

GENERAL SAFETY GUIDELINES FOR PRODUCTION

Production Company: _____

Show Name: _____

Additional safety information is available at www.canadianproduction.com

Before you start your job:

1. Read these **General Safety Guidelines for Production**.
2. Sign the attached **Acknowledgment Form** and give it to your supervisor.
3. Familiarize yourself with the nearest fire exits and fire extinguishers at your worksite.
4. Read all posted safety information on your stage or location.

NOTE: Employees can express safety concerns by calling the **ANONYMOUS SAFETY HOTLINE (877) 566-8001**. No employee shall be retaliated against for reporting hazards or potential hazards, or for making suggestions related to safety.

INDUSTRIAL HEALTH AND SAFETY PROGRAM

As required by the **Occupational Health and Safety Act (OHSA)**, and to assist you in meeting the requirements of federal, state, and local agencies, the **Industrial Health and Safety Program (IHSP)** has been developed. It is designed to help you make Production safe and to document your safety activities.

This Company has a written Industrial Health and Safety Program (IHSP.) It is contained in the Production Safety Manual and is available to all employees: 1.) as a hard copy kept on the set with the 1st Assistant Director and in the Production Office with the Unit Production Manager; and 2.) on the web at www.canadianproduction.com.

The IHSP addresses the following:

- Responsible Persons
- Compliance: Enforcement of Safe Work Practices
- Communication
- Inspections
- Injury or Illness Investigation
- Hazard Assessment and Control of Unsafe or Unhealthful Conditions
- Safety Training
- Recordkeeping

STATEMENT OF SAFETY POLICY

It is the policy of this Production that an Industrial Health and Safety Program will be instituted and administered as a comprehensive and continuous occupational Industrial Health and Safety Program (IHSP) for all employees. Our goal is to prevent accidents, to reduce personal injury and occupational illness, and to comply with all safety and health standards.

Safety is a priority.

NOTE: Whenever an unsafe or unhealthful condition, practice or procedure is observed, discovered, or reported, the UPM or designee will take appropriate corrective measures in a timely manner based upon the severity of the hazard. Employees will be informed of the hazard, and interim protective measures taken until the hazard is corrected.

SPECIAL NOTICE TO HEADS OF DEPARTMENT/SUPERVISORS

Under the Occupational Health and Safety Act (OHSA), a supervisor must carry out certain duties including:

- Ensuring that a worker complies with the OHSA and regulations [section 27(1)(a)];
- Ensuring that any equipment, protective device or clothing required by the employer is used or worn by the worker [section 27(1)(b)];
- Advising a worker of any potential or actual health or safety dangers known by the supervisor [section 27(2)(a)];
- If prescribed, provide a worker with written instructions about the measures and procedures to be taken for the worker's protection [section 27(2)(b)]; and
- Take every precaution reasonable in the circumstances for the protection of a worker [section 27(2)(c)].

The regulations under the OHSA, if applicable, contain additional duties of supervisors. Supervisors who have been convicted for an offence of failing to comply with their duties under the OHSA or for a contravention of the OHSA and its regulations may be subject to the penalties set out in section 66 of the OHSA, which may include fines of up to \$25,000 and/or up to 12 months imprisonment.

SAFETY AWARENESS TRAINING FOR EMPLOYEES AND SUPERVISORS

Effective July 1, 2014, Ontario Ministry of Labor requires ALL employees and supervisors to take an online Safety Awareness Training class. It is your responsibility to access this training at: <http://www.labour.gov.on.ca/english/hs/training/index.php>

Failure to comply with these Safety Guidelines may result in discipline, up to and including termination.

CODES OF SAFE PRACTICES FOR PRODUCTION

These Codes of Safe Practices have been prepared to inform employees of safety issues associated with their positions, and to recommend ways of preventing injuries while on the job. However, Production management cannot monitor every employee, in every situation, every minute of the day to see that safe practices are being followed. It is a condition of employment that each employee be committed to safe work practices daily. Each employee, for themselves and fellow workers, must take responsibility work safely and should report to his or her supervisor any unsafe conditions or practices observed. While most of these guidelines are driven by common sense, others are mandated by government regulations. Failure to follow these guidelines could result not only in serious injury, but will cost valuable time and expense due to delays and/or shut downs enforced Governmental agencies or Production management personnel.

FIREARMS POLICY

The Company expressly prohibits weapons, including but not limited to firearms, in the workplace. The workplace includes all property owned, leased or controlled by the Company. Exceptions will be made for weapons approved for use for filming or with prior written approval by the Company. Failure to strictly adhere to this policy will result in disciplinary action, up to and including termination.

GENERAL

1. Know the *Emergency Plan* and how to react in emergency situations. Familiarize yourself with emergency procedures for each location. Speak to your supervisor if emergency procedures are unknown.
2. Attend all pertinent toolbox talks assigned by your supervisor and additional safety meetings whenever any stunt, special effect, firearm, live ammunition, hazardous or unusual activity is scheduled.
3. ***Report all injuries, no matter how minor, immediately so proper medical or first aid treatment can be arranged. Inform the appropriate supervisor.***
4. ***Report any employees interfering with communications equipment, the dissemination of safety information, or disrupting safety meetings, to their supervisors.***
5. Your supervisor will specify appropriate work shoes and clothing. Loose or frayed clothing, gloves, long hair, rings, etc., can be entangled in certain machines and shall not be worn.
6. Your supervisor will furnish safety equipment. Use goggles or safety glasses when cutting, grinding or chipping; correctly wear harnesses with suitable anchorages when working above or outside of guardrails; wear hard-hats when exposed to potential falling objects.
7. All safety guards and other protective devices should be properly adjusted and remain in place. Missing or faulty safety equipment should be visibly marked and be reported promptly to the employee's supervisor.
8. Always use push sticks to guide short or narrow pieces of stock through saws. Using the correct push stick allows saw operators to keep their hands at a safe distance from the saw blade and prevent kickback.
9. ***Asbestos Containing Materials (ACM):*** No employee of this company shall be asked to remove, demolish, or abate ACM or suspected ACM. All such work will be performed by licensed third party ACM remediation vendors. Contact the Production Safety Representative.
10. Any employee who accidentally disturbs friable ACM and is potentially exposed to ACM should undergo a precautionary decontamination procedure so as to avoid exposing other workers and, potentially, bringing contaminated materials home:
 - a). the employee should wash down in the nearest shower;
 - b). the employee's clothes should be disposed of by the third party asbestos remediation company;
 - c). the employee should be loaned clothing to wear when returning home.
11. Only authorized and trained personnel are allowed to use aerial lifts, scissor lifts, etc. ***Harnesses and lanyards are to be worn at all times, including in scissor lifts and bucket lifts. (May require adjustment of lanyard for Fall Restraint.)***
12. Always use aerial lifts, scissor lifts and forklifts as the manufacturers intended or has provided special guidelines. Familiarize yourself with the manual. Do not overload, tower, use in place of a crane, over rig for wind conditions, etc.
13. Always make sure the area below is clear of personnel when working with overhead loads unless exception is approved by the Production Safety Representative.
14. Ladders, scaffolds, working platforms and walkways, should be properly maintained and used in a safe manner. Access areas and walkways are to be kept clear of material and debris.
15. Adequate fall protection devices (i.e. guardrails, covers, personal fall arrest systems, barricades) shall be provided at all elevated surfaces, excavations, trenches, pits and floor openings that expose any worker to a potential fall of greater than 10 feet (3 meters). (Trigger height may vary. Contact the Production Safety Representative.)
16. ***Working Alone or in Isolation:*** If your work requires you to be alone or isolated from other employees, let your Department Head know where you will be and what you will be doing. Have the area you are working inspected for any hazards. Establish regular telephone contact with your Department Head. If no telephone service is available, alternate methods of contact should be made.
17. ***Liftgates:*** Always operate liftgates according to manufacturers' guidelines. Chock or lock wheels of all carts or materials being lifted by liftgate. Keep employees clear when raising or lowering liftgate.
18. Notify your supervisor if you are taking any medication that may interfere with your ability to work. Working under the influence of illegal drugs or alcohol is prohibited.
19. Observe designated smoking areas. Smoking is not allowed on stages. Extinguish smoking materials in appropriate butt cans.
20. It is your responsibility to report unsafe conditions, employees engaged in unsafe activities, and all accidents to your supervisor or to the Anonymous Safety Hotline (877) 566-8001.
21. See that all visitors and new hires remain a safe distance from potentially hazardous construction and filming.
22. Do not engage in pranks, horseplay, scuffling or other unsafe acts.
23. Never enter confined spaces (manholes, underground vaults, chambers, silos, etc.) until oxygen and gas levels have been checked by a qualified person and confirmed as being healthful.
24. ***Stunts and Special Effects*** require an on-site walk-through with all involved parties before filming. The meeting and rehearsals should be documented (the *daily production report* may be used.) Certain stunts and special effects, such as those involving aircraft, high falls, body burns, car crashes, etc., should be reviewed by the Production Safety Representative prior to execution. Special Effects involving *pyrotechnics, atmospheric smoke, explosives and/or fire*, should be noted in advance on the call sheet. There should be planned escape routes provided for each person who should personally check the route to determine its accessibility. Only persons necessary for the stunt and/or effect should be in the immediate area. Those involved in the scene should ask questions until they thoroughly understand their part in the action. All others should stay in the designated safe zone.
25. ***Firearms and Live Ammunition*** should always be treated as if they are loaded or set to detonate. Do not play with firearms or any weapons and **never point** a firearm at anyone, including yourself. Follow the directions of the property master regarding all firearms and weapons. Ask for clarification until you understand its proper use. Do not bring live ammunition to the filming location.
26. ***Film Vehicles:*** Be particularly cautious when vehicles such as fixed wing aircraft, boats, cars, helicopters, motorcycles and trains are being used. When driving, walking or traveling in any manner in congested areas, proceed slowly and watch for sudden movements. Pay close attention when working around helicopters and on runways.
27. ***Water Hazards:*** Always wear life vests or other safety gear when possible when working on boats, pontoons, rafts, etc. Use safety lines, nets, observers and/or safety divers when filming in rivers or other bodies of water. Only electrical equipment intended for use in and around water should be used.

