



SAFETY WALKAROUND CHECKLIST PORTABLE POWER TOOLS

2001

Date Prepared: _____

By: _____

Project Name/No: _____

Location: _____

- **Check the box if the statement is true.**
- **Citations in brackets are from Title 8 of the California Administrative Code.**

NOTES

HAZARD IDENTIFICATION

- The company has a written Injury and Illness Prevention Program (IIPP) that meets all Cal/OSHA requirements. It includes identification of hazards on the site involving portable power tools, as well as regular inspections, accident investigation, and correction of hazardous conditions. [1509]
- All hazards from portable power tools have been identified.

Types of portable power tools used on this site:

- electrical
- pneumatic (air)
- gasoline-powered
- powder-actuated
- hydraulic

SELECTION

- The right tool is used for the job; tools are used within their design limitations. [3556(b)]
- Tools are used only for their intended purpose. [3556(b)]
- Tools can be used without the hand or wrist in an awkward position.
- Tools are well-balanced.
- Tools fit the hand comfortably.
- Tools are not so heavy that they strain the arm and shoulder.
- Tool handles are designed to minimize the grip force needed. (For example, they are not slippery.)
- Handles have soft grips that don't cut into your hand.

INSPECTION

- Tools are inspected daily before use and are kept clean and in good repair. [1699(a)]
- Blades, bits, and other cutting parts are inspected prior to each use, are kept sharp, and are replaced if worn or cracked. [1699(a)]
- Chucks, collars, and other tool holding parts are in good operating condition. [1699(a)]
- Damaged, defective, or worn tools are tagged and removed from service until repaired. [1699(a), 3556(a), and 3556(c)]

WORK PRACTICES

- Workers use only tools with which they have experience, or on which they have been trained. [1510(b)]
- Tools are used only on secure and stable work surfaces. Work is secured with a vise or clamps if necessary.
- Workers using tools stand on a clean, dry surface to prevent slipping. [1513 and 3273(a)]
- Work surfaces are adjusted to minimize reaching, bending, and other awkward postures.
- Tasks are varied so the same tool isn't used for long periods.
- Work areas are well-lighted. [1523]
- Air hoses and electric cables used in elevated locations are securely fastened to a substantial anchorage at or near the working level. They are fastened no more than 15 feet from the working end. [1700]

GUARDING

- Proper guards are in place and not altered.
- All of the following parts are guarded:
 - gears, sprockets, and sprocket chain drives [4075(a)]
 - belt and pulley drives [4070(a)]
 - hazardous revolving or reciprocating parts [4002(a)]
 - hazardous shearing, pinching, and cutting parts [4002(a)]
 - pulleys and drums [3999(b)]
 - exposed shafts [4050(a)]
 - projecting shaft ends [4051(a)]
 - collars, clutches, and couplings [4050(a)]

SWITCHES AND CONTROLS

- Operating controls on all hand-held power tools are located to minimize the possibility of accidental operation. [3557(d)]

- The following hand-held power tools are equipped with a constant pressure switch or control that will shut off the power when the pressure is released:
 - circular saws with blade diameters over 2 inches
 - chain saws (electric, hydraulic, pneumatic, or gasoline)
 - percussion tools

[3557(a)]

- The following hand-held power tools are equipped with a constant pressure switch or control that will shut off the power when the pressure is released, but they **may** have a lock-on control provided it can be turned off by a single motion:
 - drills
 - tappers
 - fastener drivers (e.g. staplers, nailers)
 - grinders with wheel diameters over 2 inches
 - disc sanders with disc diameters over 2 inches
 - belt sanders
 - reciprocating, saber, scroll, and jig saws with blade shanks greater than nominal 1/4 inch

[3557(b)]

PERSONAL PROTECTIVE EQUIPMENT

- If necessary, personal protective equipment (PPE) is provided by the company and worn by workers. The types used are appropriate for the work and give adequate protection. [1514]

- Workers using tools **always** wear safety glasses with side shields or other eye/face protection. Eye and face protection meets the requirements of American National Standards Institute (ANSI) Z 87.1 1989, *American National Standard Practice for Occupational and Educational Eye and Face Protection*. [3382(d)(1)]

- When work involves potential risk of cuts, burns, harmful physical or chemical agents, or radioactive material, workers use appropriate hand protection, including vibration-damping gloves when they use vibrating tools. (Exception: Not required if gloves might become caught in moving parts or machinery). [1520]

- If gloves are used, tools can still be gripped easily.

