Dowling Construction, Co.
Injury & Illness Prevention Program

ALL PROJECTS

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Introduction

The Company's selected Subcontractors/Trade Contractors have the responsibility, expertise and authority to manage the safety of their own employees at all jobsites. It is the intent of this program to comply with the provisions of California State Occupational Safety & Health Administration ("CAL/OSHA") laws, Labor Code 6401.7, California Code of Regulations Title 8, which includes the General Industry Safety Orders and Construction Safety Orders, Senate Bill SB 198, Assembly Bills, AB 1127, AB 1930, AB 2380, AB 2774, and other applicable laws.

Every California employer must establish, implement and maintain a written Injury and Illness Prevention Program and a copy must be maintained at each place of employment. The requirements for establishing, implementing and maintaining an effective written injury and illness prevention program are contained in Title 8 of the California Code of Regulations, Section 3203 (T8 CCR 3203).

The format of this Injury & Illness Prevention Program is designed to closely parallel the CAL/OSHA requirements of a high hazard industry.

Subsequent sections of this Manual deal with the other major CAL/OSHA mandated requirements for the Construction Industry. The information contained in this manual is by no means exhaustive and from time to time will need to be supplemented with further information. The complete language of General Industry Safety Orders, Construction Safety Orders and Electrical Safety Orders are available at CAL/OSHA's website: https://www.dir.ca.gov/title8/index/T8index.asp.

Finally, this manual is in no way intended to substitute for the Trade Contractor's own Injury and Illness Prevention Program. Under the terms of the "Master Subcontract Agreement", signed by each on-site Subcontractor, each Subcontractor has the responsibility to manage the safety of their own employees. This includes correcting or removing hazards and, in all cases, promptly notifying the site superintendent and/or a designated representative of any hazards that have been or may be created.

Safety Policy Statement

It is the policy of this company to provide a safe and healthful workplace for our employees and to observe all State and Federal Laws and Regulations.

We have and will continue to maintain a safety and health program designed to train our employees to follow safe practices, and to recognize and correct unsafe working conditions.

Safety is a part of each employee's job. Active participation and adherence to the safety program is a condition of each employee's employment. No employee is required to work at a job where he or she knows is unsafe. Therefore, we must work to make every workplace safe by detecting and correcting unsafe working conditions, as well as the detection of unsafe work practices.

Our safety policy has equal importance with the company's policies of providing the best quality and most productive services in our industry.

It is our goal to completely eliminate accidents and injuries. Because of the many different hazards of our industry, we must maintain an accident safety awareness to achieve this goal.

James S. Dowling

President

Responsibility & Authority

The Injury and Illness Prevention Program ("IIPP") Administrator, INSERT NAME, has the authority and responsibility for implementing the provisions of this program for Dowling Construction ("The Company").

All other Superintendents are responsible for implementing and maintaining the IIPP at their workplace and for answering questions from employees about the IIPP. A copy of this IIPP is available at the company office, job boards and company trucks and can be obtained upon request.

Compliance

Management is responsible for ensuring that all safety and health policies and procedures are clearly communicated to all company employees. Managers and supervisors are expected to enforce the rules fairly and uniformly. All company employees are responsible for using safe work practices, for following all directives, policies and procedures, and for assisting in maintaining a safe workplace.

Our system of ensuring that all company employees comply with the rules and maintain a safe-work environment include:

1. Informing employees of the provisions of our IIPP Program
2. Evaluating the safety performance of all employees
3. Recognizing employees who perform safe and healthful work practices

4. Providing training to employees whose safety performance is deficient
5. Disciplining employees for failure to comply with safe and healthful work practices

Our system for ensuring trade subcontractors are in compliance while on our jobsites includes:

1. A contract with each Trade Subcontractor stipulating that they effectively maintain written IIPP Programs which meet or exceed all CAL/OSHA standards.
2. Subcontractor will complete and submit to the GC the following prior to the Pre-construction meeting:
    a. Injury & Illness Prevention Program Plan (Project Specific)
    b. All safety training/certifications necessary for all employees who work on our jobsites.
    c. Identity of the Competent Person(s) for the site
    d. Job Hazard Analysis (Project Specific)
    e. SDSs and Chemical Inventory List (Project Specific)
3. Subcontractor will supply all equipment necessary for their people to be able to do the job safely according to all applicable CAL/OSHA standards
4. Subcontractor will continually train workers to ensure knowledge of hazards and protective methods for their work activities.
5. They have a system for disciplining trade subcontractor for failure to comply with safe and healthful work practices.

Compliance on a Multi-Employer Worksite

All Subcontractors are expected to maintain a safe and healthy workplace for all of their employees in accordance with CAL/OSHA regulations.

Communication

Although many work place accidents cannot be anticipated or avoided, we recognize that open, two-way communication between management and staff on health and safety issues is an important method to help reduce the instances of workplace injuries. The following system of communication is designed to facilitate a flow of information between management and staff relating to safety and health in a form that is understandable and consists of the following items:

1. Orientation for new employees which includes a discussion of safety and health policies and procedures conducted by the Superintendent or designee.
2. Ongoing management review of the Injury & Illness Prevention Program (IIPP).
3. Workplace safety and health training programs (see "Training & Instruction") for all staff employees in the hazards likely to be encountered on the job.
4. Regularly scheduled safety meetings through "Toolbox Talks" in accordance with Title 8 §1509.
5. Communication through Safety and Health posters and job-site signage located at work sites as appropriate.
6. A system for employees to anonymously inform management through Human Resources and/or the Safety Committee about workplace hazards.

7. A safety session periodically scheduled during other production meetings.
8. Formal safety meetings with all site superintendents/foreman periodically and additional safety sessions at all active job sites as required.
9. Dissemination of safety related news, information and materials as appropriate. This includes immediate notification of all OSHA visits to on-site trade subcontractors and full disclosure of OSHA actions and concerns during a visit, including notices, hazard abatement demands and citation details if imposed.
10. Informal communication and discussion of accidents that have happened at similar job sites including ways they could have been prevented or avoided.

Employee Safety & Health Suggestions Program

Introduction

On occasion, employees may not notify anyone of impending danger or hazards on the job. This may be due to fear or reprisal or rejection, lack of encouragement from their supervisor, or many other reasons.

An informal, and when desired anonymous method will provide another means of bashful employee to inform us of important safety information.

Purpose

1. The "EMPLOYEE SAFETY & HEALTH SUGGESTIONS FORM" is to be used by employees to formally report hazards not handled directly by their supervisor for the presentation of suggestions to improve the safety & health of their environment.
2. The form is designed to be used to ensure that:
    a. The employee is provided with the means of reporting safety or health problem WITHOUT FEAR OR REPRISAL.
    b. Feedback is provided to the employee on their suggestions, whether positive or negative.

Procedure

Management and supervision should encourage employees to utilize the Safety & Health Suggestion Form at any time they would like to make a safety or health suggestion observation.

The form will be made available within the facility where employees may easily retrieve them. The location will be readily identifiable and a means for depositing the completed forms provided. The deposit "boxes" will be made secure so that the only person(s) so designated by the Safety Coordinator can collect the completed forms.

The form should be collected daily. For if the hazard of imminent danger were to be unnoticed; the potential for a serious accident increases. Any suggestion found to identify a condition of imminent danger would require that immediate corrective action be taken. Otherwise all other items will follow the same procedures for the corrective action as those noted during regular inspections. The Safety Coordinator will make a review of the suggestions.

If the employee has given their identity, it is important for the Safety Coordinator to provide a response on the action to be taken. The employee should also be thanked for their participation.

Employee Safety & Health Suggestions

I WOULD LIKE TO REPORT, WITHOUT FEAR OF REPRISAL, WHAT I BELIEVE TO BE IS A SAFETY/HEALTH HAZARD THAT MAY CAUSE INJURY; ILLNESS, DEATH, OR DAMAGE TO AN EMPLOYEE, OR THE PUBLIC.

DESCRIBE SAFETY/HEALTH PROBLEM:

_____
_____
_____

LOCATION: _____

SUGGESTIONS (TO CORRECT PROBLEM):

_____
_____
_____

EMPLOYEE'S NAME (OPTIONAL): _____

RECEIVED BY: _____ DATE:_____

REVIEW AND COMMENTS

COMMENTS:

_____
_____
_____

REVIEWED BY:_____ DATE:_____

COMMENTS:

_____
_____

ACTION TO BE TAKEN

_____
_____
_____

APPROVED BY: _____ EFFECTIVE DATE: _____

Return form to Gayle Johnson, Jim Dowling, Jared Kline or anonymously through unmarked envelope at the office or the box on the wall by the man door at the warehouse.

Hazard Assessment

To demonstrate "reasonable care" and in accordance with OSHA Title 8 responsibilities, the Company regularly inspects the jobsite as required. Periodic inspections are performed according to the following schedule:

1. Daily or more (by trade subcontractors) and at weekly (by GC) at the site location; Frequency (to be arranged) at mutually convenient times & dates
2. Within a reasonable time after a new, previously unidentified hazard is recognized as being introduced into the workplace;
3. When new substances, processes, procedures, or equipment which present potential new hazards are introduced into our workplace;
4. Monthly review of all reported occupational injuries and illnesses;
5. When occupational injuries and illnesses occur;
6. At the commencement of all new jobsite locations;
7. When we hire and/or reassign permanent or intermittent workers to processes, operations, or tasks for which a hazard evaluation has not been previously conducted; and
8. Whenever workplace conditions warrant an inspection.

Periodic inspections consist of identification and evaluation of workplace hazards utilizing the Jobsite Inspection/Safety Survey.

The Company contracts with their respective Trade Subcontractors to conduct their own safety inspections of their respective job-areas as necessary and required by CAL/OSHA.

Inspections by Trade Subcontractors are performed by a competent observer and include, but are not limited to, daily inspections of trenches and excavations, scaffolding and where and whenever else workplace conditions warrant an inspection. Of particular importance is the need to perform inspections when there are changes in substances, processes, procedures or equipment and when changes in weather have occurred that significantly affect operations.

The company relies on Trade Subcontractors to report and notify General Contractor of any and all Hazards they encounter as soon as reasonably possible after they are observed. If any Safety Systems are dismantled or removed for any reason during the production process, General Contractor should be immediately notified.

Accident/Exposure Investigations

Procedures for investigating workplace accidents and hazardous substance exposures include:

1. Reporting the accident/exposure to Gayle or Jared
2. Go to the accident scene as soon as possible;
3. Interviewing injured workers and witnesses;
4. Examining the workplace for factors associated with accident/exposure;
5. Taking photographs of the accident scene;

6. Determine the contributing and root cause of the accident/exposure;
7. Periodically meeting to develop corrective actions to attempt to prevent, or minimize the likelihood of, the accident/exposure from recurring; and
8. Recording the findings and corrective actions taken, if any, addressed directly to Dowling Construction, Safety Manager.

Use the Accident Investigation Report form for all accidents to company employees.

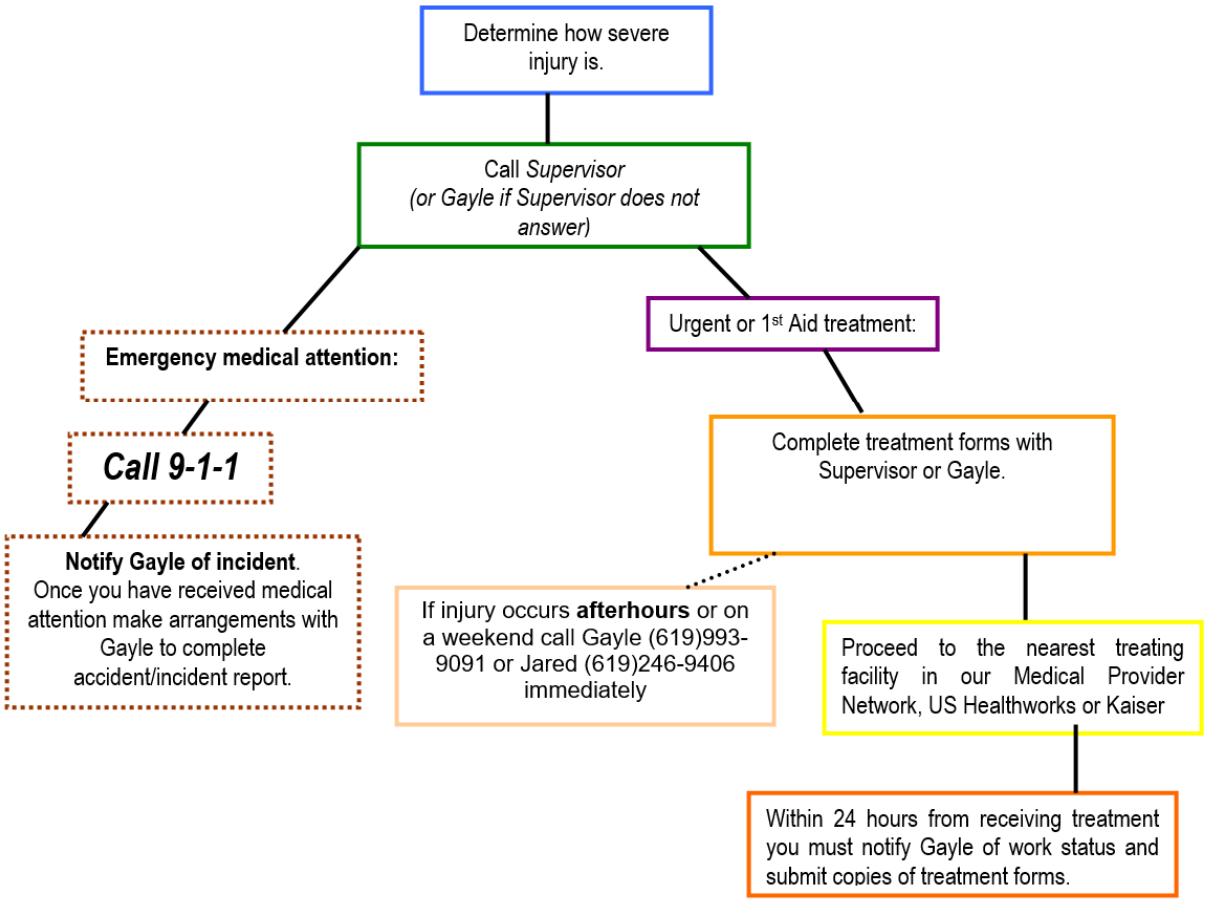
For any serious third-party injury on the jobsite (e.g. where, say, a plumber has a plasterer's scaffold plank fall on them, or, a framer is exposed to a chemical used by another trade subcontractor) an Accident Investigation Report is necessary.

