## Health & Safety Manual

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# HEALTH & SAFETY PRINCIPLES

#### THE INTERNAL RESPONSIBILITY SYSTEM

Workplace Health & Safety is built on the principle that safety is the responsibility of the people in the workplace; the employer, the foreman and the employee. Our safety is not the responsibility of government or consultants. We are responsible for our health and safety.

#### YOUR RIGHTS AND RESPONSIBILITIES

#### The Right to Know

You have the right to be trained in the hazards of the work and the work place. You have an obligation to apply that training and to work safely at all times.

#### The Right to Participate

You have the right to participate in the safety of their work and their workplace. You have an obligation to correct or report hazards.

#### The Right to Refuse

You have the right to refuse to do work or work in a place they believe is unsafe. You have an obligation to follow the Safe Work Procedures You must not take shortcuts or do anything unsafe or place yourself at risk.

#### **RESPONSIBILITIES OF THE EMPLOYER**

- 1. Ensure that the equipment, material and protective devices provided are inspected regularly and maintained in good condition.
- 2. Provide employees with the training and supervision needed to protect their health and safety.
- 3. Ensure that employees are supervised by a competent person.
- 4. Take every reasonable precaution for the protection of the employees.

#### **RESPONSIBILITIES OF A FOREMAN**

- 1. Ensure an employee is familiar with all of the actual and potential hazards of the work and the workplace before the employee starts to work.
- 2. Ensure the equipment, materials and protective devices provided are inspected regularly and maintained in good condition.
- 3. Ensure that an employee works according to the law and our safety practices.

#### **RESPONSIBILITIES OF AN EMPLOYEE**

- 1. Work in accordance with the law and the Safe Work Procedures of this company.
- 2. Correct or report a hazard immediately to the foreman.
- 3. Not do anything that may endanger you or anyone else, including taking short cuts, the improper use of machinery, horse play and practical jokes.

# We need you to think safety and work safely.

#### (The Act, Section 27)

#### Railings

# (The Act, Section 28)

#### (The Act, Section 25)

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# **ADMINISTRATIVE PROCEDURES**

### PERSONAL CONDUCT

Weapons, Violence

- Weapons of any sort are absolutely forbidden.
- Violence of any sort is absolutely forbidden.
- Weapons or violence will result in immediate termination.

Harassment

- Harassment is a course of conduct that is antagonistic or sexual in nature.
- Harassment of another employee is forbidden both during and after work.
- Harassment of another employee will result in at least a 3 day suspension without pay and may result in termination.
- Harassment must be reported to Trevor immediately.
- Trevor will investigate and determine the appropriate action.

Alcohol, Drugs

- Being under the influence of alcohol or drugs,
- Having alcohol or drugs in your possession (including in your lunch box),
- Consuming alcohol or drugs is forbidden.
- You will be suspended for the rest of the day.
- You will be suspended for an additional day.
- You may be terminated.
- You will be terminated for a second occurrence.
- Prescription Drugs: You must tell your foreman so you are not asked to do work that could be dangerous for you to do.

Safety Contraventions

- The safety laws must be obeyed at all times.
- Our safety procedures must be followed at all times.
- The Progressive Discipline Rules of labour law apply.

Other People on Site

- Do not get into an argument with anyone.
- If you have a problem, report it to our foreman.

#### SAFE WORK POLICY

- 1. If it is not safe to work STOP !
- 2. Make it safe yourself, or,
- 3. Report it to our foreman and wait until others make it safe for you.

#### SOURCES OF SAFETY INFORMATION

Infrastructure Health & Safety Assoc.	ihsa.ca
Min of Labour, Health & Safety	labour.gov.on.ca/English/hs
Office of the Worker Advisor	ows.gov.on.ca/english
The Internet	any search engine (Google, Yahoo, Bing)
Wikipedia	wikipedia.org
MSDS In any search engine, type: MSDS	+ the maker's name + the product name.

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#### TRAINING

New Employees will:

- must provide proof of the Ministry of Labour Worker Awareness Training,
- must be trained in this Safety Manual at the beginning of their first day on the site,
- must be given a site orientation in the morning of their first day on the site,
- will be trained in the hazards of our work and in the job site hazards,
- will start with the least hazardous work and progress as they learn.

Current Employees will be given a site orientation at the start of their first day on the site.

#### WHMIS (Workplace Hazardous Materials Information System)

- Employees are given WHMIS training.
- The MSDS are in the Job Box. The site office also has a copy.

