If the product is a mixture, all the ingredients that are regulated, with a few exceptions, must be listed here.

The OSHA Hazard Communication Standard requires that this section list only those ingredients that the manufacturer has determined to be hazardous according to the definitions in the law. A particular state may also require other chemicals under its state regulations. The laws usually require that the manufacturer only list hazardous material that make up one percent or more of the product. An exception to this rule is for carcinogenic (cancer causing) chemicals and other extremely hazardous ingredients. The percentage composition (parts of ingredients per 100 parts of product) of each ingredient in the mixture may also be listed; however, it is optional with the manufacturer.

It is important to get the exact spelling of the chemicals so that employees can look up their effects in a chemical dictionary. It is also important to remember that chemicals that have very similar names (and very similar structures) often have very different effects on employees' health. The CAS number, which stands for Chemical Abstracts Service number, is the best way of identifying a chemical with certainty. In general, each chemical has only one CAS number even though it may have several acceptable chemical names. CAS numbers are not required even though these are usually provided.

Under the Hazard Communication Standard, the SDS must list the exposure limits of each ingredient to which

employees may be exposed. These are two established exposures limits: The PEL and the TLV.

The PEL is the permissible exposure limit required by OSHA regulation; it is the maximum amount of a particular substance legally allowed in the workplace air. The TLV is the threshold limit value recommended by the American Conference Industrial Hygienists (ACGIH); the TLV is not legally enforceable. If no PEL or TLV is established, other exposure levels are often provided from the National Institute for Occupational Safety and Health (NIOSH), from other countries and sometimes from the manufacturers themselves.

Remember: Employees cannot judge a chemical by its PEL or TLV alone, because very few chemicals have been thoroughly tested for long-term health hazards, such as reproductive effects or the potential to cause cancer.

SECTION III: PHYSICAL DATA

This section is important because it gives employees the basic information about chemical properties needed to decide how to store chemicals, how to avoid or fight fires, and how a chemical will react. It also indicates in what chemical state (liquid, gas or solid) employees will find a product at the process temperatures and conditions used at the employer's location. This is important for predicting the most likely ways the chemical can enter an employee's body—such as inhaling, swallowing, or absorption through the skin or eyes.

- Boiling point-This is the temperature at which a liquid boils. Flammable liquids usually have a low boiling point, which can present fire hazards. The boiling point, like the vapor pressure, is a good indication of how easily the product will evaporate and give off vapors. If the product is a mixture, the boiling point may be presented as a range (such as 10-30 degrees Celsius or 80-100 degrees Fahrenheit).
- Vapor Pressure-At any given temperature, a certain proportion of a liquid will evaporate and form a gas. The pressure of that gas at the surface of the liquid is called the vapor pressure. The higher the vapor pressure, the more easily a liquid will evaporate and catch fire. Liquid materials that evaporate easily are considered volatile liquids; this means that air concentrations of vapors can build up quickly, even though employees are handling the substance in a liquid form. Liquids with high vapor pressures may be particularly hazardous if employees are working in an enclosed or confined area. Vapor pressure is measured in units of millimeters of mercury (mm Hg) as is atmospheric pressure on barometers.
- Vapor Density- This is the weight of a vapor gas compared with an equal volume of air. A vapor density of less than one means that the substance will tend to rise in still air; a vapor density greater than one means it will fall. Substances with higher vapor densities will concentrate in the bottom of tanks and other enclosed area. Therefore, if employee were at the bottom of a tank they would be more likely to breathe more of it.

- Solubility-This refers to the percentage, by weight, of the substance that can be dissolved in water. Negligible solubility means less than 9.1%; slight means 9.1% to 1%; moderate means 1% to 10%; appreciable means more than 10%; and complete means it can be dissolved in all proportions. Salt, for example, is soluble in water, oil is not.

SECTION IV: FIRE AND EXPLOSION DATA

- Flash Point-This is the lowest temperature at which a liquid will give off enough vapor to be ignited with a spark. Liquids with low flash points are more dangerous than those with high flash points (above 200 degrees Fahrenheit). If a liquid has a flash point around 70 degrees Fahrenheit (room temperature) or less, all it takes to set it on fire is a spark, a cigarette, a lit match, or a welding arc. Keeping chemicals at temperatures below its flash point will help prevent fires.
- Extinguishing Media-This section lists the type of material in fire extinguishers that best puts out a fire where the substance on the SDS is the fuel that keeps the fire burning. Some extinguishing materials are completely useless for certain types of fires; some can even spread the fire or make it worse. For example, water cannot put out a fire of cadmium powder, but sand can. The employer should provide the right extinguishers for all possible chemical fires.
- Special Firefighting Procedures-This section includes any precautions that must be taken by firefighters when fighting a fire fueled by the material on the SDS. This would include any respirators or other protective equipment needed. It should also mention any extinguishing material that might be unsafe for controlling this type of fire. Typically this section does not apply to employees, unless they are professional firefighters. If there is a fire, the employer will have a posted procedure for fire emergencies that employees should know and follow.

SECTION V: REACTIVITY DATA

This section indicates whether the chemical substance will change its actual composition—usually by combining with another substance or breaking down to create a new substance. Section IV, on the other hand, describes conditions in which a chemical will change its form (for example, from solid to liquid or from liquid to gas). New substances may be more hazardous than the original and may enter an employee's body by a different route of exposure than the original substance.

A properly completed data sheet should tell employees: (1) Whether the substance is likely to break down or react with other substances; (2) What conditions are likely to change its composition; and (3) What new

hazards might result.

- Stability-Stability indicates how well a material in the workplace can resist changing its form when it is exposed to heat, water, air, or mixed with other chemicals. A stable material will not change easily, even under fairly extreme conditions. An unstable material will change easily. Examples of changes are:
 - Exploding under very hot conditions.
 - Breaking down into more than one chemical and releasing toxic vapors or fumes.

An unstable material creates a possible safety hazard unless it is stored and handled very carefully.

- Incompatibility-This section provides a list of substances that should not come into contact with the chemical or chemicals in the product during normal usage. Incompatible substances may react when mixed to form a new hazardous chemical or the results may be a fire or explosion, which in turn can create new and different hazards for everyone concerned.
- Hazardous Decomposition or By-Products- This section will list any new hazardous material(s) formed when the substance breaks down or decomposes under certain conditions. For example, carbon monoxide is a by-product of the chemical reaction-taking place in a gasoline engine.
- Hazardous Polymerization-This is a type of chemical reaction that occurs when a material is exposed to air, water, heat, or other conditions that cause the release of a large amount of heat and, in some cases, toxic gas. Most materials that are likely to react in this way are treated with inhibitors, materials that can stop this type of chemical reaction during the manufacturing process. These inhibitors in turn may be toxic, even though these are present in very small amounts. If the “may occur” box is checked, special storage procedures must be given in the section “Conditions to Avoid”. These procedures must be followed to prevent serious injury.

SECTION VI: HEALTH HAZARD DATA

Health Hazard Data lists the symptoms of overexposure. It is very important to know what level employees are being exposed to so that employees can use the information in this section.

Routes of Entry

Before a chemical can cause health problems, it must get into the body. There are three ways hazardous substances can enter an employee’s body:

1. Inhalation-Substances can enter the body through the lungs. Dusts, mists, gases, vapor, and fumes all enter the body by being inhaled.
2. Skin Absorption-Many chemicals cause damage where these contact the surface of the body-the

eyes are very vulnerable. Other chemicals can be absorbed through the skin and enter the blood stream. Occasionally, the skin can also absorb vapors. For example, even if employees use a respirator during a spray painting operation, the paint vapors could enter through the skin unless special protective clothing is also worn.

3. Ingestion-Workers may swallow chemicals and dusts when they are transferred from workroom air to cigarettes, food, coffee, or makeup.

Health Hazards

This part describes the harmful effects of the substance on an employee's health. These health hazards may be acute hazards (short-term) or chronic health hazards (long-term).

An acute effect usually means a serious, but temporary, effect from exposure. An acute exposure usually means an exposure at a high level over a short period of time. The resulting effect can usually be reversed if the exposure is not repeated.

A chronic health effect usually describes a health condition that will gradually develop and is difficult to reverse. The term "chronic exposure" usually means a relatively low level of exposure over a relatively long period of time. Often, there are no noticeable signs or symptoms in the early stages. Sometimes the illness may take many years, even decades to appear. When the disease is finally felt or noticed, it is often difficult to recover the function that is lost.

Further disability or worsening of disease can often be prevented. Some chemicals have both acute and chronic health effects, depending on the way the exposure is experienced over time. Some illnesses are difficult to classify in one category or another. Cancers, for example, may be initiated by short period of acute exposures, but may take many years to develop and are therefore considered to be chronic illnesses. Data sheets must tell employees about both kinds of health effects- chronic and acute. But since so little is known about the effects of continual, low-level exposures, most of what employees can learn from an SDS will be about short-term reactions to high exposures.

Carcinogenicity

Carcinogenicity is the ability of a substance to cause cancer. Many experts agree that there is no safe level of exposure to cancer-causing chemicals (Carcinogens). Even so, reducing an employee's exposure reduces their risk. As a result, it is important to avoid exposure as much as possible. Preferably, the employer will use a less toxic material instead of the carcinogen. If this is not possible, the employer may be able to enclose the process.

Sign and symptoms of exposure

Symptoms are what employees feel from being exposed. Signs are what a doctor sees on examining employees following exposure. For example, if employees are exposed to paint thinner, they need to know that it can make them feel dizzy (symptom); employees are need to know that with long-term exposure it can cause tremors (sign) and damage their nervous systems (cause of the symptoms and signs). The dizziness is

only a symptom of what is happening inside.

