



**Waverly  
Construction  
& Management  
Company**

# **SUBCONTRACTOR SAFETY RESPONSIBILITIES**

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**B U I L D I N G   T R U S T**  
on Two Continents  
Since 1993

# Subcontractors Responsibilities

## T a b l e o f C o n t e n t s

### Section 1

First Aid/Drinking Water and Sanitation  
House Keeping  
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Electrical  
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Scaffold Requirements  
Fall Protection  
Trenching & Excavation  
Welding & Cutting  
Motorized Vehicles and Mechanized Equipment  
Steel erection  
Hazard Communication  
Silica

### **First Aid**

Only minor first aid will be administered on all projects, except in the case of an emergency or where loss of life is eminent. Only personnel with a valid certification in first aid will administer treatment. Seriously injured personnel will not be transported from the project except by emergency medical teams such as but not limited to; EMT, ambulance or fire rescue.

An approved first aid kit will be furnished by the company for all projects and contain the required items based on the number of personnel on site.

A person trained in basic first aid will be on each project.

Phone numbers of local emergency teams will be posted on each project or at the meeting place for the job.

### **Drinking Water and Sanitation**

Drinking water will be accessible in sufficient amounts for the size of the crew. Individual drinking will be provided and a container for the disposal of all used cups will be provided. All drinking water containers will be conspicuously labeled "Drinking Water Only". Drinking water container lids will be tightly fitted and equipped with a tap. Water shall not be dipped from the containers. The use of common drinking cups is prohibited. All containers will be cleaned on a regular basis. Non-potable water will be clearly marked that it is not intended for drinking, or washing purposes.

### **Bathroom Facilities/Port-a-Pots**

All toilet facilities will be maintained in a clean and sanitary condition as frequently as needed. There will be enough toilets on site as deemed necessary for the number of employees on the job. Toilets will be of the chemical or flush type and adequate cleaning supplies will be available at all times to meet the employees' needs. All toilets will be ventilated and have lockable doors to ensure privacy. All bathrooms will remain accessible to all employees and will not be locked during working hours. There will be adequate hand washing facilities near by. An adequate number of bathroom facilities will be provided by **Waverly Construction.**

### **Rodent and Vermin Control**

All work places will be maintained as reasonably as possible to prevent rodents and other vermin to enter the job site.

### **Break Areas**

Employees are instructed not to eat or drink in bathroom facilities or any area hazardous materials may be stored. Adequate break rooms or break areas shall be maintained in a clean atmosphere.

### **Housekeeping and Material Storage**

Good housekeeping should be a primary concern of all employees on the job. Housekeeping should be planned at the beginning of the project to allow for trash/waste disposal. All projects should be cleaned at the end of each work day of all trash and debris and placed in dumpsters or trash cans. Clean up should not be left for someone else to take care of unless it is their specific duty. Work areas need to be clean and orderly at all times to eliminate tripping or fall hazards.

Lunch trash shall be disposed of properly to prevent unwanted rodents and insects.

Aisle ways, walkways and stairways shall be kept free of debris to allow safe access. Boards with protruding nails need to be continually removed from the floor area and the nails should be bent over or removed from the boards as soon as possible.

Combustible scrap and debris shall be removed at regular intervals during the course of construction. Safe means shall be provided to allow such removal.

Containers used for trash and other oily, flammable or hazardous wastes, such as caustics, acids, harmful dusts, etc. shall be equipped with covers.

Materials shall be separated as to the type, size and/or length and placed in organized piles that are safe from falling. If the piles are high they shall be stepped back and secured by tying or blocking. Storage shall be arranged to allow safe passage between for employees and equipment. Materials placed in roadways where public access is available shall be well guarded and have warning signs posted.

### **Signs, Barricades and Postings**

Emergency phone numbers of the local fire department, emergency medical transport, hospitals, company physician and police shall be posted on each project. In most areas 911 will be sufficient for this posting.

Every project shall also have:

- Worker's Compensation notice
- Worker's unemployment benefits notice
- Equal Employment Opportunity Poster
- Job Safety and Health Poster per state requirements
- US Department of Labor injury and illness records ( OSHA 300)

### **Personal Protective Equipment**

Personal Protective Equipment (PPE) shall be used based on the hazards of the job function. If you are not sure of the proper PPE you should be using ask your supervisor or foreman. When in doubt error on the side of safety. Necessary PPE shall be provided by the subcontractor.

Hard hats shall be worn at all times when there is a danger of overhead hazards and you could be struck by falling or flying objects. All sub-contractors shall furnish his or her own hard hats for their employees and shall meet the requirements set by the ANSI standards. Hard hats will be provided for visitors to the job site and kept in clean condition.

Eye and face protection will be worn where there is a danger of particles from chipping, grinding, cutting, etc. Safety glasses will have appropriate side shields and will meet the requirements of ANSI 87.1. If an employee wears prescription glasses they shall be made of safety glass and be equipped with side shields or goggles will be furnished.

Special precautions shall be taken for those working with harmful chemicals, vapors or gases. Appropriate protective clothing and respiratory equipment shall be used as necessary.

Gloves shall be worn when handling rough materials that could cause cuts or punctures.

Work boots shall be worn at all times around the job.

All employees are strongly encouraged not to wear jewelry that could be caught by movable or stationary objects. Rings and bracelets can cause serious harm when caught on something and can cut deeply.

Loose clothing should never be worn. Loose clothing can get caught in belts/pulleys and could pull you into various types of machinery. Loose fitting pants may cause a tripping hazard. Shirts should have at least a 1" sleeve and long pants shall be worn at all times. No shorts.

Hearing protection shall be worn during operations that cause high levels of noise such as but not limited to; concrete/masonry cutting, miscellaneous metals cutting and any other types of noise where you need to speak above your normal voice to be heard.