28. **Animals:** Make sure you understand and follow the wrangler's safety precautions in effect when animals are present. Do not feed, pet or play with any animal. Defer to the trainer/wrangler at all times.
29. **Tools and Equipment:** See to it that all equipment is in proper working order and that all protective guards are in place and are used. Do not attempt to alter, modify, displace or remove any existing safety equipment. Saw guards, safety switches, and other safety mechanisms are installed for your protection. Always use push sticks to guide short or narrow pieces of stock through saws. Using a push stick allows saw operators to keep their hands at a safe distance from the saw blades. Do not use tools or equipment for which you are not trained and certified. See your supervisor if you have any questions or feel that you need additional training. **Do not use, alter, or modify equipment being used by another employee without informing them prior to doing so.**
30. **Chemical Handling:** Store all flammable liquids in approved safety cans or cabinets. Do not allow paint chemicals and other materials to accumulate on stage floors, under platforms, or in other work areas where they do not belong. Read understand and follow proper handling and storage procedures for all combustible or flammable materials. Use only approved flame retardants and decorative set materials that are non-combustible. Properly dispose of all hazardous waste generated by the company, including paint. Do not dump down the sink, storm drain, septic systems, or in the trash.
31. **Fire Safety:** In buildings, keep all exterior doors unlocked and capable of being opened from the inside. Make sure all aisles, traffic lanes, electrical panels, and fire exits and all fire equipment are kept clear and accessible at all times. Maintain clear walkways (4 feet around the perimeter) and exit passages.
32. **Ladders:** Place ladders on slip-free surfaces, even if they have slip-resistant feet. Secure the ladder if a slip-free surface is not available. Never place ladders in front of doors or walkways.
33. **Fall Protection:** All personnel working in the permanent grid and truss system (perms) outside the catwalks and handrails will use Cal/OSHA compliant fall protection equipment. Prior to use each day, the wearer should visually inspect all fall protection equipment.
34. **Electrical Safety:** Keep all electrical cords away from pinch points. In any wet, damp or moist environment, *Ground Fault Circuit Interrupters* (GFCI's) should be used. See to it that all electrical panels are unobstructed and have a minimal clearance of 36".
35. **Lock Out/Tag Out:** Always turn off a tool or appliance before disconnecting it to avoid exposure to live electrical parts. Never work on machinery which may unexpectedly be re-energized.
36. **Lifting Precaution:** When lifting, stand close to the object with your feet comfortably apart, squatting down, and bending at the hips and knees. As you lift the object, arch your back inward and pull your shoulders back, keeping the load close to your body. Once you arrive at your destination, set the load down, bending at the hips and knees. Remember: never twist your body at the hip when carrying a load.
37. **Reach Lifts/ Gradall's should only be operated by persons trained on the specific model being used.**

2. Move to the nearest exit quickly.
3. Use the stairwells. **DO NOT USE THE ELEVATOR.**
4. Evacuate to the outdoors, to a pre-assigned evacuation area.
5. After reaching the assembly area:
 - a. Stay with your evacuation group and wait for further instructions.
 - b. Do not reenter an evacuated building until emergency personnel notify you it is safe.

IN THE EVENT OF A FIRE

1. KEEP CALM.
2. EVACUATE: all occupants from the room in which the fire has occurred.
3. CLOSE THE DOORS AND WINDOWS and leave the room.
4. PULL THE FIRE ALARM OR CALL THE FIRE DEPARTMENT. Tell them your exact location and the nature of the emergency.
5. ONLY IF YOU HAVE BEEN TRAINED TO USE A FIRE EXTINGUISHER AND CAN DO SO SAFELY, return to fight the fire with a fire extinguisher until the Fire Dept. arrives. (See FIRE EXTINGUISHERS)
6. EVACUATE OCCUPANTS FROM THE ADJOINING AREA if there is any danger from spreading fire, smoke, fumes or extreme heat.

FIRE EXTINGUISHERS

1. Use a fire extinguisher only if you have been trained to do so and can do so safely. If there is any danger at all from fire, smoke, fumes or extreme heat, LEAVE THE AREA IMMEDIATELY.
2. Determine what type of fire you have and check the label on the extinguisher to make sure it is intended for your type of fire. Letters on the label indicate the type of fire it will fight:
 - a) **A** = wood, cardboard, paper, cloth
 - b) **B** = flammable liquids and gases
 - c) **C** = electrical equipment
 - d) **D** = metals

(Never use water on an electrical fire – water can cause a fatal shock.)
3. Use the **PASS** system to put out the fire:
 - a) **P**ull the pin or ring. Some units require releasing of a lock latch, pressing a puncture lever, or other motion.
 - b) **A**im the extinguisher nozzle at the base of the fire.
 - c) **S**queeze or press the handle.
 - d) **S**weep from side to side slowly at the base of the fire until it goes out.
4. If the fire gets big, GET OUT! Close the door to slow the spread of the fire.

FIRE PREVENTION

1. Check to see that all fire exits, doorways, stairways, aisles and corridors are not obstructed or blocked at anytime.
2. Make sure you know the location of all fire exits.
3. Poor housekeeping is a fire breeder. Avoid all unnecessary accumulation of combustible debris.
4. Regularly check all electrical cords and plugs for fraying or cracked wire insulation and fitness for use. OSHA prohibits the use of ungrounded extension cords longer than 12 feet in office buildings.
5. Store all flammable liquids, such as copy machine fluids, cleaning products, solvents, etc. according to instructions on label.
6. Report fluorescent lights that give off a loud humming sound, as this may indicate a defective ballast.
7. Turn off all coffeemakers and other personal electrical appliances when they are not in use. Check the plugs, cords and wiring on a regular basis to determine if they are in good condition.

EMERGENCY INFORMATION

EMERGENCY PLAN:

Attend your Emergency Plan meeting.

1. Know exits.
2. Know assembly points.

Know your fellow employees.

When an emergency warning is made:

1. **WARN OTHERS!**

SMOKING IS PROHIBITED ON ALL SOUNDSTAGES, ON ALL SETS - INTERIOR AND EXTERIOR - AND IN ALL BUILDINGS, REGARDLESS OF LOCATION. THIS APPLIES TO ALL SMOKING PRODUCTS, INCLUDING E-CIGARETTES.

WORKING AT HEIGHTS

Ontario law states that proper fall protection/prevention must be instituted whenever a worker is exposed to the hazard of falling from a work area that is 3 meters or more above the nearest safe surface or water, or above a surface or thing that could cause injury to the worker if the worker were to fall on the surface or thing.

COMPANY POLICY: Anyone in any lift – condor, scissor lift, man lift, bucket lift, etc. – should wear a full-body harness with a lanyard attached. The lanyard may need to be adjusted for Fall Restraint.

- For general production crews, the trigger height for mandatory fall protection is 4 feet. Guardrails (42”), or harnesses with appropriate anchorage points are required.
- For set/scenery construction crews the trigger height for mandatory fall protection is 4 feet. Guardrails (42”), or harnesses with appropriate anchorage points are required.
- For construction work on a permanent structure, the trigger height for mandatory fall protection is 10’ (3 meters). Guardrails (42”), or harnesses with appropriate anchorage points are required.
- The trigger heights do not apply to work performed from portable ladders. If ladders are used properly, additional fall protection measures are generally not necessary.

FALL PROTECTION: GENERAL LADDER SAFETY

Employees must follow proper safety practices when using ladders. If ladders are maintained and used correctly, additional fall protection measures are generally not necessary.

- Inspect all ladders prior to use. Read all manufacturer safety warning on the ladder and comply with them.
- Check for loose steps or rungs, cracked or split steps or side rails, loose or bent hinges, missing ladder feet, etc. All defective ladders shall be marked “defective” and brought to the attention of the supervisor and removed from service.
- Make sure the ladder is free of oil, grease, or other slippery hazards.
- Use ladders on stable and level surfaces only.
- Ladders shall not be placed in doorways unless protected by barricades or guards.
- If using a step ladder, make sure it is securely spread open. Never use a folding step ladder in an unfolded position.
- Make sure the ladder is securely fixed at both the top and the foot so that it cannot move from its top or bottom points of rest. If the ladder cannot be secured at the top and bottom, then securely fix it at the base. If this is not possible, have someone stand at the base of the ladder and secure it manually against slipping.
- When using an extension ladder, the base to height ratio should be placed at approximately 1to 4.
- Ladders used to reach a walking surface or roof must extend at least 3 feet beyond the landing surface.
- Always face the ladder when ascending or descending.
- Use fiberglass or wood ladders when doing electrical work.
- You must maintain three points of contact at all times while climbing. Carry tools in a tool belt, pouch or holster, not in your hands. Keep your hands on the ladder.
- Do not stand on the top two steps of a step ladder.
- Do not try to reach so far above you or to either side that you lose your balance; instead, move the ladder.
- When you are using a hand line to pull up equipment or supplies, all material should be securely attached to the line and you should be in a stable position complying with fall protection regulations.
- No one should be permitted to stand, walk or work under a ladder while it is in use.
- When using rolling “A” frame trestle ladders, never extend them beyond twenty feet or manufacturer’s recommendation.
- Always lock or chock the wheels of trestle ladders to prevent any rolling or instability.

