MILLWORK

NAICS Code

321911 Wood Window and Door Manufacturing

 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.

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ALL PERSONNEL

General Rules

 1. Wear safety glasses and work boots with non-skid soles when working in the millwork plant.

 2. Do not wear loose clothing or jewelry.

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

 4. Wear earplugs in areas posted "Hearing Protection Required".

 5. Obey all safety rules and danger signs posted in the millwork plant.

Housekeeping

 1. Remove or sweep up debris such as wood scraps, hardware, saw dust and metal banding from around equipment such as power saws, assembly tables, sanders, and molders daily or more often if the routine cleaning is not sufficient to control build up.

 2. Keep aisles clear of work materials and debris.

 3. Do not clean up around someone who is operating machinery.

 4. Use brushes or vacuum machinery to remove wood chips, shavings and other debris from the saw tables or other machinery. Do not use your bare hands.

 5. Attach the pressure reducing nozzle that is labeled "Reduces Pressure to 30 psi" to the air hose when using compressed air to clean equipment, machinery, or work pieces.

 6. Do not use the air hose to clean floors assembly tables or workbenches.

 7. Do not use compressed air for comfort cooling.

 8. Coil up the air hose on the worktable or hose rack when it is not in use.

Lifting Techniques

 1. Plan the move before lifting; remove obstructions from your chosen pathway.

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

 3. If the load is too heavy or bulky, use lifting and carrying aids such as pallet jacks or lumber carts, or get assistance from a coworker.

 4. If assistance is required to perform a lift, coordinate, and communicate your movements with those of your coworker.

 5. Position your feet 6 to 12 inches apart with one foot slightly in front of the other.

 6. Face the load.

 7. Bend at the knees and keep your back straight.

 8. Get a firm grip on the object with your hands and fingers. Use handles when they are present.

 9. Do not lift anything if your hands are greasy or wet.

 10. Hold objects as close to your body as possible.

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

 12. 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.

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

 14. 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.

Lumber Carts

 1. Block the wheels of the lumber cart to prevent movement while placing or removing lumber from it.

 2. Balance the load in the center of the cart.

 3. Move lumber carts by pushing them rather than pulling them.

 4. Do not stand on, ride on, or use a lumber cart as a work platform.

Pallet Jacks

 1. Do not leave the pallet jack unattended with the load suspended.

 2. Do not use pallets or skids that are cracked, split, or have other visible damage.

 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. Keep your feet and other body parts clear of the pallet before releasing the load.

FORKLIFT OPERATORS

Forklifts

 General Rules

 1. Only employer authorized employees may operate a forklift.

 2. Do not use the forklift if any of the following conditions exist:

 • The mast has broken or cracked weld-points.

 • The forks are unequally spaced, or cracks exist along the blade or at the heels.

 • The hydraulic lines and fittings have excessive wear or are crimped.

 • Fluid is leaking from the lift or the tilt cylinders.

 • The battery has cracks or holes, uncapped cells, frayed cables, broken cable insulation, loose connections, or clogged vent caps.

 • The horn or backup alarm does not sound.

 3. Follow the manufacturer's guidelines concerning changes in the lift capacity before adding an attachment to a forklift.

 4. Only forklift operators are to ride the forklift, no passengers.

 Starting the Forklift

1. Apply the foot brake and shift gears to neutral before turning the key.

 Driving Rules

 1. Drive with the load at a minimum ground clearance height of 6-8 inches at the tips and 4 inches at the heels to clear most uneven surfaces and debris.

 2. Do not raise or lower a load while you are in route. Wait until you are in the loading area and have stopped before raising or lowering the load.

 3. Do not exceed a safe working speed of five miles per hour and slow down in congested areas.

 4. Do not drive over objects in your pathway.

 5. Drive in reverse and use a signal person when your vision is blocked by the load.

 6. Look in the direction that you are driving; proceed when you have a clear path.

 7. Steer wide when making turns.

 8. Do not drive up to anyone standing or working in front of a fixed object such as a stationary saw or an edge bander.

 Picking up a Load

 1. "Square up" on the center of the load and approach it straight on with the forks in the travel position.

 2. Stop when the tips of your forks are about a foot from the load.

 3. Level the forks and slowly drive forward until the load is resting against the backrest of the mast.

 4. Lift the load high enough to clear whatever is under it.

 5. Back up about one foot, then slowly tilt the mast backwards to stabilize the load.

 Putting a Load Down

 1. Square up and stop about one foot from the desired location.

 2. Level the forks and drive to the loading spot.

 3. Slowly lower the load to the ground, truck bed or other loading surface.

 4. Tilt the forks slightly forward so that you do not hook the load.

 5. When the path behind you is clear of obstructions, back straight out until the forks have cleared the loading surface.

