



Contract Glaziers Inc

## **Contract Glaziers Inc.** **Health and Safety Manual**

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CANADA  
620 Spruce wood, P.O. Box #7177 Windsor, ON N9C 3Z1  
T: (519) 969-1740 F: (519) 969-0099

UNITED STATES  
719 Griswold Street Suite 820 Detroit, MI 48226  
T: (586) 778-5640 F: (586) 778-5641



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# Contract Glaziers Inc. Health and Safety Manual

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## **Company Health and Safety Policy**

Management of Contract Glaziers Inc. are vitally interested in the health and safety of their employees. Protection of employees from injury or occupational disease is a major continuing objective. We will maintain a health and safety program conforming to the best practices of organizations of this type.

Management recognizes the right of workers to work in a safe and healthy work environment. All employees, subcontractors, supervisors, and visitors will be held accountable for their health and safety performance.

Supervisors will be held accountable for the health and safety of workers under their supervision. Supervisors are responsible to ensure that machinery and equipment are safe and that workers work in compliance with established safe work practices and procedures.

Contract Glaziers Inc. is committed to ensuring the health well being and safety of all its users, including all contractors & visitors to the facility by enforcing the same health & safety standards while performing work on any of our properties.

Every worker must protect his or her own health and safety by working in compliance with the law and with safe work practices and procedures established by the company. Workers must receive adequate training in their specific work tasks to protect their health and safety.

Contract Glaziers Inc. will make every effort to provide a safe, healthy work environment. All supervisors and workers must be dedicated to the continuing objective of reducing risk of injury. The prevention of occupationally induced injuries and illnesses is of such consequence that it will be given priority over operating productivity where necessary.

It is in the best interest of all parties to consider health and safety in every activity. Commitment to health and safety must form an integral part of this organization, from the president to the workers.

Mike Chlumecky  
Vice President - Operations

Dated: September 17, 2009

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### **Management / Superintendent Responsibilities**

#### **Managers:**

- Provide a statement of policy relating to the Health & Safety Program.
- The statement provides a commitment and philosophy that sets levels of expectations for health and safety performance in the field of operations.
- Ensure all health & safety policies are administered and enforced in all areas.
- Ensure all field operations personnel are aware of and effectively practice the policies and procedures set forth in this health & safety manual.
- Delegate responsibility and duties to supervisors.
- Make accident prevention efforts a part of the total operation.
- Perform workplace inspections to ensure substandard acts and / or conditions are corrected.
- Review reports of accidents as well as documentation of safety inspections.
- Recognize and commend accomplishments and contributions, along with identifying opportunities for improvement.
- Stress that a successful accident prevention program requires the cooperation of all workplace parties.

#### **Superintendents**

- Ensure that all health & safety policies and procedures are effectively implemented in each project they pertain to.
- Ensure the highest standards of performance are maintained according to the health and safety programs on their worksite.
- Accountable for the safe work performance of personnel and equipment on their project sites.
- Implement a safety program and develop a clear understanding of responsibilities and specific duties for each foreman or supervisor.
- They must be knowledgeable and responsible for complying with all legislation, codes of practice and best practice.

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### **Superintendents**

- Hold at least one safety meeting bi-weekly with foremen to review conditions and general health & safety.
- Ensure sub-trades and foremen conduct weekly tool-box meetings.
- Where there are only a few workers, superintendents shall conduct a weekly tool box meeting with all project personnel in attendance.
- Arrange to record minutes of meetings and forward copies to managers.
- Accompany the government OSHA Inspectors or designate during a project inspection. If the superintendent is not available, they shall assign another supervisor to the inspection.
- Make themselves aware of the hazards that exist for the short term, temporary and new workers who are “new” to construction activities.
- Ensure new workers receive detailed health & safety instructions before they are allowed to work.
- Assign new workers to work with others who are familiar with the project that are aware of any specific rules and regulations that are in force on the project.
- Formulate for all new workers a detailed hiring route which includes a review of all project rules and regulations before workers start to work.

### **Supervisors / Foremen**

- Provide safe working conditions for all workers under their supervision.
- Provide workers with instruction in safe work procedures.
- Supervisors shall ensure workers use personal protective equipment appropriate as part of their daily routine tasks; (i.e. safety boots, safety goggles, safety vest, masks) as deemed necessary.
- Undertake in the investigation of incidents to determine root cause.
- Provide a good example for workers by always directing and performing work in a safe manner.
- Conduct regular worksite / workplace inspections for unsafe practices and conditions and ensure prompt corrective action is taken when potential hazardous conditions are noted.
- Work in cooperation with other project supervisory personnel, and develop procedures in dealing with violations and other general safety and incident prevention procedures.
- Maintain a housekeeping standard and assign definite cleaning and organizing responsibilities to individuals.
- Provide a minimum of one tool box talk a week along with JHA's a week.

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### **Employee Rights / Responsibilities**

- Report all hazards and hazardous conditions to your supervision.
- Report all accidents / incident to immediate supervision.
- Comply with all company safety rules and procedures.
- Report all injuries to First Aid no matter how minor in the First Aid Log Book.
- Use machinery, equipment and materials only as authorized per training requirements.
- Follow all job procedures and safe work practices.
- Wear personal protective equipment as required.
- Cooperate in the Early and Safe Return to Work Program to help in the prevention of a lost time claim following an injury.
- Assist site supervision to help in the reduction and control of unsafe conditions and hazards on the worksite.



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The Occupational Safety and Health (OSH) Act of 1970 created the Occupational Safety and Health Administration (OSHA) within the Department of Labor and encouraged employers and employees to reduce workplace hazards and to implement safety and health programs. The Act gave employees many new rights and responsibilities.

### **Employer responsibilities**

Contract Glaziers Inc. has a legal obligation to inform their employees of OSHA safety and health standards that apply to their workplace. Upon request, the employer must:

- Make available copies of those standards and the OSH Act.
- The employer also must prominently display the official OSHA poster that describes rights and responsibilities under the OSH Act.
- Cooperate with the OSHA compliance officer conducting an inspection if he or she inquires about safety and health conditions in the workplace.

### **Worker Responsibilities**

OSHA does not cite employees for violations, the OSH Act requires that each employee "shall comply with all occupational safety and health standards and all rules, regulations, and orders issued under the Act" that are applicable.

Employees are required to:

- Read the OSHA poster at the jobsite;
- Comply with all applicable OSHA standards
- Follow all lawful employer safety and health rules and regulations
- Wear or use prescribed protective equipment while working
- Report hazardous conditions to the supervisor
- Report any job-related injury or illness to the employer, and seek treatment promptly.
- Exercise rights under the OSH Act in a responsible manner.



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### OSHA Compliance

- Section 6 of OSH Act gives OSHA authorities to write safety and health rules.
- The health & safety rules that OSHA writes to protect workers are called “OSHA Standards”. OSHA standards have the force of law.
- Section 8 of the OSH Act gives OSHA the authority to inspect any worksite.
- OSHA can issue correction orders and assess penalties against the owners.
- You have the right to file a complaint with OSHA due to health & safety violations at the worksite.
- OSHA cannot impose legal sanctions such as fine against workers who violate OSHA Standards.
- When OSHA was written it gave employers full legal responsibility for health & safety in the workplace.
- Employees are expected to comply with instructions given by the employer.
- These include following safe work practices and wearing all appropriate personal protective equipment.

### No discrimination for Safety & Health activities

- Under Section 11-C of the OSH Act it makes it illegal for an employer to punish a worker for exercising his / her OSHA rights.

### Your OSHA Rights

- OSHA requires your employer to provide a safe and healthy workplace, and to comply with OSHA standards.
- As an employee you have legal rights provided by OSHA and other federal laws. You have the responsibility to work in a safe manner in compliance with OSHA Standards.
- Your rights include:
  - **THE RIGHT TO A SAFE & HEALTHY** workplace.
  - **THE RIGHT TO RECEIVE SAFETY & HEALTH** training – Emergency Response, Hazard Communication (any other applicable training pertinent to your position).
  - Union contract training may supersede minimum requirements per OSHA.
  - Site specific training requirements will also be provided.

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- **THE RIGHT TO INFORMATION** – OSHA Logs, MSDS, results of workplace monitoring, your own medical records, and the written health & safety programs.

### **Right to confidentiality**

Employees who make a complaint to OSHA about safety and health hazards in their workplaces have a right to confidentiality. If the employee requests that his or her name not be used, OSHA will not tell the employer who filed the complaint or requested an inspection.

### **Whistleblower protection**

Although nothing in the OSHA law specifically gives an employee the right to refuse to perform an unsafe or unhealthful job assignment, under Section 11C of the OSHA Act, Employees have a right to seek safety and health on the job without fear of punishment.

The law forbids the employer from punishing or discriminating against employees for exercising such rights as

- Complaining to the employer, union, OSHA, or any other government agency about job safety and health hazards; and
- Participating in OSHA inspections, conferences, hearings, or other OSHA-related activities.

You may be protected against discipline or discharge for refusing to do dangerous work when faced with an imminent danger of death or serious injury.

You must prove that **all** the following conditions are met:

- You had a reasonable belief, based on what you knew at the time, that there is a real imminent danger of death or serious injury, and;
- You asked the employer to eliminate the danger, and;
- You had no reasonable alternative; and
- There wasn't time to get OSHA involved, and;
- You contacted OSHA within 30 days of when you were disciplined or discharged for this incident

### **Steps to follow for a Work Refusal**

If you feel you must refuse unsafe work, all of the following steps must be taken:

- Don't act alone, talk to your fellow co-workers
- If you have a union, let your representative act with you.
- Make it clear to your supervision that you are not being insubordinate.
- Point out the danger. Clearly explain to your supervision that you are more than willing to perform the job tasks in a safe manner.
- Offer to perform other work, show a willingness to work. Page 7

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- Do not walk off the job. Do not leave the worksite unless ordered to do so by your supervisor.
- Call OSHA at the first opportunity and ensure entire incident is properly documented.

**If the hazard is not corrected**

- An employee may file a complaint by phone, mail, email, or fax with the nearest OSHA office and request an inspection if there are unsafe or unhealthful working conditions.
- When doing so, the employee requests that OSHA not reveal his or her name (Refer to Confidentiality Clause above).
- If the OSHA area or state office determines that there are reasonable grounds for believing that a violation or danger exists, the office will investigate.



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## **Contractor Designated Competent Person**

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**Is the designated competent person for Contract Glaziers Inc. to effectively deliver the company Safety and Health Program in accordance with all applicable governing federal and state regulations.**

**OSHA currently defines a “Competent Person” as: “One who is capable of identifying existing and predictable hazards in the surroundings or work conditions that are unsanitary, hazardous or dangerous to employees, and who has the authority to take corrective measures to eliminate such hazards.”**

The responsibilities for the above name representative for Contract Glaziers Inc are as follows:

- Knowledgeable of all potential job related hazards (site specific).
- Involvement in all Pre-Construction / Pre-Start-up meetings.
- Assuring compliance with MIOSHA / OSHA safety and health standard requirements.
- Ensuring all workplace inspections are completed regularly.
- Establishing all safety policy and procedures.
- Establishing a safety training program that ensures all workers are training per requirements.
- All forms and reports will be signed and dated by the appropriate worker, supervisor and/or manager.

