Plumbing, Heating & Air Conditioning

Contractors

NAICS Code

238220 Plumbing, Heating &

Air Conditioning Contractors

Section 9

SAFETY RULES, POLICIES, AND PROCEDURES

The safety rules contained on these pages have been prepared to protect you in your daily work. Employees are to follow these rules, review them often and use good common sense in carrying out assigned duties.

ALL EMPLOYEES

Housekeeping 3

Lifting Procedures 3

Ladders and Step Ladders 3

Knives/Sharp Instruments 4

OFFICE PERSONNEL

Office Safety 4

SALES PERSONNEL

Driving Safety 5

AIR-CONDITIONING, REFRIGERATION, and HEATING MECHANICS

General Job Site Rules 5

Equipment Installation Safety 5

General Personal Protective Equipment Guidelines 5

Respirators 6

Spray Painting Safety 6

Confined Spaces 7

Sheet Metal Air-Duct Fabrication 7

Lockout/Tagout 8

Electrically Powered Tools 8

Grinders 9

General Power Saws Safety 9

Scaffolding 10

Hazardous Materials 10

General Hand Tool Safety 11

Compressed Gas Cylinders 12

Cranes and Hoists 13

Lifting Equipment 13

Vehicle Safety 14

PLUMBERS (MASTERS and APPRENTICES)

General Installation Rules and Guidelines 15

Work Clothing and Personal Protective Equipment 15

Respirators 15

Confined Space Entry 16

Fabrication Operations 17

Compressed Gas Cylinders 17

Lockout/Tagout 18

Electrically Powered Tools 19

General Power Saws Safety 19

Hazardous Materials 20

General Hand Tool Safety 21

Vehicle Safety 22

WAREHOUSE PERSONNEL

General Storeroom/Stockroom Safety 23

Stocking Shelves 23

Hand Truck Operations 23

Pallet Jacks 24

General Hand Tool Safety 24

ALL EMPLOYEES

Housekeeping

1. Use caution signs/cones to barricade slippery areas.

2. Do not store or leave items on stairways.

3. Return tools to their storage places after using them.

4. Do not block or obstruct stairwells, exits or accesses to safety and emergency equipment such as

fire extinguishers or fire alarms.

5. Do not place materials such as boxes or trash in walkways and passageways.

6. Do not use gasoline for cleaning purposes.

7. Mop up water around drinking fountains, drink dispensing machines and ice machines.

Lifting Procedures

General

1. Test the weight of the load before lifting by pushing the load along its resting surface.

2. If the load is too heavy or bulky, use lifting and carrying aids such as hand trucks, dollies, pallet

jacks and carts or get assistance from a co-worker.

3. Never lift anything if your hands are greasy or wet.

4. Wear protective gloves when lifting objects with sharp corners or jagged edges.

When lifting

1. Face the load.

2. Position your feet 6"-12" apart with one foot slightly in front of the other.

3. Bend at the knees, not at the back.

4. Keep your back straight.

5. Have a firm grip on the object using your hands and fingers. Use handles when they are present.

6. Hold the object as close to your body as possible.

7. Perform lifting movements smoothly and gradually; do not jerk the load.

8. If you must change direction while lifting or carrying the load, pivot your feet and turn your

entire body. Do not twist at the waist.

9. Set down objects in the same manner as you picked them up, except in reverse.

10. Do not lift an object from the floor to a level above your waist in one motion. Set the load

down on a table or bench and then adjust your grip before lifting it higher.

Ladders and Step Ladders

1. Read and follow the manufacturer's instructions label affixed to the ladder if you are unsure how

to use the ladder.

2. Do not use ladders that have loose rungs, cracked or split side rails, missing rubber foot pads, or

are otherwise visibly damaged.

3. Keep ladder rungs clean and free of grease. Remove buildup of material such as dirt or mud.

4. When performing work from a ladder, face the ladder and do not lean backward or side­ways

from the ladder.

5. Allow only one person on the ladder at a time.

6. Do not stand on the top two rungs of any ladder.

7. Do not stand on a ladder that wobbles, or that leans to the left or right of center.

8. Do not try to "walk" a ladder by rocking it. Climb down the ladder, and then move it.

Climbing a Ladder

1. Face the ladder when climbing up or down it.

2. Do not carry items in your hands while climbing up or down a ladder.

3. Maintain a three-point contact by keeping both hands and one foot or both feet and one hand on

the ladder always when climbing up or down the ladder.

Knives/Sharp Instruments

1. When handling knife blades and other cutting tools, direct sharp points, and edges away from you.

2. Cut in the direction away from your body when using knives.

3. Use the knife that has been sharpened; do not use knives that have dull blades.

4. Use knives for the operations for which they are made.

5. Do not use knives that have broken or loose handles.

6. Do not use knives as screwdrivers or pry bars.

7. Do not pick up knives by their blades.

8. Carry knives with their tips pointed towards the floor.

9. Do not carry knives, scissors or other sharp tools in your pockets or an apron unless they are first placed in their sheath or holder.

10. Do not attempt to catch a falling knife.

11. Store knives in knife blocks or in sheaths after using them.

12. When opening cartons use the safety box cutters. Do not cut with the blade extended beyond the guard.

OFFICE PERSONNEL

Office Safety

General

1. Do not place material such as boxes or trash in walkways and passageways.

2. Do not throw matches, cigarettes, or other smoking materials into trash baskets.

3. Do not kick objects out of your pathway; pick them up or push them out of the way.

4. Keep floors clear of items such as paper clips, pencils, tacks, or staples.

5. Straighten or remove rugs and mats that do not lie flat on the floor.

6. Mop up water around drinking fountains and drink dispensing machines.

7. Do not block your view by carrying large or bulky items; use a dolly or hand truck or get assistance from a fellow employee.

8. Store sharp objects, such as pens, pencils, letter openers or scissors in drawers or with the points down in a container.

9. Carry pencils, scissors and other sharp objects with the tips pointing down.

10. Use the ladder or step stool to retrieve or store items that are located above your head.

11. Do not run-on stairs or take more than one step at a time.

12. Keep doors in hallways fully open or fully closed.

13. Use handrails when ascending or descending stairs or ramps.

14. Obey all posted safety and danger signs.

Furniture Use

1. Open only one file cabinet drawer at a time. Close the filing cabinet drawer you are working in before opening another filing drawer in the same cabinet.

2. Use the handle when closing doors, drawers, and files.

3. Put heavy files in the bottom drawers of file cabinets.

4. Do not tilt the chair you are sitting in on its back two legs.

5. Do not stand on furniture to reach high places.

Equipment Use

1. Do not use fans that have excessive vibration, frayed cords, or missing guards.

2. Do not place floor type fans in walkways, aisles, or doorways.

3. Do not plug multiple electrical cords into a single outlet.

4. Do not use extension or power cords that have the ground prong removed or broken off.

5. Do not use frayed, cut, or cracked electrical cords.

6. Use a cord cover or tape the cord down when running electrical cords across aisles, between desks or across entrances or exits.

