HEALTH & SAFETY POLICY
AND
LOSS CONTROL MANUAL

FIELD

CONTENTS

Reviewed By: Joe Henriques, President

REVISIONS OF THIS POLICY

Date of Revision	Changes/Topics
April 2021	1. New Definition of a Worker 2. New Mandatory Occupational Health and Safety Training 3. Noise Regulation 4. Worker/Supervisor/Acknowledgement 5. Set fines by the Ontario Court of Justice 6. Cannabis Policy including Edibles 7. Forklift Requirements 8. WHMIS GHS 2015 - Revised 9. PPE Update 10. MOL – Inspection & Auditing 11. Respiratory Protection 12. Policy on Airborne Diseases Signature: _____ Dated: April 01/2021

INTRODUCTION

Gensteel (Div. of Austin Steel Group Inc.) (here on in noted as Gensteel) is a 100% Canadian owned and operated company with the corporate head office located at 39 Progress Court, Brampton, Ontario. We started our operations on November 1994, with a staff of five and grew into a reputable and respected company. Through hard work and commitment to excellence, we are able to provide superb service to all of our **Gensteel's** clients regardless of their needs or location. We are also committed to applying the same approach to health, safety and environmental concerns.

Our Safety Manual's Purpose and Scope

Gensteel's Health and Safety Policy and Loss Control Manual contains policies and procedures applicable to all employees regarding safety, health, and environmental responsibilities on **Gensteel's** projects and for work performed for **Gensteel.** Employees should review the sections of this manual that are appropriate to the work to be performed.

This manual does not replace existing site-specific procedures or operational specifications outlined by **General Contractors**. Approved site-specific procedures must be followed where applicable.

This manual does not relieve employees and sub-contractors of their responsibility for safety, health, and environmental compliance under law, act, or regulation.

This manual does not address all possible circumstances and hazard control methods and therefore it is not an absolute guide to personal health and safety. Therefore, workers and supervisors must identify actual and potential hazards prior to starting the task and develop and implement site-specific procedures and adequate controls.

How This Manual Is Organized

This manual is organized as a reader friendly document that outlines workplace parties' duties and responsibilities starting with the President. In addition to duties and responsibilities of individual parties, this manual also outlines generic and specific guidelines designed to protect worker's health and safety.

GENERAL INFORMATION

Non-compliance with safety or environmental requirements is treated with highest priority and may result in work stoppage or employee removal from the premises**.** Wilful or repeated non-compliance may result in termination.

Compliance with federal, provincial, and local codes or regulations is required by law**.** This Health and Safety Policy and Loss Control Manual is a supplementary document to governmental rules, codes, and regulations having jurisdiction, and does not negate, overturn, or minimize any provisions of these rules, codes, and regulations**.** It is intended to supplement and enforce existing requirements and to coordinate the overall safety effort**.**

Supervisors are responsible for **Gensteel's** employees while on site.

Safety is considered an integral part of quality control, cost reduction, and job efficiency**.** Managers and supervisors are accountable for the safety performance demonstrated by their employees.

The Health and Safety Policy and Loss Control Manual will be updated **annually** using addenda to the current revision**.** Each addendum is approved by the Joint Health and Safety Committee, and the President, **Mr. Joe Henriques**. The manual is revised and reprinted annually when necessary, as determined by the committee.

GOALS & OBJECTIVES

The goals of the safety program are listed below:

- eliminate accidents and work related illnesses
- achieve zero fatalities, zero permanent disabling injuries, and zero lost work day cases
- prevent MOL orders, fines and penalties
- eliminate releases to the environment and prevent environmental harm

The main objective of the safety program is to support and assist supervisors/foreman and employees with their responsibility to control the exposures and prevent the incidents that may cause injuries, illness, fatalities, equipment damage, fire, and damage or destruction of property.

Note: Site specific procedures will be produced for the site in addition to the procedures in this manual.

CONTACT NUMBERS

Gensteel - Head Office	905-799-3324
Gensteel - Fax	905-799-8011
President – Joe Henriques	905-799-3324
General Manager	
Shop Manager	
Field Manager	
H&S Representative	
M.O.L	1-877-202-0008
Emergency Services (Police, Ambulance, Fire Department)	911

Reviewed By: Joe Henriques, President

HEALTH AND SAFETY POLICY STATEMENT

Gensteel is committed to the protection from accidental loss of all its recourses, including all workers and physical assets.

In fulfilling this commitment to protect both people and property, we will provide and maintain a Safe and Healthful work environment. In order to achieve this goal, **Gensteel** will support its employees and sub-contractor's safety concerns and whenever necessary, ensure that disciplinary action is taken in the case of any breach of the Health and Safety Policy. **Gensteel** will enforce compliance to legislative requirements and will strive to eliminate any foreseeable hazards.

All supervisors, workers and sub-contractors will be equally responsible for minimizing accidents within our company projects.

Job practices and procedures are clearly defined in our Accident Prevention Program for all workers to follow. We believe that knowledge and training will result in safer work environment. Loss prevention is the direct responsibility of supervisors and all workers. Management is committed to develop and administer suitable return to work program.

All management, supervisors, workers and sub-contractors must comply with **Gensteel** loss prevention requirements as they apply to every project. All workers must perform their jobs safely in compliance with established written procedures and operating practices as well as **Gensteel's** policies and report promptly any unsafe acts or conditions.

Mr. Joe Henriques, President
Gensteel

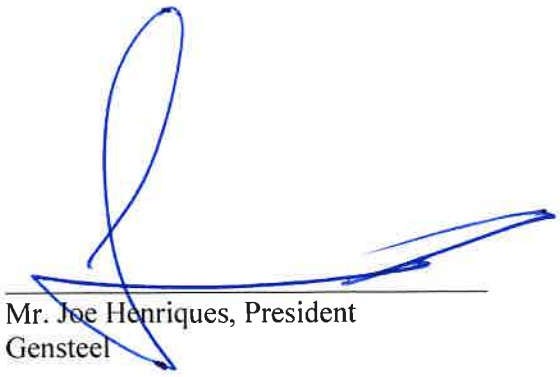
Reviewed By: Joe Henriques, President

ENVIRONMENTAL POLICY STATEMENT

At **Gensteel,** we believe that all employees, supervisors and managers shall behave in a way that protects and preserve the environment. We are committed to protecting the environment and resources in all areas affected by our activities. Compliance to environmental legislation pertinent to our activities or those of our clients, is a minimum requirement and an integral part of our policy.

It is the company's policy to:

- Comply with applicable environmental laws and regulations at all levels of authority municipal, provincial and federal.
- Protect the environment from adverse effects of production operations.
- Provide any information in our possession on the most appropriate Health, Safety and Environmental Management and waste disposal practices to be utilized.
- Conduct workplace audits and walk-through surveys to ensure compliance.
- Promote awareness and education.
- Stay informed of any law changes and waste disposal requirements.
- Maintain all equipment, cranes and vehicles in the manner that prevents leaks, spills and discharge of petrochemical product on the soil or concrete surfaces.



Mr. Joe Henriques, President
Gensteel

WORKPLACE VIOLENCE AND HARASSMENT & SEXUAL HARASSMENT POLICY

Gensteel is committed to providing all personnel with a workplace free from violence, harassment and discrimination in any form (whether prohibited by human rights legislation or otherwise), and where all individuals are treated with respect and dignity. The Company recognizes its important responsibilities in relation to worker health and safety, and we will take whatever steps are reasonable to protect our workers from workplace violence and harassment from all sources, including, but not limited to, visitors, clients/customers, or delivery personnel. The Company will not tolerate incidents of workplace violence, harassment or discrimination; and we will act swiftly and efficiently to address all such matters that come to our attention. Any worker who is found to have violated the Company Workplace Violence and Harassment Policy will be subject to appropriate discipline, up to and including termination of employment. Visitors, clients, and delivery personnel are also required to comply with the requirements of this Policy; and violations may result in removal from the premises or termination of any business relationship with the Company.

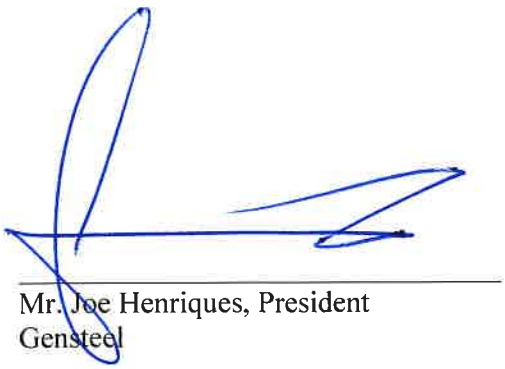
"Workplace harassment" means engaging in a course of vexatious comment or conduct against a worker in a workplace that is known or ought reasonably to be known to be unwelcome. Harassment may relate to any form of discrimination as set out in the Ontario *Human Rights Code* (the "Code"); however, the definition is not limited by the Code.

"Workplace violence" means: the exercise of physical force by a person against a worker, in a workplace, that causes or could cause physical injury; an attempt to exercise physical force against a worker, in a workplace, that could cause physical injury; or a statement or behaviour that is reasonable for a worker to interpret as a threat to exercise physical force against the worker, in a workplace, that could cause physical injury. Workers are encouraged to report any incidents of workplace harassment to Company Management. Management will investigate and deal with all concerns, complaints or incidents of workplace violence or harassment in a fair and timely manner, while respecting workers' privacy as much as possible. Any individual who exercises his or her rights under this Policy in good faith has the right to do so without fear of retaliation or reprisal (or the threat of retaliation or reprisal) for so doing. Disciplinary action can result for any person who engages in retaliation or reprisal against any individual who submits a complaint under this Policy or who otherwise exercises any right or participates in any process set out under this Policy. The Company maintains a Workplace Violence and Harassment Program (the "Program") for the implementation of this Policy. The Program sets out (a) measures and procedures to protect workers from workplace violence and harassment, (b) means of summoning immediate assistance, and (c) a process for workers to report incidents and raise concerns.

"Workplace Sexual Harassment" means,

a. Engaging in a course of vexatious comment or conduct against a worker in a workplace because of sex, sexual orientation, gender identity or gender expression, where the course of comment or conduct is known or ought reasonably to be known to be unwelcome; or
b. Making a sexual solicitation or advance where the person making the solicitation or advance is in a position to confer, grant or deny a benefit or advancement to the worker and the person knows or ought reasonably to know that the solicitation or advance is unwelcome.

Gensteel , as the employer, will ensure that this Policy and the Program are implemented and maintained, and that all workers and supervisors have the appropriate information and instruction to protect themselves from violence and harassment in the workplace. Supervisors will adhere to this Policy and the Program and are responsible for ensuring that (a) measures and procedures are followed by workers, and (b) workers have the information that they need to utilize this Policy and protect their rights under it. Ultimately, everyone in the Company is expected to uphold this Policy and must be dedicated to preventing workplace violence and harassment. Everyone will be held accountable by the Company for the implementation and observance of this Policy and the Program.



Mr. Joe Henriques, President
Gensteel

Reviewed By: Joe Henriques, President

LEGALIZATION OF CANNABIS AND SUBSTANCE ABUSE POLICY STATEMENT

Introduction

It has long been recognized that the use or abuse of drugs, alcohol, medications and other substances can significantly impair a person's ability to work in a safe manner. It is therefore the intent of this policy to identify acceptable safe job performance and outline our position of the use and/or possession of illegal drugs, alcohol, medications and other substances that impairs one's performance while at work. We will not randomly test for drugs and/or alcohol but advise you that the use and/or possession of these substances while at work, prior reporting for work, or being unfit for work due to the use of these substances, are a major breach of company policy and are grounds for **immediate dismissal**. Everyone in the workplace has the responsibility to be fit for their duties. Employers and supervisors have responsibility to provide safe workplace for everyone and take reasonable precautions for the protection of all workers.

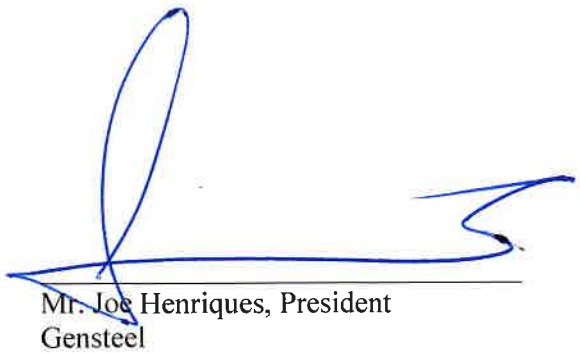
Impairment and cannabis legalization

The federal government's legalization of recreational cannabis on **October 17, 2018** has brought forward the issue of workplace impairment. Workplace parties should examine the possible workplace hazards posed by impairment arising from substance use, including cannabis. In response to Federal Legalization, Ontario has developed a balanced and responsible approach to recreational cannabis, which includes ensuring the continued protection of the worker's health and safety in the province's workplaces.

Under the company's Alcohol and Drug Policy in Ontario, we continue to have **zero tolerance** for workers under the influence of any type of drug, medical or otherwise.

- As an employer, the company has a legal obligation under the Occupational Health and Safety Act to ensure the safety of its workforce as well as its contractors, suppliers and other personnel at the worksite.
- Cannabis use has an impairing effect, and these impairing effects pose significant safety risks that are incompatible with working in a safety sensitive environment.
- Most of the operational jobs are safety sensitive and may present potential or actual hazards (work at heights, any equipment operation and handling etc.)
- As a result, the company has ***and requires all subcontractors hired to carry out the work on behalf of*** **Gensteel** to have an existing alcohol and drug policy and supporting standards in place that addresses all substances which have a potential to impact safety, including cannabis, whether legal or not. Any policy that is more stringent than the other will be enforced and be applied.
- The legalization of cannabis will not impact the company's approach to safety or how we enforce our Alcohol and Drug Policy and supporting standards.
- Cannabis cannot be used in a way that will impact the fit-for-duty of our employees or subcontractor's personnel while on the company's premises or jobsites.

- Workers are cautioned about its use prior to arriving at work and how it may impact their fit-for-duty.
- All workers must arrive for work fit-for-duty.
- Subcontractor's personnel and **Gensteel** employees must be made aware of the company's requirements and the potential effects of cannabis use, including the potential impacts on their fit-for-duty.
- Possession and use of recreational cannabis will be **prohibited on any/all of the company's premises and jobsites.** This includes all forms of cannabis, including in its dried form and all derivatives from the plant such as oils and edible products.
- The company also recommends that subcontractor's encourage workers who suspect they may have a substance dependency or an emerging alcohol or drug problem to seek immediate assistance.
- **Gensteel** has compassion and understanding that there may be extenuating circumstances with a worker that may be required to use cannabis for medicinal purposes or prescribed medication/narcotics, although the requirements again to work on our job site is **zero tolerance** and be fit-for-duty when arriving on site
- Contractors are responsible for ensuring that their subcontractors comply with the company's Contractor Alcohol and Drug Standard, and that their subcontractors are aware of the company's position with respect to the legalization of cannabis as set out in this letter and the related
- **Gensteel's** employees/subcontractors who do not want to enter the client's vicinity to carry out assigned tasks, if cannabis use is observed - are not required to do so. Report to the company's supervisor/foreman and explain their reasoning
- Also, any form of consuming (smoking, vaping, eating) of cannabis in a motor vehicle, is prohibited (for those driving or having control of the vehicle and for their passengers, and regardless of whether the vehicle is in motion).



Mr. Joe Henriques, President
Gensteel

SAFETY PROGRAM ADMINISTRATION

General Information

The purpose of this Safety & Loss Control Manual is to establish, implement, and execute a practical and effective method for preventing accidents, illnesses, and injuries and protecting the environment.

The Safety & Loss Control Manual will help employees, our supervisors/foreman and sub-contractors to recognize, to evaluate, and to control hazardous activities or conditions within their areas of contract responsibility**.** **Gensteel** will not assume or relieve sub-contractors of the responsibility for employee and public safety or regulatory compliance.

This manual defines how the safety program will be administered, identifies responsibilities, and ensures control of work area safety. Relevant provisions of this manual apply to all sub - sub-contractors**.** Contracts signed with sub-contractors and the provisions of this manual are intended to complement each other; however, in the event of a conflict between the provisions of this manual and the terms of a specific contract, notify **Gensteel's** project supervisor/foreman immediately of any such conflicts.

The provisions of this manual apply to all **Gensteel's** employees; however, each site may have specific safety rules and regulations applied by the **General Contractors** of the project**.** We are responsible for following the rules and regulations applicable to the site. If in disagreement with the **General Contractor's** specific safety request, you must contact **Gensteel's** head office for further instructions.

Administration

The effectiveness of the safety program depends on **establishing and maintaining a safety culture** through the participation and cooperation of employees and coordination of their efforts in carrying out the following basic responsibilities:

1. Planning and coordinating work to avoid personal injury, property damage, environmental risk, and the loss of production.
2. Establishing and maintaining a system for early detection and correction of unsafe practices and conditions
3. Developing an emergency plan for the work
4. Providing adequate protection of public and private properties and the environment and ensuring the safety of the public.
5. Establishing and conducting safety education programs designed to stimulate and maintain the interest and participation of employees through use of the following:
   - Safety meetings and communication
   - Proper work procedures, personal protective equipment, and mechanical guards

- Safety instructions for individual employees and group safety training programs
- Accident, illness, and potential safety incident investigation and reporting to determine causes and corrective actions
- Records of accidents and losses and accident/loss experience summaries
- Proper waste disposal and emission control procedures

Toolbox Meetings

Tool box talks of 5 to 10 minutes must be held by crew supervisor and/or foreman **each week**. Employees never receive too much training, and therefore, our company relies upon crew supervisors/foreman to provide ongoing and continuous employee training.

The subject to each training talk should be chosen to relate to the type of work that is being performed.

Some examples include (this is not an exclusive list):

- the use of safety glasses when potential of eye injury exists such as grinding task.
- the proper set up and use of ladders.
- work at heights and fall protection requirements.
- fire prevention.
- weather conditions.
- hard hats and protective footwear as at all times requirements.
- a discussion of a recent accident and its cause(s) as well as measures to prevent recurrence.
- a discussion of disciplinary procedures for failure to comply with safety policies.
- housekeeping
- horseplay
- tool maintenance, inspections, manufacturing instructions
- dust and noise control
- electrical hazards etc.
- power elevated work platforms safety

A log of Toolbox Talks must be kept in accordance with the form that follows. One copy should be kept by jobsite management and submitted to our office at least monthly for review and filling.

One copy shall be given to our client/**General Contractors** per request basis.

Safety Program Implementation

a) **Gensteel's** management is responsible for establishing and implementing a safety program for their employees**.** This program will include maintaining and auditing safety performance for compliance with applicable federal, provincial, local regulations and with established safety and environmental requirements.
b) Supervisors/foremen are to conduct regularly scheduled safety inspections of the work being conducted**.** The scope or duration of work may regulate the frequency of these inspections (minimum weekly if duration of the project permits).
c) Supervisors/foremen must take immediate corrective action when a violation of job safety, fire, or environmental safety hazard is observed.
d) Failure to correct a problem may result in work stoppage in the related area, and work will not be permitted to resume until the problem is corrected. Work stoppages need to be communicated to **Gensteel's** management.
e) If a supervisor/foreman fails to correct the problem within a reasonable timeframe, disciplinary procedures will apply.
f) Supervisors/foremen are required to administer **Gensteel's** safety program on their projects and are responsible for the safety of their employees**.**

Where **Gensteel's** safety program conflicts with the **General Contractor**'**s**/client's program, and the site foreman and site supervisor cannot agree on the site-specific procedures, the Supervisor/foreman must contact **Gensteel** for further instructions.

Where required by the **General Contractors**/client, **Gensteel's** manager or supervisor must attend a pre-work safety meeting prior to beginning work. The meeting is to review procedures, forms, record keeping and reporting, and to ensure a clear understanding of the safety program relevant to the work to be performed.

INTERNAL RESPONSIBILITY SYSTEM - (I.R.S.)

President

The President has issued a corporate health and safety message related to **Gensteel's** Health and Safety Policy & Loss Control Manual. The Policy Statement provides a commitment that the health and safety of our workers and our working environment is of the highest priority. The President may instruct periodically, that changes be made in the overall program design, objectives, implementation methods, planning and control of operations and expected levels of performance.

The President maintains overall control of budgets and funding for sponsored safety training and awareness programs.

Supervisor/Foreman

The safety and health of the employees they supervise is a primary responsibility of the supervisors/foreman.

To accomplish this obligation, supervisors/foreman will:

- be familiar with **Gensteel's** Health and Safety Policy and Loss Control Manual, the Occupational Health and Safety Act and Regulations and all other applicable legislation.
- ensure that every worker under his/her direct control works safely and uses or wears the protective equipment as prescribed or required by the employer.
- ensure that Joint Health & Safety meetings and minutes are coordinated as required.
- conduct regular safety inspections in the area of his control and take immediate action to rectify any unsafe condition or practice observed and provide a written record of his inspection and actions taken.
- ensure that all accidents are investigated immediately, documented and reported, to establish the cause and ensure appropriate corrective measures are taken.
- assist MOL inspectors during their visits to our worksites.
- advise worker of any actual work potential danger.
- apply disciplinary measures (as outlines in this manual) when required to workers who do not follow requirements under the OH&SA as well as **Gensteel's** Health and Safety Policy and Loss Control Manual
- provide safety orientation to new employees and subcontractors.
- prevents workers from working or operating equipment unless adequately trained.
- ensure public way protection, fall protection, overhead hazards and safe set up of equipment systems and protective coverings **that is set up by the General Contractor**; if removed or altered by **Gensteel's** workers, it must be returned to the same safety standards as found
- ensuring that all field operations personnel are aware, understand and are effectively practicing the safety policies and procedures as set out in our safety program.
- insist on compliance with OH and Safety Act and Regulations for Construction Projects, from both our own staff and of the subcontractor companies engaged on our projects.

- shall ensure that our safety program is being routinely assessed for its degree of effectiveness, on all our projects, by a competent person such as health and Safety Representative or a third-party Safety Consultant. Such safety inspection reports will be forward to the president for review.
- shall also ensure our equipment is maintained in good condition before being sent to our projects.