 Shutting Off the Forklift

1. Lower the mast completely, leave the forklift in gear and turn off the engine before leaving the forklift.

SAWYERS/FABRICATORS

General Rules

 1. Follow the manufacturer's instructions for repairing, calibrating, replacing, and operating the power saw equipment you will be using.

 2. Do not operate a power saw on which you have not been trained.

 3. Do not wear gloves while operating a power saw.

 4. Clear all wood scraps, accumulated saw dust and other debris from the saw cutting area before performing cutting operations.

 5. Use a brush or a push stick to clean saw dust and wood scrap from around the saw blade; do not use your hands.

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

 7. Do not use a saw blade that is cracked or bent, or that has missing teeth.

 8. If the saw blade breaks during operation, follow this procedure:

 • Shut off the power.

 • Lock the start switch in the "Off" position.

 • Do not attempt to remove any part of the saw blade until the saw blade has completely stopped.

 9. Lock and/or tag damaged power saws "Out of Service.”

 10. Do not remove, cover, or alter warning tags on any part of a power saw.

 11. Do not remove locks placed by another employee.

 12. Keep your hands away from the exposed blade.

 13. Operate the saw at full cutting speed.

 14. When using the power saw, do not reach across the cutting operation.

 15. Do not leave a running power saw unattended.

 16. Stop cutting operations if something or someone distracts you.

Panel Saw (vertical and horizontal)

 1. Use a lumber rest such as a sawhorse to guide lumber that is 8 feet in length or greater from the scissor lift to the horizontal panel saw.

 2. Get assistance when placing a large sheet of wood onto the vertical panel saw.

 3. Adjust the fence and blade depth before turning the power switch to the "On" position.

 4. Set the work piece securely against the back fence before beginning the cut.

 5. Grip the vertical panel saw only by its handles when operating the saw.

Table Saw

 1. Replace the guards after changing or cleaning the table saw blade, and after performing cuts such as rabbeting or dadoing which require the removal of the blade guard.

 2. Set the saw blade high enough to cut the stock, but no higher.

 3. Do not stand directly behind the work being cut between the blade and the fence.

 4. Do not grip or lay your hand flat on the lumber; guide it through with a clinched fist.

 5. Keep your hand out of the line of the cut when feeding the work piece into the table saw.

 6. Use the push stick to guide the stock when there is not enough room for hand movement between the rip fence and the table saw blade.

 7. Do not feed the material faster than the power saw can cut it.

 8. Turn the power switch of the saw to "Off" and allow the blade to stop before attempting to pull out an incomplete cut.

Radial Arm Saws and Metric Cut Saws

 1. Do not operate a radial arm or metric cut saw that does not have the saw stop in place or that has a worn fence.

 2. Set the work piece securely against the back fence before beginning the cut.

 3. Place the back fence as close to the blade cut line as possible.

 4. Place the stock "squarely" and "solidly" on the table for cross-cutting.

 5. Do not grab or grip the wood during the crosscutting operation; press the wood against the backstop with the palm of your hand.

 6. Never let your hand, fingers, or thumb cross the cutting line.

 7. When cutting, pull the radial arm saw to the point necessary to complete the cut, release it, and then let it return to its stored position. If the saw movement is sluggish or hesitant and does not return to its stored position in a smooth and timely fashion, turn the power switch of the saw to "Off" and tag it "Out of Service".

 8. Stop using the radial arm saw if the lower portion of the blade hood is not adjusting itself to the thickness of the material being cut as the blade passes through the material.

Chop Saws and Miter Saws

 1. Secure all required adjustments and locks before applying power.

 2. Lower the chop saw handle at a slow, steady rate when making the cut. Do not force the handle down.

 3. Do not place your hands in front of the saw blade.

Saber Saws and Jig Saws

 1. Discard blades with worn or missing teeth.

 2. Adjust the dust blower toward the cutting line.

 3. Tighten the chuck to the blade before turning the saw "On".

Band Saws and Scroll Saws

 1. Set the work piece securely against the jig before beginning the cut.

 2. If the material binds or pinches on the blade, turn the power switch of the band saw to "Off" and allow the blade to stop before attempting to back the work away from the blade.

 3. Guide the work piece using a clinched fist. Do not lay your hand flat on the work piece.

Thickness Planer/Surfacer

 1. Provide a support, such as a work piece support stand, behind the out-feed table to support long work pieces.

 2. Stop the motor before attempting to dislodge a jammed work piece or before removing loose chips from the tables.

 3. Cut with the grain whenever possible.

 4. Do not allow your hands to get near the feed rollers or under the housing at anytime when the motor is "On". Keep your hands at least one foot from the in-feed roller when feeding the work pieces.

Jointer

 1. Follow this procedure when feeding the work piece:

 • Hold the work piece firmly against the tables and the fence with both hands.

 • Keeping your fingers together, place your left hand to the top-front of the work piece and your right hand to the top-rear of the work piece.