#### WORK REFUSAL (The Right to Refuse Unsafe Work)

This is one of your fundamental rights – the right to refuse to do work that you believe is dangerous for you or for anyone else on the site. You will never be criticized for refusing to do work that you believe is dangerous for you or anyone else on site.

With this right comes the responsibility to follow the law. The law says you must report your concern to your foreman before you involve anyone outside our company.

Follow these steps:

- 1. Stop working when you think it is dangerous.
- 2. Report the dangerous condition to your foreman.
- 3. The law says you must do this. It is also a condition of your employment.
- 4. You and the foreman should be able to solve the dangerous condition.
- 5. If you can't agree, Trevor must be called immediately.
- 6. The foreman will give you other work to do until Trevor arrives.
- 7. No one else is allowed to do the work that you think is dangerous.
- 8. Trevor will solve the dangerous condition with you.
- 9. If you and Trevor cannot solve the dangerous condition, you have the right to continue to refuse to do the work. This is now a "Work Refusal".
- 10. The Ministry of Labour must be called. 1-877-202-0008
- 11. Section 43 of the Occupational Health & Safety Act must be followed.
- 12. See "the green book" in our job box or the site office.
- 13. Violence & Harassment are also grounds to refuse to work.
- 14. The law protects you from being punished for refusing to do dangerous work.

#### WSIB

Injury & Accident Reporting

• All injuries must be reported. See "Accident Reporting" on the next page. First Aid

- A First Aid Kit is available in our Job Box.
- Please use our First Aid kit before you go to the site office for First Aid.
- We rely on the site office for eye wash and advanced First Aid.

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# STANDARD OPERATING PROCEDURES

#### ACCIDENT REPORTING

Major Injury - Critical Injury or Death

- Ensure breathing, control bleeding.
- Never move an unconscious person except to save his life.
- Call 911
- Call the site superintendent or the site office.
- They need to get the hoist ready and send someone to direct the ambulance.
- Call Trevor
- Do not disturb the scene; the Ministry of Labour must be called.

Foremen: Put the site super and site office phone numbers in your cell phone.

Moderate Injury - Medical Attention Needed Now

- Get the person to a doctor immediately, call 911 if necessary.
- Never let the injured person drive himself to the hospital.
- If 911 is called, site management must be notified.

Minor Injury – Medical Attention Later

• Note the particulars in your First Aid Log.

Damage to the Building

- Tell Trevor or your foreman so it can be report to Toro they need to know.
- Hiding damage only makes everything worse later.

#### **COLD & HYPOTHERMIA**

- Low body temperature is called hypothermia.
- Wind (wind chill) draws heat out of your body speeding up hypothermia.
- As the body temperature goes down, the muscles shiver to generate warmth.
- The body tries to hold in heat by reducing blood to the skin, hands and feet.
- Frost bite begins.

• The brain becomes impaired, much like being drunk.

PRECAUTIONS

- Dress for the weather. Wear layers starting with polyester next to your skin.
- Pace yourself to avoid heavy sweating.
- Take a break to warm up before hypothermia sets in.
- You have the right to stop working when you think it is too cold for you.

#### WATCH FOR

- The cheeks, ears and fingers going white.
- A person slowing down and getting clumsy or dopey.

FIRST AID

- Get the person out of the cold.
- Get someone who knows First Aid if you can.
- Give the person a hot drink, preferably with sugar in it.
- Call 911 if you think the person is in seriously condition.
- Never rub frost bite skin with snow !

(The Act, Section 51)

(The Act, Section 52)

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#### **EMERGENCY PLAN – Job Site** (Also see Fall Rescue)

- An emergency may require the evacuation of the job site.
- Leave the building quickly and meet our foreman at the main gate.
- Everyone must be accounted for during a site evacuation.
- Our foreman must tell site management that we are all out of the building.

#### EQUIPMENT INSPECTION

- Inspect your equipment before you start work every morning.
- <u>Fall Protection</u> equipment inspection starts at the harness and works all the way back to the anchor point.
- <u>Scissors Lift & Boom Lift</u> inspection requires a check of the operating controls and all things specified in the operating manual.
- <u>Swing Stage</u> inspection starts at one anchor point, works out the beam, down the cable, across the stage, up the other cable and into the other anchor point. You must tie-back before starting a swing stage inspection.
- Never use damaged equipment. Report it so we can get if fixed.

