Project Safety Program

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SC Builders

910 Thompson Place

Sunnyvale, California, 94085

www.scbuildersinc.com

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I. Emergency Response

Each project team will develop an Emergency Response Plan and/or an Emergency Medical Plan to encompass site-specific conditions and needs.

1. The Emergency Response Plan will provide the following key information:
    a. Duties to be performed during a medical emergency.
    b. Assignment of responsibilities for each identified task.
    c. Assignment for an alternate person to be responsible in the event of absence of the assigned person.
    d. Emergency contact information for the following SC Builders staff:
        i. Jobsite telephone numbers and e-mail addresses.
        ii. Personal contact information for jobsite staff for emergency use.
        iii. Regional contact information.
        iv. Corporate contact information.
        v. Media control information and procedures.
2. The Emergency Response Plan will be reviewed with all employees periodically.

A. MEDICAL EMERGENCY

SC Builders has a contractual relationship with the emergency-response entity known as Onsite Health & Safety (OHS), who will be called in the event of injury or illness unless it is an obvious major-injury situation. (All SC Builders employees with first aid training have the knowledge to determine when the extent of an injury requires calling 9-1-1.) Thus, when injury or illness occurs on an SC Builders work site, the Superintendent or other designated person will call either 9-1-1 or OHS, as appropriate.

When reporting a medical emergency, the Superintendent or designated person will provide their name, the nature and severity or illness, and the exact location. An employee may be directed to meet responders at the construction entrance and direct them to the emergency.

1. Minor Injuries:
    a. Minor injuries are those that require only immediate first aid treatment and are not likely to result in lost work time.
    b. In the event of a minor injury, the Superintendent or other designated person will determine if an appropriately trained employee may treat the injury within the scope of their first aid training.
    c. If additional attention or expertise is required for a minor injury, the Superintendent or designated person will contact OHS to come to the scene and treat the injured or ill person.
2. Major Injuries:
    a. Major injuries are those that require extensive medical treatment, potential use of emergency transport, are likely to result in lost workdays, involve three or more workers, or result in death.
    b. In the event of a major injury, the first person to encounter the injured person will summon others to notify SC Builders and may start to administer first aid if properly trained.
    c. While awaiting arrival of emergency responders, an injured person will not be moved unless such action is absolutely required by the situation to save the person's life or prevent additional injury. Any such movement requires the use of proper lifting and transportation methods to avoid aggravating the existing injury.
    d. Upon entering the jobsite, whenever possible a designated person should direct emergency responders to the location of the injured person.

e. Equipment and material involved in the incident will not be disturbed unless it presents an additional danger to the injured person.
f. Preparation of accident/incident reports will be started as soon as the injured or ill person is under the care of proper medical authorities.
g. Within 24 hours of a major injury, SC Builders will conduct an All-Hands Safety Meeting with attendance required of all workers on the jobsite. The incident will be reviewed for preventive measures, mitigation measures and pre-planning.

3. Workers who suffer a head injury or major impact, or whose injuries are the result of a fall, must be provided transportation to an appropriate medical facility only by qualified medical responders.
4. Upon return from treatment, an employee may return to work only with a release in writing from the attending physician.
5. See SC Builders' IIPP for additional information regarding Serious Injuries and required reporting.

B. FIRE PREVENTION AND FIRE PROTECTION

All workers will be trained in the use of portable fire extinguishing equipment as required by Cal/OSHA. Also refer to Fire Prevention and Fire Protection in The Code of Safe Work Practices, Section M of this Safety Manual.

Fire extinguishers will be maintained in all work areas and will be conspicuously located and in full view. Clothing and other material must not be placed over fire extinguishers.

Evacuation routes will be kept clear in all work areas. Access to fire hydrants will not be obstructed at any time. Storage of material is to be 15' clear of all fire hydrants at all times, minimum.

Employees will attempt to put out a fire unless it has burned out of control, is life-threatening to them or if there is no fire-fighting equipment in the vicinity. After reporting the fire, if the area is to be evacuated, employees will evacuate the work area and report to the jobsite office or designated assembly area.

When a fire is first noticed the employee(s) will immediately:

1. Sound an alarm, by horn or word of mouth, and notify others in the area and assist with evacuation if necessary.
2. Employees will attempt to put out the fire unless it has burned out of control or is life-threatening to them.
3. After fires have been extinguished, a thorough investigation will be conducted and documented.
4. All used firefighting equipment such as fire extinguishers, fire-retardant tarps, etc. will be removed from the work area.
5. Discharged fire extinguishers will be immediately replaced with fully charged and tagged fire extinguishers.

C. CHEMICAL SPILLS

In an effort to minimize the effects of chemical spills on the environment, each subcontractor employing fuel-operated equipment or vehicles on jobsites will have a spill kit on site when the equipment is on site. Spill kits will be of sufficient volume to accommodate quantities of potential spills of the equipment or vehicles in operation.

In the event of a chemical spill or release, if the responsible subcontractor does not have an effective spill kit or does not take immediate action to contain and clean up the spill, SC Builders will contact a licensed contractor to complete the remedial work at the subcontractor's expense.

SC Builders project team will include this topic when preparing site-specific Emergency Response Plans when applicable.

The following is a list of minimum supplies required for general containment clean-up and spill clean-up. This list is provided only as a guideline and is not inclusive. Supplies will be obtained that are appropriate and adequate for the products and in sufficient quantities to accommodate the material on site.

1. Soaker booms.
2. Drip pads.
3. Absorbents.
4. Proper PPE (i.e., Tyvek® coveralls; chemical resistant gloves, boots; chemical resistant eye and face protection such as goggles, face shields, appropriate respiratory protection).
5. Department of Transportation (DOT) approved hazardous waste containers.
6. Non-sparking shovels, squeegees, and other tools needed for proper clean-up and containment.

D. SEVERE WEATHER & EARTHQUAKES

1. Severe Weather:
    a. Should weather conditions, such as severe thunderstorms develop around or near our jobsites, employees will follow the direction of their immediate supervisor. Work in areas where inclement weather activity is possible will have a contingency plan in place. Employees may be directed to a safe area where they will remain until weather conditions improve.
2. Earthquakes:
    a. Each work site should assure that the following items are available for use in the event of an earthquake.
        i. Adequate drinking water in case domestic water supplies are disrupted.
        ii. Adequate first aid supplies.
        iii. Means of transporting injured workers out of an endangered building or structure.
    b. In the event of an earthquake during work hours, employees are to observe the following guidelines:
        i. If you have advance warning at the beginning of an earthquake, if possible, seek cover immediately adjacent to a substantial structure or under a substantial cover such as a heavy desk.
        ii. Do not try to evacuate during the seismic movement.
        iii. When the shaking subsides or stops, all workers must be accounted for. All Superintendents and Foremen must report the status of their work crews to SC Builders.
        iv. Injured persons should be provided cover protection in the event of strong aftershocks.

E. HOMELAND SECURITY

Should a local or national Severe Condition “Red” threat advisory be issued indicating a terrorist attack occurrence, active shooter, workplace violence, or the severe risk of possible terrorist attacks, SC Builders management will determine whether the project should evacuate all workers or shelter them at the jobsite.

SC Builders Project Management will communicate to workers and subcontractors all known information of the threat as the information becomes available.

II. Jobsite Visitors

SC Builders is responsible for the health and welfare of all personnel on its jobsites. The following visitor guidelines are to be adhered to by anyone entering SC Builders jobsites, including owner's personnel, architects and their consultants, salespersons and vendors, photographers, business agents, delivery personnel and all other jobsite visitors.

These guidelines do not apply to emergency responders during an emergency.

1. All visitors must check in at SC Builders' on-site office and sign a "Visitor's Release" prior to entering the construction area.
2. All jobsite visitors must be accompanied in the work area by the subcontractor they're visiting or by SC Builders personnel.
    a. Those who often visit a jobsite may attend an SC Builders Site-Specific Safety Orientation in order to be allowed on the jobsite thereafter without accompaniment.
    b. All visitors must park in the designated parking area and may not drive into the work areas. Privately-owned vehicles will not be allowed in work areas at any time. Only company-owned vehicles, with signs and current, qualified insurance certificates are allowed in the work areas.
3. All visitors are required to abide by the Project Safety Program.
    a. Wearing of hard hats is required at all times.
    b. Wearing eye protection is required at all times.
    c. Hard-soled footwear is required. Tennis shoes, open toed sandals, suede/canvas hiking boots and other athletic type footwear are not allowed.
    d. Shirts with "three-inch" sleeves, minimum, are required.
    e. Shorts and baggy pants are not allowed.
    f. High-visibility garments are required to be worn as applicable to the jobsite.
4. Observe all signs, barricades, and warnings, including verbal warnings, caution tape and danger tape.
    a. Yellow "caution" tape means observe the conditions and be cautious when entering the area.
    b. Red "danger" tape means "Do Not Enter." Crossing "danger" tape is a serious violation of the Project Safety Program.
5. Respect the property of the contractors and the workers. Do not disturb construction materials, stockpiles, supplies or equipment.
6. Stay clear of construction operations. Do not hinder the workers.
7. Be aware of the following conditions that normally occur on a construction jobsite:
    a. Temporary power cords on the floors.
    b. Building materials and debris inside and at the exterior of the building.
    c. Low obstacles due to unfinished work.
    d. Door openings may have a spreader bar.
    e. Avoid wet, slippery areas.
    f. Do not climb scaffolds, ladders, or temporary walkways. Stay on the floor slabs unless accompanied by authorized construction personnel.
    g. Do not enter restricted work areas.
    h. Avoid open excavations.
    i. Overhead work may be in progress throughout the building.

j. Construction equipment is in operation. Listen for back-up alarms and observe the location of equipment and its movement.

III. Drug & Alcohol Use

The presence or use of illegal drugs or unauthorized alcohol on company premises or jobsites is prohibited.

Illegal drugs, as referred to in this policy, include drugs that are not legally obtainable, as well as drugs that are legally obtainable but used for illegal or unauthorized purposes. The sale, purchase, transfer, distribution, use or possession of illegal drugs by anyone on Company premises is prohibited.

If an employee reports to work under the influence of alcohol, illegal drugs, or impaired by prescription drugs, they will not be allowed to begin work and will not receive pay for any portion of that day. Repeat offenders of this policy are subject to disciplinary action.

IV. Code of Safe Conduct

Expectations for standards of conduct are provided to employees and subcontractor employees through our Code of Safe Conduct.

Clean and safe working conditions are absolutely essential for achieving an incident and injury-free work environment, as well as for the promotion of construction efficiency and progress.

The following Code of Safe Conduct is a partial list of the general rules that apply to each employee. There will be no tolerance for employees who carelessly or callously disregard these rules or the other applicable health and safety rules.

1. It is the responsibility of each employee to:
    a. Work safely.
    b. Communicate safe work practices to co-workers.
    c. Protect the general public and all other employees from unsafe construction activities.
    d. Work safely with equipment, materials, and tools.
    e. Report all unsafe acts and conditions to a supervisor.
    f. Request instruction from a supervisor if they are uncertain as to the safe performance of assigned work.
2. All employees will be given frequent accident prevention instructions. Instructions will be given at least every five (5) working days in the Safety Meetings or craft Toolbox Safety Meetings. Safety Meeting attendance is required.
3. Horseplay, scuffling and other such actions, including during lunch or other breaks, which could negatively affect the safety of workers or the integrity of the project site, are prohibited.
4. No employee will attempt to work under conditions that appear to be unsafe.
5. No one will knowingly be permitted or required to work while the employee's ability or alertness is so impaired by fatigue, illness, medication, or other causes that it might unnecessarily expose the employee or others to injury.
6. Employees will wear the minimum personal protective equipment (hardhat, safety glasses, shirt, long pants, and appropriate footwear).
7. No employee will use damaged tools or equipment. Damaged tools must be removed from the work site.
8. No work will be performed on any equipment, machinery, or system without it being locked out and tagged.

9. It is every employee's responsibility to maintain their work area in a clean and orderly manner.
10. Radios and personal audio devices are not allowed in the work area at any time, including wearing of earpieces and headsets. Earpieces and headsets inhibit hearing and full attention to surrounding activities. Wearing telephone earpieces is not allowed in construction areas.
11. Workers will be instructed to ensure that all guards and other protective devices are in place and properly adjusted, and will report deficiencies promptly to their Foreman or Superintendent.
12. Each employee will report work-related injuries or illnesses immediately to a supervisor.
13. Workers will not handle or tamper with any electrical equipment, machinery, or air or water lines that are not within the scope of their duties, unless they have received permission and instructions from a Foreman or Superintendent.
14. When lifting heavy objects, use proper lifting techniques (i.e., lift with the legs instead of the lower back; ask for help or use lifting devices).
15. No employee will enter a confined space, such as manholes and vaults, etc., without training, proper equipment and PPE and authorization.
16. Do not throw materials, tools, or other objects from structures.
17. Safe ladder use is required. Working at heights must be arranged so that workers are able to face a ladder and use both hands while climbing or descending.
18. No employee will attempt to operate equipment or machinery or any specialty tool (e.g., powder-actuated tools) unless authorized and properly trained.
19. Employees will not remove respiratory protection when the work area requires it.
20. No employee will ride in the bed or on the bumper of vehicles or hang" on the exterior of forklifts or other moving equipment.
21. Anyone known to be under the influence of illegal drugs or other intoxicating or controlled substances will not be allowed on the job; workers found to be "under the influence" are subject to disciplinary action as defined elsewhere in this Safety Manual.
22. Fighting is strictly prohibited and is grounds for removal from the jobsite.
23. Gambling in any form is strictly prohibited and is grounds for removal from the jobsite.
24. No employee will intentionally discharge or remove fire-fighting equipment for purposes other than fighting fires.
25. No employee will work six feet (6') or greater above the surface or be exposed to a fall hazard of six feet (6') or greater without proper fall protection.
26. No gas cutting, welding, or other source of ignition will be applied to any enclosed tank or vessel, even if there are some openings, until it has first been determined that no possibility of explosion exists, and authority for the work has been obtained from the Foreman or Superintendent.
27. Any damage to scaffolds, false work, or other supporting structures must be immediately reported to the Foreman or Superintendent.
28. Other specific work-related standards are addressed in our Code of Safe Work Practices.

V. Code of Safe Work Practices

The Code of Safe Work Practices is established to set standards for minimum requirements as noted for each topic. The purpose of these requirements is to promote an incident/injury-free environment, establish guidelines for use in Pre-Task Planning, and establish minimum requirements for compliance of regulatory standards and regulations.

SC Builders' Code of Safe Work Practices is applicable to subcontractor operations.

References pertain to Cal/OSHA Construction Safety Orders (CSO) or to Cal/OSHA General Industry Safety Orders (GISO) unless noted otherwise.

A. BLOODBORNE PATHOGENS

Bloodborne Pathogens and Other Biological Hazards

1. Purpose:
    a. To eliminate or minimize employee exposure to bloodborne pathogens and other biological hazards.
2. Scope:
    a. Tentatively, SC Builders employees do not fall under the 29 CFR 1910.1030, OSHA's or DIR Title 8 § 5193. Bloodborne Pathogen Standard. To ensure employees are aware of the steps they will take if they inadvertently find themselves in the position of 'Good Samaritan', the SC Builders Project Bloodborne Pathogen Guidelines outline steps that will be taken to:
        i. Prevent/minimize exposure to potentially infectious bloodborne pathogens and other infectious materials, and
        ii. Respond to and report actual exposure to bloodborne pathogens.
    b. Although the probability of exposure to potential infections materials/pathogens is limited, 'Universal Precautions' will be practiced and all blood, other body fluids, and human tissue will be treated as if it is infectious.
    c. Where there is a probability of exposure to potential infections materials/pathogens, SC Builders will make efforts to utilize trained service providers to handle, clean, disinfect, and dispose of any those materials.
    d. Access to this exposure control plan is readily available to employees upon request.
3. Definitions
    a. Bloodborne Pathogens (BBP) - microorganisms present in human blood that can cause disease in humans.
        i. The following human body fluids and tissues:
            1. Semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
            2. Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
            3. HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.
    b. Biological agents – include bacteria, viruses, fungi (mold), other microorganisms and their associated toxins. They have the ability to adversely affect human health in a variety of ways, ranging from relatively mild, allergic reactions to serious medical conditions, even death. These include, but are not limited to hepatitis B virus, and human immunodeficiency virus (HIV).
    c. Disposal – Ultimate destruction of biohazard material, including disposable personal protective gear and 'sharps' items. Disposal is always done by non- SC Builders personnel using a regulated method and facility.

d. Occupational Exposure - A reasonably anticipated skin, eye, specific eye, mouth, other mucous membrane, non-intact skin, or parental contact with blood to other potentially infectious material that results from doing one's job.
e. Sharps – Needles, syringes, blades, and (non-beverage) glass capable of causing punctures or cuts in the skin.
f. Sharps Container – Puncture resistant containers; labeled with a biohazard symbol; and have lids that can be tightly secured.
g. Personal Protective Gear – Equipment and clothing that will provide a means for handling 'sharps' items without exposure to SC Builders personnel. These may include tongs, a short broom and dustpan, and protective latex gloves.

   It should be stressed that latex gloves are not immune to puncture, and therefore every means should be taken to collect 'sharps' items using hand tools along with gloves. If necessary, a shovel can be used in place of tongs or a broom and dustpan.
h. Universal Precautions – An infection control approach whereby all human blood and certain body fluids are treated as if they were known to be infectious for HIV, HBV, or other bloodborne pathogens.

4. Training
   a. Employees will be provided access to and trained in this program upon new hire orientation and annually thereafter.
   b. Each employee that receives first aid training will additionally be trained on bloodborne pathogens and biological hazards.
   c. The risks of exposure to human blood and other biological hazards shall be included as part of the training.
   d. Training shall include the avoidance of bloodborne pathogens and biological hazards, necessary PPE, and personal hygiene to prevent exposures to biological hazards.
5. Responsibilities
   a. Superintendent
      i. Responsible for implementing this procedure;
      ii. Providing or make arrangements for training to designated person who is responsible for the collection, storage and disposal of 'sharps' and other biohazards; and
      iii. Providing material and personal protective equipment identified in this procedure.
6. Implementation
   a. Preventing/Minimizing Exposure to Bloodborne Pathogens
      i. The potential for exposure to bloodborne pathogens exists whenever co-workers assist/aid an injured employee. Therefore, the following steps will be adhered to in order to minimize/eliminate potential exposure to BBP:
         1. Assume all human blood and body fluids are infectious.
         2. Based on the exposure conditions and the anticipated level of risk, the following PPE should be used:
            a. Resuscitation bags or mouth covers.
            b. Disposable surgical latex or PVC gloves.
            c. Eye, nose, and mouth should be protected with a surgical mask and goggles or a face shield if there is a likelihood of body fluids splattering.
         3. Wash hands immediately after removing gloves and after any hand contact with body fluids.

4. Do not eat, drink, apply cosmetics or lip balm, or handle contact lenses in areas where there is a potential for exposure.
5. Contaminated clothing should be removed as soon as possible and bagged; gloves should be used when handling contamination.
6. Contaminated PPE, equipment, clothing, and work area must be cleaned and decontaminated as soon as possible, after contact with body fluids.
7. All cleanup and disposal of contaminated equipment/material will:
    a. Be conducted according to local, state, and federal requirements.
    b. NOT be stored longer than 24 hours before the pathogen is destroyed/disposed; disposal method will consist of:
        i. Steam sterilization (autoclaving),
        ii. Chemical inactivation, or
        iii. Incineration.

b. Exposure to Biological Hazards
    i. If exposure to bloodborne pathogens occurs:
        1. Immediately report exposure to your supervisor.
        2. A written incident report MUST be completed and entered into SC Builders incident reporting database before the end of the work shift.
        3. Although employers are NOT required by the regulation to provide/offer employees follow-up treatment and/or private counseling if they are exposed to bloodborne pathogens while acting as a Good Samaritan, OSHA encourages companies to do so.
        4. SC Builders employees will also:
            a. Contact Safety Department.
            b. Adhere to SC Builders Corporate protocols for exposure, including providing medical evaluations within 24 hours following the time of exposure.
    ii. Exposure to other biological hazards:
        1. Exposure to other biological hazards, such as viruses, plagues, etc., will be addressed as needed.

c. Handling/Disposal of Needles, Sharps and Syringes
    i. Risk associated with sharps:
        1. The risk of injury from puncture or cuts from sharps; and
        2. The risk of disease from contact with infectious agents associated with sharps and needles, referred as ‘biohazard’. The basis of the biohazard is the transmission of infectious diseases, two of which are of particular concern. Hepatitis B (HBV) and the HIV (which may lead to acquired immune deficiency syndrome (AIDS). The infectious agents for these diseases are transmitted through blood. The potential risk for transmission of these infectious agents between people through contact with contaminated ‘sharps’ is very high. ‘Sharps’ can readily break the skin (through cuts, scrapes, and needle sticks) and convey the infectious agents from the ‘sharps’ to the blood of personnel.
    ii. Identification of Hazard
        1. Identification of ‘sharps’ is a concern for all on-site personnel. If ‘sharps’ are encountered on the work site, the following procedure should be adhered to:

a. If 'sharps' are spotted, avoid contact.
b. Immediately notify all personnel in the immediate area to prevent accidental contact.
c. Immediately notify the SC Builders project superintendent as to the exact location of 'sharps' items so that they can be collected.

iii. General Control Procedures
1. SC Builders' basic control practice is to minimize risk and exposure of 'sharps' hazards to all on-site personnel. Only trained personnel should be involved with the collection, storage and disposal of 'sharps' items. Collection of 'sharps' includes the following steps:
a. Collection of any 'sharps' items is to be done in a manner which eliminates direct contact with the 'sharp' by using simple collection devices and personal protective gear.
b. The placement of the collected 'sharp' item in a proper puncture resistant container so that it can be transported to both the storage area and to an acceptable offsite location for disposal.
c. The storage of the 'sharps' container in a secure area.

iv. Specific Control Practices
1. The steps for the safe collection, storage, and disposal of 'sharps' by trained personnel are as follows:
a. Obtain a 'sharps' disposal kit.
b. Put on a pair of rubber gloves.
c. Collect the 'sharps' items in a dustpan using tongs and transfer them form the dustpan into the puncture resistant container, close, seal and lock the 'sharps' container.
d. Place the tongs, broom, and dustpan into the plastic container marked with the 'biohazard' label, close the lid and store in a secure area along with the 'sharps' container. These items can be used again on an as-required basis. They should, however, be disinfected with bleach on a regular basis, and should ultimately be disposed of in the same waste stream as the 'sharps' items.
e. Remove the gloves, place them in the 'sharps' container, and seal the lid. This container can be re-used until it is ¾ full, at which time it should be disposed of.
2. Injury Control
a. In the event that a project worker sustains a needle stick or other related injury where contact was made with 'sharps' items, the following steps shall be taken:
i. Report injury to the on-site first aid or medical representative.
ii. Seek immediate attention from a medical doctor or physician.
iii. Properly label and keep the 'sharps' for laboratory analysis.
iv. Keep this item segregated in a clean 'sharps' disposal container.
v. Contact local medical and or health authority for appropriate laboratory analysis of the 'sharps' item(s).
3. Disposal of 'Sharps' items:

a. Call the local health or medical authorities for disposal option or
b. Contact a registered biomedical waste contractor to handle all transport and disposal of collected biohazard waste material. This will free SC Builders of all off- site responsibilities.
c. A manifest of a chain of custody sheet should be filled out covering each transfer event, either to a biomedical waste contractor or to a registered disposal center. This will usually be supplied by the carrier, disposal center or local health authority.
d. All disposal procedures will comply with local regulatory requirements.

7. Site Specific
    a. All PPE relating to bloodborne pathogens and biological agents will be made available at no cost to the employee.
    b. Each jobsite shall maintain a cleaning and disinfecting kit.
    c. Latex gloves for use in the event of an emergency shall be available on all jobsites near the First Aid Kit.
    d. Sanitary resuscitation shields shall be available on all jobsites near the First Aid Kit.
    e. Antiseptic solutions and sterile towelettes shall be available for use and shall be kept near First Aid Kits.
    f. Handwashing facilities or hand sanitizing materials will be available on the jobsite.
    g. In the event of exposure to human blood on the jobsite, Hepatitis B vaccines shall be available to all employees at no cost to the employee.
    h. All exposure to Bloodborne Pathogens shall be documented and maintained as necessary.

B. CLEAN-UP AND HOUSEKEEPING

The SC Builders policy on clean-up and housekeeping is that all equipment, tools, and materials will be stored, stacked, located, placed, temporarily spotted, or set up for manipulation in such a manner as to render it highly improbable that an accident/incident or injury could occur in the work area. A visual observation of the area will give the direct and obvious impression of a clean and orderly workplace.

1. Work areas will be maintained in an orderly and clean manner at all times.
2. Mud and dirt tracked onto public and private streets will be removed continuously during the workday.
3. The following constitute minimum housekeeping standards for SC Builders projects:
    a. All material, spoils, debris, etc. is to be cleaned-up by the end of each work shift. Each subcontractor is responsible for 100% clean-up and removal of debris created by their work each day.
    b. Trash dumpsters will be placed at a variety of locations for the removal of trash and debris but will be kept a minimum of 20’ from the exterior of buildings, when possible, to reduce the potential fire hazard and exposure to the buildings.
    c. Accumulation of trash and debris will not be tolerated.
    d. Access walkways, roadways, and fire lanes will not be blocked with material, tools, ladders, scaffolds, welding leads, air hoses or electrical cords.
    e. Electrical extension cords, light stringers, air hoses, welding leads, etc., will be elevated seven feet or higher when practical.
    f. Welding rod, nuts, bolts, and washers will be kept in proper containers and not be allowed loose on floors.

g. Shackles, slings, chokers, ladders, and safety equipment will be removed from the work area when not in use and will be properly stored.
h. Trash containers will be placed at appropriate locations within work areas.
i. All nails will be removed from scrap and lumber.
j. At all locations where drinking water is dispensed, an adequate trash container will be located for disposal of used drinking cups.
k. Trash chutes will not be allowed without approved fire prevention and fire protection systems.
l. Combustible debris will be removed from buildings daily.
m. Hazardous materials will not be disposed with normal debris. Subcontractors are responsible for disposing of hazardous waste generated by their operations.
n. Paints, solvents, and chemicals will not be washed into storm drains or onto the ground. Proper clean-up and disposal must follow manufacturer's recommendations and legal requirements.
    i. Water-based paints may be washed into a sanitary sewer system.
    ii. Oil-based product debris and waste must be properly disposed offsite by the subcontractor using the product.

C. COMBUSTIBLE MATERIAL

1. Bulk fuel storage is not allowed on SC Builders construction jobsites.
2. Servicing and fueling.
    a. Equipment will not be serviced while it is running. GISO §3319 (a)
    b. Bulk fuel (gasoline, diesel fuel, propane) storage is not allowed on SC Builders' construction sites. All operated equipment and portable welding machines, generators, etc., must be serviced by mobile service and refueling vehicles.
    c. All fuel cans must be safety cans with self-closing lids and flame arrestors per GISO §3319 (e). Plastic fuel cans and G.I. cans are not allowed on the jobsite, including in pick-up truck beds.
    d. Secondary containment will be provided for any fuel cans on the ground.
3. Oxygen and Acetylene Bottles: CSO Article 32.
    a. All oxygen and acetylene bottles will be vertical and properly secured when in use.
    b. Each oxygen/acetylene cart will have a 5:BC fire extinguisher attached.
    c. A 5:BC fire extinguisher will be placed at all oxygen/acetylene use locations if the location is more than 50' from the oxygen & acetylene cart.
    d. Fire extinguishers must be present when gauges are installed.
    e. All bottled fuel gas types in storage must be separated from one another by 20' or a one-half hour fire-rated barrier and must have caps installed. Storage requirements apply to full bottles and empty bottles.
    f. Storage is defined as left in place longer than 24 hours without use.