Workers

- work in compliance to the occupational health and safety act and its regulations.
- work in compliance to the governing corporate health and safety policy.
- wear and use any personal protective equipment/clothing that is required for his or her health and safety as prescribed.
- report any hazardous conditions or unsafe practices immediately to their supervisor/foreman.
- work in a manner that will not endanger his/herself or other workers.
- report any accidents/incidents regardless of its severity, to his/her supervisor/foreman, without delay.
- not remove or make ineffective any protective device required by the regulations or by the employer without providing an adequate temporary protective device and when the need for removing or making ineffective the protective device has ceased, the protective device shall be replaced immediately.
- not engage in any prank, contest, and feat of strength, unnecessary running or rough boisterous conduct.
- shall exercise his/her **right to know, right to participate and right to refuse** and undertake the precautions to be taken when working with hazardous materials in the workplace, by reviewing the material safety data sheets for the particular material in question and follow the instructions outlined in addition to any further measures, for his/her protection.
- obtain first aid promptly and notify their supervisor of any first aid situation that becomes a medical aid condition so the proper authorities can be notified.

Designated Substance Notification

Should a worker suspect or know he or she has disturbed or otherwise come into contact with a "designated substance" the worker shall immediately report the finding or suspicious material to his or her foreman for further investigation.

Health & Safety Representative

Where required under the Occupational Health and Safety Act, a Safety Representative shall be appointed at the work site and he shall be responsible for the following:

- identifying workplace hazards and reporting to Project Supervisor/Foreman
- conducting workplace inspections
- investigating work refusals
- assisting Ministry of Labour Inspectors on any concerns
- stopping unsafe work or practices
- attending or initiating safety meetings
- documenting results of workplace inspections

Note: on all projects where **Gensteel employs** 5 or more workers on regular basis, workers shall elect their Health & Safety Representative.

Health and safety representative has the same responsibilities and powers as a joint committee member. These include:

- identifying workplace hazards [section 8(10)];
- inspecting the workplace at least once a month [section 8(6)];
- being consulted about workplace testing [section 8(11)];
- making recommendations to the employer [section 8(10)]; and
- investigating work refusals [section 43(4)] and serious accidents [section 8(14)]

Subcontractor Duties and Responsibilities

Subcontractor management, supervisors, and employees are responsible for fully complying with:

- OH & S Act and Regulations for Construction Project (current edition)
- **Gensteel's** Health and Safety Policy & Loss Control Manual
- **Gensteel's** Clients safety policies

Owner

1. **Definition** – includes a trustee, receiver, mortgagee in possession, tenant, lessee, or occupier of any lands or premises used or to be used as a workplace, and a person who acts for or on behalf of an owner as an agent or delegate; ("proprietor")

2. Owner shall determine prior to permitting any construction work to be carried out on the owner's premises whether the owner will assume the role of the "**General Contractors**" or the role of the "**General Contractors**" will be awarded to a third party through contractual agreement.

3. Before beginning a project, the owner shall determine whether any designated substances are present at the project site and shall prepare a list of all designated substances that are present at the site.

4. If any work on the project is tendered, the person issuing the tenders shall include, as part of tendering information, a copy of the list of designated substances that are present on site.

5. An owner shall ensure that a prospective **General Contractors** on the owner's property has received a copy of the designated substances list before entering into a binding contract with the **General Contractors** and the **General Contractors** commencing the work.

6. An owner shall ensure that if at any time during the course of construction processes carried out by the **General Contractors,** Owner decide to assume the role of the **General Contractors** for the part of or entire project Notice of Project is filled with M.O.L. Department and all parties notified.

General Contractors

Under the Occupational Health and Safety Act, a "**General Contractors**" is a party (a person or company) who oversees the construction of a project and who is ultimately responsible for the health and safety of all workers. The **General Contractors** must ensure that all the employers and workers on the project comply with the Act and regulations. The Act defines a **General Contractors** as a person who undertakes a construction project for an owner. In some cases, the owner of the project is the **General Contractors** as well. When an owner undertakes all or part of project, either by himself or herself, or by contracting work out to more than one contractor or employer, the owner becomes the **General Contractors**.

If the owner hires only one contractor to do all the work, then that contractor may be the **General Contractors**, depending on the contractual arrangements with the owner. The contractor may, in turn, subcontract work to other people, but he or she remains the **General Contractors** for the project, as long as he or she is the only party the owner had contracted to do the work.

What are the legal duties of a General Contractors?

A General Contractors is to ensure that:

- the measures and procedures prescribed by the Occupational Health and Safety Act and the regulations for construction projects are carried out on the project.
- every employer and every worker on the project comply with this act and the Regulations for Construction Projects;
- the health and safety of workers on the project is protected.
- a health and safety representative or a Joint Health and Safety Committee is selected as prescribed.
- the Ministry of Labour is notified of a project as prescribed.
- the Ministry of Labour is notified of an accident or occurrence as prescribed; and
- every contractor or subcontractor receives a list of all designated substances present at the project before the prospective contractor or subcontractor enters a binding contract for the supply of work on the project.

This means a **General Contractors** has overall responsibility for worker health and safety on a project.

Sections 25 and 26 of the Act also apply to **General Contractors** as employers.

What is the relationship of the General Contractors to the other parties on a project?

The **General Contractors** has overall responsibility on a project for compliance with the Occupational Health and Safety Act and the health and safety regulations on construction projects.

The **General Contractors** can also have duties as employer under the Act.

Architects and Engineers

(2) An architect as defined in the *Architects Act*, and a professional engineer as defined in the *Professional Engineers Act*, contravenes this Act if, as a result of his or her advice that is given or his or her certification required under this Act that is made negligently or incompetently, a worker is endangered. R.S.O. 1990, c. O.1, s. 31.

Suppliers – Deliveries to the Site

Every person who supplies any machine, device, tool or equipment under any rental, leasing or similar arrangement for use in or about a workplace shall ensure:

- that the item(s) supplied are in good condition and comply with this Act and regulations
- if it is the supplier's responsibility under the supplying arrangement, that the item(s) are maintained in good condition for the duration of the arrangement.
- items are stored in a safe manner in an area designated by the **General Contractors.**
- ensure vehicles are backed up by a signal person provided by the **General Contractors.**

Any persons supplying machinery, equipment, materials or any other device or tool must ensure that the following is also supplied:

- an operator's manual for all equipment and machinery
- a logbook and a signed pre-job maintenance inspection for equipment and machinery, certifying worthiness
- delivery drivers are equipped with the appropriate personal protective equipment (i.e. class E hard hats, eye protection and safety boots)

Note: A copy of these requirements is to be sent to all suppliers

Joint Health & Safety Committee - (J.H.S.C.)

Due to the current number of employees at **Gensteel,** the J.H.S.C. consists of one worker's and one management's representative. It is required that J.H.S.C. holds meetings every 3 months and posts minutes of the meetings in the shop. Copy of the minutes with recommendations shall be forwarded to the president.

The Committee's Principal Functions

The committee has four principal functions: to identify potential hazards, to evaluate these potential hazards, to recommend corrective action and to follow up on implemented recommendations. To carry out its functions, the committee is required to hold meetings [section 9(33)] and carry out regular inspections of the workplace [sections 9(26), 9(27) and 9(28)].

In some cases, committees must also participate in the development of assessment reports and control-program reports required under the designated substance regulations.

Generally speaking, however, all committee members should be available to receive employee concerns, complaints and recommendations; to discuss problems and recommend solutions; and to provide input into existing and proposed health and safety programs.

Who carries out workplace inspections?

Committee members who represent workers must select someone in their group to inspect the workplace [section 9(23)]. If possible, this person should be a certified member [section 9(24)]. Where the committee has been established by an order of the Minister of Labour, under subsection 9(3.1), the committee members may designate a worker who is not on the committee to do the inspection. When a real or potential hazard is discovered, it must be reported to the committee [section 9(30)].

Certified members added responsibilities.

Because certified members receive special training in workplace health and safety, they are given added responsibilities. For example, certified employer and employee representatives can, under certain circumstances, act together and order the employer to stop work that is dangerous to a worker [section 45(4)].

Employer responsibilities

The employer must provide a location for meetings [section 25(2)(e)] and choose a committee member or members [section 9(9)]. Other employer responsibilities include informing the committee of any work-related accidents involving injury, death or occupational illness [section 52], and providing the committee with the results of any reports relating to health and safety in the workplace [section 25(2)(l)].

Taking action on committee recommendations

The employer must provide a written response to committee recommendations within 21 days [section 9(20)]. If the recommendations are accepted, a timetable for action must be outlined and provided to the committee as per [section 9(21)]. If an employer decides against acting on the committee's recommendations, reasons must be given in writing [section 9(21)].

MINISTRY OF LABOUR INSPECTORS

Role of Ministry of Labour Inspectors

Ministry of Labour inspectors uphold and enforce the Act. They inspect the workplace and investigate potentially hazardous situations, accidents and work refusals. An inspector may issue orders where there is a contravention of the Act and may provide advice and mediation where there are disputes between workplace parties.

What contact will committee members and health and safety representatives have with the inspector?

A committee member or the health and safety representative must be offered a chance to accompany the inspector on all inspections and investigations [section 54(3)]. When orders are issued by the inspector, a copy of the orders should be given to the committee or representative [section 57(10)]. Inspectors are entitled to review the minutes of committee meetings [section 9(22)], and are expected to do so. Inspectors may attend committee meetings when invited by members.

DISCIPLINARY PROCEDURES

The progression of disciplinary action will be determined by the severity of the incident and other mitigating factors. The emphasis is to be on the desire for **Gensteel to** promote safety through a **cultural shift** and not through enforcement activities. However, non-compliance with safety requirements may result in work stoppage if an immediate threat to safety exists**.**

Although the disciplinary process is written for the individual, the failure of an individual may under circumstances be linked to a failure of crew supervisor/foreman to ensure compliance. There will be no penalty or retaliation for reporting any safety or environmental incident, but the reporting of an incident will not protect the individual from consequences related to the incident.

Disciplinary actions will progress as follows, under ordinary circumstances:

- Documented Verbal Warning
- Written Warning with Corrective Action required
- Retraining (to the worker/violator) at the violator's expense
- Dismissal from **Gensteel's** site for the duration of the project assignment
- Ban from working on all **Gensteel's** site and contract termination.

Temporary or permanent removal from **Gensteel 's** premises may occur if the subcontractor's supervisor, our supervisor, or person in charge of the work being performed requires, requests, allows, or condones employees to work in or around unsafe acts or conditions or violate environmental permits or regulations. Immediate and permanent removal from **Gensteel's** premises may occur if a sub – contractor's supervisor, our supervisor, or employee engages in any of the following activities:

a) openly exhibits disregard, defiance, or disrespect for the safety program.
b) knowingly falsifies investigative documents or testimony involving an investigation.
c) participates in fighting, violence, threats of violence, theft, or destruction of property.
d) violates established safety rules, regulations, or codes that endanger themselves or others.
e) violates established environmental rules, regulations, or procedures that endanger the environment.
f) violators who have **Gensteel's** trucks on site and have been disciplined by being removed from the site must leave the truck at the work site and transportation to their home will be at the worker's expense. The time of removal off site through disciplinary actions, worker will not be paid for this time (if he chooses to stay and wait for transportation from another worker) and it will be recorded on file.

Reservation of Rights

Gensteel reserves the right to interpret, to revise, or to depart from safety policies and procedures at any time without notice**. Gensteel** also reserves the right to dictate safety standards during the course of a contract as necessary in the interest of safety. Compliance with this safety manual or **Gensteel's** policies, procedures, and standards does not confer or entitle subcontractors or their employees to any benefits, rights, or privileges that go to **Gensteel's** employees by virtue of their status as employees of **Gensteel.**

WORKERS' RIGHTS

The Right to Know

You have the right to know about health and safety hazards in your workplace.

This means that all hazardous materials must be properly labelled according to Ministry guidelines. You must be trained so that you learn of the potential and actual dangers of materials and how to deal with them safely.

The Right to Participate

You have the right to participate in keeping your workplace safe and healthy. You have the right to give your ideas and complaints about problems without fear of being punished.

The workers must select a health and safety representative. The representative must be a worker and not a member of management.

These are the duties of the representative:

- the representative inspects the overall health and safety of the workplace at least once per month.
- the representative informs the employer, the workers, about unsafe conditions, and she/he also recommends changes.
- the employer must give the representative a written response within 21 days.
- the representative can ask the employer for any information about health and safety of the workplace.
- the representative receives their regular pay for time spent on health and safety matters.

The Right to Refuse

You have the right to refuse work that you think is unsafe.

The right to refuse unsafe work includes the right to refuse work that will harm you or any other worker in the workplace. You can refuse work if you think the equipment or machines you are using are unsafe or being used in a way that might be harmful to you or another worker. Or you can refuse work you think is unsafe if you think the physical condition of the workplace is a danger to you.

This is the way to refuse work you think is unsafe:

1. tell your supervisor or H & S Representative why you think the work is unsafe and let them know it is your right under the act to refuse unsafe work. Also let your supervisor know that you would like them to look at the problem and have the employee health and safety representative accompany you.
2. stay in a safe place near your work area, until your supervisor, has decided what to do about the problem. If your supervisor has told you to leave the workplace call the office immediately.
3. if you are satisfied that the problem has been taken care of you can return to work.
4. if, however, you feel that it is still unsafe to continue your work you can tell your supervisor to call the Ministry of Labour and have an inspector look at the problem.
5. if your supervisor refuses to do so, you may call an inspector yourself.
6. the inspector will investigate the problem and if it is unsafe, he will order the employer to make changes. While the investigation is being done, your supervisor cannot send you home, and must give you some other work to do if it is available.
7. if, however, the investigator says it is safe, but you still feel that it is unsafe, you may appeal the investigator's decision to the *Ministry of Labour.* You have 14 days to do so.
8. during the appeals process, the worker will not be permitted to return back to work.

The Ministry of Labour's decision if final – if the worker refuses to continue work, disciplinary procedures will follow. - **Under the law, you *cannot* be punished for refusing to do work that you feel is unsafe.**

REPORTING AN EMERGENCY

General Information

This section establishes the requirements, responsibilities, and methods of notification and response to emergency situations.

Where a specific procedure has not been established, use good judgment in determining what actions to take.

The crew supervisor/foreman must identify evacuation routes, assembly areas, and safe areas to all personnel before they begin work on the site.

Definitions

Emergency - Any unplanned event that adversely affects personnel, the environment, or **Gensteel's** business is considered an emergency

Emergency Reporting Procedures

1) Immediately report an emergency to crew supervisor/foreman.
2) Supervisor/foreman must notify project superintendent and **Gensteel's office.**
3) Any photographs of emergency situations must be forward it to **Gensteel's** office.
4) If there is an evacuation, immediately report to the appropriate assembly area. See your supervisor to confirm the location of the appropriate assembly area.

Accidents Involving Serious Injury or Death

In the case of a serious accident:

- Clear the area and keep away non-essential personnel.
- Notify **Gensteel 's** office, project superintendent, MOL and ambulance.
- Provide assistance to rescue personnel if requested.

After proper evacuation of the injured employee, do not disturb or remove anything in the immediate area of an accident scene without **Gensteel's** permission.

- The responsible supervisor/foreman must make a full investigation and submit an Accident report to **Gensteel 's** office.

Fire or Smoke

- In the event of a fire, use the nearest fire extinguisher and make attempt to extinguish fire if safe to do so.
- NOTE: employees are not required to fight a fire but are expected to attempt to extinguish the fire if they are trained and can do so safely.
- Notify project superintendent, fire department and **Gensteel's** office.
- Any worker/sub-contractors attempting to extinguish a fire must be trained in the safe use of fire extinguishers. (O. Reg. 213/91 s. 52(1.1)
- Keep non-essential personnel away from the fire.
- If explosive materials or compressed gases are involved or other hazards may exist, ensure that affected personnel are immediately evacuated to a safe distance.
- Employees are to evacuate to assigned **Gensteel's** assembly areas. Once evacuation is complete, supervisor must account for everyone for whom he/she is responsible**.** If an employee is missing, notify local security or fire department personnel immediately.
- Crew supervisor/foreman must make a full investigation of the incident and submit a written report to the **Gensteel 's** office.
- The full investigation will also be conducted by a 3rd party Safety Consultant.

Chemical or Hazardous Material Spill

- In case of a spill, call the emergency telephone numbers for site specific contact numbers immediately**.**
- Isolate and contain the spill if it is safe to do so, as determined by a competent person.
- Supervisor/foreman must make a full investigation and submit full report to **Gensteel.**

Property Damage

- If property under **Gensteel's** task is damaged, notify **Gensteel 's** office immediately.
- Protect against further damage where possible.
- Keep non-essential personnel away from the area.

Evacuation: The General Contractor evacuation procedures must be followed by all Gensteel **'s** workers/sub-contractors.

Transportation

It is the policy of **Gensteel** that first aid, medical, and emergency transportation is to be provided by **Gensteel** for employees who sustain occupational injuries or illness **or call 911 and report directly to H & S Representative or representative assigned. All documentation is to be filed and kept by the health & safety representative/JHSC member assigned.**

Reviewed By: Joe Henriques, President

Reporting of Non-Referred Medical Treatment

Supervisor/foreman must document this event and notify the head office.

INVESTIGATION AND REPORTING OF ACCIDENTS & INCIDENTS

General Information

Accident and incident investigation and reporting promote accident prevention by detecting the causes of accidents**.** This allows steps to be taken to remove the causes and eliminate future accidents, thus, reducing the number and severity of occupational illnesses and injuries. Accident investigation and reporting also helps to reduce worker compensation, public liability, and property damage insurance premiums.

Accident and Incident Investigation

- An accident or incident resulting in an injury or illness, fatality, environmental release, damage to property or equipment, or a "near miss" must be reported and investigated**.**
- **Gensteel's** President must be notified immediately of any fatalities, serious injuries or illnesses, and significant property damage.
- Investigation must begin promptly after the accident or incident**.** The supervisor/foreman must report accidents that result in fatalities immediately to **Gensteel's** president, project superintendent and MOL.
- Supervisor/foreman must prevent disturbance of the accident scene and take photographs in conjunction with investigations of accidents involving witness statements.
- Written report including witness statement and photograph must be submitted to **Gensteel's** office.

ACCIDENT/INJURY RESPONSE PROCEDURE

Minor Injury Requiring Only on Site First Aid

- The worker must obtain the necessary first aid.
- The first aider must record the first aid treatment given in the "First Aid Logbook
- The first aid kit will contain all the injury report forms.
- Call the office for the required paperwork.

"No Lost Time Injury" Requiring Medical Aid (A Visit to a Doctor)

- The worker must obtain the necessary first aid.
- Worker shall be accompanied to the nearest hospital.
- The supervisor/foreman shall call the office to complete WSIB Form 156 "Treatment Memorandum" and send it to the treating physician or hospital.
- The Functional Abilities Form for Timely Return to Work shall be completed and sent with the worker to treating health care provider upon revisit to the site/follow up
- The Supervisor/foreman shall call the office to fill out a WSIB Form 7A (Indicating steps taken to prevent recurrence). Indicate also that there is no "NO LOST TIME" and include the name and addresses of the treating physician and hospital.
- The Supervisor/Foreman shall **fax** the completed copy of the WSIB form(s) to **Gensteel.**
- After worker returns from the medical aid treatment to work the same day or next morning ask worker if can perform his regular tasks or tasks need to be modified.

"Lost Time Injury" (Worker unable to work beyond the day of injury or next morning)

- The worker must obtain the necessary first aid.
- Worker shall be accompanied to the nearest hospital.
- The office shall complete WSIB Form 156 "Treatment Memorandum" and send it to the treating physician or hospital.
- The Functional Abilities Form for Timely Return to Work shall be completed and sent with the worker to the treating health care provider.
- The office shall fill out a WSIB Form 7A (Indicating steps taken to prevent recurrence). Indicate also that there is "LOST TIME" and include the name and addresses of the treating physician and hospital.
- The Supervisor/Foreman shall complete an accident investigation in writing on the company provided "Supervisors Accident Investigation Report".
- The completed Accident Investigation Report and the corresponding WSIB forms must be **faxed** to **Gensteel** the same day.
- The Supervisor/Foreman shall complete the employer section of the "Functional Abilities Form for Timely Return to Work" outlining the modified work our company have on site. Send this form along with "Dear Doctor" letter to the treating medical centre.

- The supervisor shall review the modified work program with the injured worker.
- Once all required paperwork received by Company Head Office it will be responsibility of this office to inform WSIB and MOL if required.

Critical Injury (O. Reg. 831)

- Take charge of situation, remain calm.
- Send somebody to call for help (Ambulance, Fire Department, 911).
- Access the hazard at the scene of the accident.
- Make the area safe for your self and others.
- Identify your self to the casualty as a first aider and offer to help.
- Quickly assess the casualty for life-threatening conditions.
- Give applicable first aid.
- Assign specific responsibilities to others.
- Notify **Gensteel 's** Head Office and MOL Office nearest to you (numbers posted on the back page of OH & S Act and regulations Booklet) immediately.
- Notify our client/**General Contractors** superintendent.
- Ensure worker accompanied to the hospital.
- Secure the accident seen for MOL investigation and conduct your own investigation.

The Head office is to complete all required paperwork as indicated in "Lost Time" procedure and keep on file.

Clarification on The Definition of Regulation 834: Critical Injury

Issued: January 2017

Clause 1(d) of Regulation 834 stipulates that an injury of a serious nature is a "critical injury" if it involves the fracture of a leg or arm but not a finger or toe. The Ministry of Labour interprets this provision as including the fracture of a wrist, hand, ankle or foot – i.e. any such fracture would constitute a critical injury if it is of a serious nature. While the fracture of a single finger or single toe does not constitute a critical injury, the ministry takes the position that the fracture of more than one finger or more than one toe **does** constitute a critical injury if it is an injury of a serious nature.

Clause 1(e) of Regulation 834 stipulates that an injury of a serious nature is a "critical injury" if it involves the amputation of a leg, arm, hand or foot but not a finger or toe. While the amputation of a single finger or single toe does not constitute a critical injury, the ministry takes the position that the amputation of more than one finger or more than one toe **does** constitute a critical injury if it is an injury of a serious nature.

A critical injury must be reported under s. 51 of the Occupational Health and Safety Act if there is a connection between the hazard that gave rise to the injury and worker health and safety.

Reviewed By: Joe Henriques, President

This notice is intended to provide clarity around the application of clauses (d) and (e) of the critical injury definition. The legal definition of a critical injury set out in Regulation 834 has not changed.

EMERGENCY RESPONSE

Reporting Injuries

All employees will be held accountable for reporting the injury immediately after an injury occurs, even if medical treatment is not required. (Notice must be made at or near the time of the injury and on the same day of the injury.) Employees must report the injury to their supervisor/ foreman. A casual mentioning of the injury will not be sufficient.

Employees must let their supervisor know:

- how they think they hurt themselves.
- what they were doing at the time.
- who they were working with at the time.
- when and where it happened.
- other pertinent information that will aid in the investigation of the incident.