### **Record Keeping**

- Maintaining all applicable safety records. These records include:
- All safety and health training, including certificates
- State required “Right to Know” poster.
- Safety and Health Workplace Poster (OSHA 2203 or state equivalent).
- Health and Safety Orientation forms (new hires, transferred, promoted & Leave of Absence).
- Attendance sign in sheets, and minutes of health and safety meetings.
- Hazard assessments and corrective action reports from recommendations, workplace inspection reports.
- Maintenance records and schedule of all repairs.
- Injury & Illness Record Keeping Forms (OHSA LOGS -300, 300A, 301).
- Injury stat reports ( include lost time, medical aid, first aid logs)
- Workers compensation reports – Restriction requirements



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## Emergency Response Procedure

Per CGI and / or General Contractor, emergency response procedures as indicated per site requirements, the following measures are implemented:

### Evacuation / Rescue: 911

- Police, Fire, Medical Response Team: \_\_\_\_\_
- Location of rescue equipment -  
\_\_\_\_\_
- Muster Point: \_\_\_\_\_
- Severe Weather Shelter: \_\_\_\_\_
- First Aid Equipment Location: \_\_\_\_\_
- Emergency Medical Attention: \_\_\_\_\_
- CGI Certified First Aid / CPR Provider: \_\_\_\_\_
- Emergency Contact Number for CGI: \_\_\_\_\_
- Emergency Contact Number for GC (if applicable) \_\_\_\_\_

### Emergency Signals

**\*\*Evacuation:** Please complete per site requirements.

**\*\*Seek Shelter (Weather):** Please complete per site requirements.

## ALL CLEAR: NOTIFICATION BY CELL PHONE OR RADIO



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## Emergency Equipment

### Emergency Procedures / Fire Safety

- In case of immediate emergency DIAL - 911.
- Method of communication shall be posted at each site.
- The address of the site should be posted near the communication station.
- Post names of first aid responders onsite.
- Designate person to direct emergency crews to site of emergency.
- EMERGENCY NUMBERS shall include  
**Police, Fire, Medical Response Team**
- EVACUATE- KNOW YOUR POSTED PRIMARY FIRE ESCAPE ROUTES, COLLECTION POINTS.
- All employees shall be instructed if known harmful plants, reptiles, animals or insects are present regarding all of the following:
  - 1) Potential Hazards
  - 2) How to avoid injury
  - 3) Applicable first aid procedures to be used in the event of an injury.

### Fire Extinguishers – The NFPA Classification Code for Types of Fires

**Class A** – Ordinary Combustibles -fuels like wood and paper – (may contain water, multipurpose dry chemical or halon).

**Class B** - Flammable and combustible liquids and gases – (may contain dry chemical, carbon dioxide or halon).

**Class C** - Electrical equipment – they use an agent that does not conduct electricity (carbon dioxide, dry chemical or halon).

**Class D** - Combustible metals like magnesium or sodium. Water and some common extinguishing agents react with these metals making the fire worse.

- **Water Based** – pump, stored pressure and cartridge, works by cooling fires – USE FOR CLASS A.
- **Carbon Dioxide – (CO2)** – works by extinguishing fire with gas – Use for CLASS B & CLASS C fires.
- **Multi-Purpose Dry Chemical** – works by extinguishing fire with a blanket of powder. Use for CLASS A,B,C fires.
- **Aqueous Film Forming Foam** – works by extinguishing fire with foam. Use for CLASS A & B fires.
- **Dry Chemical** – types are stored pressure, cartridge operated. Works by extinguishing fire with a blanket of powder. Use for Class B & C fires.
- **Dry Powder** – special ones for different combustible metals. Use for CLASS D fires.

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- **Halogenated Agents** - works by reacting chemically to stop fire. Use for CLASS B & C or CLASS A, B & C fires depending on rating.

### **Construction Site Fire Safety Checklist**

- Approved containers used for the storing and handling flammable and combustible liquids.
- All flammable liquids kept in closed containers when not in use (i.e. parts cleaning tanks, pans etc).
- Rigid separators between containers of combustibles or flammables, when stacked one upon another, to assure their support and stability.
- Fuel gas cylinders and oxygen cylinders separated by distance, and fire resistant barriers while in storage.
- Storage tanks adequately vented to prevent the development of excessive vacuum or pressure.
- Storage rooms for flammable and combustible liquids have explosion proof lights.
- Storage rooms for flammable and combustible liquids have adequate ventilation.
- Bulk drums of flammable liquids are grounded and bonded to containers during dispensing.
- Safety cans used for dispensing flammable or combustible liquids at a point of use.
- All spills of flammable or combustible liquids cleaned up promptly.
- Flammable and combustible liquid wastes kept in fire-resistant, covered containers until they are removed from the workplace.
- Combustible scrap, debris, and waste (oily rags etc) stored in covered metal receptacles and removed from the work site promptly.
- Proper fire extinguishers provided for the types of materials in areas where they are to be used.
- Proper fire extinguishers mounted within 75 feet of outside areas containing flammable liquids, and within 10 feet of inside storage area for such materials.
- All extinguishers free from obstructions or blockage.
- All extinguishers serviced and tagged at intervals not to exceed one year.
- All extinguishers fully charged and in their designated places.
- If sprinkler systems are permanently installed, the nozzle heads are directed so that water will not spray into operating electrical equipment.
- Liquid Propane Gas (LPG) stored, handled, and used in accordance with safe practices and standards.

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## **ACCIDENT REPORTING PROCEDURES FOR WORK-RELATED INJURIES**

### **PROVISIONS / RESTRICTIONS:**

The following specifies the procedures for reporting on-the-job accidents for Contract Glaziers employees. All accident/injury cases involving Contract Glazier employees are protected by the Workmen's Compensation Act and will be immediately reported to the Site Superintendent for investigation. The following is a synopsis of the detailed procedures that will immediately follow, and provides a guide for appropriate action to be taken by the immediate supervisor and the employee involved in reporting a work-related accident/injury:

#### **An employee injured at work should do the following:**

1. He/she should report the injury immediately to his/her supervisor and obtain first aid as directed.
2. If further medical treatment is needed, he/she should obtain an authorization from his/her supervisor for treatment by a licensed physician or hospital.
3. Transportation will be provided to the nearest hospital/ clinic by the supervisor / superintendent.
4. A mandatory drug/alcohol screening will be performed at the time of treatment. If the test is not taken within 4-6 hours of the injury, a mandatory hair sample will be provided for testing.
5. A written report of the injury must be completed within 24 hours of the incident.
6. Failure to comply with the above requirements for a mandatory drug/alcohol screening within 4-6 hours of the injury or a mandatory hair sample will result in termination of employment.

### **PROCEDURES:**

#### **ON-THE-JOB ACCIDENT REPORTING PROCEDURE FOR PERSONNEL**

The following information outlines the appropriate steps to take in reporting an on-the-job accident or injury and a general explanation of Worker's Compensation and how it is applied to Contract Glazier employees.

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## **WORKERS' COMPENSATION**

Workers' Compensation as its name implies, provides compensation, both medical and monetary, for any employee who sustains an injury in the performance of duty. Under the law, an injured employee is entitled to immediate first aid and complete medical care at no cost. Further, the law warrants payment of monetary compensation (lost time wages) to the injured employee as long as medical evidence indicates that the employee is totally or partially disabled and has sustained a wage loss due to the injury. The mechanics of the payment system are of no concern at this time, but it is important to remember to follow the reporting procedure to insure an employee his/her right to benefits under the law.

## **WHAT TO REPORT**

Workers' Compensation procedures suggest that all injuries, even those of a seemingly minor nature like a scratched finger or a bumped knee should be officially reported. A minor injury can develop into a serious, complicated condition. Any on-the-job injury which requires a physician's attention and/or caused absence from work should, without question, be officially reported. To report work related injuries, complete the attached injury / illness report and submit to Health & Safety.

## **REPORT IMMEDIATELY**

In the event of an on-the-job accident, the injured party should obtain first aid as needed and notify the immediate supervisor of the incident as soon as possible. The immediate supervisor should notify the site superintendant of the incident as soon as possible; For Workmen's Compensation reporting purposes, the immediate supervisor must complete the report in detail and forward to health & safety. The final report once complete, should indicate the corrective measures implemented to resolve any unsafe hazards.

Notice of the accident to the site superintendant and health & safety office activates the mailing, normally on the same day as notification, of any necessary forms. Further correspondence proves necessary, especially with the injured employee. In all instances, a cover letter of directions specifically explaining which questions need to be answered or what information is being sought accompanies the request. The forms should be returned to the site superintendant within 10 working days from the date of the accident. The immediate supervisor should insure that all materials, both from the injured employee and the immediate supervisor, are properly completed and promptly returned to the health & safety office.

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## **DOCTOR'S RELEASE**

If an employee loses time from work (other than for immediate medical attention) as a result of an on-the-job accident, a written doctor's release is required before this person is allowed to return to work. The release should specifically indicate any work limitations imposed on the individual as a result of the injury, e.g. restrictions against lifting in a back injury case. If the employee's return is on a restricted basis, a written schedule of duties and hours, if appreciably altered, should be prepared by the immediate supervisor and signed by both the employee and the immediate supervisor. Upon receiving the written release along with the statement of restricted duties, if necessary, should then be forwarded to the Health & Safety Office. If, upon returning to work, the injured employee requires further medical attention as a result of the original on-the-job accident, the employee should obtain authorization for this additional treatment from the appropriate supervisor / safety department.

## **FORMS**

**Notice of Injury--Form CA-1.**"When an employee sustains a traumatic injury in the performance of duty, he or she should give a written report on Form CA-1 to the supervisor as soon as possible but not later than 30 days from the date of injury. If the employee is incapacitated, this action may be taken by someone acting on his or her behalf, including a family member, union official, representative, or agency official. The form must contain the original signature of the person giving notice." The supervisor should:

- (1) Review the front of the form for completeness and accuracy, and assist the employee in correcting any deficiencies found;**
- (2) Complete and sign the reverse of Form CA-1, including a telephone number in case OWCP personnel have questions about the injury. Also, insert the appropriate codes on both the front and back of the form. Codes should be included for occupation, type and source of injury, agency identification, and location of duty station by zip code.**
- 3) Sign and return to the employee the receipt attached to Form CA-1 and give a copy of the form to the employee if requested;**
- 4) Authorize medical care if needed and arrange for transportation if needed.**
- 5) Inform the employee of the right to elect continuation of regular pay (COP) or annual or sick leave if time loss will occur.**
- 6) Advise the employee whether COP will be controverted, and if so, whether pay will be terminated. The basis for the action must be explained to the employee. The reason for controverting a claim must always be shown on Form CA-1.**

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7) Advise the employee of his or her responsibility to submit prima facie medical evidence of disability within 10 working days or risk termination of COP.

**Note:** If the employee incurs medical expense or loses time from work beyond the date of injury, the supervisor should submit Form CA-1 to the district office with supporting information as soon as possible but no later than 10 working days after receipt of Form CA-1 from the employee. If one or more visits for medical care are required during duty hours after the date of injury, or if two or more such visits are required during non-duty hours after the date of injury, the case should be submitted to OWCP as a first aid injury. If no medical expense will be incurred and no time will be lost from work beyond the date of injury, the notice of injury should be retained in the Employee Medical Folder.”