D. CONCRETE

Refer to the provisions of the section on Silica for applicable requirements.

1. Impalement Protection.

   a. All vertical reinforcing steel, form stakes, conduit, pipe, and other impalement hazards will be protected with approved covers or wood troughs to protect against impalement and injury. CSO §1712.
   b. Horizontal projections must be provided with protection from scratches and impalement to a height of 7'-0", minimum.
   c. Impalement protection is required for projections "at grade".
2. A potable water supply will be available and conspicuously located and in sufficient quantities for use as an emergency washing facility at all times when concrete work is in progress. CSO §1512 (f) & GISO §5162
3. Long sleeve shirts and gloves are to be worn to protect against exposure of concrete to the bare skin and the possibility of concrete burn and contact dermatitis.
4. Formwork:
   a. Walkways along form walls will be constructed in accordance with Cal/OSHA scaffold and fall protection standards.
   b. Prefabricated forms and form material will be cleaned and stacked neatly at all times.
   c. All nails must be removed from the formwork immediately as pieces are stripped.
   d. When stripping concrete forms, all material will be immediately removed and stacked in an orderly manner.
   e. Form material or debris will not block walkways and aisles.
5. Reinforcing Steel:
   a. Workers engaged in vertical rebar assembly will comply with the six-foot fall protection rules. Positioning devices alone are not approved fall protection but can be used in conjunction with personal fall protection equipment.
   b. Subcontractors must remove excess reinforcing steel, tie-wire, bundle wire and other debris from the work area daily.
   c. Supervisors of concrete and/or reinforcing steel operations will ensure that reinforcing steel for walls, piers, columns, and similar vertical structures is adequately supported to prevent overturning and collapse and ensure that uncoiled wire mesh is adequately secured to prevent recoiling.
6. Concrete Buckets & Buggies:
   a. Concrete buckets must be equipped with a discharge device that an employee can operate without being exposed to the load.
   b. Concrete buckets must be equipped with safety devices to prevent premature or accidental dumping; ensure that the release is self-closing.
   c. Follow safe rigging practices when handling concrete buckets.
   d. Employees controlling the concrete bucket must use tag lines.
   e. Concrete buggy handles must not extend beyond the wheels on either side of the buggy.
   f. No employee is permitted to ride a concrete bucket.
7. Cement Finishing:
   a. When using bull floats, inspect the area to ensure there is no energized equipment or power lines nearby that the handles could touch.
   b. Rotating-type, powered concrete trowels will be equipped with dead-man controls that automatically shut down the equipment when the operator's hands are removed from the controls.
   c. Finishers will wear kneepads and gloves when hand finishing concrete.

8. Concrete Pump Safety:
    a. Under no circumstances are pump hoses to be folded, bent, or kinked when connected to the pump. (See manufacturer's warnings and requirements)
    b. Bending or kinking hoses connected to the pump is a serious, potentially life-threatening hazard and is grounds for immediate removal of personnel from the jobsite.
9. Clean-Up and Washout:
    a. Provide concrete washout "bags" or "tubs" for containing concrete washout and seepage. Washout bags or tubs will be used for concrete pump washout and washout of concrete trucks.
    b. Disposing of concrete washout directly onto the ground is prohibited.

E. CONFINED SPACE

1. SC Builders is classified as the Controlling Employer as defined in the California Labor Code Section 336.10(c) as well as the Construction Safety Orders Article 37. SC Builders will be the primary point of contact for information about permit spaces at the work site. The Host Employer (Owner) must provide information it has about permit spaces at the work site to the Controlling Contractor (SC Builders), who then passes it on to the subcontractor's employees who will enter the spaces.
2. Prior to commencement of work, each employer must ensure that a Competent Person has identified all confined spaces in which any employee may work and identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing as necessary.
3. All Entry Employers conducting work on a SC Builders site will decide how employees it directs will enter a permit space, the Entry Employer must have a written permit space program implemented on-site. Entry Employers must give SC Builders information about the entry program and any hazards they encounter in the space. Prior to any worker entering a confined space, they will submit training records to SC Builders, this training will include: Contents of the Confined Space Entry Plan, known hazards in the confined space, emergency procedures in case of an emergency, correct use of PPE (when required), Hot Work Permit (if required), atmosphere testing requirements, isolation of hazardous energy sources and or hazardous materials, and fall protection (if required).
4. Entry certification and confined space entry permits must comply with Construction Safety Orders Article 37. There are 5 key differences in the construction rule, and several areas where OSHA has clarified existing requirements. These new standard addresses more directly the needs of the construction industry.
    a. More detailed provisions requiring coordinated activities when there are multiple employers at the worksite. This will ensure hazards are not introduced into a confined space by workers performing tasks outside the space. An example would be a generator running near the entrance of a confined space causing a buildup of carbon monoxide within the space.
    b. Requiring a Competent Person to evaluate the work site and identify confined spaces, including permit spaces.
    c. Requiring continuous atmospheric monitoring whenever possible
    d. Requiring continuous monitoring of engulfment hazards. For example, when workers are performing work in a storm sewer, a storm upstream from the workers could cause flash flooding. An electric sensor or observer posted upstream from the work site could alert workers in the space at the first sign of the hazard, giving the workers time to evacuate the space safety.

e. Allowing for the suspension of a permit, instead of cancellation, in the event of changes for the entry conditions list on the permit or an unexpected event requiring evacuation of the space. The space must be returned to the entry conditions listed on the permit before re-entry.

5. Procedures to ensure safe work on SC Builders work sites for all personnel who enter confined spaces will cover: The requirements for safe entry, work, and exit of personnel assigned to work in confined spaces. These requirements apply to all SC Builders staff and includes subcontractors and sub-tiers. Identification of confined spaces (e.g., equipment, tanks, vessels, silos, storage bins, hoppers, vaults, pits, manholes) which have the following physical characteristics:
    a. Large enough and so configured that personnel can bodily enter and perform assigned work (this includes spaces where the head and trunk can enter even if the whole body could not fit).
    b. Limited or restricted means for entry or exit (e.g., man-way door, hatch, cover).
    c. Not designed for continuous personnel occupancy (e.g., a hazardous situation is typically present in the space).
6. If all three conditions above are present, the space is a confined space. Proceed to classify the confined space based on the potential hazard in the space. If the space is a permit space entry must comply with SC Builders Confined Space – Permit Space Program.
7. Confined Spaces—Permit Space Program
    a. Purpose
        i. To protect employees from the hazards associated with entry into permit-required confined spaces and to develop procedures by which employees will enter such spaces.
    b. Policy
        i. All spaces owned or operated by the company that meet the definition of permit-required confined spaces (PRCS) will be identified and appropriately marked. The company must control access to these spaces.
        ii. Employees are prohibited from entering any space meeting the definition of a PRCS unless the following conditions are met:
            1. The company determines that employees must enter permit-required confined spaces to perform assigned duties.
            2. The employees are trained to safely perform these duties in a PRCS.
        iii. The confined space is rendered safe for entry:
            1. By issuance and compliance with the conditions of a permit.
            2. When the space is reclassified as a non-permit space without making entry into the space. (This does not apply to a PRCS with an actual or potential hazardous atmosphere.)
            3. Alternate entry procedures are performed.
        iv. Permits issued under the procedures in this policy will be limited to the duration of the job but no longer than one work shift. A new permit is required if work continues a second shift or another day.
    c. Definitions
        i. Confined Space—a space that meets all three of the following conditions:
            1. Is large enough and so configured that an employee can bodily enter and perform assigned work.

2. Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that have limited means of entry).
3. Is not designed for continuous human occupancy.

ii. Permit-Required Confined Space (Permit Space)—a confined space that has one or more of the following characteristics:
1. Contains or has the potential to contain a hazardous atmosphere.
2. Contains a material that has the potential for engulfing an entrant.
3. Has an internal configuration such that the entrant could be trap or asphyxiated by inwardly converging walls or a floor that slopes downward and tapers to a smaller cross-section.
4. Contains any other recognized serious safety and/or health hazard.

iii. Competent Person—Means 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 the authorization to take prompt corrective measures to eliminate them.

iv. Entry Employer—Only employees designated by the entry employer will be allowed in a permit space and will follow the procedures set forth in the program and by the competent person.

v. Host Employer—The employer that owns or manages the property where the construction work is taking place.

vi. Note: If the owner of the property on which the construction activity occurs has contracted with an entity for the general management of that property, and has transferred to that entity the specified information, they will be considered the host employer for as long as that entity manages the property.

vii. Controlling Contractor—is the employer that has overall responsibility for construction at the worksite.

viii. Note: If the controlling contractor owns or manages the property, then it is both a controlling employer and a host employer.

8. Duties and Responsibilities

a. Competent Person—The competent person will be responsible for:

i. Identifying all confined spaces in which one or more of their employees may work around or within, and identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing as necessary.

ii. When there are changes in the use or configuration of a non-permit confined space that might increase the hazards to entrants, or some indication that the initial evaluation of the space may not have been adequate, a competent person will reevaluate that space and, if necessary, reclassify it as a permit required confined space.

iii. Identify the early-warning system to be used to alert authorized entrants and attendants that an engulfment hazard may be developing. This includes alarms activated by remote sensors; and lookouts with equipment for immediately communicating with the authorized entrants and attendants.

iv. Identify the monitoring process to be used for each confined space.

b. Authorized Attendant—The trained individual stationed outside the permit space to monitor the authorized entrants and to perform all attendant duties. The attendant will:

i. Remain outside the permit space during entry operations unless relieved by another authorized attendant.
ii. Perform non-entry rescues when specified by the company's rescue procedure.
iii. Know existing and potential hazards, including information on the mode of exposure, signs or symptoms, consequences, and physiological effects.
iv. Maintain communication with, and keep an accurate account of, those workers entering the permit space.
v. Order evacuation of the permit space when a prohibited condition exists; when a worker shows signs of physiological effects of hazard exposure; when an emergency outside the confined space exists; or when the attendant cannot effectively and safely perform required duties.
vi. Summon rescue and other services during an emergency.
vii. Ensure that unauthorized people stay away from permit spaces or exit immediately if they have entered the permit space.
viii. Inform authorized entrants and the entry supervisor if any unauthorized person enters the permit space.
ix. Perform no other duties that interfere with the attendant's primary duties.
x. Inform authorized entrants of the early warning system to be used.
xi. Perform monitoring of space.
xii. The following personnel have been trained and are authorized attendants:

_____

_____

_____

c. Authorized Entrant—The trained individual who enters the permit space. The entrant is required to:
   i. Know space hazards, including information on the means of exposure such as inhalation or dermal absorption, signs and symptoms, and consequences of the exposure.
   ii. Use appropriate personal protective equipment properly.
   iii. Maintain communication with attendants as necessary to enable them to monitor the entrant's status and alert the entrant to evacuate when necessary.
   iv. Exit from the permit space as soon as possible when ordered by the attendant; when they recognize the warning signs or symptoms of exposure; when a prohibited condition exists; or when an automatic alarm is activated.
   v. Alert the attendant when a prohibited condition exists or when warning signs or symptoms of exposure exist.
   vi. Know and adhere to the early warning system to be used.
   vii. The following personnel have been trained and are authorized entrants:

_____

_____

_____

d. Entry Supervisor—The trained individual with the responsibility to ensure that acceptable entry conditions are present within a permit space under their jurisdiction; issuing a permit authorizing entry; overseeing entry operations; and terminating the entry and permit.
   i. For each entry into a PRCS, the designated entry supervisor will:

1. Perform the pre-entry duties of the entry supervisor on the permit space to be entered.
2. Prepare an entry permit.
3. Perform the post-entry duties of the entry supervisor.
4. Collect the permit from the attendant at the end of entry or prepare the documentation for reclassification or alternate entry.
5. Terminate entry permit when entry operations have been completed, or a condition arises that creates new hazards in the space.
6. For the duration of each entry into a permit space, the entrants and attendants will perform the duties outlined in these procedures and will return the permit or documentation to [insert job title of responsible person] upon termination of entry.

ii. The following personnel have been trained and are authorized entry supervisors:

_____

_____

_____

e. Contractors—The company must ensure that every contract for work within an identified permit space or work within a non-permit space will:
   i. The controlling contractor must notify all contractor(s) what spaces are permit-required confined spaces, the hazards within the spaces, previous entry operations, and any precautions that the host employer, controlling contractor, or other entry employer implemented for the protection of employees in the permit spaces.
   ii. Inform the controlling contractor, before entry, of the permit space program that will be utilized, include any hazards likely to be confronted or created in each permit space.
   iii. Coordinate entry operations with the controlling contractor when multiple entities perform permit space entry at the same time.
   iv. After entry operations, inform the controlling contractor of the permit space program followed and of any hazards confronted or created in the permit space(s) during entry operations.
f. Controlling Contractor—Before entry operations begin, the controlling contractor must:
   i. Conduct an evaluation of the space using the Confined Space Evaluation Form, Attachment D.
   ii. Obtain host employer's information about the permit space hazards and previous entry operations; and
   iii. Provide the following information to each entity entering a permit space and any other entity at the worksite whose activities could foreseeably result in a hazard in the permit space:
      1. Information received from the host employer;
      2. Any additional information the controlling contractor has about the subjects listed in Title 8 § 1953 of this section; and
      3. The precautions that the host employer, controlling contractor, or other entry employers implemented for the protection of employees in the permit spaces.
g. Entry Employer—Before entry operations begin, the entry employer must:
   i. Obtain all of the controlling contractor's information regarding permit space hazards and entry operations; and

ii. Inform the controlling contractor of the permit space program that the entry employer will follow, including any hazards likely to be confronted or created in each permit space.

h. Rescue Service Personnel/Entry Rescue—The company has identified emergency responders (either on- or off-site) that are capable of responding to an emergency in a timely manner. The responders will have appropriate and readily available rescue equipment, including respirators, and be trained how to use all equipment.

i. Rescue service personnel must receive the authorized entrants training and be trained to perform assigned rescue duties. The following personnel have been trained as rescue service personnel:

_____

_____

_____

ii. The standard also requires that all rescuers be trained in first aid and CPR. At a minimum, one rescue team member must be currently certified in first aid and CPR. Employers must ensure that practice rescue exercises are performed yearly and that rescue services are provided access to permit spaces so they can practice rescue operations. Rescuers also must be informed of the hazards of the permit space. This includes off-site rescue teams such as local fire and rescue companies.

iii. Note: If the company is relying on off-site rescue services, the company must notify the off-site rescue of the permit-required confined space entry and ensure that the rescue service is on standby during entry.

9. Entry Permit System

a. All entries into a permit space will have an entry permit, Attachment E. The permit must be signed by the entry supervisor and will be posted at all entrances or otherwise made available to entrants before they enter a permit space.

b. The permit will verify that pre-entry preparations have been completed. The duration of entry permits must not exceed the time required to complete an assignment.

c. Hot Work Permits—Entries involving hot work require a hot work permit.

d. Cancelled Entry Permits—The entry supervisor must cancel entry permits when an assignment is completed or when new conditions exist. New conditions must be noted on the canceled permit and used in revising the permit space program.

10. Monitoring System

a. Monitoring is the process used to identify and evaluate the hazards after an authorized entrant enters the space. This process checks for changes that are performed in a periodic or continuous manner after the completion of the initial testing or evaluation of that space. The competent person will identify the process to be used for each space.

b. The following procedures will be followed before and during entry:

i. Perform pre-entry atmospheric hazard testing before entry is authorized.

ii. If entry is authorized, continuously monitor entry conditions in the areas where authorized entrants are working.

iii. Provide an early-warning system that continuously monitors for non-isolated engulfment hazards. The system must alert authorized entrants and attendants in sufficient time for the authorized entrants to safely exit the space.

iv. Continuously monitor atmospheric hazards or ensure that periodic monitoring is conducted at sufficient frequency to ensure that the atmospheric hazard is being controlled at safe levels. If continuous monitoring is not used, periodic monitoring is

required with sufficient frequency to ensure that acceptable entry conditions are being maintained during the course of entry operations.

v. When testing for atmospheric hazards, test first for oxygen, then for combustible gases and vapors, and then for toxic gases and vapors.

11. Retention of Permit and Other Records
    a. Canceled permits and other documentation will be retained not less than one year following the date of entry. Permits will then be retained as an employee exposure record if applicable.
    b. These records are kept at as part of the jobsite record.
12. Harnesses and Retrieval Lines
    a. Authorized entrants who enter a permit space must wear a chest or full body harness with a retrieval line attached to the center of their backs near shoulder level or above their heads. Wristlets may be used if the company can demonstrate that the use of a chest or full body harness is not feasible or creates a greater hazard.
    b. The other end of the retrieval line must be attached to a mechanical device or a fixed point outside the permit space. A mechanical device must be available to retrieve someone from vertical type permit spaces more than 5 feet deep.
13. Safety Data Sheets
    a. If an injured entrant is exposed to a substance for which a safety data sheet (SDS) or other similar written information is required to be kept at the worksite, that SDS or other written information must be made available to the medical facility personnel treating the exposed entrant.
14. Training
    a. All Employees—The respective supervisor will ensure that each employee receives awareness training on:
        i. The characteristics of a confined space.
        ii. The characteristics of a permit-required confined space.
        iii. Whether they are allowed to enter permit-required confined spaces.
        iv. Required actions when working around or near a permit space entry.
        v. The authority of authorized attendants and entry supervisors.
    b. Training will be required:
        i. During orientation.
        ii. Prior to entry into a permit-required confined space.
        iii. Whenever the supervisor becomes aware that the employee has failed to follow the instructions provided in the training.
    c. The supervisor will provide verification of training to the SC Builders Superintendent and Safety Manager.
    d. Entry Supervisors, Attendants and Entrants—The supervisor will ensure that employees designated as entry supervisors, attendants and entrants receive training in:
        i. The requirements of this policy and procedures.
        ii. The duties, authority and responsibilities of entry supervisors, attendants, lead entrants and entrants.
        iii. The types of hazards expected to be encountered in permit spaces.
        iv. The calibration, use, care, and cleaning of equipment expected to be used during entry operations.

v. The performance of pre-entry actions expected to be required in permit spaces.

e. Training will be provided:
   i. Prior to assignment or authorization of duties within permit spaces.
   ii. Within one month of revisions to this policy or procedures. Assignment or authorization for permit space entry will be suspended until training is completed.
   iii. Whenever the supervisor becomes aware that an employee is deviating from the procedures of this policy. Assignment or authorization for permit space entry will be suspended until training is completed.
   iv. Annually.

f. The company will certify that each affected employee has successfully completed training. The certification must include at least the following:
   i. Employee name.
   ii. Name, signature, or initials of the trainer.
   iii. Dates of training.

g. Additionally, the certification may include a synopsis of the topics covered, copies of materials used during training such as handouts and presentations, and copies of tests (if used) to determine trainee understanding and proficiency, and other documentation deemed appropriate by the company. The certification must be maintained by the company and a copy may be provided to the employee. Refer to the Training Program section for certification sheets.

15. Program Review
   a. We will review the effectiveness of the program annually, using the canceled permits and other documentation from the preceding 12 months, entry supervisor comments, and other available information. If no entries were made during the preceding 12 months, no annual review is required.
   b. The entry supervisor, authorized attendant or entrant may make recommendations to management at any time to make changes in procedures to address and correct weaknesses in the procedures.
   c. The entry supervisor or unit manager may notify the company at any time of potential weaknesses in policy or procedures. The company will view and initiate any changes necessary to address confirmed weaknesses.

F. CRANES

1. Mobile cranes will be operated in strict accordance with Article 15 of the Cal/OSHA Construction Safety Orders and the applicable sections of Group 13 of the Cal/OSHA General Industry Safety Orders.
2. Crane and hoisting plans should be submitted three weeks prior to the hoisting operation. The Crane Use form, Attachment F, may be used to initially notify SC Builders Project Supervision of any planned crane use.
3. SC Builders has developed a Crane and Hoisting Plan Template, Attachment G. The template provides guidance in the planning and documentation necessary for a crane work on its projects. Submitted crane and hoisting plans should closely follow the template documentation.
4. SC Builders will make available all known documentation and information for safe crane setup.
5. A Pre-Lift Safety Meeting will be conducted before cranes are set-up for each crane lift and each day there is a crane lift.

a. A copy of the current Annual Certification must be submitted to SC Builders at the time of the meeting.
b. A copy of the crane erection plan must be submitted for review prior to the meeting.
c. The crane manufacturer's operating manual, instructions and load charts for the specific crane will be reviewed and used to determine the safe operation of the crane.
d. Crane set-up and site-specific personal protective equipment (PPE) requirements will be reviewed. All PPE must be worn during crane build-up and operation, including inside the crane cab. The roof of the crane cab does not provide the required head protection.
e. After the crane has been set-up, SC Builders will review the set-up for compliance.
    i. All of the manufacturer's requirements must be strictly adhered to.
    ii. Outriggers must be fully extended.
    iii. All tires must be clear of the ground a sufficient distance to assure that the tires will not come in contact with the ground when the crane is under full load.
    iv. Tires and wheels that are mounted on floating axels are not required to be fully clear of the ground.
    v. Outrigger pads must be level and pinned.
    vi. Blocking or dunnage under outrigger pads must be solid or tightly placed with no space between members.

6. Crane operators will perform daily and monthly crane safety inspections. Inspections must be documented. Crane operators are to turn the Daily Crane Safety Checklist to SC Builders each day that the crane is on the jobsite.
7. Crane operators are required to be certified as required by the Cal/OSHA Construction Safety Orders §1618.1. A copy of the certification is required to be submitted to SC Builders at the Pre-Lift Safety Meeting.
8. All cranes will be equipped with anti-two block devices on both the load and whip lines.
9. Use of crane baskets will not be allowed on projects without prior approval of SC Builders.
10. The following guidelines must be followed:
    a. The ground where the crane will be setup must be solid and able to support the weight of the loaded crane. Determine if underground utilities exist near where the crane will be set up. Cranes must not set-up on underground manholes, vaults, etc., unless highway-rated steel plates are provided to bridge the underground structure.
    b. Ensure the crane is level 360° and maintained during operation.
    c. Before the lift, review the load weight and load capacity with the crane operator.
        i. Deductions to the net capacity should be made per manufacturer's load chart or operating manual for attachments such as jibs (stowed or attached), headache balls, wind, less than ideal setups, etc. to determine the load that can be safely lifted.
        ii. A designated, qualified person will determine the load weight. Note: OEM drawings listing the equipment or machinery assemblies are not always accurate. Refer to the shipping weight or have the equipment or machinery assembly weighed.
            1. Review the structural loads and the center of gravity with the operator.
            2. Cranes equipped with systems that provide weight of a load as it is lifted will not be used to weigh equipment or machinery assemblies.
    d. Review the radius from the center pin of the crane to the load using a steel tape with the crane operator. This is required for capacity- and near-capacity lifts.
    e. Review the boom length, counterweight, and crane configuration with the crane operator to verify the correct load chart information.

f. Review the crane set up to assure there is no possibility of contact with overhead power lines or other overhead obstructions.

g. All employees and trade partners are to always remain clear of suspended loads during crane operations. Prevention measures are to be clearly defined in safety documentation provided by the applicable parties.

11. Rigging.
    a. Only Qualified riggers will be allowed to rig loads. Riggers will be qualified as required by the Cal/OSHA General Industry Safety Orders, Group 13, §4999.
    b. All rigging components will be inspected before use and have documentation.
    c. Any rigging equipment that is defective or damaged will not be used and must be disposed of and removed from the project. Altering rigging components is strictly prohibited.
    d. Rigging components will meet the requirements of Article 101 of the Cal/OSHA General Industry Safety Orders. Slings shall not be shortened with knots, bolts, shackles, or other makeshift devices. All hooks used on an SC Builders project must have a safety latch. A hook latch that is inoperative shall render that hook unusable and cannot be used.
    e. All manufacturer specifications must be followed while using rigging components.
    f. Rigging components must be reflected in the Rigging Plan that is associated with a complete Crane Pick Plan.
    g. Proof testing is to be done by the manufacturer or equivalent entity at twice their rated capacity prior to initial use. The employer shall retain a certificate of proof test and make it available for examination.
    h. The rated load of rigging equipment shall be legibly marked on the main structure or on a tag attached to it where it is visible and not be loaded in excess of its recommended safe working load.
12. A written critical lift and rigging plan is required for any lift where:
    a. The load is greater than 85% of the crane capacity as configured for the lift.
    b. Two cranes are used.
    c. Any non-routine or critical equipment lift. The Project Manager or the Project Superintendent may determine any lift to be non-routine.
    d. The written critical lift and rigging plan will be submitted to SC Builders for review and approval prior to crane mobilization.
13. All cranes must be accompanied with an approved spill kit. Spill kits are required to be on the jobsite before crane set-up.
14. Signaling.
    a. Crane operators will not use cell phones while operating cranes.
        i. Crane operators may use two-way communication devices as a means of communication with the designated signalperson.
        ii. If cell phones are used for two-way communication between the crane operator and the dedicated signalperson, the crane operator will use a hands-free device, other than an earpiece or headset for receiving and transmitting messages.
    b. Signalpersons will be Qualified as required in §1618.2 (c) of the Cal/OSHA Construction Safety Orders.
15. Operation.
    a. The swing area of the crane cab must be protected from entry by effective barriers.
        i. The entire swing area must be protected, not just between outriggers.

b. Crane loads will not swing over workers.
c. Crane loads will not swing over occupied work areas, buildings, etc.
d. All workers are to remain clear of suspended loads during crane operations. Prevention measures are to be clearly defined in safety documentation provided by the applicable parties.
e. The crane set-up area must be identified before beginning lifting. Temporary barriers must be installed to identify the boundaries of the set-up area.
    i. The set-up area includes the area for loading or unloading and transporting material associated with the crane lift.
    ii. Workers not directly involved with crane operations and rigging are not allowed in the crane set-up area.
f. Dragging loads with the crane is prohibited.

16. SC Builders will provide written documentation that any new concrete placed by SC Builders or their subcontractors has met the minimum requirements for crane operation.
17. SC Builders will provide written documentation that any compacted fill or compacted earth placed by SC Builders or their subcontractors has been sufficiently compacted to support the loads required.
    a. The subcontractor or crane provider may be required to provide steel trench plates to distribute crane loads beneath the crane outriggers.
18. Tower cranes will be erected, maintained, and operated in compliance with the applicable articles and sections of Group 13 and Article 96 of the Cal/OSHA General Industry Safety Orders.