In the event that a trade subcontractor employee has an accident wholly in the performance of his/her own job, an accident investigation report can be requested of that particular employer. This accident report should include how/why it happened and remedies to prevent any similar accident from occurring in the future.

Use the following flowchart during

any accident or incident on site:

Work related accident/incident Procedure



If you are injured but determine no medical treatment is necessary:
You must complete an incident report within 24hours and submit to Gayle

Your health and safety is the #1 priority at James Dowling Construction, Inc.
All injuries MUST be reported to Supervisor immediately.
Contact Jared Kline 619-246-9406 or Gayle Johnson 619-993-9091 to report injury

Hazard Correction

The Company will take reasonable steps to address unsafe or unhealthy work conditions, practices or procedures which should be corrected in a timely manner based on the severity of the hazards. Hazards should be corrected according to the following, as applicable;

1. When observed or discovered;
2. Imminent Danger; if a suspected hazard is identified, which cannot be immediately abated without endangering employee(s) and/or property, all affected work should temporarily cease until the condition can be addressed. Potentially exposed workers should be removed from the area except for those workers necessary to correct the condition. Workers necessary to correct the condition shall be provided with the necessary protection; and
3. All such actions taken, and dates they are completed, shall be documented on a report form, whenever reasonably possible and addressed to Dowling Construction, Safety Manager.

Disciplinary Policy and Procedure

The safety procedures outlined in our Injury and Illness Prevention Program and "Code of Safe Practices" is for the protection of all employees and the public.

Our company will make every reasonable effort to ensure the health and safety of all workers. No worker will be required or knowingly permitted to work in an unsafe or unhealthful place, except for the purpose of making it safe and healthful and then only after proper precautions have been taken to protect the worker while doing such work.

However, sometimes we encounter a situation where a worker is aware of the correct work practice that has been adopted for his or her protection, but the worker has either neglected or refused to comply with established safe work practices and must be disciplined.

Disciplinary Procedure

Fighting, possession or use of illegal drugs or weapons, or flagrant violations or disregard for project safety rules may result in termination.

The project team will determine the best disciplinary action to be taken which best suits the circumstances in accordance with our at will employer status. The steps to be taken at a minimum may include the following:

- **Verbal Warning:** As the first step in correcting unacceptable behavior or minor infractions, a verbal warning will be issued to the employee. This verbal warning will be documented.
- **Written Warning**: If the unacceptable performance continues, or the severity of the infractions warrants, the next step will be a written warning. The written warning will clearly state the safety policy that was violated and steps the employee must take to correct it.
- **Suspension:** If the unacceptable practice continues, or the severity of the infraction warrants, the employee will be given time off without pay.
- **Termination:** If the unacceptable practice continues, or the severity of the infraction warrants,

the employee will be terminated.

- **Immediate Termination:** Any employee who commits a serious safety violation may be subject to immediate termination without prior notice in lieu of any prior verbal and/or written warnings.

Safety Training and Instruction

Company employees, including managers and supervisors specifically employed at each jobsite, should have training and instruction on general and job-specific safety and health practices applicable to that site. Reasonable steps to provide training and instruction, as applicable, should be periodically provided in accordance with the following guidelines:

1. When the IIPP is first established at each new jobsite;
2. To new employees (through Human Resources Department), except for those in construction who are provided training through a CAL/OSHA approved construction industry occupational safety and health training program;
3. To all existing employees and employees given new job assignments for which applicable training has not been previously provided. This includes Toolbox Talks every week;
4. Whenever new substances, processes, procedures or equipment are introduced to the workplace and represent a new hazard;
5. Whenever the employer is made aware of a new or previously unrecognized hazard;
6. To supervisors to familiarize them with the safety and health hazards to which workers under their immediate direction and control may be exposed; and
7. To all workers with respect to hazards specific to each employee's job assignment.

Workplace safety and health training practices include the following:

1. Providing access to the company IIPP, Emergency Action Plan and Fire Prevention Plan and measures for reporting any unsafe conditions, work practices, and injuries.
2. Information about the use of appropriate clothing, including gloves, footwear and personal protective equipment, as necessary.
3. Information about chemical hazards to which employees could be exposed and other hazard communication program information.
4. Availability of sanitary toilet, hand-washing and drinking water facilities.
5. Provisions for medical services and first aid including emergency procedures.
6. Information about the Code of Safe Practices.
7. Heat and illness Prevention Training.
8. Information about Medical, First Aid and CPR procedures.
9. Operation of equipment, e.g., scissor lift, rolling scaffold, welders and generators.

Recordkeeping

All high-hazard employers in California covered by the CAL/OSHA Act, except those who had no more than ten employees at any one time during the previous year, are required to keep CAL/OSHA records.

The records to be maintained assist DOSH personnel in making inspections and investigations, provide information employers can use to evaluate their own safety programs, give information to employees about conditions in their workplace, and provide data for the annual survey conducted by the California Division of Labor Statistics and Research (DLSR) in cooperation with the U.S. Bureau of Labor Statistics.

The Building Industry is designated by OSHA to be a high hazard industry, and therefore requires certain specific record-keeping and reporting standards. We have taken the following steps to implement these requirements into our IIPP:

1. Records of hazard assessment inspections, including the person(s) conducting the inspection, the unsafe conditions and work practices that have been identified, and the action taken to correct the identified unsafe conditions and work practices that have been identified, and the action taken to correct the identified unsafe conditions and work practices (if any) are recorded on the Hazard Assessment and Correction record; and
2. Documentation of safety and health training for each employee, including the employee's name or other identifier, training dates, type(s) of training, and training provides are recorded on an employee training and instruction form. We also maintain records relating to employee training provided by a construction industry occupational safety and health training program approved by CAL/OSHA

The OSHA Form 300, Log and Summary of Occupational Injuries and Illnesses (these records are kept on a calendar year basis and retained for five years).

Employers should post only the final page of the OSHA Form 300 (Form 300A) in a conspicuous place in the workplace during the months of February, March & April every year, to reflect the annual total number of company injuries and illnesses at that worksite.

It is the employer’s responsibility to record work-related injuries and illnesses, which include the following:

- Occupational deaths
- Lost work-day cases
- Occupational injuries that involve loss of consciousness, restricted work activity, transfer to another job, medical treatment other than first aid.

First aid cases which include one-time treatment, even if administered by a doctor, and subsequent observation for such injuries such as minor scratches, cuts, burns, and splinters need not be recorded. Treatment of occupational illness, including pesticide exposures, is not considered first aid and must be recorded.

In addition to maintaining records of occupational injuries and illnesses, the employer is required to allow employees, or their representatives, access to the employer's log of occupational injuries and illnesses, and to keep accurate records of employee exposure to harmful physical agents.

Reporting

Employers must immediately report (by telephone or telefax) to the nearest office of the Division of Occupational Safety and Health, work-related, or suspected work related, fatalities and "serious injuries or illnesses" to company employees (Title 8 section 342). The employer has up to 8 hours to report a serious accident to CAL/OSHA "unless exigent circumstances exist" that prevents notification within the permissible time period.

A serious injury or illness is one that requires employee hospitalization for purposes other than medical observation- for any period of time for other than medical observation, or in which a part of the body is lost or serious permanent disfigurement occurs; and/or impairment sufficient to cause a part of the body or the function of an organ to become permanently and significantly reduced in efficiency on or off the job (AB 2774).

Hazardous Substances and Proposition 65 Information

In 1991 the CAL/OSHA Standards Board revised its Hazardous Substances Information & Training Act regulations which essentially parallel Federal regulations while retaining some requirements unique to California. California Code of regulations, Title 8, General Industry Safety Orders, §5194, governs all California employers. A full description of the state hazard communication standard appears in section 2 of this manual.

HAZCOM Manuals with SDS information will be at the GC job board and are available when necessary.

California Proposition 65 requires that all job site visitors be warned of the possible presence of chemicals and substances known by the State of California to cause cancer.

Code of Safe Practices

The purpose of the Code of Safe Practices is to assist you in making safety a regular part or your work habits. This is a minimum guide to help identify your responsibility for safety. Your Supervisor is obligated to hold you responsible for your safety by enforcing these rules and providing you a safe place to work.

a. I will immediately report to my supervisor any accidents or near misses, and injuries no matter how slight, that occur on the job.
b. I will cooperate and assist in investigation of accidents to identify the causes and to prevent recurrence.
c. I will promptly report to my supervisor all unsafe acts, practices, or conditions that I observe.
d. I will become familiar with and observe safe work procedures during the course of my work activities.
e. I will keep my work areas clean and orderly at all times.
f. I will avoid in engaging in any horseplay and avoid distracting others.
g. I will wear personal protective equipment when working in hazardous areas and/or required by my supervisor.
h. I will inspect all equipment prior to use and report any unsafe conditions to my immediate supervisor.
i. I will submit any suggestions for accident prevention, which may assist in improved working conditions or work practices to my immediate supervisor.
j. I will not bring in my possessions. Use or introduce any kind of intoxicating liquor or illegal drugs on any customer's property or work area or facility, or I will accept possible discharge for these illegal actions.
k. I will not bring onto job, have in my possession or in my car, any weapons or ammunition of any kind.
l. I will obey all safety rules and follow published work instructions.
m. I will not come to work under the influence or intoxicating liquor or illegal drugs, and realize that I will not be allowed to start work and may be immediately discharged for this action.

General Safety Rules

1. If you think something may be unsafe, more than likely it is. Report all hazardous Conditions and/or unsafe practices immediately to your supervisor for corrective action. If it is possible for you to correct the problem without injury this should be done.
2. Smoking is permitted only in designated areas outside the building.
3. Obey all warning signs: they are there for your protection.
4. Your supervisor must give authorization for all medical treatment, for on the job injuries before obtaining medical treatment.
5. Failure to report an injury that happened on the job, prior to the end of your work shift. Will mean grounds for disciplinary action up to and including discharge.
6. Horseplay is strictly prohibited.
7. Jewelry, including rings and bracelets, must not be worm when operating any type of machinery or equipment.
8. Special safety equipment is provided for your protection. Use it when it is required. Keep it in good condition. Report any loss or damage immediately.

9. Do not tamper with operating machinery. Adjustments that are necessary must be performed by authorized personnel only.
10. Only qualified persons are authorized to make repairs on any equipment.
11. Warn other employees of the hazards created by your work activities.
12. If you see a safety issue such as a co-worker not wearing proper PPE, bring it to their attention. If you see something, say something.
13. When lifting bend your knees not your back. Life with your legs, they are 10 times stronger than your back muscles. If the load is to heavy don't be bashful ask for help.
14. Keep out of hazardous areas or any job area where you have not been assigned or safety trained to work.

Hand Tools and Equipment

1. All hand tools must be kept clean and in good repair and used only for the purpose for which designed.
2. Tools having defects that will impair intended operation or render them in any way unsafe for use must be removed from service immediately.
3. When work is being performed overhead, tools not in use must be secured in or placed in holders.
4. Throwing tools or materials from one location to another, from one employee to another, or dropping them to lower levels is not permitted.
5. Power tools must be inspected, tested and determined to be in safe operating condition prior to use. Continued periodic inspections must be made to assure safe operating condition and proper maintenance.
6. Loose, fringed or frayed clothing, loose, untied, long hair, dangling jewelry, rings, chains, or wrist watches must not be worn while working with any power tool or machine.
7. Don't carry sharp tools in clothing. Always use the proper carrying case or tool kit.
8. All portable power tools must be grounded or double insulated.
9. Use only those power tools you are authorized to use.
10. All power tools must be equipped with guards as required.
11. Do not use a file without a handle. Do not use a file as a pry tool.
12. Use tools only for the purpose for which they were intended.
13. Keep any personal tools and equipment in good condition at all times. They will be inspected just as company tools.
14. Inspect all impact tools for mushroomed heads.
15. Do not hammer on wrenches or use a pipe for extension.

Electric Tools

1. All electric tools must be grounded in one of the two methods: Either designed and clearly marked “double insulated” or by use of three prong plug.

2. All wiring must be kept in good repair and dry.

3. Electrical tools will not be used in controlled atmospheres such as but not limited to: flammable/combustible areas, areas where there is a possibility of explosion gases, corrosive areas, etc.

4. Electrical tools that are used in conjunction with an extension cord must have a cord that is a heavy-duty type construction. It must be secured to the tool using a three-prong coupler. The extension cord should not be kinked, broken, showing exposed wires or having loose plug ends.

5. Extension cords should not be fixed to objects such as ladders rails, cabinets, walls, etc. When drilling, sawing, fastening, soldering, welding, chipping, filing, etc. employees must wear industrial Grade Safety Glasses and/or proper face protection.

Compressed Air

1. Air pressure at the end of a portable air blowgun must be less than 30 pounds per square inch when dead end gauged.

2. Air guns must not be used to remove dust, chips, or loose materials from clothing or body parts. Attachments shall be firmly affixed to the main gun.

3. Disconnects must be reachable from the floor standing flat-footed.

Hammers

1. Make sure the hammerhead fits tightly.

1. Replace deformed heads and loose or split handles.

2. Grip the handle close to the end: don’t choke-up on it: you will be doing its work rather than letting it do the work for you. Never use hammer handles to pry or to tap objects.

Screwdrivers/Knives

1. Screwdrivers and knives must be outfitted with a secure handle.

2. Screwdrivers must be equipped with a non-conducting handle when used on electrical work.

3. Screwdrivers must be inspected and repairs made if they have:

    - A loose or broken handle
    - A cracked or broken blade
    - Ends are worn or correct angles are missing
    - A bent shank

4. Screwdrivers must not be used as a punch, lever, pry, etc.
5. Keep screwdriver blades in good condition and grind or file the tip square.
6. Select the correct size so it fits the screw snugly.
7. Never attempt to hold the work in one hand use the screwdriver with the other. Instead use a vise or firm support to hold the piece being worked.

Pliers

1. Pliers with sprung jaws or worn faces must not be used.
2. Worn joint pins must be replaced.
3. Pliers used in electrical operations must be designed for that use and shall be outfitted with adequate non-conditioning surfaces.
4. Pliers should never be used on nuts- use a wrench.
5. Grasp handle near the end as you may be pinched if you grip close to the hinge.
6. Never use pliers on a hardened surface, as this only tends to dull the teeth and loosen the pliers grip.

