Fall Protection, Fire Safety, First Aid Kits, & Hand Tools

FALL PROTECTION

Purpose

To provide guidelines to ensure the safety of all employees involved in the duties of elevated work.

References

OSHA 29 CFR 1926.21

OSHA 29 CFR 1926.28

OSHA 29 CFR 1926.500

OSHA 29 CFR 1926.750

Policy

Prior to the start of work where new facilities will be constructed and/or where work will be performed at a client's existing facilities, construction management shall make an initial survey of the types of fall hazards which are expected to be encountered and develop a plan relative to providing the kind and number of safeguards that shall protect against these fall hazards.

DEFINITIONS

This section sets forth the definitions applicable to this procedure.

Fall Protection: Workers six (6) feet above the floor or ground level shall be protected from the possibility of a fall hazard which could result in injury or death.

100% Tie Off: Persons working in areas where the use of safety belts/harnesses with lanyard is required shall be used. In areas where the 100% tie off requirement is not practical, other means of protection shall be used, i.e., scaffold's, catch platforms, nets, etc.

Anchorage: A secure point of attachment for lifelines, lanyards, or deceleration devices, which is capable of withstanding the forces specified in this procedure.

Approved: Means, for the purpose of this section; tested and certified by the manufacturer, or any recognized national testing laboratory, to possess the strength requirements specified in this section.

Body Belt: Type 1 safety belt used in conjunction with lanyard or lifeline for fall restraint only.

Full Body Harness: Configuration of connected straps to distribute a fall arresting force over at least the thighs, shoulders and pelvis, with provisions for attaching a lanyard,

fall. Compliance with anchorage strength requirements specified in the applicable sections of OSHA or state regulations shall constitute approval of the anchorage.

Fall Protection Work Plan: A written document in which the employer identifies all areas on the jobsite where a fall hazard of six (6) feet or greater exists. The plan describes the method or methods of fall protection to be utilized to protect employees, and includes the procedures governing the installation, use, inspection, and removal of the fall protection methods, which are selected by the employer.

Fall-Restraint System: An approved device and any necessary components that function together to restrain an employee in such a manner as to prevent that employee from falling to a lower level. When standard guardrails are selected, compliance with applicable sections governing their construction and use shall constitute approval.

Fall Distance: The actual distance from the worker's support to the level where a fall would stop.

Guardrails: Top rail must be between 39" – 45" above the walking/working surface.

Hardware: Meaning snap hooks, D-rings, buckles, carabineers, adjusters, O-rings, that are used to attach the components of a fall protection system together.

Horizontal Lifeline: A rail, wire rope, or synthetic rope that is installed in a horizontal plane between two anchorage's and used for attachment of a worker's lanyard or lifeline device while moving horizontally; used to control dangerous pendulum-like swing falls.

Lanyard: A flexible line of webbing rope, or cable used to secure a body belt or harness to a lifeline, or an anchorage point usually 2, 4, or 6 feet long.

Leading Edge: Advancing edge of a floor, roof, or form work which changes location as additional floor, roof or form work sections are placed, formed, or constructed. Leading edges not actively under construction are considered to be "unprotected sides and edges" and positive methods of fall arrest or fall restraint shall be required to protect exposed workers.

Lifeline: A vertical line from a fixed anchorage or between two horizontal anchorages', independent of walking or working surfaces, to which a lanyard or device is secured. Lifeline as referred to in this text is one that is part of a fall protection system used as back-up safety for an elevated worker.

Locking Snap Hook: A connecting snap hook that requires two separate forces to open the gate; one to deactivate the gatekeeper and a second to depress and open the gate

which automatically closes when released; used to minimize roll-out or accidental disengagement.

Low-Pitched Roof: A roof having a slope equal to or less than 4 in 12.

Positioning Belt: Single or multiple strap mechanism that can be secured around the worker's body to hold the user in a work position; for example, a lineman's belt, a rebar belt or saddle belt.

Restraint Line: Line from a fixed anchorage or between two anchorages to which an employee is secured in such a way as to prevent the worker from falling to a lower level.

Roll-Out: Unintentional disengagement of a snap hook caused by the gate being depressed under torque or contact while twisting or turning; a particular concern with single-action snap hooks that do not have a locking gatekeeper.

Rope Grab: A fall arrester that is designed to move up or down a lifeline suspended from a fixed overhead or horizontal anchorage point, or lifeline, to which the belt or harness is attached. In the event of a fall, the rope grab locks onto the lifeline rope through compression to arrest the fall. The use of a rope grab device is restricted for fall restraint applications.

Safety Line: See Lifeline.

Safety Monitor System: A system of fall restraint used in conjunction with a warning line system only where a competent person as defined by this part, having no additional duties, monitors the proximity of workers to the fall hazard when working between the warning line and the unprotected sides and edges, including the leading edge of a low-pitched roof or walking/working surface.