G. DEMOLITION

1. All demolition will be performed in compliance with Article 31 of the Cal/OSHA Construction Safety Orders.
2. Each building or portion of a building to be demolished must have a Hazardous Material Survey completed before demolition work is scheduled.
    a. Abatement of hazardous materials must be complete and written clearance provided to SC Builders before demolition work begins.
    b. Hazardous material of electrical components such as fluorescent lamps and ballasts should be removed from the demolition area prior to demolition.
    c. Hazardous material and refrigerants must be removed prior to demolition.
3. Each demolition operation requires a written site-specific demolition plan which must be on site at all times during demolition.
    a. A structural survey of the building or areas scheduled for demolition should be completed prior to preparation of the site-specific demolition plan. The demolition plan must take the structural survey into consideration in developing sequences and methods of removals.
    b. Demolition plans must address existing utility systems and precautions required for the specific jobsite.
    c. A sequence of removals must be identified, and all workers must know the work plan.
4. The demolition supervisor must be on site at all times.
5. Secured Area.
    a. Demolition areas must be secured, and signage must be in place prior to start of demolition.
    b. The areas below and adjacent to demolition must be secured. No other workers are allowed to enter demolition areas.

   c. All exterior points of access must be secured to prevent unauthorized and uncoordinated entry.
6. Glass must be removed from windows in the demolition area or must have substantial protection from breakage.
7. Access to demolition areas must be identified and must be compliant.
8. Dust control:
   a. Dust control must be continuous when conditions create airborne dust of any kind.
   b. Drinking water, first aid supplies, food and cleaning supplies should be kept out of dusty areas.
   c. Air quality should be measured, and workers must be provided proper respiratory protection as necessary.
   d. Continuous clean up is an essential component of effective dust control.
   e. “Sticky mats” should be used to clean the bottom of footwear of works exiting demolition areas and entering into occupied areas or non-demolition areas.
9. Adjacent buildings or structures and public areas must be protected from damage.
10. The status of electrical systems in the demolition area must be verified via SC Builders Safe Off plan.
    a. All efforts must be made to disconnect electrical services in areas scheduled for demolition.
    b. Where electrical systems cannot be disconnected, a qualified electrician will make a thorough survey of the electrical system in the area scheduled for demolition and will perform the following:
       i. Lockout/tagout of de-energized electrical circuits to remain, including overhead systems.
       ii. Disconnect wiring serving the electrical systems that are shut down but are required to remain, to assure the system cannot be energized accidentally.
       iii. Conspicuously mark all components of “Hot” or energized electrical systems, including overhead conduit and boxes and lighting systems.
    c. Wiring will be removed from abandoned electrical systems including bus bars, conduit, raceways, etc.
11. All utilities should be disconnected and piping, conduit, duct, etc., should be separated from structures scheduled for demolition.
    a. Verification of each utility will be documented via the SC Builders Safe Off plan (water, sanitary sewer, storm drain, gas, communications, fire protection, security, mechanical or special systems piping).
    b. Utilities scheduled to remain must be conspicuously marked and identified before demolition begins.
12. Adequate lighting will remain in all demolition areas.
13. Adequate ventilation will be maintained in all work areas.
14. Consideration must be given to protective clothing such as Tyvek® type coveralls and footwear coveralls to protect clothing and footwear of the workers.
15. An emergency washdown area using potable water must be in place prior to the start of demolition.

H. DRINKING WATER

1. SC Builders will provide drinking water, containers, disposable cups, and waste containers for employees in accordance with §1524 of the Cal/OSHA Construction Safety Orders.
2. The Project Superintendent will determine which method of providing potable water will be used, based on logistics and the number of SC Builders' employees on the jobsite.
3. The Project Superintendent will assure that water supplies are replenished in sufficient volume to provide one quart of water per employee, per hour.
4. A designated waste container will be placed near drinking water supplies.
5. Drinking directly from the spout of a common-use container, and the placing of hands or a cup into drinking water is prohibited.
6. All employees will be provided unrestricted access to drinking water, especially during times of hot weather and continued exposure to sunlight during work hours.
7. See SC Builders' Heat Illness Prevention Program for additional information.

I. ELECTRICAL

All electrical systems will meet the requirements of the Cal/OSHA Electrical Safety Orders as a minimum standard.

SC Builders employees will not perform any electrical work unless specifically trained as required. Inspection and maintenance of power tool whips and temporary power cords is permissible work for SC Builders' employees who have been properly trained.

Temporary electrical systems, taps and tie-ins will be performed by a qualified electrical contractor's employees only.

No work will be performed on any energized electrical circuit, buss bars, equipment, or panels unless an approved written work plan is developed in accordance with the Cal/OSHA Electrical Safety Orders and submitted to SC Builders for review prior to performance of the work.

Electrical equipment and tools will be inspected before use each day to prevent accidental electrical shock. This applies to all cord sets, portable electrical equipment, tools, and appliances that are not part of any permanent building electrical systems.

All temporary cords will be three wire types S, ST, SO, or STO with a 16 or greater wire gauge and will meet the requirements of the Cal/OSHA Electrical Safety Orders, Article 13, and Article 49.

1. Ground Fault Circuit Interrupters (GFCI):
    a. SC Builders project management are tasked with implementing and enforcing Ground Fault Protection/GFCI measures on the project level. The project Superintendent or Foreman will be the designated Competent Person enforcing the GFCI measures on the project level.
    b. All cord sets and cord-plug electrical equipment, tools or appliances that are 120 volts will be connected to a ground fault circuit interrupter. No cord set or cord-plug electrical equipment, tool or appliance will be plugged directly into any permanent building or structural electrical system without a GFCI adaptor. Exemptions are office equipment and appliances in jobsite offices.
    c. Electrical power serving construction jobsite offices will be grounded.
    d. When the source of electricity is from a two-wire, single-phase portable or vehicle mounted generator rated not more than 5kW, a GFCI is not required, as long as the generator is insulated from the frame and all other grounded surfaces.
2. Double-Insulated Tools:
    a. Double-insulated tools must be used in conjunction with GFCI protected systems and adaptors.
3. Inspection Program:

An electrical cord inspection program will be established to inspect all cord sets, including temporary lighting, portable electrical equipment, tools, and appliances as described below and before first use, before returned to service following any repair, and after an incident that could have caused damage.

a. Daily Inspection:
    i. Each cord set, attachment cap, plug, and receptacle of cord sets, portable electrical equipment, tools, or appliances connected by a cord and plug, will be visually inspected daily by employees for external damage, such as deformed or missing ground pins, insulation damage, frayed wires or indications of possible internal damage and outer sheath continuity.
    ii. Any electrical equipment, tool, appliance, or cord set that is damaged or defective will be immediately removed from service and tagged out as defective equipment for repair.
    iii. A qualified electrician will repair tagged electrical items.
b. Quarterly Inspection:
    i. All cord sets, receptacles and cord-plug connected electrical equipment, tools, or appliances not part of the building or structure's permanent wiring, will have the following performed each quarter:
        1. Visually inspect for damage or missing ground pin.
        2. Inspect outer insulation for damage and continuity. The outer insulation must extend into the cord caps.
            a. If conductor insulation or conductors are visible, the cord must be removed from service.
            b. Repairs to the outer insulation are not permissible.
        3. Inspect for signs of internal damage such as twisting of the conductors within the outer insulation sheath.
        4. Continuity.
    ii. After inspection of the cord and power tool whip, a strip of colored electrical tape will be wrapped within six inches of each end of a power cord and power tool whip.
        1. The colored tape will be uniformly coordinated for the company and all subcontractors on SC Builders' jobsites.
        2. The following colors will be applied for the time periods noted.
            a. First quarter (January, February, and March): White
            b. Second quarter (April, May, and June): Green
            c. Third quarter (July, August, and September): Red
            d. Fourth quarter (October, November, and December): Orange
        3. When new colored tape is applied, previously applied tape must be removed.
    iii. All components of the temporary power and lighting systems will be inspected and tagged as described above.
    iv. Temporary junction box (spider box) receptacles will be tested as defined in the Cal/OSHA Electrical Safety Orders §2405.4 (d).

4. General Electrical Rules:
    a. All cord sets will be elevated above the work surface when practical.
    b. Cord sets and electrical tools that have the grounding prong missing will be cut and the unsafe plug end will be disposed immediately.

c. Suspension of electrical power and lighting cords will be made by non-metallic means. Wire, nails, or other conductive material will not be used to hang or attach cord sets or welding leads.
d. Cord sets that cross roadways will be protected from damage by vehicle and equipment traffic by devices such as “bridges.”
e. Vehicles and equipment must not be allowed to run over electrical cords.
f. Necessary steps will be taken to prevent unauthorized or unqualified workers access to energized electrical parts or equipment.
g. Welding leads and electric cords will not be suspended or secured from a temporary guardrail system.
h. Temporary power boxes (spider boxes) will be maintained in an upright position at all times.
i. Temporary lighting:
    i. Temporary lighting will be served from a separate source than the temporary power system.
    ii. Temporary power for tools will not be connected to temporary lighting systems.
    iii. Temporary lighting will have the bulbs or lamps protected from accidental contact or breakage.
    iv. Temporary lighting will remain energized after work hours if the jobsite is potentially accessible to trespassers or other persons who may enter the area through an existing facility.
    v. Stairways without permanent lighting must have temporary lighting or adequate natural light at all times.

Temporary Power & Lighting

1. Lockout/Tagout:
    a. Control of hazardous energy sources shall require the subcontractor to have a written program meeting Cal/OSHA’s Control of Hazardous Energy Standard. Subcontractor shall provide a copy of their program upon request to SC Builders.
    b. Control of hazardous energy sources in an operating facility will be coordinated through SC Builders with the facility engineering department.
    c. Subcontractor shall develop and implement a site-specific plan for control of hazardous energy sources to prevent access and accidental operation of circuits within construction areas.
        i. Electrical contractor shall establish and maintain control of electrical rooms within construction areas. Electrical room doors shall remain locked and inaccessible to unauthorized personnel at all times or the electrical equipment it contains must be locked to prevent unauthorized access.
        ii. Where electrical panels contain both circuits for operational areas and areas under construction, circuits serving the construction area will be controlled to prevent unauthorized access and operation. Circuits that are incomplete or under construction shall be de-energized locked and tagged.
        iii. Where electrical panels contain circuits that serve only operational areas, those panels’ closures shall remain locked and construction access will be expressly prohibited.
        iv. Whenever possible, electrical feeders should be disconnected from circuits that are incomplete or are under construction.

v. Factory electrical panel enclosure locks shall not be used as a lockout for control of hazardous energy sources into construction areas.

2. Control of Rooms Containing Electrical Equipment:
    a. Electrical Rooms with live panels shall remain locked at all times unless a qualified electrician is in the room or can monitor access into the room.
    b. Live electrical panels shall have the dead fronts installed.
    c. No energized electrical work shall be performed unless approved by both subcontractor and SC Builders management and all provisions of NFPA 70E 2015 have been met.
3. Signage:
    a. The electrical subcontractor shall post applicable warning signage on the electrical room door(s) in the construction areas.
    b. Signage shall include:
        i. The words “Danger – Authorized Personnel Only,” or similar words to convey the message and restrictions.
        ii. The signage shall include emergency contact information and telephone numbers for the electrical subcontractor’s Superintendent/Foreperson and SC Builders’ Superintendent.
        iii. Where the electrical room contains both panels with circuits of operational areas and construction areas, the signage shall include emergency contact information of the facility engineer/electrician, in addition to 2.b. above.
4. Temporary Power:
    a. Temporary power shall comply with the provisions of NEC Article 590.
    b. Temporary power supply shall be run overhead from the electrical panel to power distribution boxes. Excess cable shall be rolled up and maintained.
    c. Subcontractor is responsible for the inspection and maintenance of temporary power. Consideration shall be given to how the temporary power supply is installed so that it may be easily maintained to suit the needs of the project as the project changes.
    d. Temporary power shall not be drawn from temporary lighting sources.
    e. Power outages shall be coordinated with SC Builders and scheduled to minimize impact to ongoing construction. Adequate lighting shall be maintained throughout power outages where other trades are working.
5. Temporary Lighting:
    a. Temporary lighting shall be fed from a dedicated circuit or source, separate from distributed power for temporary power. Subcontractor shall take into consideration the future buildout of spaces in providing a temporary lighting plan so that it shall be maintained during construction to provide adequate general and access/egress lighting.
    b. General path lighting shall remain “on” during off work hours unless permitted by SC Builders Superintendent.
    c. Temporary light shall be maintained and sufficient to provide the required lighting to entryways, exits, main corridors, stairwells, large open work areas. The temporary lighting shall be sufficient to provide adequate lighting from areas illuminated with task lighting.
    d. Task lighting shall be provided by others.
6. Electrical Inspection Program:
    a. Subcontractor shall install all temporary electrical equipment in compliance with Cal/OSHA Electrical Safety Orders, Article 13, Temporary Wiring. For the purpose of providing reliable and safe temporary electrical power and lighting, subcontractor shall provide both ground-

fault circuit interruption where applicable and an assured equipment grounding conductor (inspection) program as specified in Cal/OSHA Electrical Safety Orders §2405.4 (d).

b. The subcontractor shall implement the assured grounding program or an equivalent inspection program to document quarterly inspections of temporary cord sets, junction boxes (spider boxes), receptacles, and lighting.
c. Temporary power distribution boxes (Spider Boxes) shall be identified by numbers or letters unique to the box. Records of an electrical inspection program shall include the identification number of the boxes as a reference to each device and displayed on the box.
d. Circuits on temporary power distribution boxes (Spider Boxes) shall be labeled individually for inspection purposes, the same as circuits in a permanent electrical panel.
e. Quarterly inspection documentation shall be maintained on the jobsite and available to SC Builders when requested.
f. Other trades shall be responsible to perform inspections of their electrical equipment.

7. Demolition:
   a. Provide all layout of electrical items scheduled for demolition or removal.
   b. Make safe all panels and circuits, remove wires, cables, and feeders from bus bars, and disconnect conduit in all areas scheduled for demolition before start of demolition.
   c. Disconnect wire and cable from terminals at each end of existing electrical panels and light fixtures scheduled for demolition and create a visible “air gap” in all conduits. Removal of remaining conduit scheduled for demolition is by another subcontractor.
   d. Electrical circuits that have been disconnected from equipment and or incomplete electrical circuits shall not remain live in the demolition or construction areas and must either be disconnected at the panel or de-energized and locked and tagged.
   e. Subcontractor shall identify and mark all conduit, fixtures, outlets, etc., which must remain live during demolition.
   f. Subcontractor is to participate in the demolition and “safe off” coordination meeting and SC Builders “safe off” verification process.
8. Commissioning:
   a. Subcontractor shall utilize a documented process to ensure that prior to commissioning, all electrical systems, circuits, and components are 100% complete.
   b. Prior to energizing circuits, verify all MC whips or conductors, junction boxes and associated equipment are either permanently made up, safe ended or properly terminated into junction boxes with cover plates installed.
   c. Communicate to all trades that electrical systems will be energized in the work area.
   d. Where a system or area is commissioned out of sequence, prior to energizing equipment, subcontractor shall inform the contractor as to the reason for energizing the equipment out of sequence and when it is scheduled to be energized.

J. EQUIPMENT AND VEHICLES

1. Operated equipment (forklifts, dump trucks, excavators, back hoes, skip loaders, boom-lifts, scissor-lifts, etc.) used by SC Builders employees and subcontractors will be inspected prior to use and comply with applicable Cal/OSHA and ANSI standards.
   a. Portable fuel-operated equipment will comply with the requirements of the California Environmental Protection Agency Air Resources Board.
2. Employees will comply with any special operating requirements on jobsites. Special operating requirements may include standards established by the facility, the owner, or SC Builders.

   a. No person will stand between a piece of equipment and another object.
3. All operated equipment will have audible back-up alarms complying with §1592 of the Cal/OSHA Construction Safety Orders.
4. Windshields on equipment and vehicles will be free of cracks or other visible damage.
5. Equipment will be equipped with rollover protective structures (ROPS) as required.
6. Seatbelts are required to be worn at all times when operating equipment with ROPS and driving vehicles.
7. The driver and all passengers of any vehicle will wear seat belts.
8. No equipment or vehicle will be used to transport personnel unless it is specifically designed to do so. This includes bumpers and beds of pick-up trucks.
9. All equipment operators must complete a daily safety inspection report and have it available for review. Subcontractor may use their own form or SC Builders. As a minimum, each operator will check:
   a. Brakes.
   b. Lights.
   c. Backup alarms.
   d. Hydraulic systems.
   e. Steering mechanism.
   f. Operating controls.
   g. Mirrors.
   h. Fire extinguisher.
   i. Limit switches.
   j. Leaks.
10. Equipment operators will possess the required training, certification and licenses as required by law for the equipment that they are assigned to operate.
11. Servicing and fueling.
   a. Equipment will not be serviced while it is running. GISO §3319 (a)
   b. Bulk fuel (gasoline, diesel fuel, propane) storage is not allowed on SC Builders' construction sites. All operated equipment and portable welding machines, generators, etc., must be serviced by mobile service and refueling vehicles.
   c. All fuel cans must be safety cans with self-closing lids and flame arrestors per GISO §3319 (e). Plastic fuel cans and G.I. cans are not allowed on the jobsite, including in pick-up truck beds.
12. Portable fuel-operated equipment such as generators, air compressors, welding machines, etc. will have a dedicated 10:BC fire extinguisher near the equipment at all times when it is in operation.
13. Portable wheeled equipment such as air compressors, generators, welding machines, etc., will have their wheels chocked when not connected to a towing vehicle.
14. The batteries of all equipment, regardless of type and size of the equipment, will be protected from the sides and the top.
15. Equipment load limits specified by the manufacturer must be displayed and shall not be exceeded.
16. All equipment shall be positioned, equipped, protected, and/or operated so that no part comes closer to energized power lines than indicated in the table below:

Minimum Clearance Distances	
Voltage (nominal, kV, alternating current)	Minimum clearance distance (feet)
up to 50	10
over 50 to 200	15
over 200 to 350	20
over 350 to 500	25
over 500 to 750	35
over 750 to 1,000	45
over 1,000	(as established by the utility owner/operator or registered professional engineer who is a qualified person with respect to electrical power transmission and distribution)

17. Forklifts

As required by the Cal/OSHA, General Industry Safety Orders (GISO) §3650 (t) and §3664 (a), the following Forklift Operating Rules must be posted and strictly adhered to by all employees:

a. All forklift operators must be trained to operate the specific forklift they are operating. All training must be documented and on file with SC Builders. GISO §3650 (s) (1) & §3664 (b).
    i. Forklift training provided to SC Builders field employees will be compliant with Cal/OSHA GISO §3668 (b) regarding formal instruction, practical training, and an evaluation of the operator's performance in the workplace.
    ii. Compliant with Cal/OSHA GISO §3668 (b), forklift training will be provided by qualified personnel who have the training, knowledge, experience, and competence for evaluation.

b. Operators will check the vehicle at the beginning of each shift, and if it is found to be unsafe, the matter will be reported immediately to a Foreman, and the vehicle will not be put in service until it has been made safe. Attention will be given to the proper functioning of tires, horn, lights, battery, controller, brakes, steering mechanism, cooling system, and the lift system (forks, chains, cable, and limit switches). GISO §3650 (s) (7).
    i. Equipment will not be operated with a leak in the fuel system. GISO §3650 (s) (8).

c. Seat belts must be worn at all times while operating the forklift. GISO §3664 (b) (1).

d. Stunt driving and horseplay is strictly prohibited. GISO §3650 (s) (2) (3) & §3664 (d).

e. Riders are not allowed on the forks, steps, fenders, or any other place on the forklift unless that location is specifically designed for passengers by the manufacturer. GISO §3650 (s) (3) & (4) & §3664 (b) (6).

f. Workers are not permitted to stand, pass, or work under the elevated portion of the equipment, loaded or empty, unless the forks or the load are effectively blocked to prevent it from falling. GISO §3650 (s) (6).

g. Operators must inspect the forklift at least once per shift. Inspections must be documented. GISO §3664 (c).

h. The operator is responsible to look in the direction of travel and not to move the equipment until all persons are clear from the travel path. GISO §3650 (s) (12).

i. Forks are to be carried as low as possible.
    i. On grades, loads will be tilted back if applicable and raised only as far as necessary to clear the road surface. GISO §3650 (s) (14) (B).

j. When leaving the equipment, the operator must: GISO §3664 (b) (9).
    i. Shut off the engine.

ii. Set the brakes or block the wheels, front and rear. GISO §3650 (s) (16) (B).
iii. Use park lock if available.

k. Extreme care must be taken when tilting elevated loads. The mast will not be tilted with workers on a work platform. GISO §3657 (i) (3).
l. Workers may not be elevated unless the operator is trained in accordance with Cal/OSHA GISO §3657.
    i. Work platforms of at least 2'x2' must be secured to the mast or forks. GISO §3657 (a) (2).
    ii. Platforms must have guardrails (top and mid), toeboards and a back guard. GISO §3657 (a) (3).
        1. A full-body harness will be used as described in GISO §3656 (e) & §3657 (b).
    iii. The platform floor will have no spaces or holes greater than one inch and the platform surface must be slip resistant. GISO §3657 (a) (4) & (5).
    iv. Operators must remain at the controls while the workers are elevated. GISO §3657 (d).
        1. When workers are on the platform in the work location, the operator will place the equipment in neutral and set the parking brake. GISO §3657 (i) (4).
    v. The operator will check all controls for smooth operation before elevating workers. GISO §3657 (i) (2).
        1. The platform will be lifted and lowered smoothly and with caution. GISO §3657 (i) (5).
    vi. All persons will keep hands and feet clear of the controls other than those in use. GISO §3657 (i) (7).
    vii. Never travel with personnel on the work platform other than to make minor movements for final positioning of the platform. GISO §3657 (i) (8).
    viii. Workers will not sit, climb, or stand on the platform guardrails or use planks, ladders, or other devices to gain elevation. GISO §3657 (h) & (i) (9).
    ix. If dual controls are used, only one set of controls will be operable at a time. GISO §3657 (f).
m. Do not operate the forklift near open trenches, near workers, on embankments and slopes or near open holes. GISO §3664 (b) (2).
n. The speed limit on jobsites is 8 MPH. GISO §3650 (s) (9).
    i. Operators will keep a safe distance from other vehicles or equipment.
o. The controls will be operated smoothly. If the controls do not operate smoothly, they will be repaired before continuing to operate the equipment or the equipment will be removed from the jobsite. GISO §3664 (b) (7).
p. Reduce speed when turning, crossing slopes, and on rough, slick or muddy surfaces. GISO §3664 (b) (3).
q. The operator will be aware of cross traffic and obstructions such as row ends, roads, trees, etc. GISO §3664 (b) (5).
    i. The operator will watch for and be aware of overhead obstructions and power lines. GISO §3657 (i) (6).
r. When connecting trailers, hitch only to the drawbar and hitch points recommended by the manufacturer. GISO §3664 (b) (8).

s. No repairs will be made on any equipment until arrangements have been made to reduce the probability of injury to repairmen or others caused by sudden movement or operation of the equipment or its parts. GISO §3664 (b) (9) (e).
t. All forklifts must have rollover protection, (ROPS). GISO §3657 (c).
u. Employees will not place any part of their bodies outside the running lines of the equipment or between mast uprights or other parts where shear or crushing hazards exist. GISO §3650 (s) (5).
v. If the load being carried obstructs forward view of the operator, the operator will be required to travel with the load trailing. GISO §3650 (s) (11).
w. Equipment will not be driven up to anyone standing in front of any obstacle of such size that the person could be caught between the equipment or the load and the object. GISO §3650 (s) (13)
x. Forklifts will not be operated inside of any new building under construction without the approval of the Structural Engineer of Record.
y. Forklifts will not be loaded in excess of their rated capacity. GISO §3650 (s) (26)
    i. A coordination meeting must be held with SC Builders
    ii. The loads of multiple equipment lifts will not exceed the combined rated lifting capacity of all trucks involved. GISO §3650 (s) (32)
    iii. Forklifts will not be moved until the load is safe and secure. GISO §3650 (s) (27)
z. Refresher training will be provided to employees when any of the following have occurred:
    i. The operator has been observed to operate the vehicle in an unsafe manner;
    ii. The operator has been involved in an accident or near-miss incident;
    iii. The operator has received an evaluation that reveals that the operator is not operating the truck safely;
    iv. The operator is assigned to drive a different type of forklift; or
    v. A condition in the workplace changes in a manner that could affect safe operation of the truck.
aa. Performance evaluations will be conducted every three years by SC Builders management for field employees.

18. Scissor-Lifts:
    a. Employees will not stand or place any platform on the top or mid rail of a scissor-lift to gain added height.
    b. The safety chains or platform gates of scissor-lifts will be properly extended across the opening and connected whenever a worker is on the scissor-lift platform.
    c. Fall protection tie-off is not required in a scissor-lift as long as the guardrails are in place.
    d. If the work platform does not reach the necessary work height, the supervisor must consider an alternate means to access the work elevation.
    e. If the scissor-lift platform is unable to reach the necessary working level with the guardrails in place, the guardrails may be removed for a pre-determined time if adequate fall protection is provided while the guardrails are down. The procedure must be documented in advance. All affected workers must be informed of the new procedure requirements and must sign the document before beginning the new work procedure.
    f. Work from ladders on a scissor-lift platform is prohibited.
    g. Scissor-lifts will not be used to transport workers from one elevation to another unless the following conditions are provided:

i. The scissor-lift platform must reach the elevation the workers will be exiting the scissor -lift. A step or ramp to accommodate elevation differences is prohibited.
ii. 100% fall protection components must be in place prior to using the scissor -lift to transport workers from one elevation to another.
    1. A compliant guardrail system, if used, must extend to the location the scissor -lift platform will be raised for worker transport and must not leave gaps either side of the scissor-lift.
    2. If a guardrail system is not in place, workers must wear a full-body harness and lanyard to accommodate 100% tie-off. Workers must clip their lanyard to the tie-off point at the new exit elevation before exiting the scissor-lift.

19. Boom-Lifts:
    a. All persons in a boom-lift basket must wear a full-body harness and be tied-off at all times to the connection location provided by the manufacturer.
    b. If the platform of the boom-lift does not reach the required working height, the supervisor must consider an alternate means of access.
    c. At no time will anyone stand on the toeboard, midrail or the top rail to perform or inspect work.
    d. Boom-lifts will not be used to transport workers from one elevation to another unless the following conditions are provided:
        i. The boom-lift platform must reach the elevation the workers will be exiting the boom-lift. A step or ramp to accommodate elevation differences is prohibited.
        ii. 100% fall protection components must be in place prior to using the boom-lift to transport workers from one elevation to another.
            1. A compliant guardrail system, if used, must extend to the location the boom-lift platform will be raised for worker transport and must not leave gaps either side of the boom-lift basket.
            2. If a guardrail system is not in place, workers must wear a full-body harness with dual lanyards to accommodate 100% tie-off. Workers must clip their second lanyard to the tie-off point at the new exit elevation before disconnecting their lanyard from the book-lift point of connection.
20. All fuel-operated equipment, stationary, portable, and mobile, must be accompanied with an approved spill kit.
21. Vehicle and equipment operators will not use cell phones while operating vehicles or equipment.
    b. Operators will stop and park equipment, lower all attachments such as forks, buckets, gannons, etc., to the ground, place the transmission in “Park” or “Neutral” (whichever is applicable for the piece of equipment) and will set the brake before using cell phones while on the equipment or vehicle.