#### **HEAT STRESS**

- Drink lots of water and cold drinks.
- Gatorade and similar drinks are good. They have *electrolytes* your body needs.
- Go easy on coffee and tea and especially no alcohol ! They all make you dry.
- Rest when you need to rest.
- The law does not say when it is too hot to work you decide.
- You have the right to stop working when you think it is too hot for you.

#### HEAT STROKE

- The body loses the ability to control its own temperature.
- The body temperature rises just like a fever.
- <u>The brain swells</u>. The person will go into convulsions and can die.
- Watch out for a person who is not sweating and may feel dizzy or light headed.
- Watch out for a person who seems to be drunk but has not been drinking.
- You must get that person to a hospital fast !

#### HOUSEKEEPING

- Housekeeping is important.
- Our work area must be kept clean.
- Coffee break and lunch debris must be cleaned up.
- Poor housekeeping attracts unwanted attention. Please do your part.

#### PERSONAL PROTECTIVE EQUIPMENT

- Green tag safety footwear.
- Hard hat on your head.
- Use a chin strap if your hard hat won't stay on your head.
- Safety glasses are required when you drill higher then your waist.
- Pants below the knee and a shirt with a sleeve that covers the shoulder.
- Protect the CSA sticker on your harness and lanyard.

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# SAFE WORK PROCEDURES

#### "Safety is not about what should happen, it's about what could happen."

Richard Cushing, The Safety Guy

There are two major hazards in our installation work:

- 1. A person falling.
- 2. Tools & material falling on a person.

#### ANCHOR POINTS FOR FALL PROTECTION EQUIPMENT

- Your anchor point must be able to take a 1,500 lbs. load (6kn).
- That is what it takes to stop you if you fall.
- There are 2 types of anchor points: engineered and structural.
- Nothing else is allowed !

Engineered (It was designed by a Professional Engineer, a factory made it)

- Only one person per anchor point.
- A Safe-T-Strap or the orange box & ring in the wall.
- A CSA approved rod through the wall.
- A "Miller Grip" installed as per the manufacturer's instructions.
- A CSA approved running line. Do not use an ordinary piece of rope.
- A roof anchor.

<u>Structural</u> (the building itself)

- More than one person can tie back to the same structural anchor.
- A column. (Protect the rope from the column edges.)
- Holes through the slab. (Protect the rope from the slab edges.)
- Welded pre-cast anchor bolt.

#### CARTS

- The wind can move a cart. The cart can roll over the edge.
- Never bring a cart onto a balcony.

#### FALL PROTECTION

- 1. Always check each part of your fall protection equipment before using it.
- 2. Remember the difference between *Travel Restraint* and *Fall Arrest*.
- 3. And keep your rope as short as possible.
- 4. Do not join two lanyards together. Get a rope and a rope grab.
- 5. Do not hook your lanyard directly onto a rope. Get a rope grab.
- 6. A railing is not a guard rail until the glass is installed. You must tie back.
- 7. You must tie back within 10 feet (3 metres) of any open edge.
- 8. You must tie back if you stand on a bench or a ladder "near" a guard rail.

"Near" means that you could fall over the safety fence if you fell off the ladder or if the ladder fell over toward the safety fence.

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### FALL RESCUE

- 1. Our work is in high rise buildings. Rescue work should be straight forward.
- 2. Don't panic. The man in the harness is not going anywhere.
- 3. Can you rescue him ? If you do not think you can do it, call 911.
- 4. If you think you can do it, get the equipment and the help you need.
- 5. Tie-back. Do not risk your life at the edge.
- 6. Step 1 help him get his hands on the slab edge.
  - Step 2 next help him get his arms over the slab edge.
  - Step 3 then while he pulls on his lanyard or rope, reach down and pull his waist sideways up to the slab and help him roll onto the slab.
- 7. Replace the fence and take him to the hospital.
- 8. Hospital regardless of whether he thinks he's not hurt, he could have internal injuries. <u>He must go to the hospital</u> to get checked out.
- 9. Every fall must be reported to Trevor and the Site Office. They must call the MoL.

#### **GLASS HANDLING, STACKING & DOLLIES**

- You must wear a glove with a coated palm when handling glass.
- Stack the glass near the balcony door. Do not take a dolly onto a balcony.
- Dollies must have been made from an engineered drawing nothing homemade.
- Load glass evenly on both sides of the dolly; maximum 5 pieces per side.
- Never put all of the glass on one side of the dolly.
- Never put more than 5 pieces of glass on either side of a dolly.
- Do not stack glass where it is exposed to people or machines passing by.
- Stack glass against wall at 65 to 80 degrees a boot width to waist height.
- Never leave glass on a balcony at the end of a day. Strong wind can come later and blow the glass off the balcony. That can kill people below.