**Medical Treatment--Form CA-16.** “If an employee requires medical treatment because of the injury, the supervisor should promptly complete the front of Form CA-16 within four hours of the request whenever possible. If the supervisor doubts whether the employee's condition is related to the employment, he or she should so indicate on the form. In an emergency, where there is no time to complete a Form CA-16, the supervisor may authorize medical treatment by telephone and then forward the completed form to the medical facility within 48 hours. Retroactive issuance of Form CA-16 is usually not permitted under other circumstance.”

**Delayed Report of Injury.** “If an employee has reported an injury several days after the fact, or did not request medical treatment within 24 hours of the injury, the supervisor may still authorize medical care using Form CA-16. Agency personnel are encouraged to use discretion in issuing authorizations for medical care under such circumstances, but employees should not be penalized for short delays in reporting injuries. The supervisor may, however, refuse to issue a CA-16 if more than a week has passed since the injury on the basis that the need for immediate treatment would normally have become apparent in that period of time. An employee may not use Form CA-16 to authorize his or her own medical treatment.”

**Medical Reports--Forms CA-20, CA-20a, and CA-17.**” In cases sent to OWCP, a medical report from the attending physician is required. This report may be made on Form CA-16 or on Forms CA-20 or CA-20a, which are attached to compensation claim forms. It may also be made by narrative report on the physician's letterhead stationery, or in the form of an emergency room summary. In all instances, however, the physician's original signature must appear on the report. The supervisor should supply medical report forms to the employee for completion by the physician as often as needed. These reports should be submitted in original form to OWCP.”

**When to File.** If disability is expected to continue beyond the period of entitlement to COP, the employee may claim compensation or use leave to cover his or her absence from work. If it is not clear whether the employee will remain disabled after the 45 days of COP are used, claim for compensation should be initiated. Employees who have filed claims should be carried in LWOP status. If an employee returns to work after Form CA-7 has been filed, however, the supervisor should notify OWCP by telephone to avoid overpayments, and later provide written confirmation of return to duty.

**Completion.** If compensation is to be claimed, the supervisor should give Form CA-7 to the employee on the 30th day of COP with instructions to complete the front and return the form to the agency within one week. (If the employee has not returned it by the 40th day of COP, the supervisor should contact him or her by telephone and request that it be submitted as soon as possible).

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**When the form is returned, the supervisor should complete the reverse of the form, including the name and the telephone number of an agency official with direct knowledge of the claim. The employee should arrange to provide medical evidence to support the period of disability claimed; this evidence may be submitted with the Form CA-7 or sent to OWCP separately.**

### **Forms**

CA- 1 - Federal Employee's Notice of Traumatic Injury and Claim for Continuation of Pay/Compensation

CA -2 - Notice of Occupational Disease and Claim for Compensation

CA -7 - Claim for Compensation on Account of Traumatic Injury or Occupational Disease

CA -16- Authorization for Examination and / or Treatment

CA -17- Duty Status Report

CA -20- Attending Physicians Report

### **ANNUAL**

Review of policy / procedure annually for any updates or changes to legislation requirements.

## **ACCIDENT INVESTIGATION REPORT**

The final report is designed to help people learn from the accident. Recommendations must be included so that the accident will not be repeated. All recommendations must be evaluated by management and implemented as soon as possible. The report should contain the following information:

- The location of the project
- Date and time of the accident
- Names and addresses of all those that were injured
- Nature of all injuries sustained
- The attending physician and location of office
- Names and addresses of all persons involved
- Names and addresses of constructor and employer(s)
- Material damage, including costs
- Names and addresses of witnesses
- As thorough a description of the accident as possible.
- The description should include equipment and machinery involved, and type and circumstances of the occurrence
- Immediate and underlying causes.
- Recommendations for corrective action.
- Signatures of those conducting the investigation and preparing the report.

The four main factors in an effective report are:

- Outline all events that contributed to the accident in order.
- Point out all deficiencies or breakdowns in the system as they occurred.
- Summarize on the report all deficiencies identified.

Ensure all corrective action has been completed with regard to recommendations.

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## **OWNER CONTROLLED INSURANCE PROGRAM (OCIP) REPORTING**

An Owner Controlled Insurance Program (OCIP) is a centrally managed insurance and risk control program that can be implemented for a single construction project or a series of projects. They are also referred to as “wrap up programs”.

The following applies on an OCIP project:

- The insurance will cost less to purchase it in "bulk" (covering all contractors under the same policy) than it costs when each contractor purchases insurance on his own.
- If CGI is involved in an OCIP project, the owner of the project pays for the insurance policy and therefore CGI would be covered under that policy for the duration of the project.
- If a CGI worker is injured on an OCIP project the following procedure shall apply:
- The incident shall be reported to CGI's immediate supervisor and the owner of the OCIP project.
- CGI shall complete a detailed accident report with regard to the incident and submit to the OCIP owner.
- The incident report will have workers personal information and a detailed report of the cause of the accident.
- The OCIP owner shall be responsible to ensure all pertinent details of the incident are recorded including corrective action.
- The OCIP owner is responsible for the modified return to work program for CGI workers.
- If CGI cannot accommodate an injured worker due to lack of job suitability and / or a risk of re-injury then CGI can decline the modified work program.



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## **Contract Glaziers Inc.** **Safety Manual**

### **Substance Abuse Policy**

As part of our effort to provide a safe and healthy work environment free from drug abuse, applicants who are being offered employment will be required to undergo drug screening as a condition of employment. A positive test result may make an applicant ineligible for employment.

- Employees of Contract Glaziers Inc. are required to comply with the company's substance abuse policy, as changed from time to time as a condition of continued employment.
- Cooperation and compliance with this policy is a condition of employment, and violations of the policy may result in discipline up to and including termination.
- An additional drug /alcohol test may be required by a new customer.
- A test may be administered in the event that a trained supervisor / superintendent has reasonable cause to believe or suspect that an employee may not be in compliance of our Safety Policy.
- During the process of establishing reasonable cause for testing, the employee (if covered by a union) has the right to request his onsite union representative to be present.
- If the onsite union representation is unavailable, reasonable effort will be made to contact representation from the employee's union.
- If attempts to contact the union representative are unsuccessful the following timelines for complying to the required drug screening / alcohol testing will still apply:
  - A mandatory test will be performed at the time of the incident.
  - If the test is not taken within 4-6 hours of the incident, a mandatory hair sample will be provided for testing.
  - **Failure to comply with the above requirements for a mandatory drug/alcohol screening within 4-6 hours of the incident or a mandatory hair sample will be deemed a failed test and will result in termination or refusal of employment.**
- Testing will be required if an employee is involved in a workplace accident / incident, or if there is a workplace injury.
- Testing may be required as part of a follow up to counseling or rehabilitation to substance abuse. Employees returning to work may be subject to further drug / alcohol testing without prior notice (up to 4 tests during the first 12 months after returning to work).

### **Initial / Pre-employment Drug Screening- Informed consent and release of liability form**

I have been made aware of the Drug and Alcohol Abuse Policy of Contract Glaziers Inc., and I hereby freely and voluntarily consent to submit to an initial

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pre-employment drug screening to determine the presence or lack of presence of the following controlled substances:

- Amphetamines, Barbiturates, Benzodiazepines
- Cocaine, Cannabinoids, Methadone, Methaqualone
- Opiates, Phencyclidine, Propoxyphene

**The company reserves the right to expand or otherwise vary the list of substances to be covered by the drug screening.**

I further give my free and voluntary consent to the evaluation of the screening results, and other relevant medical information by the Medical Review Officer (MRO) employed to review such results, and understand that the release of such results may make me **ineligible** for employment.

I hereby release Contract Glaziers Inc., the collection site, the testing laboratory, the MRO, and the employer of the MRO and their respective affiliates, subsidiaries, employees, representatives, agents, partners, and contractors from any claims or liability whatsoever arising or resulting from the drug screening and any employment decision whether or not made on the basis of the screening results.

The screening laboratory will be selected by Contract Glaziers Inc. based upon the availability of facilities and response to the company. I understand that I am required to report to the collection site for screening within 3 business days after I am offered a position. I understand that a misrepresentation, falsification or deliberate omission of any information provided during my application process may lead to a refusal to employ me or immediate termination of my employment.

\_\_\_\_\_  
Employee- Print (Last name, First name, MI)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Employee Signature



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## **M.U.S.T Program Procedure (Michigan)**

In accordance with Michigan's M.U.S.T Drug Testing Program, the following steps listed in this procedure shall be followed for all new employees / supervisors prior to commencing work for Contract Glaziers Inc.

### **PROCEDURE**

#### **Site Superintendent / Supervisor**

- The site superintendent and / or designate shall register the information on the following website **www@mustonline.org**. The process will be implemented by initiating a drug test with the workers Social Security Number (SSN), followed by their personal information.
- The reason for the testing must be identified on the form.
- Once all pertinent information has been entered and verified for accuracy, click "Authorize Test".
- A drug test authorization form will be available to print or store electronically in your user file.
- Once the drug test has been completed and results are indicated, ensure all information is updated in the file.

#### **Employee**

- Prior to commencing work, the employee shall take the Authorization for Examination or Treatment Form to the participating clinic to have the drug test performed.
- Once complete, the results will be forwarded to CGI to update in the employee's M.U.S.T. program file.
- The employee shall abide by the M.U.S.T Program guidelines and ensure the annual drug test is completed.
- If an injury occurs while working for CGI, the worker will be subject to a mandatory post accident drug/alcohol screening test at the time of treatment.
- Failure to comply with the above requirements of a mandatory drug/alcohol screening within 4-6 hours post injury, the worker will provide a mandatory hair sample test drug/alcohol screening.
- Any results from the initial drug screening that indicate positive for illegal substances as prescribed, the employee involved will not commence work for CGI.
- Any potential employee refusing to submit to this test; will not be permitted to work on any project for CGI that is covered by this program.



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### Safety Manual

#### Hazardous Communication

You have a **RIGHT to KNOW** about Hazardous Chemicals at work. As a construction worker you come in contact with many chemical substances. Some are relatively safe while others pose potentially serious health & safety risks.

Workers have been injured, made sick and died because they did not know the hazards of the chemicals they worked with and did not know the precautions to take. The standard OSHA HazCom Standard (29 CFR 1926.59) guarantees you the right to know.

#### Employer Responsibilities

- Have a written Hazcom program to inform workers of hazards.
- Have a MSDS for each hazardous chemical in the workplace, and make these MSDS available to all workers.
- Ensure containers of hazardous chemicals are labeled clearly & properly.
- Maintain an updated chemical inventory list in the workplace and ensure it is available to all workers.
- Provide worker training in the following areas:
  - The Hazard Communication Standard
  - The employers HazCom Program
  - What hazardous chemicals are present
  - Where hazardous chemicals are present
  - How to use MSDS
  - How to interpret chemical labels
  - How to detect the presence of chemicals
  - The health & safety hazards of the chemicals
  - Safe work practices, protective equipment and emergency procedures for the chemicals.



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## **Contract Glaziers Inc**

### **Safety Manual**

#### **Hazard Communication**

In accordance with OSHA Hazard Communication Standard (CFR 29-1926.59 / 1910.1200 requirements), CGI has established a written hazard communication program to ensure that employees with exposure or potential exposure to hazardous chemicals are provided with appropriate health and safety information.