Failure to report an injury immediately (meaning at or near the time of the injury and on the same day of the injury) is a violation of the Safety Policy, and they may result in immediate termination, in accordance with company policy and will not be covered by WSIB.

Accident Notification

Time frame in which written report of accident needs to be submitted to Ministry of Labour is determined by severity of the accident. The following procedures shall be applied:

- Fatal or Critical Injury – immediately by phone and report in writing no later than 48 hours (s. 51 of OHSA)
- Disabling Accident – within 4 days (s. 52 of OHSA)
- Explosion, fire, failure of equipment or machinery – within 2 days (s. 53 of OHSA)

In Case of Critical Injury or Death

"Critical Injury" means an injury of a serious nature that

- places life in jeopardy
- produces unconsciousness
- results in substantial loss of blood
- involves the fracture of a leg or arm but not finger or toe
- involves amputation of a leg, arm, hand or foot but not a finger or toe
- consists of burns to a major portion of the body
- causes the lost of sight in an eye

Workers:

- Notify the crew supervisor/foreman immediately.

Supervisors/Foreman:

- Call 911 or MOL
- Notify the President immediately.
- Secure the area & do not allow any disturbance.
- Notify project superintendent.
- Advice witnesses if any not to leave the area and wait for MOL inspector(s) to arrive.
- Take pictures of the accident scene.
- Conduct accident investigation

In Case of Inspection by MOL Inspector

As soon as project superintendent is notified that an MOL Inspector is on the jobsite, it is the responsibility of the superintendent and all employees to make the inspector's visit on the jobsite as pleasant and timely as possible and provide full cooperation on all issues or concerns raised by MOL Inspector.

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MOL VISITS / INSPECTIONS / INVESTIGATIONS

- All supervisors/foreman, workers & elected H. & S. Representatives are to assist MOL Inspector(s) during their visit to our projects in all areas of concern.
- All orders issued, or concerns brought to your attention by MOL Inspector(s) must be respected and addressed accordingly.
- If there is disagreement with MOL order or concerns it is not to be handled in heated, argumentative and personal way.
- You may simply advise the inspector that you are in disagreement with the interpretation of applicable requirements under your circumstances and you wish to have your company qualified representative to review the documentation/report/summons prior to you signing or call **Gensteel's Head Office** for assistance.

Reviewed By: Joe Henriques, President

MODIFIED WORK PROGRAM

It is our policy to gainfully employ and return an injured worker back to their pre-injury job, by providing them with **light duty or modified work** that will not in any way infringe upon the injury and that will not prove hazardous to fellow workers. Regardless of the Provincial status that may prevail, it is our position that when a valued worker has suffered a workplace injury, we shall do our utmost to co-operate with the worker, the health provider and the Workplace Safety and Insurance Boards (WSIB in Ontario) or the provincial Worker's Compensation Board, ensuring that the worker has the opportunity to be gainfully employed again.

Your cooperation will help keep our employees fully employed when they have sustained minor injuries. When an injury occurs that prevents and injured worker from performing their normal duties, we will offer various forms of light duties or modified work at that project or at another location. Modified duties will be cleared with the worker, foreman/supervisor and the treating physician to ensure that the appropriate measures are instituted. The foreman/supervisor will conduct follow-ups on the employee's progress with the treating physician. The foreman/supervisor will also ensure that the employee will also be monitored on their progress in the modified position so that he/she can return to their initial work position. After an injury has occurred, the injured worker will be contacted by his/her foreman/supervisor. A "**Functional Abilities Form for Timely Return to Work"** form must be completed by attending physician. These forms will outline the physical restrictions and instructions to be observed during your return-to-work program or modified work program and provide the WSIB (or the provincial Worker' Compensation Board) with information pertaining to your injury.

These forms must be completed and sent into the WSIB for review.

The WSIB now requires that the injured employee apply for "Lost Time" or "Loss of Earnings" benefits. In order to obtain those benefits, employees must cooperate with the employer by authorizing the release of the "**Functional Abilities**". In the event that none of or tasks on the project are suitable under restrictions outlined in functional ability form and we can not accommodate adequate modified work under circumstances we will contact WSIB claims adjudicator assigned to the claim for further cooperation in the matter

Worker's Responsibilities:

- When you are injured, obtain the proper medical treatment.
- Inform your employer as soon as possible after the injury and communicate on a weekly basis throughout your recovery and keep them informed of your progress and status.
- Assist your employer in identifying suitable modified work during and after your recovery. The Functional Abilities form will help identify task limitations.
- Provide the WSIB or the provincial Workers' Compensation Board with any information requested.

- Cooperate with **Gensteel's** management and the WSIB or the provincial Workers' Compensation Board in your early and safe return to work.
- Report any material changes in your status within 10 days. This includes any significant change in your medical condition or income.

Gensteel's Responsibilities

- Contact the worker as soon as possible after the injury.
- Maintain communication throughout their recovery and return to work program
- Re-employ the worker.
- Provide if available suitable work that is: safe for the worker, restores the worker to his/her previous earnings as closely as possible, what the worker's abilities will allow, and the skills that he/she has to do.
- Provide the WSIB with any information requested about the workers return to work.
- Cooperate with the worker and the WSIB in the Early Safe Return to Work Process

EMERGENCY AND FIRST AID SUPPLIES

Subcontractor Compliance

Gensteel's currently carries out all assigned tasks by our own employees. However, if situation arises in which work is assigned to the subcontracting company they must be aware of the following:

Sub-contractors must:

- comply with duties and responsibilities set out by OHSA & Regulations for construction projects and wear required PPE at all times.
- comply with **Gensteel's** Injury and Illness Prevention Program.
- have only trained and competent workers to perform the assigned tasks under contract agreement.
- carry proof of training as applicable.
- have up to date SDS kept on the project.
- report any near misses, incidents and accidents to our project supervisor/foreman.
- refuse unsafe work.
- fully cooperate with MOL Inspectors.
- provide competent supervision to their workers.
- comply with our clients' policies and procedures whenever possible and identify conflicting ones.
- obtain site safety orientation by our supervisor/foreman, be familiar with **Gensteel 's** policies and procedures and sign acknowledgement.
- provide up to date WSIB form 1000.
- when requested provide their own safety policy and safe work procedures.
- ensure good housekeeping.

Failure to ensure above noted will be subject to disciplinary action not limited to dismissal or termination of the contract agreement. If subcontractors misconduct causes financial burden on our company, all associated cost will be past onto subcontracting company in question.

SAFETY ORIENTATION AND TRAINING

General Information

- This section establishes basic training and instruction activities to ensure that employees are trained in hazard recognition and are informed of their responsibilities in carrying out their assignments in an efficient and accident-free manner.
- The provisions in this section will also help employees comply with specific OHSA, provincial, and local safety requirements, as well as the requirements of this safety manual.
- It is **Gensteel's** requirement that employees/workers must provide a translator or speak the English language.
- The crew supervisor/foreman must instruct employees on the safest way to perform each task of the work assignment prior to starting work.

Safety Meetings, Records, and Minutes

- Supervisors/foreman should hold weekly safety meetings and require attendance by employees.
- Accident prevention should have a prominent place on the agenda, and the meeting records should state the specific items discussed.
- Each supervisor should review specific procedures pertinent to the project activity**.** This meeting provides an opportunity to point out hazardous conditions or unsafe work practices, and discuss safety and environmental rules and regulations, safe working procedures, analysis of accidents, and potential hazards.
- Records and minutes of safety meetings are encouraged, including recording attendees and subjects covered**.**
- JHSC meetings shall be held every three months and minute distributed to all employees or as frequently as required.

Specific Instruction

Supervisors/foreman is required to provide regular and continuing training for their employees, including all training required by applicable regulations**.** They will also monitor the training activities of subcontractors and others under their direction.

The following are **examples**, but not a complete list, of the areas of training required.

1. Recognizing and avoiding unsafe conditions and acts, specific regulations applicable to the work environment and the safe handling and use of poisons, caustics, and harmful substances when the employee is exposed to or required to handle or use them.
2. Awareness of actual and potential hazards, personal hygiene, and personal protective measures
3. Handling and use of flammable gases, liquids, or toxic materials, if applicable to work
4. Environmental training

5. Hazard recognition, emergency procedures, and the use of tools and equipment
6. Electrical safety and lockout/tagging
7. Handling and use of fire extinguishers (workers must be trained in the use of fire extinguishers (O. Reg. 213/91 s. 52(1.1)
8. Ladder safety and fall protection (guard rails, coverings, fall arrest, travel restraint, horizontal lifeline systems)
9. WHMIS – GHS 2015
10. Using PPE – workers must supply their own PPE and maintain as per manufacturer's instructions and legislative requirements.
11. The proper method of giving signals for operators of cranes, hoisting /rigging
12. Compressed gas safety
13. Basics of Supervising
14. Supervisor Awareness in 5 Basic Steps (O. Reg. 297/13)*
15. Worker Awareness in 4 Basic Steps (O. Reg. 297/13)*

* New mandatory occupational health and safety training

In an effort to improve health and safety in the workplace, the Ontario Provincial Government is introducing new training requirements under the Occupational Health and Safety Act ("OHSA"). Bill 160, which comes into force on July 1, 2014, sets out mandatory occupational health and safety awareness training to be provided to workers and supervisors. (O. Reg. 297/13)

Gensteel will ensure that workers and supervisors receive the required training as set out by the Bill 160, under the Occupational Health and Safety Act.

Training will include:

- The rights and duties of workers, employers and supervisors under the OHSA
- The roles of health and safety representatives and Joint Health and Safety Committees under the OHSA
- The roles of the Ministry of Labour, the WSIB and other entities designated under the OHSA
- Supervisors will be trained in this regulation within 1 week of being hired and assuming their role.

Job Hazard Analysis

Job hazard analysis is the process of carefully studying and recording each step of a job to identify existing and potential safety and health hazards, then evaluating the hazards to determine the best way to perform the job while avoiding the hazards**.** Working safely reduces costs resulting from employee injuries and worker compensation.

Gensteel is recommending that supervisor/foreman fill out JHS/JSA forms as required by the General Contractor and indicate on these forms:

- actual and any potentially hazardous tasks or conditions
- hazard control methods
- personal protective equipment and training procedures required to perform each task, duty, or work assignment safely.

Documentation Requirements

At the conclusion of the orientation, employees and sub-contractors will receive a handbook titled Safety & Loss Control Manual**.** The last section of the handbook has a tear-out sheet**.** Employees and sub-contractors are required to complete the form on this sheet and give it to the instructor.

INSPECTION AND AUDITING

Inspection and Audit Program

If requested by **Gensteel 's** third party safety consulting firm may be summoned to perform safety evaluation of our project.

Inspection and Auditing Procedures

Ministry of Labour Inspectors

Ministry of Labour Inspectors are responsible for enforcement of OHSA and Regulations for Construction Projects. Their visits are typically unannounced and may result in verbal warning to the violators, orders to comply, stop work orders or summons. Some inspectors prefer to collect the evidence of unsafe act or practices by obtaining pictures prior to approaching violators. Maximum fines to individuals are $100,000 **per violation** or imprisonment for up to one year or both. Corporation may be fined up to $1,500,000.00. If approached by MOL inspectors, you are responsible to cooperate in professional manner. Ask your safety representative or supervisor/foreman to be present during conversation/interview. Each individual fined by MOL inspector will be responsible for paying the assigned amount or legal assistance.

In the case of serious injury or fatality secure the scene for MOL inspectors and call **Gensteel's** office immediately.

OH & S ACT AND ITS REGULATIONS

General Information

Supervisors/foreman, employees and sub-contractors must know and understand their responsibility for compliance with OHSA and regulations and should have a copy of the applicable OHSA and regulations on the project.

Hazardous Materials List

Supervisors/foreman must prepare a hazardous materials list before the materials arrive on site and ensure that all workers are trained in WHMIS – GHS 2015 up to date. (annual review is required)

Material Safety Data Sheets

Supervisors/foreman must maintain the most current material safety data sheets provided by manufacturers and distributors of the material. A copy of each SDS must be maintained at the work site**.** The copy must be easily accessible to employees and be up to date. (expires every 3 years)

WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM
(WHMIS - GHS 2015)

All workers must receive WHMIS GHS 2015 training and refresh this training on an annual basis.

PURPOSE

To ensure that all containers are labelled, a current inventory list of all hazardous chemicals/material is maintained, and current Safety Data Sheets are available. **Gensteel** is responsible for updating and maintaining this program and for compiling a current inventory of all chemical/material and updating SDS's as needed. All employees have free access to SDS's, stored in/at the office or at the site office.

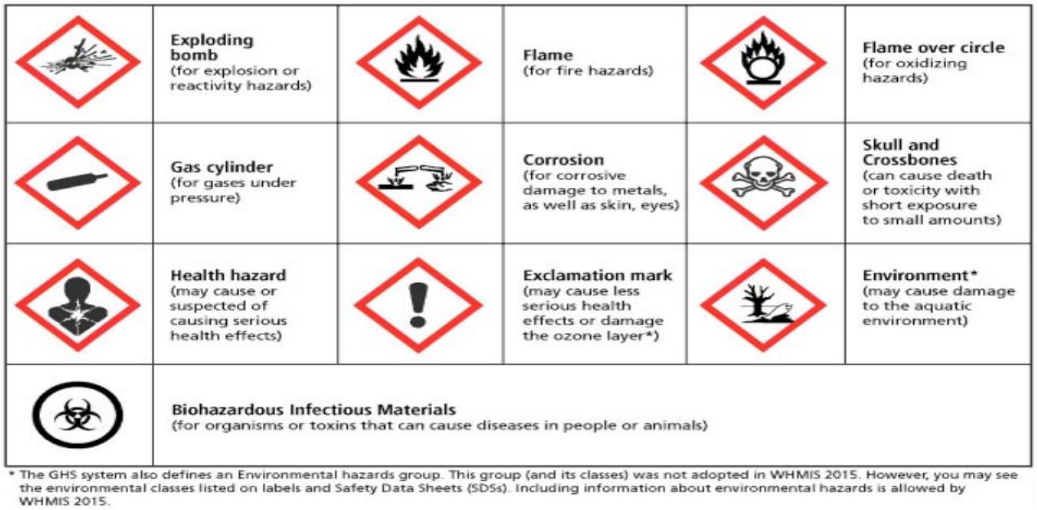
DEFINITION

GHS (Globally Harmonized System "GHS "WHMIS 2015") is a Canada wide system for identifying and labelling hazardous materials to help provide workers with information on workplace hazardous materials called hazardous products.

GHS "WHMIS 2015" CLASSIFICATIONS AND EXEMPTIONS

The hazardous materials to which Globally Harmonized System "GHS "WHMIS 2015" Classification applies are called 'hazardous products'. They meet the criteria for one or more of six hazardous classes, A, B, C, D, E, and F (note: class D has three sub-divisions), according to their hazard properties. Hazardous products may fall into one or more of these categories.

New GHS 'WHMIS 2015' Pictogram



Each class (and sub-division for class D) has its own hazard symbol.

Class A: COMPRESSED GAS

The contained gas product is under high pressure and may be liquefied or refrigerated. Heating, dropping or damaging the compressed gas cylinders can result in explosive decompression and/or spillage of the product. Examples of compressed gases are propane, oxygen, and carbon dioxide.

Class B: FLAMMABLE AND COMBUSTIBLE MATERIAL

At room temperature, flammable materials burn readily. Combustible materials may catch fire or burst into flames if heated or exposed to a spark or flame. These substances may release toxic fumes when burned. Materials included are flammable gases, liquids, solids, aerosols, reactive materials, and combustible liquids. Some examples of common products are methane (flammable gas), gasoline (flammable liquid), and diesel fuel (combustible liquid).

Class C: OXIDIZING MATERIAL

These materials may or may not burn themselves but will release oxygen causing or contributing to the combustion or explosion of woods, fuels, or other combustible materials that they are in contact with. They may also increase the flammability of gases or vapours in the air. Examples of oxidizing products include oxygen, chlorates, and peroxides.

Class D: POISONOUS AND INFECTIOUS MATERIAL
Division 1: Material Causing Immediate and Serious Toxic Effects

These products are very toxic causing immediate and extreme harm to life and health. The dangerous effects are acute, and include nerve damage, respiratory difficulties or death. Exposure is possible by inhalation, ingestion, or absorption through the skin. Examples of such products are hydrogen sulphide, chlorine gas and carbon monoxide.

Division 2: Material Causing Other Toxic Effects

These products may be irritants or cause chronic toxic effects. They may be a carcinogen, teratogen, mutagen, reproduction toxin, and/or sensitizer of the skin or respiratory tract. Examples of such health hazards include mercury, asbestos, and formaldehyde.

Division 3: Biohazardous Infectious Material

These products may cause serious disease or illness in humans and animals. This includes organisms such as viruses, bacteria, and fungi, and the toxins they may produce, both of which may be transmitted through urine, feces, body fluids, etc. This class of products consists of such examples as blood samples containing Hepatitis B or HIV.

Class E: CORROSIVE MATERIAL

This class of materials corrodes metal and causes severe burns and possibly permanent damage to human tissues such as skin or eyes upon contact, or the respiratory tract upon inhalation. Examples include sulphuric acid (battery acid) and caustic soda.

Class F: DANGEROUSLY REACTIVE MATERIAL

Materials that may become unstable or react vigorously when exposed to light, heat, vibration, extreme temperatures, or other materials. The violent reactions may cause fire, explosions, or may produce a very toxic gas. Products include picric acid, vinyl chloride, and benzyl peroxide.

Responsibilities:

Managers

Managers Shall:

- If hazardous products are used in the workplace management, in consultation with the site safety advisor shall establish and maintain an effective GHS "WHMIS 2015" program, as part of the overall workplace health and safety program, which addresses applicable GHS "WHMIS 2015" requirements including education and training, and is reviewed at least annually, or no more frequently if required by a change in work conditions or available hazard information.
- Ensure that SDS's are obtained for all hazardous products that are at the workplace.
- Ensure that the training of all employees on information on hazardous products they use to include identity, hazards and safety precautions is done by competent personnel. If a worker is or may be exposed to a chemical or biological substance which could cause an adverse health effect, management must ensure that the supervisor and the worker are trained in and follow the established procedures for safely handling, using, storing and disposing of the substance,

including emergency and spill clean-up procedures as per the SDS for the specific hazardous product. Training is also to include major hazards of the hazardous products in use in the workplace, rights and responsibilities of **Gensteel** and workers and content required on labels and SDS's and the significance of this information.

- Ensure the employees that handle or work around flammable or combustible substances are trained in the safe handling, use, storage, and disposal of the substance. They must be provided with adequate information concerning the identity, nature, and potential hazards of the substance.
- Obtain a supplier SDS for that hazardous product if the supplier is required to prepare an SDS. Ensure SDS's are available and current for all products used.
- Ensure that a worker who works with or in proximity to a hazardous product received from a supplier has access to all hazard information received from the supplier concerning that hazardous product as well as any further hazard information of which **Gensteel** is aware or ought to be aware concerning the use, storage and handling of that product.
- Must ensure that the identity of the substance, its possible effects on worker health and safety and any precautions required for the health and safety of the worker are clearly indicated by labels, SDS's, placards, signs, tags or other similar means.
- Review the GHS "WHMIS 2015" program annually to ensure compliance with provincial legislation requirement.
- When a supplier SDS obtained for a hazardous product is 3 years old, management must, if possible, obtain from the supplier an up-to-date supplier SDS for the hazardous product if any of the product remains in the workplace.
- Must ensure that no worker is exposed to a substance that exceeds the ceiling limit, short-term exposure limit, or 8-hour TWA limit prescribed by ACGIH.
- Ensure that all supplier labels are affixed to all hazardous products on their original containers and ensure that all decanted hazardous products have workplace labels affixed to them if they are not in the original containers given by the suppliers.

Site Safety Representatives

Site Safety Representatives shall:

- Ensure SDS's are readily available to all workers (readily available means the SDS is located near workers and accessible to workers on each shift).
- Establish a process to provide and maintain an inventory of hazardous substance inventories.

Supervisors

Supervisors shall:

- Involve all workers where reasonably practicable in the hazard identification process. Ensure workers co-operate and participate in the completion of the hazard assessment and in the control or elimination of the hazard identified where reasonably practicable.

- Ensure that an assessment is conducted of the risks posed by hazardous substances from accidental release, fire or other such emergency. If a worker is or may be exposed to a hazardous substance, the supervisor must ensure that:
    - A walkthrough survey is conducted to assess the potential for overexposure taking into account all routes of exposure, including inhalation, ingestion, and skin contact, and
    - Reassessment is conducted when there is a change in work conditions which may increase the exposure, such as a change in production rate, process, or equipment. If the walkthrough survey reveals that a worker may be at risk of overexposure to an airborne contaminant, the supervisor must ensure that air sampling is conducted to assess the potential for overexposure.
    - If a worker is or may be exposed to a chemical or biological substance, which could cause an adverse health effect, the supervisor must ensure that the content and meaning of the information is clearly communicated to the worker prior to handling the hazardous product and has the SDS readily available for worker to review.
    - If a worker is or may be exposed to a chemical or biological substance which could cause an adverse health effect, supervisors must ensure that effective written procedures are prepared and implemented to prevent exposure by any route that could cause an adverse health effect, and to address emergency and clean-up procedures in the event of a spill or release of the substance.
    - The hazard assessment is to be used to identify the hazardous product with the necessary control measures to be implemented as per the SDS for each chemical or biological substance the worker may be exposed to.
- Ensure that a hazardous product or its container at a work site has a supplier label or a work site label on it in accordance with legislative requirements.
- Contaminated waste materials are disposed of in closed receptacles.
- Contaminated waste materials are disposed of in closed receptacles. Waste material contaminated with a solvent, oil, grease, paint, or other flammable substance shall be placed in covered metal containers before disposal and shall not be stored in work areas.
- If a hazardous product is decanted at a work site into a container other that the container in which it was received from a supplier, the supervisor must ensure that a work site label is applied to the container.
- Communicate location of SDS on site.
- Emergency eyewash equipment is available in site trailer as prescribed.

Contractors/Workers

Contractors/Workers shall:

- Ensure workers have valid GHS “WHMIS 2015” training.
- Handle hazardous products in a safe and efficient manner.
- Ensure all GHS “WHMIS 2015” hazardous products are labelled properly. Ensure that a hazardous product or its container at a work site has a supplier label or a work site label on it in accordance with legislative requirements.