- Workers exposed to foot injuries from crushing or penetrating actions, hot surfaces, falling objects, or hazardous substances, or who are required to work in abnormally wet locations, use appropriate foot protection such as steel-toed safety shoes and/or boots. (For jackhammers, workers wear a steel covering over the whole foot, not just the toes.) [3385]
- Workers exposed to noise in excess of 90 dB use hearing protection. [1521(g) and 5096(b)]

POWER TOOLS BY CATEGORY

ELECTRICAL TOOLS

- Grounding is assured through either a ground fault circuit interrupter (GFI) system or an assured equipment grounding conductor program. [2405.4(b)]

This site uses:

- GFIs Grounding conductor program Both
 - (*If GFI:*) Approved GFI devices are present on all 120-volt, AC, single-phase, 15- and 20-ampere outlets which are not part of permanent building wiring. [2405.4(c)]
 - (*If grounding conductor program:*) The program is in writing and covers all 120-volt, AC, single-phase cord sets, plugs, and receptacles which are not part of permanent building wiring. The program includes daily visual inspection, regular testing, ID markings placed on the equipment, and recordkeeping. [2405.4(d)]
- All electrical tools are grounded or double insulated. [2395.45]
- Earth returns are not used for grounding. [2405.2(c)]
- Every receptacle is grounded. [2510.7(a)]
- Electrical cords are protected from damage by vehicles, etc. [2340.1]
- Electrical cords are regularly checked for fraying. [2340.1]
- Electrical tools are not used in wet areas, or in areas where flammable vapors may be present, unless specifically designed for that purpose. [2540.2(b) and 2940.5]
- Electrical tools are not hoisted or lowered by their cords. [1707(a)]

PNEUMATIC TOOLS

- Air hose connections are checked to make sure they are secured properly. [1699(a) and 3301(c)]
- Compressed air over 10 psi is never used to blow dirt, chips, or dust from clothing while it is being worn. [3301(a)]
- All pneumatic impact tools have safety clips or retainers so dies and tools won't be accidentally expelled from the barrel. [3559(a)]
- Pneumatic nailers and staplers operating at more than 100 pounds per square inch (psi) have a safety device to prevent operation when the muzzle is not in contact with the surface. [3559(c) and 1704(a)]
- Pneumatic nailers and staplers are disconnected **at the tool** from the air supply when not in use. [1704(b)]
- Hoses over ½" inside diameter have safety devices at supply source, or branch lines to reduce pressure in case of hose failure. [1704(c)]
- Operators using pneumatically driven nailers and staplers on steep roofs (1/3 pitch or greater) always wear a securely fastened safety belt and lanyard. [1704(d)]
- On roofs of 1/4 pitch or greater, the air hose for a pneumatic nailer or stapler is secured at roof level to provide ample, but not excessive, amounts of hose. [1704(d)]
- Pneumatic tools are not hoisted or lowered by their hoses. [1707(b)(3)]
- On portable compressors:
 - Wheels are fixed, locked, or blocked to prevent rolling. [1696(a)]
 - Fans are guarded with a shroud or side screens. [1696(b)]
 - Air tanks are drained of liquid according to the manufacturer's specifications. [1696(c)]
 - Air tanks comply with the Article 3 of the Unfired Pressure Vessel Safety Orders. [1696(e)]

GASOLINE-POWERED TOOLS

- Gasoline is stored in approved containers or portable tanks per Department of Transportation (DOT) regulations. [1930(a)]
- Fire extinguishers of the correct type are available where gasoline is stored. [1933(a)] An additional extinguisher is located outside of the room or immediate area where the gasoline is stored. [1933(b) and (c)]
- When tools are filled, or when gasoline is transferred between containers, proper grounding and bonding procedures are used. [1934]

POWDER-ACTUATED TOOLS

Since powder-actuated tools may be used only by trained workers with certification, the following is only a summary of a few requirements designed to protect other workers nearby. Many other requirements apply to tool operators.