#### MINISTRY OF LABOUR

- Inspectors have a job to do. Answer their questions.
- Be polite. You can ask them questions, but do so politely.
- <u>Do not argue</u>. Trevor can call Toro's safety consultant.

#### **MULTIPLE DOOR BALCONIES**

- Some balconies have 2, 3 or more doors.
- The door you are using must have the Warning Sign prominently displayed.
- Some sites will lock for the other doors with a key.
- Never assume a door is locked. Check each door before taking any fence down.
- If access to the balcony is not locked, put a piece of safety fence with warning signs across the both sides of the balcony where you are working to block others from walking into your work area.

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# SAFETY FENCE – Removing & Replacing

- Do not take down safety fence until you are tied back and ready to work.
- Take down only one or at most two pieces at a time.
- A site specific Safe Work Procedure is required if you need to take down more than two pieces of fence at a time.
- A balcony railing is not a guard rail until the glass has been installed.
- Always replace the fence as you work until the glass has been installed.

# SUCTION CUPS (Installing Glass)

- You must use a suction cup if you are installing over the top of a railing.
- Do not lift a panel over a railing without putting a suction cup on the panel.
- Dust off the surface of the panel with a rag and plant the suction cup.
- Either hold the suction cup as you position the glass into the railing, or,
- Tie a rope to the suction cup handle and a post.
- This is an accident that can kill. You can prevent it !

# TOOL RETENTION

- 1. Falling tools can kill people below your work.
- 2. All tools for railing installation work must be tied back.
- 3. Drills with cords tie the drill cord to the extension cord.
- 4. Cordless drills must have a retention strap.
- 5. Mallets, levels and hand held tools must have a retention strap.
- 6. Flashing must be secured until it is partially installed.

# WARNING SIGNS

- 1. The law requires warning signs "prominently displayed" wherever tools and material can fall on people below.
  - Set out the DANGER OVERHEAD WORK warning signs at all of the approaches to the area below your work in the morning.
  - Join the signs with red DANGER tape.
  - Move the signs with your work. One move at lunch is usually all it takes.
  - Put them away before you leave the site.
- 2. The law requires warning signs "prominently displayed" wherever people can fall.
  - Put the DANGER FALL PROTECTION REQUIRED warning signs at the entrance to the bay where you are working before you take down a guard rail.
  - Stand a piece of fence with the sign to restrict access by others to your work.

# WORKING ALONE

- We work at the slab edge where we are always exposed to falling.
- Anyone who falls must be rescued as quickly as possible.
- Being suspended in a harness reduces the ability of blood to circulate in the lower legs and feet. The blood cells can die from a lack of oxygen. After the worker is rescued, full circulation is restored, the dead blood goes through the body and can cause a heart attack.
- If you fall while working alone, you can hang for a long time. That can kill you.
- Always work with a partner who can see you or hear you.

#### Railings

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#### WORKING FROM A BENCH OR STEP LADDER

- 1. Open the ladder and lock the arms.
- 2. DO NOT climb higher than the  $3^{rd}$  step from the top.
- 3. Anything heavier than a drill makes you top heavy on a step ladder.
- 4. DO NOT install material heavier than a drill from a step ladder.
- 5. Use a scaffold or a lift.
- 6. You must hook up if you could fall off the ladder and go over an edge. Your feet must be 1 metre + 45° back from the safety fence. Hook up if you are closer.

#### WORKING FROM A STRAIGHT or EXTENSION LADDER

- 1. Set the ladder so it is 1 foot out from the wall for every 4 rungs high on the ladder.
- 2. Set the ladder's feet on a non-slip surface otherwise, block the feet.
- 3. Do not climb higher than the 4<sup>th</sup> rung from the top.
- 4. Do not lean out sideways past the centre of your chest.
- 5. You must hook up if you stand higher than the 8<sup>th</sup> rung, unless you can hold onto the ladder with one hand <u>all of the time</u> (3-point contact).
  - If you need both hands and cannot hook up, you must use a scaffold or lift.
- 6. You must be protected from falling while installing material heavier than a drill from a ladder. You must use a scaffold or lift if you cannot hook up.
- 7. You must hook up if you could fall off the ladder and go over an edge. Your feet must be 1 metre + 45° back from the safety fence. Hook up if you are closer.