 • Feed the work piece with slow, even pressure on the front table into the cutting knives.

 • When the work piece has passed over the knives and onto the rear table, lift your hands over the knives and hold the work piece firmly down on the rear table against the fence. Do not place your hands over the cutting knives at any time.

 • Let the work piece slide under your left hand which remains just beyond the knives at the rear table while you feed the work piece with your right hand.

 • Continue with pressure against the tables and fence with both hands until the workpiece has passed over the knives.

 2. Use a push block for short or thin workpieces.

 3. When extra wide workpieces are edge planed, add an auxiliary fence.

 4. Do not cut a workpiece less than 1 foot in length when using a jointer.

Shaper

 1. Use devices such as feather boards, fences, collars, forms, or an outline pattern to guide and hold the stock against the shaper knives.

 2. If the character of the work is such that it is impossible to employ a hold-down device, take two or more light cuts repeatedly where considerable material is to be removed.

 3. Do not cut small workpieces on a shaper. Instead, shape the edge of a larger workpiece, and then cut off the scrap with a table or radial arm saw.

 4. Grip the workpiece firmly with both hands and hold it against the fence and the table.

 5. Hold the work piece against the peg and collar when cutting/shaping irregular shaped workpieces.

 6. Feed the workpiece against the direction of rotation of the cutter. Thus, if the cutter is turning clockwise looking from the top, the workpiece is fed left to right.

 7. Feed the work piece into the cutter slowly and steadily.

 8. Keep your hands away from the cutter.

 9. Consult with your supervisor before performing new or unfamiliar cuts.

Molders, Gang Saws and Straight-Line Saws

 1. Do not allow your hands to get near the feed rollers or under the housing at anytime when the motor is "On". Keep your hands at least one foot away from the in-feed roller when feeding the workpieces.

 2. Do not overload the motor by "crowding" the workpiece. If the motor slows down, disengage the rollers by using the feed control until the motor returns to full operating speed.

 3. Stand to the side of the cutting blades when feeding the workpiece into the machine.

ASSEMBLY PERSONNEL

General Rules

 1. Do not use a power tool if the power cord has splices, exposed wires or cracked or frayed ends.

 2. Do not operate a power tool if the ground prong from the three wired power plug is missing or has been removed.

 3. Turn the power tool off before plugging or unplugging it.

 4. Do not carry a power tool by the cord.

Drills

 1. Do not use dull, cracked, or bent drill bits or accessory shafts.

 2. Tighten the drill bit or accessory shaft securely in the chuck before drilling or boring.

 3. Remove the chuck key or drift from the chuck before starting the drill.

 4. Do not hold the work piece by hand when boring; use clamps to hold the work piece.

 5. Turn the drill "On" before allowing the drill point to touch the work piece.

Routers

 1. Secure the work piece to a bench or table.

 2. Make sure the router bits are clean, sharp, and firmly tightened in the collet before turning the router "On".

 3. When possible, use a dust collection system that will gather all the dust generated by the router.

 4. Keep an accessible area under the router's guide so that the router's bit does not hit any obstructions.

 5. Do not start up the router with the bit in contact with the wood.

 6. Always feed against the direction of rotation of the bit (left-to right feed when rotating clockwise).

 7. Do not jam or crowd routers in the workpiece.

 8. Do not touch a bit immediately after use; allow it to cool.

Belt Sanders

 1. Wear safety goggles when using belt sanders. Tilt your head forward when removing goggles to prevent sawdust from falling into your eyes.

 2. Do not wear contact lenses when sanding.

 3. Do not touch the abrasive surface of the belt sander with your bare hands when the belt sander is operating.

 4. Turn off the sander and disconnect the power supply before changing the sandpaper.

Contact Glue Application

 1. Turn on the ventilation and exhaust system before applying the contact glue.

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

 3. Close the lids of containers of contact glue tightly after each use and return the containers to the storage cabinet labeled "Flammable Storage" when spraying is finished.

 4. Always wash your hands with soap and water after using adhesives; do not use mineral spirits, paint thinner, acetone or any other toxic solvents to remove contact glue from your skin.

Pinch Roller Press

 1. Keep all guards in place. Replace all guards after adjusting or repairing equipment before starting the pinch roller press.

 2. Do not touch any moving parts of the press. The press must be disengaged and stopped completely before touching any operating part.

 3. Do not attempt to reach into the point of operation to make last minute adjustments to the workpiece when the press is in operation. Back the work piece away from the press and disengage the press before making the adjustment.