Wrenches

1. Check wrenches before using and discard those that are bent, deformed, cracked or have loose handles.
2. Never attempt to straighten a bent wrench as this only serves to weaken it further.
3. Select the correct wrench for the job and be sure that it fits snugly. Never use a shim.
4. When tightening or loosening a nut, always pull the wrench toward you- never push you will have better control. Also make sure you have a firm grip on the tool and your footing is secure: and allow plenty of clearance for your fingers.
    1. Keep debris from blocking access to ladders, electrical equipment, and other important areas in case of emergency.
    2. Never leave nails, or spikes sticking up in boards or planks. Promptly remove them or bend them over when found.
    3. Never pick up sharp objects with your bare hands.

Employee Acknowledgement Form

Code of Safe Practices

I _____(PRINT) hereby acknowledge that I have received, read and understand the “Code of Safe Practices (a.k.a Safety Handbook), SDS Sheets and Flow chart for “What to do when an accident/injury occurs,” and the First Aid and CPR Manual.

I agree to conform to all practices, safety rules and regulations relating to safe work performance.

I understand that my failure to follow these safety procedures will result in disciplinary action up to and including discharge.

I further understand that:

It is my responsibility to report all unsafe conditions or violations of the Code of Safe Practices to my supervisor or other management personnel in order to minimize the potential of injury to my fellow workers.

I am encouraged to inform my immediate superior of any hazards on the job without fear of reprisal. And that should my assistance create any such action or related intimidation, that I am encouraged to contact the Safety Coordinator or management by phone or mail.

_____ _____

Signature or employee Date

_____ _____

Signature of Supervisor Date

Copies to: Office (original), Safety Coordinator, Employee

Hazard Communication Program

California Code of Regulations, Title 8, General Industry Safety Orders, §5194 requires the following explanation of the methods used to identify, analyze, plan and control new and existing hazardous conditions.

Employee Right-To-Know

CAL/OSHA standards have established an employee's "Right-to-Know" about hazardous conditions and/or materials that they may be exposed to during the course of their employment and how to safely protect themselves.

Hazard Identification

A formal assessment survey and evaluation should be regularly conducted and reported to the Safety Committee.

SDS's

Hazardous conditions must be identified and documented, hazardous materials inventoried and properly communicated by use of Safety Data Sheets (SDS). Jobsite safety inspections that include all hazardous materials and equipment should be made at the start of each job and every month thereafter. Label all hazardous materials.

Fire Hazards

All combustible materials must be properly stored and labeled and a visual inspection of all portable fire extinguishers must be included in the inspection. If a hazard is found that cannot be immediately abated, secure the job site by appropriately placed signs and tape off the area in order to prevent possible accidents and/or injury.

Hazard Analysis

Using the "Hazards Analysis" guide, evaluate the extent of the danger and properly communicate it both to the Safety Administrator and the Safety Committee.

Hazard Control

Hazardous materials must be labeled and stored in a clearly marked area. Hazardous site conditions must be identified, secured and effectively communicated. Hazardous equipment must be labeled and withdrawn from service. Hazardous work practices must be adjusted to ensure that a job can be safely performed.

It is better to avoid hazards and/or eliminate them rather than try to "work around them".

The Hazard Communication Program should be implemented and maintained at the workplace. Any chemical which is a physical hazard or a health hazard must be stored in a ·container appropriately labeled or marked with the identity of the hazardous chemical(s), whatever warnings that are necessary and the name and address of the responsible party.

A temporary container does not need to be marked if it is constantly with the employee using it until the work is finished. All labels must be legible, in English, and clearly display physical hazard warnings and health risks.

Hazard Warning Levels

- Danger hazard level is used to indicate immediate danger and that special precautions are necessary. Red should be the color for identification for fire protection equipment, danger and stop.
- Warning signs and labels shall be used to represent a hazard level between Danger and Caution and are usually Orange.
- Caution signs shall be used to warn against potential hazards or unsafe practices. Yellow is the basic color for designating caution and marking physical hazards.
- Safety instruction signs should be used where there is a need for general instructions and suggestions relative to safety measures. Green letters on a white background should be used.
- General notices should be constructed in Blue letters on a white background (See Over).

Hazard Warnings

Signs should be posted and/or labels attached for the following reasons:

- Hot hazards
- Chemical hazards
- Authorized Areas & Controlled Access Zones
- Whenever/wherever Personal Protective Equipment is needed.
- Other Physical and Health Hazards.

The purpose of the Hazard Communication Program is to ensure that the hazards of all chemicals produced or imported are evaluate and that information concerning their hazards is transmitted to employers and employees.

One of the key components of the program is the Safety Data Sheet (SDS).

SDS should be obtained for every hazardous chemical in the workplace. The SDS Inventory Form can be used to check that this has been done.

SDS Accessibility

SDS should be accessible to all concerned employers and employees. The SDS file should be clearly marked and always available in case of an emergency. The accessibility of the SDS can be either physically at the workplace, available by fax or electronically. Fax numbers or electronic addresses should be available in the event they are stored offsite.

For employees who work offsite or who travel away from their workplace, SDS should be stored at the primary workplace and can immediately be obtained in case of an emergency.

Subcontractors who use or store hazardous materials at the jobsite will submit their SDS's to the GC.

While performing work onsite, subcontractors will have their SDS at the location of work.

Written Hazard Communication Program

These pages represent the Company's "Written Hazard Communication Program" ("HCP") as required by CAL/OSHA, Title 7, General Industry Safety Orders §5194. The objectives of this standard are:

- To ensure that the hazards of chemical substances used by the company are identified and appropriate safeguards instituted.
- To ensure that employees are trained in the hazards of the chemical substances with which they work.
- Title 8, § 5194 (e) states that the HCP shall include the methods employers will use to inform other employers using the same work area of the hazardous substances.

Incoming Chemicals

Any container of chemical coming into the workplace with which neither appears on the Safety Data Sheet (SDS) Inventory Form or is missing its label or other form of identification should be reported to the subcontractor foreman, the site superintendent or safety committee member.

These materials will not be released for use until the supplier has been contacted for the appropriate SDS paperwork.

SDS and labels.

Any chemical listed as hazardous on the SDS can be cross referenced on the following lists:

- OSHA Subpart Z (Toxic and Hazardous Substances)
- Sect. 37245 (Threshold Limit Values of Chemical Substances and Physical Agents in the Workplace).
- Sect. 335 (Listing of Extremely Hazardous Chemicals)
- CERCLA 302.4

Labeling & Tagging

Each bulk container of hazardous chemical when received at work site must be checked for proper labeling, tagging with the identity of the hazardous chemicals therein and the appropriate hazard warning in English. The label should be designated in accordance with the American National Standard Institute (ANSI) Z129.1 -1982 "Hazardous Chemicals- Precautionary Labels".

Storage

Hazardous materials should be stored in accordance with the prescribed instruction.

The storage area will be identified as such and materials will be grouped for easy recognition.

Labeling conforms to the National Fire Protection Association (NFPA) and Hazardous Materials Identification System (HMIS) design standards. They appear as diamond-shaped placards divided into four separate color-coded areas and designate the following:

- BLUE = Health Hazards
- RED = Fire
- YELLOW = Reactivity
- WHITE = Special Hazards

The numbering systems used also conform to NDPA standards (See Over).

Training

All employees will be provided with information and training on hazardous and toxic substance utilized in their workplace at the time of their initial assignment, whenever a new hazardous material or toxic substance is introduced to the workplace or whenever new/revised information is received concerning a hazardous or toxic substance. Refresher employee training sessions will be conducted annually to review physical and health hazards, safety precautions and emergency procedures for hazardous or toxic substance with which they work.

Employee Rights

Employees have a "right-to-know" about Hazardous Materials and Toxic Substances that are used in the workplace, per California Code of Regulation, Title 8 §5194.

Information on safety and operating procedures in the work areas where the hazardous chemicals are present.

Methods employees can use to protect themselves such as work practices, personal hygiene practices and the use of personal protective equipment when necessary.

The location and availability of this Hazard Communication Manual together with all applicable Material Safety Data Sheets.

*Written, printed or graphic information displayed on or affixed to the container of a toxic or hazardous substance. Labels are designed to inform employees concerning the hazards of various chemicals. It is therefore important that no hazardous chemicals are put in an improperly labeled container or in a container without a label.

Recordkeeping

The subcontractor will maintain training records on each employee.

All SDS are maintained for thirty (30) years. Documentation of each employee's training is maintained for three (3) years after the employee has left the company.

Trade Subcontractors

All outside trade subcontractors doing work for the company at any of its facilities or job sites will be required through the trade contract, to provide SDS, hazardous materials training and adequate hazard control and communications procedures for their employees. It is the responsibility of the trade subcontractor, as the controlling employer, to properly train and instruct their employees in all aspects

of hazardous materials usage and on toxic substance to which their employees may become exposed at the workplace.

If the trade subcontractor is using chemicals, hazardous materials or toxic substances to which other workers at the workplace may be dangerously exposed, the trade subcontractor must inform the site superintendent of these possible dangers. Trade subcontractor will provide the site superintendent with the appropriate SDS which can be kept on site for other workers indirectly exposed to these hazards in the performance of their duties.

Housekeeping

1. It is the responsibility of each employee, supervisor and craftsman to practice good housekeeping at all times.
2. Tools and materials must not be left where they could create a hazard for others, especially the general public.
3. Scrap material, debris, and rubbish can easily create a tripping hazard. If excess trash exists in any work area, employees should advise the supervisor, who will arrange for its prompt removal.
4. Soiled clothes, food scraps, and soft drink cans or bottles must not be allowed to accumulate. Single service drinking cups are provided for employee convenience but these must be disposed of in an appropriate receptacle.

Personal Protective Equipment

1. All employees must wear an ANSI approved hard hat, including long pants and a sleeved shirt (4-inch sleeve or longer) when on the job site or in the yard as well as any other safety equipment specified for their work assignments.
2. Employees must wear appropriate ANSI approved eye or face protection when exposed to flying particles, dust, objects, chemicals, or harmful light rays, etc.
3. Hand protection must be worn when handling objects or substances which may cut, tear, burn, or irritate the hands or skin (including when handling concrete). If necessary, similar types of materials may be used as body protection.
4. Employees shall wear appropriate footwear at all times. Sandals, sneakers or tennis shoes are not permitted.
5. Respiratory protection is required for any area where a suspected health hazard may exist due to the accumulation of harmful fumes, mist, vapor, or dust. Employees using respirators must be properly trained, medically examined, and fit tested prior to using a respirator.
6. Employees must wear appropriate hearing protection when exposed to noise decibel levels above permissive noise levels.

Office Environment Safety

Working in the office space is typically not a hazardous as working out on the construction site. However, there are still important safety items to keep in mind:

1. Do not overload power outlets beyond the manufacturer's rating. This could lead to electrical

fires or shock hazards.

2. Use good ergonomics when you are setting up your computer work stations. Eliminate stressful and fatiguing postures through adjustable desks and chairs ergonomic keyboard and mouse designs.
3. Lighting inside the office environment should be ample enough to prevent eyestrain and allow for good visibility when exiting the building during an emergency.
4. Do not use unstable objects as substitutes for ladders such as boxes and swivel chairs. Use proper ladders or steps instead
5. Do not stack heavy objects on top of cabinets where they risk falling and striking workers below.
6. Make sure exit signs are posted and workers are trained on proper evacuation procedures.
7. Some hazardous chemicals in special inks or cleaning solvents may be present. Consult with the SDS information for any new chemical and wear the required PPE.

Lifting and Carrying

Your back is always working 24 hours a day, every day of the year. Every time you lift, sit, stand or even lie down. You are using your back. Over the years the effects of poor posture, being overweight, not lifting safety, or simple wear and tear accumulate and can lead to a "problem back".

You can't turn back the clock but you can stop the cycle of back abuse and prevent injury by learning how your back works and how to lift. Stand and sit with your back safely balanced. Protecting your back around the clock is your best insurance against back injury. You are the only one who's around to do it, both on and off the job.

The Biomechanics of Lifting

Most back injuries result from improper lifting. According to the principles of biomechanics, the worst lifting situation occurs when the body is extended over the load: the lower back becomes a fulcrum supporting the weight of the body plus the load. Twisting in this position invites injury.

1. GET A FIRM FOOTING. Keep your feet apart (shoulder width) for a stable base point toes out.
2. BEND YOUR KNEES. Do not bend at the waist. Keep the principles of leverage in mind. Don't do more work than you have to. Maintain your three natural back curves.
3. TIGHTEN STOMACH MUSCLES. Your abdominal muscles support your spine when you lift, offsetting the force of the load. Train muscle groups to work together.
4. LIFT WITH YOUR LEGS. Let your powerful leg muscles do the work of lifting, not your weaker back muscles. Maintain your three natural curves.
5. KEEP THE LOAD CLOSE. Don't hold the load away from your body. The closer it is to your spine the less force it exerts on your back.
6. KEEP YOUR BACK UPRIGHT. Whether you are lifting or putting down the load, don't add the weight or your body to the load. Avoid twisting; it is common cause of injury

Conditioning

Bring your back and body to work in the best possible condition. Learning to reduce stress, combined with a sensible diet and exercise program, can relieve back pain and start you on the road to a happier, healthier, and more enjoyable lifestyle. Now let's apply the principles of good body mechanics to lifting and material handling situations.

Material Handling: Think Before You Lift

1. MENTAL LIFTING: To handle materials safely, lift everything twice! **FIRST,** lift the load mentally. Plan every step before you do it physically. Even repetitive jobs can be thought through beforehand. **SECOND,** lift with your legs, not your back.

2. SIZE UP THE LOAD: How much does it weigh" how much do you weigh? Give it the height test to see whether or not you can lift it- you don't want any surprises, if it feels OK, go ahead and lift it.

3. GET HELP: If the load is too bulky or heavy to lift alone get help. Don't hesitate to ask someone else for a hand. A moment's help could save you from days of disability and pain.

4. FIND A BETTER WAY: Sometimes no one else is around to help, or the job is bigger than the two of you. Arrange for mechanical help from a pushcart, hand truck, wheelbarrow, or forklift.

5. CHECK THE PATHWAY: Look for obstacles underfoot and overhead, spills, lighting, traffic (people or vehicles) and changes in elevation. Choose a clear route over the flattest surface, even if it takes a little longer.

6. SOLVE HIGH LOAD PROBLEMS: Lifting from height above the shoulders can be hazardous. Test the weight by pushing up on the load. Get as close to the load as possible, so it can slide down your body, close to you. And plan to lift down the same way you plan to lift up- the right way.