- Powder-actuated tools are used only by **trained workers** holding a **valid operator's card** for the specific tool involved. [1685(a)(1)]
- All powder-actuated tools comply with American National Standards Institute (ANSI) A 10.3 1995, *Safety Requirements for Powder-Actuated Fastening Systems*, or have a California approval number. Refer to the standard for exceptions. [1684(a)(1) and (2)]
- Tool containers are lockable, and have the required warning labels on the inside and outside of the container. [1687(a)]
- Loaded powder-actuated tools are not left unattended. [1690(b)]
- Powder-actuated tools are operated in accordance with the manufacturer's instructions. [1691(a)].
- Powder-actuated tools are not loaded until ready for use. [1691(g)] They are unloaded immediately if work is interrupted. [1691(h)]
- Powder-actuated tools are never pointed at any person, whether the tool is loaded or unloaded. [1691(i)] Hands and feet are kept clear of the open barrel end. [1691(j)]
- On misfire, the tool is held in place for 30 seconds. [1691(l)]
- Warning signs are conspicuously posted within 50 feet of the area where powder-actuated tools are being used, and are removed promptly when no longer applicable. [1691(n)]

SPECIFIC POWER TOOLS

JACKHAMMERS

- All bolts are checked regularly to be sure they haven't loosened. [1699(a)]
- Drills are kept sharp. [1699(a)]
- Chuck bushings and hammers are in good condition. [1699(a)]
- Jackhammers have recommended safety equipment including:
 - A locking mechanism on the drill bit.
 - An instant trigger control and automatic release.
 - A hand guard extending from the handle to the body of the tool.

CIRCULAR SAWS

- The upper half of the saw blade is permanently guarded. [4307(a)]
- The lower half of the saw blade is guarded with a telescopic or hinged guard. [4307(b)]
- Guards are not blocked open to prevent functioning. [4307(c)]

GASOLINE POWER SAWS

- There is a control that returns to idle when released. [3425(a)(2)]
- The clutch is adjusted to prevent the chain drive from engaging at idle speed. [3425(a)(3)]
- The operator is positioned properly to avoid injury in case of “kick back.”
- The engine is stopped when the saw is carried over 100 feet, or when it is being cleaned, refueled, adjusted, or repaired. [3428(a)(8 and 9)]

GRINDERS AND ABRASIVE WHEELS

- Excessively worn grinding disks are discarded and replaced. [1699(a)]
- Abrasive wheels have hoods or guards to protect workers from flying fragments of a bursting wheel. [3577(b)] [See 3577(b) and 3583(b) for exceptions.]
- There are guards on the spindle end and on nut and flange projections. They are mounted to maintain proper alignment with the wheel. The strength of the fastenings exceeds the strength of the guard. [3583(b)] [See 3583(b-d) for exceptions.]
- Wheels are inspected before mounting, and the spindle speed is checked to make sure that it doesn't exceed the rating marked on the wheel. [3583(f)(1)]
- Wheels fit freely on spindles under all grinding conditions. [3583(f)(2)]
- All contact surfaces of wheels, blotters, and flanges are flat and free of foreign matter. [3583(f)(3)]
- If there is a bushing in the wheel hole, it doesn't exceed the width of the wheel, and it doesn't contact the flanges. [3583(f)(4)]

CAL/OSHA ERGONOMICS REGULATION

- If there has been more than one ergonomic injury within a year to workers doing the same task, the company has set up a program to identify and correct these hazards and provide relevant training. [5110]