Self-Retracting Lifeline: A deceleration device which contains a drum-wound line which may be slowly extracted from or retracted onto the drum under slight tension during normal employee movement and which after onset of a fall automatically locks the drum and arrests the fall.

Shock Absorbing Lanyard: A flexible line of webbing, cable or rope used to secure a body belt or harness to a lifeline or anchorage point that has integral shock absorbers.

Single-Action Snap Hook: A connecting snap hook that requires a single force to open the gate which automatically closes when released.

Snap Hook: A self-closing connecting device with a gatekeeper latch or similar arrangement that will remain closed until manually opened. This includes single action

snap hooks that open when the gatekeeper is depressed and double action snap hooks that require a second action on a gatekeeper before the gate can be opened.

Static Line: See Horizontal Lifeline.

Strength Member: Any component of a fall protection system that could be subject to loading in the event of a fall.

Steep Roof: A roof having a slope greater than 4 in 12

Unprotected Sides and Edges: Any side or edge (except at entrances to points of access) of a floor, roof, ramp, or runway where there is no wall or guardrail system as defined in this section.

Walking/Line System: For the purpose of this section, any area whose dimensions are 45 inches or greater in all directions through which workers pass or conduct work.

Warning Line System: A barrier erected on a walking and working surface or a low pitch roof (4 in 12 or less), to warn employees that they are approaching an unprotected fall hazard(s).

Work Area: That portion of a walking/working surface where job duties are being performed.

FALL PROTECTION WORK PLAN

The Safety & Compliance Manager in partnership with the Site Superintendent shall develop and implement a written fall protection work and rescue plan including each area of the workplace where the employees are assigned and where fall hazards of six (6) feet or more exist. It is recommended that the written plan be upgraded every month. The plan will be posted on the SCS Safety Portal.

The fall protection work plan shall:

- Identify all fall hazards in the work area as the project work progresses.
- Describe the method of fall arrest or fall restraint to be provided.
- Describe the correct procedures for the assembly, maintenance, inspection, and disassembly of the fall protection system to be used.
- Describe the method of providing overhead protection for workers who may be in or pass through the area below the work site.
- Be available on the jobsite for inspection.

Prior to permitting employees into areas where fall hazards exist, the employer shall:

- Ensure that employees are trained and instructed in the items described above and...
- Inspect fall protection devices and systems to ensure compliance with applicable parts of this procedure.

Training of employees is required by this section and shall be documented and available on the jobsite. See Exhibit A.

FALL RESTRAINT, FALL ARREST SYSTEMS

When employees are exposed to a hazard of falling from a location six (6) feet or more in height, project management shall ensure that fall restraint or fall arrest systems are provided, installed, and implemented according to the following requirements:

Fall restraint protection shall consist of:

- Standard guardrails as described in applicable OSHA or state regulations.
- Safety harness attached to securely rigged restraint lines.
- Safety harness shall conform to ANSI standard.
- Temporary guardrails and stair-rails on unprotected leading edges, window and door openings less than 36” above the floor, and unprotected stairways, as described in applicable OSHA or state regulations
- Class III full body harness
- All safety harnesses and lanyard hardware assemblies shall be capable of withstanding a tensile loading of 5,000 pounds without cracking, breaking, or taking a permanent deformation.
- Rope grab devices are prohibited for fall restraint applications unless they are part of a fall restraint system designed specifically for the purpose by the manufacturer and used in strict accordance with the manufacturer’s recommendations and instructions.
- The project management shall ensure component compatibility.
- Components of fall restraint systems shall be inspected prior to each use for mildew, wear, damage, and other deterioration, and defective components shall be removed from service if their function or strength have been adversely affected.
- Anchorage points used for fall restraining shall be capable of supporting 3,000 pounds.
- Restraint protection shall be rigged to allow the movement of employees only as far as the sides and edges of the walking/working surface.
- A warning line system as prescribed in OSHA 1926.500 to protect worker engaged in duties between the forward edge of the warning line and the unprotected sides

and edges, including the leading edge of a low-pitched roof or walking/working surface.
- Warning line system as described in OSHA 1926.500 are prohibited on surfaces exceeding a 4 in 12-pitch, and on any surface whose dimensions are less than 45 inches in all directions.