7. SOLVE REPETITIVE PROBLEMS: Don't except problems "as the way things are". Recognize them as problems, and decide how you can avoid them in the future. Think through your job tasks. Do you really need to bend and reach so much, or can you think of a smarter way?

Physical Lifting

Be sure to apply proper lifting techniques. Whether working alone, with a team or with the aid of a mechanical helper.

Lift It Properly

When lifting follow these steps:

- Get close to the load and grasp firmly. Hug it!
- Keep your back in its natural alignment as you use your strong leg muscles to lift

  the load.
- Set the load down smoothly.

1. TEAM LIFTING: When team lifting pick one person to call the signals. The leader should direct the team so you all lift together. Walk in step, and lower the load together, using the lifting principles shown above.

2. PUSH DON'T PULL: Use good lifting techniques to load mechanical devices. Whenever possible, push rather than pull. Then lift; apply the same lifting techniques in reverse to unload.
3. CLEAR THE PATHWAY: Remove any hazards you see- and/or see that they are removed. Wipe up spills. Make sure the area is well lighted. Wait until traffic clears. Then transport the load setting it down in the proper place.
4. UNLOAD CAREFULLY: Un-lift or set a load down as safely as you lifted it. Plan where you can put the load down. Pick your spot carefully so no one has to move the load again.
5. LIFT LESS. ENJOY THE REWARDS: Look around your workplace. How could you recognize to minimize how much you have to lift and how far you have to carry it? Discuss with **your** supervisor and co-workers ways to make lifting easier, and then incorporate these safer methods into your daily routine.

Every move you make, on and off the job, depends on your back. So keep your back, and your safety, in mind throughout your day while you sit, stand, lift or carry.

Remember to practice the principles of good body mechanics. And remember to lift twice-but use your headfirst. Handle materials mentally before you handle them physically. Use your HEAD to SAVE your back.

Ladders

This procedure outlines the requirements for the purchase, use and inspection of ladders.

General Requirements

1. Only OSHA approved ladders are allowed on the job.
2. Straight and extension ladders require non-skid feet.
3. Straight and extension ladders and stepladders are to be tied or secured when in use. At least ½" rope, 6 feet in length, should be applied to the top rung for this purpose.
4. Metal ladders should not be used if fiberglass one is available. They are not as safe as a fiberglass one.
5. Portable ladders must be placed on a substantial base, and the area around the top and bottom of the ladder must be kept clean.
6. Ladders will not be used in the horizontal position or used as platforms, walkways or scaffold.
7. Ladders are not to be placed in passageways, doorways, or any location where they may be displaced by work activities around them, unless protected by barricades or guards.
8. Side Rails of ladder must extend **At least 36 inches above** the landing or grab rails will be provided.
9. The use of ladders with broken rungs, broken or split side rails, or rails or other faulty or defective construction is prohibited.
10. Ladder, which have open and hallow rungs and show signs of excessive corrosion and wear, must be replaced.
11. All ladders will be inspected on a regular basis and tagged "unsafe to use" or "do not use" when beyond repair.
12. When climbing the ladder face the ladder and keep hands free for climbing.

13. Don’t stand on the top 3 rungs of a straight ladder without handholds unless you are protected by a safety belt.
14. Immediately remove damaged ladders from use when any unsafe condition noted.
15. Place ladders at approximately a 75-degree angle. Or place the bottom of the ladder 1 foot back for every 4 feet in height.
16. Don’t place planks on the top of stepladders.
17. Don’t stand on the top 2 steps of a stepladder.
18. Don’t paint or coat wooden ladders with dark coatings or colors as this may impair the inspection of the ladder.
19. Painted or coated ladders, which cannot be properly inspected, should be removed from service.
20. Don’t tie ladders together in order to get more height or other support for which ladders were not intended.
21. Do not use metal ladders within 4 feet of exposed live electrical parts.
22. Portable metal ladders should be marked:

Caution- Do Not Use Around

ELECTRICAL EQUIPMENT

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Fall Protection

Standards

Guardrails and Covers

When and where needed?

1. Guardrails are needed wherever the workers could fall 7 1/2 feet or more from scaffolds, runways, ramps, elevated platforms and surfaces. [1621(a)] Exceptions:
    a. Float and ladder jack scaffolds.
    b. Bricklayers' and masons' scaffolds used in accordance with Sections 1641(e) & 1644 (a)(6).
    c. During demolition on the floor or surface being demolished.
2. All stairs and stairwells need railings, toe boards and handrails. [1626(a)] and 1626(b)]
3. All floor, roof and skylight openings shall be guarded by railing and toeboards or be covered securely. The cover capable to support greater than a 200-pound person or the weight of worker(s) and material(s) placed thereon. Covering shall prevent accidental removal or displacement and bear one inch painted or stenciled sign, stating: "Opening-Do Not Remove." Markings of chalk or keel shall not be used. [1632(b)]
4. Ladderway floor openings or platforms need railings. [1632(c)]
5. Pits and trap-door floor openings need railings or covers. [1632(e)]
6. Manhole floor openings shall be guarded by covers or shall be protected by standard railings. [1632(f)]
7. Temporary floor openings shall have standard railings. [1632(g)]
8. Floor holes, into which persons can accidentally walk, shall have either a railing with toeboard on all exposed sides or a cover secured against accidental displacement. [1632(h)]

9. Wall openings with a drop of more than 4 feet and the opening bottom is less than 3 feet above the working surface, shall be guarded as follows:
    a. When the height and placement of an opening in the working surface is such that either a standard or intermediate rail will effectively reduce the danger of falling, one or both shall be provided;
    b. The bottom of a wall opening, less than 4 inches above the working surface, regardless of width, shall be protected by standard toeboard or an enclosing screen of solid construction. [16320)]
10. Extension platforms outside a wall opening. One side may have removable railings in order to facilitate material handling. [1632(k)]
11. When a chute is attached to an opening, this section shall apply, except a toeboard is not required. [1632(i)]
12. Elevator shafts that do not have a cage or are not enclosed shall be guarded on all open sides. [1633(a)]
13. Excavation cross-overs need railings where the excavation is over 6 feet deep and over 30 inches wide. [1541(1)(1),(2)]
14. Dredge discharge pipelines used as walkways need at least a top rail. [1603(a)]
15. Catwalks and platforms need railings over water that is deeper than 4 feet. [1603(b)]
16. Exposed edges of all temporary planked or temporary metal decked floors at the periphery of skeleton steel structure more than 30 feet in height need railings. [1710(e)(3)]
17. Perimeter and openings need railing as soon as falsework is erected. [1717(d)(4)]
18. At demolition sites wall openings need railings- except the ground floor and the floor being demolished. [1735(k)]

Personal Fall Arrest Systems and Positioning Devices

When and where needed?

Where guardrail or safety nets are not practical, workers must use approved personal fall arrest systems, personal fall restraint or positioning devices when:

1. Exposed to a falling distance greater than 7 1/2 feet from the perimeter of a structure or through shaftways and opening; Down sloped roof surfaces steeper than 7:12 or down other slopes steeper than 40 degrees. [1670(a)] Note: For employees working at elevated locations on poles, towers and other structures see Section 2940.6(b) and (c) of the High Voltage Electrical Safety Orders or Section 8615(g) of the Telecommunications Safety Orders.
2. Exposed to a falling distance greater than 15 feet from a truss, purlin, beam or top plate of 4-inch nominal width or similar locations. [1669(a)]
3. Removing the last panel when gathering and stacking temporary floor planks. [1635(b)(11)]
4. Using pneumatic nailers on roofs of 1/3 pitch or steeper. [1704(d)]
5. Working from:
    a. Boatswain's chairs 1662(c)
    b. Float scaffolds 1663(a)(5)
    c. Needle beam scaffolds 1664(a)(12)
    d. Suspended scaffolds 1660(g)
6. Connecting beams with fall distance greater than 30 feet [171O(g)(1)]

7. Other than connecting with fall distance of 15 feet or greater. [171O(g)(2)]
8. Workers engaged in installation and construction of structural wood framing system over 15 feet shall use guardrails, safety net or personal fall protection system or other methods in Article 24. Employees working at the leading edge shall be provided with either fall protection, utilize a fall protection plan or be protected by parapets at least24 inches high. [1716.1(c)(1)]
9. Tight substantial floors to be installed every 2 stories or every 30 feet, whichever is less for steel structures. [171O(e)(4)] Note: Where a planked floor is not practical, safety nets shall be installed when the potential fall distance is more than 30 feet.
10. When gathering and stacking temporary floor planks from the last panel, the assigned workers are required to wear approved personal fall arrest with lines attached to a catenary line or other substantial anchorage. [1710(e)(4)(B)]

Roofing Operations

1. Fall hazards from falling off roofs must be prevented regardless of height. [1509, & 151OJ
2. Worker on roofs of more than 20 feet in height requires the following fall protection devices:
    a. For monolithic roof covering (e.g. built-up roofs) where the slope is 0:12 through 4:12. [1730(b)]
        i. warning lines and headers shall be placed no closer than 5 feet from the roof edge, or catch platforms with guardrails, or
        ii. scaffold platforms, or
        iii. eave barriers, or
        iv. standard railings and toeboards.
    b. For monolithic roof coverings where the slope exceeds 4:12. [1730(c)]
        i. parapets 24 inches or higher, or
        ii. approved personal fall arrest and lines, [1724(f)] or
        iii. catch platforms, [1724(c)] or
        iv. scaffold platforms, [1724(d)] or
        v. eave barriers, [1724(e)] or
        vi. standard railings and toeboards. Article 16

Note: Provisions in 1730(c) do not apply when motorized equipment is used on which the operator rides. The equipment must be designed for use on roofs with slopes exceeding 4:12 with a parapet at least 36 inches high at roof edges, which are perpendicular or nearly so to the direction in which the equipment is moving. [1730(c)]

    c. For Multiple-Unit Roof Coverings (e.g., shingles or tiles) with a slope of 0:12 through 5:12. [1730(e)]
        i. roof jack system, or
        ii. parapet at least 24 inches high, or
        iii. other method that gives equivalent protection.
    d. For Multiple-Unit Roof Coverings with slopes greater than 5:12. [1730(f)]
        i. parapet at least 24 inches high, or
        ii. approved personal fall arrest and lines, [1724(f)] or catch platforms, [1724(c)] or
        iii. scaffold platforms, [1724(d)] or
        iv. eave barriers, [1724(e)] or

v. roof jack systems. [1724(a)] (Safety lines shall be required in conjunction with roof jack systems on roofs steeper than 7:12)

3. Equipment shall not be pulled backwards by an operator on a roof with a slope greater than 4:12. [1730(d)]
4. When pulling felt laying equipment, fall protection is required regardless of height. [1730(b)(1)]

Access and Housekeeping

1. Access requirements to get to and from all platforms and levels. [1629, 1630]
2. Keep walkways [1624], ladders [1629], [1675-1678], and/or stairs [1629] safe and clear at all times.
3. Assure all work areas are free of all tripping hazards. [1513]

Prohibited Types of Scaffolds

Lean-to or jack scaffolds, shore scaffolds, nailed bracket, loose tile, loose blocks, stilts, or other similar unstable objects shall not be used as working platforms, or for the support of such platforms.

Exception: Bricklayer's 'jump boards" no higher than 20 inches above the regular scaffold platform are acceptable for such service when supported by piers of carefully piled bricks or concrete blocks. [16370)1

Safety Nets

Safety nets must be used when the following conditions exist:

1. Approved personal fall protection is required but its use is impractical. [1669(b]
2. At the exterior and interior perimeter of the structure if the elevation is 25 feet or more and the use of approved personal fall protection is impractical. [1671(a)]

Exception: See Section 1710(d), (e) and (f) for flooring requirements and nets for steel erection in tiered buildings and structures.

3. The building structure is not adaptable to temporary floors, scaffolds are not used, and the fall distance exceeds 30 feet. [1710(e)(2)]
4. Connecting beams at the periphery of a building or structure, where the fall distance exceeds 30 feet and the use of approved personal fall protection is impractical. [171O(g)(5)]

California (CAL/OSHA) Fall Protection

T8 CCR includes fall protection standards in various sections of the GISOs, CSOs, TSOs, and ESOs (General Industry Safety Orders, Construction Safety Orders, Tunnel Safety Orders, Electrical Safety Orders). These standards reflect the levels of the fall hazards associated with each activity.

1. The factors affecting the level of hazard include the following:
    a. Fall height
    b. Level of hazard awareness and skill of the employee
    c. Physical work environment (e.g., conditions affecting the stability of the employee on the work surface)
    d. Duration of exposure to the fall hazard.