FALL PROTECTION: FIXED LADDERS

When climbing a fixed ladder over 20 feet in length without rest balconies, or a ladder that is not equipped with a ladder cage, you must

FALL PROTECTION: DEFINITIONS & GUIDELINES

(1) Passive Fall Prevention

- The best way to avoid a fall is not to work from a height. **Bring the work down to ground level** whenever possible.
- If you can’t bring the work to ground level, work from access equipment such as **scaffolding, a platform, an aerial lift, or a ladder.**
- If the work environment does not allow you to use access equipment, secure the elevated work area with a passive fall prevention barrier system, such as **guardrails** or a **roof parapet at least 42” high.**

(2) Fall Restraint

If the work environment does not allow for the use of a passive fall prevention system, use an approved fall restraint system. Fall restraint systems, such as a harness, and rope grab prevent the employee from reaching the edge of the roof.

(3) Fall Arrest

- A fall arrest system, such as a **rope grab kit, lanyard, and approved or acceptable anchorage point** arrests and limits the fall of an employee. Plan a method of rescue prior to the use of a fall arrest system.

(4) Controlled Access Zone

- When on elevated surfaces such as rooftops, platforms, or around pits and tanks one option is to establish a Controlled Access Zone (CAZ) A CAZ protects employees not wearing fall protection equipment by warning them when they are within six feet of the fall hazard.
- The system uses stanchions and control lines with high visibility flags every six feet. The line must be rated for two hundred pounds and be not less than six or more than 25 feet from the edge.
- A safety monitor must be assigned to: watch and warn employees who leave the safe zone and enter the CAZ six foot zone who are not wearing fall protection gear.

FALL PROTECTION: TRIGGER HEIGHTS

- Fall protection is always required when employees are working within six feet from the unprotected edge of a set, platforms, or roof, that is elevated 10’ (3 meters) above the surface below where the edge is not protected by a 42” guardrail or parapet wall.

use a ladder safety device. This equipment includes: a full-body harness and a sliding sleeve attached to either a fixed-rail or cable system.

- Inspect all fall protection equipment prior to use.
- Connect the sleeve to the “D” ring located on the front of your harness.
- Connect the sleeve to the fixed-rail or cable. Connect the sleeve onto the fixed-rail or cable with the arrow pointed toward the top of the ladder.
- Once attached, climb up the ladder normally. The detachable cable sleeve will follow you as you climb.
- When you reach the top of the ladder, carefully disconnect from the ladder safety device to exit the ladder.
- To descend the ladder, reattach your “D” ring to the sleeve and climb down smoothly in a normal manner. Allow the sleeve to “lead” you down. Climbing down out of position will cause the sleeve to lock onto the fixed-rail or cable.
- If the sleeve locks, move upward slightly to release the sleeve.
- You must be attached to the ladder safety system whenever you are on the ladder.
- Do not use unprotected fixed ladders over 20 feet in length.

☐ FALL PROTECTION: SOUNDSTAGE PERMANENTS

When working outside the catwalks, in the unprotected area of the permanents known as the “ozone,” **you must use fall arrest equipment.** This equipment includes: a full body harness and a self-retracting lanyard.

- Inspect all fall protection equipment prior to use.
- Locate an anchorage point for the self-retracting lanyard (SRL). Single-user anchorage points are located on the soundstage trusses at the corners of the ozone; are constructed of wire rope with thimbles; and have been identified with a yellow tag.
- Select an anchorage point as close as possible to where you are working to avoid or limit a possible swing fall.
- Connect the SRL to the anchorage point with a self-locking carabineer.
- Attach the double-locking snap hook from the SRL to the “D” ring located on the back of your harness.
- Avoid quick or sudden movements in any direction to prevent loss of balance from line tension or locking. The SRL maintains normal line tension when line is being steadily extracted and retracted. Do not allow the SRL to go slack.
- Practice using your attached SRL on the catwalk. This will familiarize you with the tension and locking actions of the system and make you aware of the forces applied to your body by the system during movement.
- If you need to move farther than the SRL will allow, return to the catwalk and find another anchorage point. Never try to increase the length of an SRL by attaching it to another SRL.
- Never detach from the SRL until you are safely back on the catwalk.
- **WARNING:** Do not allow the retractable lifeline to wrap around your arm. Do not turn and/or reach over the lifeline.

☐ FALL PROTECTION: HORIZONTAL CABLE SYSTEM OVER PERMANENTS

An employee working outside the catwalks, in the unprotected area of the permanents known as the “ozone,” **must use fall arrest equipment.** This equipment includes: a full body harness, a shock absorbing lanyard or a self-retracting lanyard (SRL), and a carabineer.

- Inspect all fall protection equipment prior to use. Inspect the horizontal wire rope cable for any kinks or damage.

- Select a horizontal line as close as possible to where you are working to avoid or limit a swing fall. These engineered lines are designed for two users per line.
- Connect the lanyard to the fixed horizontal anchorage line with a double-locking snap hook or self-locking carabineer.
- You may connect to the horizontal anchorage line either by:
 - Connecting the SRL to the horizontal line directly with a self-locking carabineer,
 - Substituting a 6-foot shock-absorbing “Y” lanyard for the SRL.
- Attach the double-locking snap hook from the SRL to the “D” ring located on the back of your harness.
- When using an SRL, avoid quick or sudden movements in any direction to prevent loss of balance from line tension or locking. The SRL maintains normal line tension when line is being steadily extracted and retracted. Do not allow the SRL to go slack.
- Practice using the device on the catwalk. This will familiarize you with the tension and locking actions of the SRL and make you aware of the forces applied to your body by the line during movement.
- If you need to move farther than the lanyard will allow, return to the catwalk and find another horizontal line. Never try to increase the length of a lanyard by attaching it to another lanyard.
- Never detach from the lanyard until you are safely back on the catwalk.

☐ FALL PROTECTION: BELOW THE PERMANENTS – SINGLE ROPE GRAB SYSTEMS

When working at heights below the permanents that cannot be reached by using a ladder, aerial lift, or scaffolding, **you must use fall arrest equipment.** (Examples of this work include, hanging greenbeds or walking on the top of set walls). The equipment needed includes: a full body harness with a self-retracting lanyard, a vertical rope lifeline with rope grab, a carabineer and a tag line.

- Inspect all fall protection equipment prior to use.
- Locate an anchorage point for the vertical lifeline. Single-user anchorage points are eyebolts located on the soundstage trusses and have been identified with a yellow tag.
- Select an anchorage point above you and as close as possible to where you are going to be working to avoid or limit a swing fall.
- Connect the vertical lifeline to the anchorage point with the double-locking snap hook.
- Open the rope grab and enclose the vertical lifeline with the rope grab (arrow pointed up) then tightly screw the rope grab to the vertical lifeline. **Make sure that the arrow on the rope grab is pointing up toward the anchorage point.**
- Attach the self-retracting lanyard (SRL) to the rope grab with a self-locking carabiner.
- Connect the tag line to the double-locking snap hook on the other end of the SRL.
- Position the rope grab, SRL and tag line on the lifeline so that the final height of the SRL is 6 feet above your intended work height.
- Protect the lifeline against rough edges by using a rope protector or by padding sharp corners.
- From the ground or greenbed, pull the tag line down and attach the double-locking snap hook from the SRL to the “D” ring located on the back of your harness.
- Never remove your lifeline until you are back on the ground or greenbed.
- If you need to move a longer distance horizontally across the set, you can rig two or more vertical lifeline systems. This will reduce the swing fall potential. (See “Multiple Rope Grab Systems” below.)

FALL PROTECTION: BELOW THE PERMANENTS – MULTIPLE ROPE GRAB SYSTEMS

When working at heights below the permanents that cannot be reached by using a ladder, aerial lift, or scaffolding, **you must use fall arrest equipment.** (Examples of this work include, hanging greenbeds or walking on the top of set walls).

When you need to move long distances horizontally across the set, use a multiple rope grab system. Two or more rope grab set-ups will allow you to travel across the set without risking a swing fall. This equipment includes: a full body harness the number of self-retracting lanyards (SRL's) you intend to use, number of vertical lifelines with rope grabs you intend to use, tag lines, carabineers and a double D-ring extender for your harness.