Fall arrest protection shall consist of:

Full Body Harness

- An approved Class III body harness shall be used.
- Body harness system or components subject to impact loading shall be immediately removed from service and shall not be used again for employee protection.
- All safety lines and lanyards shall be protected against being cut or abraded.
- Body harness system shall be rigged to minimize free fall distance with a maximum free fall distance allowed of 6 feet, and such that the employee will not contact any lower level.
- Hardware shall be drop forged, pressed or formed steel, or made of materials equivalent in strengths.
- Hardware shall have a corrosion-restraint finish and all surfaces and edges shall be smooth to prevent damage to the attached body harness or lanyard.
- When vertical lifelines *(drop lines)* are used, not more than one employee shall be attached to any one lifeline.
- Full body harness systems shall be secured to anchorage's capable of supporting 5,000 pounds per employee except:
- When self-retracting lifelines or other deceleration devices are used which limit free fall to two feet, anchorages shall be capable of withstanding 3,000 pounds.
- Independent lifelines *(drop lines)* shall have a minimum tensile strength of 5,000 pounds, except the self-retracting lifelines and lanyards which automatically limit free fall distance to two feet or less shall have a minimum tensile strength of 3,000 pounds.
- Horizontal lifelines shall have a tensile strength capable of supporting a fall impact load of at least 5,000 pounds per employee using the lifeline applied anywhere along the lifeline.
- Lanyards shall have a minimum tensile strength of 5,000 pounds.
- All components of body harness systems whose strength is no otherwise specified shall be capable of supporting a minimum fall impact load of 5,000 pounds applied at the lanyard point of connection.
- Full body harness systems shall be inspected prior to each use for mildew, wear, damage, and other deterioration, and defective components shall be removed from service if their function or strength has been adversely affected.

- Safety nets shall be installed as close as practicable under the walking/working surface on which employees are working, but in no case more than 10 feet below such level.
- Safety nets shall be installed with sufficient clearance under them to prevent contact with the surface or structures below when subjected to an impact force equal to the drop test specified below.
- Safety nets shall extend outward at least 8 feet from the outermost projection of the work surface.
- Safety nets and their installations shall be capable of absorbing an impact force equal to that produced by the drop test specified below.
- Safety nets and safety net installations shall be drop-tested at the jobsite before used as a fall protection system.

Exception:

The drop-test shall consist of a 400-pound bag of sand 30 plus or minus 2 inches in diameter dropped into the net from the highest walking/working surface on which employees are to be protected.

Exception:

When the employer can demonstrate that a drop-test is not feasible or practicable, the net and net installation shall be certified by a qualified person to be in compliance with the provisions of this section.

- Safety nets shall be inspected weekly for mildew, wear, damage, and other deterioration and defective components shall be removed from service.
- Materials, scrap pieces, and tools which have fallen into the safety net shall be removed as soon as possible from the net and at least before the next work shift.
- The maximum size of each safety net mesh opening shall not exceed 36 square inches nor be longer than six inches on any side measured center-to-center of mesh ropes or webbing. All mesh crossing shall be secured to prevent enlargement of the mesh opening.
- Each safety net (or section of it) shall have a border rope for webbing with a minimum breaking strength of 5,000 pounds.
- Connections between the safety net panels shall be as strong as integral net components and shall be spaced not more than six inches apart.

Temporary Railings:

Temporary railings shall be installed on all leading edges, open stairwells, and unprotected stairways. Railings shall be constructed to withstand forces consistent with OSHA’s guidelines for handrail and stair rail construction.

GUARDING OF LOW-PITCHED ROOF PERIMETERS

General Provisions

During the performance of work on low pitched roof with a ground to eaves height greater than 6 feet, project management shall ensure that employees engaged in such work be protected from falling from all unprotected sides and edges of the roof as follows:

- By the use of a fall restraint or fall arrest system, as defined in applicable OSHA or state regulations.
- By the use of a warning line system erected and maintained as provided elsewhere in this section.
- Mechanical equipment shall be used or stored only in areas where employees are protected by a warning line system, or fall restraint, or fall arrest systems as described in applicable OSHA or state regulations.

Exception:

- The provisions of this section do not apply at points of access such as stairways, ladders, and ramps, or when employees are on the roof only to inspect, investigate, or estimate roof level conditions.

Catch Platforms

- A catch platform shall be installed within 6 vertical feet of the work area.
- The catch platform's width shall equal the distance of the fall but shall be a minimum of 45 inches wide and shall be equipped with standard guardrails on all open sides.

Independent lifelines used in areas where the lifeline may be subjected to cutting or abrasion, shall be a minimum of 7/8 inch wire core manila rope. For all other lifeline applications, a minimum of Â¾ inch manila or equivalent, with a minimum breaking strength of 5,000 pounds shall be used.

Warning Line Systems

- Warning lines shall be erected around all sides of the work area.
- When mechanical equipment is not being used, the warning line shall be erected not less than six feet from the roof edge.
- When mechanical equipment is not being used, the warning line shall be erected not less than six feet from the roof edge which is parallel to the direction of

mechanical equipment operation and not less than 10 feet from the roof edge which is perpendicular to the direction of mechanical operation.