K. EXCAVATIONS AND TRENCHING

1. All excavation and trenching will be performed in accordance with Article 6 of the Cal/OSHA Construction Safety Orders. A competent person must supervise all excavation and trenching.
2. Existing utility locations.
    a. Prior to any grading, demolition, excavation or trenching, the following must be performed by the employer performing the work. SC Builders will not place calls for utility locator services unless SC Builders employees or direct hired excavator is performing the work.
    b. Utility locations must be determined regardless of the method of trenching or excavation, including hand work.

i. Underground utility locating authorities and the property owner must be given the required advance notices, two working days, to locate and mark the utilities. USA (Underground Service Alert) can be contacted by calling 8-1-1 or 1-800-227-2600.
    1. Utility locations must be marked by the locator service, utility company or property owner before excavation or trenching begins.
ii. If unplotted underground utilities are known or suspected, proper notification will be given to the facility operator or owner prior to excavation or trenching.
    1. Potholing for known or suspected utilities is required.
    2. Potholing within 2'-0" of a marked utility must be by hand.
    3. Once located, the utility pipe, conduit, etc. will be uncovered the length of the utility service where it is within planned work areas.
iii. Probes used for potholing and locating gas lines will be made of plastic or fiberglass and will have a blunt end.
iv. The Competent Person will review the Soils Report and analyze the soil of the work area to determine the condition and type of soil to ascertain proper sloping or shoring requirements.

3. During excavation or trenching operations the following requirements will be followed:
    a. All trenches and excavations four feet or deeper will have the appropriate barricades or warning system in place, the appropriate signage posted at the work area and appropriate fall protection prior to beginning excavation.
        i. Solid barricades will be required when excavations are subject to public or jobsite traffic exposure. Solid barricades will be provided by the subcontractor to prevent vehicles and equipment from accidentally entering open excavations.
    b. Trenches or excavations will be shored, shielded, sloped, or benched in accordance with the recommendations of the Geotechnical Engineering Report and as required by Cal/OSHA under the supervision of a Competent Person. All excavations 5' and deeper will be shored, shielded, benched or sloped.
        i. Protection from collapse of the trench walls may be required for trenches under 5'-0". Factors include the type of work to be performed, soil movement, exposure to being buried for workers in the trench, and soil classification.
    c. Supporting systems (i.e., shoring, shielding, piling, etc.) will be utilized for all trenches requiring a protective system where sloping or benching is not possible.
    d. Spoils piles and all other material will be placed according to the recommendations of the Geotechnical Engineering Report. A minimum distance of 2'-0" from the edge of all trenches or excavations is required.
    e. Adequate access must be maintained at all times during trenching or excavating activities. Ladders or ramps must be used for trench and excavation access per the Cal/OSHA Construction Safety Orders §1541 (c).
    f. The Competent Person will inspect excavations and trenches at the beginning of each day, throughout the day and when conditions change.
    g. Excavations in Type C soil will not be benched.
    h. Excavations and trenches four feet or greater in depth will be evaluated for confined space restrictions.
    i. A registered professional engineer must design protective systems for all excavations over 20-feet in depth.
    j. Foot bridges or ramps will be provided for workers crossing excavations wider than 30". CSO §1541 (l) (1).

k. Water will not be allowed to accumulate in a trench where workers are working.
    i. Soils will be declassified one level if water enters a trench. Upon declassification, collapse prevention measures will be implemented immediately and before any worker enters the trench. Once declassified, the trench soils classification may not be upgraded, and temporary collapse protection equipment must remain in place at all times when workers are in the trench.
l. Workers in trenches will not be standing where they will be exposed to being hit by a load of material if it falls from during placement of the load.

4. Subcontractors performing excavation or trenching will develop and submit an Excavation & Trenching Plan addressing the layout of the excavation or trench; the depth of the excavation or trench; the location for storage and placement of material such as bedding materials, conduit, pipe, etc.; trench spoils placement and off haul routes; traffic control barriers and signage.

L. FALL PREVENTION AND FALL PROTECTION

SC Builders is committed to the philosophy of 100% continuous fall protection whenever workers are exposed to fall hazards of six feet (6') or greater. All fall prevention and fall protection measures will meet the requirements of CSO Article 24.

1. SC Builders will take all practical measures to eliminate, prevent, and control fall hazards. All work will be planned with the intent to eliminate identified fall hazards. When a fall hazard has been identified and cannot be eliminated, effective means of fall protection will be implemented.
2. Acceptable fall protection and fall prevention systems include the following:
    a. Guardrail systems.
    b. Safety nets.
    c. Floor, roof, and wall opening covers.
    d. Overhead protection, for protecting workers beneath fall hazards.
    e. Personal fall arrest systems.
    f. Controlled access zone.
3. Superintendents will develop site-specific Fall Prevention Plans as applicable to their jobsites.
    a. Fall Prevention Plans.
        i. Fall Prevention Plans will include a retrieval method or system to be used in the event of a fall when the worker is left suspended.
        ii. Employees potentially exposed to fall hazards will be trained in a Fall Prevention Plan and will be given periodic refresher courses specific to fall exposure and prevention measures. Fall protection training records will be maintained on the project. Training will consist of the following at a minimum:
            1. The nature of the fall hazards in the work area.
            2. The correct procedure for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used.
            3. The use and operations of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and any other methods of protection to be used.
            4. Rescue procedures to be implemented in case a worker falls and is suspended.
4. Employees may work from ladders without personal fall protection when the following criteria are met:
    a. Working height does not exceed twelve feet (12’).

   b. Work can be performed without reaching beyond the side rails of the ladder. (Worker remains inside the area between the side rails)
   c. Ladder is properly tied off/secured or, in the case of a stepladder, legs are fully extended, and the spreaders are locked.
   d. Work does not involve working within fifteen feet (15') of a fall exposure such as an elevated slab perimeter or shaft.
5. Personal Fall Arrest Systems will consist of an ANSI certified full-body harness, double lanyard with shock absorbing device or retractable lifeline, locking snap hook and properly engineered anchorage points.
   a. Fall arrest equipment will be inspected bi-annually. Inspections will be documented.
   b. All Fall Arrest Systems must account for fall distance and swing fall.
6. In multi-story construction, the building perimeter cable system is placed as a guardrail and is not provided for tie-off.
7. When wire rope is used to construct guardrail systems, at least 3/8" diameter cable will be used with three heavy-duty cable clamps per connection and wire rope thimbles at all connections to the structure.
8. Subcontractors using horizontal lifelines will submit documentation of the engineered system for review. Rope will not be approved as a component of a horizontal lifeline without approval of a qualified Professional Engineer (PE) in fall protection. All horizontal lifelines will be installed under the direct supervision of a qualified person.
9. Lanyards will not be tied back to themselves unless the lanyard is specifically manufactured to tie back to itself.
   a. When lanyards are not in use, the hooks will be secured to a ring on the full-body harness and will not be allowed to drag on the ground or walking surface.
10. Employees who are exposed to falls of six feet (6') or greater while working on scaffolds, elevated decks, elevated platforms, low-slope roofing, stairways, stairwells, reinforced steel, and any other elevated area or equipment will be protected from falls. There is no set safe distance from a leading edge or perimeter that would exempt a worker from fall protection.
11. On properly constructed scaffolds, elevated decks and elevated platforms that have perimeter guardrail systems consisting of a top and mid rail, employees are not required to tie off. If the perimeter guardrail system must be removed, employees will wear full body harnesses with double shock-absorbing lanyards appropriately tied-off.
12. Floor, roof, and wall openings: CSO §1632.
   a. Floor openings 2-inches or greater, roof openings and all wall openings will be guarded or covered with an appropriately secured cover or guardrail.
   b. Floor and roof opening covers will be secured to the floor to prevent accidental removal.
   c. The floor or wall opening cover will be properly marked with a sign stating, "Opening – Do Not Remove".
      i. Spray painting the word "hole" on plywood is not allowed.
      ii. Use of keel (wax/ lumber crayon) to identify the danger is prohibited due to the temporary nature of keel markings.
   d. Floor opening and shaft covers will not be used as a work surface or for material storage unless they are specifically designed for that purpose.
   e. Floor and roof opening covers will have a guardrail system to prevent workers from walking on the cover or using the cover as a work surface unless the cover is specifically designed for foot traffic and work loads.

f. In multi-story buildings, each shaft opening is to be covered at the lowest floor opening of the shaft to protect employees on the lowest floor from falling objects from above.

13. Any employee who must remove a guardrail, wall or floor opening cover, or other fall protection system in the course of their work will be responsible for providing interim protection and immediately replacing the protective system when their work is complete, during breaks or at the end of the work shift.
    a. Leaving a wall, floor or roof opening open and unprotected is a serious offense and is grounds for immediate removal from the jobsite.
14. When no other practical means of fall protection can be used, employees will be tied off at all times utilizing a full body harness and double shock-absorbing lanyard.
15. Workers will be protected from falling objects from above.
16. In the event any deviation of the fall protection procedures is required, a temporary Fall Protection Plan will be developed by the appropriate personnel. The temporary plan will be in writing, workers will be trained in the requirements and procedures of the temporary plan and it will be present at the affected work area at all times. CSO §1669 (c) & CSO §1671.1.
17. A written Controlled Access Zone Work Plan must be developed and reviewed by SC Builders before implementation. CSO §1671.2.
    a. A copy of the plan must be present at all times the Controlled Access Zone is in operation.
    b. All affected workers must be trained in the requirements and provisions of the plan and must sign the plan prior to start of work.
    c. The designated “spotter(s)” in the Controlled Access Zone will have no other assigned duties and will be located in close proximity to all workers. Additional “spotters” may be required.

M. FIRE PROTECTION AND FIRE PREVENTION

1. Fire Protection:
    a. Temporary fire protection measures, such as fire extinguishers, temporary hose lines, and temporary standpipes, are required near hazardous locations.
    b. Each project team will develop a fire protection plan in accordance with the Cal/OSHA CSO, Article 36.
    c. Fire extinguishers will be:
        i. Conspicuously located within each building, spaced as required and placed on stands at approximately 36” to 48” above the floor when practical.
        ii. Inspected monthly.
        iii. Protected from falling and displacement.
        iv. Placed within the immediate area of any welding/cutting operation or flammable liquid storage area. (Separate designated fire extinguishers)
        v. Placed near fuel operated equipment in use.
        vi. Serviced annually at a minimum and have current tags.
    d. If a fire extinguisher is discharged for any purpose it must be reported to SC Builders and removed from the work area.
    e. All temporary buildings and trailer complexes (shops, field offices, storage bins, etc.) will have a 5:ABC fire extinguisher located within the structure.
    f. Access to fire hydrants will be maintained at all times. Access to buildings and other structures will be maintained at all times.
    g. Provisions for fire department response will be intact at all times.

h. SC Builders' employees will be trained on fire extinguisher use upon initial employment, and annually thereafter.

2. Fire Prevention:
   a. Temporary buildings located within another building or structure will be constructed of non-combustible material or have a fire resistance rating of one hour.
   b. Plastic tarps or covers (visqueen) used for any purpose inside a building where welding, cutting, or open flame is present will be made of fire-retardant material.
      i. Each office and storage bin will be equipped with a 5:ABC fire extinguisher.
      ii. Each office and storage bin will have a waste container for immediate disposal of miscellaneous trash and debris.
   c. Combustible refuse from construction operations will not be burned or dumped anywhere on the construction site. Such refuse will be removed at frequent intervals, as needed. Storage of large quantities of construction debris will be placed in metal dumpsters at least 35' from buildings.
   d. Compressed gases will be:
      i. Stored with valve caps on.
      ii. Secured upright at all times, including when transported in vehicles on the site.
      iii. Separated by 20 feet or greater or a fire rated barrier (applicable to fuel gases).
      iv. Stored in separate areas, full vs. empty cylinders.
   e. Only *approved* high flash point solvents are to be used for cleaning purposes.
   f. Oily rags and waste are to be stored separately in metal containers fitted with self-closing lids and disposed of when full. Trash and refuse must be placed in trash containers provided for this purpose.
   g. No open fires are permitted.
   h. A minimum clearance of 15 feet from fire hydrants must be maintained at all times for stored materials.
   i. All tarps and blankets used in construction will be fire retardant.
   j. All fire safety rules and signs will be observed and obeyed.
   k. Motors and machinery will not be left running during non-work hours unless specifically approved.
   l. All temporary electrical systems will be in accordance with the Cal/OSHA Electrical Safety Orders.
   m. Fire-rated doors will not be wedged or propped open for any purpose.
      i. Door hardware on fire-rated doors must remain operable.
      ii. Door closers will remain connected and in working order.
   n. Fire alarm systems in existing buildings will remain in service or will be removed from service as coordinated with the building engineer.
   o. It is recommended to invite the local fire department responding engine company to the jobsite to be familiar with construction activities.
   p. Protection of fire alarm systems and fire sprinkler heads is required in renovation work. Protection measures must be coordinated with, and acceptable to the building engineer.
3. Flammable Liquid Dispensing:
   a. High flash and methylene chloride solvents are prohibited.
   b. Storage of flammable liquids is not allowed on SC Builders jobsites.

c. Transportation and transferring of volatile liquids will be made in Underwriter Laboratory or Department of Transportation approved containers. Transporter shall insure necessary bonding and grounding requirements if applicable.
d. All fuel cans must be safety cans with self-closing lids and flame arrestors per GISO §3319 (e). Plastic fuel cans and G.I. cans are not allowed.
e. Bulk fuel (gasoline, diesel fuel, propane) storage is not allowed on site. All operated equipment, welding machines and generators must be serviced by mobile service and refueling vehicles.
f. Vehicle refueling locations will be per an approved Storm Water Pollution Prevention Program (SWPPP) when applicable.
g. At fuel dispensing points, the following is required:
    i. Portable 20 B-C fire extinguisher within 25 to 75 feet from the fueling point.
    ii. No Smoking signs posted. Additional signs in a second language if required.
    iii. Self-locking fuel nozzles are prohibited.
    iv. Spill kit available nearby.

4. Fire Fighting:
    a. Immediate and appropriate action is the key to preventing major losses due to fires.
    b. If a fire occurs, notify the local Fire Department and a supervisor immediately and assist with evacuation of the area if necessary.
    c. Immediately extinguish the fire with a fire extinguisher, water, or non-combustible material such as sand, unless it has burned out of control or is life-threatening.
    d. If possible, remove or shut off the fuel source such as removing debris or material or shutting off the fuel supply.
    e. Evacuation routes will be kept clear.
    f. After fires have been extinguished, a thorough investigation will be conducted and documented.

N. FIRST AID

1. SC Builders will maintain at least one First Aid Kit available on our jobsites at all times with contents which meet the requirements of Cal/OSHA. CSO §1512 (c)
    a. First-Aid kits will be inspected by SC Builders' personnel on a regular basis, and/or after each use to ensure that the kit is adequate for use.
2. Emergency eye wash stations and/or emergency eye wash solution will be readily available at all projects.
3. The Project Superintendent will make arrangements, or will assure that arrangements have been made, for medical aid at a facility as approved by our Workers Compensation Insurance carrier.
4. Latex gloves will be kept near First Aid Kits for use when treating open wounds or exposed to blood.
5. Emergency breathing kits will be kept near first aid kits for use by persons trained in rescue breathing.
6. All workers trained in First Aid will be appropriately educated about Bloodborne Pathogens and preventive measures to be used during treatment of accident victims.
    a. First Aid trainers and third-party providers will be certified through the American Red Cross or equivalent.

7. Medical records will be maintained on each SC Builders employee with occupational exposure to blood and other infectious materials for the period of time required by law. Medical records will be made available to the affected employee upon request by the subject employee or by the employee's heirs and/or legal representative via court order.

O. GENERAL RENOVATION AND NEW WORK

1. When renovation and new work are performed in, and around, an operating facility we must use the utmost caution and consideration to minimize the impact of the work on the daily operations of the facility and adjacent properties.
2. The health and welfare of the facility's staff, clients and guests is top priority throughout all construction activities. All necessary precautions will be taken to prevent injury to the public or damage to the property.
3. Altered walkways which have planking, trench plates, etc. will not have deviations from one surface to another greater than one-half inch (1/2"). If such deviation exists, they must be reduced by placement of temporary asphalt, concrete, ramps, or other acceptable material to ease the elevation transition.
4. Existing exits, entrances, public sidewalks, doors, and corridors will be kept clear of obstructions to permit safe public access and egress at all times.
5. No emergency exit will be obstructed or closed without a thorough review and approval of the tenants and/or building manager.
    a. Long-term emergency exit closures must be coordinated with the local agency having jurisdiction.

P. HAND AND POWER TOOLS

1. General.
    a. All hand and power tools will be kept in good condition with regular maintenance. Hand and power tools are to be used and operated according to manufacturer's instructions and guidelines and the personal protective equipment appropriate for the tool will be worn.
    b. Damaged and excessively worn tools must be removed from service and tagged "Defective," or destroyed so they aren't inadvertently reused. Tools such as hammers and chisels with mushroomed heads must be replaced.
    c. Tools must never be carried in a way that interferes with a worker's ability to use both hands while climbing a ladder or structure; tools will be raised or lowered by rope, using a bucket if necessary.
2. Hand Tools: CSO §1699.
    a. Impact tools such as chisels, wedges, etc. are not to have mushroomed heads.
    b. Wooden handles will not be splintered or cracked.
    c. Pocketknives will not be used for stripping wire.
    d. Only appropriate tools will be used for each task.
        i. A screwdriver is not to be used as a chisel.
        ii. Files must be equipped with handles and not be used to punch or pry.
        iii. Pipe wrenches are not to be used as a substitute for other, more appropriate wrenches.
        iv. Wrenches may not be altered by the addition of handle-extensions or "cheaters" unless specifically designed for such use.

e. Pointed tools, such as chisels and screw drivers, are not to be carried (whether point-up or point-down) in pockets. They are to be hand-carried only with the sharp edge or point away from the body.
f. Hammers should not be used as a substitute for a nail-puller.

3. Electric Tools - General: CSO Article 28.
    a. Each power tool must be inspected before use each day.
        i. Defective tools must be tagged accordingly and removed from the work area.
    b. Never lift, carry, raise, or lower a power tool by its cord.
    c. Guards and safety switches will not be removed or made inoperative.
    d. Electric tools must have a three-wire cord unless it is double insulated.
    e. Electric cord whips must meet the requirements of extension cords and will be inspected before use and tagged in accordance with SC Builders' Assured Grounding Conductor Program. (See Electrical, 3, b)
    f. Power strips with GFCI protection are required when construction tools are used with a building's permanent power system.
        i. Each subcontractor must provide GFCI protected power strips for their own use.
    g. Power tools will be disconnected from power source before changing blades, bits, etc.
4. Electric Grinder: CSO Article 28.
    a. Guards will not be removed.
    b. Grinding disks and wheels will be checked to verify they are the correct one for the grinder arbor and are RPM compatible.
5. Pneumatic Tools: CSO §1704.
    a. Air hoses ½ inch in diameter or greater will have a safety valve installed at the source of air.
    b. Clips, whips, or retainers are required at each air hose coupling to prevent attachments from being ejected from the tool. Only clips or pins manufactured for this use are permitted.
        i. Nails, tie wire, and other make-shift items are prohibited for use as retainers.
    c. Only the pneumatic nail gun, where the muzzle is pressed against the work surface to fire, is allowed.
    d. Pneumatic tools will not be hoisted or lowered by their hoses.
    e. Pneumatic nail guns will be disconnected from the air supply when unattended.
6. Powder-Actuated Tools: CSO Article 27.
    a. Employees will be trained to operate a powder-actuated tool and required to carry their operator card at all times.
    b. Operation of powder-actuated tools will be in strict accordance with the manufacturer's instructions.
    c. Powder-actuated tools will be locked in a container inaccessible to unqualified persons when not in use.
    d. Powder-actuated tools will not be left unattended at any time.
    e. Powder-actuated tools will not be loaded until immediately before intended firing time. If work is stopped, the tool will be unloaded before it is laid down.
    f. Fired cartridges are not to be discarded on the floor but placed in a container or bucket and properly disposed per manufacturer's requirements.

g. Only low velocity type powder-actuated tools will be allowed on SC Builders projects.
h. All manufacturers' requirements must be followed for tool use.
i. Warning signs will be posted in the immediate work area where powder-actuated tools are in use.
j. Verbal warnings are to be given before each shot is fired.

7. Chop Saws.
    a. Chop saw users will wear face shields in addition to safety glasses.
        i. Face shields must be the hard hat adaptable type.
    b. A fire-retardant backdrop will be placed behind the chop saw to reduce the splatter of cutting debris.

Q. HEAT ILLNESS PREVENTION

All outdoor operations will be scheduled and managed to provide maximum worker protection from the symptoms of heat illness in accordance with the Cal/OSHA GISO §3395. All SC Builders employees will be appropriately trained as required in GISO §3395 (f).

1. SC Builders' Superintendent and foreman have the authority and responsibility for implementing the provisions of this program at the worksite. The name and contact numbers for these personnel are located at the project office.
2. The Project Superintendent shall check in advance the extended weather forecast. Weather forecasts can be checked with the aid of the internet (http://www.nws.noaa.gov/), or by other reliable forecasting methods. The work schedule will be planned in advance, taking into consideration whether high temperatures or a heat wave is expected. This type of advance planning should take place all summer long.
3. Prior to each day the Project Superintendent of Foreman shall check in advance the weather forecast using the above-mentioned method. A thermometer may be used at the jobsite to monitor for sudden increases in temperature, and to ensure that once the temperature exceeds 80 degrees Fahrenheit, shade structures will be opened and made available to the workers. In addition, when the temperature equals or exceeds 95 degrees Fahrenheit (95°F), additional preventive measures such as the High Heat Procedures will be implemented.
4. Procedures for water, shade, observation, acclimatization, high heat, and emergency response.
    a. Procedures for Provision of Water for Employees:
        i. SC Builders shall utilize a variety of methods of distribution to provide unrestricted access to a fresh and suitably cool potable water supply for its employees. This may include, but is not limited to, the distribution of bottled water, watercoolers and or through the use of permanent or temporary water fountains.
        ii. The Project Superintendent will determine which method of providing potable water will be used, based on logistics and the number of SC Builders' employees on the jobsite.
        iii. SC Builders project supervision will assure through periodic inspection (e.g. every hour), and more frequently when the temperature rises, that water distribution method(s) are sufficient in volume to provide one quart of water per employee, per hour and are sanitary.
        iv. Where methods of distributing water require that equipment is reused or water sources are handled, workers maintaining and handling the equipment will be trained in the cleaning, proper storage and handling for worker hygiene and health.
        v. Project Supervision shall provide verbal reminders and install signage to remind and encouraged workers to drink frequently throughout the shift. When the

temperature equals or exceeds 95°F or during a heat wave the number of water breaks will be increased.

vi. Water containers, fountains or other bulk supplies of water will be placed as close as possible to workers (given the conditions and layout of the worksite), to encourage frequent drinking of water. If field terrain prevents the water from being placed as close as possible the workers, bottled water or personal water containers will be made available so that workers can have drinking water readily accessible.

vii. A designated waste container will be placed near drinking water supplies that utilize single serve cups.

viii. Drinking directly from the spout of a common-use container and the placing of hands or a cup into drinking water is prohibited.

ix. All employees will be provided unrestricted access to drinking water, especially during times of hot weather and continued exposure to sunlight during work hours.

b. Procedures for Access to Shade:

i. The Project Superintendent is responsible to assure shade structures will be opened and placed as close as practical to the workers when the temperature equals or exceeds 80 degrees Fahrenheit (80°F). When the temperature is below 80°F, access to shade will be provided promptly, when requested by an employee.

ii. SC Builders shall provide shade to its employees through variety of ways which may include, but is not limited to, natural shade, office trailers with air conditioning, buildings, temporary covers, tents, umbrellas, etc.

iii. Enough shade structures will be available at the site, to accommodate all of the employees who are on a break at any point in time. During meal periods there will be enough shade for all of the employees who choose to remain in the general area of work or in areas designated for recovery and rest periods. (Employers may rotate employees in and out of meal periods, as with recovery and rest periods.)

iv. Shade is defined as blockage of direct sunlight. Shade is not adequate when heat in the shade area defeats the purpose of the shade and does not allow the body to cool.

v. Shade structures will be relocated to follow along with the crew and they will be placed as close as practical to the employees, so that access to shade is provided at all times. All employees on recovery, rest break or meal period will have full access to shade so they can sit in a normal posture without having to be in physical contact with each other.

vi. In situations where trees or other vegetation are used to provide shade (such as in orchards), the thickness and shape of the shaded area will be evaluated, before assuming that sufficient shadow is being cast to protect employees.

vii. The shade area will be open-sided or will have ventilation or cooling at all times when the temperature is 80°F or higher.

viii. Workers will be encouraged to take additional five-minute rest periods in the shade area throughout the shift.

ix. In situations where it is not safe or feasible to provide access to shade (e.g., during high winds), a note will be made of these unsafe or unfeasible conditions, and of the steps that will be taken to provide shade upon request.

x. Shade areas shall not be located near portable toilet facilities or any other areas which may produce odors or unsanitary conditions.

xi. Shade areas shall not be located in wet or potentially muddy locations.

xii. Seating areas in shade areas shall be located so that workers are not in contact with tree branches, bushes, thorns, etc.

c. Observation:

i. The project superintendent or designated field supervisor shall conduct periodic observations of employees throughout the workday when temperatures are equal to or exceed 80 degrees. The observation shall monitor for compliance with this program and look for signs of heat illness. The Supervisor Heat Stress Observation Checklist shall be completed at least once per shift anytime temperatures are equal to or exceed 80 degrees. (Attachment A)

ii. An employee who takes a preventative cool-down rest break will be monitored and asked if they are experiencing symptoms of heat illness and in no case will the employee be ordered back to work until signs or symptoms of heat illness have abated. (See also the section on Emergency Response for additional information)

iii. Workers shall not be rushed to return to work.

iv. Workers exhibiting signs or symptoms of heat illness, or complaining of symptoms of heat illness, shall receive first aid without delay.

v. If heat illness is suspected, Emergency Medical Personnel shall be contacted immediately.

vi. No person displaying signs or symptoms of heat illness shall be left unattended or sent home without being offered first aid or provided emergency services.

vii. Supervisors will immediately address any reports of heat illness symptoms and will provide adequate treatment as necessary.

1. Workers displaying signs or symptoms of heat illness shall not be left unattended until they have recovered through acclimatization, first aid treatment or medical transport.
2. Affected workers will be provided escort to the shade area for recovery.

viii. Observation for Acclimatization:

1. All employees shall be closely observed by a supervisor or designee during a heat wave. For purposes of this section only, “heat wave” means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.
2. An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.

d. Procedures for Acclimatization:

Acclimatization is a process by which the body adjusts to increased heat exposure. The body needs time to adapt when working in hotter environments. Employees are more like to develop heat illness if not allowed or encouraged to take it easy when a heat wave strikes or when starting a job that newly exposes them to heat. Acclimatization is fully achieved in most people within 4 to 14 days of regular work involving at least 2 hours per day in the heat.

i. The weather will be monitored daily. The supervisor will be on the lookout for sudden heat wave(s) or increases in temperatures to which employees haven’t been exposed to for several weeks or longer.

ii. All employees shall be closely observed by a supervisor or designee during a heat wave. For purposes of this section only, “heat wave” means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and

at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

iii. An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.

iv. SC Builders project supervision shall use various methods to acclimate employees. These methods may include, but are not limited to, discontinuing of work, job rotation, increased frequency of breaks, additional water/shade, change of work hours, adjustment of work task to lessen the intensity, etc.

v. All workers assigned to outdoor work crews shall be provided acclimatization time and shall be closely monitored during that time period.

vi. Acclimatization shall include:

1. Work assignments as part of a “buddy system.”
2. Frequent and regular breaks, including unrestricted access to shade.
3. Assigned work times outdoors should be limited to two-hour increments and should be increased as workers become acclimated to the heat and humidity.
4. Close observation during a heat wave (80 degrees Fahrenheit).
5. Frequent and documented communication, encouraging drinking of water, the location of water, taking breaks, access to and the location of the shade area.
6. Light-duty work when possible.
7. When light-duty work is not possible or feasible, the work activities shall be alternated between workers to assure that the heaviest burden is not borne by one worker.

vii. When possible, work should be assigned in a rotating manner to distribute heavy work throughout the assigned work crew. The following are examples of workload definitions.