7. Turn the power switch of the local exhaust fans to "On" when operating the blueprint machine.

8. Do not use lighting fluid to clean drafting equipment; use soap and water.

SALES PERSONNEL

Driving Safety

Fueling Vehicles

1. Turn the vehicle off before fueling.

2. Do not smoke while fueling a vehicle.

3. Wash hands with soap and water if you spill gasoline on your hands.

Driving Rules

1. Shut all doors and fasten your seat belt before moving the vehicle.

2. Obey all traffic patterns and signs at all times.

3. Maintain a three-point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.

AIR-CONDITIONING, REFRIGERATION, and HEATING MECHANICS

(Installation and Service/Repair)

General Job Site Rules

1. Do not begin working until barricades, warning signs or other protective devices have been installed to isolate the work area from local traffic.

2. Do not walk under partially demolished walls or floors.

3. Stop working outdoors and seek shelter during lightning storms.

4. When working outside, keep shirts on to avoid dehydration and sun burn.

5. Drink plenty of clear liquids during your breaks.

6. Erect protective barriers or guards and warning signs prior to removing maintenance hole covers where accessible by vehicular or pedestrian traffic.

7. Do not use a metal ladder within 50 feet of electrical power lines.

8. Do not block the walking surfaces of elevated working platforms, such as scaffolds, with tools or materials that are not being used.

9. Do not stand on sinks, toilets, or cabinets; use a step ladder.

10. Stand clear of floor openings if guardrails or covers are removed or displaced.

11. If you discover a wasp nest or beehive while installing or servicing equipment, use the long-distance aerosol insecticide labeled "Wasp and Bee Insecticide" to spray the nest. Test with the stick or pole once again to ensure that all bees/wasps are gone before continuing work.

12. Seek first aid immediately if bitten or stung by wasps or bees.

13. Do not handle caterpillars or other insects with your bare hands.

Equipment Installation Safety

General Safety

1. Assume all electrical wires as live wires.

2. Turn the main switch to "Off" before removing and replacing power fuses.

3. Do not wear jewelry or coats with metal zippers when working on or near energized lines, panels, parts, or equipment.

4. Do not wear watches, rings or other metallic objects when working on or near energized lines,

panels, parts, or equipment.

5. Wear 100% cotton or flame-resistant shirts or jumpers (with sleeves rolled down) and pro­tective hats when working on or near live parts, lines, and panels.

6. Do not work near any circuit that is in service without first installing barricades approved by your supervisor.

General Wiring Safety

1. Do not fish through conduits or ducts until you determine that the fish tape and wires will not contact energized lines or the equipment.

2. Do not use conductive measuring ropes or tapes when working on or near energized lines or sources.

3. Do not fasten or hang electrical extension or power cords from non-insulated staples or nails and do not suspend them by wire.

4. Wear rubber gloves or use hot sticks when placing protective equipment on/around energized voltage conductors.

5. Treat bare wire communication conductors on structures as energized lines unless they are

protected by insulated conductors.

6. Visually inspect and wipe down all hot line tools each day before use.

7. Do not use defective hot line tools. Mark them as defective and turn them in for repair or replacement.

8. Keep conductors that are being strung in or removed under positive control to prevent accidental contact with energized circuits.

9. If an existing line that crosses over a conductor is to be de-energized, ground the line on both sides of the crossing or treat the conductor being crossed as energized.

General Personal Protective Equipment Guidelines

1. Do not wear hard hats that are dented or cracked.

2. Wear your safety glasses when operating drills and when cutting or snipping copper or light gauge wire.

3. Wear your safety goggles when welding, soldering, or cutting metal.

4. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.

5. Wear the dielectric gloves when working on electric current.

6. Do not wear jewelry or coats with metal zippers to work.

7. Wear ear plugs or earmuffs in areas posted "Hearing Protection Required."

Respirators

1. Wear the respirator provided by your supervisor for your assigned duties.

2. Shave daily to prevent facial hair from interfering with the face seal of the respirator.

3. Clean and disinfect your respirator with detergent solution and clean water after each use.

4. Do not wear contact lenses when wearing a respirator. Use optical inserts acquired by your supervisor.

5. Return respirators to carrying case or carton and store in your locker or storage area when the work is completed.

6. Prior to each use, inspect the respirators for missing or distorted inhalation and exhalation valves, or cracked face pieces. Do not use if any of these conditions are found.

7. Do not use respirator that has cracks, excessive dirt on the face piece, and loss of elasticity in the straps, missing gaskets, and kinks in air supply hoses.

8. Perform a fit test prior to use:

• First, position face piece comfortably over face and pull all straps tight. Do not wear face piece if it does not allow you to talk if it does not fit snug over the nose bridge or if it slips. Close off the inlet of the canister, cartridges, or filters with the palm of your hands or replace the seals and inhale slightly and hold for 10 (ten) seconds. If face piece remains slightly col­lapsed and no inward leaking is detected, the respirator is tight enough. Use your other hand to detect air leaks around face seal. (Negative pressure test).

• Second, close off the exhalation valve and blow into face piece gently. Use hands to feel any air leaking out of the seal between face piece and face. If no outward leaking is detected, the respirator is tight enough. (Positive pressure test)

9. Only use respirator that has been issued to you.

Spray Painting Safety

1. Do not point the spray gun toward any part of your body or at anyone else.

2. Store rags that have paint on them in closed metal containers labeled "oily rags."

3. Press the pressure relief valve on painting canisters and painting guns prior to disconnecting them.

4. Do not store food or eat where spray painting is being performed.

5. Close the lids of containers of paint and thinner tightly after each use or when not being used.

6. Return containers of thinners, mineral spirits and other liquids labeled "Flammable" to the storage cabinet labeled "Flammable Storage," when painting is finished.

7. Always wash your hands with soap and water after using paints or other toxic solvents to remove paint from your skin.

Confined Spaces

1. Do not enter any area labeled "confined space" without a confined space entry permit.

2. Do not enter any confined spaces without reading and following this "confined space entry procedure."

3. Turn "off" disconnect, or lock and tag all systems that affect or make operational the con­fined space prior to entry.

4. Do not perform hot work such as electric or gas welding or cutting in or on a confined space until the atmosphere has been determined to be safe.

5. Use mechanical forced air ventilation when open flames or torches are used in a confined space.

6. Do not enter any confined space without a safety observer present; minimum of a two per­son team.

7. Use survey equipment such as an "organic vapor meter" to test and monitor the confined space for oxygen deficiency and explosive or hazardous gases\fumes. If the organic vapor meter reading for the explosive gases is above 10% of the LEL and if the oxygen reading is below 19.5% or greater that 23.5%, do not enter the confined space.