2. A personal fall protection (PFP) system prevents a worker from falling or- if the worker is falling - stops the fall. PFP systems include guardrails, safety nets, personal fall restraint systems, personal fall arrest systems, and positioning device systems.
    a. Guardrails are required to guard the open sides of all work surfaces that are 7 ½ ft. or higher or workers who must be otherwise protected. The railing must be made from select lumber (Doug fir #1 or better 1500 Psi or equivalent) and must consist of a top rail 42 in. to 45 in. high. 2" x 4" (min.); a 1" x 6" midrail halfway between the top rail and the floor; and support posts at least 2" x 4" at 8 ft. o.c.
    b. A personal fall restraint (PFR) system is used to prevent an employee from falling. It consists of anchorages, connectors, and a body belt or harness. It may include lanyards, lifelines, and rope grabs designed for that purpose.
    c. A personal fall arrest (PFA) system is used to stop an employee during a fall from a working level and to keep him or her from hitting a lower level or structure. The system consists of an anchorage, connectors, and a body harness. It may include a lanyard, a lifeline, a deceleration device, or suitable combinations of these. A PFA system must meet the following requirements:
        i. It must limit the maximum arresting force on an employee to 1,800 lbs.
        ii. It must not allow an employee to free-fall for more than 4ft. or to come into contact with a lower level.
        iii. Systems and Positioning Devices: Paragraph (b)(11)(B) now allows personal fall arrest systems to be rigged so that an employee cannot free fall more than 6 feet.
        iv. Anchorage points must be able to support 5,000 lbs. per employee attached or:
            1. Must be designed, installed, and used as part of a complete PFA system with a safety factor of two; and
            2. Under the supervision of a qualified person.
        v. The PFA system lifeline must meet the following requirements: 1670(b)
            1. It must be able to support 5,000 lbs.
            2. Each employee must be attached to a separate lifeline. 1670(b)(4)
            3. The lower end of the vertical lifeline must extend to within 4ft. from the ground. 1504
            4. A horizontal lifeline system must be designed, installed, and used under the supervision of a qualified person and maintained with a safety factor of at least two. 1670(b)(2)
    d. Safety belts and body belts are to be used only as positioning devices or in PFR systems. A PFP system may be required while an employee uses a safety belt, as specified in certain safety orders. Safety belts must limit the maximum arresting force on an employee to 900 lbs. and the free-fall distance to 2ft.1670(c)
    e. Safety nets may be used in place of all other fall protection systems if the nets are installed properly. 1671
3. A PFP must be used if guardrailing or safety nets are not installed for the following fall distances and work activities:
    a. A fall distance of more than 6ft., when placing or tying rebar in walls, columns, piers, etc. 1712(e)

b. A fall distance of 7 ft. or greater during the following:
    i. Work from the perimeter of a structure, through shaft-ways and openings.1670(a)
    ii. Work anywhere on roofs with slopes greater than 7:12.1670(a)
    iii. Work from thrust-outs or similar locations when the worker's footing is less than 3 in. wide.1669(a)
    iv. Work on suspended staging, floats, catwalks, walkways, or advertising sign platforms.1670(a)
    v. Work from slopes steeper than 40 degrees. 1670(a)
c. A fall distance of 15ft. or greater during the following:
    i. Work from buildings, bridges, structures on construction members, such as trusses, beams, purlins, or plates that are of at least 4" nominal width. 1669(a)
    ii. Ironwork other than connecting.171O(g)(2)
    iii. Work on structural wood framing systems and during framing activities on wood or light gauge steel frame residential/light commercial construction.1716.1(c)(1), 1716.2(e)
d. An eave height of 15ft. or greater, during all roofing operations (see exceptions in 2a above and 6a and 6b below). 1730(b)
e. A fall distance of 30 ft. or greater, when ironworkers are connecting structural beams.171O(g)(1)
f. Any height during work:
    i. On roofs having a pitch of 4:12 or greater, while workers use pneumatic-nailers. 1704(d)
    ii. On roofs, while an operator uses a felt-laying machine or other equipment that requires the operator to walk back-wards (see prohibitions noted in 1730[d]).1730(d)
    iii. From boatswain's chairs. 1662(c)
    iv. From float scaffolds.1663(a)(5)
    v. From needle-beam scaffolds. 1664(a)(12)
    vi. From suspended scaffolds. 1660(g)

4. A fall protection plan (FPP) must be implemented when a fall protection (FP) system is required but cannot be used because the system creates a greater hazard or is impractical. 1671.1 The fall protection plan must.1671.1(a)(1):
    a. Be prepared by a qualified person (QP) who is identified in the plan.
    b. Be developed for a specific site or developed for essentially identical operations.
    c. Be updated by the QP.
    d. Document why a conventional FP system cannot be used.
    e. Identify the competent person to implement and supervise the FPP.
    f. Identify the controlled access zone for each location where a conventional FP system cannot be used.
    g. Identify employees allowed in the CAZ.
    h. Be implemented and supervised by the competent person.
5. The controlled access zone must be established and maintained as follows:.1671.2
    a. A control line or its equivalent must control access to the CAZ and must:

i. Consist of ropes, wires, tapes, or equivalent materials and be supported by stanchions.
ii. Be flagged or marked at not more than 6ft. o.c.
iii. Be rigged not fewer than 39 in. and not more than 45 in. from the working surface.
iv. Have a breaking strength of 200 lbs. (min.). See 1671.2 for greater detail.

b. Signs must be posted to keep out unauthorized persons.
c. A safety monitoring system is required & must include a designated safety monitor who is able to:
    i. Monitor the safety of other employees.
    ii. Recognize fall hazards.
    iii. Warn an employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner.
    iv. Stay in sight of and in communication with the employee being monitored.
    v. Have no other responsibilities. 1671.2

CAL/OSHA Fall Protection Trigger Heights

Above 30'	Iron Workers- Connectors. §1710(m)(1)(A)
Above 20'	Roofers - Single-Unit or Multiple-Unit Coverings. §1730(b)(1), (c), (e), and (f)
Above 15'	Roofers - New Production Type Residential Slope 3:12 through 7:12. §1731(c)(1) Iron Workers- Other than connectors. §1710(m)(1)(B) "Framers" §1669(a)
Above 7 ½'	Anyone on unprotected platforms, scaffolds, or edge of structures. §1621(a) and §1670(a)
Above 6'	"Rodbusters" Point-to-Point Travel = 24 feet (no impalement below). §1712(e)
Any Height	Roofers - New Production Type Residential Steeper than 7:1. §1731(c)(2)

Important Note: The above listed fall protection trigger heights are CAL/OSHA requirements. Verify the "authority having jurisdiction" on your respective project as well as more stringent requirements of the "owner".

Wall Openings

NEW AMENDMENT TO TITLE 8, CCR SECTION 1632

There is a new amendment regarding the installation of windows. It states that wall openings shall be guarded as required by section 1632. The guardrail may be removed immediately prior to the installation of the window components if removal of the guardrail is necessary to install the window(s). This new amendment has eliminated a “gotcha” in the old regulations which made every window installation on the second floor and higher a violation. The following is a description of other requirements from Section 1632 concerning the guarding of wall openings:

1. Wall openings, from which there is a drop of more than 4 feet, and the bottom of the opening is less than 3 feet above the working surface, shall be guarded as follows:
    a. When the height and placement of the opening in relation to the working surface is such that either a standard rail or intermediate rail will effectively reduce the danger of falling, one of both shall be provided;
    b. The bottom of a wall opening, which is less than 4 inches above the working surface, regardless of width, shall be protected by a standard toeboard or an enclosing screen of either solid construction or as specified in this section.
2. An extension platform outside a wall opening onto which materials can be hoisted for handling shall have side rails or equivalent guards of standard specifications. One side of an extension platform may have removable railings in order to facilitate handling materials.
3. When a chute is attached to an opening, the provisions of this section shall apply, except that a toeboard is not required.
4. Wall opening protection shall meet the following requirements:
    a. Barriers shall be of such construction and mounting that, when in place at the opening, the barrier is capable of withstanding a load of at least 200 pounds applied in any direction (except upward).
    b. Screens shall be of such construction and mounting that they are capable of withstanding a load of at least 200 pounds applied horizontally at any point on the near side of the screen. They may be of solid construction, of grill work with openings not more than 8 inches long, or slat work with openings not more than 4 inches wide with length unrestricted.

Wood and Light Gage Steel Frame Construction

NEW AMENDMENT TO TITLE 8, CCR SECTION 1716.2

1. The fall protection threshold is now 15 feet for all framing operations. Sections 1669, 1670, and 1671 no longer apply to residential framing or light steel work under 15 feet.
2. The regulation provides a broad definition of residential framing activities.
3. For starter boards, roof sheathing and installation of fascia boards, the 15-foot threshold will be measured from the eave of the roof, not from higher up.
4. Work can be done from outside end trusses and rafters without fall protection if the work (for example, nailing fascia boards) is of short duration with limited exposure; is done by a "qualified" person; and a determination is made that the hazards of rigging safety devices exceeds the hazards of the work.
5. Work on top plates, joists and roof structures over 15 feet can be done without fall protection if the members are on 24 inch centers and braced, or when joists are laid on their sides with 24 inch centers or within 24 inches of the top plate or another support.
6. Window opening guard rails can be removed for the immediate installation of window components. This eliminates a "gotcha" in the old regulations which made every window installation on the second floor, and higher, a violation.

Heat Illness Prevention Program

The project Superintendent is the designated person having the authority and responsibility for implementing the provisions of this program at this worksite. The Heat Illness Prevention Plan (HIPP) is intended to control occurrence of heat related illness. The Plan applies to all outdoor and indoor areas of the job site where employees can be assigned work, and where environmental conditions cannot be mitigated by engineering controls.

Heat Illness Prevention Plan Scope and Application

This program applies to all Dowling Construction outdoor and indoor workplaces.

Definitions

“Acclimatization” means temporary adaptation of the body to work in the heat that occurs gradually when a person is exposed to it. Acclimatization peaks in most people within four to fourteen days of regular work for at least two hours per day in the heat.

“Heat Illness” means a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat stroke.

“Environmental risk factors for heat illness” means working conditions that create the possibility that heat illness could occur, including air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, protective clothing and personal protective equipment worn by employees.

“Personal risk factors for heat illness” means factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

“Shade” means blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is running with air conditioning. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use.

“Temperature” means the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor or indoor temperature in an area where there is no shade. While the temperature measurement must be taken in an area with full sunlight, the bulb or sensor of the thermometer should be shielded while taking the measurement, e.g., with the hand or some other object, from direct contact by sunlight.

Provision of water

Employees shall have access to potable drinking water that is fresh, pure, suitably cool, and provided to employees free of charge. The water shall be located as close as practicable to the areas where employees are working. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per

employee per hour for drinking for the entire shift. Dowling Construction may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water shall be encouraged.

Access to shade

Shade shall be present when the temperature exceeds 80 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, Dowling Construction shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate the number of employees on recovery or rest periods, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shade shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain onsite.

Shade shall be available when the temperature does not exceed 80 degrees Fahrenheit. When the outdoor temperature in the work area does not exceed 80 degrees Fahrenheit employers shall either provide shade or provide timely access to shade upon an employee's request.

Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times. An individual employee who takes a preventative cool-down rest:

- shall be monitored and asked if he or she is experiencing symptoms of heat illness
- shall be encouraged to remain in the shade and
- shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.

If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, Dowling Construction shall provide appropriate first aid or emergency response.

Exceptions to shade requirements:

Where Dowling Construction can demonstrate that it is infeasible or unsafe to have a shade structure, or otherwise to have shade present on a continuous basis, Dowling Construction may utilize alternative procedures for providing access to shade if the alternative procedures provide equivalent protection.

Measures other than shade (e.g., use of misting machines) may be provided in lieu of shade if Dowling Construction can demonstrate that these measures are at least as effective as shade in allowing employees to cool.

High-heat procedures

Dowling Construction shall implement high-heat procedures when the temperature equals or exceeds 95 degrees Fahrenheit outdoors or 82 degrees Fahrenheit indoors. These procedures shall include the following to the extent practicable:

- Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.
- Observing employees for alertness and signs or symptoms of heat illness. Dowling Construction shall ensure effective employee observation/monitoring by implementing one or more of the following:
    - Supervisor or designee observation of 20 or fewer employees, or
    - Mandatory buddy system, or
    - Regular communication with sole employee such as by radio or cellular phone, or
    - Other effective means of observation.
- Designating one or more employees on each worksite as authorized to call for emergency medical services, and allowing other employees to call for emergency services when no designated employee is available.
- Reminding employees throughout the work shift to drink plenty of water.
- Pre-shift meetings 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.
- Adding fans to indoor work areas when practicable to lower indoor temperatures.

Emergency Response Procedures

Dowling Construction shall implement effective emergency response procedures including:

- Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable. If an electronic device will not furnish reliable communication in the work area, Dowling Construction will ensure a means of summoning emergency medical services.
- Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.
    - If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness.
    - If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), Dowling Construction must implement emergency response

procedures.
    - An employee exhibiting signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered onsite first aid and/or being provided with emergency medical services in accordance with Dowling Construction's procedures.
- Contacting emergency medical services and, if necessary, transporting employees to a place where they can be reached by an emergency medical provider.
- Ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

Acclimatization

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.

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.

Training

Employee Training

Effective training in the following topics shall be provided to each supervisory and non-supervisory employee before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness:

- The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment.
- Dowling Construction's procedures for complying with the requirements of this standard, including, but not limited to, Dowling Construction's responsibility to provide water, shade, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation.
- The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties.
- The concept, importance, and methods of acclimatization pursuant to Dowling Construction's procedures
- The different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and/or emergency responses to the different types of heat illness, and in addition, that heat illness may progress quickly from mild symptoms and signs to serious and life-threatening illness.
- The importance to employees of immediately reporting to Dowling Construction, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-

workers.

- Dowling Construction's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary.
- Dowling Construction's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider.
- Dowling Construction's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders. These procedures shall include designating a person to be available to ensure that emergency procedures are invoked when appropriate.

Supervisor Training

Prior to supervising employees performing work that should reasonably be anticipated to result in exposure to the risk of heat illness effective training on the following topics shall be provided to the supervisor:

- The information required to be covered in the employee training session.
- The procedures the supervisor is to follow to implement the program.
- The procedures the supervisor is to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures.
- How to monitor weather reports and how to respond to hot weather advisories.

Symptoms and Responses to Hot Weather Health Emergencies

Even short periods of high temperatures can cause serious health problems. Doing too much on a hot day, spending too much time in the sun or staying too long in an overheated place can cause heat-related illnesses. Know the symptoms of heat disorders and overexposure to the sun and be ready to give first aid treatment.

Heat Stroke

Heat stroke occurs when the body is unable to regulate its temperature. The body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided.

Recognizing Heat Stroke

Warning signs of heat stroke vary but may include the following:

1. An extremely high body temperature (above 103°F, orally)
2. Red, hot, and dry skin (no sweating)
3. Rapid, strong pulse
4. Throbbing headache
5. Dizziness
6. Nausea
7. Confusion
8. Unconsciousness

What to Do

If you see any of these signs, you may be dealing with a life-threatening emergency. Have someone call for immediate medical assistance while you begin cooling the victim. Do the following:

1. Get the victim to a shady area.
2. Cool the victim rapidly using whatever methods you can. For example, immerse the victim in a tub of cool water; place the person in a cool shower; spray the victim with cool water from a garden hose; sponge the person with cool water; or if the humidity is low, wrap the victim in a cool, wet sheet and fan him or her vigorously.
3. Monitor body temperature, and continue cooling efforts until the body temperature drops to 101-102°F.
4. If emergency medical personnel are delayed, call the hospital emergency room for further instructions.
5. If you offer fluids, make sure they are cool; not warm and not extremely cold
6. Get medical assistance as soon as possible.

Sometimes a victim's muscles will begin to twitch uncontrollably as a result of heat stroke. If this happens, keep the victim from injuring himself, but do not place any object in the mouth and do not give fluids. If there is vomiting, make sure the airway remains open by turning the victim on his or her side.

Heat Exhaustion

Heat exhaustion is a milder form of heat-related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. It is the body's response to an excessive loss of the water and salt contained in sweat. Those most prone to heat exhaustion are elderly people, people with high blood pressure, and people working or exercising in a hot environment.