### **Hand and Power Tools**

Electrical tools used on the job, whether furnished by the company or the employee shall be maintained in a safe working condition. Electrical power tools shall be double insulated or be properly grounded. Tools shall be inspected prior to use and in the event repairs are needed, they shall be repaired prior to use or tagged out of service until the repairs can be made. Employees shall be properly trained in the correct operation of the tools provided. Caution will be taken when electrical tools need to be used in damp or wet locations.

All moving parts such as pulleys, belts, chains, etc. shall have guards in place to eliminate pinch points.

### **Gasoline Operated Tools**

Gasoline operated tools and equipment such as saws, generators, mixers etc. shall not be refueled while in operation. Adequate cool down time should be allowed prior to refueling so as not to cause fire. Some gasoline operated tools require oil to be mixed with the fuel so make sure you use the proper fuel for the tool. All tools shall be shut off with a proper turn off switch and not by removing or grounding the spark plug. Proper maintenance and service shall be performed prior to operation. Check the oil level, filters and for fuel leaks.

### **Hand Tools**

It is the responsibility of the subcontractor to maintain their hand tools in proper working order. Splintered handles shall be replaced immediately. Mushroomed heads on chisels shall be ground down regularly. Chisels and other types of tools required to be sharp shall be sharpened or replaced. All hand tools shall be used for their intended purpose. Never use a screw driver as a chisel or a wrench as a hammer.

### **Fire Prevention/Protection**

Access to available fire fighting equipment shall be maintained at all times and shall be conspicuously located.

All fire fighting equipment shall be maintained and inspected periodically. Defective or discharged equipment shall be replaced immediately.

A fire extinguisher, rated not less than 2a, will be provided for every 3000 square feet of building, however travel distance shall not exceed 100' by **Waverly Construction**. A ½" garden hose not to exceed 100' in length and equipped with a nozzle may be used instead of a 2a fire extinguisher provided it is capable of discharging 5 gallons per minute minimum.

In multi story buildings, one 2a fire extinguisher will be provided for every floor and adjacent to each stairway system.

Only approved metal safety cans, (with quantities of 5 gallons or less) or portable tanks shall be used to store flammable or combustible liquids.

Portable storage tanks shall be at least 20' from any building or structure and shall be protected to prevent collision damage. A 12" dike or earth berm shall be erected to contain any potential spills unless the tank is a double walled fuel storage tank. A fire extinguisher rated not less than 20B: C shall be provided at refueling areas not less than 25' and not more than 75'.

Propane bottles shall not be stored inside of building. Bottles shall remain upright and secure at all times. When in use the bottles shall be a minimum of 10' from any heating source.

### **Electrical Safety**

The following basic rules shall be followed while utilizing temporary electric:

1. Only skilled electricians shall be allowed to perform electrical work.
2. All circuits shall be protected by ground fault circuit interrupters unless assured equipment grounding conductor program is used.
3. All extension cords shall be rated heavy duty and must be a three wire cord.
4. All extension cords shall be replaced if they are worn or frayed, the ground pin is missing or strain relief fittings have come loose.
5. All circuits shall be properly grounded.
6. When a circuit is de-energized for maintenance it shall be Locked Out and Tagged Out by the person performing the work. No other personnel shall remove this tag and lock. Only the personnel that locked and tagged out the equipment shall remove these devices.
7. Pinch points of cords and wires shall be eliminated by protection or blocking. When cords are ran through windows or doorways they must be blocked to prevent creating a pinch point which may cause wear and tear on the cord.
8. Wires and cords shall be protected from vehicular traffic.
9. Wire and cords can not be hung by or on conductive materials.
10. All temporary electric shall be kept off floors or the ground and shall be suspended at least 8' off the ground where feasible. If wiring crosses a roadway system or traffic area on the job it must be hung high enough to ensure contact cannot be made.
11. Temporary lighting shall have bulb guards installed to prevent accidental contact with the bulb.
12. Temporary lighting shall be installed to provide adequate lighting in stairways, aisle ways and work areas.
13. Temporary lighting shall not be hung on or by conductive materials.

14. GFCI protected temporary power will be provided until the building goes onto permanent power. At this point the subcontractor will need to utilize portable GFCI protection for the use of tools and extension cords.

### Ladders

Ladders shall be provided wherever there is a break in elevation of 19" or more. When ladders are used for access they shall be tied or blocked to prevent tipping or displacement and they need to extend at least 36" above the landing area.

Areas around the top and bottom of ladders shall be kept clear to allow safe access getting on and off. Extension ladders shall be placed at a pitch of 1' horizontally to 4' vertically. **Example: If a platform is 20' off the ground, the ladder should be placed 5' away from the base of the building or platform.**

1. All ladders shall be equipped with slip resistant feet when used on slippery surfaces such as concrete.
2. Metal or aluminum ladders are not to be used where contact from overhead power lines may occur.
3. Damaged or defective ladders shall be removed from service or tagged "Do Not Use" until repairs can be made or the ladder has been disposed of.
4. Ladders must not be used horizontally as platforms and should only be used for their intended purpose.
5. When ladders are used they should be located where they are not subject to damage from vehicles equipment or prevent employee access at exits. When it is necessary to use a ladder in these situations, warning signs and caution tape or other protective barriers shall be placed around them to prevent someone or something from hitting the ladder.
6. Ladder rungs, cleats and steps shall be parallel, level and uniformly spaced when the ladder is in use.
7. Ladder components shall be surfaced to prevent injury to an employee from punctures or lacerations, and prevent the snagging of clothes.
8. Ladders shall remain free of oils, grease and other slippery substances to prevent slippery conditions.
9. Wooden ladders shall not be covered with opaque covering which could hide defects. Company identification and appropriate warning labels may be placed on one side rail only.
10. Each manufacturer ladder has a specific load rating. These ratings should not be exceeded beyond their maximum intended load capacity. A type II commercial ladder shall be the minimum rated ladder utilized. Household duty ladders shall not be used on the job.
11. Ladders shall not be moved, shifted or extended while occupied.
12. Only non-conductive ladders shall be used where it could come in contact with electrically energized equipment.
13. Inspection of ladders for defects shall be conducted by a competent person on a periodic basis. Employees shall inspect the ladder prior to each use.
14. If a ladder is repaired due to defects, it must be repaired to meet the manufacturers' original design prior to being placed back in service.