Sheet Metal Air-Duct Fabrication

General Machine Safety

1. Replace the guards before starting machines, or after adjusting or repairs to the machine.

2. Do not remove, alter, or bypass any safety guards or devices when operating any piece of equipment or machinery.

3. Do not wear loose clothing or jewelry around moving machinery.

4. Long hair must be contained under a hat or hair net, regardless of gender.

5. Read and obey safety warnings posted on or near any machinery.

6. Do not try to stop a work piece as it goes through any machine. If the machine becomes jammed, unplug it before clearing the jam.

7. Do not use metal working equipment such as grinders, sanders or beveling machines if they do not have safety guards.

8. Clamp work when using saws or cutting tools.

Drill Table Safety

1. Insert the work piece into the table grooves before starting the drilling process.

2. Use brushes or vacuum machinery to remove metal chips, shavings, and other debris from the drill table. Do not use your bare hands.

3. Do not use dull, cracked, or bent drill bits.

Riveting/Bolting Safety

1. Wear safety goggles while riveting or bolting.

2. Do not use your hands to guide a bit into place when riveting or bolting steel.

3. Disconnect the snap and plunger from an air hammer when it is not in use.

4. Do not pass air powered tools from one worker to another by the hose.

5. Use a receptacle or a net to catch rivets or bolts that are knocked off or backed out from your work area.

6. Do not carry nuts, bolts, or rivets in your hands or pockets; use the carrying/storing con­tainer provided for this purpose.

Welding Operations

1. Wear clothing made of cotton, wool, or non-synthetic fibers. Wear long sleeve shirts, long pants, and boots.

2. Before welding place, the floor fan behind you to keep welding fumes away from your face.

3. Use the welding screen to shield other employees from flying slag and intense light.

4. Wear the welding helmet or welding goggles during welding operations.

5. Use the insulated work gloves when using welding sheet metal air-ducts.

6. Do not perform welding tasks while wearing wet cotton gloves or wet leather gloves.

7. Do not use the welding apparatus if the power cord is cut, frayed, split or otherwise visibly damaged or modified.

8. Do not perform "hot work" such as welding, cutting or other spark producing operations within 50 feet of containers labeled "Flammable" or "Combustible."

Sanding Operations

1. Wear gloves, aprons, dust masks, goggles and hearing protection when operating the sander.

2. When using a disk sander, sand on the downward side of the disk.

3. Do not use your hands to hold the part to be sanded. Use clamps and fixtures.

4. Do not eat, drink, or use tobacco products while using sanders.

5. After leaving the sanding area wash hands and exposed skin surfaces of arms.

Lockout/Tagout

1. Do not remove a lock from any equipment unless you placed it there yourself. Each person shall place his/her own lock/tag when required to isolate an energy source.

2. Do not start any adjustment, service, or repair without verifying that the tag/lock out switch or control cannot be by-passed or over-ridden.

3. Lockout verification:

• Verify that the locked-out switch or control cannot be overridden.

• Test the equipment to be certain that the locked-out switch is de-energized and not simply malfunctioning.

• Press all start buttons to see if the equipment starts.

• Ensure the system you will be working on is the same one that has been locked out.

4. Before restarting the equipment, verify the following:

• All tools and other items have been removed.

• All machine guards are in place.

• All electric systems are reconnected.

• All employees are clear of equipment.

Electrically Powered Tools

1. Do not use power equipment or tools on which you have not been trained.

2. Keep power cords away from the path of drills, saws, and grinders.

3. Do not use cords that have splices, exposed wires, or cracked or frayed ends.

4. Do not carry plugged in equipment or tools with your finger on the switch.

5. Do not carry equipment or tools by the cord.

6. Disconnect the tool from the outlet by pulling on the plug, not the cord.

7. Turn the tool off before plugging or unplugging it.

8. Do not leave tools that are "On" unattended.

9. Do not handle or operate electrical tools when your hands are wet or when you are stand­ing on wet floors.

10. Do not operate spark inducing tools such as drills, saws or grinders near containers labeled "Flammable" or in an explosive atmosphere.

11. Do not use extension cords or other three-pronged power cords that have a missing prong.

12. Do not remove the ground prong from electrical cords.

13. Do not use an adapter such as a cheater plug that eliminates the ground.

14. Do not plug multiple electrical cords into a single outlet.

15. Do not stand in water or on wet surfaces when operating power hand tools or portable electrical appliances.

16. Do not use a power hand tool while wearing wet cotton gloves or wet leather gloves.

17. Never operate electrical equipment barefooted. Wear rubber-soled or insulated work boots.

18. Do not operate a power hand tool or portable appliance that has a frayed, worn, cut, improperly spliced or damaged power cord.

19. Do not operate a power hand tool or portable appliance if a prong from the three-pronged power plug is missing or has been removed.

20. Do not operate a power hand tool or portable appliance that has a two-pronged adapter or a two-conductor extension cord.

21. Do not operate a power hand tool or portable appliance while holding a part of the metal casing or while holding the extension cord in your hand. Hold all portable power tools by the plastic hand grips or other nonconductive areas designed for gripping purposes.

Grinders

1. Do not use grinding wheels that have chips, cracks, or grooves.

2. Do not use the grinding wheel if it wobbles. Tag it "Out of Service."

3. Do not try to stop the wheel using your hand, even if you are wearing gloves. To prevent your gloves from getting caught by the grinding wheel, hold the workpiece by using vice grip pliers, clamps, or a jig.

4. Adjust the tongue guard to within 1/4 inch of the grinding wheel and the tool rest an 1/8 inch from the abrasive wheel as outlined in the grinder's operating and maintenance manual before using.

General Power Saws Safety

1. Wear the prescribed personal protective equipment such as goggles, gloves, dust masks and hearing protection when operating the power saw.

2. Turn the power switch of the saw to "Off" before making measurements, adjustments, or repairs.

3. Keep your hands away from the exposed blade.

4. Operate the saw at full cutting speed, with a sharp blade, to prevent kickbacks.

5. If the saw becomes jammed, turn the power switch of the saw to "Off" before pulling out the incomplete cut.

6. Do not alter the anti-kickback device or blade guard.

Scaffolding

1. Follow the manufacturer's instructions when erecting the scaffold.

2. Do not work on scaffolds outside during stormy or windy weather.

3. Do not climb on scaffolds that wobble or lean to one side.

4. Initially inspect the scaffold prior to mounting it. Do not use a scaffold if any pulley, block, hook, or fitting is visibly worn, cracked, rusted, or otherwise damaged. Do not use a scaffold if any rope is frayed, torn or visibly damaged.