- If a hazardous product is decanted at a work site into a container other that the container in which it was received from a supplier, the worker must ensure that a work site label is applied to the container.
- Metallic or conductive containers used to transfer flammable liquids must be electrically bonded to each other or electrically grounded while their contents are being transferred from one container to the other.
- Notify their Supervisor if an updated SDS is missing or a new chemical has been received.
- Refer to SDSs before handling an unfamiliar product.
- Understand the purpose/significance of the SDS and be able to apply the information provided in the SDS.
- Consult their Supervisor if the SDS information is not understood.
- Use PPE to handle hazardous products appropriately.
- Dispose of hazardous substances in the designated areas.

Controls

Training / Competencies
New Employee Orientation

General Requirements

All workers must have GHS "WHMIS 2015" training certification. The worker will be trained by **Gensteel** or an approved training facility. The training is valid for **ONE** year.

O.H.S.A s. 42(3) Frequency of Training

GHS "WHMIS 2015" Training Is Required

Upon employment and then annually updated or more often if required

Training Records

A copy of the GHS "WHMIS 2015" training certificate of each worker will be kept on file for reference for a minimum of three years.

PRECAUTIONARY MEASURES
- personal, protective equipment required
- storage requirements
- spill/leak response procedures
- engineering controls required
- handling procedures and equipment
- waste disposal
- special shipping information

First Aid / Fire Response Measures

- Product-specific first aid covering all possible routes of entry: inhalation, ingestion, eye contact, skin contact, or skin absorption
- Appropriate emergency washing facilities are to be provided within a work area where a worker's eyes or skin may be exposed to harmful or corrosive materials or other materials which may burn or irritate.
- Eye wash stations and shower facilities are available at the campsites and worksite sea containers for flushing and decontamination efforts.
- A Class B (or ABC) fire extinguisher must be readily available when working with or near flammable and combustible liquids.

SDS Preparation Information

- Date of SDS preparation
- Name and contact number of person or group responsible for SDS preparation.

Many SDSs will be available in a sixteen-category international format rather than the nine-category format given in the legislation. This is acceptable as long as it includes all the required information, as well under the Regulatory Information heading a statement to the effect that the product has been classified in accordance with the Hazardous Product Regulation and it contains all the information required under that regulation.

Storage and Handling of Hazardous Substances

All hazardous substances should be stored and handled in accordance with the instructions included on the SDS and the supplier label. Any source of ignition is prohibited in areas where flammable and combustible sources are stored. This includes cigarette smoking, sparks from welding or grinding, open flames, etc. Flammable and combustible substances must be stored in areas away from substances that may cause a reaction, such as an oxygen tank.

Further conditions of flammable or combustible substances stored or used at the work area are:

a. they will not be in sufficient quantity to produce an explosive atmosphere if inadvertently released.
b. are not stored within 30 metres of an underground shaft.

Are not stored in the immediate vicinity of the air intake of:

1. a ventilation supply system,
2. an internal combustion engine, or
3. the fire box of a fired heater or furnace, and
4. are stored only in containers approved to CSA Standard B376-M1980 (R2008),
5. Portable Containers for Gasoline and Other Petroleum Fuels.

a) any engineering controls that should be used when handling the products (i.e. should it be used under local exhaust ventilation, is general room ventilation sufficient, etc.)
b) personnel protective equipment required, including specific types of gloves, eye, face and/or body protection.
c) when a flammable gas or a flammable liquid is handled, used or stored, all sources of ignition must be eliminated or adequately hazardous including open flame, spark-producing mechanical equipment, welding and cutting processes, smoking, static discharge and any electrical equipment or installation that is not approved for hazardous locations, as specified by the Electrical Safety Act.
d) an internal combustion engine in a hazardous location that has a combustion air intake and exhaust discharge must be equipped with a flame arresting device or located outside the hazardous location. all the surfaces of an internal combustion engine that are exposed to the atmosphere in a hazardous location are to be at a temperature lower than the temperature that would ignite a flammable substance present in the hazardous location or shielded or blanketed in such a way as to prevent any flammable substance present in the hazardous location from contacting the surface.
e) except for packaging used to contain flammable or combustible liquids, combustible shelves, racks and other materials are not permitted inside.
f) flammable or combustible liquids storage room or storage cabinet unless required as part of a fire separation. flammable and combustible substances must be stored in approved containers. flammable and combustible chemicals must be stored in fire resistant cabinets or a designated storage room or building. flammable liquids must be stored in a flammable storage cabinet with adequate ventilation.
g) waste material contaminated with solvent, oil, grease, paint, or other flammable substance shall be placed in covered metal containers before disposal and shall not be stored in work areas.
h) any other specific handling instructions.

Compressed Gas

We will ensure the following in regard to storage and handling of compressed gases:

- compressed gas containers are to be used, handled, stored, and transported in accordance with the manufacturer's specifications.
- a cylinder of compressed flammable gas is not to be stored in the same room as a cylinder of compressed oxygen, unless the storage arrangements are in accordance with the Ontario Fire Code (2016).
- compressed gas cylinders, piping, and fittings are to be protected from damage during handling, filling, transportation, and storage.
- compressed gas cylinders are equipped with a valve protection cap if manufactured with a means of attachment, and
- oxygen cylinders or valves, regulators, or other fittings of the oxygen using apparatus or oxygen distributing system are kept free of oil and grease.

Hazardous substances should also be stored following the instructions on the SDS. It is particularly important to note whether there are any products with which it may not be stored as they may be incompatible. Where work or manufacturing processes involve the use of a flammable liquid, vapour, or gas, the concentration of the liquid, vapour, or gas in the work area shall be maintained a minimum of 10% below the lower explosive limit (LEL) of the substance involved. Workers must not enter or remain in a work area if more than 10% of the lower explosive limit (LEL) of an explosive substance is present in the atmosphere.

If it is not practicable to maintain the airborne concentration of a flammable gas or vapour below the applicable exposure limit, for example, in a temporary situation or an emergency, (a) only the minimum number of workers necessary for the work may be exposed, (b) every worker exposed must be adequately trained and equipped to safely perform the required duties, (c) the concentration of the flammable gas or vapour must not exceed 20% of the lower explosive limit (LEL), and (d) in a life-threatening emergency only, exposure of emergency response workers is permitted above 20% of the LEL, provided that only those qualified and properly trained and equipped workers necessary to correct the unsafe condition are exposed to the hazard and every possible effort is made to control the hazard while this is being done.

Workers must ensure that conductive containers are electrically bonded to each other or electrically grounded during transfer of contents.

Summary

1. Disposal of GHS “WHMIS 2015” Hazardous Products

All hazardous products must be disposed of in accordance with the site-specific procedures developed for the work site you are working on.

2. Location of SDS’

SDS’s will be readily available to workers at all times. The location will be clearly identified and communicated to all workers at the work site. SDSs are listed alphabetically on the index page and are filed alphabetically in the binder.

3. Document Administration

It is the responsibility of the Health and Safety department to ensure there is an up to date SDS available for all hazardous products. If an SDS is not available at the work site or an updated version is required, contact your immediate Supervisor.

i. If a hazardous substance is received and it is accompanied by an SDS not currently in the SDS binder, update the product inventory and add the SDS to the binder. Then forward a copy to your Supervisor.
ii. If a new hazardous substance is received and an up to date SDS is not available, it is not to be used until an SDS is obtained. Products without a valid SDS may be stored but not used for up to 120 days while efforts are made to obtain an up to date SDS.

iii. All workers have the responsibility to inform their Supervisor if any concerns or issues arise with any product or chemical used, and/or with any SDS.

We will review this procedure and the inventory of current SDSs to ensure up to date information is provided to the workers. This review will be conducted on an annual basis.

References

- Occupational Health and Safety Act and it Regulations for Construction Projects (O.Reg. 213/91)
- Transportation of Dangerous Goods Act and Regulations

Informing Sub-Contractors

It is the responsibility of **Gensteel** to provide sub - contractor employees exposed to our chemicals with the following information:

1. Hazardous chemicals with which they may come in contact.
2. Measures the employees should take to lessen the risks.
3. Where to get SDS's for all hazardous chemicals.

It is the responsibility of **Gensteel** to obtain chemical information from sub-contractors and the responsibility of subcontractors to provide chemical information when they will expose our employees to hazardous chemicals which they may bring into our workplace.

Reviewed By: Joe Henriques, President

WHMIS COMPLIANCE PLAN

[WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM]

1. All workers entering the project shall carry proof of WHMIS – GHS 2015 Training.

2. All sub-contractors of **Gensteel** *shall provide* un-expired Safety Data Sheets for all WHMIS – GHS 2015 hazardous products to be brought on site, to General Contractor's project supervisor or his competent replacement, *before* these hazardous products are stored or used on the project. Shall ensure WHMIS – GHS 2015 hazardous products have their required supplier and workplace labels affixed to the outer containers.

3. All sub-contractor's supervisors are to provide site-specific instruction to their workers on the storage, handling, use and disposal of any WHMIS – GHS 2015 hazardous products brought on site. General Contractor project supervisor or his competent replacement will require each trade sub-contractor to provide written evidence, workers have received generic and site-specific instruction for their worker's safety.

4. General Contractor's project supervisor or his competent replacement will post all SDS documents in a conspicuous area to allow unrestricted access and review to all workers on the project.

5. All trade sub-contractors is to use the designated storage areas provided to them by the **General Contractors**. Any WHMIS- GHS 2015 hazardous products *not in use* shall be kept under storage. Appropriate fire extinguisher equipment shall be provided near these storage areas.

6. General Contractor's project supervisor or his competent replacement, in consultation with the Joint Health and Safety Committee for the project, shall periodically review the suitability of the WHMIS – GHS 2015 training and practices in place by the trade sub-contractors on site, keeping in mind that the results of such training and instruction provided, must enable the workers to *use* the information in a performance-based manner to protect their health and safety.

7. All trade sub-contractors shall have written procedures to be followed by their workers, where *fugitive emissions* from a hazardous product, poses a risk to the workers' health and safety.

8. All trade sub-contractors shall also have written procedures to be followed by their workers in case of an *emergency involving a hazardous product*.

9. Failure to follow safe work procedures in the use, storage, handling or disposal of a hazardous product by a trade contractor's employee will cause disciplinary measures to be taken against the worker and supervisor of the trade Contractor.

ALCOHOL AND DRUG ABUSE POLICY

- **Gensteel** prohibits the possession, distribution, promotion, manufacture, sale, use, and abuse of illegal drugs, drug paraphernalia, controlled substances, and alcoholic beverages by employees while on the premises
- Employees and subcontractors are prohibited from reporting to the premises under the influence of alcohol or drugs which affect their working ability or safety, including but not limited to their alertness and coordination.
- The policy applies to all employees, management, and sub - contractors**. Gensteel** may take legally permissible steps as necessary or appropriate to enforce compliance with this policy.
- Employees may possess a prescription medication in its original container to be administered only to the person for whom it is prescribed**.**

Enforcement

- Supervisors/foreman must prevent employees from carrying any tasks on the project if they appear while under the influence of alcohol or drugs.
- Transportation will not be offered, and employee removed from the project will have to provide their own safe means of transportation off the site.
- If employee does not cooperate or becomes violent call police for assistance and notify **Gensteel's** office immediately.
- After the event, a report must be submitted to JHSC to determine further action/measures to prevent recurrence as well as disciplinary procedures.

Reviewed By: Joe Henriques, President

SMOKING POLICY

The purpose of this policy is to restrict smoking in the workplace. The "Smoking in the Workplace Act "(R.S.O. 1990, cS.13) sets out clear restrictions on smoking in the workplace. "**Smoking**" – includes carrying a lighted cigar, cigarette or pipe and "smoke" has a corresponding meaning. "**Enclosed Workplace**" – means an enclosed building or structure in which an employee works and includes a shaft, tunnel, caisson or similar enclosed spaces.

Smoking is not only a health hazard but poses serious fire hazards since our activities may accumulate highly combustible wood dusts. Although smoking will not be totally prohibited, it will be restricted to certain areas a outlined below.

Smoking MAY BE permitted:

1. only in the areas designated by **General Contractors** (our client)
2. only in the areas designated by your supervisor/foreman

No smoking in company vehicles.

PERSONAL PHONES & ELECTRONIC DEVICES

Use of above noted devices during tasks activity may lead to serious injuries or failure to quickly respond in the case of emergency. Therefore, it is policy of **Gensteel** that these devices are used during worker's breaks or lunchtime. Where AM/FM radios permitted by crew supervisor sound level shall not exceed level of conversation.

SECURITY PROGRAM

Where **General Contractors** or the owner of the project sets out security protocol including reporting arrival on the site on regular basis, wearing of identification badges all **Gensteel** employees and sub – contractors must fully cooperate.

Failure to do so may result in disciplinary action not limited to dismissal.

Reviewed By: Joe Henriques, President

DISCRIMINATION, HARASSMENT & VIOLENCE POLICY

Gensteel is committed to providing a harmonious and harassment and violence free workplace. Discrimination, harassment, bullying and workplace violence are unacceptable behaviors. **Gensteel** accepts its legal and moral obligation to ensure that management, employees and sub-contractors are not subjected to discrimination, harassment, bullying or workplace violence.

Relevant Definitions

In this policy:

Discrimination means unfair or unjust treatment of or decisions affecting an individual because of their sex, race, age, marital status, transgender status, career's responsibilities, disability, age, union membership, or other personal activities.

Harassment means verbal or physical conduct which, because of its severity and/or persistence, is likely to create a hostile or intimidating environment which may detrimentally affect an individual's employment or education. Harassment is defined by reference to the nature and consequences of the behavior, not the intent of the initiator.

Sexual Harassment means unwelcome sexual advances, requests for sexual contact and verbal or physical conduct of a sexual nature when submission to, or rejection of, such advances, requests or conduct is explicitly or implicitly a term or condition affecting employment and/or when such advances, requests or conduct have a detrimental effect on an individual's work environment.

Bullying and Workplace Violence means any on-going anti-social behavior that offends, degrades or humiliates a person, and has the potential to create a risk to health, safety and wellbeing. Bullying and workplace violence refer to coercive, unethical activities that create an environment of fear.

Gensteel will deal with complaints of discrimination, harassment, and bullying and/or workplace violence through its Complaints Management process. Where there is an allegation that discrimination, harassment, bullying or workplace violence has occurred **Gensteel** will act promptly to address the alleged behavior, including eliminating the potential for such behavior to reoccur.

In the event of alleged discrimination, harassment, bullying or workplace violence, employee may refer the matter to the JHSC or the President.

Management, supervisors/foreman and workers have a role to play in eliminating discrimination, harassment, workplace violence, bullying, and victimization of work or colleagues.

They should:

- refuse to join in with these types of actions and behaviors; and
- support the person to say 'no' to these behaviors.

Nothing in this policy will be construed as excluding the jurisdiction of any external body competent to deal with alleged harassment, bullying or workplace violence.

Harassment, including sexual harassment, will not be tolerated**.** Violation of this policy may result in immediate removal from **Gensteel 's** project or premises.

Assessing the Workplace

Gensteel is required to assess our workplace for existing or potential violence. We must prepare a report with the results of the assessment and a plan to address potential areas of concern. In carrying out the assessment, we should consider the nature of our work, the types of employees and clients that we work with, our work processes, and our physical environment. **Gensteel** will involve workers in this process. The report and plan will be in writing and available to workers.

Gensteel will cover the following points:

- the right to assist any person subjected to violence
- steps prior to formal reporting
- formal reporting
- no prejudicial treatment for making a complaint
- investigation
- disposition of a complaint
- confidentiality
- evaluation of the procedures
- complaint resolution alternatives

Workplace Training

Gensteel is responsible for ensuring that our policies and procedures concerning workplace violence are understood. Training will include the following components:

- an explanation of the policy and procedures.
- a definition of workplace violence.
- how workplace violence can be prevented or minimized.
- our expectations for behavior in the workplace.
- how to respond to incidents of violence.
- how to obtain assistance; and

- how the reporting, investigating and documenting of workplace incidents will be done.

Response Plan

If there is an occurrence of workplace violence, including an incident that has the *potential* of causing serious injury to a worker, **Gensteel** will respond by carrying out several steps. These steps include:

- conducting an investigation,
- preparing a report that includes actions to prevent a recurrence,
- keeping the report on file for two years,
- ensuring the report is available for inspection by an Occupational Health and Safety Officer and workers affected by the incident.

Victims of workplace violence often require support and reassurance. If a worker is exposed to or experiences an incident of workplace violence, they should be debriefed. One of the purposes of the debriefing should be to ensure the worker understands they are not to blame for the aggressive behaviors directed at them.

Gensteel will ensure that workers are advised to consult a health professional of the worker's choice for treatment or referral.

Implementation Process

Gensteel believes in the prevention of violence and promotes a violence-free workplace in which all people respect one another and work together to achieve common goals. Any act of violence committed by or against any member of our workplace or member of the public, is unacceptable conduct that will not be tolerated. This policy applies to all activities that occur while on firm premises or while engaging in firm business, activities, or social events. Acts of violence can take the form of physical contact. Acts of violence may occur as a single event or may involve a continuing series of incidents.
Abuse in any form erodes the mutual trust and confidence that are essential to **Gensteel's** operational effectiveness. Acts of violence destroy individual dignity, lower morale, engender fear, and break down work unit cohesiveness.

Purpose

The purpose of the policy is to ensure that:

- individuals are aware of and understand that acts of workplace violence are considered a serious offence for which necessary action will be imposed;
- those subjected to acts of workplace violence are encouraged to access any assistance they may require in order to pursue a complaint; and

- individuals are advised of available recourse if they are subjected to, or become aware of, situations involving workplace violence.

Commitment

Gensteel is committed to:

- investigating reported incidents of workplace violence in an objective and timely manner;
- taking necessary action to respond to those incidents; and
- providing support for complainants.

Definition

For the purposes of this policy, firm member includes partners, associates, summer students, support staff, and contract employees. For the purposes of this policy "workplace violence" means the threatened, attempted, or actual conduct of a person that causes or is likely to cause physical injury, whether work related or at a work site.

Examples of workplace violence include, but are not limited to:

- threatening behavior such as shaking fists, destroying property or throwing objects;
- verbal or written threats that express an intent to inflict harm;
- physical attacks;
- any other act that would arouse fear in a reasonable person in the circumstances.

Prohibited Conduct

No employee or any other individual affiliated with this organization shall subject any other person to workplace violence or allow or create conditions that support workplace violence. A member of the firm that subjects another firm member, client, or business associate of the firm to workplace violence may be subject to disciplinary action commensurate to the incident, up to and including dismissal.

Management Responsibilities

For the purposes of this policy, as a supervisor or manager, you are responsible to:

- act respectfully towards other individuals while at work and participating in any work-related activity;
- develop workplace arrangements that minimize the risk of workplace violence;
- promote a non-violent workplace;
- ensure that this policy is explained to all employees that you supervise or manage;
- identify training needs for employees;
- ensure that employees understand who to contact regarding concerns about the policy or when reporting an incident;

- ensure your own immediate physical safety if an incident of workplace violence occurs, then report criminal behavior to the appropriate law enforcement agency and
- ensure the security and safety of all parties involved during an investigation of an incident of workplace violence.

Employees'/Workers' Responsibilities

For the purposes of this policy, employee/worker, you are responsible:

- to act respectfully towards other individuals while at work and participating in any work-related activity;
- to ensure your own immediate physical safety in the event of workplace violence, then to report the incident to the police or a supervisor or manager as the situation warrants; and
- to co-operate with any efforts to investigate and resolve matters arising under this policy

Complaint Procedure

1. Prior to filing a formal report of the incident, a person subjected to workplace violence (the Complainant) should let their objections to the behavior be known to the alleged offender (the Respondent), directly or with the assistance of a third party.
2. A Complainant may ask for support from their immediate supervisor or manager to communicate their objections to the incident and/or to prepare and submit a formal complaint if they choose.
3. The Complainant should carefully record details of the incident including the date and time of the incident, the nature of the violence, and names of people who may have witnessed the incident. This document is the Complainant's personal record and property.
4. The Complainant may choose to file a formal complaint that documents their concerns to the President of **Gensteel .**

Confidentiality

Strict confidentiality is required to properly investigate an incident and to offer appropriate support to all parties involved. Any individual who becomes aware of an incident of violence should not disclose the details of the incident to any third party without prior consultation with the Complainant. Gossiping about an incident seriously undermines the privacy of all parties involved and will not be tolerated. Those with questions or concerns about an incident should speak to their immediate supervisor or manager.

Non-Retaliation

All persons involved in the processing of a complaint will ensure that the Complainant is neither penalized nor subjected to any prejudicial treatment as a result of making the complaint. Disciplinary action will be taken against any person who takes any reprisal against a person who reports workplace violence.

Investigation

Upon receipt of a formal complaint of workplace violence, the immediate supervisor or manager will determine whether an investigation will be pursued, and will:

- advise the Respondent in writing of the investigation and nature and specifics of the complaint;
- advise the Complainant of the investigation; and
- assign the investigation to an internal or external person to investigate.

The investigator will:

- advise all parties to the investigation that they may have representation
- conduct the investigation in accordance with the principles of natural justice; and
- explore all allegations by interviewing the Complainant, the Respondent, and others who may have knowledge of the incident(s) or circumstances that led to the complaint or are responsible for the workplace.

The investigator may make a finding of:

- sufficient evidence to support a finding of violation of this policy,
- insufficient evidence to support a finding of violation of this policy, or
- no violation of this policy.

The investigator must prepare a written report of the investigation's finding, and forward that report to Management within thirty (30) working days from the Respondent being advised of the complaint. Management should make a decision whether to dismiss or act upon the report from the investigator within thirty (30) working days of receiving the report and advise the Complainant and Respondent in writing of the outcome.

Corrective Action and Discipline

If Management decides to act on the report from the investigator the following conditions will be considered when determining corrective action:

- the impact of the incident on the Complainant;
- the nature of the incident;
- the degree of aggressiveness and physical contact;
- the period of time and frequency of the incidents;
- the vulnerability of the Complainant.

The following corrective actions may be considered depending on the particular incident and the factors in the previous paragraph:

- apology;
- training;
- referral to an assistance program;
- reassignment or relocation;
- report to a professional body;
- suspension;
- discharge; and / or
- legal action.

Record Keeping

The documents corresponding to the investigation will be kept on file in a secured location, separate from the Complainant and Respondent's personal files, for two years from the date of the incident to be readily available for inspection by anyone directly affected by the incident, or Ministry of Labour. The investigation report should be kept in a secured location for longer than two years when it is reasonable to do so in the circumstances. Examples of reasonable circumstances include: to wait for the expiration of a limitation period, for the program manager to evaluate the workplace violence policy, and to monitor persons of ongoing concern.