Medical conditions aggravated by exposure

Different people can be affected in different ways by the same exposure. Sometimes workers with a medical condition are affected more seriously than others, even at extremely low levels. For example, people with heart conditions can have serious health effects from much lower levels of carbon monoxide than people with no prior heart problems. Threshold limit values are set to protect the 'average worker' and do not account for differences in the wide range of people exposed.

Emergency and first aid procedures

First aid should be described for all routes of entry. If no information is listed here, the employer should call the manufacturer before there is an emergency. If there is an emergency, get attention from the nearest doctor or nurse. If possible, they should have access to the SDS and the information contained therein.

SECTION VII: PRECAUTIONS FOR HANDLING

Steps to be taken in case material is released or spilled

Waste Disposal

Any special procedures that should be used for disposing of hazardous workplace materials are noted here. Dumping hazardous waste in the garbage, or down the drain or in an unlicensed landfill, not only creates a problem for the surrounding community, it exposes the city or town disposal workers unnecessarily to unknown hazards. If the employer has any questions regarding disposal methods, the Environmental Protection Agency should be contacted.

Precautions to be taken in handling and storing

It is advised to not store acids and bases together or organic chemicals around strong oxidizers and to keep some chemicals in temperature controlled areas.

SECTION VIII: CONTROL MEASURES

The best control measures for chemicals are those that reduce or eliminate the problem at the source (before anyone comes into contact with it). Engineering controls is a name given to some prevention methods. Control measures, such as ventilation, have to be designed to fit the actual conditions of use and exposure. Personal protective equipment (respirators, clothing, and goggles) should never be relied upon as the sole means of control. At best, these may be appropriate if an exposure is occasional or until ventilation or other controls are installed.

Respiratory Protection

The type of respiratory protection recommended must be specific to the exposures in the workplace. If a product is a hazardous dust, but employees also work with a solvent at the same time, the type of respirator recommended on the dust SDS may not be suitable to protect against the solvent employees are also using. However, there are masks that protect against both which would be proper.

It is also important to keep in mind that different levels of exposure require different kinds of respirators. For example, while a half-mask, air-purifying respirator may be adequate for a level of air contamination slightly above the recommended or permissible legal limit, a self-contained breathing apparatus would be necessary for a contamination level that is life-threatening.

Local Ventilation

Local ventilation uses an exhaust fan at the end of an enclosure to draw the dust, fumes, gas, or vapors away from the source. If it works effectively, it will keep the surrounding air free from toxic levels. Examples of local exhaust are laboratory hoods and paint spray booths.

Mechanical (general) Ventilation

This type of ventilation dilutes the chemicals in the air with clean air in a general area, room or building. A fan in the wall or ceiling is not very effective unless fresh air is brought in at the same time. A floor fan does not help much without additional ventilation. It may move the vapors around, but does not remove these.

Protective Gloves

Protective gloves should always be worn when working with material that can either be absorbed through the skin or damage the skin itself. The material used to make the gloves must be selected based on the properties of the combination of products with which employees work. The SDS should specify the appropriate glove material to use with each specific product.

Eye Protection

Eye protection is important to wear if there is any danger of splashing or contact with corrosive substances or dusts. If eye protection is recommended, the employer should look for ways of redesigning the job to avoid contact. Eyewash fountains should be made available in the work area, although this is not always a possibility.

Other Protective Clothing on Equipment

Other protective clothing may be recommended if vapors can penetrate the skin, or if the danger of spills is great. Showers should be provided if there is a danger of contact as discussed under Eye Protection, but the best method is to design the job so that contact is avoided if this is a reasonable solution.

Work/Hygiene Practices

Washing hands before eating or leaving the area, restricting food or drink in work areas, keeping an area free of dust or liquids, coping, not control measures, may make sense as work rules in employees' areas.

Each employee on site is responsible for ensuring all elements of their program are being implemented.

SAFETY AUDITS/INSPECTIONS

To the extent possible, Bedrock Concrete, LLC will ensure that their employees are complying with the requirements of this manual, as well as any applicable local, state, and/or federal safety regulation(s).

Bedrock Concrete, LLC's Safety Manager will perform regular and frequent job-site audits.

Non-Compliance

If the Bedrock Concrete, LLC's safety manager notes any noncompliance with these safety requirements, or is advised of such noncompliance, the safety manager shall perform the following if necessary:

1. Discuss and review the noncompliance and the corrective action required.
2. Exercise the right to issue a suspend-work order stopping all or any part of the work if necessary. The order will remain in effect until satisfactory corrective action has been taken.
3. Require the removal from Bedrock Concrete, LLC's property of any employee or piece of equipment that is deemed to be unsafe.

Job Briefing

Prior to the start of any work, Bedrock Concrete, LLC will have a job briefing with the project manager and employees involved in the project to discuss the safety aspects. If at any time a process or equipment is to be changed, Bedrock Concrete, LLC will require that a new Job Briefing be conducted.

PUBLIC PROTECTION

Bedrock Concrete, LLC shall take all necessary precautions to protect the public, the facilities, the personnel and nearby tenants of any project from any hazards arising from their scope of work. All construction operations shall be isolated from the public to the greatest extent possible.

Protection of the Public and Property

1. The public shall be considered as including all persons not employed by Bedrock Concrete LLC. The owner's employees not directly involved with the project, facilities or other related construction contracts shall be considered members of the public.
2. The following precautions are required:
 - a. Bedrock Concrete, LLC shall take all necessary action to prevent injury to the public or property damage.
 - b. Work shall not be performed in any area occupied or in use by the public unless specifically permitted by the contract or in writing from Bedrock Concrete, LLC management.
 - c. When it is necessary to maintain public use of work area involving sidewalks, entrances to buildings, and vehicular roadways, the employee shall protect the public with overhead protection, temporary partitions, shields, and adequate visibility.
 - d. Sidewalks, entrances to buildings, or exits that remain in use by the public shall be kept clear of obstructions to permit safe ingress and egress of the public at all times.
 - e. Appropriate warnings, signs, and instructional safety signs shall be posted where necessary. In addition, a signalman shall control the moving of motorized equipment where the public might be endangered.
 - f. Barricades shall be secured against accidental displacement and shall be maintained in place except where temporary removal is necessary to perform the work. When a barricade is temporarily removed, a watchman shall be placed at all openings.
 - g. Fuel-burning types of lanterns, torches, flares or other open-flame devices are prohibited.

Rules have been adopted for the project in order to address some of the more common construction activities. These rules in no way alleviate any employee from the applicable occupational safety and health standards and regulations or rulings made by government authorities.

These rules apply to all persons on site including Bedrock Concrete, LLC's Management Team, employees and all visitors or vendors. The most restrictive rule, regulation or policy shall apply in the event of a conflict between project, employee, local, state or federal regulations. To achieve these purposes, Bedrock Concrete, LLC shall perform the following:

1. Protect the health and safety of employees, the public, and other persons; prevent damage to property, materials, supplies, and equipment; and avoid interrupting the normal operation of the plant or construction site.
2. Comply with all federal, state, and local safety laws and regulations, and industry standards including, but not limited to, the application of OSHA Safety and Health Regulations 29 CFR Part 1926 and 29 CFR Part 1910; and Bedrock Concrete, LLC's Safety Manual regulations and orders; and shall require compliance of the foregoing by all subcontractor employees and suppliers at every tier.

PERSONAL PROTECTIVE EQUIPMENT

Bedrock Concrete, LLC shall be responsible for orienting employees on the specific safety rules and PPE equipment that must be followed/worn by all employees while working on any Bedrock Concrete, LLC project.

A list of the minimum PPE is as follows:

1. Approved hard hats shall be worn at all times while on any project site.
2. Safety glasses, which meet applicable ANSI standards, are required at all times while on any project site. Dark tinted safety glasses are not allowed to be used inside buildings. Prescription eyewear must be fitted with either adequate side-shields or equivalent protection to meet or exceed ANSI standards.
3. Hearing protection shall be worn in areas greater than 85 dBA or as posted.
4. A serviceable pair of work shoes or boots consisting of hard soles and leather uppers or similar material shall be worn. Tennis shoes, sandals, or other similar shoes are not permitted. The wearing of safety shoes is encouraged.
5. Full length pants without excessive length or flared bottoms will be required. No sweatpants, nylon pants, or shorts are to be worn at any time while on a Bedrock Concrete, LLC project site.
6. Shirts must cover the entire mid-section and the sleeves must cover the entire shoulder. Sleeveless shirts, tank-tops, net-shirts, halter tops, etc. shall not be worn on the construction site. Clothing bearing wording and/or illustrations that could be considered offensive to the general public is prohibited.
7. Long hair shall be contained under a hard hat or net if the individual is working where hair may become entangled.
8. All employees while on a Bedrock Concrete, LLC's jobsite shall be required to wear a form of high visibility protection. Class 2 apparel will be considered applicable for jobsite protection. High visibility vest, jackets, coats, shirts will be considered applicable apparel.

RESPIRATORY PROTECTION

A respiratory program has been established to control diseases caused by air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors.

The program ensures that employees and subcontractors under Bedrock Concrete, LLC's supervision prevent atmospheric contamination and are provided proper respiratory protection as needed at all Bedrock Concrete, LLC 's facilities and job sites. The safety director will administer the program and is authorized to review respiratory protection procedures, to initiate policy changes and to clarify areas of concern. The Safety director will be authorized to designate worksite operating procedures in order to protect the health of employees.