5. Do not use any scaffold tagged "Out of Service."

6. Do not use unstable objects such as barrels, boxes, loose brick, or concrete blocks to sup­port scaffolds or planks.

7. Do not work on platforms or scaffolds unless they are fully planked.

8. Do not use a scaffold unless guardrails and all flooring are in place.

9. Level the scaffold after each move. Do not extend adjusting leg screws more than 12 inches.

10. Use your safety belts and lanyards when working on scaffolding at a height of 10 feet or more above ground level. Attach the lanyard to a secure member of the scaffold.

11. Do not climb the cross braces for access to the scaffold. Use the ladder.

12. Do not jump from, to, or between scaffolding.

13. Do not slide down cables, ropes or guys used for bracing.

14. Keep both feet on the decking. Do not sit or climb on the guardrails.

15. Keep the scaffold free of scraps, loose tools, tangled lines, and other obstructions.

16. Do not throw anything "overboard" unless a spotter is available. Use the debris chutes or lower things by hoist or by hand.

17. Do not move a mobile scaffold if anyone is on the scaffold.

18. Chock the wheels of the rolling scaffold, using the wheel blocks, and lock the wheels by using your foot to depress the wheel-lock, before using the scaffold.

Hazardous Materials

1. Wear the chemical goggles when using, applying, or handling chemical liquids from containers labeled "Caustic" or "Corrosive."

2. Follow the instructions on the label and in the corresponding Safety Data Sheet (SDS) for each chemical product you will be using in your workplace.

3. Use personal protective clothing or equipment such as neoprene gloves, rubber boots, shoe covers, rubber aprons, and protective eyewear, when using chemicals labeled "Flam­mable", "Corrosive", and “Caustic" or "Poisonous."

4. Always use your chemical goggles and the face shield when handling chemicals labeled "Corrosive" or "Caustic."

5. Do not use protective clothing or equipment that has split seams, pin holes, cuts, tears, or other visible signs of damage.

6. Each time you use your gloves, wash them, before removing the gloves, using cold tap water and normal hand washing motion. Always wash your hands after removing the gloves.

7. Only dispense a liquid labeled "Flammable" from its bulk container located in areas posted "Flammable Liquid Storage."

8. Do not use chemicals from unlabeled containers or unmarked cylinders.

9. Do not drag containers labeled "Flammable."

10. Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive" or "Caustic."

General Hand Tool Safety

1. Use tied off containers to keep tools from falling off scaffolds and other elevated work platforms.

2. Carry all sharp tools in a sheath or holster.

3. Tag worn, damaged or defective tools "Out of Service" and do not use them.

4. Do not use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose.

5. Do not use impact tools such as hammers, chisels or steel stakes that have mushroomed heads.

6. Do not perform "make-shift" repairs to tools.

7. Do not carry tools in your hand when you are climbing. Carry tools in tool belts or hoist the

tools to the work area using a hand line.

8. Do not throw tools from one location to another or from one employee to another.

9. Transport hand tools only in toolboxes or tool belts. Do not carry tools in your clothing.

Hammers

1. Do not strike nails or other objects with the "cheek" of the hammer.

2. Do not strike a hardened steel surface, such as a cold chisel, with a claw hammer.

3. Do not strike one hammer against another hammer.

4. Do not use a hammer if your hands are oily, greasy, or wet.

5. Do not use a hammer as a wedge or a pry bar.

Saws

1. Keep control of saws by releasing downward pressure at the end of the stroke.

2. Do not use an adjustable blade saw if the blade is not taut.

3. Do not use a saw that has dull saw blades.

4. Oil saw blades after each use of the saw.

5. Keep your hands and fingers away from the saw blade while you are using the saw.

6. Do not carry a saw by the blade.

7. When using the hand saw, hold the work piece firmly against the worktable.

Screwdrivers

1. Always match the size and type of screwdriver blade to fit the head of the screw.

2. Do not hold the work piece against your body while using a screwdriver.

3. Do not put your fingers near the blade of the screwdriver when tightening a screw.

4. Use a drill, nail, or an awl to make a starting hole for screws.

5. Do not force a screwdriver by using a hammer or pliers on it.

6. Do not use a screwdriver as a punch, chisel, pry bar or nail puller.

7. When you are performing electrical work, use the screwdriver that has the blue handle; this screwdriver is insulated.

8. Do not use a screwdriver if your hands are wet, oily, or greasy.

Wrenches

1. Do not use wrenches that are bent, cracked, or badly chipped or that have loose or broken handles.

2. Do not use a shim to make a wrench fit.

3. Use a split box wrench on flare nuts.

4. Do not use a wrench that has broken or battered points.

5. Discard any wrench that has spread, nicked, or battered jaws or if the handle is bent.

6. Use box or socket wrenches on hexagon nuts and bolts as a first choice, and open-end wrenches as a second choice.

Pliers

1. Do not use pliers as a wrench or a hammer.

2. Do not attempt to force pliers by using a hammer on them.

3. When you are performing electrical work, use the pliers that have the blue rubber sleeves covering the handle; these pliers are insulated.

4. Do not use pliers that are cracked, broken, or sprung.

5. When using the diagonal cutting pliers, shield the loose pieces of cut material from flying into the air by using a cloth or your gloved hand.

Clamps

1. Do not use the C-clamp for hoisting materials.

2. Do not use the C-clamp as a permanent fastening device.

Metal Snips

1. Wear your safety glasses or safety goggles when using snips to cut materials.

2. Wear your work gloves when cutting materials with snips.

3. Do not use straight cut snips to cut curves.

4. Keep the blade aligned by tightening the nut and bolt on the snips.

5. Do not use snips as a hammer, screwdriver, or pry bar.

Toolboxes/Chests/Cabinets

1. Use the handle when opening and closing a drawer or door of a toolbox, chest, or cabinet.

2. Do not stand on toolboxes, chests, or cabinets to gain extra height.

3. Lock the wheels on large toolboxes, chests, or cabinets to prevent them from rolling.

4. Push large chests, cabinets, and toolboxes; do not pull them.

5. Do not open more than one drawer of a toolbox at a time.

6. Close and lock all drawers and doors before moving the tool chest to a new location.

7. Do not use a toolbox or chest as a workbench.

8. Do not move a toolbox, chest, or cabinet if it has loose tools or parts on the top.

Compressed Gas Cylinders

Storage and Handling

1. Do not handle oxygen cylinders if your gloves are greasy or oily.

2. Store all compressed gas cylinders in the upright position.

3. Place valve protection caps on compressed gas cylinders that are in storage or are not being used.

4. Do not lift compressed gas cylinders by the valve protection cap.

5. Do not store compressed gas cylinders in areas where they can encounter chemicals labeled "Corrosive."

6. Hoist compressed gas cylinders on the cradle, sling board, pallet, or compressed gas cylinder basket.

7. Do not place compressed gas cylinders against electrical panels or live electrical cords where the cylinder can become part of the circuit.