15. When climbing up or down a ladder the user must face the ladder and keep at least three point of contact with the ladder.
16. Step ladders shall be fully opened when in use. The locking brackets shall be locked in place to prevent collapse.
17. Ladders shall be used only for the purpose for which they were intended by the manufacturer.
18. Single cleat job made wooden ladders up to 16' in length shall be constructed of 2x4 lumber side rails.
19. The top or top step of a step ladder shall not be used as a step.
20. An employee shall not carry any object or load that could cause the employee to lose balance and fall.
21. Rungs, cleats and steps of portable ladders shall be spaced not less than 10" apart or more than 14" apart, as measured between the centerlines of the rungs, cleats or steps.
22. The subcontractor shall provide a training program for each employee using ladders.

### STAIRWAYS

1. A stairway or ladder shall be provided at all personnel points of access where there is a break in elevation of 19 inches or more, and no ramp, runway, sloped embankment, or personnel hoist is provided.
2. **Waverly Construction** will provide and install all stairway fall protection systems before employees begin the work that necessitates the installation and use of stairways.
3. Riser height and tread depth shall be uniform within each flight of stairs, including any foundation structures used as one or more treads of the stairs. Variations in riser height or tread depth shall not be over 1/4" in any stairway system.
4. Where doors or gates open directly on a stairway, a platform shall be provided, and the swing of the door shall not reduce the effective width of the platform to less than 20".
5. Slippery conditions on stairways shall be eliminated before stairways are used to reach other levels.
6. The height of stair rails shall be as follows: Stair rails installed after March 15, 1991, shall not be less than 36 inches nor more than 37 inches from the upper surface of the stair rail system to the surface of the tread, in line with the face of the riser at the forward edge of the tread.
7. Mid-rails, screens, mesh, intermediate vertical members, or equivalent intermediate structural members, shall be provided between the top rail of the stair rail system and the stairway steps.
8. Handrails and the top rails of stair rail systems shall be capable of withstanding, with failure, a force of at least 200 pounds applied within 2 inches of the top edge, in any downward or outward direction, at any point along the top edge.
9. The height of handrails shall not be more than 37" or less than 30" from the upper surface of the handrail to the surface of the tread, in line with the face of the riser at the forward edge of the tread.
10. Stair rail systems and handrails shall be surfaced as to prevent injury to employees from punctures or lacerations, and to prevent snagging of clothing and the ends shall be constructed as not to constitute a projection hazard.
11. Handrails that will not be a permanent part of the structure being built shall have a minimum clearance of 3 inches between the handrail and walls.



12. Unprotected sides and edges of stairway landings shall be provided with guardrail systems.

### **SAFETY REPORTS**

1. All Reports should be filed by subcontractor name, job name, Superintendent or Foreman name.
2. All reports should be copied and sent to the Superintendent of **Waverly Construction** with a letter stating what corrective action was taken.
3. If you receive a report with safety violations that your employees are exposed to, but you are not responsible to correct, you should copy that report and mail it to the general contractor asking what corrective action will be taken or how you are to work safely to avoid injury to your employees or a citation in the event you are subject to a OSHA type inspection.

### **ACCIDENT INVESTIGATION PROCEDURE**

An accident is an unintentional event that caused or could cause bodily injury or property damage. A "near miss" is an accident and also should be reported. The correct procedure for this report is as follows:

1. The subcontractor, in consultation with the injured or reporting employee, completes the written investigation report immediately. The report is submitted to **Waverly Construction** Superintendent.
2. All injuries or incidents regardless of how small must be reported immediately to the **Waverly Construction** superintendent on the job and treated at once.
3. All forms concerning accidents that are required to be posted on the project shall be posted promptly and in a conspicuous place. OSHA 300 for the months of February through April.

### **INCIDENT REPORT**

*(Fill out for all accidents - regardless if employee goes to doctor or not)*

1. Name of employee: \_\_\_\_\_  
First Middle Last
2. Date of injury: \_\_\_\_\_
3. Time of injury: \_\_\_\_\_
4. Jobsite injury occurred on: \_\_\_\_\_
5. Occupation of injured: \_\_\_\_\_
6. Occupation of injured when hurt: \_\_\_\_\_
7. Machine or tool causing injury: \_\_\_\_\_
8. Was safety appliance provided? \_\_\_\_\_ In use? \_\_\_\_\_
9. Name and address witness: \_\_\_\_\_
10. Describe how accident occurred – What, when, where, why and how? \_\_\_\_\_
11. Name and address of physician: \_\_\_\_\_
12. Name of hospital: \_\_\_\_\_
13. Signature of injured: \_\_\_\_\_
14. Name of Subcontractor: \_\_\_\_\_

## **RESPONSIBILITY OF ALL EMPLOYEES**

EMPLOYEES ARE RESPONSIBLE FOR COMPLYING WITH ALL ASPECTS OF THE SAFETY POLICIES WHILE PERFORMING THEIR DUTIES.