False Accusations

A person who submits a complaint in good faith, even where the complaint cannot be proven, has not violated the policy. If an investigation results in a finding that the Complainant falsely accused the Respondent of workplace violence knowingly or in a malicious manner, the Complainant will be subject to appropriate sanctions, including the possibility of termination. Such action is considered a violation of the policy, and the investigation results and any sanctions will be recorded in **Gensteel** personnel records relating to the Complainant.

Complaint Resolution Alternatives

An individual affected by workplace violence has the right to pursue their concern through alternative forums such as mediation, or other forms of dispute resolution. Nothing in this policy prevents an individual from pursuing other remedies to an incident of workplace violence such as a criminal or civil action, a complaint to the Ontario Human Rights Commission, or a complaint to the Upper Law Society in Ontario.

Reviewed By: Joe Henriques, President

Assistance

An employee or worker with questions, concerns or a complaint regarding workplace violence may contact their supervisor/manager for help and advice. This information will be kept confidential except in the case of an imminent physical threat in the workplace.

Evaluation

This policy will be reviewed on an **annual** basis to ensure that it conforms with any changes to the Occupational Health and Safety Act and its Regulations and that it continues to address the needs of **Gensteel** regarding workplace violence.

PREVENTING AND MANAGING INCIDENTS OF VIOLENCE OR HARASSMENT

Although no incident of workplace violence is deserved, there are steps that will be taken to reduce such incidents in our workplace.

Dealing with a potentially violent person

For verbal communication:

- focus your attention on the other person to let them know you are interested in what they have to say.
- do not glare or stare, which may be perceived as a challenge.
- remain calm and try to calm the other person. do not allow the other person's anger to become your anger.
- remain conscious of how you are delivering your words.
- speak slowly; quietly and confidently.
- speak simply.
- avoid communicating a lot of technical and complicated information when emotions are high.
- listen carefully; do not interrupt or offer unsolicited advice or criticism.
- encourage the person to talk. do not tell the person to relax or calm down.
- remain open-minded and objective.
- use silence as a calming tool.
- acknowledge the person's feelings. indicate that you can see he or she is upset.

Tips for non-verbal behavior and communication:

- use calm body language – relaxed posture with hands unclenched attentive expression.
- arrange yourself so that your exit is not blocked.
- position yourself at a right angle rather than directly in front of the other person.
- give the person enough physical space… this varies by culture, but normally 1 –2 meters is considered an adequate distance.
- get on the other person's physical level. if they are seated, try kneeling or bending over, rather than standing over them.

Do not pose a challenging stance such as:

- standing directly opposite someone
- putting your hands on your hips
- pointing your finger
- waving your arms
- crossing your arms

- do not make sudden movements which can be seen as threatening.
- do not fight. walk or run away. get assistance from security or police.

Responding to a physical attack

If you are attacked:

1. make a scene, yell or scream as loudly as possible. try shouting words like stop, or help.
2. if you are being pulled along or dragged, fall to the ground and roll.
3. blow a whistle, activate your personal security alarm or push the security alarm.
4. give bystanders specific instructions to help you. single someone out and send them for help. for example, “you in the yellow shirt, call the police.”
5. if someone grabs your purse, briefcase or other belongings, do not resist. throw the item to the ground several feet away from the thief and run in the opposite direction, yelling “help”
6. do not chase a thief.
7. run to the nearest safe place, a safe office or an open store.
8. call security or the police immediately after the incident.
9. if the attack does not warrant calling the police, inform your supervisors or the authorities at your workplace.
10. file an incident report.

Be Prepared

- Take a self-defense course.
- Try to imagine yourself responding successfully to different types of attacks.

Practice your responses.

Working Off-Site

If you work away from a traditional office setting you must exercise extra caution. In many cases you have less or no ability to control your work environment. You may require special training to avoid violence by using conflict resolution and mediation tactics. Nevertheless, the following specific preventative tactics or procedures will minimize or prevent risks associated with working off-site:

1. have access to a cellular telephone or similar means of communication.
2. use an established check-in procedure that allows you to manage typical situations you may encounter off-site.
3. prepare a daily work plan so that you and others know where and when you are expected somewhere.
4. arrange to meet in a safe environment.
5. be alert and make mental notes of your surroundings when you arrive at a new or different setting.

6. use the "buddy system", especially when you feel your personal safety may be threatened.
7. determine under which circumstances unaccompanied visiting would involve unacceptable risk.
8. exercise your right to refuse to work in clearly hazardous situations.
9. disclose any feelings of discomfort or apprehension about an impending appointment to your supervisor.
10. do not enter any situation or location where you feel threatened or unsafe.

When you are in unfamiliar premises:

- Check for escape routes and position yourself near an escape route.
- Mentally rehearse what you will do if an individual becomes aggressive or hostile. Decide what your best preventive tactic will be.
- Take control of the seating arrangements. If possible, seat yourself near the door.
- Maintain a "reactionary gap" between you and the person – out of reach of the average person's kicking distance. Increase the gap by sitting at a table. Be aware of the person's proximity at all times.
- Be well prepared for an appointment. Review the available information about the individual(s) you are meeting.
- Terminate the appointment in a non-confrontational manner if the individual appears to be:
    - Intoxicated
    - Under the influence of drugs
    - Emotionally disturbed and threatening or out of control
- Do not allow yourself to be backed into a corner. Leave a clear path to the exit.
- Do not venture too far into the premises e.g. remain near an exit.
- Do not turn your back on the person or enter a room first.

Terminating a Potentially Violent Interaction

- Interrupt the conversation firmly but politely.
- Tell the person that you:
    - do not like the tone of the conversation.
    - will not accept such treatment.
    - will end the conversation if necessary.
    - tell the person that you will ask them to leave the building, or that you will leave (if working off-site).
- If the behavior persists, end the conversation.
- Ask the person to leave the building or leave yourself.
- If the person does not agree to leave, remove yourself from the scene and inform your manager or supervisor immediately.

- Do not return to the person if you believe they pose a physical threat.
- Advise other staff and have them leave the immediate area.
- Call security or your local police.
- File an incident report.

In addition, specific instructions shall be provided when deemed necessary to all employees regarding workplace security hazards unique to their job assignment and workplace.

SAFETY PROCEDURES AND PERMITS

General Information

Work safety procedures may be standard or **site specific**. Standard procedures must be implemented as a minimum and specific as required. Specific procedures may be requested by:

- **Gensteel's** Supervisor/foreman
- Owner of the project/General Contractors
- **Gensteel's** safety consultant

Standard Safety Procedures

The standard safety procedures apply to all employees and sub-contractors unless otherwise noted**.** Employees and sub-contractors are responsible for familiarizing themselves with applicable site-specific procedures such as the pre – start safety orientation by **General Contractors.** Employees and sub-contractors must review these procedures with there supervisor/foreman to determine which procedures are applicable to the project. Sub-contractors are responsible for administering and controlling the activities of their work area**.**

Site Specific Procedures and Permits

- If site specific safety procedures are imposed by the owner of the project or the **General Contractors,** they are responsible to communicate these procedures to **Gensteel's** management during contract negotiating stage and prior to commencement of the work and **Gensteel 's** arrival on the site.
- Specific procedures often require pre-planning, additional training or equipment which often effects budgets, schedule of work and if "last minute" carried out, safety of the workplace parties or public.
- It is not uncommon that Safety representatives or consultants representing our clients approach our staff in the field requesting specific procedures that were not addressed during pre-start project safety orientation or in our clients written policies.
- Some requests may not be reasonable under circumstances or given time frame to address. In these circumstances contact **Gensteel 's** office for further instructions.
- Where project specific safety procedures are initiated by **Gensteel 's** management or our assigned safety consultant crew supervisors/foreman and our sub-contractors are responsible for implementation of this policy.

Reviewed By: Joe Henriques, President

HOUSEKEEPING POLICY

General Information

Good housekeeping is mandatory**.** Work areas must be kept neat, clean, and orderly at all times.

Housekeeping Procedures

- Keep work areas, passageways, fire exits, fire lanes, and stairs/ladders in and around the buildings and structures clear of debris at all times.
- Store materials, equipment, and tools in an orderly manner that prevents tipping, rolling or collapsing.
- Keep all materials, tools and equipment at least 1.8m away from the edge of unguarded roof perimeters or openings.
- Clean the work area daily and dispose of debris in dumpsters, or off site in accordance with the environmental requirements.

Reviewed By: Joe Henriques, President

POLICY ON AIRBORNE DISEASES

Management is committed to providing a safe, healthy environment at all of our operating locations. We are dedicated to identifying, correcting and preventing health, safety and environmental hazards that could adversely affect our employees, customers or the general public.

Management is committed to ensuring that all applicable regulatory health, safety and environmental protection requirements are complied with and that adequate resources are provided to ensure the health and safety of our employees as well as the preservation of the environment to this end.

It is our policy to provide a healthy and safe work environment for employees at every level through awareness and prevention of occupational injuries and illness. The objective of our company's Health and Safety Program is to reduce work-related accidents (thereby injuries) and illness and to promote health and safety in every task undertaken by employees on behalf of the company.

Concerns & Background

An airborne disease is any disease that is caused by pathogens that can be transmitted through the air. Such diseases include many of considerable importance both in human and veterinary medicine. The relevant pathogens may be viruses, bacteria, or fungi, and they may be spread through breathing, talking, coughing, sneezing, raising of dust, spraying of liquids, toilet flushing or any activities which generates aerosol particles or droplets. Human airborne diseases do not include conditions caused by air pollution such as Volatile Organic Compounds (VOCs), gases and any airborne particles.

Airborne Diseases

You can catch some diseases simply by breathing. These are called airborne diseases. Airborne disease can spread when an infected person coughs, sneezes, or talks, spewing nasal and throat secretions into the air. Certain viruses or bacteria take flight and hang in the air or land on other people or surfaces.

When you breathe airborne pathogenic organisms in, they take up residence inside you. You can also pick up germs when you touch an infected surface, and then touch your own eyes, nose, or mouth. Because these diseases travel in the air, they're hard to control. Keep reading to learn more about the common types of airborne diseases and what you can do to protect yourself from catching them.

Types of Airborne Diseases

Many diseases are spread through the air, including these:

The Common Cold

Millions of cases of the common cold occur each year. Most adults get two or three colds a year. Children tend to get them more frequently. The common cold is the top reason for absences at school and work. There are many viruses that can cause a cold, but it's usually a rhinovirus.

What is the common cold?

The common cold is an upper respiratory infection caused by a virus. There are more than 200 different viruses can cause the common cold. However, the rhinovirus is most often the one that makes people sneeze and sniffle. It's highly contagious. Though you can catch a cold at any time of year, colds are more common during the winter months. This is because most cold-causing viruses thrive in low humidity.

Colds spread when someone who's sick sneezes or coughs, sending virus-filled droplets flying through the air.

You can get sick if you touch a surface (such as a countertop or doorknob) that has recently been handled by an infected person and then touch your nose, mouth, or eyes. You're most contagious in the first two to four days after you're exposed to the cold virus.

Colds usually clear up within 7 to 10 days. See a doctor if:

- your cold hasn't improved in about a week
- you start to run a high fever
- your fever does not go down

Influenza

Most of us have some experience with the flu. It spreads so easily because it's contagious about a day before you notice the first symptoms. It remains contagious for another five to seven days. If you have a weakened immune system for any reason, you can spread it to others for longer than that. There are many strains of the flu, and they are constantly changing. That makes it difficult for your body to develop immunities.

What is the seasonal flu?

Influenza — or the flu, as it's better known — is another upper respiratory illness. Unlike a cold, which can hit at any time of year, the flu is generally seasonal. Flu season usually runs from fall to spring, peaking during the winter months.

During flu season, you can catch the flu in the same way you'd pick up a cold: By coming into contact with droplets spread by an infected person. You're contagious starting one day before you get sick and up to 5 to 7 days after you show symptoms.

The seasonal flu is caused by the influenza A, B, and C viruses, with influenza A and B being the most common types. Active strains of influenza virus vary from year to year. That's why a new flu vaccine is developed each year.

Unlike the common cold, the flu can develop into a more serious condition, such as pneumonia.

This is especially true for:
- young children
- older adults
- pregnant women
- people with health conditions that weaken their immune system, such as asthma, heart disease, or diabetes

Guidelines

Here are some basic guidelines for telling the difference between cold and flu symptoms, and what to do if you have either one of these infections.

How to spot the difference

Viruses cause colds and the flu. Both are respiratory infections. The simplest way to tell the difference is by looking at your symptoms.

If you have a cold, you'll probably have symptoms like these:

Symptoms

Airborne diseases usually result in one or more of the following symptoms:
- inflammation of your nose, throat, sinuses, or lungs
- coughing
- sneezing
- congestion
- runny nose
- sore throat
- swollen glands
- headache
- body aches
- loss of appetite
- fever and fatigue

Flu symptoms can include:

- dry, hacking cough
- moderate to high fever, although not everyone with the flu will run a fever
- sore throat
- shaking chills
- severe muscle or body aches
- headache
- stuffy and runny nose
- severe fatigue that may last up to two weeks
- nausea and vomiting, as well as diarrhea (most common in children)

Colds come on gradually over a few days and are often milder than the flu. They usually get better in 7 to 10 days, although symptoms can last for up to 2 weeks.

Flu symptoms come on quickly and can be severe. They usually last 1 to 2 weeks. Use your symptoms as a guide to figure out which condition you have. If you think you might have the flu, see your doctor to get tested within the first 48 hours of showing symptoms.

Prevention

Although it's impossible to completely avoid airborne pathogens, there are some things you can do to lower your chances of getting sick:

- avoid close contact with people who have active symptoms of disease.
- stay home when you're sick. don't let vulnerable people come in close contact with you.
- if you must be around others, wear a face mask to prevent spreading or breathing in germs.
- cover your mouth when you cough or sneeze. use a tissue or your elbow to cut down on the possibility of transmitting germs on your hands.
- wash your hands thoroughly (at least 20 seconds) and often, especially after sneezing or coughing.
- avoid touching your face or other people with unwashed hands.

Some ways to prevent airborne diseases include washing hands, using appropriate hand disinfection, getting regular immunizations against diseases believed to be locally present, wearing a respirator and limiting time spent in the presence of any patient likely to be a source of infection. Exposure to a patient or animal with an airborne disease does not guarantee receiving the disease. Because of the changes in host immunity and how much the host was exposed to the particles in the air makes a difference to how the disease affects the body.

Antibiotics are not prescribed for patients to control viral infections. They may however be prescribed to a flu patient for instance, to control or prevent bacterial secondary infections. They also may be used in dealing with air-borne bacterial primary infections, such as pneumonic plague.

Many public health specialists recommend social distancing to reduce the transmission of airborne infections.

Vaccines can reduce your chances of getting some airborne diseases. Vaccines also lower the risk for others in the community.

How To Prevent A Cold?

Avoidance

Because colds spread so easily, the best prevention is avoidance. Stay away from anyone who's sick. Don't share utensils or any other personal items, such as a toothbrush or towel. Sharing goes both ways — when you're sick with a cold, stay home.

Good Hygiene

Practice good hygiene. Wash your hands often with hot water and soap to get rid of any germs you might've picked up during the day or use an alcohol-based hand sanitizer.
Keep your hands away from your nose, eyes, and mouth when they're not freshly washed. Cover your mouth and nose when you cough or sneeze. Always wash your hands afterward.

How To Treat The Flu?

In most cases, fluids and rest are the best ways to treat the flu. Drink plenty of fluids to prevent dehydration. Over-the-counter decongestants and pain relievers, such as ibuprofen and acetaminophen, may control your symptoms and help you feel better.

However, never give aspirin to children. It can increase the risk of a rare but serious condition called Reye's syndrome. Doctor's may prescribe antiviral drugs.

These drugs can shorten the duration of the flu and prevent complications such as pneumonia.

However, they may not be effective if not started within 48 hours of getting sick.

When to Call A Doctor

If you're at risk of complications from the flu, call your doctor when you first have symptoms.

People at risk of serious complications include:

- people over the age of 65
- pregnant women
- women who are two weeks postpartum
- children under age of 2
- children under age 18 taking aspirin

- those with weakened immune systems due to HIV, steroid treatment, or chemotherapy
- people who are extremely obese
- people with chronic lung or heart conditions
- people with metabolic disorders, such as diabetes, anemia, or kidney disease
- people living in long-term care facilities, such as nursing homes

Contact your doctor right away if your symptoms do not improve or if they become severe. See your doctor if you have signs of pneumonia, including:

- trouble breathing
- severe sore throat
- cough that produces green mucus
- high, persistent fever
- chest pain

Call a doctor right away if your child develops the following symptoms:

- trouble breathing
- irritability
- extreme fatigue
- refusing to eat or drink
- trouble waking up or interacting
- what you can do to prevent spreading an airborne disease
- although it's impossible to completely avoid airborne pathogens, there are some things you can do to lower your chances of getting sick:
- avoid close contact with people who have active symptoms of disease.
- stay home when you're sick. don't let vulnerable people come in close contact with you.
- if you must be around others, wear a face mask to prevent spreading or breathing in germs.
- cover your mouth when you cough or sneeze. use a tissue or your elbow to cut down on the possibility of transmitting germs on your hands.
- wash your hands thoroughly (at least 20 seconds) and often, especially after sneezing or coughing.
- avoid touching your face or other people with unwashed hands.

About the Coronaviruses

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases. Some coronaviruses transmit between animals, some between animals and people, and others from people to people.

Symptoms of Coronavirus Infections (Covid-19)

Coronavirus infections are common and typically lead to the common cold. Gastrointestinal disease is possible for young infants.

Symptoms are usually mild to moderate and can include:

- runny nose
- headache
- cough
- sore throat
- fever
- a general feeling of being unwell
- loss of taste and smell

Although rare, other types of coronavirus infections cause illnesses such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS) can produce more severe illnesses such as pneumonia, respiratory failure, kidney failure, or even death.

If You Get A Coronavirus Infection

If you have cold-like symptoms, you can help protect others by doing the following:

- **stay home while sick.**
- avoid close contact with others.
- cover your mouth and nose with a tissue when you cough or sneeze, then throw the tissue in the trash and wash your hands.
- clean and disinfect objects and surfaces.

How coronavirus infections are diagnosed

Coronavirus infections are diagnosed by a health care provider based on symptoms and laboratory tests.

In some cases, travel history may be important.

Coronavirus Infection Treatment

For now, there is no specific treatments for most people with coronavirus infection. Most people with common coronavirus illness will recover on their own. Your health care provider may recommend steps you can take to relieve symptoms.

Consult your health care provider as soon as possible if you are concerned about your symptoms or have a travel history to a region where severe coronaviruses are known to occur. The sooner you get treatment, the better your chances are for recovery.

Reviewed By: Joe Henriques, President

Responsibilities

Education and Training

Management will provide job - or task - specific education and training on preventing transmission of infectious agents associated with our daily tasks and site-specific locations.

Updated information will be periodically communicated to our workers during ongoing educational programs.

Other Practices

- follow good infection control practices.
- meet applicable requirements for personal protective equipment (PPE) and respirators. care must be taken to put on and remove PPE properly.
- wear gloves - use good handing washing techniques after removing gloves, and dispose of gloves in properly labelled containers.
- if you might be splashed, sprayed or spattered with body fluids, wear face and eye protection such as full-face shield or surgical masks with goggles. aprons or other fluid-resistant clothing must also be worn.
- if you are asked to clean a surface that may be contaminated, your employer is responsible for ensuring you are protected and that appropriate procedures are followed.
- training about the sources of exposure and appropriate precautions is provided.

Any worker who may believe that they have been infected or is showing symptoms of any of the signs as indicated in this policy; please contact management or immediate supervisor for further instructions.

Reviewed By: Joe Henriques, President

INFECTIOUS DISEASE PANDEMIC PLAN

Having a contingency plan to address business interruptions due to a pandemic is in everyone's best interest and to this end **Gensteel** has devised the following protocols to protect our workers and our business interests.

Coughing Etiquette

To curtail the spread of typical illnesses such as colds, the flu, and other contagious conditions all employees should adopt the following protocols.

Wash your hands frequently, particularly when touching common items among public places such as escalator rails, door handles, etc.

Try to keep at least six feet (two metres) away or further from other people at all times and when you feel a cough or sneeze is coming on and use a handkerchief or cough onto your elbow so you limit the airborne spread of germs and viruses.

The following protocols will be adopted:

The project superintendent may arrange with management to provide skin temperature readout devices, if feasible, so workers entering project can be tested for high temperatures associated some viral and bacterial infections. High readouts may require the supervision to prevent the worker from entering project and worker be compelled to seek medical checkup.

All employees will be briefed on proper hygiene and educated on the symptoms to look for.

Employees will also be given instructions on how best to avoid contraction related to their job assignments. Suitable disinfection wash stations will be posted throughout our projects.

Workers who can work out of their homes, will be asked to do so. Our office personnel will most likely be able to do this. Also, social distancing can include eating at your desks and appropriate spacing of workstations.

Workers will be asked to take their work clothes, footwear, etc. home with them at end of shift and avoid suiting up among others in our trailers. Recommend that all trailers be locked to avoid social gathering. Workers will also be required to take their breaks, in the open (not in trailers) and separate from each other. We must avoid gathering in confined spaces.

1. Employees having to enter the offices, or our shops will be required to disinfect their hands using waterless hand cleansers at designated disinfection stations.
2. Employees will be asked to communicate by telephone as much as possible rather than having close-up conversations person to person. Remember to keep at least six feet away from the person you're talking to, to minimize the risks of sustaining airborne germs and

viruses. Employees will be asked to avoid personal contact such as handshaking and hugging.