Use of Compressed Gas Cylinders

1. Do not use dented, cracked, or other visibly damaged cylinders.

2. Use only an open ended or adjustable wrench when connecting or disconnecting regulators and fittings.

3. Do not transport cylinders without first removing the regulators and replacing the valve protection caps.

4. Close the cylinder valve when work is finished, when the cylinder is empty or at any time the cylinder is moved.

5. Do not store oxygen cylinders near fuel gas cylinders such as propane or acetylene, or near combustible material such as oil or grease.

6. Stand to the side of the regulator when opening the valve.

7. If a cylinder is leaking around a valve or a fuse plug, move it to an outside area away from

where work is performed and tag it to indicate the defect.

8. Do not use compressed gas to clean yourself, equipment, or your work area.

9. Do not remove the valve wrench from acetylene cylinders while the cylinder is being used.

10. Open cylinder valves slowly. Open the valves fully when the compressed gas cylinder is being used, to eliminate leakage around the cylinder valve stem.

Cranes and Hoists

1. Do not use load hooks that are cracked, bent, or broken.

2. Passengers are not permitted to ride inside the operator's cab of a truck crane.

3. Keep crane windows clean. Do not use a crane if its windows are broken.

4. Do not exceed the rated load capacity of the crane as specified by the manufacturer.

5. Use the cribbing mats when operating the crane on "soft" ground.

6. Fully extend the outriggers of the crane before attempting a lift.

7. Do not perform any crane refits or modifications without the manufacturer's approval.

8. Do not leave the crane you are working in unattended if you have a hoisted load suspended in the air.

9. Do not hoist loads over people.

10. Do not use a hoist whose safety latch on the hook has been removed, is bent, or is other­wise visibly damaged.

Lifting Equipment

1. Do not use chain slings if links are cracked, twisted, stretched, or bent.

2. Fabricate all wire in wire rope slings by using thimbles; do not form eyes by using wire clips or knots.

3. Do not shorten slings by using make-shift devices such as knots or bolts.

4. Do not use a kinked chain.

5. Protect slings from the sharp edges of their loads by placing pads over the sharp edges of the items that have been loaded.

6. Do not place your hands between the sling and its load when the sling is being tightened around the load.

7. Wear work gloves when handling rough, sharp-edged, or abrasive material such as chains, cables ropes or slings.

8. Do not alter or remove the safety latch on hooks. Do not use a hook that does not have a safety latch, or the safety latch is bent.

9. Lift the load from the center of the hooks, not from the point.

Vehicle Safety

General

1. Turn the vehicle off before fueling it.

2. Do not smoke while fueling a vehicle.

3. Wash hands with soap and water if you spill gasoline on your hands.

4. Shut your door and fasten your seat belt before moving the vehicle.

5. Obey all traffic laws and signals at all times.

6. Maintain a three-point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.

7. Only service vehicle personnel are permitted to operate a service vehicle.

8. Do not ride in the bed of a pick-up truck.

9. Turn headlights on when driving inside the shop area or on parking decks.

10. Do not drive over 5 mph in the shop area.

11. Walk behind the vehicle and remove any equipment, tools, or other pathway instructions before getting into the vehicle. Sound the horn to alert nearby coworkers before backing the vehicle.

12. Tie down, lash, or secure all materials and equipment hauled in the bed of vehicles.

13. Do not mount or dismount a moving vehicle.

Lift Gates

1. Do not place items such as air-conditioning units or heating units anywhere on the lift gate where it cannot be moved by a dolly.

2. Secure equipment on the truck by using latches or ropes.

3. Keep hands, fingers, and arms away from the edge of the lift gate platform.

4. Do not lower the lift gate until everyone is clear of its landing area.

Vehicle/Trailer Safety

1. Set the parking brake in the towing vehicle and use wheel blocks to chock the wheels of the trailer before removing any equipment from the trailer.

2. Secure equipment and fuel tanks to the vehicle with chains or straps to eliminate or mini­mize shifting of the load.

3. No one is permitted to ride in the trailer.

4. Take slow, wide turns when towing trailers.

5. Do not exceed the load capacity as posted on the trailer door of the trailer.

6. Do not place all the heavy equipment on one side of the trailer.

PLUMBERS (MASTERS and APPRENTICES)

General Installation Rules & Guidelines

1. Do not begin working until barricades, warning signs or other protective devices have been installed to isolate the work area from local traffic.

2. Do not walk under partially demolished walls or floors.

3. Stop working outdoors and seek shelter during lightning storms.

4. When working outside, keep shirts on to avoid dehydration and sun burn.

5. Drink plenty of clear liquids during your breaks.

6. If you discover a wasp nest or beehive while installing or servicing equipment, use the long

distance aerosol insecticide labeled "Wasp and Bee Insecticide" to spray the nest. Test with the stick or pole once again to ensure that all bees/wasps are gone before continuing work.

7. Seek first aid immediately if bitten or stung by wasps or bees. See page IV.1, "First Aid Procedures."

8. Do not handle caterpillars or other insects with your bare hands.

9. Do not use a metal ladder within 50 feet of electrical power lines.

10. Do not block the walking surfaces of elevated working platforms, such as scaffolds, with tools or materials that are not being used.

11. Do not stand on sinks, toilets, or cabinets; use a step ladder.

12. Do not work on open sided floors, elevated walkways, or elevated platforms if there are no guardrails in place.

13. Do not handle hot items such as hot water heaters or water/steam lines with your bare hands; use cloth gloves.

14. Open the gate valve to release the pressure from the steam lines and turn off the boiler before servicing piping equipment.

Work Clothing and Personal Protective Equipment

1. Wear the face shield over your goggles or safety glasses during open furnace, welding, soldering, or gas cutting operations.

2. Do not continue to work if your safety glasses become fogged. Stop work and clean the glasses until the lenses are clear and defogged.

3. Wear the welding helmet or welding goggles during welding operations.

4. Wear the dielectric gloves when working on electric current.

5. Wear your ear plugs or earmuffs in areas posted "Hearing Protection Required."

6. Safety goggles must be worn while welding or cutting metal.

7. Do not wear long sleeve shirts that do not have button-down cuffs.

8. Do not wear jewelry or coats with metal zippers to work.

Respirators

1. Wear the respirator provided by your supervisor for your assigned duties.

2. Shave daily to prevent facial hair from interfering with the face seal of the respirator.

3. Clean and disinfect your respirator with detergent solution and clean water after each use.

4. Do not wear contact lenses when wearing a respirator. Use optical inserts acquired by your supervisor.

5. Return respirators to carrying case or carton and store in your locker or storage area when the work is completed.

6. Prior to each use, inspect the respirators for missing or distorted inhalation and exhalation valves, or cracked face pieces. Do not use if any of these conditions are found.