1. Rest – sitting (quietly or with moderate arm movements).
2. Light work – sitting or standing to control machines; performing light hand or arm work (e.g., using a table saw); occasional walking; driving.
3. Moderate work – walking about with moderate lifting and pushing or pulling; walking at moderate pace (e.g., scrubbing in a standing position).
4. Heavy work – pick and shovel work, digging, carrying, pushing/pulling heavy loads, walking at fast pace (e.g., carpenter sawing by hand).
5. Very Heavy – very intense activity at fast to maximum pace)e.g., shoveling wet sand).

e. High Heat Procedures:

When the temperature reaches or exceeds 95 degrees Fahrenheit, SC Builders will ensure the following in addition to the standard procedures:

i. Effective communication by voice, direct observation (applicable for work crews of 20 or fewer), mandatory buddy system, or electronic means will be maintained, so that employees at the worksite can contact a supervisor when necessary. If the supervisor is unable to be near the workers (to observe them or communicate with them), then an electronic device, such as a cell phone or text messaging device, may be used for this purpose if reception in the area is reliable.

1. During periods of high-heat, efforts shall be made to implement a “buddy system”.
2. If a “buddy system” cannot be implemented, Supervisors shall maintain frequent and regular communication with workers who are working alone.
3. The project superintendent shall determine the most efficient method of communication. Methods that may be used to communicate an emergency may include, but are not limited to, voice, radio, cell, or other electronic means.
4. Frequent communication will be maintained with employees working by themselves or in smaller groups (keep tabs on them via phone or two-way radio), to be on the lookout for possible symptoms of heat illness. The employee(s) will be contacted regularly and as frequently as possible throughout the day since an employee in distress may not be able to summon help on their own.

ii. A Pre-shift meeting shall be conducted before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.

f. Emergency Response Procedures for Heat Illness:

i. If employee is showing signs of heat related illness it is the duty of the employee, supervisor, or co-worker to immediately report this to the SC Builders Superintendent.

ii. When an employee displays possible signs or symptoms of heat illness, a trained first aid worker or supervisor will check the sick employee and determine whether resting in the shade and drinking cool water will suffice or if emergency service providers will need to be called. A sick worker will not be left alone in the shade.

iii. When an employee displays possible signs or symptoms of heat illness and no trained first aid worker or supervisor is available at the site, emergency service providers will be called.

iv. Emergency service providers will be called immediately if an employee displays signs or symptoms of heat illness (decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, red and hot face), does not look OK or does not get better after drinking cool water and resting in the shade. While the ambulance is in route, first aid will be initiated (cool the worker: place the worker in the shade, remove excess layers of clothing, place ice pack in the armpits and groin area and fan the victim). Do not let a sick worker leave the site.

v. If an employee does not look OK and displays signs or symptoms of severe heat illness (decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior, incoherent speech, convulsions, red and hot face), and the worksite is located more than 20 minutes away from a hospital, call emergency service providers, communicate the signs and symptoms of the victim and request Air Ambulance. Employees showing signs of heat illness will be moved to nearest shade location and given cool water (if they are able to drink) and be allowed to lie down.

vi. It is the responsibility of the Superintendent or Project Supervision to ensure that the emergency procedures are activated immediately. Whoever is in contact with EMS will inform them of the emergency and give them the physical location of the injured employee and the jobsite entrance location.

vii. The person in contact with EMS is to remain on the line until they reach the injured employee.

g. Training:
   i. Employees shall be trained in the requirements and procedures of this program.
   ii. When it is anticipated that temperatures will reach 80 degrees or more, heat illness prevention will be a topic of each toolbox safety meeting with emphasis on frequent water consumption, rest time and shade access during hot weather.
   iii. When it is anticipated that temperatures will reach 80 degrees or more, heat illness prevention shall be a topic in each pre-task planning session.
   iv. This program shall be made available to all affected workers upon request.

R. HOT WORK

Hot Work is defined as the use of open flame, other heat sources, and/or spark-producing devices in areas where combustible materials may or do exist, or where there is potential for explosion or fire. Compliance with the applicable sections of CSO Article 36 is required.

Hot work activities include burning, welding, cutting, grinding, or other operations that produce a flame or sparks that could cause catastrophic results if not controlled. Prior to performing Hot Work, employees and subcontractors will obtain a Hot Work Permit from the designated SC Builders representative. All SC Builders employees shall be provided Hot Work training.

A Hot Work Permit is valid as stated on the permit.

1. The following precautionary measures will be taken when a Hot Work Permit is required:
   a. Gratings, openings, etc. will be completely covered in such a way to prevent sparks and slag from falling to a level below.
   b. Appropriately sized fire extinguishers will be placed in the immediate area of the work.
   c. No flammable or combustible material may be stored within 35 feet in any direction.
   d. Combustible/flammable materials that cannot be moved must be covered with fire retardant material.
   e. Employees designated as fire watch will be trained and remain for one-half hour after the Hot Work has been completed.
      i. A fire watch is always required when Hot Work is being performed. These measures shall be outlined following the completion of an SC Builders Hot Work Permit.
   f. A thorough review of surrounding areas will be made for all Hot Work within occupied areas of a facility.
   g. Interior Hot Work in an existing facility or at the tie-in locations to an existing facility will be closely coordinated with the facility engineers for fire alarm control and awareness.
   h. Hot Work equipment and tools must be adequate for the work being performed. Defective Hot Work equipment are to be removed from the field immediately.
2. When cutting or welding using compressed gases, flame arrestors will be installed on both the torch side and regulator side of the oxygen and gas hoses.
3. Welding screens will be used whenever possible to protect workers and the general public from welding flash.
4. Supervisors will review the procedures with employees or subcontractors prior to performing any hot work. The review includes:
   a. A review of the work to be performed.
   b. Precautions to be taken.

c. How to use the fire extinguisher correctly.
d. Emergency procedures in case of fire.
e. Duties of the fire watch.

5. Dedicated fire extinguishers must be provided by the subcontractor performing the work. The general fire-fighting fire extinguishers provided by SC Builders will not be relocated for Hot Work and are not "designated" for Hot Work regardless of their proximity to the work location.
6. Subcontractors performing Hot Work indoors will provide or assure that adequate ventilation is provided in accordance the applicable sections of Article 107 of the Cal/OSHA General Industry Safety Orders.
    a. Additional measures may be required regarding ventilation and/or respirator equipment when personnel are exposed to hazardous fumes, gases, or dust. Exposures must not exceed their applicable exposure limits and safeguarding measures must be compliant to the level of exposures.

S. LASERS

Laser use will be in compliance with §1801 of the Cal/OSHA Construction Safety Orders.

1. Precautions will be taken to ensure all employees using a laser are trained in the proper use and the hazards associated with lasers. Each trained employee is to be issued a qualification card, which must be carried by the employee and available upon request.
2. No employee will install, adjust, or operate any laser equipment without a valid qualification card.
3. "Laser" warning signs will be placed around the perimeter of the area the laser is being used.
4. No laser equipment will be used that does not contain a label, indicating make, maximum output, and beam spread.
5. Whenever a laser is not in use, shudders or caps will be used and the laser turned off.
6. When performing internal alignment, lasers will only be guided by mechanical or electronic means.
7. No laser beam will be directed at any person.
8. When environmental conditions exist such as rain, fog, snow, or extremely dusty conditions, use of lasers will not be permitted.
9. Only lasers emitting non-ionizing radiation will be used.

T. LADDERS, STAIRWAYS AND RAMPS

1. Ladders and ladder use will meet the requirements of Article 25 of the Cal/OSHA Construction Safety Orders and §3276 of the Cal/OSHA General Industry Safety Orders.

    When selecting a ladder for use, consideration will be given to the ladder length or height required, the working load, the duty rating, worker position to the task to be performed, and the frequency of use to which the ladder will be subjected.

    a. Ladders, stairs, or ramps will be provided where there is a change in elevation of 18 inches or greater.
    b. Employees will be trained on the safe use of ladders.
    c. Ladders used for accessing one elevation from another will extend at least 36 inches above the landing they serve.
    d. Extension ladders and straight ladders will be secured at the top and base of the ladder to prevent displacement.

e. Ladder landings will remain clear of all obstacles and obstructions to allow easy access on and off the ladder.
f. When ascending or descending a ladder, the user will face the ladder and maintain contact with the ladder at three-points at all times.
g. Each employee is required to inspect ladders daily prior to use. Ladders with broken or bent rungs, steps or side rails will be immediately destroyed and removed from work areas.
h. Job-made ladders will comply with CSO §1676.
i. Ladders will not be used as a supporting component of a scaffold system unless they're specifically designed for that purpose and the manufacturer's applicable safety literature is available for review by SC Builders.
j. Ladders will prominently display all manufacturers' safety and inspection labels, maintenance information and load ratings.
k. When selecting a ladder for use, the load rating consideration must include the weight of the worker using the ladder, tools, and equipment to be used and material.
    i. All ladders will be minimum Type I, heavy-duty with a minimum rating of 250 lbs.
    ii. Medium Type II (225 lbs.) and Light Duty Type III (200 lbs.) ladders are prohibited.
l. Stepladders:
    i. Stepladders will not be used as straight ladders. Stepladders will only be used with the legs fully extended and spreader bar locked in place.
    ii. Workers will not stand on the top or top step of a stepladder. No worker will work when their knees are above the top of the stepladder.
m. Straight Ladders and Extension Ladders:
    i. Ladders will be set up so the horizontal distance at the bottom is not less than ¼ of the vertical distance to the bearing point.
    ii. Employees will not stand on the top three rungs of a ladder.
    iii. All straight ladders will have non-skid feet at the base.
    iv. Extension ladders and straight ladders will be secured at the top and base of the ladder to prevent displacement.

2. Stairways will comply with CSO §1626.
    a. Stairways will be maintained free and clear of obstructions and will be available for use at all times except when work is specifically coordinated to obstruct a stairway and other provisions for exiting have been made.
    b. Stairways having four or more risers or rising 30 inches or more will have a guardrail system 36 inches high on each unprotected side.
    c. Metal pan stairs will not be used until the pans are filled to prevent a tripping hazard.

U. LIFTING

All employees are to be instructed in the proper methods and techniques of lifting both light and heavy objects. Lifting is to be a continuing topic for Pre-Task Planning and in weekly Toolbox Safety Meetings when applicable.

SC Builders will provide back supports and training for use of back supports when necessary.

1. Always employ safe lifting practices and techniques.
    a. Do not lift heavy or awkward objects alone. Size up objects to be lifted and ask for assistance as necessary.

b. Make sure the walking path is clear before lifting and carrying any object and maintain a clear view as you proceed.
c. Lift with your thighs and legs, not your back. Maintain proper posture during lifting and carrying.
d. Change direction with your feet. Do not twist your back while lifting or carrying a load.
e. Once material has been set down or in place, push it – do not pull it – to relocate it.
f. When lifting with another person, talk through the routine and procedure to assure you are working together and not against one another.

2. Employees are encouraged to conduct stretching exercises before beginning work, especially on cold mornings.
   a. Stretching helps maintain flexible muscles and muscle groups, helps increase range of motion, increases blood circulation, and helps build endurance.
   b. When stretching, move slowly into and out of the exercises.
   c. Hold stretch positions for 15 to 20 seconds.
   d. Protect your back. Don't over-stretch without easy warm-ups.
   e. Use isometric exercises to help maintain strength of muscles. Isometric exercises require stationary objects or other body parts to push against while flexing muscles.
   f. Use isotonic exercises to extend the muscles and help maintain range of motion.
   g. Try to include as many muscle groups as possible during the stretching routine.

V. LOCKOUT / TAGOUT

A lockout/tagout procedure to ensure that workers are not exposed to the hazards from moving machinery or equipment and those hazards posed by an energized source (electrical, mechanical, pneumatic, steam, hydraulic, chemical, etc.) will be strictly followed by authorized subcontractors only.

1. Lockout/Tagout for electrical systems will comply with the applicable sections of the Cal/OSHA Electrical Safety Orders and NFPA 70E (National Electric Code).
2. Lockout/Tagout of machinery and equipment will include the above-noted standards and will incorporate the requirements of GISO §3314.
3. Written Lockout/Tagout procedures will be developed by a qualified contractor and submitted to SC Builders for review.
4. Lockout/Tagout of electrical systems and/or equipment in an existing and operating facility will be closely coordinated with the facility engineer.

W. MASONRY

Refer to the provisions of the section on Silica for applicable requirements.

All masonry work will be performed in accordance with §1722 of the Cal/OSHA Construction Safety Orders.

1. A limited access zone is required to be in place prior to the construction of any masonry wall. The limited access zone will be on the un-scaffolded side of the wall to prevent anyone from working or walking on the blind side of the masonry work.
2. Masonry walls over eight feet in height will be adequately braced to prevent collapse and remain in place until permanent support is in place. CSO §1722 (b)
3. The masonry subcontractor will complete clean-up and disposal of mortar and grout debris as the work progresses.

4. The masonry subcontractor will provide washout “bags” or “tubs” for containing mortar and grout washout. Washout bags or tubs will be used for grout pump washout and washout of concrete/grout trucks. Mortar and grout washout will be disposed offsite. Washout directly on the ground is prohibited.

X. MATERIAL HANDLING & STORAGE

Placement and storage of material will be coordinated with SC Builders.

1. Access and exiting requirements must be maintained at all times. Material placement will not obstruct entrances or exits.
2. Material will be kept at least 15’ clear of fire hydrants and other firefighting devices such as Siamese connections, fire system standpipes, drains, etc.
3. Material will not be stored in electrical rooms after permanent power has been energized.
4. Material will not be placed temporarily or stored on stairs or in a stairway, including landings and mid-landings.
5. Bulk material will be secured from displacement.
    a. Palletized material will not be stacked higher than two tiers.
    b. All stacked material must be stabilized by the use of dunnage or separators between material at intervals to help stabilize the load and distribute the weight to avoid falling or collapse.
6. Combustible debris will be removed from buildings daily.
7. All containers on the jobsite must be labeled.
    a. Secondary containers must be labeled.
    b. Labels must include the content of the secondary container, the subcontractor’s name and contact information, and the hazard level and specific hazards of the contents of the container.
8. Store paints, chemicals, solvents and other hazardous materials and fluids in designated storage areas with double containment.

Y. NOISE CONTROL

1. Playing of radios or personal audio devices and other similar devices is prohibited, including devices with earphones or headsets.
    a. Wearing Bluetooth® type earpieces in construction areas is prohibited. Hearing must not be impacted and must be available for safety communication at all times.
2. Employees will be provided with proper hearing protection as necessary, and subcontractors will provide hearing protection for their workers as required.
3. Equipment will be maintained to operate within the noise limits as specified by equipment manufacturers.
4. All motor-driven equipment will have a proper exhaust system that meets Cal/OSHA standards on noise levels.
5. Noise levels in closed work areas will be monitored.
    a. Construction activities that create excessive noise levels will be coordinated with other work activities to minimize excess noise exposure to other workers.
    b. Examples of high noise activities include metal cutting, impact tools such as roto-hammers, chipping guns, concrete breaking and cutting equipment.
    c. Operators of high noise generating tools will wear appropriate hearing protection.

Z. PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Personal Protective Equipment (PPE) standards are established to provide a consistent and effective standard for SC Builders' construction sites. These standards apply to all persons entering SC Builders' work areas per California Labor Code §6407.

All subcontractors are required to provide all PPE for their employees in accordance with the Cal/OSHA General Industry Safety Orders §3380. All PPE will be of quality and design to provide workers with the necessary protection in each task they are assigned.

SC Builders will not loan, rent, or sell PPE to subcontractor's employees. Subcontractor employees reporting to work without the required PPE will not be allowed to begin work.

1. Head Protection. GISO §3381.
    a. ANSI Z89.1 certified hard hats will be properly worn at all times.
    b. Hardhats will be maintained and replaced as recommended by the manufacturer.
    c. Baseball type caps, stocking caps, sweatshirt hoods, or other headgear not specifically designed to wear with a hardhat will not be worn beneath hardhats.
        i. Soft welders' caps are permissible.
    d. Metal hard hats are not allowed to be worn due to potential hazards with a variety of operations throughout construction. Many metal hard hats do not meet Z89.1 impact requirements. As a matter of standardization, SC Builders will not allow metal hard hats to avoid validating individual hard hats.
    e. "Cowboy" or "Western style" hard hats are not allowed to be worn due to the potential hazards they may contribute to at times during the course of construction. Many "Cowboy" or "Western-style" hard hats do not meet Z89.1 impact requirements. As a matter of standardization, SC Builders will not allow "Cowboy" or "Western-style" hard hats to avoid validating individual hard hats.
2. Eye and Face Protection. GISO §3382.
    a. Safety glasses that meet ANSI Z-87.1 criteria are to be worn at all times.
    b. Workers with prescription glasses must meet ANSI Z-87.1 requirements or will be required to wear over the glasses (OTG) safety eyewear.
    c. In addition, the following eye/face protective equipment must be used when performing the following work activities:

Activity	Safety Equipment
Welding	Welding hood*
Torch cutting	Goggles
Abrasive grinding or cutting	Face shield*
Drilling	Safety glasses or goggles and a face shield
Reaming	Safety glasses or goggles and a face shield
Chemical handling	Goggles and a face shield*
Molten materials	Goggles and a face shield*
Corrosive liquids	Goggles and a face shield*

Overhead work such as chipping, scraping, drilling, etc.	Safety glasses or goggles and a face shield
* Safety glasses will be used in conjunction with face shields and welding hoods.	

3. Footwear. GISO §3385.
    a. All employees will wear work boots or acceptable work shoes and will keep their footwear in good condition at all times.
        i. Footwear will be hard-soled with durable leather upper footwear covering the top of the foot to protect against abrasions.
    b. Appropriate foot protection will be required for employees who are exposed to foot injuries from electrical hazards, hot, corrosive, poisonous substances, falling objects, crushing, or penetrating actions, which may cause injuries or who are required to work in abnormally wet locations.
    c. Footwear that is defective or inappropriate to the extent that its ordinary use creates the possibility of foot injuries will not be worn.
    d. Footwear such as tennis shoes, sneakers, open-toed footwear, soft suede/canvas hiking boots, athletic footwear and other soft-soled footwear are not allowed, including steel-toed sneaker type footwear.
    e. Employees using compaction equipment and some demolition equipment will wear tarsal protection while performing their work.
4. High-Visibility Clothing. CSO §1590 (a) (5) & §1598 (c).
    a. Workers will wear orange, yellow-green or fluorescent versions of those colored warning garments such as vests, jackets, shirts, or other clothing.
    b. When exposed to vehicular or equipment traffic, workers will wear Class 2 high-visibility clothing. (Class 2 high-visibility clothing includes retro-reflective horizontal and vertical stripes in a belt and suspenders configuration on the garment.)
    c. Workers subject to high traffic conditions, flaggers, and anyone in an area where there is operated equipment will wear Class 2 high-visibility clothing.
    d. Workers on night shifts who are exposed to traffic will wear Class 3 high-visibility clothing.
    e. Raingear must comply with high-visibility requirements where applicable.
    f. Work that includes a lot of airborne dust such as some types of demolition, high-visibility clothing may be substituted with Tyvek® type coveralls to protect the workers' clothing from contamination.
    g. Superintendents may waive the high-visibility clothing requirements for small jobs of limited duration and exposure.
5. Work Attire. CSO §1522 & GISO §3383.
    a. Body protection may be required for employees whose work exposes parts of their body, not otherwise protected as required by other orders in this article, to hazardous or flying substances or objects.
    b. In order to help protect employees from overexposure to harmful ultraviolet radiation, shirtsleeves will have a minimum sleeve length of three inches (3"). Sleeve length is measured from the underside of the armpit to the lower end of the sleeve.
    c. Tank tops or shirts with cut-off sleeves are not permitted.
    d. Clothing appropriate for the work being done will be worn. Loose sleeves, tails, ties, lapels, cuffs, or other loose clothing which can be entangled in moving machinery will not be worn.

e. Long pants are required to fit properly around the waist and ankles. Pants that are worn low on the hips or thigh are not allowed. Pants with loose-fitting legs and waists will not be allowed. The length of the pants will be such as to not present a tripping hazard.

f. Clothing saturated or impregnated with flammable liquids, corrosive substances, irritants, or oxidizing agents will be removed and will not be worn on the jobsite.

6. Hand and Arm Protection. CSO §1520 & GISO §3384.
   a. Hand protection will be required for workers whose work involves exposure of hands to cuts, burns, harmful physical or chemical agents which are encountered and capable of causing injury or impairments.
   b. Hand protection, such as gloves, will not be worn where there is a danger of the hand protection becoming entangled in moving machinery or materials.
   c. Workers will wear gloves at all times when lifting or handling material.
   d. Forearms and wrists will be protected by long sleeves, leather sleeves or other suitable protection when the work or specific task exposes the arms to injury.
   e. Wrist watches, rings, or other jewelry will not be worn while working with or around machinery with moving parts in which such objects may be caught, or around electrically energized equipment.
7. Hearing Protection. CSO §1521 & GISO Article 105.
   a. Approved hearing protection will be worn as specified in posted areas and while working with or around high-noise level producing machines, tools, or equipment. A good rule to follow is: When you must raise your voice to be heard, you need hearing protection. Exposure to impulsive or impact noise will not exceed 140dB noise level.
   b. Any tool or equipment, which produces noise levels that require you to shout to be heard, will be considered to have exceeded the Permissible Noise Exposure for noise, and hearing protection is required, no matter the duration of use.
   c. Refer to Table N-1 (below), GISO §5096 for Permissible Noise Exposure limits.

	Permitted Duration Per Workday				Permitted Duration Per Workday	
Sound Level (dBA)	Hours-Minutes	Hours		Sound Level (dBA)	Hours-Minutes	Hours
90	8-0	8.00		103	1-19	1.32
91	6-58	6.96		104	1-9	1.15
92	6-4	6.06		105	1-0	1.00
93	5-17	5.28		106	0-52	0.86
94	4-36	4.60		107	0-46	0.76
95	4-0	4.00		108	0-40	0.66
96	3-29	3.48		109	0-34	0.56
97	3-2	3.03		110	0-30	0.50
98	2-38	2.63		111	0-26	0.43
99	2-18	2.30		112	0-23	0.38

100	2-0	2.00		113	0-20	0.33
101	1-44	1.73		114	0-17	0.28
102	1-31	1.52		115	0-15	0.25

8. Respiratory Protection. GISO §5144.
    a. Respirators will be provided by SC Builders for our employees and by subcontractors for their employees, when such equipment is necessary to protect the health of the employee.
    b. Respirators which are applicable and suitable for the purpose intended will be provided.
    c. Where respirators are necessary to protect the health of the worker(s), each employer will establish and implement a written respiratory protection program with worksite-specific procedures. The program will be updated as necessary to reflect those changes in workplace conditions that affect respirator use. If a respirator program is required, SC Builders will hire a Program Administrator or will appropriately train an SC Builders employee to administer the program. The following provisions will be included, as applicable:
        i. Procedures for selecting respirators for use.
        ii. Medical evaluations for employees required to use respirators.
        iii. Fit testing procedures.
        iv. Procedures for proper use of respirators in routine and emergency situations.
        v. Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and maintaining respirators.
        vi. Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators.
        vii. Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations.
        viii. Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance.
        ix. Procedures for regularly evaluating the effectiveness of the program.
    d. All procedures as outlines in GISO §5144 will be followed after determination of the program requirements and procedures.
    e. Dust masks.
        i. Dust masks may be used when applicable. Workers must be notified of the limitations of the dust mask.
        ii. Dust masks must be maintained in sanitary condition when not in use.
        iii. Dust masks subject to the routine workplace environment by lying around the work area must be disposed.
        iv. Disposable dust masks are not suitable for protection of silica exposure.
9. Additional Protection.
    a. During the course of work, SC Builders may require workers to wear additional personal protective equipment to reduce the likelihood of a work-related injury or illness.

AA. PUBLIC AREAS

No work is to be performed in any area occupied by the public unless the proposed work and protective measures are specifically reviewed and approved by the Project Superintendent. The following precautions will be adhered to:

1. Every necessary precaution or action will be taken to protect and maintain the public's safe use of sidewalks, building entrances, lobbies, corridors, aisles, doors, exits, roadways, and other facilities as necessary.
2. Pedestrians will be protected with appropriate sidewalk sheds, canopies, catch platforms, fences, guardrails, barricades, shields, and adequate visibility as required by law.
3. When public access is required to be re-routed from normal foot traffic patterns, appropriate, conspicuous, and safe delineation and barriers will be provided.
4. Guardrails, temporary walking surfaces, stairs, handrails, ramps, etc., will meet the requirements for permanent installations unless special provisions for temporary work are permitted and approved.
5. Traffic control will be provided for all vehicles and equipment moving through public areas, including parking lots, streets, and highways within designated work zones. Traffic control will be provided by the subcontractor whose vehicles or equipment are moving through public areas.
6. Applicable warning and safety signage will be in place with all barriers and barricades prior to starting work in public areas.
    a. Barriers and barricades in public areas during hours of darkness will have flashing lights at 10'0" on center, minimum.
7. Delivery and unloading of construction equipment and material on public roadways is prohibited without two-way traffic control. Traffic control will be provided by the subcontractor whose equipment or material is being delivered.
8. Work areas will be secured from public access as much as possible and practical.
    a. Perimeter fencing must be post-driven fencing or will be otherwise secured from displacement and braced against wind damage.

BB. RESPIRATORY PROTECTION PROGRAM

Improper use of or failure to wear respiratory protection when required can have devastating effects on the life and/or health of workers. Lack of a respirator, early removal of a respirator and improperly fitting respirators has resulted in needless worker injury and death.

The purpose of this policy is to establish a respiratory protection program for SC Builders, Inc. that ensures that workers are provided with the necessary information, training, and equipment to protect themselves from respiratory hazards in the workplace, and complies with OSHA, ANSI and other applicable standards and regulations.

It is management's responsibility to implement this program at no cost to the employees and it is the employee's responsibility to comply with all aspects of this program. Any voluntary use of respiratory protection equipment by employees shall be governed by the provisions of this program, also at no expense to the employees.

1. Responsibilities:
    a. Management – Has the responsibility of overseeing the implementation of this policy and assigning program administrators for each site location. These administrators must be suitably trained and have the appropriate accountability and responsibility to fully manage the site respiratory program. The program administrator will report, at least annually, on the effectiveness of the program to management, and be authorized to make appropriate changes to the site program. The administrators will be identified by name in the specific site program.

b. Supervisory – It is the responsibility of the supervisor to ensure that all personnel under their control are completely knowledgeable of the respiratory requirements of this program. Supervisors are to ensure that employees have been trained and are medically fit to use respiratory equipment safely. It is the supervisors' duty to monitor the employees' diligence in following procedure and take appropriate action when deficiencies are observed.

c. Employees – It is the responsibility of the employee to be aware of and practice the information presented in the training. Specifically, employee responsibilities are to report equipment malfunctions, seal check their respirator before every use, and to report medical or physical changes that could affect respirator use.