Protection against atmospheric hazards at a worksite requires an evaluation of the atmosphere to determine the presence of an oxygen deficiency or harmful dusts, fogs, fumes, mists, gases, smokes, sprays or vapors. The safety director will examine jobsites for any atmospheric hazard and take the necessary precautions to protect each employee from respiratory hazards.

HEARING CONSERVATION PROGRAM

As defined by OSHA in 29 CFR 1910.95 a continuing, effective noise control and hearing conservation program has been implemented to maintain employee noise exposures below levels that are generally accepted to be harmful. This program includes: assessment of work area sound levels and employee noise exposures; engineering and administrative control measures where feasible; measurements of employee hearing acuity; provision of hearing protective devices, if necessary; and employee training in hazard recognition and control measures.

Evaluations have shown that many of the processes Bedrock Concrete, LLC uses, as well as many of the job sites where Bedrock Concrete, LLC works, exceed the maximum level of noise allowed over an eight (8) hour day. However, most of these job sites involve intermittent exposure. As a result, hearing protection with a noise reduction rating (NRR) sufficient to reduce the noise exposure to below 85 dBA is required at all job sites where Bedrock Concrete, LLC's equipment is being operated.

A general survey of operating equipment shall be conducted to identify noise levels exceeding acceptable levels. This survey will identify both fixed noise sources and mobile noise sources for the types of equipment Bedrock Concrete, LLC utilizes.

Employee Exposure Monitoring-When information indicates any an employee's exposure may equal or exceed an eight (8) hour time-weighted average of 85 decibels, representative employee exposure monitoring shall be conducted. Factors which suggest that noise exposures exceed this level include: employee complaints, indications that employees may be suffering from hearing loss or noisy conditions which make normal conversation difficult.

Hearing Protective Devices-Hearing protective devices will be made available without cost to any employee exposed to noise above the action level of 85 dBA-TWA. Hearing protectors shall be replaced as necessary due to wear or deterioration.

Fall Protection and Prevention

It is the policy of Bedrock Concrete, LLC to take all practical measures possible to prevent employees being injured by falls from heights. The company will take necessary steps to eliminate, prevent and control all recognized fall hazards.

The first priority is given to the elimination of fall hazards. If a fall hazard cannot be eliminated, effective fall protection will be planned, implemented and monitored to control the risks of injury due to falling. All employees exposed to potential falls from heights will be trained to minimize the exposure. Fall protection equipment will be provided and its use required by all affected employees.

The following are examples of situations where fall protection would be needed. This list is by no means complete and there are many other situations where a fall of 6 feet or more is possible.

1. **Wall openings**-Each employee working on, at, above, or near wall openings where the outside bottom edge of the wall opening is 6 feet (1.8 meters) or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches (1.0 meter) above the walking/working surface must be protected from falling by the use of a guardrail system, a safety net system or a personal fall arrest system.
2. **Holes**-Personal fall arrest systems, covers, or guardrail systems shall be erected around holes (including skylights) that are more than 6 feet (1.8 meters) above lower levels. Hole covers located in roadways and vehicular aisles must be able to support at least twice the maximum axle load of the largest vehicle to which the cover might be subjected. All other covers must be able to support at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time. To prevent accidental displacement resulting from wind, equipment or workers activities, all covers must be secured in place and labeled, "hole" or "cover".
3. **Leading Edges**-Each employee who is constructing a leading edge 6 feet (1.8 Meters) or more above lower levels shall be protected by guardrail systems, safety net systems or personal fall arrest systems.
4. **Excavations**-Each employee at the edge of an excavation 6 feet (1.8 meters) or more deep shall be protected from falling by guardrail systems, fences, barricades or covers. Where walkways are provided to permit employees to cross over excavations, guardrails are required on the walkway if it is 6 feet (1.8 meters) or more above the excavation.
5. **Hoist Areas**-Each employee in a hoist area shall be protected from falling 6 feet (1.8 meters) or more by guardrail systems or personal fall systems. If guardrail systems or portions thereof must be removed to facilitate hoisting operations, as during the landing of materials and a worker must lean through the access opening or out over the edge of the access opening to receive or guide equipment and materials, that employee must be protected by a personal fall arrest system.

Training-Bedrock Concrete LLC's employees will be trained in the following areas:

1. The nature of fall hazards in the work area.
2. The correct procedures for erecting, maintaining, disassembling and inspecting fall protection systems.
3. The use and operation of guardrails, personal fall systems, safety nets and warning lines.

EXCAVATION AND TRENCHING

This program outlines procedures and guidelines for the protection of employees working in and around excavations and trenches. This program requires compliance with OSHA standards described in Subpart P (CFR 1926.650) for the construction industry.

Compliance is mandatory to ensure employee protections when working in or around excavations.

Responsibilities- It is the responsibility of each superintendent and supervisor to implement and maintain the procedures and steps set forth in this program. Each employee involved with excavation and trenching work is responsible to comply with all applicable safety procedures and requirements of this program.

Definitions-

- **Benching**-A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near vertical surfaces between levels.
- **Cave-in**- The separation of a mass of soil or rock material from the side of an excavation, or the loss of soil from under a trench shield or support system, and its sudden movement into the excavation, either by falling or sliding, in sufficient quantity so that it could entrap, bury, or otherwise injure and immobilize a person.
- **Competent Person**-One who is capable of identifying existing and predictable hazards in the surroundings or working conditions, which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.
- **Duration of Exposure**-The longer an excavation is open, the longer the other factors have to work on causing it to collapse.
- **Excavation**-Any man-made cut, trench, or depression in an earth surface, formed by earth removal.
- **Hazardous Atmosphere**-An atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness or injury.
- **Protective System**-A method of protecting employees from cave-ins, from material that could fall or roll from an excavation, or from the collapse of adjacent structures, Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide necessary protection.
- **Shield**-A structure that is capable of withstanding the force imposed on it by a cave-in and thereby protects employees within the structure. Shields can be permanent structures or can be designed to be portable and moved along as work progresses.
- **Sloping**-A method of protecting workers from cave-ins by excavating to form sides of an excavation that are inclined away from the excavation to prevent cave-ins. The angle of incline

required to prevent a cave-in varies with differences such as soil type, length of exposure, and application of surcharge loads.

- **Surcharge Loads**-Generated by the weight of anything in proximity to the excavation, push starts for a cave-in (anything up top pushing down). Common surcharge loads are weight of a spoil pile, weight of nearby buildings, or other structural objects and weight of material and equipment.
- **Trench**-A narrow excavation below the surface of the ground, less than 15 feet wide, with a depth no greater than the width.
- **Undermining**-Undermining can be caused by such things as leaking, leaching, caving or over digging. Undermined walls can be very dangerous.
- **Vibration**-A force that is present on construction sites and must be considered. The vibrations caused by backhoes, dump trucks, compactors and traffic on job sites can be substantial.

Hazards--One of the reasons the company requires a competent person on-site during excavation & trenching are the numerous potential hazards that may be encountered or created. Hazards include: Electrocutation, Gas explosion, Entrapment, Struck by Equipment, Suffocation.

Hazard Controls—Before any work is performed and before any employee enters the excavation, a number of items must be checked and insured:

- Before any excavation, underground installations must be determined. This can be accomplished by either contacting the local utility companies or the local 'one-call' center for the area. All underground utility locations must be documented on the proper forms. All overhead hazards (surface encumbrances) that create a hazard to employees must be removed or supported to eliminate the hazard.
- If the excavation is to be over 20 feet deep, it must be designed by a registered professional engineer who is registered in the state where work will be performed.
- Adequate protective systems will be utilized to protect employees. This can be accomplished through sloping, shoring, or shielding.
- The worksite must be analyzed in order to design adequate protection systems and prevent cave-ins. There must also be an excavation safety plan developed to protect employees.
- Workers must be supplied with and wear any personal protective equipment deemed necessary to assure their protection.
- All spoil piles will be stored a minimum of four (4) Feet from the sides of the excavation. The spoil pile must not block the safe means of egress.
- If a trench or excavation is 4 feet or deeper, stairways, ramps, or ladders will be used as a safe means of access and egress. For trenches, the employee must not have to travel any more than 25

feet of lateral travel to reach the stairway, ramp or ladder.

- No employee will work in an excavation where water is accumulating unless adequate measures are used to protect the employee.
- A competent person will inspect all excavations and trenches daily, prior to employee exposure or entry, and after any rainfall, soil change, or any other time needed during the shift. The competent person must take prompt measures to eliminate any and all hazards.
- Excavations and trenches 4 feet or deeper that have the potential for toxic substances or hazardous atmospheres will be tested at least daily. If the atmosphere is inadequate, protective systems will be utilized.
- If work is in or around traffic, employees must be supplied with and wear orange reflective vests. Signs and barricades must be utilized to ensure the safety of employees, vehicular traffic, and pedestrians.

Competent Person Responsibilities—

1. Have a complete understanding of the applicable safety standards and any other data provided.
2. Assure the proper locations of underground installations or utilities, and that the proper utility companies have been contacted.
3. Conduct soil classification tests and reclassify soil after any condition changes.
4. Determine adequate protective systems (sloping, shoring, or shielding systems) for employee protection.
5. Conduct all air monitoring for potential hazardous atmospheres.
6. Conduct daily and periodic inspections of excavations and trenches.
7. Approve design of structural ramps, if used.

Excavation Safety Plan-An excavation safety plan is required in written form. This plan is to be developed to the level necessary to insure complete compliance with the OSHA Excavation Safety Standard and state and local safety standards.

Excavation Safety plan factors:

- Utilization of the local one-call system
 - Determination of locations of all underground utilities
 - Consideration of confined space atmosphere potential
 - Proper soil protection systems and personal protective equipment and clothing
 - Determination of surface and subsurface water
 - Depth of excavation and length of time it will remain open
 - Proper adherence to OSHA Standards, this excavation and trenching safety program and any other coinciding safety programs.