3. Employees will be asked to avoid public transit and other public places as much as practicable. All efforts should be made to minimize contact as much as possible. Also, workers will be asked not to carpool to and from the worksites; if carpooling is deemed necessary, all occupants of the vehicle to wear face coverings and a supply of hand sanitizer be made readily available for all occupants.
4. Avoid touching possible contaminated items such as public phones, rails, switches, controls, etc. should be avoided as much as possible. If necessary, disinfect before contact.
5. Avoid rubbing your hands onto your eyes, mouth, nose etc. as these are primary entry point into the body. Keep your hands away from your face.
6. Glove protection may be useful if a worker must handle or touch such public items as mentioned above. Remember that viruses can survive on surfaces for several days, so such protection as gloves and masks should be treated as one-time disposable items. Must be disposed in a safe manner and you must wash your hands after handling.
7. Special air filtration systems may be implemented to filter out particulates of less than <5 microns where possible. HEPA filtering systems can address this. Useful in ventilation systems and choice of protection for face masks.
8. Also, the introduction of fresh air into our offices or good heap ventilation exchange air rates will assist. Stagnant air can harbor viruses for hours on end.
9. When cleaning our shops and offices, a wet mop method using a suitable disinfectant will work best in limiting the spread of bacteria, viruses and dust.
10. For diseases such as West Nile Virus, Yellow Fever, etc., standing pools of water around our work locations will be eliminated if possible and if necessary appropriate larvicides will be introduced to prevent the infestation of mosquitoes that can carry these diseases.
11. Travel restrictions map be placed to certain parts of the world due to disease outbreaks. These areas will be identified for the benefit of our employees and families.
12. In some circumstances, in order to avoid public association, we may set up alternate work shifts (ghost shifts) so we work at night hours when businesses are closed.

In closing such a critical situation deserves the personal approach towards our workers and their families. Our policy will be to grant sick time leave to our workers who feel compelled to stay home and deal with sick family members and certainly to stay home if one becomes ill so as not to spread the illness among others in our work force.

Gensteel will maintain a working relationship with the medical authorities to the benefit of our workforce.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

General Information

- **All employees are required to provide and use their own personal protective equipment as required for the task and as prescribed by OHSA and Regulations for Construction Projects, manufacturer's instructions, as well as Gensteel 's policies.**
- This section defines the requirements for the use of personal protective equipment to control or eliminate hazards or exposure to illness or injury.
- Unless otherwise noted, sub-contractors are to provide the required and needed personal protective equipment, medical clearance, and the training described in this section and are responsible for the compliance of their employees**.**
- Employee or sub – contractor who refuses to use the prescribed personal protective equipment or wilfully damages this equipment will be subject to the disciplinary procedures.
- Employees must be trained on the use, inspection, care, and storage of all personal protective equipment.
- **ALL WORKERS are required to provide their own safety equipment to the job site and ensure that they are worn at all times and used in accordance with manufacturer's instructions.**
- **Workers performing one-time non-standard jobs (materials which are not standard with Gensteel's work e.g.: aluminum) as per Gensteel's requirements, Gensteel will provide the PPE required for the task**
- **Gensteel as the employer will ensure that these requirements are met with all workers on their jobsite.**
- Prior to use of any PPE, SDS (Safety Data Sheets) will be reviewed and the hazard will be assessed and follow the legislative guidelines to determine the proper selection of personal protective equipment. All personal protective equipment must be CSA approved/ANSI Standards were applicable. Supervisors will need to assess the exposure to the workplace hazards and determine the appropriate personal protective equipment that will adhere to any regulatory requirements.

Head Protection

Wearing a CSA approved, non-conductive safety hat is mandatory in construction areas and designated areas at all times**.**

Inspecting and Maintaining

Proper care is required for the hard hat to work properly. The service life of the hard hat is

determined by many factors such as temperature, chemicals, sunlight and ultraviolet radiation (welding).

The usual maintenance of the headgear is by washing it with a mild detergent and rinsing it thoroughly.

Do:
- replace hard hats that have been damaged by cracks, becomes brittle, etc.
- replace hard hats that have been subjected to blows even if the damage is not visible
- replace any hard hat components as suggested by manufacturer's instructions
- refer to the OHSA and its regulations for compliance or from the manufacturer of the hard hat.

Don't:
- alter the hard hat (shell, insulation etc.) in any way
- paint or use any chemicals on the hard hat; this could cause the shells to become weak
- use any liner that has metal or any other conductive materials
- use any hard hats or components if there are visual signs of defects
- carry anything in the hard hat while wearing it
- drill, remove peaks or alter the shell or suspension of the hard hat in any way
- put chin straps over the brims of the Class E hard hat

Eye/Face Protection

Eye/Face protection is required when employee is exposed to potential of eye/face injury. Employees must wear appropriate eye and face protection during certain tasks, including but not limited to:

- welding, burning, or cutting with torches
- using abrasive wheels, grinders, circular saws, or files
- chipping concrete, stone, or metal
- working with materials subject to scaling, flaking, or chipping
- drilling
- working under dusty conditions
- using powder-actuated or pneumatic tools
- working with compressed air or gases
- working with chemicals or hazardous materials
- using chop saws or similar equipment
- working in the immediate area of operations listed above
- contact lenses may trap or absorb particles or gases causing eye irritation or blindness; hard contact lenses may break into the eye.
- basic eye protection shall be worn with face shields; face shields alone aren't enough to fully protect the eyes from work hazards. When eye and face protection are required, refer to Safety Data Sheets (SDS) or your supplier.

- ensure the eye protection fits properly and are cleaned on a regular basis. Do not modify eye or face protection which is CSA approved.
- safety eyewear must meet the requirements of CSA Standard CAN/CSA-Z94.3-92

Welders and their helpers are required to wear a full-face shield or helmet when welding or working around a welding area. Any workers in the area where welding occurs, they must also wear eye protection if a welding shield is not in place to protect them against a flash.

Hardened glass prescription lens and sport glasses are not an acceptable substitute for proper, required industrial safety eye protection.

Do:
- ensure that your eye protection fits properly and close to the face for protection
- wear eye protection that is comfortably fitting. clean safety classes on a daily basis and as often as required
- safety glasses should be stored in a safe and clean dry place when it is not in use
- any safety glasses that has visible signs of damage, scratches etc. should be replaced

Don't
- change or modify any eye and face protection
- wear or use any eye or face protection that is not CSA certified
- wear contact lenses in any area of the workplace where particles, falling debris and gases are present.

Respiratory Protection

- respiratory protection devices approved by CSA must be worn by employees exposed to hazardous concentrations of dust, fumes, mists, gases, smoke, sprays, vapours or other hazards.
- consult SDS for site specific products and permissible concentrations.
- workers wearing respiratory equipment shall (**by worker**) have received medical clearance, adequate training on use, cleaning and storage of the equipment.

Respirator Selection

In order to select the proper respirator for a particular job, it is necessary to know and understand:

- the characteristics of the contaminant(s),
- the anticipated exposure conditions,
- the performance limitations of the equipment,
- any legislation that applies.

Refer to the Safety Data Sheet (SDS) or sheets if more than one product is being used. The SDS

will identify any respiratory protection required and should specify the type of respirator to be worn.
It is also important to realize that facial hair and deep facial scars can interfere with the seal between the respirator and face. Respirators should only be selected by someone who understands all of these factors.

If there is any doubt about the correct type of protection for a specific material and operation, consult the manufacturer of the product, a supplier or manufacturer of respirators, or the IHSA.

Fit Testing

Before each use, you must perform a Positive and Negative pressure test. This applies to respirators only. If the required protection is a filtering half facepiece (dust mask) then follow manufacturer's instructions.

Negative Pressure Test

The wearer puts on the respirator and adjusts it so that it feels relatively comfortable. Then the air inlets are blocked off with the hands or a plastic cover, and the wearer inhales gently. If the respirator is properly fitted, it should collapse slightly and not permit any air into the facepiece. If leakage is detected, the mask should be readjusted, and the test repeated until the fit is satisfactory.

Positive Pressure Test

The wearer puts on the respirator and adjusts it so that it feels relatively comfortable. Then the exhaust port of the respirator is covered, and the wearer tries to exhale gently. The face piece should puff away from the wearer, but no leakage should occur.

General Instructions:

Filters should be changed as follows:
- dust/mist/fume filters should be changed when there is noticeable resistance to normal breathing.
- chemical cartridge respirators should be changed when the gas or vapour can be tasted or smelled.
- any filter should be changed at the interval specified by the manufacturer or when damaged in any way.

Do
- train workers specifically in the care, use and instructions of respirators
- ensure that respirators are properly cleaned and disinfected after each shift and according to the manufacturer's instructions
- ensure workers are readily protected by:

a. Stored in a readily accessible location
b. Stored in a manner that prevents its contamination
c. Maintained in a clean and sanitary condition
d. Inspected before and after each use to ensure its in satisfactory working condition
e. Serviced and used in accordance with the manufacturer's instructions

- dispose of exhausted cartridges and masks in sealed bags or containers
- keep new and unused filters separate from the old and used filters
- monitor the use of respirators and that they are worn properly
- replace filters when breathing becomes difficult.

Don't

- use respirators where oxygen content in the air is less than 19.5%
- use for protection against materials which are toxic in small amounts
- use with materials that are highly irritating to the eyes
- use respirators if their effectiveness is in question
- use with gases that cannot be detected by odour or throat irritation
- use with gases not effectively halted by chemical cartridges regardless of the concentration (refer to the cartridge label)

Refer to the OHSA and its Regulations for Construction Projects (O. Reg. 213/91)

Hearing Protection

- Hearing protection is designed to reduce the level of sound energy reaching the inner ear.
- Any sound over 85 dba requires hearing protection. Hearing loss can be very gradual, usually happening over a number of years.
- The most common types of hearing protection in the construction industry are earplugs and earmuffs.
- It is important to have different styles of hearing protection available. Different styles allow for better fit.
- Most earplugs, if properly fitted, generally reduce noise to the point where it is comfortable (takes the sharp edge off the noise).
- If your hearing protection does not take the sharp edge off the noise, or if workers have ringing, pain, headaches or discomfort in the ears, your operation requires the advice on an expert.

Maintenance

Disposable foam earplugs may be worn a couple of times if you wipe them off after each time they are worn. However, after about three wearings, the earplugs noise reduction ability will diminish. Wiping off the earplugs removes excess earwax, bacteria and dirt that could lead to infections in the ear canal. Always be certain your earplugs are clean and dry before insertion.

Wash earmuffs with a mild liquid detergent in warm water and then rinse in clear warm water.

Do

- wear hearing protection when working around heavy equipment or tools.
- inspect single-use ear plugs prior to fitting; check for damage or extreme hardness
- replace earmuffs if cracked or if foam is exposed on outer ring.
- insert ear protection (disposable plugs) properly for best protection

Don't

- allow gaps between your head and earmuffs
- use harsh abrasives to clean the earmuffs
- allow the sound-attenuating materials inside the ear cushions to get wet.

Noise - Ontario Regulation 381/15

New Noise Regulation:

- prescribing, for workers exposed to noise, a maximum time-weighted exposure limit of 85 decibels over an eight-hour work shift
- requiring employers to put in place measures to reduce workers' exposure based on a "hierarchy of controls", which could include engineering controls, work practices, and the use of personal protective equipment in the form of hearing protection devices and
- requiring employers who provide a worker with a hearing protection device to provide adequate training and instruction on that device

Duty to protect workers

2. (1) Every employer shall take all measures reasonably necessary in the circumstances to protect workers from exposure to hazardous sound levels.

(2) The protective measures shall include the provision and use of engineering controls, work practices and, subject to subsection (5), hearing protection devices.

(3) Any measurement of sound levels in the workplace that is done in order to determine what protective measures are appropriate shall be done without regard to the use of hearing protection devices.

(4) Without limiting the generality of subsections (1) and (2), every employer shall ensure that no worker is exposed to a sound level greater than an equivalent sound exposure level of 85 dBA, Lex, 8.

(5) Except in the circumstances set out in subsection (6), the employer shall protect workers from exposure to a sound level greater than the limit described in subsection (4) without requiring them to use and wear hearing protection devices.

(6) Workers shall wear and use hearing protection devices appropriate in the circumstances to protect them from exposure to a sound level greater than the limit described in subsection (4) if engineering controls are required by subsections (1) and (2) and,

(a) are not in existence or are not obtainable;
(b) are not reasonable or not practical to adopt, install or provide because of the duration or frequency of the exposures or because of the nature of the process, operation or work;
(c) are rendered ineffective because of a temporary breakdown of such controls; or
(d) are ineffective to prevent, control or limit exposure because of an emergency.

(7) Where practicable, a clearly visible warning sign shall be posted at every approach to an area in the workplace where the sound level, measured as described in subsection (3), regularly exceeds 85 dBA.

Footwear

- Employees must wear CSA approved safety boots at all times**.**

The tag colour on the boots indicates the amount of resistance the toe will supply to different weight dropped from different heights.

The green symbol on the boot will indicate the strength of the sole. For example, it designates a puncture resistant sole able to withstand 135 kg. of pressure, (300 ft. lbs.) without being punctured by a 5 cm. nail.

Gensteel requires only the green triangle grad of footwear, with a 6" minimum height from the bottom of the sole to the top of the boot to be used on our job site.

Do:
- wear only CSA approved footwear and according to the job hazard
- laces must be laced up securely to prevent tripping hazards
- protect the boots with an effective boot dressing to help the boot last longer and provide greater water resistance (wet boots conduct currents)
- choose foot protection that is high cut that will provide ankle support and fewer injuries
- replace any defective or torn safety footwear (i.e.: exposed steel toe caps)

Don't
- modify any footwear in any way
- under protect your feet

Hand and Skin Protection

- wear appropriate hand protection when handling objects or substances that could cut, burn, injure the hand, or be absorbed into the skin, and when exposed to harmful temperature extremes.
- shirts with sleeves must be worn at all times.
- long pants are mandatory and must be worn over safety boots and not tucked in.

- wear cotton fabrics and not polyester.
- Use fire retardant clothing or protection when welding.

When selecting PPE, keep in mind:
- look for anything at the job site that may be hazardous to the hands
- selecting the proper type for the job that is to be done
- inspect and maintain PPE regularly

If in doubt about the selection or require hand PPE, ask your supervisor for assistance; always refer to the supplier/manufacturer, Safety Data Sheets (SDS) or the Occupational Health and Safety Act and its Regulations.

Do
- inspect hand PPE for defects before using them
- wash all chemicals and fluids off gloves before removing them
- ensure that the gloves fit properly
- use the proper hand PPE for the job
- follow manufacturer's instructions on the care and use of the PPE that you will be using
- ensure that any exposed skin is covered; no gaps between the sleeve and the hand PPE

Don't
- wear gloves when working with moving machinery; gloves can get tangled or caught
- wear hand PPE with metal parts near any electrical equipment
- use gloves or hand protection that is worn out or defective

Limb and Body Protection

Since there are a number of different hazards associated on a construction site that cannot completely cover specialized limb and body protection in full details. These types of hazards are known as job exposures (exposures to fire, temperature extremes, body impacts, corrosive, molten metal, cuts from sharp or abrasive materials).

Personal protective equipment in this category would be items such as:
- full body suits,
- leather aprons and leggings,
- specialty hand pads and grips,
- leg, arm, chin and belly guards
- flame and chemical resistant clothing and various types of plastic boot covers and overshoes

Further information on these specialty PPE, ask your supervisor, or consult the SDS or the Occupational Health and Safety Act and its Regulations.

As with all personal protective equipment, follow the manufacturer's instructions on the care and

cleaning is vital and will help the longevity of the specialized equipment.

WORKING AT HEIGHTS

Ministry of Labour has introduced new standards and requirements for working at heights training for workers on construction projects.

Falls from heights are a major hazard for workers and are one of the leading causes of critical injuries and fatalities in Ontario workplaces. This change focuses on the construction sector because the number of fatalities due to falls from heights on construction projects is disproportionally large compared to other workplaces. Employers, supervisors and workers will all benefit from the implementation of the working at heights training standards because they set a minimum standard for high quality, consistent training for the high-hazard activity of working at heights.

Ministry of Labour's new requirements for working at heights training:

The Occupational Health and Safety Awareness and Training (O. Reg. 297/13) will require employers to ensure that workers on construction projects successfully complete a working at heights training program if they use specified fall protection systems. The program must be approved by the Chief Prevention Officer (CPO) and must be delivered by a training provider approved by the CPO.

As of April 1, 2015, the new training requirements is mandatory for workers on construction projects who use any of the following methods of fall protection:

- travel restraint system
- fall restricting system
- fall arrest system
- safety net
- work belt or
- safety belt

The new requirements must be met in addition to existing training requirements for workers who use fall protection systems on construction projects, as set out in the Construction Projects Regulation (O. Reg. 213/91). Subject to the transition provisions – see question below.

When do the new mandatory working at heights training requirements come into force?

The new mandatory working at heights training regulatory requirements come into force on April 1, 2015. However, a **two-year transition period** will apply to workers who received adequate training in the use of fall protection systems, as required by Section 26.2 of the Construction Projects Regulation, prior to April 1, 2015.

Who will need to complete the new mandatory working at heights training?

Workers on construction projects must successfully complete the training if they are required by the Construction Projects Regulation to use a:

- travel restraint system
- fall restricting system
- fall arrest system
- safety net
- work belt or
- safety belt

Workers have an additional two years to complete the new working at heights training if they received training, prior to April 1, 2015, that meets the current training requirements, in Section 26.2 of the Construction Projects Regulation. Employers would need to ensure workers who complete an approved working at heights training program also complete any training currently required by the Construction Projects Regulation. The new working at heights training requirements applies only to workers who are required by the Construction Projects Regulation to use any of the following methods of fall protection:

- travel restraint system
- fall restricting system
- fall arrest system
- safety net
- work belt or safety belt

Whether a particular activity is considered to be maintenance or construction will continue to be determined on a case-by-case basis, subject to specific workplace conditions and an initial assessment of the situation. The training is valid for **three years** from the date of successful completion of an approved program.

Reviewed By: Joe Henriques, President

WORKING AT HEIGHTS COMPLIANCE REQUIREMENTS

WARNING! No worker shall be exposed to heights greater than three meters (10 feet) when near an unguarded edge to a floor, roof, platform or opening. Any person not complying shall be subjected to immediate stop work and disciplinary action. Fall protection is also required if a worker may fall into operating machinery, into water or other liquids, into or onto hazardous substances or objects regardless of height.

Equipment Standards and Set-Up

All fall protection system components used must carry a C.S.A. label and meet the C.S.A. National Standards of Canada standards as stated in Section 26.1 (3) of the Ontario safety regulations for Construction Projects – July 2014 edition. The lanyard or lifeline/lanyard combination must be secured to a permanent or temporary fixed support capable of resisting a static force 3600 to 5000 lbs for fall arrest (without a shock absorber) and 2700 lbs for fall arrest (with a shock absorber), 2700 lbs for fall restriction protection and a minimum of 900 lbs for travel restraint use. The makeup and adjustment of the fall protection system must not subject the wearer who falls, to a peak arrest *force greater than 1800 lbs.*

Lifelines and Set-Up

All lifelines shall be:

- CSA standard Z259.2.5-12 – polypropylene blend rope.
- used only by one worker at a time.
- free of any cuts, abrasions, other defects and protected against chaffing.
- long enough to reach the ground or be knotted at the end.
- connected at right angles to the worker's position.
- provided with a rope grab (cam lever) device of lanyard attachment.

Travel Restraint Protection

This is the second preferred method of fall prevention, as this setup prevents a worker to reaching an unguarded edge, such as a typical floor slab exposure. This consists of a suitable anchorage point capable of resisting a static force load of 900 lbs. Although the applicable legislation allows for waist type belts it is the policy of **Gensteel** to require all workers to wear and use **- FULL BODY HARNESSES ONLY!** This system must be adjusted so the worker cannot reach an exposed edge, therefore if he or she should trip or lose their balance they will fall on the work surface.

NOTE:

ALL WORKERS SHOULD SET UP FOR TRAVEL RESTRAINT PROTECTION IF AT ALL POSSIBLE. FALL ARREST SETUPS SHOULD ONLY BE USED AS A LAST RESORT.

Fall Arrest Protection

In the normal course of setting up for Fall Arrest protection where a worker is not at risk of "Bottoming Out " - that is hitting an object, level or ground below the work, it is expected that a Shock Absorber Device will be part of the worker's fall arrest equipment setup. Shock absorber devices assist in limiting the peak arrest forces applied the wearer in a fall to 1800 lbs or less. However, if a risk of "Bottoming out" exists, the following applies:

Exception Ruling - Removal Of Shock Absorber Device

Section 26.6 (4) of OH & S Regulations states that the fall arrest system shall not include a shock absorber device, if wearing or using one could cause a worker to hit the ground, an object or level below the work. Without the use of a shock absorber device, we expect the wearer to shorten up on his or her system components in order to minimize the amount of free fall.

Fall Restriction Protection

This consists of an assembly of components that is attached to an adequate fixed support on the project and is designed and arranged in accordance with the manufacturer's instructions, so that a worker's fall distance does not exceed 0.6 meters [2 feet].

Temporary or Permanent Anchors

All designated anchor points must be predetermined by competent and qualified person and meet the requirements under OHSA and regulations as well as Ontario Building Code.

A permanent anchor system shall be used as the fixed support in a fall arrest system, fall restricting system or travel restraint system if the following conditions are met:

1. The anchor system has been installed according to the *Building Code*.

2. It is safe and practical to use the anchor system as the fixed support.

(2) If the conditions set out in subsection (1) are not met, a temporary fixed support shall be used that meets the following requirements:

1. A support used in a fall arrest system shall be capable of supporting a static force of at least 8 kilonewtons (1800 lbs of force)) without exceeding the allowable unit stress for each material used.

2. If a shock absorber is also used in the fall arrest system, the support shall be capable of supporting a static force of at least 6 kilonewtons (1350 lbs force) without exceeding the allowable unit stress for each material used.

3. A support used in a fall restricting system must be capable of supporting a static force of at least 6 kilonewtons (1350 lbs force) without exceeding the allowable unit stress for each material used.

4. Paragraph 3 does not apply to a support that is used in accordance with the manufacturer's written instructions and is adequate to protect a worker.

5. A support used in a travel restraint system shall be capable of supporting a static force of at least 2 kilonewtons (450 lbs force) without exceeding the allowable unit stress for each material used.

(3) Despite the requirements listed in subsection (2), the support capacity of a temporary fixed support used in a fall protection system may be determined by dynamic testing in accordance with good engineering practice to ensure that the temporary fixed support has adequate capacity to arrest a worker's fall.

(4) A fixed support shall not have any sharp edges that could cut, chafe or abrade the connection between it and another component of the system. O. Reg. 145/00, s. 14.

Requirements of The Horizontal Lifeline Systems

The following requirements apply to a horizontal lifeline system:
1. It shall be designed by a professional engineer in accordance with good engineering practice.
2. The design may be a standard design or a custom design.
3. The design shall,
    i. show the arrangement of the system including the anchorage or fixed support system,
    ii. indicate the components used,
    iii. state the number of workers that can safely be attached to it,
    iv. set out instructions for installation or erection, and
    v. show the design loads for the system.
4. The system shall be installed or erected, and maintained, in accordance with the professional engineer's design.
5. Before each use, the system shall be inspected by a professional engineer or a competent worker designated by a supervisor.
6. The **General Contractors**/Employer shall keep the design at the project while the system is in use.