- The written hazard communication program applies to all areas where employees are exposed to hazardous chemicals during their work.
- The Site Superintendent and / or Supervisor of any storage areas where the containers remain sealed are responsible only for maintaining and making available the material safety data sheets for the hazardous chemicals stored.
- Must ensure that the labels are legible on all containers, and for the information and training requirements of this program to the extent necessary to protect employees in the event of a spill or leak; (refer to site specific Emergency Evacuation).
- CGI will comply with the requirements for maintaining container labels, the requirements for providing labels and material safety data sheets when transporting or shipping hazardous chemicals, and fulfill the requirement to maintain material safety data sheets that are received with shipments of hazardous chemicals.
- For the purposes of this program, the term "*hazardous chemical*" shall mean any chemical that is a physical or health hazard as defined in the standard, including mixtures and gases.

#### **Material Safety Data Sheets**

- The Site Superintendent is responsible for ensuring that a master Material Safety Data Sheets binder is compiled and maintained. The master file will be located in the Site office.
- Supervisors will be responsible for properly displaying the required OSHA Right To Know poster and postings for notifying employees of new or revised Material Safety Data Sheets in their areas.

#### **Labeling**

- The immediate supervisor for the work area will be responsible for ensuring that all containers received or shipped are properly labeled.
- Labels on incoming containers of hazardous chemicals may not be removed or defaced unless the container is immediately marked with all of the required information.

#### **Employee Information and Training**

- Hazard Communication training to be provided at the time of initial assignment, and whenever a new physical or health hazard is introduced at the worksite.
- Training will include training requirements of Hazard Communication, operations where hazardous chemicals are present, proper PPE, and location of MSDS.



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## **Contract Glaziers Inc.** **Safety Manual**

### **Personal Protective Equipment**

Personal protective equipment (PPE) falls under Subpart E of the OSHA Construction Standard. PPE means health & safety items that you wear in order to protect you on the worksite.

These items include:

- Respirators / Particulate Masks
- Protective Clothing
- Gloves
- Hard hats
- Ear plugs / Ear muffs
- Boots
- Safety Glasses / Goggles / Face shields

### **Criteria for Personal Protective Equipment**

- Whenever personal protective equipment (PPE) is necessary, due to hazards in the workplace (defined as chemical hazards, radiological hazards, or mechanical irritants), the PPE “Shall be provided, used and maintained in a sanitary and reliable condition”....
- In the situation where employees provide their own PPE (i.e. work boots etc) the employer is still responsible to make sure that the PPE is adequate, properly maintained and sanitary.

### **Foot Protection**

- Safety-toe boots and shoes must meet the ANSI Standard Z41.1.
- This standard has specifications for different amounts of protection that footwear must provide, dependent on the work being performed.
- Ensure when you purchase footwear that it meets the ANSI Standard, a label will be visible.

### **Head Protection**

- You must wear a hard hat in a work area where there is a possibility of:
  - Injury from impact
  - Injury from falling or flying objects
  - Injury from electrical shock or burn
- Helmets for impact protection and falling and / or flying object protection must meet the ANSI Standard Z89.1.
- If working near live electrical circuits, the helmet must be non-conductive and meet ANSI Standard ZS89.2.

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### Hearing Protection

- If the noise level that a worker experiences is greater than 85 db and it is not feasible to reduce the noise level, then “ear protective devices shall be provided and used”.
- Noise levels are measured with an instrument called a sound level meter, in dBA’s.
- If there is no sound level meter available onsite, here’s a rule of thumb: If you have to shout to be understood by a person a few feet away, then the sound level is probably above 85dBA.
- Ear plugs and / or muffs are the only acceptable protection device allowed.

### Eye & Face Protection

- You must wear eye protection if there is the possibility of:
  - Eye injury from flying objects.
  - Injury from hazardous chemicals.
  - Injury from radiant energy such as welding arcs.
- Safety glasses and goggles must meet ANSI Standard Z87.1.
- If you wear prescription glasses you must wear safety goggles or a face shield over your glasses.
- Prescription safety glasses must have side shields.
- When performing welding tasks, ensure that your lenses have the correct shade number.
- If cutting, grinding or involved with chemical use, you must always use safety glasses (100%) and a face shield.

### Reflective Vests

- When an employee is working in a tunnel, flagging, or exposed to heavy vehicular traffic, a reflective vest **must** be worn.

### Respirators / Particulate Masks

Respirators are an effective method of protection against designated hazards when properly selected and worn.

- Employee’s who voluntarily wear a loose-fitting disposable respirator when protection is not required per OSHA permissible exposure limits (PEL), will be provided a copy of Appendix D from 1910.134 of the General Industry Standards.
- Employees may not bring in their own respirators onsite without prior approval from management.

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- They will receive instruction on the location, replacement, storage and disposal of these masks.
- A copy of a training certificate showing respiratory training will be kept onsite and with Health & Safety.
- A hazard assessment must be completed prior in any situation where an employee requests the use of a respirator.
- Under OSHA regulations, CGI is responsible to ensure that all respiratory protection used by employees provides appropriate protection for the specified hazard identified onsite.

**The following precautions should be taken when utilizing a respirator / particulate mask:**

- Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator limitations.
- Choose the proper respirator certified for use to protect against the contaminants of concern.
- A label or statement of certification should appear on the respirator or respirator packaging. It will indicate what the respirator is designed for and how much it protects you.
- Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect you against.
- Keep track of your respirator so that you do not mistakenly use someone else's respirator.

**Respirators**

There are two basic types of respirators:

- **Air Purifying Respirators (APR's):** with these you breathe the dirty air around you. The respirator has filters or cartridges that clean the air before you inhale it.
- **Atmosphere Supplying Respirators:** these provide a separate, clean air supply from a cylinder on your back (SCBA), or through an airline from a cylinder or from a compressor located in a clean area.
- Refer to OSHA Standard 1910.134-Appendix C for information on the Medical Evaluation Questionnaire for mandatory respirator program.

**Using Air Purifying Respirators**

- Not for use in a confined space entry.
- Must be at least 19.5% oxygen (APR's do not supply oxygen).
- You must know the identity of the contaminants (this will ensure you pick the correct filter and cartridges).
- You know the concentration of the contaminants:( this will ensure you chose the correct rating for the respirator).

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- Ensure the concentrations are not above the IDLH (Immediately Dangerous to Life and Health).
- You must have approved filters / cartridges for these contaminants at these concentrations.
- The contaminants have good warning properties.
- Filters and cartridges only last so long. Once they expire the contaminants can pass through.

**Always refer to the NIOSH Protection Factor Chart**  
**The protection factor tells how much cleaner the air is inside the respirator than the outside air.**

### **Fall Protection Systems**

The OSHA Construction Standard covers most workers except those inspecting workplace conditions prior to the start of work and after it is completed.

- Construction employers must protect their employees from fall hazards when an affected employee is 6 feet or more above a lower level.

### **Guardrail Systems – CFR 1926.501(502)(b)**

Must meet the following criteria:

- The top rails and mid rails may be made of wire rope at least ¼” to prevent cuts & lacerations.
- If using wire rope for the top rails, must be flagged at least every 6feet with high-visibility material.
- If manila or synthetic rope is used, it must be inspected frequently to ensure strength and stability.
- Steel and plastic banding cannot be used as top rails or mid rails.
- The top edge height of top rails must be between 39-45” above walking level.
- Openings in the guardrail system cannot be more than 19” across.
- The guardrail system must be capable of withstanding a force of at least 200 pounds.

### **Guardrails Systems CFR 1926.501(502)(b)**

- Guardrails systems must be free of damage that could cause lacerations.
- If guardrails are used on ramps / runways, they must be erected on each unprotected side or edge.
- A chain, gate or removable guardrail section must be placed across the access opening when hoisting operations are not taking place.

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**Safety Net Systems – 29 CFR 1926.502 c**

- Safety nets must be installed close under the walking / working surface they protect and never more than 30 feet below that surface.
- Safety nets must be inspected at least once a week for damage.
- Defective nets must not be used.
- No opening in the net can be more than 36” square, and more than 6” on any side.
- Openings, measured center-to center, of mesh ropes or webbing, must not be more than 6”.
- Safety nets must have sufficient clearance underneath to prevent contact with the surface or structure below.
- The potential fall area from the walking/working surface to the net shall be unobstructed.
- Safety nets shall be capable of absorbing an impact force of a 400 pound bag of sand 30” in diameter.
- The bag of sand shall be dropped 42” above the highest surface on which employees will be working and / or walking.
- Items that have fallen into safety nets must be removed as soon as possible and at a minimum before the next work shift.
- Safety nets must extend outward from the outermost projection of the work surface.

	Vertical distance	Horizontal distance –working surface to the Outside of the net
	Up to 5 ft.....	8 feet.....
	More than 5ft-10ft	10 feet.....
	More than 10ft	13 feet.....

**Personal Fall Arrest Systems – 29 CFR 1926.502 (d)**

These systems consist of an anchorage, connectors, lifeline, lanyard and a body harness. They may also have a deceleration device.

When utilizing a personal fall arrest system, it must do the following:

- Limit maximum stopping force to 1800 pounds.
- Not allow the worker to free fall more than 6feet or hit a lower level.  
Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 ft.
- Strong enough to withstand 2 X the impact of an employee free falling 6 feet of the free fall distance of the system, whichever is less.
- The fall arrest system must include a body harness.
- Body belts are prohibited as of 01.01.98;(however can still be utilized in a positioning device system).



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- Ropes and lanyards must be made of synthetic fiber (such as nylon, Kevlar), not manila.
- Snap hooks must be the locking type, and must be designed for the object for which they are attached.
- A “competent” person must supervise the design and installation of lifelines and anchorages.
- Lanyards must have shock absorbing capabilities.

### **Positioning Device Systems – 29 CFR 1926.502 (e)**

- A positioning device system uses a body harness which is set so that a worker can free fall no more than 2 feet.

### **Warning Line Systems –CFR 1926.502(f)**

- The purpose of this system is not to physically prevent workers from falling, but to alert them to danger so they do not get too close to a fall hazard area.
- Warning lines must be:
  - Flagged at least once every 6 ft with high visibility material.
  - All points must be between 34 to 39 “ above the walking surface.
  - Stanchions holding up the warning line must resist tipping by a moderate force of 16 pounds.
  - The line must be rigged so that pulling on one section does not take up the slack in an adjacent section before the stanchion tips over.

### **Controlled Access Zones 29 CFR 1926.502 (g)**

- **Definition:** an area where certain work (i.e. leading edge) may take place without the use of conventional fall protection systems. This is allowed because a fall protection system may interfere with the work and create a much greater hazard.

### **Control Line**

- **Definition:** the control line defines the controlled access limits so that other workers don't enter. Control lines can be ropes, wires, or tapes with supporting stanchions.
- Control lines must be:
  - Flagged at least once every 6 feet with high visibility material.
  - All points must be between 39-45” above the walking surface.
  - Strong enough to sustain force of at least 200 pounds.
  - A control line for a leading edge must be roughly parallel to the edge.
  - Maximum and minimum distances for locating control lines for activities:

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### **Safety Monitoring Systems – 29 CFR 1926.502 (h)**

- When there is no other alternative fall protection that can be implemented, the employer can appoint a competent person to monitor the safety of workers. The safety monitor must:
  - Be competent to detect unsafe work practices and recognize fall hazards.
  - Be located on the same walking / working surfaces of the workers and able to see them and communicate orally to warn of any fall hazards.
  - Have no other duties to distract from the monitoring function.