- The warning line shall consist of a rope, wire, or chain and supporting stanchions erected as follows:
    - The rope, wire, or chain shall be flagged at not more than six feet intervals with high-visibility material.
    - The rope, wire, or chain shall be rigged and supported in such a way that its lowest point (including sag) is no less than 34 inches from the roof surface and its highest point is no more than 39 inches from the roof surface.
    - After being erected with the rope, wire or chain attached, stanchions shall be capable of resisting without tipping over, a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the roof surface, perpendicular to the warning line, and in the direction of the roof edge.
    - The rope, wire, or chain shall have a minimum tensile strength of 500 pounds and after being attached to the stanchions, shall be capable of supporting, without breaking the loads applied to the stanchions.
    - The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

- Access paths shall be erected as follows:
- Points of access, materials handling areas and storage areas shall be connected to the work area by a clear access path formed by two warning lines.

When the path to a point of access is not in use, a rope, wire or chain equal in strength and height to the warning line shall be placed across the path at the point where the path intersects the warning line erected around the work area.

ROOF EDGE MATERIALS HANDLING AREAS AND MATERIALS STORAGE

Employees working in a roof edge material handling or materials storage area location on a low-pitched roof with a ground to eaves height greater than 6 feet shall be protected from falling along all unprotected roof sides and edges of the area.

- When guardrails are used at hoisting areas, a minimum of four feet of guardrail shall be erected on each side of the access point through which materials are hoisted.
- A chain or gate shall be placed across the opening between the guardrail sections when hoisting operations are not taking place.
- When guardrails are used at bitumen pipe outlets, a minimum of four feet of guardrail shall be erected on each side of the rope.
- When harnesses and lanyards are used, they shall not be attached to the hoist.

- When fall restraint systems are used, they shall be rigged to allow the movement of employees only as far as the roof edge.
- Materials shall not be stored within six feet of the roof edge unless guardrails are erected at the roof edge.

LEADING EDGE CONTROL ZONE

When performing leading edge work, project management shall ensure that a control zone be established according to the following requirements:

- The control zone shall begin a minimum of 6 feet back from the leading edge to prevent exposure by employees who are not protected by fall restraint or fall arrest systems.
- The control zone shall be separated from other areas of the low-pitched roof or walking/working surface by the erection of a warning line system.
- The warning line system shall consist of wire, rope, or chain supported on stanchions, or a method which provides equivalent protection.
- The spacing of the stanchions and support of the line shall be such that the lowest point of the line (including sag) is not less than 39 inches from the walking/working surface, and its highest point is not more than 45 inches from the working/walking surface.
- Each line shall have a minimum tensile strength of 500 pounds.
- Each line shall be flagged or clearly marked with high visibility materials at intervals not to exceed 6 feet.

FALL PROTECTION

Additional procedures that require the use of fall restraint and/or fall arrest protection for employees are listed below:

- Ladder
- Suspended Scaffold
- Two Points Suspension Scaffold
- Bosun's Chain Scaffold
- Needle Beam Scaffold
- Ladder Jack Scaffold
- Window Jack Scaffold
- Float or Ship Scaffold
- Pump Jack Scaffold
- Boom Supported Elevating Work Platforms
- Vehicle Mounted Elevated and Rotating Work Platforms
- Crane and Derrick Supported Work Platforms
- Open Sided Floors

- Pile Driving
- Vertical Slip Forms
- Placing and Removal of Forms
- Steel Erection Temporary Floor

RECORDS

The Safety Department shall maintain the Fall Protection Plan and keep documentation of training in the use of fall protection on file. All rescue plans will be available on the SCS Safety Portal.

Exhibit A - Sample FP Plan

SAMPLE FALL PROTECTION PLAN

Fire Safety

This chapter covers the fire safety responsibilities of employees and supervisors and sets forth the fire safety rules and procedures.

Policy and planning for fire safety at S.C. Swiderski, LLC considers the special fire hazards for specific operating areas, the protection of high-value property, and the safety of employees. This chapter covers the fire safety responsibilities of employees and supervisors and sets forth the fire safety rules and procedures.

These ends are met by:

- Non-combustible or fire-rated materials and construction practices suitable to the assigned uses of buildings and facilities.
- Alarm systems and automatic extinguishing systems.
- Availability of suitable hand extinguishers and local hose lines for use before firefighters arrive.
- Access to the professional fire department, always staffed and trained in the control of emergencies that could occur at the Company.

  (The Fire Department makes the initial response to all requests for emergency aid received on the emergency telephone number: 9-1-1.)

General Fire Safety

Our local fire department is well acquainted with our facility, its location, and specific hazards. All fire doors and shutters must be maintained in good operating condition. Fire doors and shutters should be unobstructed and protected against obstructions, including their counterweights. Fire door and shutter fusible links must be in place.

All automatic sprinkler water control valves, if any, air and water pressures should be checked routinely. The maintenance of automatic sprinkler systems is assigned to the Maintenace Department. Sprinkler heads should be protected by metal guards if they could possibly be exposed to damage. Proper clearance must be maintained below sprinkler heads.