Excavation Protection Systems-The three basic protective systems for excavations and trenches are sloping and benching systems, shoring and shields. The protective systems shall have the capacity to resist without failure all loads that are intended or could reasonably be expected to be applied to or transmitted

to the system. Every employee in an excavation shall be protected from cave-ins by an adequate protective system. There are 2 exceptions to using a protective system; Excavations are made entirely in stable rock and excavations are less than 5 feet deep and declared safe by a competent person.

Sloping and Benching Systems

There are four options for sloping:

1. Slope to the angle required the Standard for Type C, which is the most unstable soil type.
2. The table provided in Appendix B of the OSHA Standard may be used to determine the maximum allowable angle (after determining soil type).
3. Tabulated data prepared by a registered professional engineer can be utilized.
4. A registered professional engineer can design a sloping plan for a specific job.

Sloping and benching systems for excavations five (5) to twenty (20) feet in depth must be constructed under the instruction of a designated competent person.

Sloping and benching systems for excavation greater than twenty (20) feet must be designed and stamped by a registered professional engineer.

Sloping and benching specifications can be found in Appendix B of the OSHA Standard (Subpart P).

Shoring Systems

Shoring is another protective system or support system. Shoring utilizes a framework of vertical members (uprights), horizontal members (whales), and cross braces to support the sides of the excavation to prevent a cave-in. Metal hydraulic, mechanical or timber shoring are common examples.

The different examples of shoring are found in the OSHA Standard under these appendices:

- Appendix C-Timber shoring for trenches
- Appendix D- Aluminum Hydraulic Shoring for Trenches
- Appendix E- Alternatives to Timber Shoring

Shield Systems (Trench Boxes)

Shielding is the third method of providing a safe workplace. Unlike sloping and shoring, shielding does not prevent a cave-in. Shields are designed to withstand the soil forces caused by a cave-in and protect the employees inside the structure. Most shields consist of two flat, parallel metal walls that are held apart by metal cross braces.

Shielding design and construction is not covered in the OSHA Standards. Shields must be certified in design by a registered professional engineer and must have either a registration plate on the shield or registration papers from the manufacturer on file at the jobsite office. Any repairs or modifications must be approved by the manufacturer.

Personal Protective Equipment

It is company policy to wear a hard hat, safety glasses and work boots on the jobsite. Because of the hazards involved with excavations, other personal protective equipment may be necessary, depending on the potential hazards present.

Inspections

Daily inspection of excavations, the adjacent areas and protective systems shall be made by the competent person for evidence of a situation that could result in a cave-in, indications of failure of protective systems, hazardous atmospheres or other hazardous conditions.

- All inspections shall be conducted by the competent person prior to the start of work and as needed throughout the shift.
- Inspections will be made after every rainstorm or any other increasing hazard.
- All documented inspections will be kept on file in the jobsite safety files and forwarded to the Safety Director weekly.

Training

The competent person must be trained in accordance with OSHA Excavation Standard, and all other programs that may apply and must demonstrate a thorough understanding and knowledge of the programs and the hazards associated.

All other employees working in and around the excavation must be trained in recognition of hazards associated with trenching and excavating.

ELECTRICAL LOCKOUT/TAGOUT PROGRAM

Everyone who works on our near equipment that is powered by an energizing source, such as electric, pneumatic, hydraulic, gas, water, steam, chemical, momentum, gravity or springs shall Lock and Tag the equipment prior to performing any maintenance or set-up (Includes a normal production operations if a guard or other safety device is removed or by-passed, or if any part of the body is required to be in the 'point of operation', or a danger zone exists during equipment operating cycle.)

This policy applies to all employees and outside contractors. These are minimum requirements only and are not considered to be all encompassing.

Lockout/Tagout is required when:

- The energizing of a piece of equipment exposes an employee to a hazard when they are working on or near that piece of equipment. (i.e., guards are removed or any part of the body is to be in the point of operation)
- The operation of a piece of equipment may cause damage to that equipment.
- It is necessary to prevent the unauthorized use of equipment.

Definitions

Lockout-The term that means the locking of the energy source of a piece of equipment in such a way that the equipment cannot be energized without the lock being removed. All lockout devices shall contain a tag showing employee's name performing the lockout.

- Electrical lockout shall mean disconnecting the electrical power from equipment at the 'source' of electrical current by pulling a disconnect switch and attaching a lock.
- Equipment powered by other than electricity shall be locked in the following manner as appropriate:
 - Close the supply valve, chain and lock or remove the handle and tagout.
 - Insert a blocking device and tag it.

Tagout-The placement of a tagout device on an energy isolating device to indicate that the energy isolating device, and equipment being controlled, may not be operated until the tagout device is removed. All tags shall indicate the identity of the employee applying the tag.

Individual Lock-This is a lock issued to an employee for his/her own use, for his/her personal protection.

Lockout, Tagout and Tryout Procedures

Lockout shall be used on any equipment capable of being locked out. Tags may be used only when a piece

of equipment is not capable of being locked out.

1. Locking out or tagging out any equipment:

- a. Before starting work on any piece of equipment requiring a lockout or tagout, the individual involved must first obtain permission from the production supervisor responsible for the equipment. Also, if proper locking or tagging sequence is in question, check with supervisor responsible for the equipment.
- b. Equipment must be shut off at the appropriate energy source and any lines bled if necessary. All refrigerant in lines and equipment is to be recovered not vented.
- c. The lockout or tagout shall be made at the energy source by the individual performing the work.
- d. Switches or breakers will be thrown or pulled out and locked out or tagged by all individuals performing the work.
- e. Each person who works on a 'locked out/tagged out' piece of equipment shall place his/her lock/tag on the equipment. If a large number of people are working on the equipment, the supervisor of each group shall place a departmental lock/tag on the energy isolating device.
- f. When there is doubt as to the location of the proper energy isolating device(s), the maintenance department shall be contacted to ensure that the proper isolating device(s) are identified and locked/tagged out to de-energize the system or equipment.
- g. It is each employee's responsibility to see that he or she has a sufficient number of lockout/tagout devices. The employee shall obtain such devices from a Maintenance Supervisor.

2. Tryout Procedure:

- a. The group or individuals performing the work shall, after locking out or tagging out the energy isolating device(s), attempt to operate the equipment before beginning work on the equipment.
- b. The person trying out the equipment shall always push the stop buttons after testing.
- c. If the equipment does energize during the test, push the stop button and immediately contact the supervisor.

3. Removal of Locks or Tags:

- a. Each person shall remove his/her lock tag. It shall be a safety violation resulting in disciplinary action, to remove another person's lock or tag.
- b. When an employee has left his/her lock or tag on for an unknown reason and it has to be removed, the employee should be contacted to return to the location to remove the tag. If the employee cannot be contacted, a department supervisor is responsible to check out the equipment and make sure it is safe to remove the lock or tag.

Procedure for Equipment that Cannot be Physically Locked Out

Due to the age and design of some equipment at the location, it may not be possible to physically lockout some equipment. Every effort should be made to attach a device to these systems so they can be physically locked out. If lockout is not possible, the following should be done.

1. Electrical Equipment—
 - a. Breakers shall be placed in open position and then tagged by the individual performing the work.
 - b. Disconnect switches shall be pulled to open the circuit and tagged. Access to the switch shall be restricted by a barrier or enclosure.
 - c. Tags shall be placed on all open breakers and at other strategic locations (machine start buttons, etc.) by the individuals involved, notifying all people in the area that the equipment is being repaired.

2. Other energized equipment—

The following are other types of safeguard that shall be taken when it is impossible to physically lockout the equipment.

- a. Blanks in the line.
- b. Break lines and drop a section out on all sides or work being performed.
- c. Physically disconnect and tag the energy supply for the equipment to be repaired.
- d. Release or physically clock any device with stored or potential energy in the system.
- e. Place an employee of the same group that is working on the equipment, and who is properly instructed, at the disconnect as a 'safety person' to ensure that the equipment is not inadvertently energized.

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Lockout Procedures for Outside Contractors

When it is necessary to outside contractors to lockout or tagout equipment, the following shall be required.






1. The maintenance, production, or engineering supervisor assigned to the project shall follow the procedures outlined in this policy and lock or tag equipment.
2. The contractor shall notify Bedrock Concrete, LLC's supervisor while the lockout/tagout procedure is being performed and attach their locks or properly filled out tags.
3. The supervisor of the project and contractor shall be responsible for removing their own locks or tags when the work is complete.

FIRE PROTECTION and PREVENTION

Bedrock Concrete, LLC recognizes the dangers associated with fires. Employees have a responsibility in preventing losses associated with fires by using methods and practices, which protect themselves and others against fire. All field management personnel shall enforce and follow these guidelines.

1. Know where the nearest fire extinguisher is located and how to use it.
2. Practice good housekeeping and do not let combustible scrap or useless material accumulate in your area.
3. Obey 'No Smoking' signs.
4. Store oily or paint-soaked rags in covered metal containers.
5. When welding or cutting, make sure area is free of combustibles and a fire extinguisher is nearby.
6. Store flammable liquids in proper, labeled containers.
7. Report all fire hazards immediately.
8. All tarps and blankets shall be of fire retardant materials.
9. All gas bottles, such as oxygen, acetylene and propane shall be properly stored and secured in a vertical position in their designated area; all bottles not in use shall be capped.
10. Quantities of flammable or combustible liquids in excess of 25 gallons shall be stored in an acceptable or approved cabinet meeting the requirements of 29 CFR 1926.152.
11. Leakage or spillage of flammable or combustible liquids shall be recovered and disposed of promptly and safely.