1. It is the responsibility of all employees to work in a manner that will prevent injury and undue exposure to themselves and to their fellow employees.
2. Use all safety devices provided for their protection and to keep same in good condition.
3. Obey all rules and regulations as posted, outlined, discussed or set forth by the Waverly Construction, the Owner or any pertinent government agency.
4. Report any unsafe situation or acts to your Superintendent or Foreman immediately.
5. Consider the hazards before starting any task and discuss with their supervisor the proper methods and equipment required to complete same in safe manner.
6. Set the example and be known as a safe worker.
7. Hard hats and hard rubber-soled construction boots are to be worn at all times.
8. Get help unloading, lifting or moving heavy or awkward loads.
9. Warning, danger signs and barricades are for your own personal safety. They should be obeyed at all times. Any defaced, destroyed or missing safety signs or devices should be reported to a supervisor immediately.

## **GENERAL USE AND CRITERIA REQUIREMENTS FOR ALL SCAFFOLDS** (EXCEPT SUSPENDED SCAFFOLD SEE SUSPENDED SCAFFOLD)

1. Scaffolds and scaffold components shall not be loaded in excess of their maximum intended loads or rated capacities.
2. The use of shore or lean-to scaffolds is prohibited.
3. Scaffolds and scaffold components shall be inspected for visible defects by a competent person before each work shift
4. Scaffolds shall be erected, moved, dismantled, or altered only under the supervision and direction of a competent person qualified in scaffold erection, moving, dismantling or alteration.
5. Employees shall be prohibited from working on scaffolds covered with snow, ice, or other slippery material except as necessary for removal of such materials.
6. Debris shall not be allowed to collect on platforms.
7. Supported scaffolds with a height to base width (including outrigger supports, if used) ratio of more than four to one (4:1) shall be restrained from tipping by guying, tying, bracing, or
8. Supported scaffold poles, legs, posts, frames, and uprights shall bear on base plates, mud sills or other adequate firm foundation.
9. Supported scaffold poles, legs, posts, frames, and uprights shall be plumb and braced to prevent swaying and displacement.
10. Scaffolds shall be designed by a qualified person and shall be constructed and loaded in accordance with that design.

## **GUARDRAILS/FALL PROTECTION**

### FALL PROTECTION - GENERAL REQUIREMENTS:

1. Each employee on a scaffold more than 10 feet above a lower level shall be protected from falling to that lower level.
2. Effective September 2, 1997, the employer shall have a competent person determine the feasibility and safety of providing fall protection for employees erecting or dismantling supported scaffolds. Employers are required to provide fall protection for employees erecting or dismantling supported scaffolds where the installation and use of such protection is feasible and does not create a greater hazard.

## **PERSONAL FALL ARREST SYSTEMS**

Personal fall arrest systems used on scaffolds shall be attached by lanyard to a vertical lifeline, horizontal lifeline, or scaffold structural member.

## **GUARDRAIL SYSTEMS**

1. Guardrail systems shall be installed along all open sides and ends of platforms. Guardrail systems shall be installed before the scaffold is released for use by employees other than erection/dismantling crews.
2. The top edge height of top rails or equivalent member on supported scaffolds manufactured or placed in service after January 1, 2000 shall be installed between 38 inches and 45 inches above the platform surface.
3. When mid-rails are used, they shall be installed at a height approximately midway between the top edge of the guardrail system and the platform surface.
4. Each top rail or equivalent member of a guardrail system shall be capable of withstanding, without failure, a force applied in any downward or horizontal direction at any point along its top edge of at least 200 pounds.

## **ACCESS TO SCAFFOLDING**

### SPECIFIC REQUIREMENTS:

When scaffold platforms are more than 2 feet above or below a point of access, portable ladders, hook-on ladders, attachable ladders, stair towers (scaffold stairways/towers), stairway-type ladders (such as ladder stands), ramps, walkways, integral prefabricated scaffold access, or direct access from another scaffold, structure, personnel hoist, or similar surface shall be used. Cross braces shall not be used as a means of access.

Ramps and walkways:

Ramps and walkways 6 feet or more above lower levels shall have guardrail systems which comply with the fall protection section of this company's policy.

## **PLANKING/PLATFORM**

1. SCAFFOLD PLATFORM CONSTRUCTION (See suspended scaffold for specific requirements)

- a. Each platform on all working levels of scaffolds shall be fully planked or decked between the front uprights and the guardrail supports as follows:
2. Each platform unit (e.g., scaffold plank, fabricated plank, fabricated deck, or fabricated platform) shall be installed so that the space between adjacent units and the space between the platform and the uprights is no more than 1 inch wide, except where the employer can demonstrate that a wider space is necessary (for example, to fit around uprights when side brackets are used to extend the width of the platform).
3. Where the employer makes the demonstration provided for in the above paragraph, the platform shall be planked or decked as fully as possible and the remaining open space between the platform and the uprights shall not exceed 9 1/2 inches. Exception to paragraph 1.a. above: The requirement in paragraph 1.a. above to provide full planking or decking does not apply to platforms used solely as walkways or solely by employees performing scaffold erection or dismantling. In these situations, only the planking that the employer establishes is necessary to provide safe working conditions is required.
4. Except as provided in paragraphs above, each scaffold platform and walkway shall be at least 18 inches wide.
5. Each end of a platform unless cleated or otherwise restrained by hooks or equivalent means, shall extend over the centerline of its support at least 6 inches.
6. Unstable objects shall not be used to support scaffolds or platform units.
7. Unstable objects shall not be used as working platforms.
8. Front-end loaders and similar pieces of equipment shall not be used to support scaffold platforms unless they have been specifically designed by the manufacturer for such use.
9. Capacity - All scaffold and scaffold component shall be capable of supporting, without failure, its own weight and at least 4 times the maximum intended load applied or transmitted to it.

## **FALL PROTECTION**

### **1. GUARDRAIL SYSTEMS – GENERAL**

- (a) All employees shall be protected from falls 6' or more above the walking/working surface by the use of guardrail systems, safety net systems or personal fall arrest systems.
- (b) Installation of all fall protection systems shall be performed prior to the beginning of the work that necessitates the fall protection.