### **Covers – 29 CFR 1926.502 (i)**

- A cover for a hole must be strong enough to support at least twice the weight of anybody or anything that might rest on it.
- Covers located in roadways & vehicular aisles must be able to support twice the axle load of the heaviest vehicle that may drive over it.
- All covers shall be secured when installed so as to prevent accidental displacement by the wind, equipment, or employees.
- All covers shall be color coded and clearly marked with the words “HOLE” or “COVER” to provide warning of a hazard.

### **Protection from falling Objects – 29 CFR 1926.502 (j)**

When guardrail systems are used to prevent materials from falling from one level to another, all openings must be small enough to prevent the passage of potential falling objects.

- Materials and equipment cannot be stored within four feet of any leading edge work.
- Any guardrail system that is used to prevent materials from falling from one level to another must have openings small enough to prevent passage of potential falling objects.

### **Toe boards – 29 CFR 1926.502 (j) (2),(3),(4)**

When toe boards are used as protection from falling objects, they must be erected along the edges of the overhead working surfaces for a distance sufficient to protect persons working below.

Toe boards must meet the following requirements:

- Capable of withstanding a force of at least 50 pounds.
- Be at least 3 ½” tall.
- No more than ¼” clearance above the working surface and no gap or space greater than 1” along their length.
- If tools or materials are piled higher than the top edge of a toe board, paneling or screening must be erected to protect employees below.

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### **Training**

Employers are required to provide a training program for employees who may be exposed to fall hazards. The training program must include the following:

- The nature of fall hazards in the work area.
- The correct procedure for erecting, maintaining, disassembling, and inspecting fall protection systems.
- Proper use and operation of controlled access zones and guardrails, personal fall arrest, safety nets, warning lines and safety monitoring systems.
- Roles and responsibilities of all employees involved in the safety monitoring system when implemented.
- Correct procedures for equipment and material handling, storage and the erection of overhead protection.
- Employee's role in fall protection plans.
- All applicable standards in Subpart M of the legislation.
- Employers are responsible for the preparation of written certification that provides evidence of training and the date trained.
- Retraining must be provided when necessary.

### **General Housekeeping**

#### **Walking and Working Surfaces – CFR 1926.25**

- The floor of every workroom shall be maintained in a clean and, so far as possible, a dry condition. Where wet processes are used, drainage shall be maintained. False floors, platforms, mats, or other dry standing places should be provided where practicable.
- Clearance must be allowed for aisles where mobile equipment is used. This includes loading docks, through doorways, and wherever turns or passage must be made.
- All aisles and passageways must be kept clean, clear, sanitary, and in good repair with no obstruction that could create a hazard. All floors must be free of holes, loose boards, and protruding objects that could be a hazard.
- Aisles and passageways must be marked or otherwise identified.
- **Illumination** - All walkways and work areas are to be free of obstacles and have adequate lighting during the evening hours.
- Unnecessary tools and equipment will be picked up and stored when not in use.



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- **Walkways** – including stairways, passageways, and gangways should be in good repair and clean.
  - Passageways should be kept free from protruding objects, storage of equipment, pallets of products, and uncovered openings in the floor.
  - Gather and remove debris as often as required to keep work and travel areas orderly.
  - Keep equipment and areas around equipment clear of scrap and waste.
  - Secure loose or light materials stored on roof or on open floors to prevent blowing by wind.
  - Guardrails temporarily removed for materials delivery must be **immediately** replaced when work is done. Workers involved must wear fall protection until guardrails are back in place.
  - When piling material for storage, make sure the base is firm and level. Cross tie each layer. Keep piles level and do not stack piles too high.
  - When storing materials suspended from racks or hooks, secure them from falling and route walkways a safe distance from the surface beneath.
  - When storing materials overhead on balconies or mezzanines, provide adequate toe boards to keep materials from falling over the edge.
  - Do not let materials and supplies no longer needed to accumulate, if not needed dispose of it.
  - Maintain tools, equipment, machinery and work areas should be maintained in a clean and safe manner. Defects and any unsafe conditions should be reported to the supervisor immediately.
  - Return tools and equipment to their proper place when not in use.
  - Layout extension cords, air hoses, ladders, pipes, tools etc., in such a way to minimize trip hazards or obstructions to traffic.
  - Clean up spills immediately to avoid hazards. If the removal cannot be done immediately, the area must be appropriately guarded, roped off, with signage.
  - Nail points, ends of loop or tie wires must not be left exposed when packing and unpacking boxes, crates and barrels.
  - Dispose all packing material properly to help reduce the risk of fires.
  - All switches or drives on machinery must be locked out before cleaning, greasing, oiling, or making adjustments or repairs.
  - Circuit breaker boxes or fuse boxes must be closed at all times. It is a requirement to maintain a minimum clearance of 36 inches in front of them.
  - Flammable and combustible materials should not be stored in mechanical rooms or around electrical boxes.
  - Keep electrical equipment properly maintained free of grease / dirt. Page 32

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- Ensure adequate lighting in secure areas for the protection of the workers and public.
- Place oily and greasy rags in the proper designated container for this purpose and dispose of properly and on a frequent basis.

### **Job Site Inspections**

The competent person and / or other designated person will tour each job site daily and observe potential safety and health hazards and develop a plan for safeguarding Contract Glaziers Inc. employees.

The process shall include:

- Conducting a daily review of CGI's area of work to observe any present or future safety hazards, and / or potential hazard.
- All hazards will be recorded and corrective action will be implemented by the competent person.
- Once the hazard has been corrected, the competent person will notify the site supervisor / superintendent.
- Provide all appropriate personal protective equipment (PPE) and enforcing proper use according to OSHA Regulations.
- Training workers in safe work practices. This process can be achieved through weekly tool box talks.
- The tool box talks are to be submitted to the site supervisor / superintendent and forwarded to the safety representative weekly.
- Coordination of the protection of workers through other contractors.
- Assign a competent person to train and inspect hazards visually on the jobsite.
- These reports are to be turned into the site supervisors / superintendents.
- These reports will be kept on file at the jobsite office.
- **Any equipment repairs and / or maintenance should be forwarded to the appropriate parties for corrective action.**
- These reports are to be turned into Health & Safety once all corrective action has been completed.



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## **Contract Glaziers Inc.** **Safety Manual**

### **Material Handling, Storage, Use / Disposal** **29 CFR – 1920.250 (H)**

- Handling and storage of materials can cause serious injuries. Many times, the weight and bulk of objects can create a potential hazard resulting in injuries.
- Manual material handling can contribute to sprains and / or strains to muscles and joints.
- Fractures, lacerations and bruises can result from being struck by moving or falling objects, pinched between objects, or incorrectly cutting straps.

### **General Requirements of Material Handling -29 CFR -1926.251**

- Do not move more than you can. Ensure you have a good handle or grasp on the object, and a clear path when transporting bulky objects.
- Standard weights for lifting requirements of manual material handling can range between 35-40 lbs.
- If you place blocks under a load, ensure that your hands are completely removed before the load is lowered unto the blocks.
- Ensure proper PPE is utilized when moving equipment; (i.e. gloves, boots).
- When using powered equipment to move materials; (i.e.–forklifts) the following rules apply:
  - Know the rated capacity of the equipment, don't overload it.
  - Ensure the load is centered.
  - Keep the load in the lowest possible position when travelling.

### **Storage Areas**

- Keep storage areas free from accumulated materials that may cause tripping, fires, or contribute to the influx of rats and other pests.
- When stacking materials ensure you consider factors such as height, weight, accessibility of the stored materials to the user, and the condition of the containers.
- Ensure you are aware of the load limits of the floor or rack, **DO NOT OVERLOAD IT!**
- Load limits should be posted in all storage areas.
- Don't stack materials too high. Know the proper maximum height for different materials and containers.
- Ensure that materials are not blocking sprinkler heads.

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### **Storage Areas**

- If drums or barrels are stacked on their ends, place planks or plywood between the tiers for added security.
- If stacked on their sides, make sure the bottom tier is securely blocked to prevent any rolling.

### **Manual Lifting**

Workers move materials. Trucks are unloaded, and supplies are moved to warehousing areas. Waste materials are collected and loaded for disposal. These activities often require lifting heavy objects by hand.

Proper technique should include:

- Do not overestimate your strength. If it's too heavy or bulky ask for assistance.
- Keep your back straight and lift with your legs.
- Lift slowly and carefully.
- Keep the load as close to your body as possible.
- Don't turn or twist while lifting, awkward positions increase the potential for injury.
- Carefully place loads down, avoid extended reaching and use proper body posture.

### **OSHA Ergonomic Guidelines**

Although there is no specific OSHA standard, guidelines have been implemented to assist in recognizing and controlling hazards in the construction industry. Contract Glaziers Inc. has an obligation under the **OSHA General Duty Clause Section 5 (a) (1) to furnish workplaces that are free from recognized serious hazards that are causing, or likely to cause, death or physical harm to employees.**

The basic principle of ergonomics is that the job is adapted to “fit the person”, not the person forced to “fit the job”.

- Tools and equipment should be easy to operate. Excessive vibration and awkward postures should be addressed to order to help in the prevention of potential injury to workers joints and muscles.
- Ergonomics should include restructuring or changing workplace conditions to make the workplace job tasks easier and reduce stressors.

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- Work environment and items such as design and function of workstations, controls, displays, safety devices, tools and lighting should be addressed to fit the workers physical requirements in order to ensure health & safety.
- In the area of materials handling and storage techniques, ergonomic principles require reducing the size or weight of objects lifted, mechanical lifting aids, and re-organizing or changing the height of a shelf.

### **Musculoskeletal disorders or MSD's**

Definition: Injuries to muscles, nerves, tendons, ligaments, cartilage, and spinal discs caused by employee exposure to repetitive motions, awkward postures and other risk factors. Other terms for MSD's are:

- Cumulative trauma disorders (CTD's)
- Repetitive motion injuries (RMI's)
- Repetitive stress injuries (RSI's)

Common conditions associated with MSD's are tendonitis, low back pain and carpal tunnel syndrome.

- A common risk factor among these disorders is the use of force, combined with repetitive motion over time. These conditions are common to construction site tasks.
- These painful and sometimes crippling injuries develop gradually over periods of weeks, months and years. They result from repeated actions such as twisting and bending of the hands, arms and wrists.

The following are important risk factors for MSD's:

- **Force** – the physical effort required to accomplish / complete a task or motion. Use only the force necessary to perform the job.
- **Repetition** – Frequency that a task is repeated over and over during a shift with little change in movement. Tasks should always be rotated to avoid a single type of repetitive motion for too long of a duration.
- **Awkward Posture** – body parts that deviate significantly from the “neutral position” during a work shift. Always practice proper lifting techniques, get help with larger loads and use proper material handling equipment.
- **Contact Stress** – stress that is involved in either repeated or continuous contact between body tissue and sedentary objects.
- **Vibration** – vibration to a localized area (i.e. to the hand from powered tools). Rotate tasks and take extra breaks from tasks during your shift to avoid vibration for too long of a duration.