Portable fire extinguishers are provided in adequate number and type and are located throughout the facility. Fire extinguishers are mounted in readily accessible locations. Fire extinguishers are recharged regularly, and the date of the last inspection noted on their tags. All employees are periodically instructed in the use of extinguishers and fire protection procedures. Notify the Safety & Compliance Manger of any damage to fire protection equipment.

Fire Department

The local Fire Departments are responsible for protecting people and property from fires, explosions, and other hazards through prevention and expeditious control of such events. In addition, the Fire Department provides first-response rescue and transportation services in medical emergencies. The Fire Department's inspection staff is responsible for ensuring company-wide compliance with fire safety and protection requirements and for reviewing all plans and procedures for compliance with these requirements; for inspecting and testing automatic fire protection and alarm systems and ensuring their maintenance and repair; for conducting fire safety and protection inspections; and for providing fire prevention recommendations.

Other responsibilities include training employees in fire safety equipment, practices, and procedures. All these fire protection and response functions are performed in conformance with OSHA regulations, State law, S.C. Swiderski, LLC policies, and nationally recognized standards and guidelines for fire and life safety.

The Fire Chief and the Fire Marshal have the authority to enforce applicable requirements of the Uniform Building Code; the Uniform Fire Code; National Fire Protection Association Codes (including the Life Safety Code), Standards, and Recommended Practices; and the fire protection provisions of OSHA Orders. All employees must immediately report fires,

smoke, or potential fire hazards to the Fire Department (dial 911). All employees must conduct their operations in such a way as to minimize the possibility of fire. This means applying rules such as keeping combustibles separated from ignition sources, being careful about smoking, and avoiding needless accumulations of combustible materials. Supervisors are responsible for keeping their operating areas safe from fire.

The Safety & Compliance Manager and the Fire Department will provide guidance and construction criteria with respect to fire and life safety as well as inspections. The provision and maintenance of fire detection systems and both automatic and manual fire extinguishing equipment is the responsibility of the Maintenace Department. But the supervisor, who best knows the day-to-day nature of his/her operations, is responsible for notifying the Safety & Compliance Manager of operations that change the degree of fire risk and will, therefore, require a change in the planned fire protection provisions.

Supervisor Responsibilities

All managers must ensure that their personnel are properly instructed regarding potential fire hazards involved in their work and around their workplaces, the proper precautions to minimize fires, and the procedures in case of fire. The local Fire Department and the Safety & Compliance Manger also offer formal courses and training materials on fire prevention and response:

- Fire Safety
- Fire-Extinguisher Operation
- Self-Contained Breathing Apparatus

Class A Combustibles

Class A combustibles are common materials such as wood, paper, cloth, rubber, plastics, etc. Fires in any of these fuels can be extinguished with water as well as other agents specified for Class A fires. They are the most common fuels to be found in non-specialized operating areas of the workplace such as offices.

Safe handling of Class A combustibles means:

- Disposing of waste daily.
- Keeping work area clean and free of fuel paths, which can spread a fire, once started.
- Keeping combustibles away from accidental ignition sources such as hot plates, soldering irons, or other heat or spark-producing devices.
- Keeping all rubbish, trash, or other waste in metal or metal-lined receptacles with tight-fitting covers when in or adjacent to buildings. (Exception: wastebaskets of metal or of

other material and design approved for such use, which is emptied each day, need not be covered.)
- Use safe ashtrays for the disposal of smoking materials and make sure that the contents are extinguished and cold to the touch before emptying them into a safe receptacle.
- Planning the use of combustibles in any operation so that excessive amounts need not be stored.
- Storing paper stock in metal cabinets and rags in metal bins with automatically closing lids.
- Making frequent inspections and checks for non-compliance with these rules in order to catch fires in the potential stage.

Class B Combustibles

Class B combustibles are flammable and combustible liquids (including oils, greases, tars, oil-based paints, lacquers) and flammable gases. Flammable aerosols (spray cans) are treated here. Cryogenic and pressurized flammable gases are treated elsewhere in this manual. **The use of water to extinguish Class B fires (by other than trained firefighters) can cause the burning liquid to spread carrying the fire with it.**

Flammable-liquid fires are usually best extinguished by excluding the air around the burning liquid. Generally, this is accomplished by using one of several approved types of fire-extinguishing agents, such as the following:

- Carbon dioxide ABC multipurpose dry chemical Halon 1301 (used in built-in, total-flood systems)
- Halon 1211 (used in portable extinguishers)
- Fires involving flammable gases are usually controlled by eliminating the source of fuel, i.e., closing a valve.

Technically, flammable, and combustible liquids do not burn. However, under appropriate conditions, they generate sufficient quantities of vapors to form ignitable vapor-air mixtures. As a general rule, the lower the flashpoint of a liquid, the greater the fire and explosion hazard. It should be noted that many flammable and combustible liquids also pose health hazards.