Recognizing Heat Exhaustion

Warning signs of heat exhaustion include the following:

1. Heavy sweating
2. Paleness
3. Muscle cramps
4. Tiredness
5. Weakness
6. Dizziness
7. Headache
8. Nausea or vomiting
9. Fainting

The skin may be cool and moist. The victim's pulse rate will be fast and weak, and breathing will be fast and shallow. If heat exhaustion is untreated, it may progress to heat stroke. Seek medical attention immediately if any of the following occurs:

1. Symptoms are severe
2. The victim has heart problems or high blood pressure

Otherwise, help the victim to cool off, and seek medical attention if symptoms worsen or last longer than 1 hour.

What to Do

Cooling measures that may be effective include the following:

1. Cool, nonalcoholic beverages, as directed by your physician
2. Rest
3. Cool shower, bath, or sponge bath
4. An air-conditioned environment
5. Lightweight clothing

Heat Cramps

Heat cramps usually affect people who sweat a lot during strenuous activity. This sweating depletes the body's salt and moisture. The low salt level in the muscles causes painful cramps. Heat cramps may also be a symptom of heat exhaustion.

Recognizing Heat Cramps

Symptoms: Heat cramps are muscle pains or spasms—usually in the abdomen, arms, or legs—that may occur in association with strenuous activity. If you have heart problems or are on a low-sodium diet, get medical attention for heat cramps.

What to Do

If medical attention is not necessary, take these steps:

1. Stop all activity, and sit quietly in a cool place.
2. Drink clear juice or a sports beverage.
3. Do not return to strenuous activity for a few hours after the cramps subside, because further exertion may lead to heat exhaustion or heat stroke.
4. Seek medical attention for heat cramps if they do not subside in 1 hour.

Sunburn

Sunburn should be avoided because it damages the skin. Although the discomfort is usually minor and healing often occurs in about a week, a more severe sunburn may require medical attention.

Recognizing Sunburn

Symptoms of sunburn are well known: the skin becomes red, painful, and abnormally warm after sun exposure.

What to Do

Consult a doctor if the sunburn affects an infant younger than 1 year of age or if these symptoms are present:

1. Fever
2. Fluid-filled blisters
3. Severe pain

Also, remember these tips when treating sunburn:

1. Avoid repeated sun exposure.
2. Apply cold compresses or immerse the sunburned area in cool water.
3. Apply moisturizing lotion to affected areas. Do not use salve, butter, or ointment.
4. Do not break blisters.

Heat Rash

Heat rash is a skin irritation caused by excessive sweating during hot, humid weather. It can occur at any age but is most common in young children.

Recognizing Heat Rash

Symptoms - Heat rash looks like a red cluster of pimples or small blisters. It is more likely to occur on the neck and upper chest, in the groin, under the breasts, and in elbow creases.

What to Do

The best treatment for heat rash is to provide a cooler, less humid environment.

1. Keep the affected area dry. Dusting powder may be used to increase comfort, but avoid using ointments or creams—they keep the skin warm and moist and may make the condition worse.
2. Treating heat rash is simple and usually does not require medical assistance. Other heat-related problems can be much more severe.

Heat Illness Prevention Guidance for Workers

Awareness of heat illness symptoms can save your life or the life of a co-worker

- If you are coming back to work from an illness or an extended break or you are just starting a job working in the heat, it is important to be aware that you are more vulnerable to heat stress until your body has time to adjust. Let your employer know you are not used to the heat. It takes about 10 – 14 days for your body to adjust.
- Drinking plenty of water frequently is vital to workers exposed to the heat. An individual may produce as much as 2 to 3 gallons of sweat per day. In order to replenish that fluid the worker should drink 3 to 4 cups of water every hour starting at the beginning of your shift.
- Taking your breaks in a cool shaded area and allowing time for recovery from the heat during the day are effective ways to avoid heat illness.
- Avoid or limit the use of alcohol and caffeine during periods of extreme heat. Both dehydrate the body. Certain medications can also accelerate heat illness.
- If you or a co-worker start to feel symptoms such as nausea, dizziness, weakness or unusual fatigue, let your supervisor know and rest in a cool shaded area. If symptoms persist or worsen seek immediate medical attention.
- Whenever possible, wear clothing that provides protection from the sun but allows airflow to the body. Protect your head and shade your eyes if working outdoors.
- When working in the heat, be sure to pay extra attention to your co-workers and be sure you know how to call for medical attention.
- Be aware of potential radiant heat sources in your work area such as windows, skylights, electric rooms, elevator rooms, equipment rooms, working within 6 feet below non-insulated roof structures or tools that may exhaust heat such as a generator. Take steps to mitigate heat in these conditions such as setting up fans, when practicable to displace heat.

Emergency Procedures

Emergency Medical Services

Provision of Services

Dowling Construction will verify emergency medical services are available for the worksite per CAL/OSHA requirements. All subcontractors on site will follow this emergency medical service plan.

Appropriately Trained Persons

Dowling Construction will have at least one person on site who is trained in CPR and First Aid during times of field work activity. Subcontractor personnel must meet the same one-person minimum requirement and add more trained persons if one trained person is not enough to service their work crews.

First-Aid Kit

Dowling Construction keeps a first aid kit on all job boards, company trucks, and the office. Every subcontractor shall provide at least one first-aid kit in a weatherproof container for their own employees. The contents of the first-aid kit shall be inspected regularly to ensure that the expended items are promptly replaced. The contents of the first-aid kit shall be arranged to be quickly found and remain sanitary. First-aid dressings shall be sterile in individually sealed packages for each item. The first aid contents must meet CAL/OSHA requirements.

Informing Employees of Emergency Procedures

Dowling Construction informs all employees who come onto the site about emergency procedures by giving them a copy of the safety orientation document on their first day. This document specifies the details of emergency contact numbers, exit routes, and emergency procedures in case of injury or illness.

Provision for Obtaining Emergency Medical Services

Dowling Construction will call for emergency services via site telephone when radioed or otherwise notified by a subcontractor. Alternatively, any member of any subcontractor can call the emergency numbers on their own cell phones is needed. The telephone numbers for emergency services are posted in our site office

Emergency Washing Facilities

An emergency wash station will be provided by subcontractors who work with injurious or corrosive materials. The wash station will be located in their office facility at the project.

Emergency Call Systems

The building is below the five stories or 48’ requirement for CAL/OSHA. The site office phone and worker cell phones will be utilized on site.

Notifications

The Project Superintendent will contact the local hospital and/or ambulance services to discuss the project scope of work, materials identified on site, number of employees, etc.

A list of phone numbers for emergency agencies and utilities will be posted on the job board to help facilitate emergency activities in the event of an accident.

In the event of an emergency requiring notification of off-site personnel, the Project Superintendent is responsible for immediately contacting the appropriate agencies. If the Project Superintendent is unavailable, the Field Foreman will perform this function. All personnel on site will be assigned roles and responsibilities to be carried out in cases of emergency. These assignments will be reviewed periodically with the jobsite staff.

The Project Superintendent, or his/her designee, will notify all public agencies requiring this information. CAL/OSHA must be notified of all serious injuries and hospitalizations within 24 hours and fatalities within 8 hours of the time of the accident.

The emergency evacuation signal for this project will be communicated by the Superintendent or other designated person onsite. Cell phones may also be used, as well as verbal warnings, to notify project personnel of the emergency evacuation notice. All project personnel will assemble at the construction entrance of the jobsite. Whenever an employee reports, or becomes aware of evacuation conditions, the employee shall immediately proceed to the assembly point. Foremen for each trade/crew will account for the personnel under their supervision and be prepared to report to the Project Superintendent regarding the presence or absence of any of their personnel. The Project Superintendent shall account for all personnel on site and provide instructions on further actions to be taken, including declaration of "all clear".

Emergency Equipment on Site

Each subcontractor will have one fully trained and equipped CPR/First Aid individual on site when they are performing work on the Project.

The following emergency equipment will be available:

- First aid kits
- Fire extinguishers
- Running water

Training

Dowling Construction personnel will be trained on specific duties regarding the emergency action plan when they first arrive on site.

Emergency Numbers

Ambulance	911
Emergency	911
Fire	911
Poison Control Center	(800) 442-6305
Police	911
Gas Leaks (Dig Alert)	800 – 227 - 2600
Medical Clinic:	Concentra Urgent Care nearest location to jobsite: look up on phone

Hospital / Emergency Medical Source

The Nearest Hospital is:

Kaiser Permanente Clairemont Mesa Medical Offices

7060 Clairemont Mesa Blvd, San Diego, CA 92111

(619) 528-5000

The Primary Care Facility will be:

Concentra HealthCare

7590 Miramar Rd Suite C, San Diego, CA 92126 (858) 549-4255

Further care facilities will be determined in accordance with project specifications.

THE SUPERINTENDENT IS THE INCIDENT COMMANDER FOR ALL EMERGENCY PROCEDURES

Crystalline Silica Exposure Program

Scope

This program applies to all occupational exposures to respirable crystalline silica in construction work, except where employee exposure will remain below 25 micrograms per cubic meter of air (25 µg/m3) as an 8-hour time-weighted average (TWA) under any foreseeable conditions.

Definitions

Action level

Means a concentration of airborne respirable crystalline silica of 25 µg/m3, calculated as an 8-hour TWA.

Competent person

Means an individual who is capable of identifying existing and foreseeable respirable crystalline silica hazards in the workplace and who has authorization to take prompt corrective measures to eliminate or minimize them. The competent person must have the knowledge and ability necessary to fulfill the responsibilities set forth in this program.

Employee exposure

Means the exposure to airborne respirable crystalline silica that would occur if the employee were not using a respirator.

High-efficiency particulate air [HEPA] filter

Means a filter that is at least 99.97 percent efficient in removing monodispersed particles of 0.3 micrometers in diameter.

Objective data

Means information, such as air monitoring data from industry-wide surveys or calculations based on the composition of a substance, demonstrating employee exposure to respirable crystalline silica associated with a particular product or material or a specific process, task, or activity. The data must reflect workplace conditions closely resembling or with a higher exposure potential than the processes, types of material, control methods, work practices, and environmental conditions in Dowling Construction's current operations.

Physician or other licensed health care professional [PLHCP]

Means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide or be delegated the responsibility to provide some or all of the particular health care services required by paragraph (h) of this section.

Respirable crystalline silica

Means quartz, cristobalite, and/or tridymite contained in airborne particles that are determined to be respirable by a sampling device designed to meet the characteristics for respirable-particle size-selective samplers specified in the International Organization for Standardization (ISO) 7708:1995: Air

Quality-Particle Size Fraction Definitions for Health-Related Sampling.

Specialist

Means an American Board Certified Specialist in Pulmonary Disease or an American Board Certified Specialist in Occupational Medicine.

Specified silica exposure control methods

For each employee engaged in a task identified on Table 1, Dowling Construction shall fully and properly implement the engineering controls, work practices, and respiratory protection specified for the task on Table 1, unless Dowling Construction assesses and limits the exposure of the employee to respirable crystalline silica using other acceptable methods in compliance with this procedure.

TABLE 1

Equipment/Task	Engineering and Work Practice Control Methods	Respirator Requirements and Minimum Assigned Protection Factor (APF) for 4 Hours or Less	Respirator Requirements and Minimum Assigned Protection Factor (APF) for More Than 4 Hours
Stationary masonry saws 	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	 (None required)	 (None required)

Equipment/Task	Engineering and Work Practice Control Methods	Respirator Requirements and Minimum Assigned Protection Factor (APF) for 4 Hours or Less	Respirator Requirements and Minimum Assigned Protection Factor (APF) for More Than 4 Hours
Handheld power saws (any blade diameter) 	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions:		
	When used **outdoors:**	 (None required)	 (APF 10 required)
	When used **indoors or in an enclosed area:**	 (APF 10 required)	 (APF 10 required)

Equipment/Task	Engineering and Work Practice Control Methods	Respirator Requirements and Minimum Assigned Protection Factor (APF) for 4 Hours or Less	Respirator Requirements and Minimum Assigned Protection Factor (APF) for More Than 4 Hours
Walk-behind saws 	Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions:		
	When used **outdoors:**	 (None required)	 (None required)
	When used **indoors or in an enclosed area:**	 (APF 10 required)	 (APF 10 required)

Equipment/Task	Engineering and Work Practice Control Methods	Respirator Requirements and Minimum Assigned Protection Factor (APF) for <u>4 Hours or Less</u>	Respirator Requirements and Minimum Assigned Protection Factor (APF) for <u>More Than 4 Hours</u>
Rig-mounted core saws or drills 	• Use tool equipped with integrated water delivery system that supplies water to cutting surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	 (None required)	 (None required)

Equipment/Task	Engineering and Work Practice Control Methods	Respirator Requirements and Minimum Assigned Protection Factor (APF) for 4 Hours or Less	Respirator Requirements and Minimum Assigned Protection Factor (APF) for More Than 4 Hours
Handheld and stand-mounted drills (including impact and rotary hammer drills) 	• Use drill equipped with commercially available shroud or cowling with dust collection system. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the airflow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • Use a HEPA-filtered vacuum when cleaning holes.	 (None required)	 (None required)

Equipment/Task	Engineering and Work Practice Control Methods	(APF) for 4 Hours or Less	(APF) for More Than 4 Hours
Jackhammers and handheld powered cg tools 	Use tool with water delivery system that supplies a continuous stream or spray of water at the point of impact:		
	When used outdoors	 (None required)	 (APF 10 required)
	When used indoors or in an enclosed area	 (APF 10 required)	 (APF 10 required)
OR (Alternatively) Use tool equipped with commercially available shroud and dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide the airflow recommended by the tool manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism:	When used outdoors	 (None required)	 (APF 10 required)
	When used indoors or in an enclosed area	 (APF 10 required)	 (APF 10 required)

Equipment/Task	Engineering and Work Practice Control Methods	(APF) for 4 Hours or Less	(APF) for More Than 4 Hours
Handheld grinders for uses other than mortar removal 	For tasks performed outdoors only: • Use grinder equipped with integrated water delivery system that continuously feeds water to the grinding surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	 (None required)	 (None required)
OR (Alternatively) Use grinder equipped with commercially available shroud and dust collection system. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. Dust collector must provide 25 cubic feet per minute (cfm) or greater of airflow per inch of wheel diameter and have a filter with 99% or greater efficiency and a cyclonic pre-separator or filter-cleaning mechanism:	When used outdoors	 (None required)	 (None required)
	When used indoors or in an enclosed area	 (None required)	  (APF 10 required)

Equipment/Task	Engineering and Work Practice Control Methods	(APF) for <u>4 Hours or Less</u>	(APF) for <u>More Than 4 Hours</u>
Walk-behind milling machines and floor grinders 	• Use machine equipped with integrated water delivery system that continuously feeds water to the cutting surface. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.	 (None required)	 (None required)
OR (Alternatively) • Use machine equipped with dust collection system recommended by the manufacturer. • Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions. • Dust collector must provide the airflow recommended by the manufacturer, or greater, and have a filter with 99% or greater efficiency and a filter-cleaning mechanism. • When used indoors or in an enclosed area, use a HEPA-filtered vacuum to remove loose dust in between passes.		 (None required)	 (None required)

When implementing the control measures specified in Table 1, Dowling Construction shall:

- For tasks performed indoors or in enclosed areas, provide a means of exhaust as needed to minimize the accumulation of visible airborne dust;
- For tasks performed using wet methods, apply water at flow rates sufficient to minimize release of visible dust;
- For measures implemented that include an enclosed cab or booth, ensure that the enclosed cab or booth:
    - Is maintained as free as practicable from settled dust;
    - Has door seals and closing mechanisms that work properly;
    - Has gaskets and seals that are in good condition and working properly;
    - Is under positive pressure maintained through continuous delivery of fresh air;
    - Has intake air that is filtered through a filter that is 95% efficient in the 0.3-10.0 µm range (e.g., MERV-16 or better); and
    - Has heating and cooling capabilities.