7. Do not use respirator that has cracks, excessive dirt on the face piece, and loss of elasticity in the straps, missing gaskets, and kinks in air supply hoses.

8. Perform a fit test prior to use.

•First, position face piece comfortably over face and pull all straps tight. Do not wear face piece if it does not allow you to talk if it does not fit snug over the nose bridge or if it slips. Close off the inlet of the canister, cartridges, or filters with the palm of your hands or replace the seals and inhale slightly and hold for 10 (ten) seconds. If face piece remains slightly col­lapsed and no inward leaking is detected, the respirator is tight enough. Use your other hand to detect air leaks around face seal. (Negative

pressure test).

•Second, close off the exhalation valve and blow into face piece gently. Use hands to feel any air leaking out of the seal between face piece and face. If no outward leaking is detected, the respirator is tight enough. (Positive pressure test)

9. Only use respirator that has been issued to you.

Confined Space Entry (sewers, etc.)

1. Do not enter the sewers or other confined spaces without reading and following this "con­fined space entry procedure."

2. Obtain a confined space entry permit from your supervisor before entering the confined space.

3. Do not enter the confined space unless an assigned observer or lookout person posted at the entrance. If you are assigned as the outside observer, do not go inside the confined space under any circumstances and always keep the entrant in your view.

4. Place furnaces and space heaters in a level position on the downhill lower side of the man­hole.

5. Do not throw materials into or out of maintenance holes. Place materials in a receptacle and hoist them in and out by means of a rope.

6. Do not leave tools and/or materials on the ground around a maintenance hole opening.

7. Use survey equipment such as an "organic vapor meter" to test and monitor the confined space for oxygen deficiency and explosive or hazardous gases\fumes. If the organic vapor meter reading for the explosive gases is above 10% of the LEL and if the oxygen reading is below 19.5% or greater that 23.5%, do not enter the confined space.

8. Turn "off" disconnect, or lock and tag all systems that affect or make operational the con­fined space prior to entry.

9. Do not perform hot work such as electric or gas welding or cutting in or on a confined space until the atmosphere has been determined to be safe.

10. Use mechanical forced air ventilation when open flames or torches are used in a confined space.

Fabrication Operations

General Machine Safety

1. Replace the guards before starting machines, or after adjusting or repairs to the machine.

2. Do not remove, alter, or bypass any safety guards or devices when operating any piece of equipment or machinery.

3. Do not wear loose clothing or jewelry around moving machinery.

4. Long hair must be contained under a hat or hair net, regardless of gender.

5. Read and obey safety warnings posted on or near any machinery.

6. Do not try to stop a work piece as it goes through any machine. If the machine becomes jammed, unplug it before clearing the jam.

7. Do not use metal working equipment such as grinders, sanders or beveling machines if they do not have safety guards.

8. Clamp work when using saws or cutting tools.

Welding Operations

1. Obey all signs posted in the welding area.

2. Wear clothing made of cotton, wool, or non-synthetic fibers. Wear long sleeve shirts, long pants, and boots.

3. Before welding place, the floor fan behind you to keep welding fumes away from your face.

4. Use the welding screen to shield other employees from flying slag and intense light.

5. Wear the welding helmet or welding goggles during welding operations.

6. Use the insulated work gloves when using welding sheet metal air-ducts.

7. Do not perform welding tasks while wearing wet cotton gloves or wet leather gloves.

8. Do not use the welding apparatus if the power cord is cut, frayed, split or otherwise visibly damaged or modified.

9. Do not perform "hot work" such as welding, cutting or other spark producing operations within 50 feet of containers labeled "Flammable" or "Combustible."

10. Do not leave oily rags, paper, or other combustible materials in the welding, cutting or brazing area.

11. Use the red hose for gas fuel and the green hose for oxygen.

12. Do not use worn or cracked hoses.

13. Do not use oil, grease, or other lubricants on the regulator.

14. "Blow Out" hoses before attaching the torch.

15. "Blow Out" the cylinder valve before attaching or reattaching a hose to the cylinder.

16. Do not use a cigarette lighter to ignite torches; use friction lighters only.

17. Do not wear contact lenses when you are welding.

18. Do not change electrodes using your bare hands; use the dry rubber gloves.

19. "Bleed" oxygen and fuel lines at the end of the work shift.

20. Use the welding cart that has a safety chain or cable when transporting cylinders used for welding.

Portable Welding/Soldering Operations

1. Do not perform welding or soldering tasks while wearing wet cotton gloves or wet leather gloves.

2. Use the insulated work gloves when using welding or soldering equipment.

3. Do not use the welding or soldering apparatus if the power cord is cut, frayed, split or otherwise visibly damaged or modified.

4. Do not perform "hot work" such as welding, soldering or other spark producing operations within 50 feet of containers labeled "Flammable" or "Combustible."

Compressed Gas Cylinders

Storage and Handling

1. Do not handle oxygen cylinders if your gloves are greasy or oily.

2. Store all compressed gas cylinders in the upright position.

3. Place valve protection caps on compressed gas cylinders that are in storage or are not being used.

4. Do not lift compressed gas cylinders by the valve protection cap.

5. Do not store compressed gas cylinders in areas where they can encounter chemicals labeled "Corrosive."

6. Hoist compressed gas cylinders on the cradle, sling board, pallet, or compressed gas cylinder basket.

7. Do not place compressed gas cylinders against electrical panels or live electrical cords where the cylinder can become part of the circuit.

Use of Compressed Gas Cylinders

1. Do not use dented, cracked, or other visibly damaged cylinders.

2. Use only an open ended or adjustable wrench when connecting or disconnecting regulators and fittings.

3. Do not transport cylinders without first removing the regulators and replacing the valve protection caps.

4. Close the cylinder valve when work is finished, when the cylinder is empty or at any time the cylinder is moved.

5. Do not store oxygen cylinders near fuel gas cylinders such as propane or acetylene, or near combustible material such as oil or grease.

6. Stand to the side of the regulator when opening the valve.

7. If a cylinder is leaking around a valve or a fuse plug, move it to an outside area away from where work is performed, and tag it to indicate the defect.

8. Do not use compressed gas to clean yourself, equipment, or your work area.

9. Do not remove the valve wrench from acetylene cylinders while the cylinder is being used.

10. Open cylinder valves slowly. Open the valves fully when the compressed gas cylinder is being used, to eliminate leakage around the cylinder valve stem.

Lockout/Tagout

1. Do not remove a lock from any equipment unless you placed it there yourself. Each person shall place his/her own lock/tag when required to isolate an energy source.

2. Do not start any adjustment, service, or repair without verifying that the tag/lock out switch or control cannot be by-passed or over-ridden.

3. Lockout verification:

• Verify that the locked-out switch or control cannot be overridden.