- Inspect all fall protection equipment prior to use.
- Locate an anchorage point for each of your vertical lifelines. Single-user anchorage points are located on the soundstage trusses and have been identified with a yellow tag.
- Select anchorage points above you and as close as possible to where you are going to be working to avoid or limit a swing fall.
- Connect the vertical lifelines to the anchorage points you have chosen with the double-locking snap hook. Attach only one vertical lifeline per anchor point.
- Open the rope grab and enclose the vertical lifeline with the rope grab (arrow pointed up) then tightly screw the rope grab to the vertical lifeline. **Make sure that the arrow on the rope grab is pointing up toward the anchorage point.**
- Attach the self-retracting lanyard (SRL) to the rope grab with a self-locking carabiner.
- Connect the tag line to the double-locking snap hook on the SRL.
- Position the rope grab, SRL and tag line on the lifeline so that the final height of the SRL is 6 feet above your intended work height.
- Protect the lifeline against rough edges by using a rope protector or by padding sharp corners.
- From the ground or greenbed, pull the tag line and attach the double-locking snap hook from the SRL to the double D-ring extender attached to the D-ring on the back of your harness.
- As you work move toward the next SRL you previously positioned. Pull the tag line and hook the double-locking snap hook to the second D-Ring extender.
- Unhook the first double-locking snap hook from the first SRL.
- Never remove one lifeline until you are safely attached to the second lifeline, or until you are back on the ground or greenbed.

FALL PROTECTION: Rooftop Restraint

When working within 6 feet of the unprotected edge of a flat or low-pitched roof (maximum allowable pitch 4:12 slope), or around unguarded skylights, then **you must use fall restraint equipment.** This equipment includes a full-body harness and a lifeline; an adjustable rope grab all attached to an appropriate anchorage point by a cross arm strap or other similar method. (**Note:** Roof edges protected with a 42" guardrail (permanent or a temporary equivalent) or a 42" or higher parapet wall do not require the use of fall restraint equipment.)

- Inspect all fall protection equipment prior to use.
- Select an anchorage point as close as possible to where you are working. Because you will be harnessing yourself so that it would be impossible to fall over the edge of the building (*Fall Restraint*) the anchorage point should be four times heavier than your body weight. (**Prior to working on a roof with no anchorage points, contact your Production Safety Representative.*)

- Connect the lifeline to the anchorage point cross arm strap D-Ring (or equivalent device) with a double-locking snap hook or self-locking carabiner.
- Open the rope grab and enclose the vertical lifeline with the rope grab (arrow pointed up) then tightly screw the rope grab to the vertical lifeline. **Make sure that the arrow on the rope grab is pointing up toward the anchorage point.**
- Position the rope grab on the lifeline so that its maximum extended length will physically limit your ability to inadvertently fall over the edge of the roof.
- Attach the double-locking snap hook or self-locking carabiner from the rope grab to the "D" ring located on the back of your harness.
- You must be attached to the system prior positioning yourself for work.

FALL PROTECTION: CONTROLLED ACCESS ZONE

When you are working in elevated areas such as rooftops, unprotected platforms, or around pits and tanks, one option for fall prevention is to establish a **Controlled Access Zone (CAZ).** The CAZ is the area within six feet of the edge of the fall hazard. A CAZ protect employees not wearing fall arrest or fall restraint equipment by physically and verbally warning them when they are within 6 feet of a potential fall hazard. This system requires stanchions, control lines, high visibility markers and additional employees acting as safety monitors.

WARNING: The CAZ requires vigilance, and a dedicated designated "safety monitor". It is therefore not appropriate to all situations.

- The Controlled Access Zone (CAZ) is separated from the Safe Zone by a heavy control line that restricts access to the CAZ.
- **Post Signs at the entrance of the Safe Zone** warning employees or unauthorized personnel that they: (1) are entering a CAZ; (2) should stay within the visibly marked control lines (Safe Zone); and, (3) to do as they are told by the Safety Monitors.
- Control lines must be positioned not less than 6 feet from the fall hazard and not more than 25 feet from the fall hazard.
- Expand the CAZ during adverse conditions (e.g., rain, wind, slippery roof), or when working at an additional elevation within the "Safe Zone" (e.g., on a step ladder).
- Make sure control lines consist of ropes, wires, or equivalent materials that have a minimum breaking strength of 200 pounds.
- Control lines should be clearly marked every six feet with high-visibility materials. (Bright barricade tape or red flags).
- Rig each line so it is between 39 inches and 45 inches from the working surface. Do not let them "sag".
- Anyone working outside the "SAFE ZONE" and inside the CAZ (within 6 feet of the leading edge or fall hazard), must wear fall restraint or fall arrest equipment.
- Designate a person whose sole job and responsibility is to monitor the safety of other employees in the work area and who will:
- Watch and warn employees when it appears that they are acting in an unsafe manner; crossing the CAZ line without wearing fall protection or fall arrest protection.
- The Safety Monitor must be able to see that the entire CAZ is clear of unprotected employees. If necessary add an additional Safety Monitor to ensure the CAZ remains clear.
- All Employees who working at a location utilizing a Controlled Access Zone will comply with the Safety Monitors directives.
- If there are repeated infractions into the CAZ, the Safety Monitor will bring the matter to the attention of the 1st AD.

FALL PROTECTION: IN THE EVENT OF A FALL

(NOTE: All falls sustained by employees in fall protection equipment should immediately be reported to local emergency response personnel.)

Self Rescue: If a person falls a short distance and is conscious, uninjured, and can reach a working surface safely, the employee should do so and be taken to First Aid.

Ladder or Aerial Work Platform Rescue: if self-rescue is not possible, the next option is the use of a ladder, “condor,” or scissor lift. This rescue depends upon the accessibility and condition of the person; the availability of appropriate equipped personnel and the necessary equipment. Ensure the employee is taken to First Aid.

Fire Department Rescue: if the previous rescue options cannot be accomplished in a prompt and safe manner, the fire department personnel will rescue the person using advanced techniques.

- Establish verbal contact and continuously monitor the employee.
- Watch for signs or complaints of suspension trauma: faintness, nausea, breathlessness, dizziness, sweating, paleness, hot flashes, loss of vision or increased heart rate.
- Continue to talk to the suspended worker; tell them to keep their legs moving to increase circulation.
- Safely lower a rope with a loop tied in the end of it and the opposite end tied to an anchor point to the suspended worker. Have the worker step into the loop and stand up at regular intervals to remove the pressure on his legs created by the leg straps. This also enables him to shift his body weight around into a more comfortable position.
- After the event do not continue to use any of the Fall Protection Equipment involved in the incident. Tag it, “Do Not Use” and return it to your supervisor or Production Safety Representative.
- **Report all falls to your supervisor and Production Safety Representative.**

HAZARD COMMUNICATIONS (WHMIS)

This Code of Safe Practices is designed to help employees work safely with potentially hazardous materials that they may use. This program outlines procedures for Department Heads and Supervisors to make employees aware of the chemical hazards that they may encounter and how to protect themselves from them.

1. Employees are to receive training from the ACTSAFE Safety Passport System “WHMIS” Class (www.actSAFE.ca).
2. Supervisors shall see that employees understand proper handling and disposal of hazardous products they use.
3. Observe and comply with all Warning Signs that you encounter (i.e. DANGER - NO SMOKING, etc.).
4. Read, understand and obey Warning Labels that are attached to containers of products containing hazardous chemicals.
5. Check to see that all containers being used to store hazardous chemicals, including those filled from the original container are labeled with the same safety information that is available on the manufacturer’s label.
6. Alert your supervisor when you discover unlabeled containers. Do not use the contents of the container.
7. Safety Data Sheets (SDS), contain more in-depth information than is provided for on the product label. You can request a copy of an SDS for any product used by calling the 3E Company at (800) 451-8346, an SDS management company.
8. Always wear the appropriate eye, skin, body and respiratory personal protective equipment (PPE) required to protect you from potential workplace hazards. If unsure of the type of PPE to use, ask your supervisor, or follow the directions on the container or SDS.

9. Store chemicals in approved areas (i.e. flammable materials in flammable cabinets, acids in acid cabinets, etc.). Incompatible materials like flammable and oxidizing materials or inorganic acids and certain combustible materials can react violently if allowed to mix. Always store these incompatible materials separately. SDS’s or the original container should be consulted for specific incompatibility information.
10. Notify your supervisor before mixing together any hazardous materials for the first time. Conduct all mixing operations following the directions found on the product’s warning label, the manufacturer’s mixing instructions, or on the SDS.
11. Call local emergency response personnel whenever there is a large spill involving potentially hazardous or unknown chemical products.
12. In the event of a spill, attempt to contain the spread of the hazardous material only if it is safe to do so.
13. Regularly inspect hazardous material containers for leaks or signs of deterioration. Notify your supervisor of containers in poor condition or those exceeding shelf life.
14. Check the ventilation requirements for a chemical product before using it in a space with low ventilation.
15. Contact the Production Safety Representative if you have any questions or concerns about materials or chemicals present in your workplace.

LOCK OUT/TAG OUT

1. Only employees who have been trained in Lock Out/ Tag Out shall service or repair any machine or equipment that could cause injury during unexpected startup or movement.
2. Lock Out/Tag Out is a method for preventing equipment from being set in motion and endangering workers.
3. Common situations for use of Lock Out/Tag Out are: (a) when you are to remove or bypass a guard or other safety device not installed by a fellow employee, (b) when you are to place any part of your body where it could be caught moving machinery, (c) when using electrical circuits.
4. Whether the power switch is on or off, be aware that residual energy could be present in equipment.
5. Stored energy poses special problems. Employees should know or determine the nature of the power source, i.e. hydraulic pressure, steam, electric charge, etc. All residual energy should be dissipated prior to work being performed. Ask your supervisor if you do not know how to do this procedure.
6. Energy controls are applied according to a six-step procedure:
 - Preparation for shutdown
 - Equipment shutdown
 - Equipment isolation
 - Application of Lock Out/Tag Out devices
 - Control of stored energy
 - Equipment isolation verification

Removal

1. Prior to removing Lock Out/Tag Out devices, make sure that the equipment is safe to operate by removing all tools and verifying that the system is fully assembled.
2. Lock Out/Tag Out devices may only be removed by the person who put them on, except in an emergency.
3. When the worker who applied a lock is not present to remove the lock, it can be removed only under the direction of the supervisor.
4. Follow the manufacturer’s checklist to re-energize the system.
5. If an outside contractor or other outside worker is performing service or maintenance, they are to coordinate their activities with the Electrical Department or other appropriate employees.