NOTE: The flash point of a liquid is the minimum temperature at which it gives off sufficient vapor to form an ignitable mixture with the air near the surface of the liquid or within the vessel used. It is the responsibility of the user to ensure that all Class B combustibles are properly identified, labeled, handled, and stored. If assistance is required, contact the Responsible Safety Office.

Safe handling of Class B combustibles means:

- Use only approved containers, tanks, equipment, and apparatus for the storage, handling, and use of Class B combustibles.

- Make sure that all containers are conspicuously and accurately labeled as to their contents.
- Dispense liquids from tanks, drums, barrels, or similar containers only through approved pumps taking suction from the top or through approved self-closing valves or faucets.
- Store, handle and use Class B combustibles only in approved locations, where vapors cannot reach any source of ignition, including heating equipment, electrical equipment, oven flame, mechanical or electrical sparks, etc.
- Never clean with flammable liquids within a building except in a closed machine approved for that purpose.
- Never store, handle, or use Class B combustibles in or near exits, stairways, or other areas normally used for egress. In rooms or buildings, storing flammable liquids in excess of 10 gallons in approved storage cabinets or special rooms approved for the purpose.
- Know the locations of the nearest portable fire extinguishers rated for Class B fires and how to use them.
- Never smoke, weld, cut, grind, use an open flame or unsafe electrical appliances or equipment, or otherwise create heat that could ignite vapors near any Class B combustibles.

Electrical Fires

There are many combustible materials, including electrical equipment, oxidizing chemicals, fast-reacting or explosive compounds, and flammable metals, which present specialized fire safety and extinguishing problems. Refer to other appropriate chapters of this manual for safe handling advice. If in doubt, request advice from the Safety & Compliance Manager.

Fire Exits

Exit corridors must not be used for storage. The Life Safety Code, NFPA 101, requires that buildings designed for human occupancy must have continuous and unobstructed exits to permit prompt evacuation of the occupants and allow necessary access for responding emergency personnel. The intent of the Code is to keep exits free from obstructions and clear of combustible materials. Attention to housekeeping, therefore, is very important.

"Temporary" storage of furniture, equipment, supplies, or anything else is not permitted in exit ways. Combustibles, including recyclable wastepaper, are not permitted in exit ways. Metal lockers with ends and tops ferried to the walls and that do not interfere with minimum exit width requirements may be installed in exit corridors when approved by the Fire Department and the Safety & Compliance Manager.

The following requirements must be met for storage locker/cabinets:

- Cabinets will be permitted on one side of the corridor only.
- Cabinets must end at least 6 ft from the corridor exit door.
- Cabinet ends must be at least 12 in. from the edge of the doorway on the latch side and from the edge of the door leaf when fully opened into the corridor.

- The cabinets must not be more than 20 in. deep by 37 in. wide by 72-3/4 in. high.
- The cabinets must be all-metal construction with positive latches to prevent spillage of contents in the event of an earthquake.
- All doors must return automatically to the closed position when not held open manually.
- A 45 degree-angle fairing must be provided from the wall to the corridor corner of the cabinet. Fairing must be provided at both ends of the cabinet or bank of cabinets.
- A 45 degree-angle fairing must be provided at the top of the cabinets from the outside corridor edge of the cabinet to the wall.
- All cabinets must be anchored to the wall firmly enough to withstand 0.5g of lateral acceleration (or a lateral load equal to 1/2 the total deadweight of the cabinet and its contents) in the event of an earthquake. Liquids and chemicals are not to be stored in corridor lockers.
- All cabinets must be kept locked, with one key being retained by the Building Manager.
- All cabinets must be labeled with the contents and the name, address, and telephone number of the assigned user.

Any deviation from the above requirements must be approved by the Safety & Compliance Manager.

Portable Heaters

See Page 105.

Welding & Other Permits

As part of the local Fire Department's program to control and reduce fire hazards, a permit system is in effect to cover welding, burning, or other operations with a high fire hazard. Typically, operations that require a permit are:

- Welding (arc, oxyacetylene, or heliarc)
- Soldering (which requires an open flame) Use of a torch (for cutting, bending, forming, etc.)
- Open fires for any purpose

To obtain additional information or to request a permit for these operations, call the Fire Department on its business line, not the emergency 911 number.

Fire Prevention

Purpose

To provide guidelines for fire protection and prevention in shops and on jobsites.