Where an employee performs more than one task on Table 1 during the course of a shift, and the total duration of all tasks combined is more than four hours, the required respiratory protection for each task is the respiratory protection specified for more than four hours per shift. If the total duration of all tasks on Table 1 combined is less than four hours, the required respiratory protection for each task is the respiratory protection specified for less than four hours per shift.

Alternative exposure control methods

For tasks not listed in Table 1, or where Dowling Construction does not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1:

Permissible exposure limit (PEL)

Dowling Construction shall ensure that no employee is exposed to an airborne concentration of respirable crystalline silica in excess of 50 µg/m3, calculated as an 8-hour TWA.

Exposure assessment

Dowling Construction shall assess the exposure of each employee who is or may reasonably be expected to be exposed to respirable crystalline silica at or above the action level in accordance with either the performance option or the scheduled monitoring option of this program.

Performance option

Dowling Construction shall assess the 8-hour TWA exposure for each employee on the basis of any combination of air monitoring data or objective data sufficient to accurately characterize employee exposures to respirable crystalline silica.

Scheduled monitoring option

Dowling Construction shall perform initial monitoring to assess the 8-hour TWA exposure for each employee on the basis of one or more personal breathing zone air samples that reflect the exposures of employees on each shift, for each job classification, in each work area. Where several employees perform the same tasks on the same shift and in the same work area, Dowling Construction may sample

a representative fraction of these employees in order to meet this requirement. In representative sampling, Dowling Construction shall sample the employee(s) who are expected to have the highest exposure to respirable crystalline silica.

If initial monitoring indicates that employee exposures are below the action level, Dowling Construction may discontinue monitoring for those employees whose exposures are represented by such monitoring.

Where the most recent exposure monitoring indicates that employee exposures are at or above the action level but at or below the PEL, Dowling Construction shall repeat such monitoring within six months of the most recent monitoring.

Where the most recent exposure monitoring indicates that employee exposures are above the PEL, Dowling Construction shall repeat such monitoring within three months of the most recent monitoring.

Where the most recent (noninitial) exposure monitoring indicates that employee exposures are below the action level, Dowling Construction shall repeat such monitoring within six months of the most recent monitoring until two consecutive measurements, taken seven or more days apart, are below the action level, at which time Dowling Construction may discontinue monitoring for those employees whose exposures are represented by such monitoring.

Reassessment of exposure

Dowling Construction shall reassess exposures whenever a change in the production, process, control equipment, personnel, or work practices may reasonably be expected to result in new or additional exposures at or above the action level, or when Dowling Construction has any reason to believe that new or additional exposures at or above the action level have occurred.

Methods of sample analysis

Dowling Construction shall ensure that all samples taken to satisfy the monitoring requirements are evaluated by a laboratory that analyzes air samples for respirable crystalline silica in accordance with the procedures in Appendix A to the OSHA Silica Standard.

Employee notification of assessment results

Within five working days after completing an exposure assessment, Dowling Construction shall individually notify each affected employee in writing of the results of that assessment or post the results in an appropriate location accessible to all affected employees.

Whenever an exposure assessment indicates that employee exposure is above the PEL, Dowling Construction shall describe in the written notification the corrective action being taken to reduce employee exposure to or below the PEL.

Observation of monitoring

Where air monitoring is performed to comply with the requirements of this section, Dowling Construction shall provide affected employees or their designated representatives an opportunity to observe any monitoring of employee exposure to respirable crystalline silica.

When observation of monitoring requires entry into an area where the use of protective clothing or equipment is required for any workplace hazard, Dowling Construction shall provide the observer with protective clothing and equipment at no cost and shall ensure that the observer uses such clothing and equipment.

Methods of compliance

Dowling Construction shall use engineering and work practice controls to reduce and maintain employee exposure to respirable crystalline silica to or below the PEL, unless Dowling Construction can demonstrate that such controls are not feasible. Wherever such feasible engineering and work practice controls are not sufficient to reduce employee exposure to or below the PEL, Dowling Construction shall nonetheless use them to reduce employee exposure to the lowest feasible level and shall supplement them with the use of respiratory protection.

Abrasive blasting

Dowling Construction shall comply with other OSHA standards, when applicable, such as 29 CFR 1926.57 (Ventilation), where abrasive blasting is conducted using crystalline silica-containing blasting agents, or where abrasive blasting is conducted on substrates that contain crystalline silica.

Respiratory protection

Where respiratory protection is required by this program, Dowling Construction must provide each employee an appropriate respirator that complies with the requirements of this paragraph and 29 CFR 1910.134. Respiratory protection is required:

- Where specified by Table 1 of this program; or
- For tasks not listed in Table 1, or where Dowling Construction does not fully and properly implement the engineering controls, work practices, and respiratory protection described in Table 1:
  - Where exposures exceed the PEL during periods necessary to install or implement feasible engineering and work practice controls;
  - Where exposures exceed the PEL during tasks, such as certain maintenance and repair tasks, for which engineering and work practice controls are not feasible; and
  - During tasks for which an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce exposures to or below the PEL.

Respiratory protection program

Where respirator use is required by this program, Dowling Construction shall follow its respiratory protection program.

Housekeeping

Dry sweeping or dry brushing is not allowed where such activity could contribute to employee exposure to respirable crystalline silica unless wet sweeping, HEPA-filtered vacuuming or other methods that minimize the likelihood of exposure are not feasible.

Compressed air is not allowed to be used to clean clothing or surfaces where such activity could contribute to employee exposure to respirable crystalline silica unless:

- The compressed air is used in conjunction with a ventilation system that effectively captures the dust cloud created by the compressed air; or
- No alternative method is feasible.

Written exposure control plan

Dowling Construction shall establish and implement a written exposure control plan that contains at least the following elements:

- A description of the tasks in the workplace that involve exposure to respirable crystalline silica;
- A description of the engineering controls, work practices, and respiratory protection used to limit employee exposure to respirable crystalline silica for each task;
- A description of the housekeeping measures used to limit employee exposure to respirable crystalline silica; and
- A description of the procedures used to restrict access to work areas, when necessary, to minimize the number of employees exposed to respirable crystalline silica and their level of exposure, including exposures generated by other employers or sole proprietors.

Dowling Construction shall review and evaluate the effectiveness of the written exposure control plan at least annually and update it as necessary.

Dowling Construction shall make the written exposure control plan readily available for examination and copying, upon request, to each employee covered by this program, their designated representatives and OSHA.

Dowling Construction shall designate a competent person to make frequent and regular inspections of job sites, materials, and equipment to implement the written exposure control plan.

Medical surveillance

Dowling Construction shall make medical surveillance available at no cost to the employee, and at a reasonable time and place, for each employee who will be required under this section to use a respirator for 30 or more days per year.

Dowling Construction shall ensure that all medical examinations and procedures required by this section are performed by a PLHCP.

Initial examination

Dowling Construction shall make available an initial (baseline) medical examination within 30 days after initial assignment, unless the employee has received a medical examination that meets the requirements of this section within the last three years. The examination shall consist of:

- A medical and work history, with emphasis on: Past, present, and anticipated exposure to respirable crystalline silica, dust, and other agents affecting the respiratory system; any history

of respiratory system dysfunction, including signs and symptoms of respiratory disease (e.g., shortness of breath, cough, wheezing); history of tuberculosis; and smoking status and history;
- A physical examination with special emphasis on the respiratory system;
- A chest X-ray (a single posteroanterior radiographic projection or radiograph of the chest at full inspiration recorded on either film (no less than 14 x 17 inches and no more than 16 x 17 inches) or digital radiography systems), interpreted and classified according to the International Labour Office (ILO) International Classification of Radiographs of Pneumoconioses by a NIOSH-certified B Reader;
- A pulmonary function test to include forced vital capacity (FVC) and forced expiratory volume in one second (FEV1) and FEV1/FVC ratio, administered by a spirometry technician with a current certificate from a NIOSH approved spirometry course;
- Testing for latent tuberculosis infection; and
- Any other tests deemed appropriate by the PLHCP.

Periodic examinations

Dowling Construction shall make available medical examinations at least every three years, or more frequently if recommended by the PLHCP.

Information provided to the PLHCP. Dowling Construction shall ensure that the examining PLHCP has a copy of this standard, and shall provide the PLHCP with the following information:

- A description of the employee's former, current, and anticipated duties as they relate to the employee's occupational exposure to respirable crystalline silica;
- The employee's former, current, and anticipated levels of occupational exposure to respirable crystalline silica;
- A description of any personal protective equipment used or to be used by the employee, including when and for how long the employee has used or will use that equipment; and
- Information from records of employment-related medical examinations previously provided to the employee and currently within the control of Dowling Construction.

PLHCP's written medical report for the employee

Dowling Construction shall ensure that the PLHCP explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of each medical examination performed. The written report shall contain:

- A statement indicating the results of the medical examination, including any medical condition(s) that would place the employee at increased risk of material impairment to health from exposure to respirable crystalline silica and any medical conditions that require further evaluation or treatment;
- Any recommended limitations on the employee's use of respirators;
- Any recommended limitations on the employee's exposure to respirable crystalline silica; and;
- A statement that the employee should be examined by a specialist if the chest X-ray provided in accordance with this section is classified as 1/0 or higher by the B Reader, or if referral to a specialist is otherwise deemed appropriate by the PLHCP.
- PLHCP's written medical opinion.

Dowling Construction shall obtain a written medical opinion from the PLHCP within 30 days of the medical examination. The written opinion shall contain only the following:

- The date of the examination;
- A statement that the examination has met the requirements of this section; and
- Any recommended limitations on the employee's use of respirators.

If the employee provides written authorization, the written opinion shall also contain either or both of the following:

- Any recommended limitations on the employee's exposure to respirable crystalline silica;
- A statement that the employee should be examined by a specialist if the chest X-ray provided in accordance with this section is classified as 1/0 or higher by the B Reader, or if referral to a specialist is otherwise deemed appropriate by the PLHCP.
- Dowling Construction shall ensure that each employee receives a copy of the written medical opinion within 30 days of each medical examination performed.

Additional examinations

If the PLHCP's written medical opinion indicates that an employee should be examined by a specialist, Dowling Construction shall make available a medical examination by a specialist within 30 days after receiving the PLHCP's written opinion.

Dowling Construction shall ensure that the examining specialist is provided with all of the information that Dowling Construction is obligated to provide to the PLHCP per OSHA standards.

Dowling Construction shall ensure that the specialist explains to the employee the results of the medical examination and provides each employee with a written medical report within 30 days of the examination.

Dowling Construction shall obtain a written opinion from the specialist within 30 days of the medical examination.

Communication of respirable crystalline silica hazards to employees

Hazard communication

Dowling Construction shall include respirable crystalline silica in the program established to comply with the hazard communication standard (HCS). Dowling Construction shall ensure that each employee has access to labels on containers of crystalline silica and safety data sheets. Dowling Construction shall ensure that at least the following hazards are addressed:

- cancer
- lung effects
- immune system effects, and
- kidney effects

Employee information and training

Dowling Construction shall ensure that each employee covered by this section can demonstrate

knowledge and understanding of at least the following:

- The health hazards associated with exposure to respirable crystalline silica;
- Specific tasks in the workplace that could result in exposure to respirable crystalline silica;
- Specific measures Dowling Construction has implemented to protect employees from exposure to respirable crystalline silica, including engineering controls, work practices, and respirators to be used;
- The contents of this program;
- The identity of the competent person designated by Dowling Construction for this program and
- The purpose and a description of the medical surveillance program

Dowling Construction shall make a copy of this program readily available without cost to each employee covered by this program.

Recordkeeping

Air monitoring data.

Dowling Construction shall make and maintain an accurate record of all exposure measurements taken to assess employee exposure to respirable crystalline silica.

This record shall include at least the following information:

- The date of measurement for each sample taken;
- The task monitored;
- Sampling and analytical methods used;
- Number, duration, and results of samples taken;
- Identity of the laboratory that performed the analysis;
- Type of personal protective equipment, such as respirators, worn by the employees monitored; and
- Name, social security number, and job classification of all employees represented by the monitoring, indicating which employees were actually monitored.

Dowling Construction shall ensure that exposure records are maintained and made available in accordance with OSHA and CAL/OSHA standards.

Objective data

- Dowling Construction shall make and maintain an accurate record of all objective data relied upon to comply with the requirements of this program.
- This record shall include at least the following information:
- The crystalline silica-containing material in question;
- The source of the objective data;
- The testing protocol and results of testing;
- A description of the process, task, or activity on which the objective data were based; and
- Other data relevant to the process, task, activity, material, or exposures on which the objective data were based.

- Dowling Construction shall ensure that objective data are maintained and made available in accordance with 29 CFR 1910.1020.

Medical surveillance

Dowling Construction shall make and maintain an accurate record for each employee covered by medical surveillance.

The record shall include the following information about the employee:

- Name and social security number;
- A copy of the PLHCPs' and specialists' written medical opinions; and
- A copy of the information provided to the PLHCPs and specialists.

Dowling Construction shall ensure that medical records are maintained and made available in accordance with CAL/OSHA requirements.