6. If servicing lasts more than one shift, Lock Out/Tag Out protection should not be interrupted. One shift should inform the next.
7. Never remove a lock until you are absolutely sure that it is completely safe to do so.

TRENCHING AND SHORING

1. Contact the Production Safety Representative if you are planning any trenching job deeper than 4 feet.
2. A Trenching and Shoring Trained Competent Person is to be in charge of any shoring operation.
3. Before digging, you are to check the site for potential hazards.
4. Adequate barriers (i.e. guardrails, covers, barricades) shall be provided at all excavations, trenches, pits and holes.
5. A shoring or benching system is to be employed in trenches and evacuation deeper than 5 feet.
6. Before excavating, locations of existing underground utilities are to be determined by calling the local agency or organization that provides that information.
7. Before entering a confined space, the air in the space is to be tested for dangerous gases and oxygen levels.
8. No part of any shoring system of an excavation shall be removed until proper steps have been taken to avoid hazard to men from moving ground.
9. Spoil piles are to be 2' back from edge of all excavations.

LIFTING

1. Before lifting, check the load for splinters, jagged edges, burrs, rough or slippery surfaces, and protruding nails.
2. Wear appropriate protective clothing (gloves, safety shoes, etc.).
3. Ask for help when a load cannot be handled safely by one person because of excessive weight, bulkiness or awkward shape of the load.
4. Check your route of travel for any slip, trip or fall hazards before you lift.
5. When lifting as a group, one person should communicate commands to the others. Indicate any changes in elevation, cornering or rotating. Always give adequate warnings before setting your portion of the load down.
6. **Recommended Lifting Procedures:**
 - a) Stand close to the load with your feet spread shoulder width apart.
 - b) Squat down, bending at the hips and knees, while keeping your back straight.
 - c) Grip the load firmly, tighten your abdomen, and use your legs to lift the object.
 - d) Lift in one continuous motion while keeping your back straight.
 - e) Remember to breathe normally while you lift. Steady breathing prevents you from becoming fatigued.
 - f) Keep the load close to your body. The closer the load is to your body, the less pressure it exerts on your back.
 - g) Change directions by moving your feet. Never twist your body.
 - h) When you set the load down, bend only at the hips and knees while keeping your lower back straight.
 - i) If retrieving a load from above your shoulder level, do not reach over your head. Elevate yourself to the load with a ladder. Get help if you need it.

HEAT ILLNESS

When the body is unable to cool itself by sweating, several heat-induced illnesses such as heat stress or heat exhaustion, and the more severe heat stroke can occur and result in death.

Factors Leading to Heat Stress

1. High temperature and humidity.
2. Direct sun or heat.
3. Limited air movement.
4. Physical exertion.
5. Poor physical condition.
6. Some medicines.
7. Inadequate acclimatization to work in hot area.

Symptoms of Heat Exhaustion

1. Headaches, dizziness, lightheadedness, fainting, weakness and moist skin.
2. Mood changes such as irritability and confusion.
3. Upset stomach or vomiting.

Symptoms of Heat Stroke

1. Dry, hot skin with no sweating.
2. Mental confusion or losing consciousness.
3. Seizures or convulsions.

Preventing Heat Stress

1. Know signs/symptoms – monitor yourself and watch for symptoms in coworkers.
2. Block direct sun or other heat sources with EZ-Ups or other shelters (to be set-up within a 5-minute walking distance of your worksite).
3. Take frequent 5-minute breaks in the shade, especially if you are not acclimated to heat.
4. Use cooling fans/air conditioning where possible.
5. Rest regularly.
6. Drink plenty of water – *about 1 cup every 15 minutes*.
7. Wear lightweight, light-colored, loose-fitting clothes and broad-brimmed hats.
8. Avoid alcohol, caffeinated drinks and heavy meals.

What to Do for Heat-Related Illness

1. **Call Emergency Medical Response personnel immediately.**
2. While waiting for help to arrive:
 - a. Move the worker to a cool, shady area.
 - b. Loosen or remove heavy clothing.
 - c. Provide cool drinking water.
 - d. Fan and mist the person with water.

For more complete information: contact your Production Safety Representative.

SCAFFOLD USER AWARENESS

1. Only employees who have been properly trained to do so may work from scaffolds.
2. Do not use scaffolds that do not have proper guardrails, mid rails and toe boards (as appropriate).
3. Do not overload scaffolds. Follow the manufacturer's or construction coordinators safe working load recommendations.
4. Do not climb cross braces. Use only approved access ladders or steps and use both hands while climbing. When climbing, always maintain three points of contact.
5. Do not stand on guardrails, ladders or makeshift devices on top of scaffolds to gain greater height.
6. Never use scaffolds where contact can be made with live electrical circuits or power lines. Always maintain safe clearance from any electrical source.
7. Never apply shock loads to the scaffold platform. (Never jump down onto the platform.)

BLOODBORNE PRECAUTIONS

1. All employees, whose jobs may expose them to blood during first aid or paramedic procedures, or during cleaning operations, are to receive *Bloodborne Pathogens Training*.
2. Other employees whose jobs may expose them to blood should always use Universal Precautions.

Universal Precautions:

Treat all human blood and certain human bodily fluids as if they were infectious.

1. Employees shall wash their hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as possible following contact with blood or potentially infectious materials.
2. Employees who may have contacted blood should call First Aid or the Anonymous Safety Hotline immediately.
3. All fluids are to be wiped up with disinfectants (i.e. 100% bleach) by a person trained in Bloodborne Pathogens.

PERSONAL PROTECTIVE EQUIPMENT

General

1. Always wear appropriate clothing and work shoes. Do not wear loose or frayed clothing, long hair, rings, etc., near machinery and other sources of entanglement.
2. Always wear appropriate foot protection when you are exposed to foot injuries from hot, corrosive, hazardous substances, falling objects, crushing or penetrating actions that may cause injuries, or when you are working in abnormally wet locations.
3. Always wear appropriate hand protection (gloves) when you are exposed to cuts, burns harmful physical or chemical agents that are encountered and capable of causing injury or impairments. Never wear gloves where there is a danger of their becoming entangled in moving machinery. Use push-sticks.
4. Always wear face or eye protection when working in locations where there is a risk of receiving eye injuries such as punctures, abrasions, contusions, or burns as a result of contact with flying particles, hazardous substances, projections or injurious light rays.
5. Suitable screens or shields isolating the hazardous exposure should be used to safeguard nearby employees.
6. Always wear approved head protection when you are exposed to flying or falling objects.
7. Always wear hearing protection when noise levels exceed 85 decibels.
8. See to it that personal protective equipment (PPE) is cleaned regularly or disposed of after use. Always keep PPE in good repair.
9. If you are working with electricity, you require additional or specialized PPE and should consult with your supervisor.

RESPIRATORS

This Code of Safe Practices is designed to act as a guide in the use, selection and care of respiratory protective equipment. All respirator protective equipment used on this Production is intended to be used to reduce employees' potential exposure to airborne dusts, gases, vapors, mists and fumes.

1. Respirator training is specific for each different make and model of respirator. Employees are to receive additional training before they use any respirator that they have not been trained and fit tested for.
2. Respirators may be required when creating smoke or fog effects on interior sets or when working in locations with compromised air quality. Producer(s) are responsible for the purchase of appropriate respirators (consult SDS as required). Refer to

AMPTP Safety Bulletin #10 - Artificially Created Smokes, Fogs and Lighting Effects for further information.

3. Prior to the issuance and use of a respirator and at least annually thereafter, each employee shall be given a qualitative fit test by a qualified person.
4. Employees who have a diagnosed respiratory disease or ailments (i.e. asthma, emphysema, cardio-pulmonary disease, chemical sensitivity, respiratory allergies, etc.) or who feel that they could not wear a respirator because of some other physical or medical limitation are to notify their Supervisor so they can be given special consideration.
6. If you are using a new product, your supervisor or Production Safety Representative will determine what type of respiratory protection should be used. This determination will be based on the nature and level of the airborne contaminant(s) in your work area.
7. Employees shall request assistance from the Production Safety Representative whenever the nature or level of airborne contaminants changes and they are not sure if their respiratory protection is appropriate for the work they are doing.
8. **NEVER** use dual cartridge respirator or paper mask (dust, paint fumes or high efficiency particulate air filters) to enter an oxygen-deficient or suspected oxygen-deficient atmosphere. *Call the Production Safety Representative when there is any reason to suspect an environment may be oxygen deficient.*
9. Respiratory protection shall be used when required by law or when deemed necessary by your supervisor or Production Safety Representative.
10. Employees are to make sure to obtain a gas-tight seal between their facial skin and the respirator. This means that employees who have a beard, moustache, or who are not clean-shaven may not be issued or wear a respirator.
11. Employees shall perform a negative and positive pressure test before each use of their respirator.
12. Employees shall inspect their respirators for defects before each use and shall not wear a faulty respirator under any circumstance.
13. If an employee smells or tastes the airborne contaminant that the respirator is designed to remove, then the employee shall leave the work area, re-inspect the respirator and conduct another positive and negative test. If there is a gas-tight seal and the smell/taste returns, then the employee shall install new cartridge filters of the type recommended by the product manufacturer.
14. If breathing through the respirator becomes difficult, the filter cartridges or pre-filters may need to be replaced.
15. Employees will routinely clean their respirators in accordance with the manufacturer's instruction.
16. Respirators will be stored in air tight bags when not in use.