2. Hazard Assessment:

   Respiratory hazard determination starts at the planning stage of a job. SC Builders, Inc. will identify all known hazards as required by the hazard communication standard. Evaluation of the hazards consists of exposure duration, potential for contact, and known or potential concentrations. When the hazard is a federally controlled substance, that hazard shall be assessed and monitored as dictated by that specific standard. A respiratory hazard may not have an established OSHA permissible exposure limit documented; however, all provisions of this program will be enforced to protect the health of the employees.

   Acceptable methods for estimating respiratory hazards include:

   a. Personal exposure monitoring is the most reliable and accurate method to determine exposure.

   b. Use of objective data – This is the use of data obtained from industry studies, trade associations or from tests conducted by chemical manufacturers. The objective data shall represent the highest contaminant exposures likely to occur under reasonably foreseeable conditions of processing, use or handling. If objective data is used for assessment, the data must be documented as part of the written program.

   c. Mathematical Approach – The use of physical and chemical properties of air contaminates, combined with information on room dimensions, air exchange rates, contaminant release rates, and other pertinent data including exposure patterns and work practices to estimate maximum exposure levels in the workplace.

   d. Where employee exposure cannot be identified or reasonably estimated, the atmosphere will be considered immediately dangerous to life and health (IDLH). Atmospheres that are oxygen deficient will also be treated as IDLH conditions.

   e. Accidental release or emergency response must be a consideration when estimating hazard exposure.

3. Hazard Control:

   a. Engineering Controls: This should be the first consideration when evaluating hazard exposure.

      i. Substitution of a less or non-toxic substance to replace a more harmful one. Example: Sandblasting with black grit instead of silica sand.

      ii. Isolation or encapsulation of the process. Example: To spray asbestos insulation with glue paste to lessen exposure levels.

      iii. Ventilation to remove contamination from the work area before exposure. Example: Mechanical dust collection system installed to capture contaminants and reduce buildup.

   b. Administrative Controls:

      i. Especially effective for repetitive stress and heat stress control, crew rotation could increase productivity in contaminated atmospheres.

ii. Adjust the length of the work shift. Instead of two 12-hour shifts, it may be more effective to have three 8-hour shifts.

iii. Change scheduled work to limit the number of employees exposed. The scheduling of other work near the exposure area could be limited until exposure is gone.

c. Personal protective devices for the control of respiratory hazards are to be used as a last resort, and only when other means of control are not practical or feasible. Respiratory protection may be required while implementing engineering controls, or in conjunction with other control methods. Engineering controls may only lessen the exposure but are required to be implemented along with personal protective devices.

4. Respirator Selection:

a. Selecting the proper respirator can be very complex and is critical in having an effective respiratory program. The program administrator must solicit information from all available professional resources concerning exposure controls.

Factors that must be considered include:

i. The nature of the hazardous operation or process.

ii. The type of respiratory hazard (including physical properties, oxygen deficiency, physiological effects on the body, concentration of toxic material or airborne radioactivity level, established exposure limits for the toxic materials, established permissible airborne concentration for radioactive material, and established immediately dangerous to life or health concentration for toxic material).

iii. The location of the hazardous area in relation to the nearest area having respirable air.

iv. The period of time for which respiratory protection must be worn.

v. The activities of workers in the hazardous area.

vi. The physical characteristics and functional capabilities and limitations of the various types of respirators.

vii. Respirator-assigned protection factors listed in Attachment I, Table 1.

b. Respirators for use under IDLH conditions:

i. The required respiratory protection for IDLH conditions caused by the presence of toxic materials, or a reduced percentage of oxygen, is a combination full face piece pressure demand supplied air respirator (SAR) with auxiliary self-contained air supply. For rescue applications, a full-face piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes is acceptable.

ii. When respirators are worn under IDLH conditions, at least one standby person shall be present in a safe area. The standby person shall have the proper equipment available to assist the respirator wearer in case of difficulty. Communications (visual, voice, signal line, radio, or other suitable means) shall be maintained between the standby person and the wearer. While working in the IDLH atmosphere, the wearer shall be equipped with safety harness and safety lines to permit removal to a safe area, if necessary. Provisions for rescue other than safety harness and lines may be used, if equivalent.

5. Breathing Air Quality:

a. Workers using supplied breathing air equipment shall be thoroughly trained in its use.

b. Breathing air is typically supplied from cylinders or via a compressor. Appropriate measures shall be taken to ensure that all compressed breathing air meets at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

i. Oxygen content (v/v) of 19.5-23.5%;
ii. Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
iii. Carbon monoxide (CO) content of 10 ppm or less;
iv. Carbon dioxide content of 1,000 ppm or less; and
v. Lack of noticeable odor.

c. Suppliers of breathing air cylinders shall provide SC Builders, Inc. with a certificate of analysis with each delivery certifying that the breathing air meets the requirements for Grade D breathing air; and that the moisture content in the cylinder does not exceed a dew point of -50°F (-45.6°C) at 1 atmosphere pressure. The certificate shall have the name of the breathing air supplier, the testing technician and date of test.

Breathing air cylinders shall be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and part 178).

d. Compressors used to supply breathing air to respirators shall be constructed and situated so as to:
i. Prevent entry of contaminated air into the air-supply system.
ii. Minimize moisture content so that the dew point at 1 atmosphere pressure is 10 degrees F (-5.56°C) below the ambient temperature.
iii. If required to ensure delivery of Grade D air to the user, provide suitable in-line air-purifying sorbent beds and filters. All filters, cartridges and canisters shall be labeled and color-coded with the NIOSH approval label, and the label shall remain legible. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacturer's instructions. A tag containing the most recent change date and the signature of the person authorized by the employer to perform the change shall be attached to the equipment.
iv. For compressors that are not oil-lubricated, SC Builders, Inc. shall ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.
v. For oil-lubricated compressors, SC Builders, Inc. shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.
vi. The air shall be routinely tested to ensure that it meets Grade D requirements.

e. In addition, a stand-by attendant shall be on watch anytime workers are using breathing air supplied directly by a compressor.

f. Breathing air couplings shall be incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing airlines.

6. Training:

a. To protect employees from exposure to respiratory hazards using OSHA and ANSI standards as minimum guidelines, all employees who will wear respiratory protection will be trained on this policy. Training will be provided prior to job assignment where respirator equipment is required, and annually thereafter. Additional training is required when there are deficiencies in the employee's knowledge/skills or when there is a change in the workplace or respiratory equipment that renders previous training obsolete. The training will include the following:
i. Responsibilities of employees and supervisors.
ii. How, why, and for what jobs we use respirators.
iii. Hazard assessment including limitations of respirators.

iv. Hazard control.
v. Respirator selection.
vi. Medical evaluation.
vii. Respirator fit test.
viii. Maintenance, care, and storage.
ix. Medical surveillance.
x. Program evaluation.

b. All training shall be conducted in a way that is understandable to the employee and shall be documented.
   i. Why use respiratory protection:
      1. The nature, extent, and effects of respiratory hazards.
      2. Consequences of improper fit, usage, and maintenance on respirator effectiveness.
   ii. Limitations and capabilities of the respirator:
      1. Air-purifying respirators that filter either particles or absorbing vapors and gases.
      2. Air-supplying respirators that supply air from an uncontaminated source.
      3. Limitations of respirators in IDLH atmospheres and for emergency use only.
   iii. How respirators are inspected, donned, removed, seal checked and worn:
      1. What to do if respirators have defects.
      2. Whom to report problems to during use.
      3. Proper technique for donning and removing the respirator, and how to store when not in use.
      4. How to seal check using the positive and/or negative pressure method.
   iv. Methods of maintenance and storage:
      1. Visual inspection of parts for worn or defective items.
      2. How to keep the issued respirator clean and sanitary.
      3. Requirement to disinfect and sanitize before reissue to other employees.
      4. Proper storage in a cool, clean, and dry location, placing them in a clean, sealed plastic bag after drying.
   v. Medical signs and symptoms that may limit or prevent the effective use of respirators:
      1. An awareness of physical conditions that may indicate warning signs.
      2. An obligation to report signs and symptoms and the opportunity for medical reevaluation.
      3. Changes in weight (gain or loss).
      4. Physical changes in facial structure.
      5. Changes in endurance, stability, or general health.
      6. Medication for illness.

7. Medical Evaluation:
   a. All employees whose job classification may require use of respiratory protection shall be evaluated and certified by a physician or a licensed health care professional (PLHCP) as being “medically fit” to wear a respirator. For new hires, the medical evaluation shall be made before any use of respiratory equipment. Thereafter, the evaluation shall occur at a

minimum annually. The medical evaluation consists of, at a minimum, the administration of a health questionnaire meeting federal guidelines or provisions for a physical examination by a PLHCP that elicits the same information as the questionnaire. The PLHCP shall be provided with supplemental information by the employer on the description of the job classification, possible work conditions and any additional personal protective equipment. that may be required of the employee while using respiratory equipment. A copy of this program will also be given to the PLHCP for reference along with the OSHA standard.

b. The administration of the health questionnaire will be done during work hours and at no cost to the employee. The information on the questionnaire shall remain confidential between the PLHCP and the employee. The employee must have access to the PLHCP for discussion and asking questions concerning their medical evaluation. SC Builders, Inc. will only receive a recommendation of the employee's ability to wear respiratory equipment.

c. If an employee is restricted by the PLHCP from wearing a negative pressure respirator, but otherwise physically able to perform duties with a powered air respirator, then reasonable accommodations will be made by the program administrator not to have this restriction limit the employee's ability to perform their job.

8. Respirator Fit Test:

   a. Respirator fit testing is required of all employees prior to using a positive or negative tight-fitting respirator. The fit test will be specific for respirator manufacturer, model, and size. This test is to be repeated annually, or if there is a change in the respiratory equipment. Some substance specific standards may call for more frequent testing and dictate a specific protocol, which would take precedence over this program. A change in the employee's physical appearance can affect the seal of a respirator and may require re-testing. If the respirator is unacceptable to the employee due to comfort, irritation, or inability to get a seal, the employee will be offered a reasonable selection for an alternate choice of respirators.

   b. The employee will be asked to wear the proposed respirator for a period of time to become familiar with the feel and fit. No obstacles can be between their face and the sealing surface of the respirator, including facial hair of 24 hours or more growth, sideburns that extend into the sealing surface or hair that is long enough to prevent proper function of the respirator. Jewelry, caps, hats, scarves, and certain safety gear must be evaluated as part of the fit test if the employee is permitted or required to wear them during work. OSHA does not restrict the use of contact lenses with respirators but does mandate that the use of corrective lens shall not interfere with the seal of the respirator. Any adaptive devices for vision correction with respiratory equipment will be supplied at no cost to the employee. The employee will be instructed on how to field check respiratory equipment. The positive and negative seal check methods of verifying a good seal shall be required before each and every entry into a respiratory hazard area. These seal checks are not to be considered a fit test.

   c. Positive Seal Check:

      i. A positive seal check is accomplished by effectively sealing the exhalation valve and slowly exhaling. This should create a slight, positive pressure inside the face piece for a short period of time. The participant must be careful not to exhale too fast or small leaks can be nullified and/or large leaks artificially created.

   d. Negative Seal Check:

      i. A negative seal check is accomplished by effectively sealing the inhalation ports of the respirator and inhaling slowly. The participant should be able to create a

negative pressure inside the respirator and hold it for a short period of time. Inhaling too fast may nullify small leaks and/or artificially create other leaks.

e. Fit Test (See OSHA's Appendix A to §1910.134 for Acceptable Fit Test Methods) :
    i. Qualitative fit test (QLFT) – a pass/fail test that relies on the subject to detect a challenge agent and is predicated on an individual's sensory response.
    ii. Quantitative fit test (QNFT) – uses an instrument to measure the challenge agent inside the respirator and gives a numerical value to the test data.
    iii. If the qualitative testing is used, the employee should be informed of the exposure limitations. A limit of 10 times the permissible exposure level for an 8-hour duration is the maximum exposure for either a half mask, or full-face piece negative pressure respirator.

f. For OSHA guidelines, refer to OSHA's Appendix A to §1910.134 for Acceptable Fit Test Methods.

g. Irritant Smoke Protocol:
    i. Irritant smoke protocol for qualitative fit testing is very effective, since it is the only challenge agent that does not rely on a voluntary response. This type of test requires that the tester be well trained in the correct and safe use of the irritant smoke tubes. The smoke tubes can be a health hazard if not used properly and in a well-ventilated room. Specific step by step procedures are referenced in Attachment III.

9. Maintenance and Care:
    a. SC Builders, Inc. will provide for the cleaning and disinfecting, storage, inspection, and repair of respirators that are issued to their employees. There are specific guidelines to follow in Attachment IV to ensure the respirators are clean and disinfected. Respirators designated for the exclusive use of an employee shall be the responsibility of that employee to maintain and keep in a sanitary condition. Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals. Respirators maintained for emergency, training, or fit testing use shall be cleaned and disinfected after every use.
    b. Storage:
        i. Respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They shall be packed or stored to prevent deformation of the face piece. Emergency respirators shall, in addition, be kept accessible to the work area and stored in easily identifiable coverings. Reference the manufacturer's instructions for other recommendations.
    c. Inspection:
        i. Respirators are inspected on a regular basis and employees are instructed on how to inspect their respirator. All respirators used on a routine basis shall be inspected before each use and during cleaning. All emergency respirators shall also be inspected at least on a monthly basis. Respirator inspection shall include the tightness of connections and the condition of various parts including, but not limited to, the face piece, head straps, valves, gaskets, connecting tubes, cartridges, canisters, and filters. Also, check all elastic parts for deterioration and pliability. Inspection of self-contained breathing apparatus shall be done only by trained technicians competent with that specific brand, make and model of respiratory equipment. The technician conducting the inspection shall certify the inspection by attaching a signed and dated tag or label to the equipment.

d. Repairs:
   i. Equipment that is defective, broken or otherwise in need of repair shall be identified immediately by attaching a red tag and stating the reason it is out of service. Repairs to respirator equipment shall be made by competent employees and only with the manufacturers' recommended replacement parts. Absolutely no substitution of parts is allowed that is not authorized by the NIOSH approval.

e. Medical Surveillance:
   i. Employees should be aware of medical conditions that would prevent or limit their use of respiratory equipment. Supervisors shall be informed when employees experience medical difficulties that may affect or be a result of respirator use. Substance specific hazards may require a specific medical monitoring procedure that requires biological testing. Employees will be required to complete a medical questionnaire initially, and then further evaluation at the frequency determined by the medical evaluator.

f. Program Evaluation:
   i. The supervisor will monitor the work site for acceptance of and compliance with the written respiratory program. The supervisor will address issues where employees have had deficient respiratory issues (i.e., cartridge breakthrough and the respirator effectiveness). Employees will be asked questions about the effectiveness of the program and encouraged to offer suggestions for improvement including how the fit test protocol was performed, the maintenance procedures for care and storage of respirators and overall program. Periodic audits will be documented and reviewed by the program administrator. The program administrator will report, at least annually, to the management on the effectiveness of the total program.

g. Table: Assigned Protection Factors

Type of respirator	Respiratory inlet covering			
	Half Mask[1]		Full Facepiece	
Air purifying	10		100	
Atmosphere supplying:				
SCBA (demand)[2]	10		100	
Airline (demand)	10		100	
Type of respirator	**Respiratory inlet covering**			
	Half mask	**Full face**	**Helmet/hood**	**Loose-fitting facepiece**
Powered air purifier	50	1,000[3]	25/1,000[3]	25
Atmosphere supplying airline:				
Pressure demand	50	1,000	-	-
Continuous flow	50	1,000	25/1,000[3]	25
Self-contained breathing apparatus	-	1,000	1,000	25
Demand mode	10	50	50	-
Pressure demand or open/closed circuit	-	10,000[4]	10,000[4]	-

[1] Includes quarter masks, disposable half masks, and half masks with elastomeric facepieces.
[2] Demand SCBA shall not be used for emergency situations such as fire fighting.
[3] Protection factors listed are for high-efficiency filters and sorbents (cartridges and canisters). With dust filters, an assigned protection factor of 100 is to be used due to the limitations of the filter.
[4] Although positive-pressure respirators are currently regarded as providing the highest level of respiratory protection, a limited number of recent simulated workplace studies concluded that all users may not achieve protection factors of 10,000. Based on this limited data, a definitive assigned protection factor could not be listed for positive-pressure SCBAs. For emergency planning purposes where hazardous concentrations can be estimated, an assigned protection factor of no higher that 10,000 should be used. NOTE: Assigned protection factors are not applicable for escape respirators. For combination respirators, e.g., airline respirators equipped with an air-purifying filter, the mode of operation in use will dictate the assigned protection factor to be applied.

10. Respirator Selection

Logic Guide: Reference ANSI 288.2 – 1992 7.2.2.

Respirator selection involves reviewing each operation to (a) determine what hazards may be present (hazard determination) and (b) select which type or class of respirators can offer adequate protection.

a. Hazard Determination Steps
    i. The nature of the hazard shall be determined as follows:
        1. Determine what contaminant(s) may be present in the workplace.
        2. Determine whether there is a published Threshold Limit Value, Permissible Exposure Limit, or any other available exposure limit or estimate of toxicity for the contaminant(s). Determine if the IDLH concentration for the contaminant is available.
        3. Determine if there is a comprehensive health standard (e.g., lead, asbestos) for the contaminant(s). If so, there may be specific respirators required that influence the selection process.
        4. If the potential for an oxygen-deficient environment exists, measure the oxygen content.
        5. Measure or estimate the concentration of the contaminant(s).
        6. Determine the physical state of the contaminant. If an aerosol, determine or estimate the particle size. Determine if vapor pressure of the aerosol is significant at the maximum expected temperature of the work environment.
        7. Determine whether the contaminant(s) present can be absorbed through the skin, produce skin sensitization, or be irritating or corrosive to the eyes or skin.
        8. Determine for a gas or vapor contaminant(s) if a known odor, taste, or irritation concentration exists.

b. Selection Steps.
    i. The proper respirator shall be selected as follows:
        1. If unable to determine what potentially hazardous contaminant may be present, the atmosphere shall be considered IDLH.
        2. If no exposure limit or guideline is available and estimates of the toxicity cannot be made, the atmosphere shall be considered IDLH.
        3. If a specific standard exists for the contaminant, follow those guidelines/requirements.

4. If there is an oxygen-deficient atmosphere, the type of respirator selected depends on the partial pressure and concentration of oxygen and the concentration of the other contaminant(s) that may be present.
5. If the measured or estimated concentration of the contaminant(s) is considered IDLH, reference "Respirators for use under IDLH conditions" at the end of this guide.
6. Divide the measured or estimated concentration of each contaminant by the exposure limit or guideline to obtain a hazard ratio. When two or more substances are present, consideration needs to be given if there is a synergistic or combined effect of exposure rather than considering each substance individually. Select a respirator with an assigned protection factor greater than the value of the hazard ratio, as listed in Attachment I, Table 1.
7. If the contaminant(s) is a gas or vapor only, select a device with an assigned protection factor that is greater than the hazard ratio. The concentration shall also be less than the maximum use concentration of the cartridge/canister.
8. If the contaminant is a paint, lacquer, or enamel, select a respirator approved specifically for paint mists or an atmosphere-supplying respirator. (Approval label or regulatory provision may preclude use for some paints.)
9. If the contaminant is a pesticide, select a respirator and filtration system specifically approved for pesticides or an atmosphere-supplying respirator. (Approval label may preclude use for some pesticides.)
10. If the contaminant is an aerosol with an unknown particle size, or less than 2 µm (MMAD), a high-efficiency filter shall be used.
11. If the contaminant is a fume, use a filter approved for fumes or a high-efficiency filter.
12. If the contaminant is an aerosol with a particle size greater than 2 µm (MMAD), any filter type (dust, fumes, mist, or high efficiency) may be used.
13. If the contaminant is a gas or vapor and has poor warning properties, the use of an atmosphere-supplying respirator is generally recommended.
14. When atmosphere-supplying respirators cannot be used because of the lack of a feasible air supply, or the need for worker mobility, air-purifying devices should be used only if:
15. The air-purifying respirator has a reliable end-of-service-life indicator that will warn the user prior to contaminant breakthrough or,
16. A cartridge change schedule is implemented based on cartridge service data including desorption studies (unless cartridges are changed daily), expected concentration, pattern of use, duration of exposure, and the chemical does not have a ceiling limit.

ii. Respirators for use under IDLH atmospheres:

1. The required respiratory protection for IDLH conditions caused by the presence of toxic materials, or a reduced percentage of oxygen, is a combination full face piece pressure demand supplied air respirator (SAR) with auxiliary self-contained air supply. For rescue applications, a full-face piece pressure demand SCBA certified by NIOSH for a minimum service life of thirty minutes is acceptable.
2. When respirators are worn under IDLH conditions, at least one standby person shall be present in a safe area. The standby person shall have the

proper equipment available to assist the respirator wearer in case of difficulty. Communications (visual, voice, signal line, intercom, radio or other suitable means) shall be maintained between the standby person and the wearer. While working in the IDLH atmosphere, the wearer shall be equipped with a safety harness and lifeline to permit removal to a safe area, if necessary. Provisions for rescue other than harness and lifeline may be used, if equivalent.

3. Special considerations for confined space entry into IDLH conditions are not addressed in this policy.

c. Table: use and duration of cartridges:

Contaminant[1]	Maximum Concentration	Maximum Use Time[2] (Hours)
1,3 Butadiene	50	1
Ammonia	100	4
Benzene	10	8
Benzene	50	4
Chemicals not specified[3]	N/A	1
Naphtha	100	4
Naphtha	500	2
Particulates (incl. dusts, mists, welding fumes)	N/A	8
Sulfur Dioxide	50	8
Total Hydrocarbons (as n-hexane)	100	4
Total Hydrocarbons (as n-hexane)	500	1
[1] If more than one contaminant is present, use the lowest maximum use time. [2] Cartridges should be changed out if the contaminant can be detected inside the respirator mask, regardless of the maximum use time. [3] Cartridges for chemicals not listed should be used for only 1 hour. This will err on the side of safety. If specific information is needed on a particular chemical, consult with the SDS or your supervisor.		

11. Fit Testing

If the test subject is not familiar with using a particular respirator, the test subject shall be directed to don the face piece several times and to adjust the straps to become adept at setting the proper tension on the straps.

a. Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:
   i. Position of the mask on the nose.
   ii. Room for eye protection.
   iii. Room to talk.
   iv. Position of mask on face and cheeks.

b. The following criteria shall be used to help determine the adequacy of the respirator fit:
   i. Chin properly placed.
   ii. Adequate strap tension, not overly tightened.
   iii. Fit across nose bridge.
   iv. Respirator of proper size to span distance from nose to chin.
   v. Tendency of respirator to slip.
   vi. Self-observation in mirror to evaluate fit and respirator position.

c. The test subject shall conduct a user seal check, utilizing the negative and positive pressure seal check methods. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to side and up and down slowly while taking in a few slow deep breaths. Another face piece shall be selected and retested if the test subject fails the user seal check tests.

d. The test shall not be conducted if there is any hair growth between the skin and the face piece sealing surface, such as stubble beard growth, beard, mustache, or sideburns which cross the respirator sealing surface. Any type of apparel that interferes with a satisfactory fit shall be altered or removed.

e. If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.

f. Exercise regimen: Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercise that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.

g. The fit test shall be performed while the test subject is wearing any applicable safety equipment that may be worn during actual respirator use, which could interfere with respirator fit.

h. Test exercises: The following test exercises are to be performed for all fit testing methods. The test subject shall perform exercises, in the test environment, in the following manner:

   i. Normal breathing: In a normal standing position, without talking, the subject shall breathe normally.

   ii. Deep breathing: In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.

   iii. Turning head side to side: Standing in place, the subject shall slowly turn their head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.

   iv. Moving head up and down: Standing in place, the subject shall slowly move their head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).

   v. Talking: The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

      1. Rainbow Passage: When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a person looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

   vi. Bending over: The test subject shall bend at the waist as if they were to touch their toes. Jogging in place shall be substituted for this exercise in those test environments that do not permit bending over at the waist.

   vii. Normal breathing: Same as exercise (h.i).

   viii. Each test exercise shall be performed for one minute. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon

completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

i. Irritant Smoke Protocol:
   i. This qualitative fit test uses a person's response to the irritating chemicals released in the "smoke" produced by a stannic chloride ventilation smoke tube to detect leakage into the respirator.
   ii. General Requirements and Precautions:
      1. The respirator to be tested shall be equipped with high efficiency particulate air (HEPA) or P100 series filter(s).
      2. Only stannic chloride smoke tubes shall be used for this protocol.
      3. No form of test enclosure or hood for the test subject shall be used.
      4. The smoke can be irritating to the eyes, lungs, and nasal passages. The test conductor shall take precautions to minimize the test subject's exposure to irritant smoke. Sensitivity varies, and certain individuals may respond to a greater degree to irritant smoke. Care shall be taken when performing the sensitivity screening checks that determine whether the test subject can detect irritant smoke to use only the minimum amount of smoke necessary to elicit a response from the test subject.
      5. The fit test shall be performed in an area with adequate ventilation to prevent exposure of the person conducting the fit test, or the build-up of irritant smoke in the general atmosphere.
   iii. Sensitivity Screening Check:
      1. The test operator shall break both ends of a ventilation smoke tube containing stannic chloride and attach one end of the smoke tube to a low flow air pump set to deliver 200 milliliters per minute, or an aspirator squeeze bulb. The test operator shall cover the other end of the smoke tube with a short piece of tubing to prevent potential injury from the jagged end of the smoke tube.
      2. The test operator shall advise the test subject that the smoke can be irritating to the eyes, lungs, and nasal passages and instruct the subject to keep their eyes closed while the test is performed.
      3. The test subject shall be allowed to smell a weak concentration of the irritant smoke before the respirator is donned to become familiar with its irritating properties, and to determine if they can detect the irritating properties of the smoke. The test operator shall carefully direct a small amount of the irritant smoke in the test subject's direction to determine that they can detect it.
   iv. Irritant Smoke Fit Test Procedure:
      1. The person being fit tested shall don the respirator without assistance and perform the required user seal check(s).
      2. The test subject shall be instructed to keep their eyes closed.
      3. The test operator shall direct the stream of irritant smoke from the smoke tube toward the face seal area of the test subject, using the low flow pump or the squeeze bulb. The test operator shall begin at least 12 inches from the face piece and move the smoke stream around the whole perimeter of the mask. The operator shall gradually make two more passes around the perimeter of the mask, moving to within six inches of the respirator.

4. If the person being tested has not had an involuntary response and/or detected the irritant smoke, proceed with the test exercises.
5. The exercises identified in section H of this attachment shall be performed by the test subject while the respirator seal is being continually challenged by the smoke, directed around the perimeter of the respirator at a distance of six inches.
6. If the person being fit tested reports detecting the irritant smoke at any time, the test is failed. The person being retested must repeat the entire sensitivity check and fit test procedure.
7. Each test subject passing the irritant smoke test without evidence of a response (involuntary cough, irritation) shall be given a second sensitivity screening check with the smoke from the same smoke tube used during the fit test, once the respirator has been removed, to determine whether they still react to the smoke. Failure to evoke a response shall void the fit test.
8. If a response is produced during this second sensitivity check, then the fit test is passed.