Guardrail Protection (for info only)

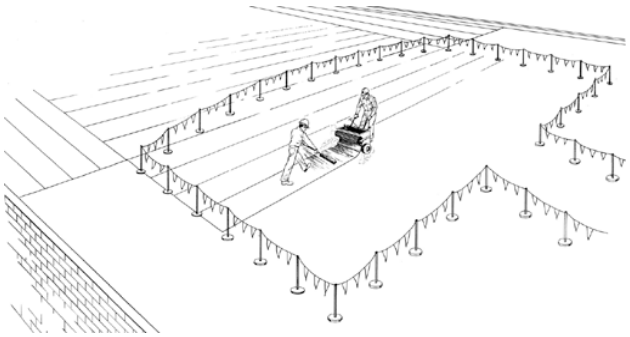
Guardrails consisting of a top rail, middle rail and toe board must be provided around work platforms, ramps, and open areas where a worker can fall from one level to another. Temporary removal of a guardrail by workers in order to perform work, will require the worker(s) to protect themselves by use of either travel restraint or fall arrest protection methods and take appropriate measures to cordon off the work area and post signs warn others to stay clear. The guard railing must be re-installed once the work is completed. Temporary guard rail system must be installed in accordance with s. 26.3 of OH & S Act and Regulations.

Coverings Over Openings (for info only)

It is generally expected that openings are to be guardrailed if at all possible. When coverings are required however, planking laid tightly side by side shall be the material of choice, or such material suitable to support and resist all anticipated loads with a minimum live load resistance of 50 lbs per square foot. Treat all coverings to openings as flooring and set your supports on edge (treated like a joist). This adds strength to the covering. All coverings must be securely fastened, fully cover the openings and marked (IDENTIFIED AS A COVERING), to prevent accidental removal. All coverings should be marked "DANGER-OPENING – DO NOT REMOVE COVER".

Warning Barriers and Bump Lines

Warning barriers and bump lines prevent falls by alerting workers to fall hazards. Warning barriers and bump lines should be set up around the work area at least 2 metres (6 feet 6 inches) from unprotected edges. When a work area is enclosed by properly installed and maintained warning barriers or bump lines, work inside the area can be done without additional fall protection measures. But anyone outside the area who is working less than 2 metres from the edge must use approved fall protection. Lines or barriers should be 1.07 metres (42 inches) high and consist of weighted posts, fibre rope, and warning flags or signs along their entire length, as per the regulations.



Reviewed By: Joe Henriques, President

EMERGENCY RETRIEVAL PROCEDURES FOR RESCUE OF A WORKER SUSPENDED ON A FALL ARREST SYSTEM

Generic Retrieval Plan only – must be customized to each project!

In the event a worker falls and is arrested by fall arrest system, it is imperative that the following rescue procedures be taken to retrieve this worker **within fifteen minutes** from the time of suspension. Being suspended for prolonged durations beyond fifteen minutes could cause serious internal injury to the worker.

Communications:

All workers will be informed of these procedures and the crew foreman will organize the rescue process. Handheld radios or telephones should always be available by crew supervisors to notify the **General Contractors** of a fall arrest event.

Retrieval Procedures:

1. Emergency facilities, including site safety personnel shall be immediately notified when a worker has fallen and is suspended by his/her fall arrest system.
2. All work is to be suspended in the area near the fallen worker, until such time as the worker has been rescued and the fall event has been fully investigated.
3. Where possible, the suspended worker is to be secured by secondary means of support (another lifeline, rope, etc.).
4. One person is to be designated to remain in constant contact with the fallen worker and shall continuously monitor the fallen worker's condition and maintain contact with the rescue team. This designated person shall be tied off through the use of appropriate fall protection equipment and shall at no time exposed herself/himself to the hazard of falling.
5. The fallen worker shall NOT attempt to release, or disable the descent control device, or shall he/she attempt self-rescue.
6. **Power Elevating Work Platforms**: In the event there is a power elevating platform available on the project, (of sufficient capacity and reach) the operator will be summoned to position the power lift device directly underneath the suspended worker and raise the platform slowly so as to land the suspended worker onto the platform.
7. The worker, once he/she has been recovered, shall be immediately removed to the nearest health care facility or medical attention.
8. No work may commence until all investigations have been completed, and where required, recommendations implemented to prevent a recurrence.
9. All components of the fall arrest system involved in arresting the worker in the fall shall be gathered and taken out of service. This equipment (used in the fall arrest event), shall only be reused once it has passed the manufacturer's tests and approvals for reuse.

Ladders

In the event that there is no power elevating work platform or crane equipped with a retrieval "man basket" available on the project, an extension ladder, suitable to reach the necessary height, will always be made available at the workplace. At least two workers will be summoned by the crew foreman to assist in securely setting up a ladder beside the worker suspended on his/her lifeline. The suspended worker will be asked to mount this ladder from his suspended position and fellow workers will hold the ladder stable for this purpose.

Extreme Heights

In this situation, only a crane of sufficient capacity and reach, equipped with an approved man basket or other retrieval device, or a properly equipped fire rescue vehicle equipped with an extension ladder of sufficient reach (outside of fire rescue service authorities), is to be used. Should the heights involved cannot be reached by the equipment on site, the local Fire Department should be called in to assist in the rescue.

Rescue Team Co-Ordination

One person must be designated as the team co-coordinator ("person in charge") and should have a thorough understanding of the retrieval procedures to follow. All persons assisting in the rescue shall co-ordinate their efforts through the direction given by the Team Co-coordinator. There must be verification of the crane operator's knowledge and understanding of the rescue requirements, and this should apply to all crane operators working on the construction project. Meetings should be held to convey these rescue and retrieval procedures to all persons who may possibly be involved in the rescue.

Note: This emergency retrieval procedure above is generic and should be customized to the specific needs of each project.

ERECTION OF STRUCTURAL STEEL

Procedures

Site Layout and Construction Preparation

Before authorizing commencement of steel erection, crew supervisor/foreman shall ensure that the **General Contractors/client** provides (if possible in writing) that:

1. The concrete in the footing piers and walls and the mortar in masonry piers and walls have attained sufficient strength to support the loads imposed during steel erection.
2. Adequate access roads into and through the site for safe delivery and movement of any vehicles or machinery are being maintained as passageways for pedestrian and vehicular use.
3. A safe, graded and properly drained area is readily accessible for safe storage and with adequate access to equipment and material.
4. Mobile crane location is determined, approved and safe for crane operations.
5. Traffic Control Plan is established and reviewed.
6. No other trade or persons are permitted in the erection area or immediate vicinity
7. The **General Contractor** is required to install adequate ventilation if it is in a closed area.

Reminder to Crew Supervisors/Foreman and Installers

The sequence of erection, bolting, manning, riveting and welding shall be such that the stability of the structure is guaranteed at all times.

This applies to:

a) The dead weight of the structure.
b) The weight and working state of all equipment and installers.
c) Any external forces that may be applied.

Installer

1. An installer is an experienced and trained iron worker who makes initial connections of structural steel members. Prior to starting, installers shall be chosen by the supervisor based on the difficulty of the task, their level of training and their experience. Minimum of two designated workers are required for each crane or other hoisting device.
2. In addition to the crane operator, a crew will consist of at least two workers and one signaller if crane operator cannot see the worker.
3. Fall arrest system on beams and/or columns must be provided by installers. The system may be secured to beams or columns prior to erection.
4. Type of fall arrest system installed shall permit safe range of movement for the installers without compromising their safety. Pre-planning is mandatory in order to determine the best system for the task.

5. Tag ropes/guide ropes shall be used to stabilize the load in motion unless it is not practicable or unsafe/dangerous to do so.

Column Erection

1. Prior to worker positioning him/herself on the column, the column shall be adequately braced and a fall arrest system shall be used.
2. The fall arrest system shall consist of full body harness, lanyard, rope grab and vertical lifeline secured at the top of the column and extending to ground level.
3. All columns must be anchored by a minimum of four anchor rods (anchor bolts) or a fall arrest system cannot be used.
4. Each column anchor rod (anchor bolt) assembly, including the column base plate weld and the column foundation structure, must be designed and stamped by a professional engineer and comply with CSA standards and good Engineering Practices.
5. Columns must be set on level finished floors, pre-grouted levelling plates, levelling nuts or shim packs that adequately transfer the construction loads.
6. All columns must be evaluated by a competent person to determine whether tying or bracing is needed.
7. No hoisting hook is to be released until person detaching the load has verified that column or load is adequately secured against any unintentional or accidental movement.

Anchor Rods – Anchor Bolts

Ensure that anchor rods, if damaged, are capable of taking the load of column and other members, and the consultant engineer must be notified.

Connecting Beams and Columns

During the final placing of structural members, the load must not be released from the hoisting line until:

- The members are secured with at least one bolt per connection of the same size and strength as shown in the erection drawings unless it is an unusual sized beam. A competent person is to determine if more than one bolt is needed.
- Competent person determines if more than one bolt is necessary to ensure stability of cantilevered members – if additional bolts are needed, they must be installed.

Double Connections at Columns

When two structural members on opposite sides of a column, or a beam over column, are connected sharing common connection holes:

1. At least one bolt must remain connected at the first member unless:
2. A shop-attached, or field-attached seat or equivalent connection (safety clip) is supplied with the member in order to secure the first member and prevent the column from being displaced

If seat or equivalent connection is used, the seat (or safety clip) must be designed to support the load during the double connection process before the nuts on the shared bolts are removed to make double connection, it must be adequately bolted or welded to both a supporting member and the first member.

Open Web Steel Joists

****Must be designed by a Professional Engineer****

Where steel joists are at or near columns and span 60 feet or less, joists shall:

- Not be placed on any unstable structure unless the framework has been safely bolted or welded; one-line bottom cord to safety them. If it is bolted 'X', one line to be installed as joist lands It must be bridged as soon as possible especially after the first joist is installed.

- In steel framing where joists are used, and columns are not framed in at least two directions with structural steel members, a tie joist must be field-bolted or tack welded at columns to provide lateral stability during construction.

- The directions marks on the drawings must be read and followed for the erection as noted.

- Where 60 foot or longer joist (up to 100 ft) or trusses are used, a minimum of one row of bridging must be installed to provide lateral stability during construction prior to releasing tension on the hoisting line.

- Where steel joists are used, and columns are not framed in at least two directions with solid web steel structural members, a steel tie joist shall be field-bolted or tack welded at the column to keep it from falling during erection.

- Where above is not possible, an alternate means of stabilizing joists, designed by qualified person and indicated in the plan drawings, must be constructed and shop-installed.

Bolted Diagonal Erection Bridging

1. The bridging must be indicated on the erection drawing, which must be the primary indicator of the placement of the bridging.
2. Shop-installed bridging clips, or functional equivalents, must be used where bridging bolts to the steel joists as per joist drawings.
3. Where permanent bridging terminus points cannot be used during erection, temporary bridging are to be added for stability.

Diagonal Bracing

Structural members used as diagonal bracing must be secured by at least one bolt per connection.

Installation of Vertical Lifeline

Vertical lifeline shall be secured to the top of the column while the column is on the ground.

Installation of Horizontal Lifeline

1. Preferably most of the components of the horizontal lifeline shall be installed prior to erection of steel beams. However, when not practical to apply safer methods, horizontal lifelines may be installed after beam erected.
2. To ensure the safety of the workers, points of attachments on the structural members must be pre-determined such as welded lugs or punched holes. These will allow for installation of anchors such as shackles or turnbuckles at the end of the static line.
3. Fall arrest must be set up by workers installing horizontal lifelines. Use power elevating work platforms where applicable and/or if possible.

Horizontal lifelines must be installed as per designed drawings by Professional Engineer.

4. Each crew foreman must inspect the system before any worker is hooked to the lines.
5. The results of inspection must be documented and shall state that the fall arrest system is installed and maintained in accordance with designed documents.
6. All designed documents and inspection reports shall be kept at the project at all times.

Training of Installers

All workers engaged in erection of structural steel shall be instructed and trained to install and use fall protection systems prior to erection of any steel work by competent person.

Work Position

While placing, tightening or painting bolts or any other related work, the workers must use a full body harness and be tied to fixed supports with a lanyard.

Travel

1. For walking the structural steel beams, the best means of fall protection is fall arrest system secured to a horizontal lifeline; if no other means are possible, this would be the best method of protection.
2. All workers shall be equipped with full body harness and **double lanyard system** to ensure safe transfer points when manoeuvring around vertical columns or other objects that may prevent the single lanyard from passing through without disconnecting.

First Aid and CPR

1. At least one worker per crew shall be trained in first aid and CPR**,** or they must contact site supervisor for list of site first aiders.

2. A first aid kit must be located within the job site.

Personal Fall Protection Equipment

1. Full Body Harness is **Gensteel's** number one preference
2. Any other method of fall protection that is used, site specific procedures are to be developed by the supervisor.
3. A Lanyard with shock absorber or a Lanyard with two arms or double lanyard equipped with shock absorber (if needed)

****All Personal Fall Protection Equipment must meet CSA Standards****

Special Considerations

1. Where shock absorber may cause worker to fall on level work, lanyard without shock absorber or retractable lanyard shall be used.
2. Double lanyard system shall be used to ensure continuous tie off during disengagement and engagement of locking snap hooks (if applicable)
3. All systems and system components must be CSA approved, inspected before each use and must be used in accordance with manufacturing instructions.
4. If any damage or defects observed, immediate removal and adequate replacement required.
5. Do not place tools, equipment or pieces of material on top of narrow work surfaces to prevent hazard from falling tools/equipment.
6. Pay close attention to weather conditions (winds, rain, snow, ice, extreme heat, lightning, etc.) and do not proceed with any work if deemed unsafe.

Reviewed By: Joe Henriques, President

INSTALLATION OF METAL DECKING

Procedures:

Hoisting, Landing, and Placing of Metal Decking Bundles

1. Do not use bundle packaging and strapping for hoisting unless specifically designed for that purpose.
2. If placing loose items such as flashing, or other materials on top of metal decking they must be secured to the bundle.
3. Prior to landing metal decking bundles on joists or steel, installer must make sure the structure is safe to perform the task. A structural inspection must be conducted and passed or the bridging must be installed and joist-bearing ends attached.
4. Metal decking bundles must be landed near framing members, if possible, and be properly spaced, as to not overload the structure.
5. At the end of shift or when environmental or job site conditions require, metal decking must be secured against displacement.
6. Metal decking bundles must be placed at least 1.8 metres from an opening in a floor or roof or open edge of floor, roof or balcony.

Preparing for Installation

Prior to starting any installation crew, supervisor/foreman and installers must determine and discuss the following:

1. Type of fall protection system to be used based on site's specific requirements.
2. Type and locations of temporary or permanent anchor systems.
3. Safe access/egress.
4. Working conditions (weather, winds, ice, snow, lighting, heat, activity around or below installation levels etc.)
5. Overhead protection of workers below or around the work zone.
6. Electrical hazards (proximity of power lines etc.)
7. Competency of workers and crew supervisors/foreman.
8. Placement of materials.
9. Fall arrest rescue procedures.
10. First aid supplies and first aiders.
11. Fire protection (fire extinguishers – location and quantity)

Once review of site's specific requirements completed, measures and procedures must be implemented to prevent injury or property damage.

Installation of Metal Decking

1. All workers engaged with this task must be protected from falling.
2. Safe access/egress must be provided to/from work area. If done by extension ladder, ladder must be secured on top and bottom and extend 900 mm over landing surface.
3. Area below work must be protected by barriers and warning signs and caution tape to prevent injury from falling materials or hot welding debris.
4. Other barriers of full enclosure walls, etc. welding screens to be installed by the **General Contractor** if other trades are working within the vicinity of **Gensteel's** work.
5. Metal decking must be laid tightly, and as soon as possible be secured to prevent accidental movement or displacement.
6. When weather conditions such as extreme heat, cold, rain, lightning or wind are endangering installers safety, all work must stop immediately until safe to return.
7. Only competent and experience installers shall be permitted to install metal decking under competent supervision.
8. No installer shall leave work area for the day or during lunch/break hours and leave sheets of decking on the roof/floor in unsafe manner and not secured.
9. Workers must take reasonable precautions by wearing PPE that will protect their skin

Roof and Floor Holes and Openings

1. Roof and floor openings must be left decked over or be filled with the intended equipment or structure if practical.
2. Protective covering must be securely fastened, completely covering the opening, identified as a covering and capable of resisting at least twice the applied loads (weight of workers, equipment etc.) without failure, by **General Contractor**.
3. Where openings cannot be immediately covered/protected personal fall protection system must be worn and used and warning signs must be in place to warn of the hazard or mark the covering with spray paint containing words "DANGER DUE TO HOLE" by **General Contractor**.
4. Where metal decking does not fit tightly around columns wire mash, exterior plywood or equivalent must be installed of sufficient strength to prevent objects or installers feet from falling through, by **General Contractor**.

Reviewed By: Joe Henriques, President

EMERGENCY RESCUE PLAN

Retrieval and Reporting Procedures

1. **Gensteel** shall immediately notify the site supervisor of the General Contractor when a worker has fallen and is suspended by his/her fall arrest system. The foreman or his competent worker designated shall notify the MOL at 1-877-202-0008.
2. All work is to be suspended in the area near the fallen worker, until such time as the worker has been rescued and the fall event has been fully investigated.
3. Where possible, the suspended worker is to be secured by a secondary means of support (another lifeline, rope, articulating boom platform etc.)
4. One person is to be designated to remain in constant contact with the fallen worker and shall continuously monitor the fallen worker's condition and maintain contact with the rescue team. This designated person shall be tied off through the use of appropriate fall protection equipment and shall at no time expose her/himself to the hazard of falling.
5. The fallen worker shall not attempt to release, or disable the descent control device.

Rescue Procedures

The following rescue procedures are ordered (1) through (3), with (1) being the preferred method and (4) being the method used when there is no other means of rescue.

1. **Elevating Work Platform Rescue:** If an elevating work platform (EWP) is available on site and the suspended worker can be reached by the platform, the following procedure should be followed:

    a. Bring the EWP to the accident site and use it to reach the suspended worker
    b. Ensure that rescue workers are wearing full-body harnesses attached to the appropriate anchors in the EWP.
    c. Ensure that the EWP has the load capacity for both the rescuer(s) and the fallen worker. If the fallen worker is not conscious, two rescuers will probably be needed to safely handle the weight of the fallen worker.
    d. Position the EWP platform below the worker and disconnect the worker's lanyard when it is safe to do so. When the worker is safely on the EWP, reattach the lanyard to an appropriate anchor point on the EWP if possible.
    e. Lower the worker to a safe location and administer first aid. Treat the worker for suspension trauma and any other injury.
    f. Arrange transportation to hospital if required.

2. **Ladder Rescue:** If an elevating work platform is not available, use ladders to rescue the fallen worker with the procedure outlines below:

    a. If the fallen worker is suspended from a lifeline, move the worker (if possible) to an area that rescuers can safely access with a ladder.
    b. Set up the appropriate ladder(s) to reach the fallen worker.
    c. Rig separate lifelines for rescuers to use while carrying out the rescue from the ladder(s).
    d. If the fallen worker is not conscious or cannot reliably help with the rescue, at least two rescuers are needed and controlled lowering device such as Self-Retracting Lifeline with Emergency Retrieval Hoist or similar.
    e. If the fallen worker is suspended directly from a lanyard or a lifeline, securely attach a separate lowering line to the harness.
    f. Other rescuers on the ground (or closest work surface) should lower the fallen worker while the rescuer on the ladder guides the fallen worker to the ground (or work surface)
    g. Once the fallen worker has been brought to a safe location, administer first aid and treat the person for suspension trauma and any other injury.
    h. Arrange transportation to hospital if required.

3. **Rescue from Work Area or Floor Below:** If the fallen worker is suspended near a work area and can be safely reached from the floor below or the area from which they fell, use the following procedure:

    a. Ensure that rescuers are protected against falling
    b. If possible, securely attach a second line to the fallen worker's harness to help rescuers pull the fallen worker to a safe area. You will need at least two strong workers to pull someone up to the level from which they fell.
    c. Take up any slack in the retrieving line to avoid slippage
    d. Once the worker has been brought to a safe location, administer first aid and treat the person for suspension trauma and any other injury.
    e. Arrange transportation to hospital if required.

4. **Crane Rescue:** To perform a Crane rescue, follow the steps below:

    a. Make sure preferred methods 1 – 3 are not possible and life is in imminent danger and can not wait for 911 responders.
    b. Notify the crane operator right away and explain why, as this is contrary to there policy
    c. Contact **Gensteel** for instruction on how to proceed.
    d. Arrange for immediate transportation to hospital or to meet ambulance. A designated worker must accompany the injured worker to the hospital.

Post-Rescue Procedure

All non-affected workers should remain in the designated safe gathering zone until the site supervisor notifies them to do otherwise.

The site supervisor and health and safety representative should:

- Begin the accident investigation
- Quarantine all fall-arrest equipment that may have been subjected to fall fatigue effects and/or shock loading for further investigation
- Secure the area (the OHSA requires that an accident scene not be disturbed where a fatal or critical injury has occurred)
- Determine whether the jobsite-specific rescue and evacuation plans were followed as designed
- Record modifications or additions to the plans that the rescue team deems necessary
- Record all documented communications with fire, police, MOL, and other contractors involved (when a fall occurs and is arrested, you must notify the MOL in writing)
- Record all documented statements from employees, witnesses, and others
- Save all photographs of the incident
- Record all key information such as dates, time, weather, general site conditions, and specific accident locales including sketches of the immediate incident area, complete with measurements if applicable
- Written documentation in measures to prevent recurrence

MOBILE CRANE SETUP AND OPERATIONS

Setup Location

All rigging material is to be supplied by the crane supplier. The crew supervisor, mobile crane operator and client representative/superintendent shall determine crane set up location prior to starting the work.