• Test the equipment to be certain that the locked-out switch is de-energized and not simply malfunctioning.

• Press all start buttons to see if the equipment starts.

• Ensure the system you will be working on is the same one that has been locked out.

4. Before restarting the equipment, verify the following:

• All tools and other items have been removed.

• All machine guards are in place.

• All electric systems are reconnected.

• All employees are clear of equipment.

Electrically Powered Tools

1. Do not use power equipment or tools on which you have not been trained.

2. Keep power cords away from the path of drills, saws, and grinders.

3. Do not use cords that have splices, exposed wires, or cracked or frayed ends.

4. Do not carry plugged in equipment or tools with your finger on the switch.

5. Do not carry equipment or tools by the cord.

6. Disconnect the tool from the outlet by pulling on the plug, not the cord.

7. Turn the tool off before plugging or unplugging it.

8. Do not leave tools that are "On" unattended.

9. Do not handle or operate electrical tools when your hands are wet or when you are stand­ing on wet floors.

10. Do not operate spark inducing tools such as drills, saws or grinders near containers labeled "Flammable" or in an explosive atmosphere.

11. Do not use extension cords or other three-pronged power cords that have a missing prong.

12. Do not remove the ground prong from electrical cords.

13. Do not use an adapter such as a cheater plug that eliminates the ground.

14. Do not plug multiple electrical cords into a single outlet.

15. Do not stand in water or on wet surfaces when operating power hand tools or portable electrical appliances.

16. Do not use a power hand tool while wearing wet cotton gloves or wet leather gloves.

17. Never operate electrical equipment barefooted. Wear rubber-soled or insulated work boots.

18. Do not operate a power hand tool or portable appliance that has a frayed, worn, cut, improperly spliced or damaged power cord.

19. Do not operate a power hand tool or portable appliance if a prong from the three-pronged power plug is missing or has been removed.

20. Do not operate a power hand tool or portable appliance that has a two-pronged adapter or a two-conductor extension cord.

21. Do not operate a power hand tool or portable appliance while holding a part of the metal casing or while holding the extension cord in your hand. Hold all portable power tools by the plastic hand grips, or other nonconductive areas designed for gripping purposes.

General Power Saws Safety

1. Wear the prescribed personal protective equipment such as goggles, gloves, dust masks and hearing protection when operating the power saw.

2. Turn the power switch of the saw to "Off" before making measurements, adjustments, or repairs.

3. Keep your hands away from the exposed blade.

4. Operate the saw at full cutting speed, with a sharp blade, to prevent kickbacks.

5. If the saw becomes jammed, turn the power switch of the saw to "Off" before pulling out the incomplete cut.

6. Do not alter the anti-kickback device or blade guard.

Hazardous Materials

1. Wear the chemical goggles when using, applying, or handling chemical liquids from containers labeled "Caustic" or "Corrosive."

2. Follow the instructions on the label and in the corresponding Safety Data Sheet (SDS) for each chemical product you will be using in your workplace.

3. Use personal protective clothing or equipment such as neoprene gloves, rubber boots, shoe covers, rubber aprons, and protective eyewear, when using chemicals labeled "Flam­mable", "Corrosive", and “Caustic" or "Poisonous."

4. Always use your chemical goggles and the face shield when handling chemicals labeled "Corrosive" or "Caustic."

5. Do not use protective clothing or equipment that has split seams, pin holes, cuts, tears, or other visible signs of damage.

6. Each time you use your gloves, wash them, before removing the gloves, using cold tap water and normal hand washing motion. Always wash your hands after removing the gloves.

7. Only dispense a liquid labeled "Flammable" from its bulk container located in areas posted "Flammable Liquid Storage."

8. Do not use chemicals from unlabeled containers or unmarked cylinders.

9. Do not drag containers labeled "Flammable."

10. Do not store chemical containers labeled "Oxidizer" with containers labeled "Corrosive" or "Caustic."

General Hand Tool Safety

1. Use tied off containers to keep tools from falling from scaffolds and other elevated work platforms.

2. Carry all sharp tools in a sheath or holster.

3. Tag worn, damaged or defective tools "Out of Service" and do not use them.

4. Do not use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose.

5. Do not use impact tools such as hammers, chisels or steel stakes that have mushroomed heads.

6. Do not perform "make-shift" repairs to tools.

7. Do not carry tools in your hand when you are climbing. Carry tools in tool belts or hoist the tools to the work area using a hand line.

8. Do not throw tools from one location to another or from one employee to another.

9. Transport hand tools only in toolboxes or tool belts. Do not carry tools in your clothing.

Hammers

1. Do not strike nails or other objects with the "cheek" of the hammer.

2. Do not strike a hardened steel surface, such as a cold chisel, with a claw hammer.

3. Do not strike one hammer against another hammer.

4. Do not use a hammer if your hands are oily, greasy, or wet.

5. Do not use a hammer as a wedge or a pry bar.

Saws

1. Keep control of saws by releasing downward pressure at the end of the stroke.

2. Do not use an adjustable blade saw if the blade is not taut.

3. Do not use a saw that has dull saw blades.

4. Oil saw blades after each use of the saw.

5. Keep your hands and fingers away from the saw blade while you are using the saw.

6. Do not carry a saw by the blade.

7. When using the hand saw, hold the work piece firmly against the worktable.

Screwdrivers

1. Always match the size and type of screwdriver blade to fit the head of the screw.

2. Do not hold the work piece against your body while using a screwdriver.

3. Do not put your fingers near the blade of the screwdriver when tightening a screw.

4. Use a drill, nail, or an awl to make a starting hole for screws.

5. Do not force a screwdriver by using a hammer or pliers on it.

6. Do not use a screwdriver as a punch, chisel, pry bar or nail puller.

7. When you are performing electrical work, use the screwdriver that has the blue handle; this screwdriver is insulated.

8. Do not use a screwdriver if your hands are wet, oily, or greasy.

Wrenches

1. Do not use wrenches that are bent, cracked, or badly chipped or that have loose or broken handles.

2. Do not use a shim to make a wrench fit.

3. Use a split box wrench on flare nuts.

4. Do not use a wrench that has broken or battered points.

5. Discard any wrench that has spread, nicked, or battered jaws or if the handle is bent.

6. Use box or socket wrenches on hexagon nuts and bolts as a first choice, and open-end wrenches as a second choice.

Pliers

1. Do not use pliers as a wrench or a hammer.

2. Do not attempt to force pliers by using a hammer on them.

3. When you are performing electrical work, use the pliers that have the blue rubber sleeves covering the handle; these pliers are insulated.

4. Do not use pliers that are cracked, broken, or sprung.

5. When using the diagonal cutting pliers, shield the loose pieces of cut material from flying into the air by using a cloth or your gloved hand.