#### WORKING FROM A SCISSORS/ BOOM LIFT (sections 143 - 149 of the Construction Reg.)

- 1. You must have your training card with you when you use a scissors lift.
- 2. Close off the area your work area with tape and warning signs.
- 3. Look around your work area for holes in the floor or ground and clear away debris.
- 4. The scissors lift must not be able to drive off a slab edge.
- 5. Look up for pipes, ducts and electrical wires.
- 6. Read & follow the manufacturer's instruction book.
- 7. Complete the Pre-Start Check List.
- 8. Attach your lanyard the first thing when you get into the lift.
- 9. Stay attached until you get out of the lift.
- 10. Check out all of the operating controls as part of your prestart check.
- 11. Do not by-pass safety switches and safety devices.
- 12. Keep your feet on the floor. If you cannot keep your feet on the floor, you must hook up to a *CSA* rated fall protection anchor before your feet leave the floor. NOTE: The lift cannot be used as an anchor point if your feet leave the floor.
- 13. Do not hang anything on the outside of the lift.
- 14. Use the manufacturer's glazing brackets to lift windows and frames.
- 15. Do not over load the lift.
- 16. Tools must be tied back.
- 17. Plan your work and work according to your training.

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WORKING FROM A SWING STAGE (sections 137 to 142 of the Construction Reg.)

- 1. You must have <u>professional</u> training before you use a swing stage.
- 2. Plan your work and work according to your training.
- 3. Never work alone !
- 4. Put barricades with warning signs around the drop zone.
- 5. Check your fall protection equipment all the way back to the anchor point.
- 6. Put it on and hook up !
- 7. Now examine the swing stage set up from the roof anchor out and the hook down.
- 8. You must have a cell phone and should have a fire extinguisher.
- 9. Look for people below before you load material and tools.
- 10. All tools must be tied back so they cannot fall see Tool Retention above.
- 11. Do not hang anything on the outside of the swing stage.
- 12. Check to see that your partner is hooked up.
- 13. Watch out for changes in the weather.
- 14. Watch each other for signs of cold or heat stress.
- 15. Stay hooked up until after you get off the swing stage until you are protected by a guard rail or are 10 ft. back from the edge.

#### RAILING INSTALLATION SEQUENCE

- 1. Put out the warning signs below your work area. (See Warning Signs above)
- 2. Clear your work area of debris, ice and snow.
- 3. Put a warning sign at the entrance to the balcony or terrace.
- 4. Distribute posts along the balcony next to the wall.
- 5. Tie your tools back so they can't fall off the balcony.
- 6. Check your fall protection equipment all the way back to the anchor point.
- 7. Hook up !
- 8. Keep your rope length as short as possible . Adjust the length as you work. Remember the difference between *Travel Restraint* and *Fall Arrest*.
- 9. Check for people below you. If there are people below you, don't install until they move. (Call the Site Superintendent if they won't move.)
- 10. Take down one or two pieces of safety fence as you work.
- 11. A site specific Safe Work Procedure is required to take down more than two pieces of fence as a time.
- 12. Replace the fence as you progress with the post installation.

( Safety fence must be in place until the glass is installed.)

NEVER LEAVE AN OPEN EDGE !

13. Do not leave anything on the balcony that is not bolted or tied down.

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# **GLASS INSTALLATION SEQUENCE**

- 1. Put out the warning signs below your work area. (See Warning Signs above)
- 2. Clear your work area of debris, ice and snow.
- 3. Put a warning sign at the entrance to the balcony or terrace.
- 4. Check your fall protection equipment all the way back to the anchor point.
- 5. Hook up !
- 6. Keep your rope as short as possible. Adjust it as you work. Remember the difference between *Travel Restraint* and *Fall Arrest.*
- 7. **Check for people below you.** If there are people below you, don't install until they move. (Call the Site Superintendent if they won't move.)
- 8. Take down the safety fence as you work, not all at once.Use a suction cup with glass being installed over the railing.Hold the suction cup or tie it back to a post.
- 9. Work according to your training do not take short cuts.

# WORK SAFE !

- Everyone should go home as fit and healthy as they arrived in the morning.
- STOP if it is not safe to work. Make it safe yourself or report it and wait for others to make it safe for you.
- Always remember the two major hazards in our work:
  - 1. A person falling.
  - 2. Tools and material falling on people.

# THINK SAFETY, WORK SAFELY !