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### **Electrical Safety / Safeguard Checklist** **29 CFR 1926 Subpart K**

Electrical dangers shall be observed and improper electrical conditions shall be notified to all project personnel.

Use of the following equipment is prohibited for the safety of all involved personnel:

- Frayed extension cords
- Metal Ladders

All personnel shall be protected from such electrical hazards:

- Exposed live electrical parts
- Ungrounded electrical equipment (double insulated tools is acceptable)
- Unprotected electrical cords
- Non-GFCI protected equipment

Daily tests and inspections on the following equipment shall be made to ensure it is safe, free from defects, and functioning properly:

- Lighting and illumination equipment
- Power and Electrical Equipment
- GFCI's
- Portable electric tools and cords
- Extension cords

The Site Supervisor / Superintendent shall ensure that all project personnel are instructed to inspect power tools prior to each use to ensure tools are in proper operating condition.

### **LOCK-OUT/TAG-OUT PROCEDURES:**

#### **29 CFR 1926.417 Lock-out and Tagging of Circuits**

The following are specific procedures to be followed for lock-out/tag-out:

1. Notify all affected areas and employees of the impending lockout situation, the reason for it and estimated start and duration times.
2. Equipment shutdown and isolation. Place all switches in the "off" or "safe" position. Disconnect sources of power, ensuring all sources of both primary and secondary power to the equipment are interrupted.



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3. Dissipate residual energy. Shutting down equipment does not mean there is no energy left in it. Check for trapped pressure or residual electricity in the system.
4. Lock-out or tag-out all in-line points of control. In most cases, this may be more than one place, or more than one lock, if several people are working on the equipment.
5. Lock-out verification. Take nothing for granted. Verify that the locked-out switch or control cannot be overridden. Test the equipment to be certain that the locked-out switch is de-energized & not simply malfunctioning. Press all start buttons or valves to see if the equipment starts. Ensure the system you are working on is the same one that has been locked out.
6. Perform the work scheduled. Try to foresee all possible hazards. Ensure the new/repair work does not bypass the lockout and reactivate the system. Lock and/or tag removal. All locks and tags are to be left in place until work is completely finished.
7. This is especially true when more than one employee is working on the equipment. A lock is never to be removed except by the person who placed it there.
8. Equipment start up. Make a final safety check before restarting equipment, to be certain it is safe to operate. Make sure of the following:
  - a. All tools and other items have been removed.
  - b. All machine guards are returned to their proper position.
  - c. All electric, hydraulic, pneumatic or other systems are properly reconnected.
  - d. All employees are clear of equipment.

***NOTE: Only immediate supervisors are to authorize emergency removal of a lock or tag. The individual who applied the tag must be notified that the tag is being removed.***

**Many of the lock-out/tag-out procedures appear to be common sense, and they are. Following them will ensure safe operation calibration, maintenance and repair of equipment and/ or processes, without dangerous surprises or injury.**



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### **Cranes / Derricks -29 CFR 1926.550**

#### **Requirements**

- Equipment must be operated according to the manufacturer's specifications and limitations.
- If the information is not available, then a "competent" engineer in this area must determine the limitations and specifications.
- Information must be recorded in writing and submitted to CGI.
- Attachments must not exceed the rated load capacity.
- Platforms and walkways shall have anti-skid surfaces.
- A fire extinguisher must be accessible to the operator; it must be a 5BC rating or higher.
- Annual / periodic inspections by the C.C.O.

#### **Signals**

- Workers must use the appropriate hand signals.
- A copy of signals must be posted on the worksite.
- Workers must keep clear of loads about to be lifted, and clear of suspended loads.

#### **Pre-shift Inspections**

- A "competent" person must inspect all machinery and equipment prior to each use to ensure it is in safe operating condition.
- If any deficiencies are identified, the equipment must be tagged out of service until such time that repairs have been completed and / or defective parts have been replaced.
- Before equipment is deemed operable, the site superintendent must ensure completion dates are met by personnel responsible for performing the work.

#### **Annual Inspections**

- At a minimum annually, a "competent" person must conduct a thorough inspection of the hoisting machinery.
- CGI must keep a record of the dates and results of the inspections.

#### **Defective Wire Running Rope**

Wire rope must be taken out of service if any of the following conditions exist:

- Six randomly distributed broken wires in one lay.
- Three broken wires in one strand in one lay.

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### **Defective Wire Running Rope**

- Wear of 1/3 the original diameter of the outside individual wires.
- Kinking, crushing, bird caging or distortion of the rope structure.
- Heat damage.
- Reduction in the nominal diameter.

### **Defective Wire Standing Rope**

Wire rope must be taken out of service if any of the following conditions exist:

- More than two broken wires in one lay beyond the end connections.
- More than one broken wire at an end connection.

### **Modifications**

- No modifications or additions which affect the capacity or safe operation of the equipment shall be made without the manufacturer's written approval.
- If modifications are made, the capacity, operation, and maintenance instruction plates, tags, and decals shall be changed accordingly.
- Under no circumstances shall the original safety factor of the equipment be reduced.

### **Guarding**

- Belts, gears, shafts, pulley, drums, fly wheels, chains or other moving parts must be guarded to protect employees from contact.
- All accessible areas within the swing radius of the crane must be barricaded to prevent employees from being struck or crushed.
- Exhaust pipes must be guarded or insulated in areas where there may be potential for worker contact.

### **Electrical Power Lines**

- If it is difficult for the operator to see the power line, then there must be a designated person to watch the clearance and warn the operator.
- Any overhead wire shall be considered an energized line until the person "owning" the line or the electrical authority clearly state in writing that it is not energized, and it has been visibly grounded.
- Cranes can be operated near a power line only if the following applies:
  - The power line is de-energized and visibly grounded
  - Insulated barriers are in place to prevent contact
  - Sufficient clearance is maintained as per the table below

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### Cranes & Derricks

- Clearances required while working near electric power lines.

<u>Required clearance while working</u>	
50,000 volts (50kV) or less	10 feet
More than 50,000 volts (50kV)	10 feet + 0.4 inch for each 1kV over 50 kV
<u>Required clearance while moving from one place to another without a load and with the boom lowered</u>	
50,000 volts (50kV) or less	4 feet
More than 50kV but less than 345kV	10 feet
More than 345kV up to 750kV	16 feet

### Hoists – 29 CFR 1926.552

#### Requirements

The employer must comply with the manufacturer’s specifications and limitations. If they are not readily available, then a professional engineer, qualified & competent in the field, must determine the limitations and specifications and submit to Contract Glaziers Inc. in writing.

- The rated load capacities, operating speeds and special hazard warnings must be posted on cars & platforms.
- Wire rope must be taken out of service if any of the following conditions exist in hoisting ropes:
  - Six randomly distributed broken wires in one lay
  - Three broken wires in one strand in one lay.
  - Wear of 1/3 the original diameter of outside individual wires.
  - Kinking, crushing, bird caging or distortion of the rope structure. Heat damage (i.e. contact with a cutting torch or arc). Reduction in the nominal diameter.



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### **Aerial Lifts – 29 CFR 1926.556**

The following rules apply to the use of aerial lift devices:

- Lift controls must be tested each day prior to use.
- Only authorized trained workers can operate an aerial lift.
- A worker in an aerial lift must have a harness with a lanyard attached to the boom or basket.
- Never sit or climb on the edge of the basket, use planks, ladders or other devices for a work position.
- If outriggers are used, position them on pads or on a solid surface.
- Never exceed the boom and basket load limits specified by the manufacturer's recommendations.
- Never move aerial lift equipment with the boom elevated and the worker in the basket, unless the equipment is **specifically designed** for this type of operation.
- There must be a lower set on controls (at the truck body) and an upper set (at the platform or basket). Lower controls must provide for overriding the upper controls.

### **Aerial Lifts**

- Controls must be plainly marked as to their function.
- **Never** operate the lower level controls without permission from the employee in the lift, except in the case of emergency.
- The insulated portion of an aerial lift shall not be altered in any manner that might reduce its insulating device.

### **Swing Stages / Man lifts**

- Site superintendent will ensure all workers are present during initial equipment set up.
- Basic training will be provided to all workers at this time for procedure and equipment operation.
- Ensure all workers follow the fall protection requirements for swing stages and man lifts.

### **Fly Bridge Platform**

- Site superintendent for CGI shall ensure that only trained, qualified personnel operate the platform.
- All operators shall also be trained in Fall Protection Regulation– CFR 1926.502 per OSHA requirements.

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- Signed training documentation will be kept with CGI onsite for all trained operators.
- The site superintendent shall ensure that all loads shall not be greater than the rated lifting capacity.
- Only CGI personnel will install the platform, and remove the platform when moving between floors on all jobsites that they are in use.
- When in use, the area shall be deemed a “controlled access zone”, taped off, and proper signage indicating such activity.
- When platform is not in use, the site superintendent shall ensure that safety chains are properly secured and locked at all times.

### **Scaffold Safety – 29 CFR 1926.450**

#### **General Requirements**

- A “qualified” person shall design every scaffold.
- A scaffold shall be constructed & loaded to comply with its design.
- Every scaffold and scaffold component must be able to support, without failure, its own weight and at least 4 times the maximum intended load.
- All scaffold erection / dismantling shall be overseen by a competent employee Under the Scaffold Safety requirements.

#### **Scaffold Platform Construction- Refer to OSHA Standard for Scaffold Erection / Safety**

#### **Safe Guidelines for Scaffold Use**

- A competent person shall supervise the erection, moving, dismantling or altering of any scaffold. The competent person shall select experienced and trained employees to do this work.
- A competent person must inspect each scaffold prior to the beginning of each work shift.
- The competent person must also inspect the scaffold after any occurrence that might have affected the scaffold’s structural integrity.
- A scaffold shall not be loaded in excess of its capacity.
- **Never** move a scaffold with workers on it. If the scaffold has been designed by a registered professional engineer to be moved while occupied, this would be an exception.
- Keep scaffolds clear of electric power lines:
  - **At least 3 feet away from an insulated line under 300 volts.**
  - **At least 10 feet away from an insulated line over 300 volts.**
  - **At least 10 feet away from any un-insulated line.**

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### **Safe Guidelines for Scaffold Use**

- No work is allowed on a scaffold covered with snow or ice until it is removed.
- No work is allowed on a scaffold during high winds unless a “competent person” determines that it is safe to work.
- Never stand on a box or other makeshift item to reach higher from the platform.
- Planks must not deflect more than 1/60 of their length; (i.e. the greatest deflection allowed in a 10 foot long plank is 2 inches). If it bends more than this, it must be replaced with a stronger plank.
- A “shore” or “lean to” scaffold is not allowed. This is defined as a scaffold which is placed against a building or structure and held in place with props.

### **Fall Protection for Scaffold Use**

- There must be fall protection for workers on a scaffold where the work platform is more than 10 feet up. This is different than the 6 foot requirement for other walking and / or working surfaces in the OSHA Fall Protection Standard.
- Wood pole scaffolds, tube & connector scaffolds, and welded frame scaffolds shall all have guardrails on all sides.
- Guardrails shall be made of 2X4's or an equivalent material.
- Guardrails shall be approximately 42 inches above the work platform (38 to 45 inches).
- Guardrails must not have splinters, nails or other hazards.
- CGI is responsible to provide fall protection for workers who erect or dismantle a scaffold.