Respirator Type	QLFT	QNFT
Half-Face, Negative Pressure, APR (<100 fit factor)	Yes	Yes
Full-Face, Negative Pressure, APR (<10 fit factor) Used in atmospheres up to 10 times the PEL	Yes	Yes
Full-Face, Negative Pressure, APR (>100 fit factor)	No	Yes
PAPR	Yes	Yes
Supplied-Air Respirators (SAR), or SCBA used in Negative Pressure (Demand Mode) (>100 fit factor)	No	Yes
Supplied-Air Respirators (SAR), or SCBA used in Positive Pressure (Pressure Demand Mode)	Yes	Yes

j. Respirator Cleaning Procedures:
   i. These procedures are provided as a guideline when cleaning respirators. They are general in nature, and the administrator as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth (i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user).
   ii. Remove filters, cartridges, or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
   iii. Wash components in warm water (110°F maximum), with mild detergent or cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
   iv. Rinse components thoroughly in clean, warm (110°F maximum), preferably running water. Drain.
   v. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
      1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 110° F; or,

2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100cc of 45% alcohol) to one liter of water at 110°F; or,
3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

vi. Rinse components thoroughly in clean, warm (110° F maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on face pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

vii. Components should be hand-dried with a clean lint-free cloth or air-dried.

viii. Reassemble face piece, replacing filters, cartridges, and canisters where necessary.

ix. Test the respirator to ensure that all components work properly.

CC. SCAFFOLDS

1. All scaffolds will meet the requirements established in Articles 21, 22 and 23 of the Cal/OSHA Construction Safety Orders.
    a. A Pre-Erection Safety Meeting will be held before the erection of each scaffold system.
2. Erection, Maintenance and Dismantling.
    a. A scaffold Competent Person must be designated in writing to direct and supervise the erection and dismantling of all scaffolds. The Competent Person will sign and attach one of the following color-coded scaffold tags to each scaffold:
        i. Green Tag: Scaffold complete and ready for use.
        ii. Red Tag: Scaffold incomplete and not for use.
        iii. Yellow Tag: Scaffold usable but personal fall protection required.
        iv. Scaffolds will be inspected daily by the Competent Person prior to use. The Competent Person will sign the tag at the time of inspection.
    b. During erection and dismantling of scaffolds, if deviation of the fall protection procedure is required, a new plan will be developed in writing, reviewed, and approved by the Competent Person. The written plan will be in the workplace at all times when applicable.
    c. Prior to erection, all scaffold components will be inspected for defects and any damaged components will not be used.
    d. Scaffolds will be erected on a firm foundation/footing. Scaffold poles, legs, posts, frames, and uprights will bear on metal base plates and mud sills where required.
    e. Scaffold legs, poles, posts, frames, and uprights will be pinned or locked to prevent uplift.
    f. Scaffold platforms will be placed with no space between the platform components.
    g. The space between the platform components and the scaffold uprights will not exceed one inch.
    h. Because of special circumstances such as building a scaffold around a pipe, the space opening between the scaffold and the object/structure cannot exceed 9½ inches.
    i. Scaffold planks will extend past the horizontal support a minimum of six inches and not more than 12 inches unless cleated or restrained by hooks.
    j. Scaffold plank will not be overlapped unless:
        i. Overlap occurs at a horizontal support.

ii. The minimum planking overlap is 12 inches.

k. Anyone working on an incomplete scaffold above six feet without standard handrails will wear a full body harness and tied off to a fixed anchorage point.

l. Scaffolds will not be erected in a location that blocks an entry or required exit. The scaffold will be bridged to allow passage beneath the scaffold.

3. Workers required to work from scaffolds will receive training on the following:
   a. Nature of any known hazards, such as electrical, fall or falling objects.
   b. Correct method of erecting, maintaining, and disassembling fall protection systems.
   c. Falling object protection systems.
   d. Proper handling of equipment or material on the scaffold.
   e. Maximum load-carrying capacity of the scaffold.
   f. Proper access requirements.
   g. Other pertinent requirements about the scaffold.
   h. Records will be maintained of scaffold training.
4. No scaffold will be enclosed unless a qualified engineer designs the enclosure.
5. Toeboards will be placed at the open ends and non-working side of scaffolds at each scaffold level. CSO §1621 (a)
6. Ladders will not be placed on scaffolds.
7. Scaffold Access.
   a. A safe and unobstructed means of access, such as a walkway, stair, or ladder will be provided to all scaffold platforms.
   b. Ladders or stairs must be used to access any scaffold platform that is more than two feet above the point of access.
   c. Climbing up or down a scaffold using the cross bracing is prohibited.
8. Rolling Scaffolds.
   a. Wheels on rolling scaffolds will be locked in place when workers are climbing or working on the scaffold platform.
   b. Workers may ride on rolling scaffold moved by others below if the following conditions exist:
      i. The floor or surface is within 3 degrees of level, and free from pits, holes, debris, or other obstructions.
      ii. The minimum dimension of the scaffold base, when ready for rolling, is at least 1/2 of the height. Outriggers, if used, will be installed on both sides of scaffolds.
      iii. The wheels are equipped with rubber or similar resilient tires.
      iv. The manual force used to move the scaffold will be applied as close to the base as practicable, but not more than 5 feet (1.5 meters) above the supporting surface of the scaffold.
      v. Before a scaffold is moved, each employee on the scaffold will be made aware of the move.
   c. One employee may ride on and move a rolling scaffold while on the platform without assistance from others below provided the following conditions are met:
      i. All of the provisions in subsection b, above, of this section will be met.
      ii. The scaffold platform will not be more than 4 feet above the floor level.

iii. The working platform will be no less than 20 inches in width with a maximum 1-inch space between platform planks.

iv. Wheels or casters of rolling scaffolds will be provided with an effective locking device that is used in accordance with paragraph 8.a of this section; or rolling scaffolds will be provided with an effective device that is used to prevent movement of the scaffold when workers are climbing or working on the scaffold.

v. SC Builders recommends use of locking devices such as TopLock®.

d. The use of power systems such as motor vehicles, add-on motors, or battery powered equipment to propel a rolling scaffold is prohibited.

e. Workers who ride on rolling scaffolds and workers that assist in moving workers riding on a rolling scaffold will be trained in accordance with the applicable Cal/OSHA requirements of §1646 (i) & (j) and with the requirements of the §1509 to recognize the hazards associated with riding on a rolling scaffold.

9. Suspended Scaffolds. CSO Article 23
    a. A competent person will evaluate suspended scaffolding and anchorages before use and its suspension lines daily.
    b. Workers working from suspended scaffolds will wear a full body harness attached to an independent vertical lifeline.
    c. When welding is required from swing stage scaffolds, the scaffold will be grounded and suspension ropes protected from sparks, welding slag and fire.
10. Scaffold platforms more than six feet above lower levels will be equipped with guardrail systems. If guardrails cannot be used on a scaffold, employees will wear a full body harness and be tied off to a fixed anchorage point, not from the scaffold system.
11. Employees that work from a scaffold will be protected from falling objects such as hand tools, debris, and other objects from above.
12. Employees working below scaffolds will also be protected from falling objects. Scaffolds will be equipped with toeboards, screens, debris netting, catch platforms, or a canopy structure.
13. Scaffold that bridge exit paths or sidewalks will have screens attached to the top rail and the screens will extend and be affixed to the toeboards to protect pedestrians passing beneath the scaffold.
14. Baker/Perry Scaffolds.
    a. Interior or drywall scaffolds greater than one section high will be equipped with outriggers. All other built-up scaffolds will follow the three-to-one rule.

DD. SILICA

The following policy applies to all work where silica may be encountered, whether by SC Builders employees or subcontractor employees:

1. Workers that perform any of the following work tasks will be protected from exposure to silica dust:
    a. Chipping, hammering, or mixing of refractory.
    b. Abrasive blasting using silica sand as a blasting medium.
    c. Abrasive blasting of concrete regardless of the type of medium.
    d. Sawing, hammering, drilling, grinding, or chipping of concrete or masonry products.
    e. Chipping, hammering, or mixing of concrete grout.
    f. Demolition of concrete or masonry structures.
    g. Dry sweeping or compressed air blowing of concrete, masonry, rock, or sand dust.

2. Workers performing any of the above tasks or could be exposed to silica dust will receive hazard communication training on silica.
3. Acceptable engineering controls will be used when exposure to silica is likely. Examples of acceptable engineering controls are:
    a. Substitute blasting medium for less hazardous material with less than 1-% silica.
    b. Maintain an effective dust control program.
    c. Use internal blast-cleaning machines.
    d. Wet saw.
    e. Use water through the drill stem.
4. When acceptable engineering controls cannot be used, workers will wear respiratory protection, protective coveralls, and gloves. Respirators equipped with a NIOSH N-95, R-95, or P-100 are approved for silica. *Note: The common dust mask is not permitted for silica protection.*
5. Workers will follow these safe work rules when exposed to silica:
    a. Do not eat, drink, or use tobacco products in areas where silica dust is present.
    b. Always wash hands and face before eating, drinking, or using tobacco products.
6. Supervisors should consult their safety representative or the SC Builders Environmental Health and Safety Department for further assistance.

EE. STRUCTURAL STEEL

Erection of structural steel will be in accordance with the Cal/OSHA Construction Safety Orders §1709 and §1710, Appendices A, B and C.

1. The structural steel subcontractor will develop a site-specific erection and crane plan and submit it to SC Builders' Project Superintendent for review and comment.
2. A site-specific fall protection plan will be developed as a part of the erection plan. The plan will address perimeter fall protection as well as leading-edge fall protection.
    a. Fall rescue procedures will be identified.
3. SC Builders will provide written documentation that any new concrete placed by SC Builders or their subcontractors has met the minimum requirements for steel erection.
4. SC Builders will provide written documentation that any compacted fill or compacted earth placed by SC Builders or their subcontractors has been sufficiently compacted to support the loads required.
    a. The subcontractor or crane provider may be required to provide steel trench plates to distribute crane loads beneath the crane outriggers.
5. The applicable subsections in this Code of Safe Work Practices regarding Cranes will apply to structural steel erection.
6. SC Builders will coordinate the metal decking subcontractor (if not subcontracted to the structural steel subcontractor) to provide a fully planked deck within two floors below steel erection.
7. Beams will not be released by the crane and riggers until a minimum of two bolts have been placed and tightened at each end of the beam.
8. The structural steel subcontractor will be responsible for providing temporary planking over shafts and open holes in the steel frame.
9. The only persons allowed in steel erection areas are those persons necessary for and participating in the work and inspection of the work.
    a. Visitors will remain outside of steel erection areas.
    b. Jobsite perimeters will be secured during steel erection.

c. No workers will work beneath structural steel erection.

10. Perimeter fall protection will be completed by the structural steel subcontractor and reviewed and accepted by SC Builders. Once accepted, maintenance of the perimeter protection is the responsibility of SC Builders.
    a. All jobsite workers will be trained in the fall protection provisions and limitations of the systems.

FF. SUBCONTRACTOR MANAGEMENT POLICY

1. Policy
    a. Subcontractors for Company Associates work sites shall be selected and managed in a manner consistent with the overall Company Associates safety objectives, policies, and procedures embodied in the other sections of this manual.
2. Purpose
    a. To set forth a basis for the selection of safe subcontractors and to set forth procedures to assure that the subcontractor's safety activities are equal to or exceed those of Company Associates.
3. Scope
    a. Applies to all Company Associates work sites, i.e. Company offices, client job sites, etc., that have occasion to use subcontractors.
4. Definitions
    a. Experience Modification Rate (EMR) is a term related to Workers' Compensation insurance and means a factor developed by measuring the difference between an employer's actual past claim experience and the expected or actual experience of the industry classification of the employer. Depending on the workers compensation program in which the subcontractor participates, the EMR may be determined by a single state entity or a multi-state agency such as the National Council on Compensation Insurance (NCCI). The EMR is based on a point scale where 1.0 means average or expected losses for that type of industry classification. EMR's below 1.0 means below average loss history and EMR's above 1.0 mean above-average loss history.
    b. Hours of Exposure means the total number of hours that all of a company's employees are exposed to occupational injuries or illnesses during a normal work year. Salaried and hourly employees are included. Straight-time and over-time hours are included.
    c. Subcontractor for purposes of this section, means a person or business, which has a standard subcontract agreement with Company Associates, as an "independent contractor" (not an employee), to provide some portion of the fieldwork on a project for Company Associates.
5. Requirements
    a. Subcontractor Selection
        i. Company shall use the preconstruction planning website BuildingConnected's Pre-Qualification Questionnaire to capture the capture the information noted within this section. It is required that safety performance be considered initially, and annually thereafter, in the selection of subcontractors, using the following criteria:
            1. Experience Modification Rate ("EMR")
                a. Prospective subcontractors shall be required to furnish their EMR for the past three years. This information should come directly from the subcontractor's broker. An EMR greater than 1.0 can indicate an employer with a high frequency and/or severity of workers

compensation claims. In the event of an EMR greater than 1.0, a more detailed evaluation of their safety program is required by the Branch Safety Officer.

2. OSHA Log
    a. Prospective subcontractors shall be required to submit copies of OSHA logs (or equivalent summary data) for the previous three years and applicable hours of exposure. Incident frequency and severity rates should be examined and compared for acceptability with:
        (1) Comparable incident rates for relevant Company Associates work sites (if available)
        (2) Industry average incident rates for their Standard
        (3) Industrial Code (SIC or NAICS code) as published by the Bureau of Labor Statistics
        (4) An incident rate specified by the Company Associates
        (5) Branch Safety Officer or Regional Safety Coordinator
3. Evaluation of Subcontractor Safety Program
    a. The prospective subcontractor shall demonstrate that their program meets or exceeds industry standards. The following areas are a minimum that shall be addressed by the subcontractor:
        (1) The program should be industry specific, not generic, and should be responsive to the exposures prevalent in the industry and anticipated on the prospective project.
        (2) There should be elements of supervisor accountability for safety, accidents, and claim costs Safety meetings should be held regularly, with documentation as to the subject, who attended, and a review of past losses.
        (3) Safety audits (inspections) should be conducted by the subcontractor on a regular basis. Audit results should be documented to identify deficiencies and corrective action taken.
        (4) The program should provide for employee safety training, including the documentation thereof.
4. OSHA Citations
    a. The prospective subcontractor shall be required to provide information (reason, corrective action, and fines) regarding OSHA citations during the past three years. A history of frequent violations, infrequent but repeated violations, or violations applicable to the work to be performed would warrant further investigation.

b. Pre-Job Planning
    i. The understanding of Company Associates and the subcontractor on important issues should be written and signed by both parties as part of the subcontract agreement and scope of work. Examples of such issues would be:
        1. Provision of tools and equipment and inspection thereof.
        2. Performance in accordance with OSHA and other regulatory bodies.
        3. Provision of all necessary PPE, training on its use, and enforcement of usage at the worksite.

4. Responsibility for housekeeping and debris removal efforts.
5. Responsibility for utility mark out, maintenance, and protection of traffic on underground and road projects during the project.

c. Typical Actions Recommended During Performance of Work
   i. Include subcontractors in the following safety activities:
      1. Manager Audits.
      2. Safety Meetings.
      3. Training Sessions.
      4. Safety Audits.
      5. Work Observations.
      6. Job Safety Analysis Systems.
      7. Injury Intervention Processes.
      8. Root Cause Analysis.
      9. Client-Required Programs.

d. Post-Job Safety Performance Review
   i. Post-job safety performance reviews shall be conducted for subcontractors.

GG. TEMPORARY BARRICADES

1. Temporary barricades will be provided to isolate work areas to prevent unauthorized or undesired persons from entering a work area.
2. Temporary barriers may be used to provide visual identification of potentially hazardous areas.
3. Temporary barriers may consist of solid “K-rail” type barricades, A-frame barricades, delineators, channelizers, and cones, along with the appropriate flagging and tape.
4. Whenever the following hazards or processes are encountered, temporary barricades will be erected to protect employees and/or the public. Temporary barricades must be planned for short-term and long-term operations.
   a. Floor, roof, or wall openings.
   b. Working above other workers.
   c. Open excavations/trenches.
   d. Unguarded equipment.
   e. Exposure to vehicular and equipment traffic.
   f. Low light work areas.
   g. Startup operations and testing of equipment/systems.
   h. Process hazards such as discharges, open systems, etc.
   i. Overhead hazards.
5. When tape or flagging is used, the following guidelines apply:
   a. Yellow “Caution” tape is used to limit the passage of people through the barricaded area. This barricading should only be used to protect people from hazards that are not severe or the potential for severe injury or death is unlikely. “Caution” tape may be traversed after identifying the hazards.
   b. Red “Danger” tape is used to prohibit the passage of unauthorized persons through the barricaded area. This barricading should be used to protect employees from hazards that have the potential to cause serious injury or death. “Danger” tape is not to be used if the

hazards cannot be eliminated or removed during in a single work shift. Only employees directly involved with the hazardous work may enter the area.

Workers who enter a "Danger" barricaded work area without authorization will be subject to disciplinary action up to and including termination.

c. Rigid barricades will be used when protection is required beyond a work shift or longer. It will be used to protect employees from unguarded moving machinery/equipment, vehicular or heavy equipment traffic and low light conditions. Rigid barricades will consist of standard guardrail, temporary chain link fencing, tube and coupler scaffold members and concrete barriers.

6. Rigid barricades must be capable of supporting and withstanding a 200 lb. force in any direction. Concrete barriers used along public roads must meet the requirements of the local jurisdiction or the Manual of Uniform Traffic Control Devices.
    a. When using rigid barricades:
        i. Install it in a way to prevent tipping or sagging. Support construction fencing every eight feet.
        ii. Install pins in concrete barriers whenever there is a danger of vehicles or heavy equipment striking them.
        iii. Provide sufficient points of access to and from the work area.
7. When work is complete and the hazard is eliminated, remove the barricades immediately and dispose of or store the barricades properly.
8. Barricades in traffic areas in place during hours of darkness must have flashing lights.

HH. TEMPORARY HEATING

1. Caution will be exercised when determining types of temporary heating equipment.
2. Temporary heating equipment should not be an oxygen-consuming type of heater. Oxygen deficient atmospheres are hazardous.
    a. If oxygen-consuming type heaters are used, adequate ventilation and circulation must be provided and atmosphere testing must be conducted and documented before any persons enter the affected areas.
3. All temporary heating equipment must be UL tested and approved and must have all of the manufacturer's warning and capacity labels intact and legible. Operator manuals are required for each type of equipment.

II. TRAFFIC CONTROL

1. Traffic control on jobsites will follow the requirements of the Construction Safety Orders §1598 and §1599 whether the traffic control is on public streets or on private property.
2. Temporary blocking or occupying of any street or alleyway requires prior approval.
    a. When it becomes necessary to temporarily close a public street or alley, a written traffic control plan will be developed showing how the closure will occur.
    b. Traffic control and equipment will comply with Cal/OSHA standards and the Manual of Traffic Controls for Construction & Maintenance Work Zones.
        i. At a minimum, the written Traffic Control Plan will contain:
3. Time the street(s) will be required to be closed.
4. Detail drawing showing temporary signage, tapers, barriers, etc.
5. Detail plan illustrating detour routes for traffic impacted by the closed streets.

6. All workers will wear Class 2 high-visibility clothing. Employees assigned, as flagmen will be trained as required.
7. Work that fails to follow the traffic control plan or occupies a city street without authorization will be stopped. Corrective measures will be addressed and implemented before work resumes.
8. Only company-owned vehicles with signs will be used in the course of the work.
9. Two-way vehicular traffic control must be provided at all times for vehicles in public areas unless otherwise approved.

JJ. VANDALISM AND WORKPLACE VIOLENCE POLICY

1. Vandalism.

   Defacing property, material, equipment, tools, etc., will not be tolerated. Any person known to have defaced any portion of the project, whether temporary facilities or permanent work, will be immediately and permanently removed from the jobsite.

   Vandalism includes but is not limited to the following:

   a. Graffiti of any kind, including writing in the interior of temporary toilets or other facilities.
   b. Intentional breakage of material, tools, equipment, and temporary facilities.
   c. Intentionally causing any equipment, tool, or machinery to function improperly or not function at all.
   d. Damaging security devices in order to gain access into the construction area.

2. Workplace Violence.

   SC Builders is committed to providing a violent-free work environment. Workers who threaten violence through their actions, words or appearance pose a threat to the entire workplace and create an unhealthy, unsafe, and unproductive environment.

   a. No person will attempt to intimidate other persons through apparent aggressive actions or attire.
   b. No person will verbally threaten another person with physical harm, nor will anyone taunt another person with the intent of intimidation or coercion.
   c. No person on SC Builders controlled premises, with the exception of law enforcement personnel, will possess a weapon of any type, including handguns, rifles, knives, derringer pistols, swords, two-edged knives, bludgeoning instruments, nightsticks, blackjacks, etc.

      Any person in possession of a weapon will be removed from SC Builders controlled premises until the weapon has been removed from their possession, including their personal vehicle. Persons possessing weapons may not be allowed to return to SC Builders controlled premises pending investigation of the reasons the weapons first appeared.
   d. Any person threatening physical harm or acting in a manner to intimidate, upset or cause a disturbance will be removed permanently from SC Builders' place of employment. If the person or persons issuing the threats refuse to leave the property, assistance will be immediately requested from the local police department by placing an emergency call by dialing 9-1-1.
   e. Follow-up documentation will be issued immediately to the applicable employer.

VI. CAL/OSHA

The Occupational Safety and Health Act of 1970 authorizes Cal/OSHA to establish mandatory safety & health standards and a program for standards enforcement. The Act permits Cal/OSHA compliance

officers to enter any workplace for the purpose of determining if violations exist. Cal/OSHA may enter a workplace with (1) the employer's consent or (2) by obtaining a search warrant.

It is the policy of SC Builders to provide Cal/OSHA access to our work sites without obtaining a search warrant.

VII. Quality of Life

SC Builders is dedicated to providing employees a safe and healthful workplace which in turn will help provide long-term benefits for a high quality of life away from work.

A. SANITATION

Every SC Builders jobsite will be maintained in a clean, safe, healthy, and sanitary condition throughout the course of the project.

1. The Project Superintendent will determine the location of lunch and break areas and will assure that adequate debris containers are available for disposal of waste and trash.
2. SC Builders will provide toilet facilities and hand-washing stations as necessary. The minimum number of facilities on site is required by Cal/OSHA Construction Safety Orders §1526 and §1527.
3. Eating within the project area should be confined to designated areas to avoid accumulation of unsanitary debris and bacteria.
4. Eating sunflower seeds in work areas is prohibited due to the accumulation of saliva-contacted husks, which create an unhealthy environment for other workers.
5. Spitting on the floors is prohibited.
6. Chewing tobacco, snuff, and other tobacco products are prohibited due to the saliva generated and expectorated into open containers creating a potentially unsanitary and unhealthful environment.

B. SMOKING POLICY

No employee or subcontractor worker will smoke any tobacco product within any building. Smoking is authorized only in designated areas on jobsites. No smoking signs will be conspicuously placed at the entrance to each construction area and jobsite office. Workers who violate this rule will be subject to disciplinary action, up to and including termination.

C. RETURN TO WORK PROGRAM

As an employer concerned for its employees, SC Builders has initiated this program to assist employees who are temporarily disabled due to a work-related injury or illness.

1. When an employee is injured or becomes ill due to a work-related condition, they will be given forms to be completed and may be sent to a clinic for examination, evaluation and/or treatment. Each doctor's visit must be accompanied by a Return-to-Work Analysis form to assist SC Builders and the attending physician in evaluating the injured person's status for returning to work and avoiding lost-time accidents.
2. Upon completion of the Return-to-Work Analysis form, SC Builders will make every attempt to provide a limited work position until the employee is able to resume full duties. Modified work assignments are temporary and are intended to help the individual make the transition back to full work assignments as soon as possible.
3. Failure to report for modified work assignments may be considered the same as any other failure to report to work and could result in loss of Worker's Compensation Benefits and/or reinstatement to full work status.

4. The Return-to-Work Program is not intended to replace reasonable benefits as provided by applicable Federal or State law but is intended to provide opportunities to benefit the employee, their family, and the SC Builders team.
5. As an integral part of this program the physician's recommended work restrictions will be followed, allowing for implementation of work opportunities within the physician's guidelines.
6. SC Builders believes that implementation of this program is therapeutic in nature and assists in the recovery process physically, mentally, and emotionally by keeping the employee in touch with the work environment, job progress and co-workers.
7. The benefits of the Return-to-Work Program are numerous and mutual. The program provides a working, productive transition for injured employees; keeps injured employees involved as a part of the SC Builders team; helps SC Builders maintain valuable workers while decreasing costs for compensation benefits; and provides a quicker recovery and continued income for the injured employee's family. These are all factors contributing to the success of the individual's full recovery and avoiding the negative effects of a long-term absence.

VIII. Hazard Communications

All employees have a right to know the properties and potential safety and health hazards of chemicals or substances that they may come in contact within the course of their assigned duties.

1. Each project will implement the Hazard Communication Plan. This plan will be located in a location where workers can easily access and review the plan and associated documents.
2. Each jobsite will maintain a copy of the Safety Data Sheets (SDS) of all known hazardous chemicals and materials that are on the job site.
3. Subcontractors will maintain a project-specific SDS on location for each hazardous chemical or material they use.
4. All hazardous chemicals and material are to be properly labeled in accordance with the SDS. If secondary containers are used, secondary containers will be labeled for contents, hazard rating and the contractor's name using the product in the secondary container.
5. Every employee will receive training on the Hazard Communication Program, the location of the SDS, labeling requirements and specific safety or health instructions about hazardous chemicals or substances.
    a. Hazard Communication Training will consist of:
        i. The contents of the program.
        ii. Prior to use of or the potential exposure to any hazardous chemical or substance, employees are to be instructed in:
            1. Physical and health hazards.
            2. Procedures to protect against the hazards.
            3. Engineering and administrative controls.
            4. Personal protective equipment.
            5. Emergency procedures in case of exposure or accidental spill.
            6. Labeling requirements for primary and secondary containers.
6. Whenever a new chemical or substance is introduced into the workplace, employees will be briefed of its hazards.
7. The client, vendors and subcontractors that may have business in or near a work area will be notified that hazardous chemicals are being used and the hazards they may encounter.

8. If an employee believes they have encountered a hazardous chemical or substance unfamiliar to them, they will immediately notify their supervisor. The product will be identified and if determined to be hazardous all precautions will be taken to properly secure and isolate the material as required.

IX. Hazardous Material Abatement

A. POLICY STATEMENT

1. SC Builders does not directly engage in abatement of hazardous materials such as asbestos, lead, or mold. Prior to start of demolition or construction work in an existing building, SC Builders will receive and review an owner-provided assessment of all materials in the proposed workplace.
2. All identified hazardous materials requiring abatement will be removed from the workplace before SC Builders begins work or mobilizes subcontractors to the jobsite. All hazardous material (including lead and asbestos) shall not be disturbed prior to abatement or if to remain in place.
3. If materials classified as hazardous are discovered on SC Builders' jobsites, the work will be stopped immediately, and workers will be evacuated from the potential exposure area.
4. SC Builders will notify property owners of the hazardous material and work will not proceed in the area until a clearance certifying that the air quality is within the prescribed PEL and the hazardous material has been removed from the work area.