References

OSHA 29 CFR 1926.150; 1926.151; 1926.152; 1926.154

- Do not smoke except in an area designated by the foreman as a "designated smoking area."
- Extinguish cigarettes, pipes, cigars, matches, etc. and dispose of in proper receptacles.
- Wooden (kitchen type) matches are not allowed inside the warehouse. Disposable lighters are not allowed in any area where welding is in progress. Use approved lighters or safety matches only.
- Flammable liquids are identified as such. Know the flammables on your job and how to handle them.
- Store flammables only in approved containers.
- Do not smoke while using flammable liquids.
- Open containers of flammables used to clean splices must be kept closed when not in use.
- All bulk flammables shall be stored in the heated room in the warehouse.
- This area shall be maintained free of obstructions to facilitate access in an emergency.
- All flammable liquid storage areas shall be clearly defined and posted as
- "No Smoking Areas."
- Bulk storage of flammable liquids in yard areas, parking areas or adjacent to the warehouse shall be approved, in advance, by the Safety Coordinator
- All bulk containers, drums, caddie, etc., that contains flammable liquids, shall be provided with a grounding system to prevent accumulation of static electrical charge. Any pumps used shall be of the approved type and have bonding wires between the bulk container and the container being filled.
- Bulk storage of flammable liquids shall not be allowed in the open warehouse.
- Flammable liquids to be stored in foreman's trucks shall not exceed 60 gallons or the quantity needed for that days' work whichever is least.
- Individual containers shall not exceed 5-gallon capacity and shall be marked as to their contents.
- Approved safety cans shall be used for storing and dispensing small quantities of flammable liquids. Such containers shall be stored in approved metal cabinets or at least 25 feet from the warehouse.
- Metal cabinets that contain flammable liquid storage shall be identified as follows:

- Painted in yellow and lettered in red: "**FLAMMABLE**"
- The use of open containers and glass containers is strictly prohibited. Flammable liquids shall not be placed, stored, or transported in such containers.
- Flammable liquid containers (safety cans) shall be maintained in good mechanical order. All integral parts or devices such as seals, closing springs, flash arresters and similar items shall be maintained. Each container shall be inspected prior to use by those using it and defect reported to the foreman.
- All flammable liquid containers shall be plainly marked or identified.
- A supervisor to ensure proper working order shall periodically inspect safety cans. All defective cans shall be removed from service and be disposed of.
- Under no circumstances shall employees be allowed to dismantle, alter or repair safety cans without permission of the Safety & Compliance Manager.
- The application of air pressure or compressed gas to any flammable liquid container for any purpose is strictly prohibited.
- Flammable liquids shall not be used or stored within 20 feet of sources of heat or ignition. Conditions or circumstances may dictate greater distances or complete isolation.
- Defective faucets, spigots or pumps on bulk containers shall be replaced immediately.
- Only approved explosion proof electrical devices and/or connectors shall be used in the presence of flammable liquids or vapors.
- Only approved lights shall be used during cleaning and painting operations inside confined spaces.
- Adequate forced air ventilation to prevent accumulation of vapor shall be introduced by explosion proof equipment, in all confined spaces, surface areas and where large areas are being painted or cleaned with flammable liquids.
- Rags or other combustible materials used to absorb or wipe up flammable liquids shall be disposed of in approved receptacles. If rags are to be washed and reused, keep in covered metal container.
- All employees required to work with flammable liquid shall be thoroughly instructed in the proper use, handling, and storage of them.
- Employees shall not use, handle, or transport flammable liquids unless authorized to do so by supervision.
- The transportation of flammable liquids inside passenger compartment of company owned or operated vehicles is prohibited.
- Non-approved cloth type gloves shall not be worn while using flammable liquids.
- Gloves and aprons of non-absorbent materials shall be worn in any operation where clothing is likely to become wetted with flammables, acids or caustics.
- All containers, valves, faucets, hoses, spout assemblies, transfer pumps and similar items used to store, convey, or transfer flammable materials shall comply with the specifications established by Underwriters Laboratories or Factory Mutual. Check with the Safety & Compliance Manager if you have any questions.

First Aid Kits

First-aid kits and required contents are maintained in a serviceable condition. Unit-type kits have all items in the first-aid kit individually wrapped, sealed, and packaged in comparably sized packages. The commercial or cabinet-type kits do not require all items to be individually wrapped and sealed, but only those which must be kept sterile. Items such as scissors, tweezers, tubes of ointments with caps, or rolls of adhesive tape, need not be individually wrapped, sealed, or disposed of after a single use or application. Individual packaging and sealing shall be required only for those items which must be kept sterile in a first-aid kit.

Where the eyes or body of any person may be exposed to injurious chemicals and/or materials, suitable facilities for quick drenching or flushing of the eyes and body are provided, within the work area, for immediate emergency use. A poster shall be fastened and maintained either on or in the cover of each first-aid kit and at or near all phones plainly stating, the phone numbers of available doctors, hospitals, and ambulance services within the district of the worksite.

All first aid items needed to replenish the available stock in your kits is available by placing a Safety & PPE Requsition Form, available on the SCS Safety Portal. All available first aid items are available via this PDF.