## **PERSONAL FALL ARREST SYSTEMS**

### **1. GENERAL**

- (a) All employees shall be protected from falls 6' or more above the walking/working surface by the use of guardrail systems, safety net systems or personal fall arrest systems.
- (b) Installation of all fall protection systems shall be performed prior to the beginning of the work that necessitates the fall protection.
- (c) Personal fall arrest system means a system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, a body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these. As of January 1, 1998, the use of a body belt for fall arrest is prohibited.

### **WALL OPENINGS**

1. "Opening" means a gap or void 30" or more high and 18" or more wide, in a wall or partition, through which employees can fall 6' or more.
2. "Wall openings" Each employee working on, at, above or near wall openings (including those with chutes attached) where the outside bottom edge of the wall opening is 6' or more above lower levels and the inside bottom edge of the wall opening is less than 39" above the walking/working surface, shall be protected from falling by the use of a guardrail system, a safety net system, or a personal fall arrest system.
3. All walking/working surfaces on which employees work shall be determined by the employer to have strength and structural integrity to safely support employees.

### **RAMPS, RUNWAYS, WALKWAYS**

1. Each employee on ramps, runways, and other walkways shall be protected from falling 6' or more to lower levels by guardrail systems.
2. All walking/working surfaces on which employees work shall be determined by the employer to have strength and structural integrity to safely support employees.

### **DANGEROUS EQUIPMENT**

1. Each employee less than 6' above dangerous equipment shall be protected from falling into or onto the dangerous equipment by guardrail systems or by equipment guards.
2. Each employee 6' or more above dangerous equipment shall be protected from fall hazards by guardrail systems, personal fall arrest systems, or safety net systems.

### **EXCAVATIONS**

1. Each employee at the edge of an excavation 6' or more in depth shall be protected from falling by guardrail systems, fences, or barricades when the excavations are not readily seen because of plant growth or other visual barrier.
2. Each employee at the edge of a well, pit, shaft, and similar excavation 6' or more in depth shall be protected from falling by guardrail systems, fences, barricades, or covers.

### **COVERS/HOLES**

1. Hole means a gap or void 2 inches or more in its least dimension, in a floor, roof, or other walking/working surface.
2. Each employee on a walking/working surface shall be protected from objects falling through holes (including skylights) by covers.
3. Covers located in roadways and vehicular aisles shall be capable of supporting, without failure, at least twice the maximum axle load of the largest vehicle expected to cross over the cover.
4. All covers shall be secured when installed so as to prevent accidental displacement by the wind, equipment, or employees.
5. All covers shall be color coded or they shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard.

6. Each employee on a walking/working surface shall be protected from tripping in or stepping into or through holes (including skylights) by covers. **Note: This provision does not apply to cast iron manhole covers or steel grates used on streets or roadways.**
7. Each employee on walking/working surfaces shall be protected from falling through holes (including skylights more than 6' above lower levels, by personal fall arrests systems, covers, or guardrail systems erected around such holes.

### **FALLING OBJECT PROTECTION**

1. Falling object protection shall comply with the following provisions:
  - a. Toeboards, when used as falling object protection, shall be erected along the edge of the overhead walking/working surface for a distance sufficient to protect employees below.
  - b. Guardrail systems, when used as falling object protection, shall have all openings small enough to prevent passage of potential falling objects.
2. During the performance of overhand bricklaying and related work:
  - a. No materials or equipment except masonry and mortar shall be stored within 4' of the working edge.
  - b. Excess mortar, broken or scattered masonry units, and all other materials and debris shall be kept clear from the work area by removal at regular intervals.
3. During the performance of roofing work:
  - a. Materials and equipment shall not be stored within 6' of a roof edge unless guardrails are erected at the edge.
  - b. Materials which are piled, grouped, or stacked near a roof edge shall be stable and self-supporting.
4. Canopies, when used as falling object protection, shall be strong enough to prevent collapse and to prevent penetration by any objects which may fall onto the canopy.
5. Barricade the area to which objects could fall, prohibit employees from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.

### **HOISTING AREAS**

1. Each employee in a hoist area shall be protected from falling 6' or more.
2. If guardrail systems, [or chain, gate, or guardrail] or portions thereof, are removed to facilitate the hoisting operation (e.g., during landing of materials), and an employee must lean through the access opening or out over the edge of the access opening (to receive or guide equipment and materials, for example), that employee shall be protected from fall hazards by a personal fall arrest system.
3. When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail section shall be placed across the access opening between guardrail sections when hoisting operations are not taking place.
4. During low sloped roofing operations where warning line systems are utilized, points of access, materials handling areas, storage areas, and hoisting areas shall be connected to the work area by an access path formed by two warning lines.
5. All walking/working surfaces on which employees work shall be determined by the employer to have strength and structural integrity to safely support employees.

### **LOW SLOPE ROOFING WORK**

1. Low-slope roof means a roof having a slope less than or equal to 4 in 12 (vertical to horizontal).
2. Roofing work means the hoisting, storage, application, and removal of roofing materials and equipment, including related insulation, sheet metal, and vapor barrier work, but not including the construction of the roof deck.
3. Employees engaged in roofing activities on low-slope roofs, with unprotected sides and edges 6' or more above lower levels shall be protected from falling by guardrail systems, safety net systems, personal fall arrest systems, or a combination of warning line system and guardrail systems, warning line system and safety net system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system.
4. On roofs 50' or less in width, the use of a safety monitoring system alone (i.e., without the warning line system) is permitted.