Dowling Construction Respirable Crystalline Silica (RCS) Exposure Control Plan

Employees may be exposed to respirable crystalline silica while performing:

Concrete cutting, drilling, polishing and grinding operations. Jackhammering or Roto-hammering concrete, mortar block or asphalt. Demolishing and removal of Tile (Ceramic, Porcelain or Granite). Sanding drywall mud.

Engineering Controls to be Used:

Dowling Construction will utilize the required engineering controls per Table 1 in this program. This will either be a wet method or a dust collection method.

Safe Work Practices to be Used:

Workers will follow the work practices required by Table 1 of this program. Workers will not use compressed air to cleanup dust from concrete drilling, grinding and cutting operations. Wet methods or other safe methods such as using bag containment will be used to dispose of collected dusts containing RCS.

Respiratory Protection to be Used:

Respiratory protection will be used in accordance with Table 1 of this program. It is not anticipated that respirators above the APF of 10 will be needed.

Housekeeping Measures to Limit Employee Exposures:

Any dust generated will be wetted before broom sweeping or vacuuming. Slurry will not be allowed to dry to turn back into dust at a later time.

Procedures Used to Restrict Work Access of Other Workers in Nearby Areas:

The areas where respirator use is required under Table 1 of this program will be marked off with danger tape and/or visual signage that warns of not entering the area.

Respiratory Protection Program

Our respirator program administrator is Gayle Johnson

Our administrator's duties are to oversee the development of the respiratory program and, make sure it is carried out at the workplace. The administrator will also evaluate the program regularly to make sure procedures are followed, respirator use is monitored and respirators continue to provide adequate protection when job conditions change.

Selection of Respirators

We have evaluated our respiratory hazards for our most common work activities and found respirators may be needed by employees doing the following duties, tasks or activities:

Employee position or activity: Interior finish workers

Chemicals or products used: concrete, drywall, paint

Respirator type: NIOSH approved 1/2 mask respirators (APF 10)

Medical Evaluations

Every employee of this company who must wear a respirator will be provided with a medical evaluation before they are allowed to use the respirator. Our first step is to give the attached medical questionnaire to those employees. Employees are required to fill out the questionnaire in private and send or give them to Dowling Construction's occupational medical provider. Completed questionnaires are confidential and will be sent directly to medical provider without review by management.

If the medical questionnaire indicates to our medical provider that a further medical exam is required, this will be provided at no cost to our employees by Dowling Construction's occupational medical provider. We will get a recommendation from this medical provider on whether or not the employee is medically able to wear a respirator.

Additional medical evaluations will be done in the following situations:

- our medical provider recommends it,
- our respirator program administrator decides it is needed,
- an employee shows signs of breathing difficulty,
- changes in work conditions that increase employee physical stress (such as high temperatures or greater physical exertion).

Respirator Fit-testing

All employees who wear tight-fitting respirators will be fit-tested before using their respirator or given a new one. Fit-testing will be repeated annually. Fit-testing will also be done when a different respirator facepiece is chosen, when there is a physical change in an employee's face that would affect fit, or when our employees or medical provider notify us that the fit is unacceptable. No beards are allowed on wearers of tight-fitting respirators. We do fit-testing using one or more of the following fit-testing protocols:

- Irritant smoke protocol, Bitrex protocol or Saccharin protocol

Documentation of our fit-testing results is kept at our main office location

Respirators will be checked for proper sealing by the user whenever the respirator is first put on, using the attached seal check procedures:

Respirator storage, cleaning, maintenance and repair

Our non-disposable respirators will be stored in the bags they came with from the manufacturer or another zip-lock style plastic bag. Respirators will be cleaned and sanitized whenever they are visibly dirty or unsanitary. (does not apply to paper dust masks which are disposed of daily). Respirators will be cleaned according to the manufacturer's instructions.

All respirators will be inspected before and after every use and during cleaning. In addition, emergency respirators and self-contained tank-type supplied air respirators in storage will be inspected monthly.

Respirators will be inspected for damage, deterioration or improper functioning and repaired or replaced as needed. Repairs and adjustments are done by workers who are trained in respirator maintenance.

When supplied air respirators are used, any needed repairs or adjustments will be done by the manufacturer or technician trained by the manufacturer.

Respirators used by Dowling Construction are currently only equipped with filters. These filters are to be changed whenever they become too clogged to breathe easily or show signs of damage or deterioration.

Respirator Use

The Program Administrator will monitor the work area in order to be aware of changing conditions where employees are using respirators.

Employees will not be allowed to wear respirators with tight-fitting facepieces if they have facial hair (e.g., stubble, beard, mustache, etc.) absence of normally worn dentures, facial deformities (e.g., scars, deep skin creases, prominent cheekbones), or other facial features that interfere with the facepiece seal or valve function. Jewelry or headgear that projects under the facepiece seal is also not allowed.

If corrective glasses or other personal protective equipment is worn, it will not interfere with the seal of the facepiece to the face.

A seal check will be performed every time a tight-fitting respirator is put on.

The program administrator will make sure that the NIOSH labels and color-coding on respirator filters and cartridges remain readable and intact during use.

Employees will leave the area where respirators are required for any of the following reasons:

- to replace filters or cartridges,
- when they smell or taste a chemical inside the respirator,
- when they notice a change in breathing resistance
- to adjust their respirator,
- to wash their faces or respirator,
- if they become ill,

if they experience dizziness, nausea, weakness, breathing difficulty, coughing, sneezing vomiting, fever or chills.

Voluntary Use of Filtering Facepiece Respirators (Dust Masks)

If employees wish to use respiratory protection on a voluntary basis when they are not being overexposed to airborne contaminants, they may use filtering facepiece style respirators that will be supplied to them by the company. All employees who wish to voluntarily use these respirators must first read the contents of Appendix D in the OSHA Respiratory Protection Standard. No fit testing, medical evaluation, or other requirements of this program will apply to those workers.

Respirator Training

Training is done before employees wear their respirators and annually thereafter as long as they wear respirators. Our supervisors or crew bosses who wear respirators or supervise employees who do, will also be trained on the same schedule.

Additional training will also be done when an employee uses a different type of respirator or workplace conditions affecting respiratory hazards or respirator use have changed.

Training will cover the following topics:

- Why the respirator is necessary,
- The respirator's capabilities and limitations,
- How improper fit, use or maintenance can make the respirator ineffective,
- How to properly inspect, put on, seal check, use, and remove the respirator,
- How to clean, repair and store the respirator or get it done by someone else,
- How to use a respirator in an emergency situation or when it fails,
- Medical symptoms that may limit or prevent respirator use,

Respiratory Program Evaluation

Dowling Construction evaluates our respiratory program for effectiveness by doing the following steps:

1. Checking results of fit-test results and health provider evaluations.

2. Talking with employees who wear respirators about their respirators – how they fit, do they feel they are adequately protecting them, do they notice any difficulties in breathing while wearing them, do they notice any odors while wearing them, etc.

3. Periodically checking employee job duties for changes in chemical exposure.

4. Periodically checking maintenance and storage of respirators.

5. Periodically checking how employees use their respirators.

Recordkeeping

The following records will be kept:

A copy of this completed respirator program

Employees' latest fit-testing results

Employee training records

Written recommendations from our medical provider

The records will be kept at our main office location. Employees will have access to these records.

Information for Employees Using Respirators When Not Required
(OSHA Appendix D Information to Respiratory Protection Standard)

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

EMPLOYEE INFORMATION VERIFICATION:

I have read and understand the contents of this document:

_____

Employee Name

_____

Employee Signature

_____

Date

Sample Respirator Fit Test Record

Name: _____ Initials: _____

Type of qualitative/quantitative fit test used: _____

Name of test operator: _____ Initials: _____

Date: _____

Respirator Mfr./Model/Aproval no. Size Pass/Fail or Fit Factor

Note: "Fit factor" is numerical result of quantitative fit test from instrument reading

1. _____ S M L P F _____
2. _____ S M L P F _____
3. _____ S M L P F _____
4. _____ S M L P F _____

Clean Shaven? Yes___ No___ (Fit-test cannot be done unless clean-shaven)

Medical Evaluation Completed? Yes___ No___

NOTES: _____

_____

_____

_____

This record indicates that you have passed or failed a qualitative or quantitative fit test as shown above for the particular respirator(s) shown. Other types will not be used until fit tested.

Respirator Training Record

_____ Employee Name (printed)

I certify that I have been trained in the use of the following respirator(s):

_____
_____
_____
_____
_____
_____

This training included the inspection procedures, fitting, maintenance and limitations of the above respirator(s). I understand how the respirator operates and provides protection. I further certify that I have heard the explanation of the respirator(s) as described above and I understand the instructions relevant to use, cleaning, disinfecting and the limitations of the respirator(s).

_____

Employee Signature

_____

Instructor Signature

_____

Date

Seal Check Procedures

Table 21
User Seal Check Procedure

Important Information for Employees:

- You need to conduct a seal check each time you put your respirator on before you enter the respirator use area. The purpose of a seal check is to make sure your respirator (which has been previously fit tested by your employer) is properly positioned on your face to prevent leakage during use and to detect functional problems.
- The procedure below has 2 parts; a positive pressure check and a negative pressure check. You must complete both parts each time. It should only take a few seconds to perform, once you learn it.
  - If you can't pass both parts, your respirator is not functioning properly, see your supervisor for further instruction.

Positive Pressure Check:

1. Remove exhalation valve cover, if removable.
2. Cover the exhalation valve completely with the palm of your hand while exhaling gently to inflate the facepiece slightly.
3. The respirator facepiece should remain inflated (indicating a build-up of positive pressure and no outward leakage).
   - If you detect no leakage, replace the exhalation valve cover (if removed), and proceed to conduct the negative pressure check .
   - If you detect evidence of leakage, reposition the respirator (after removing and inspecting it), and try the positive pressure check again.

Negative Pressure Check:

4. Completely cover the inhalation opening(s) on the cartridges or canister with the palm(s) of your hands while inhaling gently to collapse the facepiece slightly.
   - If you can't use the palm(s) of your hands to effectively cover the inhalation openings on cartridges or canisters, you may use:
     - Filter seal(s) (if available)

       or

     - Thin rubber gloves
5. Once the facepiece is collapsed, hold your breath for 10 seconds while keeping the inhalation openings covered.
6. The facepiece should remain slightly collapsed (indicating negative pressure and no inward leakage).
   - If you detect no evidence of leakage, the tightness of the facepiece is considered adequate, the procedure is completed, and you may now use the respirator.
   - If you detect leakage, reposition the respirator (after removing and inspecting it) and repeat both the positive and negative fit checks.

Respirator Cleaning Procedures

Table 20 Respirator Cleaning Procedure	
Step	**Task**
1.	Remove filters, cartridges, canisters, speaking diaphragms, demand and pressure valve assemblies, hoses, or any components recommended by the manufacturer. • Discard or repair any defective parts.
2.	Wash components in warm (43°C [110°F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. • A stiff bristle (not wire) brush may be used to help remove the dirt. • If the detergent or cleaner doesn't contain a disinfecting agent, respirator components should be immersed for 2 minutes in one of the following: - A bleach solution (concentration of 50 parts per million of chlorine). Make this by adding approximately one milliliter of laundry bleach to one liter of water at 43°C (110°F) - A solution of iodine (50 parts per million iodine). Make this in 2 steps: • First, make a tincture of iodine by adding 6-8 grams of solid ammonium iodide and/or potassium iodide to 100 cc of 45% alcohol approximately. • Second, add 0.8 milliliters of the tincture to one liter of water at 43°C (110°F) to get the final solution. - Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer
3.	Rinse components thoroughly in clean, warm (43°C [110°F] maximum), preferably, running water. Note: The importance of thorough rinsing can't be overemphasized. Detergents or disinfectants that dry on facepieces could cause dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts, if not completely removed.
4.	Drain components.
5.	Air-dry components or hand dry components with a clean, lint-free cloth.
6.	Reassemble the facepiece components. • Replace filters, cartridges, and canisters, if necessary (for testing)
7.	Test the respirator to make sure all components work properly.

Glossary of Terms

IIPP	Injury & Illness Prevention Program an employer must establish pursuant to SB 198
OSHA	Occupational Safety & Health Administration, U.S. Department of Labor- since 1970
CFR	Code of Federal Regulations - Part 1926 -the Construction Standards
CAL/OSHA	The California Occupational Safety & Health Act under the jurisdiction of the State of California, Department of Industrial Relations
CCR	Code of California Regulations
SB198	Senate Bill 198, Statutes of 1989, Chapter 1369; Labor Code §6401.7
AB1127	Assembly Bill1127, Statutes of 2000, makes 12 changes to California Labor Code
Standard	Title 8, California Code of Regulations (CCR) General Industry Safety Orders, §3203; Construction Industry Safety Orders §1509
Codes of Safe Practices	A method of briefly describing safety-related work procedures and conditions, which, if followed, minimize hazards associated with the particular type of work
Hazards	As used in this manual, means any occupation-related physical injury or health risk produced by accident, trauma, and exposure.
GISO	Abbreviation for General Industry Safety Orders, which include all of the generally applicable standards for workplace safety and health in Title 8, California Code of Regulations, Chapter 4, Subchapter 7, §3200 et seq
CISO	Abbreviation for Construction Industry Safety Orders, which include all of the generally applicable standards for workplace safety and health in Title 8, California Code of Regulations, Chapter 4, Subchapter 7, §1500 et seq
ESO	Abbreviation for Electrical Safety Orders, which include all of the generally applicable standards for workplace safety and health in Title 8, California Code of Regulations, Subchapter 7, §2299 et seq
OSHA 300 Log	Log and Summary of Occupational Injuries and Illnesses, Title 8, CCR §14301 that must be kept by all employers with 10 or more employees - Summary Log 300A must be posted at all employment locations during February, March, and April for the preceding year
Tailgate Talks	Supervisory employees shall conduct "toolbox" or "tailgate" safety meetings, or equivalent, with their crews at least every 10 working days to emphasize safety
SDS	Safety Data Sheet- required for all hazardous materials used on the jobsite
HAZCOM	Hazard control and communication of all hazardous conditions and materials
PPE	Personal Protective Equipment- apparel and devices to protect employees from exposure to hazardous conditions and/or materials
Multi-Employer Jobsite	On a construction jobsite there are many different trade subcontractors present, all of whom have the authority and responsibility for the safety of their own people. Each are contracted to provide a safe and healthful workplace for their personnel. They are the Controlling, Creating, Exposing, and Correcting employers – each subject to OSHA regs.