Table F-1 FIRE EXTINGUISHERS DATA

	WATER TYPE				FOAM	CARBON DIOXIDE	DRY CHEMICAL			
	STORED PRESSURE	CARTRIDGE OPERATED	WATER PUMP TANK	SODA ACID			SODIUM OR POTASSIUM BICARBONATE		MULTI-PURPOSE ABC	
CLASS A FIRES WOOD, PAPER, TRASH HAVING GLOWING EMBERS 	YES	YES	YES	YES	YES	NO <small>(BUT WILL CONTROL SMALL SURFACES)</small>	NO <small>(BUT WILL CONTROL SMALL SURFACES)</small>	NO <small>(BUT WILL CONTROL SMALL SURFACES)</small>	YES	YES
CLASS B FIRES FLAMMABLE LIQUIDS, GASOLINE, OIL, PAINTS, GREASE, ETC. 	NO	NO	NO	NO	YES	YES	YES	YES	YES	YES
CLASS C FIRES ELECTRICAL EQUIPMENT 	NO	NO	NO	NO	NO	YES	YES	YES	YES	YES
CLASS D FIRES COMBUSTIBLE METALS 	SPECIAL EXTINGUISHING AGENTS APPROVED BY RECOGNIZED TESTING									
METHOD OF OPERATION	PULL PIN-SQUEEZE HANDLE	TURN UPSIDE DOWN AND BUMP	PUMP HANDLE	TURN UPSIDE DOWN	TURN UPSIDE DOWN	PULL PIN-SQUEEZE LEVER	RUPTURE CARTRIDGE-SQUEEZE LEVER	PULL PIN-SQUEEZE HANDLE	PULL PIN-SQUEEZE HANDLE	RUPTURE CARTRIDGE-SQUEEZE LEVER
RANGE	30' - 40'	30' - 40'	30' - 40'	30' - 40'	30' - 40'	3' - 8'	5' - 30'	5' - 30'	5' - 30'	5' - 30'
MAINTENANCE	CHECK AIR PRESSURE GAUGE MONTHLY	WEIGH GAS CARTRIDGE AND ADD WATER IF REQUIRED ANNUALLY	DISCHARGE AND FILL WITH WATER ANNUALLY	DISCHARGE ANNUALLY-RECHARGE	DISCHARGE ANNUALLY-RECHARGE	WEIGH SEAL ANNUALLY	WEIGH GAS CARTRIDGE-CHECK CONDITION OF DRY CHEMICAL ANNUALLY	CHECK GAS PRESSURE GAUGE AND CONDITION OF DRY CHEMICAL ANNUALLY	CHECK GAS PRESSURE GAUGE AND CONDITION OF DRY CHEMICAL ANNUALLY	WEIGH GAS CARTRIDGE-CHECK CONDITION OF DRY CHEMICAL ANNUALLY

HOUSEKEEPING

Housekeeping is important. It can affect safety, quality and production. It is the responsibility of every employee on site to keep their work area clean. Employees are responsible for trash and debris that are generated by their work. Trash and debris must be collected and placed in proper containers on a daily basis. If Bedrock Concrete, LLC is required to assign cleanup to another employee because of non-performance, the non-compliant employee will be liable for the total cost incurred.

Trash shall not be randomly thrown off a floor or through openings in the floor. Trash chutes, trash boxes, or other approved means such as barricading and/or flagging shall be utilized.

Stairways, scaffolds, ramps, platforms, walkways and work areas shall be kept clear of trash, debris, material and related items.

CRANES

1. The employee shall provide the Safety Manager or his representative with a copy of the annual Crane Safety Certification for each crane brought on the job.
2. All crane operations shall be in accordance with ASME/ANSI.B30.5 1989 and the Crane Institute of America or similar standards.
3. Crane Hand signals shall be posted in the area where signalman and cranes operates if possible.
4. All crane operations will have the required number of ground support personnel, i.e. Signal men, etc.
5. Lighting flagging, raising and lowering of crane booms shall be done in accordance with good safety rules and procedures.
6. All sling and crane load line hooks shall have safety latched installed or shall be moussed. (This does not apply to specialty slings and hooks, such as sorting or shake out slings or self-adjusting pipe slings.) Specialty slings and hooks shall not be used to set steel or move materials over workers.
7. Operating time and crane boom heights shall be reported to the Safety Manger or his representative.
8. A preventative maintenance schedule for cranes, wire rope, slings, etc. will be maintained, and records available upon request.
9. Maintain adequate distance between the crane and energized power lines according to OSHA standards.

Ladders and Stairs

It is the intent of Bedrock Concrete, LLC to provide all employees with the proper understanding, training and equipment necessary to prevent falls or injuries while using or working from or around ladders and or stairs. All work requiring the use of ladders and stairs shall comply with the requirements of 29 CFR subpart X, the OSHA standard for stairways and ladders in the construction industry. The information and suggestions below are general guidelines and is by no means complete.

Stairs-

1. Personnel shall not use any construction stairs unless the stairs are safe, properly lighted and use has been authorized by the general contractor. If stair rails are removed for any reason, the stairs shall be off limits until the protection is restored.
2. Toe boards shall be provided where materials may fall to lower levels where persons may pass beneath the open side.
3. Stairs shall be properly lighted at all times.
4. Stairs shall be kept clear of water, trash and debris at all times.
5. Electrical cords, welding leads, water hose, etc. shall not be run through and/or up stair treads.
6. Employees shall not use stairs at construction sites unless the treads are completed.
7. Handrails shall be provided for stairs where there are more than 4 risers or a change of elevation greater than 30 inches. The handrails shall provide an adequate handhold, with a minimum of 3 inches from the wall and be constructed in such a way and of material that will not snag, lacerate, injure or project into an individual. The handrail shall be able to withstand a force of 200 pounds without failure.
8. Handrails shall be used when ascending and descending stairs.

Ladder Classification

Type 1-A—These ratings include the weight of the person and all the tools and equipment placed on the ladder.

1. Extra Heavy Duty Industrial can support a maximum weight of 300 lbs.
2. Heavy Duty Industrial can support a maximum weight of 250 lbs.
3. Medium Duty Commercial can support a maximum weight of 225 lbs.
4. Light Duty Household can support a maximum of 200 lbs.

General Ladder Safety

1. Anytime an employee is expected to ascend or descend a distance greater than 19 inches to another elevation, a safe means for that transition shall be provided to prevent injury. This can

- be accomplished by using a stairway, ladder, ramp, or an authorized hoisting device.
2. Employees shall be properly trained by a competent person to recognize minimize and/or eliminate the hazards where possible.
 3. Employee training shall be documented and include instruction of the following: the requirements of 29 CFR 1926 subpart X, this stair and ladder safety program, the maximum intended load carrying capacities of the ladders to be used, the nature of the fall hazards, the proper use, erection, maintenance, disassembly and inspection of the fall protection systems to be used. Training shall also include proper reporting of hazards and proper construction, use, placement, care and handling of stairs and ladders as appropriate.
 4. Do not use a ladder for anything other than for what it was originally designed.
 5. Do not use a ladder at or near an open wall or leading edge where the user is exposed to falling from a height greater than the working height of the ladder. Unless the fall hazard is abated i.e.; by using a personal fall arrest system.
 6. Ladders shall not be moved, shifted or extended while occupied. Walking a ladder to move it is strictly prohibited. Always descend and move the ladder.
 7. The user shall always face the ladder when ascending or descending and use extreme caution.
 8. Employees shall use a least one hand to grasp the ladder when progressing up or down the ladder. Maintain a three point stance: two feet and one hand or both hands and one foot).
 9. Employees shall not carry any object or load while ascending or descending a ladder that could cause them to lose balance and fall. Materials shall be hoisted or carried on a suitable device that will free both hands.
 10. Do not jump off a ladder. Use the steps all the way to the ground.
 11. Never use a ladder on an unstable base.
 12. Never use a metal or aluminum ladder around or near an electrical source and keep any ladder at least 10' away from overhead power cables. Ladders shall have non-conductive side rails when used near exposed electrical equipment.
 13. Never stretch beyond the side rails in order to reach something or to perform duties, always climb down and move the ladder.
 14. Never use a ladder in a passageway, doorway, or driveway unless the ladder is secured of the area is barricaded to keep the activities or traffic away from the ladder.
 15. The area around the top and bottom of the ladder shall be kept clear.
 16. Never use a defective ladder. Tag it out of service and remove it from the workplace.

Ladder Inspection and Maintenance

1. Any ladder that has structural defects shall be marked or tagged "Do not use" and taken out of service until repaired.
2. Inspect ladders prior to use and regularly to ensure they are safe at all times. The competent person shall inspect ladders according to the manufacturer's instructions.
3. Checked for cracked, broken, loose or missing rungs and side rails.
4. Check the spreaders to ensure that they work properly and are not loose, thus causing the ladder to wobble.
5. Check the guides on extension ladders to ensure they fit properly and allow the ladder to be adjusted freely.

6. Check for corrosion on metal and aluminum ladders and parts.
7. In order to thoroughly inspect ladders, they are not to be coated with opaque coverings except for warning labels which are limited to one face of the side rail. However, wooden ladders may be coated with boiled linseed oil to help protect them from moisture.
8. Ensure the ladders are maintained free of oil, grease and other slipping hazards.
9. Ensure slip resistant feet are in good condition. They are required when the ladders are used on slippery surfaces.