### **SAFETY MONITORING SYSTEMS**

1. Safety monitoring systems means a safety system in which a competent person, designated by the employer, is appointed as a safety monitor, and is responsible for recognizing and warning employees of fall hazards and complies with the following requirements:
  - a. The safety monitor shall be competent to recognize fall hazards;
  - b. The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;
  - c. The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee being monitored;
  - d. The safety monitor shall be close enough to communicate orally with the employee; and
  - e. The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.
2. Mechanical equipment shall not be used or stored in areas where safety monitoring systems are being used to monitor employees engaged in roofing operations on low-slope roofs.
3. No employee, other than an employee engaged in roofing work (on low-sloped roofs) or an employee covered by a fall protection plan, shall be allowed in an area where an employee is being protected by a safety monitoring system.

### **STEEP ROOF WORK**

1. "Steep roof" means a roof having a slope greater than 4 in 12 (vertical to horizontal).
2. Each employee on a steep roof with unprotected sides and edges with a fall of 6' shall be protected from falling by guardrail systems with toe boards, safety net systems, or personal fall arrest systems.
3. All walking/working surfaces on which employees work shall be determined by the employer to have strength and structural integrity to safely support employees.
4. Controlled Access Zones:
  - a. When used to control access to areas where overhand bricklaying and related work are taking place, the controlled access zone shall be defined by a control line or by any other

means that restricts access

5. Safety monitoring systems
  - a. If controlled access zones are used, a safety monitoring system must be utilized as outlined below:
  - b. The employer shall designate a competent person to monitor the safety of other employees and the employer shall ensure that the safety monitor complies with the following requirements:
  - c. The safety monitor shall be competent to recognize fall hazards;
  - d. The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner;
  - e. The safety monitor shall be on the same walking/working surface and within visual sight distance of the employee being monitored;
  - f. The safety monitor shall be close enough to communicate orally with the employee; and
  - g. The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.

### **PRECAST CONCRETE WORK**

#### **GENERAL:**

1. Each employee engaged in the erection of pre-cast concrete members (including, but not limited to, the erection of wall panels, columns, beams, and floor and roof "tees") and related operations such as grouting of pre-cast concrete members, who is 6' or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest systems.
2. All walking/working surfaces on which employees work shall be determined by the employer to have strength and structural integrity to safely support employees.

#### **ALTERNATIVE FALL PROTECTION PLAN:**

1. Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements listed below:
2. There is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems. Accordingly, the employer has the burden of establishing that it is appropriate to implement a fall protection plan.
3. "Infeasible" means that it is impossible to perform the construction work using a conventional fall protection system (i.e., guardrail system, safety net system, or personal fall arrest system) or that it is technologically impossible to use any one of these systems to provide fall protection.
4. "Fall protection plan." This option is available only to employees engaged in leading edge work, pre-cast concrete erection work, or residential construction work.

### **TRAINING REQUIREMENTS**

1. The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards.
2. The employer shall verify training certification of employees by using a CERTIFICATION OF TRAINING FORM.



**Excavation/Trenching**  
**Competent Persons Duties: Sloping**

Be available when any conditions change to reevaluate excavation.

**ANY EXCAVATION/TRENCH SHALL BE PROTECTED AT ANY DEPTH IF THE COMPETENT PERSON SEES VISUAL SIGNS OF POTENTIAL CAVE-IN.**

**DO'S AND DON'T IN THE EVENT OF A CAVE-IN**

1. Don't jump into the trench to try to get someone out until proper safety procedures have been followed, or you may also become a victim.
2. Don't panic and try to stay as calm as possible. Those trapped need help and if you panic you won't be much help.
3. Don't move anything from the edge of the trench that might help locate the victim.
4. Don't try to use a backhoe to dig the victims out. You don't know where the victim is located and you could seriously injure or cause the victims death.
5. If you decide to jump in the trench to help, without making the trench safe, someone might have to dig you out also.
6. Look to see if someone is trapped. They might not be trapped.
7. Get help at once. One or two people can't do much alone during a rescue.
8. Start looking for shoring equipment such as lumber and tools that can be used in the rescue.
9. Control the area. People rushing in or equipment can cause a secondary cave-in. They can also move or destroy location or mark that can tell the rescue party where to look.
10. Give the rescuers all the information you can. They need to know how many people are trapped, how deep they are and the area they were working in.
11. If the victim is not covered completely, you must try to help without exposing yourself to danger. Use something to move dirt away from his head and chest. Many times this can be done without entering the trench. A shovel or board will do the job.

**WELDING AND CUTTING**

**Gas welding and cutting**

**Transporting, moving and storing compressed gas cylinders:**

1. Valve protection caps shall be in place and secured.
2. When cylinders are hoisted, they shall be secured on a cradle, sling board or pallet. They shall not be hoisted or transported by means of magnets or choker slings.
3. Cylinders shall be moved by tilting and rolling them on their bottom edges. They shall not be intentionally dropped, struck, or permitted to strike each other violently.
4. When cylinders are transported by powered vehicles, they shall be secured in a vertical position.
5. A suitable cylinder truck, chain, or other steadying device shall be used to keep cylinders from being knocked over while in use.
6. When work is finished, when cylinders are empty, or when cylinders are moved at any time, the cylinder valve shall be closed.

7. Compressed gas cylinders shall be secured in an upright position at all times except, if necessary, for short periods of time while cylinders are actually being hoisted or carried.
8. Oxygen cylinders in storage shall be separated from fuel-gas cylinders or combustible materials (especially oil or grease), a minimum distance of 20 feet (6.1m) or by a noncombustible barrier at least 5 feet (2.5m) high having a fire-resistance rating of at least one-half hour.
9. Inside of building, cylinders shall be stored in a well-protected, well-ventilated, dry location, at least 20 feet (5.1m) from highly combustible materials such as oil or excelsior.

#### **Placing cylinders:**

1. Cylinders shall be kept far enough away from the actual welding or cutting operation so that sparks, hot slag, or flame will not reach them. When this is impractical, fire resistant shields shall be provided.
2. Cylinders shall be placed where they cannot become part of an electrical circuit. Electrodes shall not be struck against a cylinder to strike an arch.
3. Fuel gas cylinders shall be placed with valve end up whenever they are in use. They shall not be placed in a location where they would be subject to open flame, hot metal, or other sources of artificial heat.
4. Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces.