Glue Guns

 1. Point a hot glue gun only at the workpiece. Do not point a hot glue gun at a coworker or yourself.

 2. Place the glue gun in its holding stand when it is not in use.

Pneumatic Staplers and Nail Guns

 1. Do not point the stapler/nail gun at anything other than the wood of the workpiece.

 2. Do not discharge the stapler/nail gun unless it is touching the surface of the workpiece.

 3. Keep your free hand out of the stapling/nailing path on the workpiece.

 4. Keep your free hand from behind the work piece that is being stapled.

 5. Use a jig or fixture to hold the workpiece; do not use your free hand to hold the workpiece.

 6. Keep your eyes on your work. Stop stapling/nailing if something or someone distracts you.

 7. Fire the nail gun using the trigger, not the safety.

 8. Do not use the head of the nail gun to hammer nails into wood.

 9. Disconnect the stapler/nail gun from the air hose and return it to its storage rack after use.

EDGE BANDER OPERATOR

Edge Bander

 1. Do not overfill the glue pots. Fill only to the reservoir line.

 2. Keep your hands at least one foot from the in feed or out feed rollers when operating the edge bander.

 3. Remove any debris such as plastic laminate, scrap banding or mica chips from around the edge bander and form the return conveyor before operating the edge bander and as debris accumulates during extended periods of operation.

 4. Follow the manufacturer's guidelines when cleaning the glue pots or the edge band rollers.

 5. Wear protective gloves when cleaning excess glue off the glue pots and edge banding rollers.

FINISHING PERSONNEL

Orbital Sanders

 1. Wear dust masks, goggles and hearing protection while using sanders.

 2. Do not wear contact lenses when sanding.

 3. Sand on the downward side of the disk.

 4. Keep your hands away from the abrasive surface.

 5. Turn off the sander and disconnect the power supply before changing the sandpaper.

Finishing

 1. Follow the instructions on the label and in the corresponding Safety Data Sheets before applying such materials as epoxies, polyurethane formulations, or lacquers.

 2. Turn on the ventilation and exhaust system before performing finishing operations.

 3. Use the respirator provided by your supervisor.

 4. Keep open flame and spark producing equipment at least 20 feet away from the finishing area.

 5. Keep no more than one day's supply of finishes and solvents in the finishing area.

 6. Turn off and remove all portable lamps and heaters from the spray booth before spraying.

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

 8. Return containers of lacquers, thinners, polyurethane, and other liquids labeled "Flammable" to the storage cabinet labeled "Flammable Storage" when finishing is completed.

 9. Always wash your hands with soap and water after using finishing products; do not use mineral spirits, paint thinner, acetone or any other toxic solvents to remove paint from your skin.

MAINTENANCE PERSONNEL

Electrical Safety

 1. Turn off electrical tools and disconnect the power source from the outlet before attempting repairs or service work. Tag the tool "Out of Service".

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

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

 4. Do not use cords that have splices, exposed wires, frayed ends or have the ground prong removed or broken off.

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

 6. Do not run extension cords through doorways, through holes in ceilings, walls, or floors.

 7. Lock and/or tag damaged machinery "Out of Service" to prevent usage of the machine.

 8. Do not remove, cover, or alter warning tags on any part of a machine.

 9. Do not remove locks placed by another employee.

Grinders and Profile Grinders

 1. Do not use a grinding wheel that has 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 with your hand, even if you are wearing gloves.

 4. Do not use the stationary grinder if it is not firmly anchored to the work bench.

 5. Do not clamp a portable grinder in a vise to use it as a bench grinder.

 6. Prior to installing a new grinding wheel, inspect the wheel for cracks or other visible damage: Tap the wheel gently with a plastic screwdriver handle to detect cracks that are not visible. If the wheel has a dead sound rather than a ring sound, do not use the wheel.

 7. Do not install a grinding wheel that has a labeled RPM speed that is lower than the rated speed of the grinder.

 8. Do not stand in line with the grinding wheel when grinding.

 9. Adjust the tongue guard so that it is no more that 1/4 inch from the grinding wheel.

 10. Adjust the tool rest so that it is no more that 1/8 inch from the grinding wheel.

 11. Regardless of the pressure required and regardless of their weight, size, or shape, grind objects on the face, not the side, of the wheel. Exception: Wheels designed for side grinding.

Blade Storage

1. Keep cutting blades oiled when stored to prevent rust. Be sure to remove the oil before putting the cutting blade into service.

SHIPPING/RECEIVING PERSONNEL

Scissor Lifts

 1. Do not stand or reach under a raised scissor lift.

 2. Do not jump from or on to a raised scissor lift.

Drivers

 1. Do not stay in the cab of the truck while the payload is being loaded or unloaded by forklifts.

 2. Perform a "walk around" inspection to ensure that the load is stable, and the securing straps are tight before moving the truck. Tighten all loose straps.

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

 4. Keep all mirrors clean and adjusted for a clear view.

 5. Always depress the clutch and brake pedal before starting a truck with a manual transmission.

 6. Shut all doors and fasten your seat belt before moving the truck.

 7. Always obey all traffic laws and signs.

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