Item # 0614A

Item # 0614A 4 Shelf Class A Industrial with Liner 15" x 22" x 5 1/2"

Item #	Description	Qty	Item #	Description	Qty
2006	First Aid Booklet	1	2198	Sterile Gauze Pads 2" x 2"	25
2009	Triple Antibiotic Ointment	25	2207	Ammonia Inhalant Pads	10
2010	Alcohol Wipes	50	2218	Non-Adherent Pads 2" x 3"	20
2014	Adhesive Tri-Cut Tape	1	2357	Burn Stop 3.5 g	20
2018	Tweezers 3"	1	2404	Antiseptic Wipes	50
2021	Woven Knuckle Bandages	40	2443	Triangular Bandage 40" x 40" x 56"	2
2023	Woven Fingertip Bandages	40	2501	CPR Mouth Barrier	1
2032	Nitrile Gloves	8	2504	Clean Wrap 2"	4
2043	Blood Stopper	1	2505	Antiseptic Hand Gel 4 oz	1
2054	Eye Wash 4 oz	1	2513	First Aid Pump Spray 2 oz	1
2071	Heavy Woven Patch 2" x 3"	25	2518	Burn Relief Pump Spray 2 oz	1
2121	Aspirin	250	2541	ABD Trauma Pad 5" x 9"	2
2123	Antacid	250	2552	Wire Handle Scissors 4 1/2"	1
2126	Ibuprofen	250	2559	Self-Adherent Wrap 3" Latex Free	1
2163	Plastic Strips 1" x 3"	100	2573	Clean Wrap 4"	2
2174	Instant Cold Pack 6" x 9"	1	2783	Woven Strip 1" x 3"	100
2183	Eye Pads With Tape	4	3469	Burn Stop Dressing 4" x 4"	2
2196	Sterile Gauze Pads 3" x 3"	25			

1

First Aid Station

If a fixed establishment employs more than 200 employees at one central location, First-aid stations shall be located as close as practicable to the highest concentration of personnel. First-aid stations shall be well marked and available to personnel during all working hours. One person holding a valid first-aid certificate shall be responsible for the proper use and maintenance of the first-aid station. First-aid stations shall be equipped with a minimum of two first-aid kits, the size of which shall be dependent upon the number of people normally employed at the worksite.

One first-aid kit may be a permanent wall-mounted kit, but in all cases, the station shall be equipped with at least one portable first-aid kit. When required by the circumstances, the station shall be equipped with two wool blankets and a stretcher in addition to first-aid kits. A roster, denoting the telephone numbers and addresses of doctors, hospitals, and ambulance services available to the worksite, shall be posted at each first-aid station.

Info on the OSHA website

Hand Tools

Purpose

To provide guidelines for the safe use of hand tools.

References

OSHA 29 CFR 1926.300; 1926.301

Policy

General Requirements

- Use hand tools only for the purpose for which they were designed.
- Use tools that are in good condition. Worn or broken tools must be repaired or replaced.
- Always use appropriate safety equipment
- Store tools that are not in use. Proper storage includes toolboxes, tool racks, and cabinets.
- Do not leave tools on overhead work areas where they may fall and strike someone below.
- Do not carry a sharp or pointed tool in pockets or belts unless the point or edge is protected with a cover.

HAMMERS AND SLEDGES

- Always wear appropriate eye protection.
- Check behind you before swinging a hammer or sledge.
- Keep your eye on the object to be hit.
- Never use a damaged hammer or sledge.

CHISELS AND PUNCHES

- Always wear appropriate eye protection.
- Keep chisels sharp and in good condition. Repair or replace dull or damaged tools.
- Strike blows squarely; aim chisel/punch away from your body.
- All mushroom heads of chisels and punches shall be ground down to prevent spalling.

WRENCHES

- Never use a “cheater” to increase leverage.
- Whenever possible, pull on the wrench handle rather than push. Adjust your stance to avoid a fall if the wrench slips.
- Repair or discard any worn or damaged wrenches.
- Never use hand sockets on power or impact tools.
- Never use a hammer on a wrench unless it is the striking face type.

PLIERS

- Do not use pliers for cutting hardened wire unless specifically made to do so.
- Never use pliers as a striking tool.
- Use dielectric pliers and shut off power when working with electricity.

SCREWDRIVERS

- Use a screwdriver with the right type of blade, and one that properly fits the size of screw.
- Never use a bent or damaged screwdriver.
- Do not use a screwdriver as a prybar or a chisel.
- Keep handles free of grease and oil.

HAND SAWS

- Always wear appropriate eye protection.
- Keep saw blades sharp; re-sharpen or replace blades that have lost good cutting teeth.
- Lubricate hacksaw blades with light machine oil to prevent heat build-up, which can cause the blade to break.
- Store saws so that there is no chance for someone to fall onto or bump into the blade.

Revision #2
Created 2024-05-24 14:28:26 UTC by Dale Bergman

Updated 2026-05-03 16:22:09 UTC by Marc Bouwer