Clamps

1. Do not use the C-clamp for hoisting materials.

2. Do not use the C-clamp as a permanent fastening device.

Metal Snips

1. Wear your safety glasses or safety goggles when using snips to cut materials.

2. Wear your work gloves when cutting materials with snips.

3. Do not use straight cut snips to cut curves.

4. Keep the blade aligned by tightening the nut and bolt on the snips.

5. Do not use snips as a hammer, screwdriver, or pry bar.

Toolboxes/Chests/Cabinets

1. Use the handle when opening and closing a drawer or door of a toolbox, chest, or cabinet.

2. Do not stand on toolboxes, chests, or cabinets to gain extra height.

3. Lock the wheels on large toolboxes, chests, or cabinets to prevent them from rolling.

4. Push large chests, cabinets, and toolboxes; do not pull them.

5. Do not open more than one drawer of a toolbox at a time.

6. Close and lock all drawers and doors before moving the tool chest to a new location.

7. Do not use a toolbox or chest as a workbench.

8. Do not move a toolbox, chest, or cabinet if it has loose tools or parts on the top.

Vehicle Safety

General

1. Turn the vehicle off before fueling it.

2. Do not smoke while fueling a vehicle.

3. Wash hands with soap and water if you spill gasoline on your hands.

4. Shut your door and fasten your seat belt before moving the vehicle.

5. Obey all traffic laws and signals at all times.

6. Maintain a three-point contact using both hands and one foot or both feet and one hand when climbing into and out of vehicles.

7. Only service vehicle personnel are permitted to operate a service vehicle.

8. Do not ride in the bed of a pick-up truck.

9. Turn headlights on when driving inside the shop area or on parking decks.

10. Do not drive over 5 mph in the shop area.

11. Walk behind the vehicle and remove any equipment, tools, or other pathway instructions before getting into the vehicle. Sound the horn to alert nearby coworkers before backing the vehicle.

12. Tie down, lash, or secure all materials and equipment hauled in the bed of vehicles.

13. Do not mount or dismount a moving vehicle.

Lift-gates

1. Do not place items such as an air-conditioning units or heating units anywhere on the lift-gate where it cannot be moved by a dolly.

2. Secure equipment on the truck by using latches or rope.

3. Keep hands, fingers, and arms away from the edge of the lift-gate platform.

4. Do not lower the lift-gate until everyone is clear of its landing area.

Vehicle/Trailer Safety

1. Set the parking brake in the towing vehicle and use wheel blocks to chock the wheels of the trailer before removing any equipment from the trailer.

2. Secure equipment and fuel tanks to the vehicle with chains or straps to eliminate or mini­mize shifting of the load.

3. No one is permitted to ride in the trailer.

4. Take slow, wide turns when towing trailers.

5. Do not exceed the load capacity as posted on the trailer door of the trailer.

6. Do not place all the heavy equipment on one side of the trailer.

WAREHOUSE PERSONNEL

General Storeroom/Stockroom Safety

1. Wear leather gloves when handling materials such as copper or aluminum wire.

2. Do not attempt to catch falling materials.

3. Do not try to kick objects out of pathways. Push or carry them out of the way.

4. Move slowly when approaching blind corners.

5. Do not run-on stairs or take more than one step at a time.

6. Do not jump from elevated places such as truck beds, platforms, or ladders.

7. Do not lift slippery or wet objects; use a hand truck.

8. Visually inspect for sharp objects or other hazards before reaching into containers such as garbage cans, boxes, bags, or sinks.

9. Remove or bend nails and staples from crates before unpacking the crates.

10. When cutting shrink wrap with a blade, always cut away from you and your co-workers.

11. Straighten or remove rugs and mats that do not lie flat on the floor.

12. Use caution signs or cones to barricade slippery areas such as freshly mopped floors.

13. Obey all safety and danger signs posted in the workplace.

Stocking Shelves

1. When stocking shelves by hand, position the materials to be shelved slightly in front of you, so you do not have to twist when lifting and stacking materials.

2. Place items on shelves so that they lie flat and do not wobble.

3. Place heavier loads on the lower or middle shelves.

4. Do not stack bulky merchandise on crushed boxes.

5. Do not let items overhang from shelves into walkways.

6. Remove one object at a time from shelves.

7. Do not climb the racking to stock or retrieve merchandise; use a ladder.

Hand Truck Operations

1. When loading hand trucks, keep your feet clear of the wheels.

2. Do not exceed the manufacturer's load rated capacity. Read the capacity plate on the hand truck if you are unsure.

3. Place the load so that it will not slip, shift, or fall. Use the straps, if they are provided, to secure the load.

4. For extremely bulky items, such as air-conditioning units or heating units, strap or chain the items to the hand truck.

5. Tip the load slightly forward so that the tongue of the hand truck goes under the load.

6. Push the tongue of the hand truck all the way under the load that is to be moved.

7. Keep the center of gravity of the load as low as possible by placing heavier objects below the lighter objects.

8. Push the load so that the weight will be carried by the axle and not the handles.

9. If your view is obstructed, ask a spotter to assist in guiding the load.

10. Do not walk backward with the hand truck, unless going up stairs or ramps.

11. When going down an incline, keep the hand truck in front of you so that it can be always controlled.

12. Move hand trucks at a walking pace.

13. Store hand trucks with the tongue under a pallet, shelf, or table.

Pallet Jacks

1. Only pallet jack operators may operate pallet jacks.

2. Do not exceed the manufacturer's load rated capacity. Read the lift capacity plate on the pallet jack if you are unsure.

3. Do not ride on pallet jacks.

4. Start and stop the pallet jack gradually to prevent the load from slipping.

5. Pull manual pallet jacks; push them when going down an incline or passing close to walls or obstacles.

6. If your view is obstructed, ask a spotter to assist in guiding the load.

7. Stop the pallet jack if anyone gets in your way.

8. Never place your feet under the pallet jack.

General Hand Tool Safety

1. Tag worn, damaged or defective tools "Out of Service" and do not use them.

2. Do not use a tool if its handle has splinters, burrs, cracks, splits or if the head of the tool is loose.

3. Do not use impact tools such as hammers, chisels, punches, or steel stakes that have mush­roomed heads.

4. When handing a tool to another person, direct sharp points and cutting edges away from yourself and the other person.

5. Do not carry sharp or pointed hand tools such as screwdrivers, scribes, snips, scrapers, chisels, or files in your pocket unless the tool or your pocket is sheathed.

6. Do not perform "make-shift" repairs to tools.

7. Do not throw tools from one location to another or from one employee to another.

8. Transport hand tools only in toolboxes or tool belts. Do not carry tools in your clothing.

Obtained from Toolboxtopics.com, Plumbing, HVAC, https://www.toolboxtopics.com/menu\_programs.html (Accessed August 14, 2024).