TOOLS

POWER TOOLS

1. Only persons trained in the safe operation of power tools shall be allowed to operate them.
2. Wear safety glasses whenever you are performing work that may generate dust, chips, splinters, shards, dust or flakes. Sources of debris such as drills, grinding equipment, table saws, wire brushes or similar equipment are obvious; however less obvious causes of eye loss include cutting wire, working with chemicals, and misusing air hoses.
3. Check your working materials carefully before proceeding. Make sure there are no nails, bolts or flaws before you run the materials through table saws, jointers, sanders, routers or other power tools.

4. Make sure all guards are in place prior to using power tools. Do not wear clothes, gloves or items that may become entangled in the machine.
5. Use a push stick when ripping material on a table saw or when using a jointer. Whenever possible, avoid standing directly behind the blade in order to avoid kickback.
6. Do not force wood, Plexiglas, or any other material through any saw, jointer, planer, etc. Allow the blades to do the cutting.
7. When walking by operating power equipment, wear safety glasses to safeguard against flying particles. Be aware and avoid accidental contact with the equipment.
8. Disconnect power before changing blades, belts or bits. (See Lock Out/Tag Out).

POWDER-ACTUATED TOOLS

1. Only qualified employees who carry valid operator cards shall be permitted to operate powder-actuated tools. Training can be arranged through the manufacturers' representative.
2. Eye or face protection shall be worn by operators and assistants when the tool is in use.
3. Prior to use, the operator is to inspect the tool to determine that it is in proper working condition.
4. Any tool found not to be in working condition shall be immediately removed from service, tagged "Defective," given to the supervisor and not used until it has been repaired.
5. Use only fasteners and powder loads recommended by the tool manufacturer for a particular tool.
6. Tools shall be loaded just prior to firing. If the work is interrupted after loading, the tool shall be unloaded immediately.
7. Never point a loaded or unloaded powder actuated tool at any person.
8. Always keep hands and feet clear of the open barrel end.
9. The tool should be held perpendicular to the work surface when fastening into any material, except for specific applications approved by the tool manufacturer.

TABLE SAWS

Woodworking can be DANGEROUS if safe and proper operating procedures are not learned and followed. Using the machine with respect and caution will considerably lessen the possibility of personal injury. If normal safety precautions are overlooked or ignored, severe injury to the operator may result. Whenever possible use all safety equipment such as guards, push sticks, hold-downs. Featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. Even the best guard won't make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workplace. If a procedure feels dangerous, or you do not understand the task and equipment interface then don't try it. Get advice from your supervisor or figure an alternative way to make the cut that feels safer. REMEMBER: Inform your supervisor of any faulty equipment. Your personal safety is your responsibility.

Table saws are designed for certain applications only. Do not modify or use this machine for any application other than those for which it was designed. If you have any questions relative to an application, do not use this table saw until you have first contacted your supervisor or the manufacturer and determined if the machine is appropriate to your task.

1. Only persons trained in the safe operation of table saws shall be allowed to operate them.
2. For your own safety, read the instruction manual before operating. Learn the correct application and limitations as well as any specific potential hazards of your table saw.
3. KEEP GUARDS IN PLACE and in working order. Removal of the guard requires the permission of your supervisor.

4. **GROUND ALL TOOLS.** If a tool is equipped with a three-prong plug, it should be plugged into a three-hole electrical receptacle, if an adapter is used to accommodate a two-prong receptacle, the adapter lug must be attached to a known ground. Never remove the third prong.
5. REMOVE ADJUSTING KEYS AND WRENCHES. Form the habit of checking to see that keys and adjusting wrenches are removed from the table saw before turning it "on."
6. KEEP YOUR WORK AREA CLEAN. Cluttered areas and benches invite accidents. Use a brush to clear not your hands.
7. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep your work area well-lighted.
8. KEEP EMPLOYEES AND VISITORS AWAY. All fellow employees and visitors should be kept a safe distance from your work area. You should stay a safe distance back from other employees work areas.
9. Make work area FOOLPROOF — with padlocks, master switches, lock out tag out, or by removing starter keys.
10. DON'T FORCE a table saw. It will cut cleaner and be safer at the rate for which it was designed.
11. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, rings, bracelets, or other jewelry that may get caught in moving parts of the table saw. Non-slip footwear is recommended. Wear protective hair covering to keep hair from becoming entangled.
12. ALWAYS USE SAFETY GLASSES. Every day eye glasses only have impact resistant lenses; they are not safety glasses. Also use face shields and/or dust masks if cutting operations are dusty.
13. Secure work. Use clamps or vise to hold your work when practical. It's safer than using your hand and frees both hands to operate the table saw.
14. Don't overreach. Keep proper footing and balance at all times.
15. MAINTAIN tools in top condition. Keep tools sharp and clean for best and safest performance. Follow manufacturer instructions for lubricating and changing accessories.
16. **TURN OFF THEN DISCONNECT** the machine before servicing and when changing accessories such as blades, bits, cutters, etc.
17. Use recommended accessories: The use of accessories and attachments not recommended by the manufacturer may cause hazards or a risk of injury to you or other nearby employees.
18. Reduce the risk of unintentional starting. Make sure switch is in "OFF" position before plugging in power cord.
19. NEVER STAND ON A TABLE SAW. Serious injury could occur if the tool is tipped or if the cutting blade is accidentally contacted.
20. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to ensure that it will operate properly and perform its intended function — check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
21. Direction of feed. Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
22. NEVER leave a tool running unattended. **TURN THE POWER OFF.** Don't leave the table saw until the blade comes to a complete stop.
23. DRUGS, ALCOHOL, MEDICATION. Do not operate this tool while under the influence of drugs, alcohol or any medication.
24. Make sure the table saw is disconnected from power supply while the motor is being mounted connected or disconnected.

WARNING: The dust generated by certain woods and wood products may be injurious to your health. Always operate machinery in well ventilated areas and provide for proper dust removal. Use proper dust

removal systems whenever possible. Use appropriate PPE such as dust masks.

CIRCULAR SAWS

1. Only persons trained in the safe operation of circular saws shall be allowed to operate them.
2. **WARNING:** Do not operate your saw until it is completely assembled and installed according to the instructions.
3. If you are not thoroughly familiar with the operation of circular saws, seek advice from your supervisor, knowledgeable employee, or other qualified person.
4. ALWAYS use the guard, splitter, push-stick and anti-kickback device on all "thru-sawing" operations. Thru-sawing operations are those when the blade cuts completely through the work-piece as in ripping or cross-cutting.
5. ALWAYS hold the work firmly against the miter gage or fence.
6. NEVER use the fence as a cut-off gage when cross-cutting.
7. Move the rip fence out of the way when cross-cutting.
8. NEVER perform any operation "free-hand" which means using your hands to support or guide the work-piece. Always use either the fence or miter gage to position and guide the work.
9. ALWAYS USE A PUSH STICK for ripping narrow stock. Refer to ripping applications in the manufacturer's instruction manual where the use of a push stick is covered in detail.
10. AVOID KICKBACKS (work thrown back toward you) by:
11. Keeping blade sharp.
12. Keeping rip fence parallel to the saw blade.
13. Keeping splitter and anti-kickback device and guard in place and operating.
14. Not releasing the work before it is pushed all the way past the saw blade.
15. Not ripping work that is twisted or warped or does not have a straight edge to guide it along the fence.
16. AVOID awkward operations and hand positions where a sudden slip could cause your hand to move into the cutting tool. Find another way.
17. ALWAYS KEEP HANDS AND FINGERS AWAY FROM THE BLADE.
18. NEVER stand or have any part of your body in line with the path of the saw blade,
19. NEVER reach behind or over the cutting tool with either hand for any reason.
20. DIRECTION OF FEED. Feed work into blade or cutter against the direction of the rotation of the blade or cutter only.
21. DO NOT feed the material too fast while cutting. Feed the material only fast enough so that the blade will cut.
22. NEVER attempt to free a stalled saw blade without first turning the saw "OFF."
23. NEVER start the saw with the work-piece pressed against the blade.
24. NEVER turn the saw "ON" before clearing the table of all objects (tools, scraps of wood, etc.).
25. ALWAYS STOP the saw before removing scrap pieces from the table.
26. NEVER perform layout, assembly or set-up work on the table while the saw is operating.
27. PROVIDE adequate support to the rear and sides of the saw table for wide or long work-pieces.
28. When cutting moldings, NEVER run the stock between the fence and the molding cutter head.
29. NEVER use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material. Only a soft damp cloth should be used to clean plastic parts.

30. Should any part of your circular saw be missing, damaged, or fail in any way, or any electrical components fail to perform properly, shut off switch and remove plug from power supply outlet. Tag and report the machine to your supervisor. Ensure that missing, damaged or failed parts are present and in good working order before resuming operation.

Additional information regarding the safe and proper operation of this product is available from the National Safety Council, the manufacturer and your supervisor.