### **Protection from Falling Objects**

- CGI workers who work on or around scaffolds shall wear hard hats.
- The scaffold must have toe boards to prevent tools, materials and debris from falling on workers below.
- Alternative to toe boards include screens, debris nets, catch platforms and canopies.
- Toe boards shall be at least 3 ½ inches tall and allow no more than a ¼ inch space between the toe board and the work surface.
- If an object on the scaffold is too big or heavy for the toe board to keep it from falling off, then it must be kept away from the edge and secured.
- Barricades and proper signage shall be erected to keep workers from areas where falling objects might land.

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## Contract Glaziers Inc. Safety Manual

### Sling Safety

- Slings are the most commonly used piece of material-handling equipment. They are commonly used to suspend loads from cranes, derricks and hoists.
- Slings can be made of different materials. These materials include chain, wire rope, wire mesh, natural fiber rope, synthetic fiber rope and synthetic webbing.
- Chain slings should be used when the load requires great strength and the need for adapting to the load shape.
- Sudden shock can cause damage to chain slings.
- The misuse of chain slings can damage the sling that may result in sling failure and possible injury to workers.
- Chain slings should be utilized for lifting materials that are very hot. They can be heated to temperatures of up to several hundred degrees.
- The following should be considered when selecting a wire rope sling:
  - **Strength** – the maximum load is determined by dividing the ultimate strength of the rope by a safety factor; (new wire rope has a safety factor of 5).
  - **Fatigue** – Fatigue failure results from small cracks that develop after repeated bending, sharp bends cause more fatigue. Use rounded blocks or pads to increase the radius where the sling bends around a load.
  - **Abrasion** – The ability of a wire rope to withstand abrasion depends on the size, number of wires, and construction of the rope.  
**Small wires** - are more flexible and less able to withstand abrasion.  
**Large wires** – make the rope less flexible, and better to withstand abrasion.
  - **Abuse** – can cause serious structural damage to the rope such as bird caging or kinking therefore reducing the rope's strength.  
**Bird caging:** when wire rope strands are forcibly untwisted and spread outward.



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## **Contract Glaziers Inc.** **Safety Manual**

### **Wire Rope**

- When using wire rope, it must be visually inspected before each use.
- The worker should check the twists or lay of the sling.
- If ten randomly distributed wires in one lay are broken, or five wires in one strand of a rope lay are damaged, the sling must not be used.
- End fittings and other components should be inspected for damage that can make the sling unsafe.
- Workers who use slings should be “competent” in recognizing damage to slings.

### **Lubrication**

- A properly lubricated wire rope sling will last longer.
- Lubrication allows them to slip along each other without excessive wear.
- There is no set rule on how much or how often this should be done it depends on the conditions under which the sling is used.
- If the load is heavier, and requires a greater number of bends, lubrication will be required at a greater frequency.
- Wire rope used more frequently in adverse elements will require more frequent care and lubrication.

### **Storage**

- Wire rope should be stored in a ventilated & dry building.
- Wire rope should never be stored on the ground. Continuous exposure to the elements will cause corrosion and rust.
- If there is no other alternative than to store the wire rope outdoors, ensure it is kept off the ground and protected.
- Using a sling frequently during any given week is a safe work practice.
- Continuous use of wire rope even for lighter loads will be more useful and provide longer service.

### **Discarding of Wire Rope**

Wire rope should be discarded under the following conditions:

- Severe corrosion.
- Localized wear (shiny worn spots) on the outside of the wire rope.
- A one-third reduction in outer wire diameter.
- Damage to end fittings.
- Distortion, kinking, bird caging, or other damage to the rope structure.
- Excessive broken wires; (Ten randomly distributed wires in one lay are broken, or five wires in one strand of a rope lay are damaged).

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## **Contract Glaziers Inc.** **Safety Manual**

### **Fiber Rope Slings**

- Fiber rope slings are pliant and grip the load well.
- Since they are less strong than wire ropes slings or synthetic slings, fiber ropes should only be used for lighter loads.
- Do not use them to lift objects with sharp edges unless you can carefully pad the edges to protect the rope.
- Fiber rope slings should not be used if they are exposed to high temperatures, or to corrosive materials or abrasion.
- Fiber rope slings should be carefully inspected prior to each load.
- The outside should be examined for dry, brittle, scorched or discolored fibers.
- Scratch the fibers with your fingernail. If they come apart easily, this means the fiber sling has suffered some level of chemical damage.
- If you untwist a portion of rope to look at the interior, and it is clean as when the rope, it shows little to no internal wear. However, a build up of dust on the inside of the fiber rope indicates excessive internal wear.
- If any of the above mentioned conditions are found, the sling must be discarded, as it is unsafe for use.

### **Synthetic Web Slings**

- These slings are made of synthetic fibers such as nylon, Dacron and Kevlar.
- The larger slings can handle loads of up to 300,000 pounds.
- Due to the flexibility of the fiber, they can easily conform to the shape of the load.
- Slipping of a load is less likely because they tend to fit the shape of the load.
- They are less likely to scratch the surface of the load.
- They have good abrasion resistance, and do not rot or mildew.
- Synthetic web slings have nylon and therefore a better ability to absorb shock.
- Synthetic web slings should be discarded if any of the following defects exist:
  - Chemical burns; (including acids and caustics).
  - Melting or charring from excessive heat or friction.
  - Snags, punctures, tears or cuts.
  - Broken or worn stitching.
  - Damage from excessive exposure to sunlight.
  - Any distortion of fittings.

Elongation (refer to the manufacturer's specifications).

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### **Safe Rigging & Lifting**

- All slings should be inspected prior to use.
- Determine the weight of the load and the distribution if more than one sling.
- Determine the center of gravity of the load. Make sure that the load can be rigged with the hook directly above the center of gravity. If the load is not centered it will tilt when raised.
- The more vertical the legs of the sling are, the less strain there is on them.
- The closer the legs are, the more strain will be experienced on the slings.
- Strain is the same as more weight. As the sling angle gets closer to horizontal, the sling can support less weight.
- Determine the number of legs the sling or slings will have when the load is rigged.
- Determine the type of hitch to use to secure the sling to the load and the sling to the hook.
- The manufacturer should supply a chart with the rated capacity of the sling at different angles and with different types of hitches.
- An extra margin of safety should be used with older slings.
- Slings must be clearly identified with the rated capacity.

### **Rigging Procedures**

- One member of the crew shall be named as the signalman, and shall be the only person to instruct the equipment operator.
- The signalman shall ensure that prior to moving a load, the “all clear” signal is received by all members of the crew.
- All riggers must ensure they are also in the clear before giving the “all clear”
- Slings should be inspected prior to each use and documented on the daily inspection checklist.
- Slowly take up the load a few inches. Check the balance and load tension.
- If you must hold the sling or choker in position, ensure your hand is clear of pinch points.
- Watch for the swing or roll of the load.
- With it almost impossible to position the hook directly over the load centre at all times, try to anticipate the swing or roll and work away from it.
- Never place yourself between material, equipment and stationary objects and the load.

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CANADA  
620 Spruce wood, P.O. Box #7177 Windsor, ON N9C 3Z1  
T: (519) 969-1740 F: (519) 969-0099

UNITED STATES  
719 Griswold Street Suite 820 Detroit, MI 48226  
T: (586) 778-5640 F: (586) 778-5641



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- Be aware of your surroundings, and any stacked materials that can be knocked over.
- Never stand under the load, and stay away from the boom as much as possible.
- Never leave a load suspended or unattended.
- Look at the area where the load will be set, remove unnecessary materials and objects that have the potential to fly up or strike you.
- When lowering or setting the load, ensure body parts (i.e. feet) are out from under.
- Set the load down as slowly and easily as possible, if it does shift, it will be a slower load to get away from.
- Tag lines should be used to control the load.

**Key points to remember for Loading and Unloading of Equipment & Materials:**

- Loads should be examined prior to lifting to ensure the stacks are stable.
- Check for hazards around the general area of the materials, (tripping, overhead wires etc).
- All rigging, transporting, material handlers, and crane / forklift operations shall only be performed by certified, qualified and approved personnel only.
- A copy of all updated training documentation shall be kept by CGI onsite.
- All required PPE shall be worn as deemed necessary, shall include safety glasses, hard hat, boots, reflective vests, gloves, fall protection equipment, and fire extinguisher as per regulations.
- Checklist for the pertinent lifting equipment shall be completed prior to use, signed off and forwarded to the site superintendent.
- Ensure the operator clearly recognizes the signals from the designated signalman.
- No one should jump on or off the stack at any time, or stand on a load while it is being lifted, or under loads especially while suspended.
- No load shall be left suspended at any time while unattended.
- Ensure additional precautions are observed during adverse weather conditions, these include snow, frost, high winds etc.
- Dunnage shall be disposed of once the unloading/ loading process has been completed.

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- No bundles shall be hoisted on steel frames, unless securely banded.
- Bundles should be tag lined during the ascent of the hoisting operations.
- Workers must be tied off at all times, keeping in mind swing fall hazards at all times.

### **Stairways and Ladders – 29 CFR 1926.1050**

#### **General Requirements**

- There must be a ladder any place where workers are expected to go up or down more than 19 inches, unless there is a ramp, slope or hoist.
- There should be at least one point of access between levels kept clear at all times.
- Stairways that will not be a permanent part of the structure must have landings at every 12 feet of vertical rise.
- Each landing must be at least 30 inches deep and 22 inches wide.
- Stairways must be installed at least a 30 degree angle, and no more than 50 degrees from the horizontal.
- The risers should be at the same height, and the treads at the same depth. No more than a ¼ inch variation is allowed.
- If a door or gate opens directly onto a stairway, there must be a platform that extends at least 20 inches beyond the swing of the door.
- Landings and treads of metal pan stairways must be secured in place before they are filled.
- Before workers can use a metal pan stairway, it must be permanently filled with concrete, or temporarily filled with wood.
- Stairways are to be kept free of ice, snow, oil or other slippery conditions.

#### **Handrails & Stair rails**

- Stairways with four or more risers, or rising more than 30 inches in height or whichever is less must have at least one handrail.
- The handrail must be between 30 and 37 inches above the steps.
- Handrails must be strong enough to withstand a force of at least 200 pounds.
- Temporary handrails must have a minimum clearance of 3 inches between the handrail and wall.
- Any unprotected side or edge of a stairway must also have a stair rail.
- A stair rail must be at least 36 inches high.
- If it also serves as the handrail, then it must not be more than 37 inches high.
- A stair rail must have screen, mesh or balusters between the top rail and the steps.

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### **Ladders**

- If there are 25 or more workers in the area, and the only way to enter or leave the work area is by ladder, there must be at least two ladders, or a double cleated ladder.
- If workers are using the ladder for up and down use at the same time, two ladders or a double-cleated ladder is also required.
- Rungs, cleats and steps must be parallel, level and uniformly spaced when the ladder is in position for use.
- Rungs, cleats and steps of portable and fixed ladders must be spaced between 10-14 inches apart.
- **Never** tie or fasten ladders together to create a longer ladder unless the ladders are specifically designed for that purpose.
- If splicing side rails, the resulting side rail must be equivalent to strength to a one-piece side rail made of the same material.
- Two or more separate ladder used to reach an elevated work area must be offset with a landing between the ladders. The only exception is when portable ladders are used to gain access to fixed ladders.