#### **Fire prevention:**

1. When practical, objects to be welded, cut or heated shall be moved to a designated safe location.
2. If the object to be welded, cut or heated cannot be moved and if all the fire hazards cannot be removed, positive means shall be taken to confine the heat, sparks, and slag, and to protect the immovable fire hazards from them
3. No welding, cutting, or heating shall be done where the application of flammable paints, or the presence of other flammable compounds, or heavy dust concentrations creates a hazard.
4. Suitable fire extinguishing equipment shall be immediately available in the work area and shall be maintained in the state of readiness for instant use.
5. When the welding, cutting, or heating operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire while the actual welding, cutting, or heating operation is being performed, and for a sufficient period of time after completion of the work.
6. For the elimination of possible fire in enclosed spaces as a result of gas escaping through leaking or improperly closed torch valves, the gas supply to the torch shall be positively shut off at some point outside the enclosed space whenever the torch is not to be used or whenever the torch is left unattended for a substantial period of time, such as during the lunch period. Overnight and at the change of shifts, the torch and hose shall be removed from the confined space. Open end fuel gas and oxygen hoses shall be immediately removed from enclosed spaces when they are disconnected from the torch or other gas-consuming device.
7. Except when the contents are being removed or transferred, drums, pails, and other containers which contain or have contained flammable liquids shall be kept closed. Empty containers shall be removed to a safe area apart from hot work operations or open flames.

#### **Welding, cutting, and heating in confined spaces:**

1. Local exhaust ventilation shall be provided whenever welding, cutting, or heating is performed in a confined space.

2. When sufficient ventilation cannot be obtained without blocking the means of access, employees in the confined space shall be protected by airline respirators.

**Lifelines:**

1. Where a welder must enter a confined space through a manhole or other small opening, means shall be provided for quickly removing him in case of emergency. When safety belts and lifelines are used for this purpose they shall be so attached to the welder's body that his body cannot be jammed in a small exit opening. An attendant with a pre-planned rescue procedure shall be stationed outside to observe the welder at all times and be capable of putting rescue operations into effect.

**MOTOR VEHICLES, MECHANIZED EQUIPMENT**

**General Requirements:**

1. All equipment left unattended at night, adjacent to a highway in normal use, or adjacent to construction areas where work is in progress, shall have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, to identify the location of the equipment.
2. A safety tire rack, cage, or equivalent protection shall be provided and used when inflating, mounting, or dismounting tires installed on split rims, or rims equipped with locking rings or similar devices.
3. Heavy machinery, equipment, or parts thereof, which are suspended or held aloft by use of slings, hoists, or jacks shall be substantially blocked or cribbed to prevent falling or shifting before employees are permitted to work under or between them. Bulldozer and scraper blades, end-loader buckets, dump bodies, and similar equipment, shall be either fully lowered or blocked when being repaired or when not in use. All controls shall be in a neutral position, with the motors stopped and brakes set, unless work being performed requires otherwise.
4. Whenever the equipment is parked, the parking brake shall be set. Equipment parked on inclines shall have the wheels chocked and the parking brake set.
5. The use, care and charging of all batteries shall conform to the requirement subpart K of this part.
6. All cab glass shall be safety glass, or equivalent, that introduces no visible distortion affecting the safe operation of any machine covered by this subpart.

**Motor Vehicles – General Requirements:**

1. All vehicles shall have a service brake system, an emergency brake system, and a parking brake system. These systems may use common components, and shall be maintained in operable condition.
2. Whenever visibility conditions warrant additional light, all vehicles, or combinations of vehicles, in use shall be equipped with at least two headlights and two taillights in operable condition.
3. All vehicles, or combination of vehicles, shall have brake lights in operable condition regardless of light conditions.
4. All vehicles shall be equipped with an adequate audible warning device at the operator's station and in an operable condition.
5. No employer shall use any motor vehicle equipment having an obstructed view to the rear unless: The vehicle has a reverse signal alarm audible above the surrounding noise level or: The vehicle is backed up only when an observer signals that it is safe to do so.
6. All haulage vehicles, whose payload is loaded by means of cranes, power shovels, loaders, or

similar equipment, shall have a cab shield and/or canopy adequate to protect the operator from shifting or falling materials.

7. Tools and material shall be secured to prevent movement when transported in the same compartment with employees.
8. Vehicles used to transport employees shall have seats firmly secured and adequate for the number of employees to be carried.
9. Seat belts and anchorages meeting the requirements of 49 CFR part 571 (Department of Transportation, Federal Motor Vehicle Safety Standards) shall be installed in all motor vehicles.
10. Trucks with dump bodies shall be equipped with positive means of support, permanently attached, and capable of being locked in position to prevent accidental lowering of the body while maintenance of inspection work is being done.
11. Operating levers controlling hoisting or dumping devices on haulage bodies shall be equipped with a latch or other device which will prevent accidental starting or tripping of the mechanism.
12. Trip handles for tailgates of dump trucks shall be so arranged that, in dumping, the operator will be in the clear.
13. All rubber-tired motor vehicle equipment manufactured on or after May 1, 1972, shall be equipped with fenders. All rubber-tired motor vehicle equipment manufactured before May 1, 1972 shall be equipped with fenders not later than May 1, 1973.
14. Mud flaps may be used in lieu of fenders whenever motor vehicle equipment is not designed for fenders.
15. All vehicles in use shall be checked at the beginning of each shift to assure that the following parts, equipment, and accessories are in safe operating condition and free of apparent damage that could cause failure while in use: service brakes, including trailer brake connections; parking system (hand brake); emergency stopping system (brakes); tires; horn; steering mechanism; coupling devices; seat belts; operating controls; and safety devices. All defects shall be corrected before the vehicle is placed in service. These requirements also apply to equipment such as lights, reflectors, windshield wipers, defrosters, fire extinguishers, etc., where such equipment is necessary.