Extension Ladder Set Up and Use

1. Extension ladders are non-self-supporting ladders that extend by means of factory installed guides and stops allowing a maximum overlap when the ladder is fully extended. The following additional requirements apply to extension ladders.
2. Secure or foot the ladder firmly before extending it.
3. Always extend a ladder using the proper overlap.
 - a. Ladders up to 32 feet, use a 3' overlap
 - b. Ladders 32-36 feet, use a 4' overlap
 - c. Ladders 36-48 feet, use a 5' overlap
 - d. Ladders over 48 feet, use a 6' overlap
4. Always carry and set up a ladder with the fly section lowered.

Mobile Equipment

1. Follow all posted speed limits while driving on Bedrock Concrete LLC's property or jobsites. This will be monitored and speeding will not be tolerated. If speed limits are not posted, drive slow and defensively.
2. Each employee or supplier employee driving motor vehicles on Bedrock Concrete, LLC's property shall have a valid driver's license and each such motor vehicle shall have a current inspection if required by the state of registration.
3. No vehicle or equipment operator shall dismount any equipment without first turning off the engine and/or securing the equipment from movement. If the vehicle has a key ignition, keys shall be removed and controlled by the operator.
4. All vehicles with obstructed view to the rear shall be equipped with a functioning back-up alarm.
5. All construction equipment windshields and side windows shall be clean and unbroken. Safety equipment such as head, tail, brake, and clearance lights, etc., shall be kept clean and tested daily, or at the beginning of each shift while operating on the site.
6. Heavy equipment with rotating superstructures shall be guarded in such a manner that rotation of the superstructure shall not present a hazard to pedestrians or infringe into any traffic lane.

Powered Industrial Trucks

1. General Requirements-
 - a. All powered industrial trucks (PITs) acquired after Feb 15, 1972 shall meet the design and construction requirements for PITs established in the American National Standard Institute (ANSI) for Powered Industrial Trucks, Part II, ANSI B56.1-1969.
 - b. Approved trucks shall bear a label or some other identifying mark indicating approval by the testing laboratory.
 - c. All name plates and markings on the truck shall be in place and in a legible condition.
 - d. Name plates should show the weight of the truck and its rated capacity as specified by ANSI/ASME B56.1.
 - e. Modifications and additions which affect capacity and safe operation shall not be performed without manufacturer's prior written approval.
 - f. If the truck is equipped with front-end attachments other than a factory installed attachment, the user shall request that the truck be marked to identify the attachments and show the approximate weight of the truck and attachment combination at maximum elevation with load laterally centered.
 - g. Many states have labor laws that restrict the age of the forklift operators. In Missouri and Kansas the minimum age to operate a forklift is 18 years old.
 - h. Any powered industrial truck not in safe operating condition shall be removed from

- service and all repairs made by authorized personnel.
- i. Prior to any operation of the fork truck, an inspection shall be done to ensure the truck is in a safe working capacity.
2. Safe Guards-
 - a. High lift rider trucks shall be fitted with an overhead guard when the truck has the capacity of lifting loads overhead or where falling object hazards exists.
 - b. Overhead guards shall not interfere with the driver's visibility and operation of the truck. Openings on the guard should be small enough to protect the operator from being struck by falling material from overhead.
 - c. If the type of load presents a hazard, the user shall equip fork trucks with a vertical load backrest extension manufactured in accordance with ANSI/ASME B56.1.
 - d. Seat belts shall be worn at all times.
 - e. Guards shall be installed over exposed tires, hazardous moving parts, and exposed gears.
 - f. Horns and flashing overhead lights can be used to warn employees of approaching fork trucks.
 - g. Pedestrians shall always have the right of way.
 3. Fuel Handling and Storage-
 - a. The storage and handling of liquid fuels such as gasoline and diesel fuel shall be in accordance with the Flammable and Combustible Liquids Section.
 - b. Fill fuel tanks on fork trucks at designated locations, preferably in the open air, with the filling hose and equipment properly bonded and grounded.
 - c. Engines shall be stopped and operators shall be off trucks before they are refilled.
 - d. NO SMOKING shall be permitted during refueling or near refueling.
 - e. The storage and handling of liquefied petroleum gas shall be in accordance with NFPA Storage and Handling of Liquefied Petroleum Gases. (NFPA no. 58-1969).
 - f. Fire extinguishers shall be located at the refueling site.
 - g. A fire extinguisher shall be permanently mounted on the roll cage of the fork truck.
 4. Batteries-
 - a. Battery charging installations shall be located in a designated area.
 - b. Facilities shall be provided for flushing and neutralizing spilled electrolyte, for fire protection, for protecting charging apparatus from damage by trucks, and for adequate ventilation for dispersal of fumes from gassing batteries.
 - c. A conveyor, overhead hoist, or equivalent material handling equipment shall be provided for handling batteries.
 - d. All re-installed batteries shall be properly positioned and secured in the truck.
 - e. When charging batteries, acid shall be poured into water instead of water poured into acid.
 - f. NO SMOKING shall be permitted in the charging area or during charging operations.

Control of Noxious Gases and Fumes

1. Concentration levels of carbon monoxide gas created by powered industrial truck operations shall not exceed the OSHA TLV levels.
2. Do not leave trucks idling unnecessarily inside buildings, outside near windows, or near

ventilation intake ducts.

Fork Truck Operations

1. Trucks shall not be driven up to anyone standing in front of a bench or other fixed object.
2. Employees shall not be permitted to pass under the elevated portion of any truck, whether loaded or empty.
3. There shall be only one operator of a forklift; passengers/riders are prohibited.
4. Operator's arms or legs shall be prohibited from being placed between the uprights of the mast or outside the running lines of the truck.
5. When a powered industrial truck is left unattended load engaging means shall be fully lowered, controls shall be in neutral, power shall be shut off, and brakes set. Wheels shall be blocked if the truck is parked on an incline.
6. A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock or platform.
7. Looking out for pedestrians is the truck operator's responsibility. They shall sound the horn when approaching pedestrians. ***Pedestrians always have the right of way.***
8. Traveling-
 - a. Operators shall observe all traffic regulations, including authorized in-house speed limits.
 - b. A safe distance shall be maintained approximately three truck lengths from the truck ahead, and the truck shall be kept under control at all times.
 - c. Operators shall slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall travel with the load trailing.
 - d. Operators shall drive down all declines and drive up all inclines.
 - e. When transporting material, keep the load no more than 6 inches off the floor.
9. Loading-
 - a. Only stable or safely arranged loads should be handled.
 - b. Place heavy, odd shaped objects with the weight as low as possible.
 - c. Loads shall never exceed the trucks rated capacity.
 - d. Always tilt the load back towards the mast of the truck before transport.

Required Operator Training

1. Bedrock Concrete, LLC shall ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training evaluation specified in 29 CFR 1910.178 paragraph (I). Employees will not be allowed to operate forklifts, except for training, unless they have satisfied all training requirements.
2. Training should consist of a combination of formal instruction, practical training, and evaluation of the operator's performance in the workplace.
3. All training shall be conducted by persons who have the knowledge, training and experience to train and evaluate powered industrial truck operators.

Refresher Training--Refresher training shall be provided when:

1. The operator has been observed to operate the vehicle in an unsafe manner.
2. The operator has been involved in an accident or near miss incident.
3. The operator has received an evaluation that reveals that the operator is not operating the truck safely.
4. The operator is assigned to drive a different type of forklift.
5. A condition in the workplace changes in a manner that could affect safe operation of the truck.
6. An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three years.

Certification—Bedrock Concrete LLC shall certify each operator that has been trained and evaluated. The certification shall include the name of the operator, the date of training and the date of evaluation.

Aerial/Scissor Lifts

1. Only authorized persons shall operate an aerial or scissor lift.
2. All lifts should be equipped with operator's manual and/or checklist. All operators shall become familiar with and fully comply with all manufacturers' safety instructions.
3. A placard or sign identifying the lift's load capacities must be displayed somewhere on the lift. Maximum weight capacities of the lifts should never be exceeded under any circumstances.
4. Lift operators should never ignore, disable or alter an installed safety device, switch or alarm.
5. Lift operators must be conscious of their surroundings, with respect to pedestrian traffic and nearby activities on the ground near the base of the lift.
6. Lift controls shall be tested each day prior to use to determine that such controls are in safe working condition.
7. All materials, tools or components being elevated in the lift, must remain on the floor and be positioned so that they are not protruding through the handrails, or could off the lift.
8. Lifts should only be operated on flat, level surfaces.
9. Employees working from scissor-lifts/aerial lifts must remain on the floor of the basket at all times and shall not sit or climb on the edge of the basket or use planks, ladders or other devices for a work position.
10. In aerial lifts, personal fall arrest systems must be used and secured to the boom or basket during lift operation.

Welding/Compressed Gas

RESPONSIBILITIES-

Management shall establish this policy to enforce a permit system which ensures welding and cutting operations are not initiated until fire safety considerations have been addressed. All work is to be evaluated to determine that the area is free from combustibles and flammable vapors prior to the performance of any welding, cutting or burning. If these factors are present and can't be eliminated or mitigated, then work will stop.

Management will appoint a designated supervisor that will be responsible for obtaining specific permits to perform hot work. Management will audit work to ensure that craftsmen are utilizing equipment, materials and work methods.

Bedrock Concrete, LLC will maintain SDS on welding rods, gases and fluxes.

Supervisors-

1. Will assume responsibility for identification of work.
2. Ensure a Job Safety Analysis is performed prior to work beginning.
3. Ensure that employees are thoroughly trained to perform their assigned tasks.
4. Supervisors shall insure that proper ventilation is obtained when welding, cutting, burning, or arc-air gouging. When burning and welding is being performed on metals known to generate toxic fumes, levels of toxins shall be determined and ventilation, respirators, or supplied air shall be used to insure employee protection.
5. When work is taking place inside of a confined space the supervisor will insure proper mechanical ventilation, lifelines, and adequate cylinder storage. Torches shall have check valves, and back flow arrestors at the regulators. Shut off valves should be located mid-way from the regulator to the torch barrel (preferably near the entrance of the confined space).