B. ASBESTOS

1. The building owner must comply with the requirements of the State of California Title 8, Subchapter 4, Construction Safety Orders, Article 4, §1529 (k) (2) (A & B) regarding the identification and notification of asbestos and presumed asbestos-containing materials.
2. The owner will provide SC Builders with a listing of products that contain asbestos and the location and quantity of asbestos or presumed asbestos-containing materials in all areas of the facility where SC Builders employees or SC Builders subcontractors will be working. In addition, the owner will provide SC Builders with a written report providing specific recommendations on the measures necessary for the safe management or removal of the asbestos-containing materials located in areas of the facility in which SC Builders employees or subcontractors will be working.
3. SC Builders will not authorize or schedule any work in required abatement areas until a written clearance has been received and the content of the clearance has been verified by the Project Manager and the Project Superintendent.
4. SC Builders will maintain a copy of the above-described asbestos reports, clearances, and other related information on the jobsite for review and/or inspection.
5. SC Builders will ensure that all SC Builders employees and all subcontractors working on the site are informed about the existence and location of asbestos-containing and/or presumed asbestos-containing materials located on the job site.
6. SC Builders will ensure that all SC Builders employees are trained in the proper procedures to identify, isolate, and report any damaged asbestos-containing materials found on the job site.
7. If abatement activities occur simultaneously with construction activities in other areas of a jobsite, SC Builders will be exercise general supervisory authority over the work covered by CSO §1529. As supervisor of the entire project, SC Builders will ascertain whether the asbestos contractor is in compliance with the standard, and will require such contractor to come into compliance with the standard when necessary.

8. If asbestos containing material or presumed asbestos-containing material is discovered during the course of work, SC Builders will stop all work in the affected are and will notify the building owner in writing of the discovery and request immediate inspection of the area.
9. Immediately upon discovering disturbed asbestos or presumed asbestos-containing material, SC Builders employees will stop work, secure the area, contain the asbestos by closing off the area and turning off ventilation to the area, and notify the jobsite management team. If the material is determined to be asbestos or if the material is of unknown composition, the SC Builders Project Manager will notify the owner who will contract with a licensed asbestos abatement contractor to address the hazard.

C. LEAD

The following policy applies to all work where lead may be encountered, whether by SC Builders employees or subcontractor employees:

1. Prior to welding, cutting, burning, grinding, chipping or abrasive blasting on painted or coated surfaces, a pre-assessment will be required to determine if the surface(s) contain lead-based paint. If sampling results indicate lead-based paint at or in excess of the permissible exposure limit, the applicable sections of the Construction Safety Orders, Article 4, §1532.1 will be followed.
2. All work will proceed as required by the above-referenced standard.
3. All affected SC Builders employees and affected subcontractor employees will be informed of the health hazards of lead, the short-term and long-term overexposure effects, and actions to be taken if they suspect exposure to lead in the workplace in accordance with Appendix A, §1532.1 of the Construction Safety Orders.
4. New SC Builders employees shall receive training on their first day within their New Hire Orientation and annually thereafter if necessary.
5. All affected SC Builders employees and affected subcontractor employees who are in a position where they could disturb or be exposed to Lead, will require Lead Awareness Training. Training shall be documented, and records will be maintained in the project office. Lead awareness training shall include at a minimum:
    a. Health effects of Lead, including fatigue, headache, nausea, vomiting, joint pain, myalgia, and sleep disturbance.
    b. Potential locations where Lead can be found in a building.
    c. Recognition of Lead damage and deterioration.
    d. Cal/OSHA requirements relating to housekeeping.
    e. Proper response to lead release episodes.
    f. Hygiene facilities and practices.
    g. Signs.
    h. Respiratory Protection Program.
    i. Air Sampling.
    j. Record Keeping.
    k. Job-specific compliance programs.
    l. Medical surveillance and provision for medical removal.
6. If lead is contacted by a field employee on bare or unprotected skin, they will immediately wash their hands and face and notify their supervisor.

D. MOLD

1. Molds are fungi and are part of the natural environment that can be found inside or outside throughout the year. Indoors, mold growth should be avoided. Problems may arise when mold starts eating away at materials, affecting the look, smell, and possibly, with the respect to wood-framed buildings, affecting the structural integrity of the buildings.
2. Necessary steps will be taken to eliminate the formation of mold in SC Builders controlled work areas. Mold may occur where there is water, oxygen, and an organic source of food (i.e., gypsum board, wood, or other building material).
3. Potential health concerns are important reasons to prevent mold growth and to remediate existing problem areas. The onset of allergic reactions to mold can be either immediate or delayed. Allergic responses include hay fever-type symptoms such as runny nose and red eyes. Molds may cause localized skin or mucosal infections but, in general, do not cause systemic infections in humans, except for persons with impaired immunity, AIDS, uncontrolled diabetes, or those taking immune suppressive drugs.
4. If mold is discovered in existing facilities, SC Builders will notify the owner of the building and request abatement of the mold following the Environmental Protection Agency's publication, "Mold Remediation in Schools and Commercial Buildings," or other guidelines developed by professional or governmental organizations.
5. In environments where there's a possibility for mold growth, work will be planned to:
    a. Prevent moisture accumulation:
        i. Double check points where moisture may enter.
        ii. Doors.
        iii. Windows.
        iv. Flashings and caulking.
        v. Waterproof membranes. Check for proper lap at joints and corners.
        vi. Roofing systems and roof penetrations.
    b. Properly store materials:
        i. Dry location.
        ii. Off the ground.
        iii. Loose tarps to allow air flow.
    c. Have drying equipment readily available:
        i. Fans.
        ii. Dehumidifiers.
        iii. Wet and dry vacuums.
6. Eating, drinking, and using tobacco products where mold remediation is in progress is prohibited.

X. Emergency Telephone Numbers

1.	Ambulance	9-1-1
2.	Fire Department	9-1-1
3.	Police (Emergency)	9-1-1
4.	Police (Non-Emergency)	3-1-1

5.	Hazardous Spills	9-1-1
6.	Underground Service Alert (USA)	8-1-1
	a. 6:00 a.m. to 7:00 p.m. weekdays	1-800-227-2600
7.	SC Builders' Sunnyvale Office	1-408-328-0688
8.	SC Builders' San Francisco Office	1-415-757-0405
9.	Project Superintendent	
10.	Project Manager	

XI. Attachments

A. I.I.P.P. Acknowledgement
B. Return to Work Offer
C. Return to Work Analysis
D. Confined Space Evaluation Form
E. Confined Space Entry Permit with Logs
F. Request for Crane Use & Lift Summary Plan
G. Crane & Hoisting Plan Template

Attachment A – I.I.P.P. Acknowledgement

Injury and Illness Prevention Program (IIPP) Training Acknowledgement

Employee Name: _____ Position: _____

A. I hereby acknowledge that I have received training in SC Builders' IIPP, the Code of Safe Conduct and the Code of Safe Work Practices, including the following areas:
    a. The potential occupational hazards of a construction jobsite and my specific assignment.
    b. The location of SC Builders' written programs and files.
    c. SC Builders' Code of Conduct and Code of Safe Work Practices which indicate the safe work conditions, safe work practices and minimum personal protective equipment required for working for SC Builders.
    d. Fall protection requirements.
    e. The hazards of any chemicals to which I may be exposed and my right to information contained on safety data sheets (SDS) for those chemicals and the location of the SDS.
    f. My right to ask questions or provide any information to my supervisor or any other SC Builders' manager on safety matters either directly or anonymously without fear of reprisal.
    g. Disciplinary procedures SC Builders will use to enforce compliance with the IIPP and associated supplements.
    h. Procedures to follow in the event of a crisis or incident, including reporting near misses and incidents whether or not injuries or property damage are involved.
    i. Required Pre-Task Planning, training, and documentation that SC Builders will provide for task-specific work and equipment operation on their jobsites.
    j. SC Builders' policy and disciplinary procedures on sexual harassment in the workplace.
B. I acknowledge that as an employee of SC Builders I am expected, as a condition of employment, to work in a manner which will not cause injury or unnecessary risk to myself or to fellow workers.
C. I have read the IIPP, the Code of Safe Conduct and the Code of Safe Work Practices, and I understand the requirements and acknowledge that compliance is a condition of employment with SC Builders.

Signature: _____ Date: _____

Attachment B – Return To Work Offer

Return To Work / Modified Duty Program
Notice and Offer of Modified Employment

Date: _____
Name: _____
Date of Injury: _____

Your physician has released you for modified duty work and we have obtained a position for you that is in line with the restrictions outlined by the doctor until you are able to return to full work duties.

The temporary/modified position is identified as: _____

As compensation for this position, you will be receiving $_____ per hour. The assignment of this modified work position will be subject to review daily.

Please report for work on:

Date: _____ Hours Per Day: _____
Time: _____ Days Per Week: _____
Location: _____
Telephone: _____
Report To: _____

Failure to report for work could affect compensation benefits and re-employment eligibility status.
We look forward to continuing to assist you in your recovery.

Signature: _____ Date: _____

☐ I have reviewed and accept this offer for modified work.

☐ I decline this offer for modified work.

Worker's Signature: _____ Date: _____

Attachment C – Return To Work Analysis

Date: _____

SC Builders has instituted a Return To Work Program to benefit our workers and to assist in their recovery following work-related injuries. Please provide the following information to help us determine whether modified work is available based upon your recommendations.

Worker Name: _____

Please identify physical restrictions as applicable:

Lifting	Never 0%	33%	Up To 66%	100%
1 to 10 lbs.				
11 to 25 lbs.				
26 to 50 lbs.				
51 to 75 lbs.				
More than 75 lbs.				

Carry				
1 to 10 lbs.				
11 to 25 lbs.				
26 to 50 lbs.				
More than 75 lbs.				

Push				
1 to 10 lbs.				
11 to 25 lbs.				
26 to 50 lbs.				
More than 75 lbs.				

Pull				
1 to 10 lbs.				
11 to 25 lbs.				
26 to 50 lbs.				
More than 75 lbs.				

Activities	Never 0%	33%	Up To 66%	100%
Bending				
Body Twisting				
Crouch				
Kneel				
Crawl				
Walk Flat Surface				
Walk Uneven Areas				
Climb Stairs				
Climb Ladder				
Reach High				
Reach Straight				
Use Wrists				
Use Hands				
(a) Grasp				
(b) Squeeze				
Operate Pedals				

Work Environment				
Inside				
Outside				
Hot				
Cold				
Windy				
Dusty				
Noisy				
Other				

Anticipated length of time for limitations: _____

Doctor's comments: _____

_____

_____

Doctor's Signature: _____ Date: _____

Worker's Signature: _____ Date: _____

Attachment D – Confined Space Evaluation Form

CONFINED SPACE IDENTIFICATION AND HAZARD EVALUATION FORM			
Date of evaluation: **Evaluation completed by:**	**Confined space name or number:**	**Permit required?** Yes ☐ No ☐	
Section 1: Confined Space Identification and Location			
Location of space (e.g., site, area, room):			
Description of space (physical characteristics, configuration, number of entry points, etc.):			
Person in charge of space or responsible individual:			
Is the space a confined space? Yes ☐ No ☐ *(If the answers to questions 1, 2, and 3 are "YES," then the space is a confined space. If YES, complete Sections 2 and 3. If NO, consult other applicable OSHA standards and guidelines.)*	**1. The space can be entered?**	Yes ☐	No ☐
	2. The space has limited or restricted entry and exit?	Yes ☐	No ☐
	3. The space is not designed for continuous human occupancy?	Yes ☐	No ☐

Section 2: Confined Space Hazard Assessment *(potential and existing hazards)*

Are there any conditions making it unsafe to remove an entrance cover? Yes ☐ No ☐

If yes, describe:

_____

Note: These conditions must be eliminated before the cover is removed.

Atmospheric Hazards

☐ Oxygen deficiency (less than 19.5% oxygen).	Monitoring results:
☐ Oxygen enrichment (greater than 23.5% oxygen).	Monitoring results:
☐ Flammable gas, vapor, or mist greater than 10% of its LFL.	Substance: Monitoring results:
☐ Combustible dust greater than or equal to its LFL *(when dust obscures vision at a distance of 5 feet or less)*.	Substance: Monitoring results or visual determination:
☐ Toxic gas, vapor, or mist in excess of its PEL, TLV, or other recommended guidelines.	Substance(s): Monitoring results:

☐ Inert or oxygen displacement atmosphere; simple asphyxiant. If yes, specify gas:

_____

(Examples include acetylene, argon, carbon dioxide, ethylene, helium, hydrogen, LPG, methane, neon, nitrogen, and propane. Note that some of these gases are flammable/explosive or have exposure limits (PELs or TLVs).)

☐ Poor or inadequate ventilation. Explain:

☐ Any other atmospheric condition that is immediately dangerous to life or health. Explain:

Atmospheric hazards summary statement/comments:

Possible Energy Sources Requiring Lockout/Tagout:

☐ Electrical ☐ Mechanical ☐ Hydraulic ☐ Pneumatic
☐ Chemical ☐ Thermal ☐ Radioactive ☐ Gravity (falling objects)

Comments/survey results:

Introduction of Hazardous Materials? If yes, explain:

Possible Content Hazards (e.g., engulfment)? If yes, explain:

Configuration of the Space?

☐ Inwardly converging walls ☐ Drop offs ☐ Downward sloping and tapering floor
☐ Low overhead clearance ☐ Complex layout ☐ Unstable or structural integrity issues

Comments/survey results:

External Space Hazards?

☐ Traffic ☐ Machinery/equipment/processes ☐ Terrain ☐ External connections to space

Comments/survey results:

Other Hazards in the Space?

☐ Slip/trip/fall hazards ☐ Ambient temperature high or low ☐ Surface temperature high or low
☐ Noise ☐ Ionizing or non-ionizing radiation ☐ Vibration (localized/whole body)
☐ Plants ☐ Rodents, snakes, spiders, insects ☐ Microorganisms
☐ Other (explain): _____

Comments/survey results:

Section 3: Permit-Required Confined Space Determination

Is the confined space a permit-required confined space (PRCS)?			
Yes ☐ No ☐ *(If the answers to questions 1, 2, 3, or 4 are "YES," then the space is a PRCS. If YES, complete the rest of Section 3 and post an appropriate danger sign per at the entrance to the space. If NO, the space is a non-permit confined space. Complete Section 5 if entry is required.)*	1. Atmospheric hazard(s)?	Yes ☐	No ☐
	2. Potential for engulfment?	Yes ☐	No ☐
	3. Internal configuration hazard?	Yes ☐	No ☐
	4. Other serious safety hazard?	Yes ☐	No ☐

Will the PRCS be entered by any personnel? Yes ☐ No ☐

If no, what measures have been taken to prevent entry?

- ☐ Posted danger signs
- ☐ Blocked, barricaded, or locked entrance
- ☐ Informed exposed employees

If yes, complete a PRCS entry permit for all entries.

What are the rescue options for the PRCS?

☐ Self-rescue ☐ Non-entry vertical rescue ☐ Non-entry horizontal rescue ☐ Entry rescue

Rescue considerations? If yes, explain: _____

_____

_____

_____

Section 4: Alternate Entry Procedures

The OSHA Confined Space standard allows a PRCS to be entered without the need for a written permit or an attendant under two conditions:

- The **only** hazard in the PRCS is an atmospheric hazard and the PRCS can be **maintained** in a condition safe for entry by using mechanical ventilation alone.
- All hazards within the PRCS have been **eliminated** and the space has been reclassified as a non-permit confined space.

1. Is the **only** hazard an actual/potential atmospheric hazard that can be safely controlled by continuous forced air ventilation alone? Yes ☐ No ☐

If yes, describe: _____

_____

If entry will occur, **certify** that the space is safe for entry and that appropriate pre-entry measures have been taken.

If no, the space must be entered using a PRCS entry permit and attendant.

(Note: If an initial entry of the PRCS is necessary to obtain the required air monitoring data, the entry must be performed utilizing a PRCS entry permit and attendant.)

2. Can the PRCS be reclassified as a non-permit space (i.e., there are no actual/potential atmospheric hazards and ALL hazards within the space are eliminated without entry into the space)? Yes ☐ No ☐

If yes, **certify** that all hazards within the space have been eliminated.

If no, the space must be entered using a PRCS entry permit and attendant.

Section 5: Non-Permit Confined Space Entry

No action is necessary for non-permit confined spaces unless personnel are entering non-permit spaces and there are changes within these spaces that may increase or create a hazard to entrants. If such a situation occurs, the space must be reevaluated, and if necessary, reclassified as a PRCS.

If personnel will enter this non-permit confined space, complete the following and post at the entrance to the space:

Date:_____

Location of space:_____

The following conditions and precautions are required for safe entry into this non-permit confined space:

_____

_____

_____

_____

_____

The following changes within this non-permit confined space constitute a "change in conditions" and require a re-evaluation of the space prior to entry:

1. _____

_____

2. _____

_____

3._____

_____

4._____

_____

5. _____

_____

In all cases, if hazards arise during non-permit confined space entry, all personnel must leave the space immediately. Confined spaces must be re-evaluated whenever there are changes in the use or configuration of the space or when hazards change or arise.

Signature of certifying individual: _____

Note: Retain this form in site files for the confined space safety program evaluation.

Attachment E – Confined Space Entry Permit with Logs

Confined Space Entry Permit

Date: _____ Job Name: _____ Location on Site: _____

Description of activity: _____

Purpose of entry: _____

Effective date & time: _____ Expiration date & time: _____

Required Signatures

Superintendent/Supervisor: _____ _____
Signature Date

Entry Supervisor: _____ _____
Signature Date

SCBI Project Safety Manager: _____ _____
Signature Date

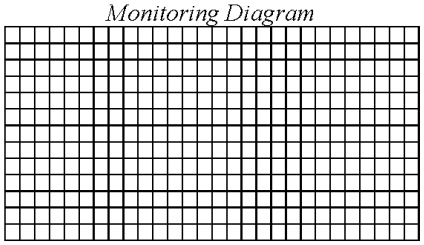
Entrant names: *See attached Confined Space Entrant Log Sheet*

All entrants & supervisors have:

☐ Confined Space Training ☐ CPR & First Aid Training ☐ Training Documentation

Air Monitoring Log: *See attached Confined Space Monitor Log Sheet*

Monitoring Diagram



Emergency Numbers

Ambulance: _____

Fire: _____

Hospital: _____

SCBI Safety Mgr: _____

Hazards of the Permit Space

Hazard Description	Yes	No	N/A	Hazard Description	Yes	No	N/A
Lack of Oxygen	☐	☐	☐	Temperature	☐	☐	☐
Combustible Gases	☐	☐	☐	Engulfment	☐	☐	☐
Combustible Vapors	☐	☐	☐	Entrapment	☐	☐	☐
Combustible Dusts	☐	☐	☐	Pressure Systems	☐	☐	☐
Toxic Gases	☐	☐	☐	Other:	☐	☐	☐
Toxic Vapors	☐	☐	☐		☐	☐	☐
Chemical Contact	☐	☐	☐		☐	☐	☐
Electrical Hazards	☐	☐	☐		☐	☐	☐
Mechanical Exposure	☐	☐	☐		☐	☐	☐

Methods for Abating Hazards

Purge/Flush & Vent	☐	Buddy System	☐	Other:	
Ventilation	☐	Evacuation Alarm	☐	_____	☐
Lockout/Tagout	☐	Lifelines & Escape Harnesses	☐	_____	☐
Inerting	☐	Emergency Egress Procedure	☐	_____	☐
Blanking, Blocking, Bleeding	☐	Tripod Escape Unit	☐	_____	☐
External Barricades	☐	Fire Extinguishers	☐	_____	☐
Signage	☐	PPE	☐	_____	☐
Shields/Barriers	☐	Respirator	☐	_____	☐
Lighting	☐	Supplied Air	☐	_____	☐
Resuscitator	☐	Communications	☐	_____	☐

Additional Permits Required

Hot Work ☐ Other ☐

Chemical Action Levels(For Additional Chemicals Refer to Federal/State Regulations)

Percent Oxygen	<19.5% or >23.5%	Hydrocyanic Acid	10 ppm
Percent LEL	Any % over 10	Sulfur Dioxide	5 ppm
Hydrocarbon/Volatile	5 ppm	Ammonia	25 ppm
Carbon Monoxide	50 ppm	Dust	Meet or Exceed LEL

Acceptable Entry Conditions

_____

_____

_____

_____

_____

_____

_____

Other

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

CONFINED SPACE ENTRANT LOG SHEET

Project: Date: Work Duration - Limit minutes

Name	Safety Line Color	Comm System (Y or N)	Air Monitor	Time In	Time Out

Updated 2/15/2019

CONFINED SPACE MONITOR LOG SHEET

Monitors (Serial #): Date:

Calibration Date:

Bump Test Complete: YES ☐ NO ☐ Bump Test Performed By:

Atmospheric Tests - Test Gases in Order Shown

Gas:	Oxygen	Combustibles	CO	H2S	Other	Location
Limits	23.5%-19.5%	10% LEL	25 PPM	10 PPM		
Time:						
Time:						
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MONITORS TO BE CHECKED AT REGULAR INTERVALS

Updated 2/20/2019

Attachment F – Request for Crane Use & Lift Plan Summary

Request for Crane Use & Lift Plan Summary

Submit this request form to SCBI 3 weeks prior to lift. Please allow 10 working days for SCBI to review completed lift plan.

INSERT ARIAL PHOTO WITH CRANE AND PICK LOCATIONS IDENTIFIED		Crane Specs, Charts & Inspections
		Hoisting, Logistics and Traffic Control Plan
		Rigging Plan
		JHA or Pretask Plan
		FAA Determination or NOTAM
		Crane Operator, Rigger/Signal Person Quals. & Certs.
		Certificate of Insurance

Project:			
Subcontractor(s), Contact Name & Number:			
Crane Supplier, Contact Name & Number:			
Date(s) & Time(s):			
Description of Operation:			
Describe Impact To Project:			
SCBI has provided known information regarding site conditions and infrastructure?		**Yes**	**No**
Subcontractor has inspected the crane setup and hoisting locations and provided all known information to Crane Supplier?		**Yes**	**No**

Subcontractor _____ **Submitted By (Name & Date)** _____

SCBI Crane Request 05/19

Subcontractor Name

Crane & Hoisting Plan

Project Name

Strong • Smart • Unique • Positive

910 Thompson Place, Sunnyvale, CA 94085
408.328.0688 scbuildersinc.com Lic # 767196 B
Silicon Valley | San Francisco

Table of Contents

Insert documents in corresponding sections as outlined below.

I. Request for Crane Use and Lift Summary
II. Crane Specifications, Charts and Inspections
III. Hoisting, Logistics and Traffic Control Plan
IV. Rigging Plan
V. JHA and Pretask Plan
VI. FAA Determination & Notice to Airmen (NOTAM)
VII. Operator, Rigger/Signal Person and Other Certifications & Qualifications
VIII. Certificate of Insurance and Endorsements
IX. Other

Guidelines for Completing Request for Crane Use and Lift Summary Form

- ✓ Inform SCBI superintendent of upcoming crane use by completing the request form at least 3 weeks prior to crane activities.
- ✓ SCBI Superintendent will use this information for schedule and coordination purposes.
- ✓ Superintendent will provide feedback on which documents are required as part of subcontractors completed lift plan.
- ✓ SCBI is to provide all know information regarding site conditions, infrastructure or potential hazards to the subcontractor.
- ✓ Subcontractor is responsible to inspect for infrastructure and conditions that may impact the crane setup location and hoisting routes.
- ✓ Subcontractor must provide all know information to its personnel and the crane supplier for planning purposes. It is encouraged the crane supplier inspect the site with the subcontractor.
- ✓ Subcontractor is responsible for facilitating and obtaining all necessary documentation to provide a complete lift plan.
- ✓ Compile all necessary documentation into a single pdf in order of the table of contents and submit to SCBI for review and comment.
- ✓ Allow at least 10 working days for review and comment.

Guidelines for Crane Specifications, Charts and Inspections

- ✓ Provide a cut sheet with crane specifications for the cranes configuration. At a minimum the cut sheet should contain the following.
  - Crane model and serial #
  - Crane weight and dimensions
  - Crane attachment information
- ✓ Provide all current crane annual and quadrennial inspections
- ✓ Provide the most current quarterly inspection
- ✓ Provide load chart(s) for configuration(s) it will be used.
- ✓ Provide an aerial or 3D diagram of the cranes setup overlaid on a site diagram or relative to structures and hoisting locations. The Diagram must contain the following:
  - Crane model & configuration
  - Load chart for configuration
  - Lift radius
  - Crane's Capacity at that lift radius
  - Load information
  - % capacity at cranes configuration
- ✓ If crane is at or exceeds 80% of the crane's load chart capacity the lift will be considered a "critical pick" and may require additional information and planning.

Guidelines for Hoisting, Logistics & Traffic Control Plan

- ✓ Provide an aerial photo showing the crane operation in its entirety. The plan should include the following:
  - Roads, structures and or buildings impacted by crane activity and picks.
  - Vehicle and equipment access and staging areas.
  - Crane setup location.
  - Crane hoisting area and swing path.
  - Pedestrian and or traffic control measures required for the operation.
  - Any know infrastructure that is or could potentially be a hazard to the operation i.e. overhead power lines, underground structures, vaults etc.

Guidelines for Rigging Plan

- ✓ Identify who is responsible for providing rigging equipment in the plan.
- ✓ Provide a detailed rigging plan that identifies all rigging equipment that will be used, their weights, capacities, sling angle and calculations for tension.
- ✓ Provide detailed information for all loads. Photos, diagrams, cut sheets etc., may be used but must include load dimensions, weights, center of gravity and how the load will be rigged. Include manufacture recommended rigging diagrams or information on pick points if available.
- ✓ Provide cut sheets and proof loading of any custom rigging devices that may be used, such as spreader bars, bins, manufactured equipment pick points, ect. Custom rigging devices must be marked with capacity.
- ✓ Identify securing measures of loads i.e., banding, shrink-wrap, ratchet straps etc.

Pallets are not to be used in hoisting operations unless properly supported from underneath with pallet forks and all loads on the pallet are secured.

Guidelines for Pre-lift Meeting, JHA and Pretask Plans

- ✓ Provide a JHA and or Pretask plan documenting hazards and safety measures associated with the hoisting operation but not addressed in other sections of the hoisting plan, such as but not limited to:
  - Identify whether radios or hand signals will be used.
  - Identify who will provide and inspect rigging.
  - Identify where personal fall arrest systems are necessary.
  - Identify pinch points or struck by hazards.
  - Weather related hazards and go, no-go parameters.
- ✓ Provide a Job Hazard Analysis (JHA) or pre-task plan for work that is associated with but not directly involved in the hoisting operation. For example, manual material handling, loading and unloading of vehicles, working from equipment, structures or elevated work platforms.
- ✓ Review the JHA and or pretask with the crew conducting the work.
- ✓ Subcontractor must conduct a prelift meeting with all personnel involved in the hoisting operation.
- ✓ Subcontractors may submit their own safe work planning forms or use templates provided.

Guidelines for FAA Determination & Notice to Airmen (NOTAM)

- ✓ Subcontractor is responsible for all notifications to the Federal Aviation Administration associated with crane use for their hoisting operation.
- ✓ The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference CFR Title 14 Part 77.9.
- ✓ Please click here to use the FAA's Notice Criteria Tool to determine if you meet the requirements to file notice of your construction or alteration

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Guidelines for Certifications & Qualifications

- ✓ Provide documentation of crane operator certification. Do not include any expired certifications.
- ✓ Provide a valid medical card accompanying NCCCO certification
- ✓ Provide certification of signal person and rigging qualification.
- ✓ Provide proof of certification for personnel directing public traffic
- ✓ Provide any other qualifications or certification for work associated with hoisting operation.

Guidelines for Evidence of Insurance and Liability Protection

- ✓ All suppliers associated with the hoisting operation must provide certificates of insurance.
- ✓ Ensure the insurance is current and contains all required coverage and limits.
- ✓ SC Builders, subcontractor and client must be identified as additional insured.
- ✓ The certificate of insurance must include all endorsements.