## **STEEL ERECTION**

### **Site layout, site-specific erection plan and construction sequence**

#### **Site-specific erection plan:**

1. Where employers elect, due to conditions specific to the site, to develop alternate means and methods that provide employee protection. A site-specific erection plan shall be developed by a qualified person and be available at the work site. Guidelines for establishing a site-specific erection plan are contained in Appendix A to this subpart.

### **Hoisting and rigging**

#### **Pre-shift visual inspection of cranes:**

1. Cranes being used in steel erection activities shall be visually inspected prior to each shift by a competent person. At a minimum this inspection shall include the following:

#### **Working under loads:**

1. Routes for suspended loads shall be pre-planned to ensure that no employee is required to work directly below a suspended load except for:

- a. Employees engaged in the initial connection of the steel; or
  - b. Employees necessary for the hooking or unhooking of the load.
2. Materials being hoisted shall be rigged to prevent unintentional displacement.
  3. Hooks with self-closing safety latches or their equivalent shall be used to prevent components from slipping out of the hook.
  4. All loads shall be rigged by a qualified rigger.

**Covering roof and floor openings:**

1. Covers for roof and floor openings shall be capable of supporting, without failure, twice the weight of the employees, equipment and materials.
2. All covers shall be secured to prevent accidental displacement.
3. All cover shall be painted with high-visibility paint or shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard.

**Installation of metal decking:**

Metal decking shall be laid tightly and immediately secured upon placement to prevent accidental movement or displacement.

**Falling Object Protection**

**Securing loose items aloft:**

All materials, equipment and tools, which are not in use while aloft, shall be secured against accidental displacement.

**Protection from falling objects other than materials being hoisted:**

The subcontractor shall bar other construction processes below steel erection unless overhead protection for the employees below is provided.

**Fall Protection**

1. Each employee engaged in a steel erection activity who is on a walking/working surface with an unprotected side or edge more than 10 feet above a lower level shall be protected from fall hazards by guardrail systems, safety net systems, personal fall arrest systems, positioning device systems or fall restraint systems.
2. Connectors and employees working in controlled decking zones shall be protected from fall hazards as provided.

**Controlled Decking Zone (CDZ) - A controlled decking zone may be established in that area of the structure over 10 and above a lower level where metal decking is initially being installed and forms the leading edge of a work area.**

**Criteria for fall protection equipment:**

1. Guardrail systems, safety net systems, personal fall arrest systems, positioning device systems and their components shall conform to the criteria in 1926.502.
2. Perimeter safety cables shall meet the criteria for guardrail systems in 1926.502

**Custody of fall protection:**

Fall protection provided by the steel erector shall remain in the area where steel erection activity has been completed to be used by other trades:

**HAZARD COMMUNICATION POLICY**  
**COPY REQUIRED ON ALL JOBSITES**

You Have a Right to Know About Hazardous Substances in Your Workplace

1. The Hazard Communication Law: Gives employees a way to learn about chemical hazards in the workplace and how to work safely with these materials. This law requires employers to inventory and list all hazardous and toxic substances used in the workplace and to collect Material Safety Data Sheets for these substances. Employers must also label or otherwise identify hazardous chemicals. Employees must know how to get information about hazardous substances in their workplace and be trained in the safe use of these materials.
2. CHEMICAL INFORMATION LISTS & MATERIAL SAFETY DATA SHEETS:
3. An extended chemical information list, a copy of our Company Policy and your Material Safety Data Sheets (MSDS) containing all of the chemicals being used on this jobsite is available to you.
4. TRADE OF INFORMATION WITH OTHER TRADES:
  - a) Additionally, on multiple-employer worksites, this company provides the above listed information to the General Contractor, Owner, Developer prior to the beginning of work, to be left in a central location with the same information from all other trades. To obtain the MSDS or chemical information list for chemical of other trades, ask your foreman or superintendent to check with the Waverly Construction.
  - b) If personal protective equipment is needed once you obtain the information, ask your supervisor for the equipment or remove yourself from the dangerous area.
  - c) Any employee from other trades who asks for our chemical information list and or MSDS will be provided a copy as soon as possible.
5. LABELING PROCEDURES, INFORMATION AND TRAINING:
  - a) The products which are used shall be labeled in accordance with the Hazard Communication Law. They contain an Identification of any hazardous Components and an appropriate hazard warning.
  - b) In accordance with Hazard Communication Laws, materials should not be transferred from one container to another. If material must be transferred it will be done by the employee who will be using it. The remainder of the material will be returned to the original container.
  - c) NON-ROUTINE LABELING - Foreman or Superintendent will not proceed with any work that is a non-routine task until a MSDS is available for the item and their immediate supervisor is notified.

## SILICA

Federal OSHA has created a Special Emphasis Plan (SEP) for hazards presented by over exposure to Silica. The state plans are required to follow guidelines, provided by Federal OSHA or rewrite their own guidelines that are equal to or more stringent than Federal requirements. This SEP requires that all employers who have employees who could be exposed to Silica at or above the permissible exposure level, establish a written Silica program whose elements include personal air monitoring, medical surveillance, information and training, employee access to data, respiratory protection, hygiene facilities/change areas, record keeping, housekeeping, regulated areas and a safety and health program. In addition, the applicable requirements from the 29 CFR Part 1926 Regulations may be used as safety and enforcement backup. In all situations, remember, engineering out the exposure is required first and then personal protective equipment as an additional source of exposure prevention. Methods of engineering out the hazard are:

- 1) Wetting
  - 2) Local exhaust
  - 3) Substitution with a less toxic material
  - 4) Job Rotation
-