Employees-

1. Perform only tasks in locations assigned, maintain, handle and store equipment according to instructions.
2. Not perform any welding and cutting operation that is not deemed safe or where the conditions for cutting or welding are not safe.
3. Perform only the operation for which they are thoroughly trained.
4. Equipment should be inspected prior to each use and any equipment defect or piece of equipment, which poses a safety hazard, should be reported, and repairs shall be made only by competent personnel.

Welding and Cutting Hazards

1. Flammable Hazards:

- a. Burns: Welding and cutting operations generate hot sparks, gas flames, and molten metal, all of which can cause severe burns. The potential for burns is increased when welding and cutting overhead. Slag and sparks should be minimized using fire blanket and proper work practices.
- b. Fire: The risk of fire is ever present. A fire watch and a hot work permit is required for welding and cutting operations which involve the following hazards—
 - i. Location of combustibles in the surrounding work area closer than 35 feet or beyond 35 feet and are easily ignited.
 - ii. Open sewers with a 25 foot radius.
 - iii. Locations where other than a minor fire might develop.
- c. Radiation: The use of arc welding generates extremely intense radiation in the form of ultraviolet, visible and infrared. Exposure to the flash or light can cause severe eye damage. Screens, barriers and protective devices shall be utilized when possible to ensure employee protection.
- d. Physical Hazards:
 - i. Hoses, cables, welding leads and other equipment shall be kept clear of passageways, doors, ladders, stairs, open holes, and excavations. These should also be protected from vehicle and pedestrian traffic where they cross walkways or roads.
 - ii. Welding hoods and goggles shall be worn by exposed personnel during welding operations. Welder's helpers shall wear flash goggles when exposed to welding arcs.
 - iii. When necessary, all arc welding or cutting operations shall be protected by flame proof screens to protect employees from welding arc flash and slag spatter.
 - iv. No welding shall be permitted over unprotected, flammable objects, such as compressed gas cylinders, gasoline cans, oily rags, paint, open sewers. If fire hazards cannot be removed from the area of operation, then screens or other protective devices shall be employed.
 - v. First aid equipment shall be available at all times. All injuries shall be reported as soon as possible for medical attention. First aid shall be rendered until medical attention can be provided.
- e. Health Hazards:
 - i. Respiratory: Welding and cutting metals can result in metal fume fever. This is caused by inhalation of metal oxide fumes. The effects of metal fume fever simulate influenza and acute bronchitis pneumonia. It is characterized by chills, shivering, trembling, nausea and vomiting.
 - ii. Gastrointestinal: This disturbance is common in welders and cutters experiencing metal fume fever.
 - iii. Ocular: Welders may experience a number of eye associated problems without proper eye protection. (i.e. flash burns, blurred vision, cataracts, retinal injury, and foreign bodies embedded in the eye)

- iv. Dermal: Skin problems may result from exposure to ultraviolet rays resulting in burns.
- v. Hearing loss: This is a hazard when employees are not wearing hearing protection during air-arc gouging operations.
- vi. Asphyxiation: This may occur in confined spaces without adequate ventilation.
- vii. Electric Flash: Because current intensities of 100-600 amps and 30-60 volts, AC or DC are used in welding, shocks are always possible. These injuries are serious and often lead to fatalities.

Compressed Gas Cylinders-

1. Receiving and Storage of Compressed Gas Cylinders

- a. Cylinders must be properly identified with labels. Do not rely on the color or shape of the cylinder only. Any cylinder without a legible, written identification of the contents shall not be used.
- b. All cylinders shall be secured in an upright position with a chain, cable, or other suitable means, to keep them from falling. Cylinders shall be secured in an upright position at all times. Acetylene cylinders shall always be stored vertically and used vertically with the valve end up. They shall not be allowed to lie horizontally.
- c. Do not drop or otherwise handle roughly.
- d. Cylinders will not be accepted or stored if the protective cap is not over the valve and screwed down. (A blow to an unprotected valve could cause the contents to be released under high pressure). Empty cylinders shall have their valves closed.
- e. Do not accept cylinders of gas if they are leaking, the cylinder and/or valve is severely corroded, or if dents, holes, cracks, fire burns or other signs of deterioration of the container are evident, odors may indicate leaking contents.
- f. Cylinders should be stored in a safe, dry and well ventilated place that is clean and free of combustible materials. Cylinders shall be kept away from heaters or other sources of heat.
- g. All stored cylinders, should be grouped by the types of gases contained in them.
- h. Stored cylinders of oxygen shall be at least 20 feet from flammable gas containers or combustible materials. All oxygen, acetylene, or other fuel gas cylinders and outlets shall be kept free of oil or grease, and should not be handled with oily gloves or hands. A jet of oxygen shall not be allowed to strike an oily surface or enter a fuel oil or other storage tank.
- i. Fuel gas cylinders shall not be stored with oxygen cylinders, unless a fire resistant barrier with a one hour fire rating separates the cylinders; or unless such cylinders are separated by a minimum of twenty (20) feet.
- j. Storage areas must have adequate fire extinguishers available. Extinguishers should be carbon dioxide or dry chemical type.
- k. Compressed gas cylinders must be pressure tested every five (5) years unless the cylinder is less than thirty-five (35) years old and has a stat by the pressure test date, and then the cylinder must be tested every ten (10) years.
- l. Full and empty cylinders must be stored separately. Cylinders must be tagged showing full or empty status.

2. Using the Cylinder

- a. Take care not to engage valve when uncapping cylinders. Check hoses and connections to make sure they are in good condition.
- b. Never lubricate the fittings. Oil with oxygen can cause an explosion.
- c. Use appropriate pressure regulators to reduce the high cylinder pressure to the required working pressure. Valves on acetylene bottles shall not be opened more than one and one-quarter turns in order to facilitate a quick shut off in the event of a fire.
- d. Valves on acetylene bottles shall not be opened more than one and one-quarter turns in order to facilitate a quick shut off, in the event of a fire.
- e. If cylinders are found with leaking valves or fittings, which cannot be stopped by closing the valve, they shall be removed from all sources of ignition and slowly emptied.
- f. When working in an enclosed space, the gas supply to the torch shall be shut off at the cylinder outside the enclosed space whenever the torch is to be left unattended for a substantial length of time, such as during lunch time. Pressure will be relieved from the hoses.
- g. Cylinders must not be used as rollers, or as supports.
- h. Do not strike electrodes against cylinders or place cylinders where they may become part of an electrical circuit.
- i. Do not substitute one gas for another. Oxygen must never be used as a substitute for compressed gas.

Hand and Power Tools

All hand tools, power tools, and similar equipment provided by Bedrock Concrete, LLC shall be maintained in a safe working condition. Unsafe tools are to be immediately tagged and removed from service until repaired.

Power-operated tools which are designed to accommodate guards (grinders, saws, etc.) shall be equipped with such guards at all times. The use of power-operated tools without the required guards or impaired guards is prohibited. Guard cannot be altered in any manner, which could cause them not to function properly or void the manufacturer's warranty.

Hand Tools-

1. Employees are not permitted to use unsafe hand tools.
2. Wrenches are not to be used when their jaws are sprung to the point that slippage occurs. The use of cheater bars to increase torque capacity is prohibited.
3. Impact tools such as chisels, drift pins, punches, and wedges are not to be used if they have mushroomed heads.
4. The wooden handles of tools are to be free of cracks and splinters and kept tightly attached to the tool.

Powder-Operated Tools-

1. Only employees who have been trained and certified can operate powder actuated tools.
2. Employees are prohibited from operating any brand or model of powder actuated tool for which they have not been certified or trained.
3. The tool is to be tested each day before loading to see that safety devices are in proper working condition. The method of testing shall be in accordance with the manufacturer's recommended practice.
4. Proper personal protective equipment shall be worn while any employee is operating a powder actuated tool.
5. Any tool found not in proper working order, or that develops a defect during use, shall be immediately removed from service, tagged and not used until properly repaired.
6. Tools are not to be loaded until just prior to the intended firing time.
7. Neither loaded nor empty tools are to be pointed at any employee or person at any time. Hands are to be kept free of the open barrel end at all times.
8. Do not drive fasteners into very hard or brittle materials.
9. Driving into materials easily penetrated shall be avoided unless such materials are backed by a substance that will prevent the pin or fastener from passing completely through and creating a missile hazard on the other side.
10. Do not drive any fastener into a spalled area caused by an unsatisfactory fastening.
11. Safety glasses shall be worn by all employees who are operating any powder actuated tool. Safety glasses shall be worn by all employees in the area of a powder actuated tool being used.

12. Powder actuated tools shall not be used in flammable or explosive environments.
13. All tools shall be used and maintained with the correct shield, guard or attachment recommended by the manufacturer.
14. Blind shots shall not be made if the operator cannot see what is on the other side of the wall, partition, etc. The area shall be secured by some form of barricade, or by blocking off access to the danger area prior to operating the tool.