### **Wood Ladders**

- Wood ladders must not be painted with an opaque covering.
- The only exception is in the case of identification or warning labels which may be placed only on one face of a side rail.
- This will allow for the ability to inspect for cracks or other defects.

### **Portable Ladders**

- Portable ladders must be strong enough to support at least four times the maximum intended load.
- Side rails of portable ladders must be at least 11 ½ inches apart.
- Rungs and steps of portable metal ladders must be corrugated, knurled or coated with skid-resistant material to minimize slipping.

### **Fixed Ladders**

- A fixed ladder must be able to support at least two loads of 250 pounds each, concentrated between any 2 consecutive attachments.
- Fixed ladders must also support added loads caused by ice buildup, winds, rigging, and impact loads resulting from using ladder safety devices.
- Each step or rung of a fixed ladder must be able to support a load of at least 250 pounds applied in the middle of the step or rung.
- A fixed ladder must extend at least 42 inches above an access level or landing platform.
- The side rails of a fixed ladder must be at least 16 inches apart.

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- If a fixed ladder is made up of separate rungs attached to the structure without side rails, then the rungs must be shaped to prevent slipping off the ends.
- There must be at least 7 inches of clearance between the rungs of a fixed ladder and the structure to which it is attached.
- There must be at least 30 inches of clearance on the climbing side of a fixed ladder.
- The step across distance between rungs of fixed ladders and the nearest edge of a landing must be at least 7 inches and no greater than 12 inches.

### **Safety Guidelines for Ladder Use**

- If using a portable ladder for access to an upper landing, side rails must extend at least 3 feet above the upper landing surface.
- If this is not possible, then the ladder must be secured, a grab rail must be provided to assist workers in getting on and off the ladder at the landing.
- Maintain ladders free of oil, grease, and other slipping hazards.
- Never load a ladder beyond the manufacturer's rated capacity.
- Make sure the ladder is on a stable and level surface, or is secured to prevent accidental movement.
- If you use a ladder in a passageway or driveway where it might be displaced by workplace activities or traffic, then it must be secured to prevent accidental movement or protected by a barricade.
- Keep the area around the top and bottom of the ladders clear.
- Never move a ladder while someone is on it.
- If you use a ladder near energized electrical equipment, it must have nonconductive side rails.
- Never use the top or top step of a stepladder as a step.
- A competent person must inspect all ladders for visible defects on a regular basis and after any incident that could affect their safe use.
- Face the ladder when ascending or descending.
- Don't carry anything on a ladder that might cause you to lose your balance.
- If a ladder has any structural defect such as broken or missing rungs, split nails, corroded components or other defects, it must be immediately tagged "DO NOT USE" and taken out of service.
- Ladder repairs must be completed by a qualified person who can restore the ladder to a condition meeting its original design criteria before returned to use.
- Documentation must be kept on file showing the completed repairs.
- All CGI workers must be trained by a competent person in the following areas:

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- The nature of fall hazards in the area.
- Proper use of fall protection systems used with ladders.
- Proper construction, use, placement, and care of stairs and ladders.
- The maximum intended load carrying capacities of ladders used.
- Workers should be trained as necessary to maintain understanding and knowledge.

## **Hand & Power Tools- 29 CFR 1926.300**

### **Hand Tools**

Hand tools are defined as tools that are powered manually. They don't have motors; (i.e. axes, screw drivers, hammers, chisels, scrapers, wrenches etc).

- Safety glasses should be worn when using impact tools like drift pins or chisels with steel heads. A piece of the head can break off and strike your eye.
- When using wrenches work gloves should be worn. If the wrench slips it can injure your hand.
- Visually inspect all tools prior to use for cracks or loose parts. If damaged, remove from service and replace.
- Remember to keep tools sharpened. Dull tools can cause more injuries than sharp ones.
- Use spark-resistant tools made of nonferrous materials where flammable liquids and / or gases are present.
- Use a vise or clamp if necessary to hold the work securely. An unsecured piece can cause the tool to slip, and cause you to lose your balance.

### **Power Tools**

There are several types of power tools that are based on the source of power:

- Electric
- Pneumatic ( Air)
- Liquid Fuel ( Gasoline)
- Hydraulic
- Powder

### **Safe Work Practices for Power Tools**

- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect the tool.

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- Keep cords and hoses away from heat, oil, and sharp edges.  
Wear safety glasses when using power tools.
- Always ensure all power tools are disconnected when changing blades, bits and cutters.
- Keep and use guards and safety switches that are part of the tool.
- Always ensure you maintain good footing and proper balance.
- Never wear loose clothing or jewelry can catch in moving parts.
- Make sure there is workers not involved in the work are a safe distance away.
- Always disconnect tools when they are not in use.
- Remove damaged tools from use and tag them “ DO NOT USE”

### **Electrical Tools**

- Operate electric tools within their design limitations.
- Use gloves and appropriate safety footwear when using electrical tools.
- Ensure electrical tools are stored in a dry place when not in use.
- Do not use electrical tools in damp or wet locations unless they are approved for that purpose.
- Keep work areas well lit when operating electrical tools.
- Ensure that cords from electrical tools do not present a tripping hazard.
- Ground fault circuit interrupters (GFCI) must be provided for every circuit that is not part of the permanent wiring of building on a construction site.
- An assured equipment grounding conductor program must also be provided that assures proper grounding of every circuit that is not part of the permanent wiring of the building on a construction site.

### **Guarding for Power Tools**

- Hazardous moving parts of tools need guards in order to prevent accidental contact with blades, belts, gears, shafts and pulleys.
- Never remove a guard.
- If a tool can't do the job with the supplied guard in place, you may need to find the correct tool for the job.
- Never remove or disable the retractable guard on a hand-held electric saw.



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## **Contract Glaziers Inc.**

### **Safety Manual**

#### **Powder-Actuated Tools**

- Powder actuated tools operate like a loaded gun, only specially trained workers should use them.
- Must only be used by trained individuals wearing the appropriate PPE.
- The powder level selected (high / low velocity) should be appropriate for the tool and the job. It should not create excessive force.
- The muzzle of the tool must have a protective shield to catch fragments that are projected when the tool is fired.
- The tool must not be able to operate until it is pressed against the work surface with a force of 5 pounds or greater than the total weight of the tool.
- If a powder-actuated tool misfires, hold the tool in the operating position for a minimum of 30 seconds before attempting to fire it again.
- If it still will not fire, hold the tool in the operating position for another 30 seconds carefully removing the load.
- Remove the load in accordance with the manufacturer's instructions.
- The bad cartridge should be placed in water immediately.

#### **Using a powder actuated tool**

- Always wear safety glasses or a face shield.
- Ear protection should always be used ( ear plugs or ear muffs).
- Inspect the tool before use.
- The tool should only be loaded immediately before use.
- Never point the tool at anyone.
- Never leave the tool unattended.
- If the tool is damaged or defective, remove from service and tag as "DO NOT USE".



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## **Contract Glaziers Inc.**

### **Safety Manual**

#### **Workplace Violence & Harassment**

Violence, threatening behavior, and harassment” includes, but is not limited to, conduct against persons or property that is offensive, intimidating, hostile, injury producing, and/or abusive.

Normal, courteous, mutually respectful, pleasant, non-coercive interactions between employees, and visitors / contractors and employees, that are acceptable to both parties are not considered to be violent, threatening, or harassment. Harassment includes any form of sexual advances or favors, hostile environment with regards to sexual harassment, and harassment on the basis of an employee’s membership in a protected class. These include age, race, color, sex, religion, national origin or disability.

#### **Statement:**

- Any and all forms of violence, threatening behavior, and/or harassment which involve or affect employees of CGI or which occur on any part of Contract Glaziers property are prohibited by this policy.
- This includes, but is not limited to, threatening behavior, violent actions, and harassment by all CGI employees directed against other employees, by employees directed against visitors, or visitors directed against CGI employees.
- When non-employees are present at our workplace (construction site), or interact with our employees through electronic communication we expect them to apply the same standards of conduct that we expect of employees here. Conversely, we expect our employees to treat non-employees with the same courtesy and respect as co-workers.

#### **Corrective Measures**

- Any employee found to have threatened or acted upon violent behavior, or harassed unlawfully another employee will be subject to appropriate discipline up to and including termination of employment.
- Further, any employee found to have coerced, retaliated against, threatened, intimidated or harassed an employee for registering a complaint, or served as a witness on behalf of another employee, will be subject to appropriate discipline, up to and including termination of employment.

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**Company Conduct and Work Rules**

The owners and management of C.G.I. in order to ensure an orderly and productive operation is achieved, expect all employees to follow policy and procedure as indicated in this manual; as well as providing a professional work environment. By abiding by the rules of conduct, this in turn will protect the interests and safety of all employees within the organization.

**C.G.I. incorporates the “Three Strikes Rule” as follows:**

- ❖ **First offence - Verbal warning**
- ❖ **Second offence - Written warning**
- ❖ **Third offence - Dismissal**

**The following infractions & incidents listed below are examples of behavior that at a minimum; will result in progressive disciplinary action, up to and including termination of employment. This list is not conclusive, and revisions can and will be reviewed and / or updated as deemed necessary by CGI management. Also be advised, that a more serious infraction / incident on a first offence does not follow progressive discipline and can lead to immediate termination of employment .**

- Theft or inappropriate removal or possession of property.
- Falsifying company records ( i.e. time cards)
- Working under the influence of alcohol or illegal drugs. Also included are legally prescribed drugs resulting in any job tasks that are performed in an unsafe manner.
- Possession, distribution, sale, transfer, or use of alcohol or illegal drugs in the workplace, while on duty, or while operating employee owned vehicles or equipment.
- Any form of harassing or abusive violent behavior exhibited while on company property.
- Boisterous or disruptive activity while on company property. This includes threatening, coercing, intimidating, and any form of fighting while on company property.
- Any form of negligent or improper conduct leading to physical damage of employer owned or customer owned property.
- Insubordination or any other form of inappropriate disrespectful behavior directed towards another co-worker or management representative of CGI or subcontractor on company property.
- Violation of company safety policy / procedures, or government legislated policy.
- Possession of dangerous or unauthorized materials such as explosives or firearms in the workplace.
- Excessive absenteeism or any absence without prior notice to immediate supervisor.
- Unauthorized absence from work station / area during company paid time.
- Unauthorized use of telephone, mail systems, or other employer owned equipment.
- Unauthorized disclosure of business “secrets” or confidential information.
- Unsatisfactory performance or conduct, documented through progressive discipline.

**I, (name) \_\_\_\_\_ have read and understand the Employee Conduct and Work Rules.**

**Signed \_\_\_\_\_ Date \_\_\_\_\_ Page 57**

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## **Employee Acknowledgement Form**

Contract Glaziers Inc. company safety policies and work rules must be observed. A copy of the company safety policy and procedures will be reviewed during your initial orientation with Contract Glaziers Inc.

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- I have received and have read the company safety policies & procedures and agree to abide by them.
- I understand these instructions, and will do my best to observe them at all times.
- I shall refer to these instructions for future reference.
- I understand that failure to observe these rules will result in disciplinary action up to and including termination of my employment.

\_\_\_\_\_  
Employee Signature    Date

\_\_\_\_\_

\_\_\_\_\_  
Supervisor Signature    Date

\_\_\_\_\_