WELDING

Only persons trained in the safe operation of welding equipment shall be allowed to operate it.

Gas Welding

1. Compressed gas cylinders should be stored and transported in the upright position with the valve protective caps on. Cylinders in portable service are to be secured upright with a chain.
2. Welding is not permitted in areas with limited or restricted air supply (see Confined Space) without prior approval from a Safety Professional.
3. Cylinders will not be stored or placed where they are exposed to heat, flame, impact, electric arcs or circuits, high temperature process equipment or sparks.
4. Empty cylinders should be tagged "Empty" and stored separately from full ones with the valve cap in place.
5. Proper eye and/or face protection will be worn when welding.
6. Torches should be lighted by friction lighters or other approved devices and not by matches or from hot work.
7. Cutting or welding will be permitted only in areas that are, or have been made, fire safe.
8. Suitable fire extinguishing equipment should be maintained ready for use while welding and cutting are being performed.
9. Designated fire watches should be used whenever welding or cutting is performed in locations where other than a minor fire might develop.

Arc Welding and Cutting

1. Workers or other persons adjacent to the welding areas shall be protected from the rays by noncombustible or flameproof screens or shields, or should wear appropriate goggles.
2. Arc welding and cutting cables should be completely insulated, flexible and capable of handling the maximum current required by the operations to be performed. Take into account the number of duty cycles.
3. When electrode holders are left unattended, electrodes should be removed and holders situated so as to prevent employee injury.
4. The power supply switch should be kept in the off position when arc welders or cutters leave or stop work, or when machines are moved. Never unplug a machine in the "on position".
5. When arc welding is performed in wet or in high humidity conditions, employees should use additional protection to prevent the increased potential of electric shock. Use rubber pads or boots,
6. When welding employees are exposed to ultraviolet radiation and should cover their skin completely to prevent ultraviolet burns or damage. Helmets and hand shields should not have leaks, openings or highly reflective surfaces.

ROPE AND CHAIN

Fiber Rope

1. Never drag a rope. This hurts the outer fibers and leads to the eventual deterioration of the rope's overall strength.
2. Avoid kinking. This strains the rope and overstresses the fibers.

3. Splice, don't knot. When joining lengths of ropes, they should be spliced, not knotted. A properly done splice will hold up 100% of the strength of the rope, but a knot only half.
4. Don't allow rope to freeze and store away from heat, moisture, chemicals, rodents, and sunlight.

Wire Rope

1. Use sheaves and drums of suitable size and design.
2. Don't exceed the rated capacity of wire rope.
3. Check for the integrity of the wire rope.
4. Be sure to use the correct lay (twist) for the application.

Chains

1. Take up slack slowly and make sure every link seats correctly.
2. Chain shackles are to be used for shortening and/or splicing chains together. Bolts as makeshift links or fasteners are prohibited.

INDOOR CRANE (HOIST)

1. The hook should have a safety latch that closes the throat of the hook.
2. Read the ANSI warning tag listing operational checks, which should be located on the control section.
3. Never exceed the cranes lifting capacity; it should be stenciled on both sides of the hoist.
4. Determine the weight of the load by checking the manufacturer information or using a dynameter.
5. Select the proper rigging gear that is within the Safe Working Load (SWL) of the web sling or wire rope being used.
6. Inspect the rigging gear prior to use. For wire rope, never exceed six or more broken wires within one lay of strand length. The wire rope is to be discarded.
7. Cranes are designed for vertical lifts only. Side pulling may result in hoist and crane breakdown or collapse.
8. Sling angles are very critical; never exceed 45 degrees, as this will put too much tension on the sling.
9. Conduct all lifting operations so that no one would be injured if there were an equipment failure.
10. Never leave a suspended load unattended.
11. Do not pass a load over coworkers or allow anyone to walk under the load.
12. Personal protective equipment, including, hard hats, eye protection, hearing protection, and gloves should be worn by employees when appropriate.

COMPRESSED AIR

1. Compressed air or other compressed gases in excess of 10 pounds per square inch gauge shall not be used to blow dirt, chips, or dust from clothing while it is being worn.
2. Do not disconnect air hoses at compressors until the hose line has been bled.
3. Compressed air or gases are not to be used to empty containers of liquids where the pressure can exceed the container's safe working pressure.
4. Use personal protective equipment such as safety glasses to protect employees from eye or body injury.
5. Abrasive blast cleaning nozzles are to be equipped with an operating valve, which are to be held open manually. A support is to be provided on which the nozzle may be mounted when not in use.
6. Compressed gases shall not be used to elevate or otherwise transfer any hazardous substance from one container to another unless the containers are designed to withstand (with a factor of safety of at least four) the maximum possible pressure that may be applied.

VEHICLES

LIFTGATES

Pre-Operations

1. Read and comply with the liftgate operating instructions and all safety decals.
2. Inspect the liftgate and do not use if there are signs of poor maintenance.
3. Before loading the liftgate, ensure that the landing area is adequate for loading and unloading freight.

Operations

1. Before lifting or lowering, ensure that loads are secure (i.e. brakes, chocks, sandbags.).
2. Anyone riding the liftgate should position themselves so a shifting load will not harm them or knock them off the liftgate.
3. Recognize and avoid pinch points.
4. Keep the work area clear of people, and stand to the side of the vehicle when bringing the liftgate up or down.
5. If necessary - due to the nature of the load - ask for help from an employee with experience operating liftgates.
6. Secure top-heavy loads with ratchets or strapping to prevent them from tipping.
7. Do not lift or lower loads greater than the rated capacity of the liftgate.

FORKLIFTS

1. Only persons trained in the safe operation of forklifts shall be allowed to operate them. The ACTSAFE Safety Passport (www.actSAFE.ca) offers training classes in forklift operation.
2. The use of additional counter balances on forklifts is strictly forbidden.
3. Never allow riders on vehicles or bicycles to "hitch rides."
4. Never ride or allow anyone to ride on the forks of lift trucks.
5. Never place any part of your body outside the running lines of an industrial truck or between the mast uprights or other parts of the truck where shear or crushing hazards exist.
6. Never stand, pass, or work under the elevated forks of any industrial truck, loaded or empty, unless they are blocked in position.
7. Never operate an industrial truck with a leak in the fuel or hydraulic system.
8. When operating a forklift, always look in the direction of travel and never move a vehicle until you're certain there are no people in your path of travel.
9. When ascending or descending grades in excess of 10 percent, drive loaded trucks with the load upgrade.
10. Always carry the forks as low as possible, consistent with safe operations.
11. When leaving a vehicle unattended, always shut off the power, set the brakes, lower the forks, and bring the mast to the vertical position. When leaving the vehicle on an incline, always chock the wheels.
12. When necessary to elevate employees using a forklift, make sure the platform is of sufficient size to accommodate the employee and material elevated, and that the platform is secured and meets the guardrail, backboard and toe board requirements as set forth by CAL/OSHA. Refer to section "Forklift Mounted Work Platforms" for additional requirements.
13. NEVER TOWER OR TRAVEL WITH A WORKER IN A FORKLIFT MOUNTED WORK PLATFORM.
14. Never operate a vehicle on floors, sidewalks, doors or platforms that will not safely support the loaded vehicle.

15. Always maintain a minimum distance of one tire width from the edge of any elevated dock, platform, freight car or truck.
16. Never load any truck in excess of its rated capacity as stated on the manufacturer's ID plate.
17. Never move a loaded vehicle until the load is safe and secure.
18. Use extreme care when tilting loads. NEVER TILT FORWARD WITH THE FORKS ELEVATED, except when picking up a load. NEVER TILT AN ELEVATED LOAD FORWARD, except when depositing it onto a storage rack or equivalent. When stacking or tiering, limit backward tilt to that necessary to stabilize the load.
19. Always place the forks in such a manner that the load will be securely held or supported.

FORKLIFT- MOUNTED WORK PLATFORMS/ MANBASKETS

1. The platform deck shall be equipped with:
 - a) A guardrail or other structure around its upper periphery that shall be 42 inches high with a midrail. (Chains or the equivalent may be substituted where they give equivalent protection.)
 - b) Where the guardrail is less than 39 inches high, an approved personal fall protection system consisting of a harness and shortened lanyard providing fall restraint shall be used.
2. Elevating Work Platforms shall include:
 - a) Toeboards at sides and ends which shall not be less than 3 ½ inches high. (EXCEPTION: Toeboards may be omitted at the access openings and on television and movie camera booms.
 - b) A platform the minimum width of which shall not be less than 16 inches.
3. Aerial baskets or platforms shall not be supported by adjacent structure(s) when workers are on the platform on in the basket while in an elevated position.
4. Lift controls shall be tested in accordance with the manufacturer's recommendations or instructions prior to use to determine that such controls are in safe working condition.
5. Belting off to an adjacent pole, structure or equipment while working from an aerial device shall not be permitted.
6. Employees shall not sit or climb on the edge of the basket or use planks, ladders or other devices to gain greater working height.
7. Boom and basket and platform load limits specified by the manufacturer shall not be exceeded.
8. When elevating personnel with the vehicle stationary the braking systems shall be set.
9. Provided they can be safely installed, wheel chocks shall be installed before using an aerial device on an incline.
10. If an approved forklift work platform is used to elevate workers, ensure the work platform is securely attached to the forks or mast in such a manner as to prevent tipping, slipping, or falling from the supports.
11. Ensure that the rear of the basket has a protective barrier at least six feet tall securely strapped to the rails of the basket to prevent any elevated employees from becoming entangled in the forklift's elevating machinery.
12. Always make sure there is an operator in the control position on the lift truck while there is a worker on the elevated platform.
13. Do not travel with the workers on the platform (towering) other than to make minor adjustments for final positioning of the platform.
14. **Do not operate forklifts within 10 feet of an energized high voltage source unless danger from accidental contact has been effectively guarded against.**
15. Never work from a platform attached to a forklift when:
 - a) exposed to extreme weather conditions (thunderstorms, high winds, heavy rain, extreme heat/cold etc.) unless provisions have been made to for the protection and safety of the workers

- b) winds exceed 25 miles per hour.
16. Secure all loose objects or production equipment that may inadvertently fall from the platform.
17. Do not use a forklift or other aerial device as a welding ground.
18. Do not weld on aerial equipment without first disconnecting both positive and negative battery terminals. Refer to the manufacturer's Operating Manual.