Grinding Tools and Abrasive Wheels-

1. All grinding machines shall be of sufficient power to maintain the spindle speed at safe levels under all conditions of normal operation.
2. All grinding tools are to be equipped with wheel guards or safety flanges appropriate to their work application. Guards and their fasteners shall be strong enough to contain the fragments of a bursting wheel.
3. Bench and stand mounted grinders with abrasive wheels shall be equipped with safety guards. The guards shall be strong enough to withstand the effects of a bursting wheel.
4. Bench and stand mounted grinders shall be equipped with tongue guards on the upper exposed surface of the wheel at no greater than $\frac{1}{4}$ inch from the wheel surface.
5. Bench and stand mounted grinders shall be equipped with rigidly supported and readily adjustable work rests. Work rests are to be kept at a distance not to exceed $\frac{1}{8}$ inch from the surface of the wheel.
6. Cut type abrasive wheels used for external grinding are to be protected by either a revolving cup guard or band type guard. All other portable abrasive wheels used for external grinding shall be provided with safety guards.
7. All wheel cups, discs, wire brushes, etc. should be matched to the equipment by shank size, wheel speed rating, etc.
8. The maximum angular exposure of the portable grinding wheel shall not exceed 180 degrees.
9. Abrasive wheels are to be closely inspected and ring tested prior to mounting to ensure they are free of cracks and defects.
10. Grinding wheels are to fit freely on the spindle and not be forced on. The spindle nut shall only be tightened enough to hold the wheel in place.
11. All employees using abrasive wheels, whether mounted on a bench, stand, or portable grinder, shall at all times wear approved eye and face protection.
12. Shielding or barricades should be placed around work areas near passageways and unprotected workers who would otherwise be exposed to flying shavings and grit produced during grinding operations.
13. When grinding operations are considered to be a fire hazard or hot work, permits may be required to starting work.

Power Saws-

1. All circular, cutoff, and chain saws shall be equipped with the manufacturer's guarding devices. The removal, modification, or disabling of saw guarding systems is strictly prohibited.

2. The replacement of blades, cutoff wheels, and chains shall only be performed with the saw's power source disabled. Electric powered saws will be unplugged and gas driven saws shut off.
3. All employees operating power saws or working within close proximity of their operations shall be required to wear approved eye and face protection.
4. All power saw blades and cutting wheels shall be matched to the saw and material being cut.

Danger/Caution Tape

All safety tape (caution, danger, etc.) should have a tag on it providing the following information:

1. Date placed
2. Employee name
3. Foreman responsible for tape and how to contact him/her
4. Description of work being done
5. Date/time when work is expected to be completed

Visitors

It is of the utmost importance that a high degree of protection be afforded all persons touring the project site. The following guidelines are general instructions for the personnel who are responsible for the organization, direction and safe conduct of tours.

1. All group tours will require prior approval from the management of Bedrock Concrete LLC.
2. Immediately prior to entering the project site, all visitors are to be briefed concerning careful and orderly conduct, including identification of any specific hazards they may encounter.
3. All visitors will be provided and expected to wear appropriate personal protective equipment, such as hard hats and safety glasses. High heels, dresses, skirts, or other loose clothing should not be worn.

Security

Bedrock Concrete, LLC is dedicated to the protection of its employees, visitors, information, facilities and other assets from any security threat affecting our company, in order to eliminate or reduce company losses. Theft on a construction project for example, costs more than just the expense to replace equipment and materials. This type of loss can include delayed completion, downtime, cost overruns and contract penalties.

Project security must be part of the pre-construction planning process and communicated to all project contractors. Although site security is often implemented by the General Contractor, it's important for subcontractors to do their part as well. Recognizing that each project site is unique, the following sections represent common control methods available to adequately secure project sites:

Fencing

Fencing should always be the first method of access control considered. Fencing will also reduce the number and frequency of patrols needed. The following recommendations are offered, with regard to fencing:

- Use see-through material such as chain link. These materials allow thieves to be visible from both the controlled and non-controlled areas of the project site.
- Keep bushes and weeds trimmed back from the fence to aid visibility.
- If possible, fences should be at least eight feet in height, with posts set in concrete.
- Consider using barbed wire or razor wire at the top of fences for added security.
- Conduct routine fence inspections and promptly repair any openings or damaged areas.
- Do not allow random items to be piled up on either side of a fence as they may create a 'climbable' condition and compromise security.

Barriers

When perimeter fencing is not feasible, barriers can be used to help prevent theft of mobile equipment on a construction site. Barriers include low walls, posts, dirt berms or ditches that help prevent mobile equipment from being driven or towed off the site.

Walls and berms should be no higher than three feet, posts should protrude two to four feet from the ground and be no more than two feet apart, and trenches or ditches should be three to four feet deep and sloped so that most vehicles cannot be driven across.

Gates

One entrance/exit to the site, secured with a locking gate is ideal. Using guarded access to control and screen entries and exits should be an option for both construction operations and off-hours.

Gates should be of heavy construction, with hinge pins spot-welded to prevent easy removal. Locking hardware should consist of a case-hardened chain and a high-security padlock permanently attached to

the fence. Shielded or blind locking devices should also be used.

Signage

Placing adequate signage around the perimeter of the site is one of the simplest ways to warn passersby and deter security threats. There are endless messages that can be delivered via the usage of signs. It is most important to inform people that the site is potentially dangerous and it is private property and trespassing is not allowed.

It is also a good idea to place the name and phone number of the project's Superintendent and/or project manager on a sign near the entrance gate, whereby members of the public or responding authorities can quickly contact an authorized representative.

Illumination

Good lighting can be a theft deterrent. Good lighting also allows for effective surveillance by patrols and security cameras. The perimeter of the jobsite should be well illuminated with lighting positioned to avoid a distracting glare for patrol personnel. Whenever possible, interior areas should also be well lit.

Access Control

Access control is the process of permitting access to the project site by authorized persons while denying access to others. Controlling access to the project site usually involves multiple control measures, such as:

1. Warning Signs
2. Gates
3. Fencing
4. Locks
5. Barriers

Strangers or suspicious persons roaming the project site during working hours should be challenged as to their purpose for being on the site. This may also include unidentified or suspicious delivery or vehicles.

Locks

Along with securing gates, use locks to secure equipment, supplies and materials stored in gang boxes, storage rooms and trailers. Use only 'high security' locks (unique key, pick restraint, case hardened or laminated steel) and prohibit the use of combination locks. When possible, ensure that key-in cylinder locks are protected by a guard to prevent removal.

Key Control

If keys are secure areas must be utilized by multiple persons, they should be kept in a central area and signed out as needed by authorized personnel. Any key taken should be recorded in a log with name, date, time out and time returned.

Patrol personnel who are given access to secure areas should also be part of the procedure. Logs should be maintained to ensure that employees or subcontractors who are finished with their involvement on the

project have returned all keys. Additionally, be sure to remove keys from all mobile equipment.

Trailers-office and storage

Office and storage trailers are often targets for theft, vandalism and malicious mischief. Locating these trailers near the guarded entrance/exit point, and visible from the street, can help deter crime. For jobsites in high crime areas, consider using metal grating over windows and doors of office trailers and immobilizing storage trailers.

Use point of entry or motion sensor alarms to provide added security for office trailers and trailers containing high value equipment or materials.

Computers and other electronic equipment located inside office trailers should be secured in place, by using computer locking devices or secured to desks or the floor using strips of metal, bolts or screws.

Keep a master record of the serial numbers on all tools, equipment, computers, fax machines, desk and cell phones and two-way radios.

Offsite Exposures

Construction projects often utilize offsite storage locations and material staging areas. Ideally, construction materials should be delivered on an as-needed basis; however, factors such as project schedule, delivery distances and cost often make this delivery system infeasible.

The longer uninstalled materials and supplies remain stored on a construction site, the greater their exposure to theft, vandalism and malicious mischief. These potential exposures must be considered when developing the project security measures to be implemented.

Equipment/Tool Security

A comprehensive inventory should be maintained of all equipment and valuable tools. This listing may be kept at the jobsite or the company's main office. It is also important to adequately label and/or engrave all tools and equipment. During non-working hours, all tools should be placed in locked gang boxes or other storage areas that are secured.

All mobile equipment should be parked out of plain view and immobilized during non-working hours and if possible, chained or grouped together. Whenever possible, mobile equipment should be disabled with hidden power switches.

Video Surveillance

As with all the components of the security plan, it is important to tailor the surveillance to the construction type, location and value exposed. The idea of being caught on video is a great deterrent to theft. The types of video surveillance systems are endless and can usually be transferred from one jobsite to the next. There is always an increased possibility of apprehension, when video surveillance is properly used and monitored.

WHAT TO DO WHEN AN EMPLOYEE IS INJURED

If the injury is life threatening, **call 911** and attend to the employee



Call, Beau, Jon, Ryan or Peggy or main office:
OFFICE-913-393-0935
Beau-913-205-2630
Jon-913-284-2305
Ryan-913-608-2436
Peggy-913-449-5960

If the injury is NOT life threatening, but needs medical attention



Call Peggy or main office to get location information about where to take employee. We use Concentra or a KU Medical Center Urgent Care.

If the injury does not need medical attention



Employee needs to report injury to their foreman and record it on their time record at the end of the day when clocking out.

If you choose to get medical care without approval from management then it will be your responsibility to pay. If an injury gets worse during an evening or weekend, call and get approval before seeking medical treatment or all costs will be your responsibility!

WHAT TO DO AFTER A VEHICLE ACCIDENT

CALL 911

Even if there are no injuries, call anyway to obtain a police report



Evaluate for injuries and if there are injuries, refer to injury instructions

CALL Beau, Jon, Ryan or Peggy to report accident and then follow steps below

1. If unable to contact anyone at Bedrock or Blue Lion, call insurance agent.
2. Exchange insurance information if there is another driver involved (all trucks should have an envelope in glove box with insurance, registration and accident form)
3. Obtain any witness contact information
4. Take pictures
5. Fill out the required accident form and return it to the office