CRANE OPERATION AWARENESS

1. The travel of cranes or boom-type excavators shall be controlled so as to avoid collision with persons, material, and equipment.
2. The empty hook shall be lashed or otherwise restrained so that it cannot swing freely.
3. Tag or restraint lines shall be used where rotation of the load is hazardous.
4. Cranes shall not be operated with wheels or tracks off the ground or working surface at any time unless properly bearing on outriggers.
5. The brakes shall be tested each time a load approaching the rated load is handled by raising the load a few inches and applying the brakes.
6. Only one crane is to be used to lift a load.
7. A crane, derrick, or hoist shall not be loaded beyond its rated capacity.
8. The load shall be attached to the hook by means of sling or other suitable or effective means.
9. Slings shall be inspected before use and be free of kinks or twists.
10. When moving the load, the individual directing the lift shall see that:
 - a) The crane is leveled for the work being performed and the wheels blocked where necessary.
 - b) The load is well secured and properly balanced in the sling or lifting device before it is lifted a few inches.
11. All individuals assisting in the lift shall wear proper personal protective equipment including seat belts, gloves and hard hats.
12. When a load of any kind is to be suspended for any considerable length of time, the brake shall be firmly applied.
13. Cranes shall not be left unattended while the load is suspended unless the load is suspended over water, a barricaded area, or blocked up or otherwise supported from below during repairs or emergency.
14. Employees are prohibited from standing under any suspended loads.

AERIAL PLATFORMS: General

1. This section covers the safe operations of the following vehicles: (1) vertically operated elevating work platforms or "scissors lifts"; (2) boom mounted telescoping and rotating elevating work platforms or "condors", and (3) forklifts with attached work platforms.
2. Only persons trained in the safe operation of these work platforms shall be allowed to operate the elevating aerial work platforms described above. The ACTSAFE Safety Passport provides training classes in aerial platform use.
3. Do not use this equipment if you feel dizzy, ill, or unsteady in any way. Do not use while under the influence of alcohol or drugs.
4. All labels and placards shall be legible and in good condition. Operators should review the accompanying manual.
5. Clear all personnel below and around the platform when it is being raised or lowered.
6. Do not sit or stand on guardrails or use guardrails to carry materials. Do not allow overhanging materials when elevating the platform.

7. Work only within the platform guardrail area and do not attempt to increase the working height by any other means such as standing on the mid-rail or toe-board. Do not lean out over the platform railing to work.
8. Do not release the outriggers, or move the unit with a person or materials on board.
9. Do not use the lift to do work which would result in horizontal force being applied to the work platform.
10. Make sure the chain guardrail is in place.
11. Do not use near moving vehicles.
12. Batteries should be charged in well ventilated areas free of sparks and open flames.
13. Do not exceed manufacturer's load capacity.
14. The condition of the equipment shall be inspected prior to operation. Check for the manual, maintenance logs, for damage or leaking hydraulic lines. Carefully check each operational control. Return the equipment to the vendor if any of the aforementioned condition exists.
15. Evaluate the job to be done using the equipment you intend to use at the job sites location and think through the work to discover potential hazards.
16. Do not operate an aerial elevating work platform within 10 feet of an energized, high voltage line or source unless danger from accidental contact with the source has been effectively guarded against. Apply greater clearance distances with greater high voltage, and wetter conditions.
17. The operation of aerial platforms OVER energized, high voltage sources of any kind is prohibited at all times.
18. Make sure the jobsite's surface is stable and will support the equipment, and there are no hazardous irregularities or accumulation of debris, which might cause the moving platform to overturn.
19. Soft surfaces or soundstage flooring with pits or weight restrictions may require the use of grip track (to spread the load) or outriggers (to add stability). Always observe stage floor load restrictions.
20. Survey the route to be used. Check for overhead obstructions, traffic, holes in the pavement, ground, soft shoulders, ditches, slope of the road, etc.
21. Operation of aerial platforms on inclined surfaces shall not exceed manufacturer's ratings. Wheel chocks shall be used on inclined surfaces.
22. No employee shall stand in front of or behind an aerial platform when it is being moved.
10. The brake system shall be set whenever workers are being elevated in the vehicle.
11. Outriggers should be on solid footing and shall be equipped with hydraulic holding valves or mechanical locks at the outriggers.
12. Operate all controls slowly to facilitate smooth platform movement.
13. Only in emergencies should lower level controls at the base of the platform be operated when workers are in the basket.
14. Boom mounted, telescoping and rotating aerial platforms shall not be used as cranes.
15. ***No TOWERING*** - When using condors and scissors lifts, DO NOT travel (move the wheels) with a worker in the basket. The boom should be retracted completely before traveling or moving.
16. "Climbers", pole-climbing equipment, shall not be worn while performing work from an aerial device.
17. Where traffic or moving vehicles are present, the work area around the aerial equipment shall be marked by flags, signs, traffic cones, or other means of traffic control.
18. Remote control operation may only be done from the side of the aerial platform: never in front of, or behind the vehicle.

ELECTRIC CARTS

1. Electric cart speed limit is **13 kph**.
2. Electric carts are not to be modified in a way that will affect capacity and safe operation of the vehicle (for instance, you should not add a trailer hitch).
3. Battery charging installations will be in marked designated areas that are well ventilated.
4. Whether on or off-lot, drivers of electric carts will obey all vehicular traffic signs and regulations:
 - a) stop at posted intersections and blind corners
 - b) obey the speed limit
 - c) do not pass moving vehicles
 - d) avoid quick or jerky stops and turns at fast speeds.
 - e) use seat belts and turn signals whenever crossing city streets.
5. **Always check with your supervisor before driving off the lot.**
6. Feet, legs, arms and hands are to be kept inside the electric cart at all times. **Do not drag your foot outside the cart.**
7. Never park the electric cart in a fire lane, aisle or doorway, or block material or equipment to which someone else may need access.
8. The number of passengers may not exceed the number of seats or the manufacturer's recommended seating/weight capacity.
9. When carrying a load, it is the driver's responsibility to be sure the load is stable and will not fall off the vehicle while the vehicle is moving. Loads will be balanced, braced and secured. Always drive more slowly and with greater caution when transporting a heavy load.
10. Golf carts have been known to flip over, causing serious injury. Always drive under control and avoid sudden sharp turns.
11. Smoking is not permitted in golf carts.
12. Communications on cell phones is not permitted while driving a cart.
13. **There is to be absolutely no horseplay on the golf carts.**

BICYCLES

1. Keep your bicycle in good mechanical condition (tires, chain, brakes).
2. Obey all traffic rules and signs - always give proper signals to indicate your intended direction at intersections.
3. Walk your bike across busy intersections.
4. Always ride with the traffic and as close as possible to the right side of the road.
5. Smoking is not permitted on bicycles.

AERIAL PLATFORM: Operation

1. SAFETY HARNESSSES – an approved safety harness with lanyard shall be properly worn when using an aerial/elevating work platform.
2. The lanyard shall be securely attached to the manufacturer's anchorage point basket, tub, or platform.
3. Belting off to an adjacent pole, structure or equipment while working from basket, tub, or platform is prohibited.
4. The lanyard shall be attached in a manner that prevents a free fall of more than four feet. (Lanyards used on scissor lifts shall be shortened so the employee cannot fall over the top rail.)
5. Do not load the basket, tub, or platform/basket beyond its rated maximum height or reach.
6. Do not attempt to raise the platform/basket beyond its rated maximum height or reach.
7. Aerial baskets, tubs, or platforms shall not be supported by or attached to any adjacent structures.
8. Ladders, planks, or any other objects shall not be placed in or on top of the platform (or guardrail) to gain greater height.
9. Workers shall not climb or sit on the edge of the basket/platform.

6. Communications on cell phones is not permitted while riding a bicycle
7. Beware of production vehicles and silent electric carts.
8. Always ride single file and watch for opening car doors.
9. Bicycles are built to carry one person ONLY.
10. Yield right of way to pedestrians.
11. Never carry heavy loads or long items which reduce your ability to maneuver your bicycle safely.
12. When carrying a small load, it is the rider's responsibility to be sure the load is stable and will not fall off the bicycle while it is moving. Loads will be balanced, braced and secured to prevent tipping and falling.
13. Riders should not attempt to tow other materials alongside or behind a bicycle (for example, with a rope, chain or by hand).
14. Riders are not allowed to "hitch rides" alongside other moving vehicles, such as golf carts, forklifts, etc.