Operator's Responsibilities

1. Mobile crane operator must carry on his/her person proof of training under Trades Qualification and Apprenticeship Act if the crane or hoisting device is capable of raising, lowering or moving material that weights more than 7,260 kg.
2. Manufacturing instructions and logbooks of maintenance and repairs must be up to date and readily accessible for review by MOL safety inspectors or our H. and S. representative/consultant.
3. Operator must discuss communication method and hand signals with signaller prior to any lifting of the load.
4. Respond only to signals of designated signaller.
5. Obey STOP signal at all times, no matter who gives it.
6. Do not exceed load rated capacities.
7. Do not leave the controls while the load is suspended.
8. The area under the load shall be cordoned off to ensure that personnel are not permitted to stand or pass under suspended load.
9. If the load hoist mechanism is not equipped with an automatic brake and the load must remain suspended for any considerable length of time, the operator shall prevent the drum from rotating in the lowering direction by activating the foot operated brakes.
10. Ensure the load bearing surface is sufficient to handle the weight of the crane and the load.
11. Setup and operate crane in accordance to manufacturing instructions.
12. Avoid passing the load over workers unless these workers are engaged in load receiving.
13. Immediately suspend all operations if view of intended path obstructed and signals from signaller not clear.
14. Inspect all rigging components prior to any work.
15. Ensure all hoisting hooks equipped with safety catches.
16. Remove and replace any damaged rigging components.
17. Ensure that minimum distances are kept where energized over-head electrical conductor is present as per following:

750 to 150,000 volts_____3 metres
more than 150,000 to 250,000 volts_____4.5 metres
more than 250,000 volts and over_____ 6 metres

18. Suspend all operations if lighting or stormy weather.
19. Suspend all operations if wind speed is sustained at 60 km/hr or view is obstructed and there is no signaller to assist.
20. Each equipment operator is responsible to evaluate safe levels of visibility prior to operating the equipment.

Signaler - Swamper Responsibilities

1. Wear required PPE including reflective vest.
2. Discuss communication method and hand signals with crane operator prior to any lifting of the load.(see hand signal chart attached at the back of this program)
3. Must be competent and trained in safe rigging practices.
4. Must not perform any other duties other than task related.
5. Must give clear hand signals.
6. If two way radios used, perform test with crane operator prior to any work to ensure clarity.
7. Do not permit others to enter work area or area under load.
8. Ensure all hoisting hooks equipped with safety catches.
9. Remove and replace any damaged rigging components.
10. Use guide ropes when needed to avoid pinching points and to stabilize the load.
11. Must not exceed load rated capacities indicated on labels of rigging equipment.
12. Carry proof of training/competency on his/her person.
13. Tower crane and swampers are to be supplied by the tower crane supplier.

Rigging

1. The equipment operator must use assistance of the signaller.
2. Signalling methods shall be discussed between operator and signaller prior to starting work.
3. Operator must follow signals from designated signaller only.
4. The signaller must be careful not to order a move until he has received the “all-ready” signal from each member of the crew engaged in rigging task.
5. Each rigger must be sure he’s in the clear before he gives an “all-ready” to the signaller.
6. Once sling or choker in position, release it, if possible, before giving “all-ready” signal.
7. If sling or choker must be held in position, ensure your hand is clear of pinch points.
8. Watch out for the roll or swing of the load, always try to hook the loads at the centre of the load.
9. Never place your self between material, equipment or any stationary object and the load swing.
10. Monitor wind conditions and obstructions in the area.
11. Use guide ropes when required.
12. Never stand under the load.
13. When lowering or settling the load, be sure your feet and all other parts of your body are out from under.
14. Set the load down easily and slowly so that if it rolls on the blocking, it will be a slow shift that you can get away from.
15. In addition to protective footwear and headwear, signaller shall be wearing reflective vest.

Safe Lifting Practices – Hoisting

Evaluation of the Load

Determine the weight of the object or load prior to a lift to make sure that the lifting equipment can operate within its limitations.

Balancing of the Loads

Estimate the centre of gravity or point of balance. The lifting device shall be positioned immediately above the estimated centre of gravity.

Hoisting Hook

Hoisting hooks must be equipped with safety catch unless design of the hooks are permitting safe levels of safety or better than those assured by safety catch and approved for that particular application.

Landing the Load

Prepare a place to land the load, lower the load gently and make sure it is stable and secured prior to releasing hoisting hooks or slings or chains.

REMEMBER

- Use only approved rigging and NEVER exceed the working load limits set out by manufacturer or professional engineer.
- Ensure the hoist or crane is positioned directly over the load.
- Use slings/chains of proper reach.
- NEVER shorten a line by twisting or knotting – with chain slings
- NEVER use bolts or nuts.
- NEVER permit anyone to ride the lifting hook or the load.
- Ensure all personnel stand clear from the load being lifted.
- NEVER work under suspended load.
- NEVER leave a load suspended when the hoist or crane is unattended.

Crane Supplier - Owner Responsibilities

1. Must keep permanent record of all inspections, tests, repairs, modifications and maintenance.
2. Must prepare a log book for use at the project that shall include record referred to in section (1) above covering the period that is the greater of the immediately preceding twelve month and the period the crane or similar hoisting device is on the project.
3. The log book shall be kept with the crane.
4. The owner/supplier of a crane shall retain and make available to the **General Contractors** on request copies of all log books and record for the crane.
5. The owner/supplier of a crane shall provide all necessary rigging equipment.

ENVIRONMENTAL ISSUES

Hazardous Waste Management

All hazardous waste must be placed in designated waste containers and disposed in accordance with environmental requirements.

Spill Prevention and Control

To minimize the risk of spills or releases to the environment, supervisors/foreman must employ appropriate protective procedures such as double containment, employee training, overflow protection, and other measures as part of activities involving the use, storage, or handling of petroleum products or hazardous materials on the project.

Notification of A Spill or Release to The Environment

Gensteel is subject to government notification and reporting requirements when a petroleum product or hazardous material is spilled or released to the environment, including releases to the ground, surface water, sanitary sewer system, or air. A spill or release of a hazardous chemical or petroleum product must be contained and cleaned up immediately. The crew supervisor/foreman must notify **Gensteel's** office immediately by telephone, followed by a written incident report within 24 hours that includes the following information:

- Description of the spill or release event
- Names of individuals involved
- Date and time of spill or release
- Copy of the SDS for the material spilled or released
- Estimated quantity and type of material spilled or released
- Duration of the release
- Steps taken or planned to reduce, eliminate, and prevent recurrence of the spill or release

Disposal of Waste In Sanitary Sewers

No hazardous materials, chemicals, or petroleum products may be disposed in sanitary sewers.

Asbestos

If material that contains asbestos is suspected or encountered, stop work immediately, notify the **Gensteel's** supervisor, and proceed only after an asbestos plan has been approved.

Weather Conditions

Rain - Lightning

During outdoor work, such as roofing, weather is always a concern. If severe weather strikes, know what to do to protect yourself, your coworkers, equipment and materials.

- Watch for changing weather. If possible, listen to weather forecasts on the radio; this can provide you with advance warning of severe wind or rain.
- Most importantly, listen to your supervisor. If he or she tells you to come off the structure, don't wait; make your way to shelter immediately.
- Your first responsibility is to ensure the safety of yourself and your fellow employees. However, if possible, try to prevent property damage to equipment, materials and the building itself. This may require placing a tarp over equipment or exposed areas of the roof and securing loose materials before a storm hits. Taking the time to prevent water or wind damage can save thousands of dollars in property damage.
- Wear shoes that won't slip in wet weather.
- Wear appropriate rain gear that will keep you dry.
- If you encounter lightning, high winds, hail or heavy rain, seek shelter immediately.
- If possible, cover any materials, tools or equipment with plastic sheeting, tarps or other waterproof material to prevent water damage. Have enough to cover any exposed areas of the roof to prevent water damage to the roof or the interior of the building.
- Make sure any roof drains are clear of debris and unplugged. Good housekeeping will help roof drains remain clear of debris.

Wind

Wind can be the most dangerous element you will face in steel erection. It is important that you understand the hazards and know how to avoid injury.

- If possible, secure any materials on the ground and those that could be blown off the structure.
- If your supervisor warns you to leave the structure, do so immediately; don't wait to finish another duty.
- Watch for severe weather approaching.
- Leave the open structure if excessive winds pick up. Seek shelter immediately.

NOISE

What is noise?

Noise is unwanted sound. It is measured on a decibel scale.

What if you are exposed to too much noise?

Noise exposures that are loud enough and last long enough can damage nerves in your inner ear. This causes *permanent and irreversible* hearing loss.

Hearing loss makes it hard to:

- talk with family, friends, and coworkers.
- hear warning signals
- enjoy music, nature, voices, and other good sounds.

Safe noise levels

The legal limit for construction workers in Ontario is an 8-hour (full-shift) average noise exposure of 85 decibels. If you must raise your voice to talk to someone an arm's length away, the noise level is probably over 85 decibels. Workers with an average noise exposure above 85 decibels need to wear hearing protectors, either earplugs or earmuffs, and be in a hearing loss prevention program. You should wear hearing protectors any time noise levels are over 85 decibels.

High Hazard - Potentially harmful after short-term exposure (95 decibels and above)

Caution Zone - Harmful after long-term exposure (85-95 decibels)

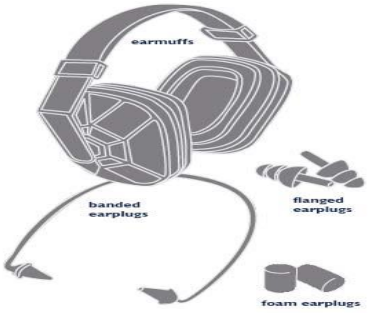
Low Hazard - Noise below 85 decibels

Noise levels of tools - Most power tools exceeded 85 decibels

Hearing protection use - Protective hearing devices must be worn where noise is exceeding 85 decibels.

The basics of hearing protection

- Consider noise sources around you— not just your own tasks—when deciding when to wear hearing protectors.
- If your noise exposure is intermittent, try banded earplugs or earmuffs. They are easy to put on and take off.
- All hearing protectors are labelled with a Noise Reduction Rating (NRR) in decibels. The NRR is usually about twice as high as the protection you will actually get.
- Keep your protectors with you so you have them when you need them.



How much hearing protection is needed?

Most workers will get enough protection if they wear a hearing protector with an NRR of 14 decibels. For most activities, an NRR higher than 14 decibels will block too much sound and may interfere with communication, including warning signals. Workers with very high noise exposures need an NRR between 14 and 33 decibels.

Finding a hearing protector that works for you

Hearing protectors are like shoes: one style will not work for all workers and all exposure levels. You may have to try several styles before you find one that is comfortable and works for you. It may take several weeks before you get used to wearing hearing protectors.

Also keep in mind,

Your exposure to noise may be reduced by using quieter equipment, blocking noise with shields, or moving noisy equipment away from you. All workers should be enrolled in a hearing loss program.

Reviewed By: Joe Henriques, President

July 1, 2016: All Ontario Employers Must Comply with New Noise Regulation

As of July 1, 2016, all Ontario employers will be required to comply with a new workplace noise Regulation under the Occupational Health and Safety Act.

The new Regulation (381/15) replaces noise protection requirements currently in the regulations for Industrial Establishments, Mines and Mining Plants, and Oil and Gas-Offshore. Those regulations apply to many – but not all – Ontario employers.

The noise obligations will be new for employers with the following types of workplaces:

- Construction projects
- Health care facilities
- Schools
- Farming operations
- Fire services
- Police services
- Amusement parks

The new Regulations basic requirements are:

- Employers must take "all measures reasonably necessary in the circumstances to protect workers from exposure to hazardous sound levels"
- The noise-protection measures must "include the provision and use of engineering controls, work practices" and, where required (and permitted), hearing protection devices
- In general, every employer must ensure that "no worker is exposed to a sound level greater than an equivalent sound exposure level of 85 dBA, $L_{ex,8}$" (as calculated according to the Regulation) without requiring workers to wear hearing protection devices
- Hearing-protection devices are a secondary (not primary) noise-protection solution and will be permitted in only certain listed circumstances
- Employers must, where practicable, post a warning sign at every approach to an area where the sound level regularly exceeds 85
- Employers who provide hearing-protection devices must provide appropriate hearing-protection training to workers who use those devices

VIBRATION

Hand-arm vibration may result in:

a. nerve and blood vessel degeneration leading to vibration white finger syndrome
b. pain and cold sensation between attacks of vibration white finger
c. loss of grip strength
d. damage to joints and muscles in wrists and/or elbows
e. carpal tunnel syndrome
f. bone cysts in fingers and wrists.

Possible control measures whole-body and hand-arm vibration

Engineering control measures are the most effective form of controls because once in place they operate all of the time. The use of personal protective equipment is considered a less effective form of control as its effectiveness is heavily dependent on the wearer. Reduction of vibration in many instances also leads to reduction in noise emissions and the control of vibrations in work processes therefore serves an important dual purpose.

The risk of injury to workers can be prevented or minimised by:

a. assessing the risks, including conducting vibration exposure surveys in accordance with AS 2670.1 *Evaluation of human exposure to whole body vibration* or AS 2763 *Vibration and shock – hand transmitted vibration – guidelines for measurement and assessment of human exposure* as appropriate, to identify risk processes and/or activities
b. developing a vibration policy and vibration management program
c. implementing a program for conducting vibration surveys on a regular basis and corrective actions
d. implementing vibration control measures in consultation with workers and the engineering/maintenance section of sugar mills and cane rail operations and in accordance with the hierarchy of controls
e. providing management and workers with education, training and information on vibration exposure, its effects and the need for its control
f. providing regular medical check-ups to exposed workers.

Control measures to minimise exposure to vibration include:

a. treating the vibration source (i.e. isolate vibrating plant from its foundation through dampers and springs, redesign or modify)
b. treating the vibration transmission path (i.e. isolate ducts etc. from stationary plant, vibration dampened seating in locomotive cabins)
c. treating the receiver (i.e. isolate control rooms/enclosures/locomotive cabins, etc. from vibrating plant and surfaces)
d. using tools with anti-vibration handles

e. maintaining properly sharpened cutting tools
f. job rotation, to limit exposure to hand arm vibration exposure to no more than four hours per shift and of whole body vibration to no more than eight hours per shift
g. an adequate plant and equipment maintenance program
h. personal protective equipment (e.g. anti-vibration gloves)
i. using minimum hand grip on tools consistent with safe work practices
j. avoid smoking as this restricts the blood vessels.

Generally administrative controls are not as effective in the long term as engineering control measures. Workers shall provide their own personal protective equipment and shall ensure their correct use, care and maintenance as per manufacturer's instructions.

Selection of personal protective equipment must be on the basis of individual fit, comfort, work tasks and work environment with respect to the equipment being worn and in order to achieve a reduction in vibration exposure.

SLIPS, TRIPS AND FALLS

Slips

Slips happen where there is too little friction or traction between the footwear and the walking surface. Common causes of slips are:

- wet or oily surfaces,
- occasional spills,
- weather hazards,
- loose, unanchored rugs or mats, and
- flooring or other walking surfaces that do not have same degree of traction in all areas.

Trips

Trips happen when your foot collides (strikes, hits) an object causing you to lose the balance and, eventually fall. Common causes of tripping are:

- obstructed view,
- poor lighting,
- clutter in your way,
- wrinkled carpeting,
- uncovered cables,
- bottom drawers not being closed, and
- uneven (steps, thresholds) walking surfaces.
- **poor housekeeping**

How to prevent falls due to slips and trips?

Both slips and trips result from some a kind of unintended or unexpected change in the contact between the feet and the ground or walking surface. This shows that good housekeeping, quality of walking surfaces (flooring), selection of proper footwear, and appropriate pace of walking are critical for preventing fall accidents.

HEAT STRESS

What happens when the body's core temperature rises?

The human body functions best within a narrow range of internal temperature. This core temperature varies from 36 °C to 38 °C. A construction worker performing heavy work in a hot environment builds up body heat. To get rid of excess heat, the body uses two cooling mechanisms:

- The heart rate increases to move blood -- and heat -- from heart, lungs, and other vital organs to the skin.
- Sweating increases so that more sweat can evaporate and cool the body.

Sweating is the body's most important way of dispersing excess heat. But when too much sweat is lost through heavy labour or working under hot, humid conditions, the body doesn't have enough water left to cool itself. The result is dehydration. Core temperature rises above 38 °C. A series of heat-related illnesses, or heat stress disorders, can then develop.

How can we recognize heat stress disorders?

Heat stress disorders range from discomfort and pain (heat rash and heat cramps) to life-threatening conditions (heat exhaustion and heat stroke). **Heat exhaustion** occurs when the body can no longer keep blood flowing to supply vital organs and at the same time send blood to the skin to reduce body temperature. Signs of heat exhaustion include:

- weakness
- difficulty continuing work
- headache
- breathlessness
- nausea or vomiting
- feeling faint or actually fainting.

Workers fainting from heat exhaustion while operating equipment can injure themselves and others. Heat exhaustion casualties respond quickly to prompt first aid. Cooling off is the objective. Have the casualty:

- rest in a cool place
- drink cool water
- remove unnecessary clothing
- loosen clothing
- shower or sponge with cool water.

It takes 30 minutes at least to cool the body down once a worker suffers heat exhaustion. If not treated promptly, heat exhaustion can lead to heat stroke -- a medical emergency.

Heat stroke occurs when the body can no longer cool itself and body temperature rises to critical levels. Signs include:

- confusion
- irrational behaviour
- loss of consciousness
- convulsions
- lack of sweating
- hot, dry skin
- abnormally high body temperature -- for example, 41°C.

Heat stroke requires immediate medical attention.

- Call 911 or your local emergency number.
- Provide immediate, aggressive, general cooling.
- Immerse casualty in tub of cool water, place casualty in cool shower, or spray casualty with cool water from a hose.
- Wrap casualty in cool, wet sheets and fan rapidly.
- Transport casualty to hospital.
- Do not give anything by mouth to an unconscious casualty.

Do personal factors increase the risk of heat stress?

Certain physical conditions can reduce the body's natural ability to withstand high temperatures:

Weight - Workers who are overweight are less efficient at losing heat.

Poor physical condition - Being physically fit aids your ability to cope with the increased demands that heat puts on your body.

Previous heat illnesses - Workers are more sensitive to heat if they have experienced a previous heat-related illness.

Age - As the body ages, its sweat glands become less efficient. Workers over the age of 40 may have trouble with hot environments. Acclimatization to heat and physical fitness can offset some age-related problems.

Heart disease or high blood pressure - To pump blood to the skin and cool the body, the heart rate increases. This can stress the heart.

Recent illness - Workers with recent illnesses involving diarrhea, vomiting, or fever have an increased risk of dehydration and heat stress because their bodies have lost salt and water.

Alcohol consumption - Alcohol consumption during the previous 24 hours leads to dehydration and increased risk of heat stress.

Medication - Certain drugs may cause heat intolerance by reducing sweating or increasing urination. Workers in hot environments should consult their physician or pharmacist before taking medications.

Lack of acclimatization - When exposed to heat for a few days, the body will adapt and become more efficient in dealing with it. Acclimatization usually takes six to seven days but may be lost in as little as three days away from work. People returning to work after a holiday or long weekend -- and their supervisors -- should understand this. Workers should be allowed to gradually re-acclimatize to work conditions.

Supervisor/Foreman must:

- Give workers frequent breaks in a cool area away from heat--around 25°C is ideal.
- Provide unlimited amounts of cool (not cold) drinking water conveniently located.
- Allow workers time to get acclimatized. For those with previous experience in hot jobs, the regimen should be;

  - 50% exposure on day one
  - 60% on day two
  - 80% on day three
  - 100% on day four.
  - For new workers in a hot environment, the regimen should be 20% on day one, with a 20% increase in exposure each additional day.

- Make allowances for workers who must wear personal protective clothing and equipment that retains heat and restricts the evaporation of sweat.
- Schedule hot jobs for the cooler part of the day; schedule routine maintenance and repair work in hot areas for the cooler seasons of the year.
- Consider the use of cooling vests containing ice packs or ice water to help rid bodies of excess heat.

Workers must:

- Wear light, loose clothing that permits the evaporation of sweat.
- Drink small amounts of water--8 ounces (250 ml) -- every half hour or so. Don't wait until you're thirsty.
- Avoid beverages such as tea, coffee, or beer that make you urinate more frequently.
- Where personal protective equipment must be worn
- Use the lightest weight clothing and equipment available.
- Wear light-coloured garments that absorb less heat from the sun.
- Use clothing and equipment that allows sweat to evaporate.

- Avoid eating hot, heavy meals. They tend to increase internal body temperature by redirecting blood flow away from the skin to the digestive system.
- Don't take salt tablets unless a physician prescribes them. Natural body salts lost through sweating are easily replaced by a normal diet.

COLD STRESS

Cold Stress Factors

- temperature of the air surrounding the body.
- body temperature.
- air movement around the body.
- body movement.
- length of exposure.

Cold Environment

- normal body temperature is 36 °C to 38 °C
- body temperature drops below 30 ºC, control system becomes ineffective.
- below 15 ºC, body begins to experience impairment of many functions.
- most hypothermia results when ambient temperature is between -1.0 ºC and 4.5 ºC.
- increased heat loss to the environment
- muscle hypertonus, resulting in shivering, is the body's attempt to maintain body temperature.

Hypothermia

- prolonged exposure to cold causes the body to lose energy faster than it its produced.
- body temperature drops to lower than normal.
- can happen when temperatures are above freezing.

Conditions Affecting Hypothermia

- aging, allergies, poor circulation, & illness.
- self-imposed conditions such as drinking, smoking, & taking sedatives also increase risks.
- wet clothing, windy conditions, & poor physical condition.

Hypothermia Symptoms

- numbness, stiffness, drowsiness, poor coordination.
- slow or irregular breathing and heart rate, slurred speech
- cool skin and puffiness in the face are common.
- may seem apathetic about getting out of the cold.
- shivering and teeth chattering is a sure signing that body temperature is too low.
- victim first feels cold then may feel mild pain in extremities.
- victim may seem confused & disoriented memory lapses.
- worst-case results can cause death.

Safety Procedures

- Get victim to where it is warm.
- Get them out of wet, frozen, or tight clothing; keep victim dry.
- Get them into loose warm clothes or blankets.
- Give warm (room temperature) liquids.
- Do not give alcohol or substances containing caffeine.
- Warm center of body first.
- If necessary, seek medical assistance & give CPR.

Frostbite

- Most serious, and second most common, cold exposure hazard.
- Nose, ears, cheeks, fingers, & toes most often affected.
- Affected area doesn't get enough heat & freezes.
- Freezing causes blood vessel constriction.
- Results in lack of oxygen, excess fluid buildup, blistering, and tissue death.
- May not be aware anything bad is happening.
- Recognized by distant pallor of the exposed skin.
- Skin goes from white or grayish yellow, to reddish violet, to black.
- Usual feeling of being really cold, then numb.
- May get a tingling or aching feeling or brief pain.
- Damage to skin sometimes caused blisters
- Constricted blood vessels impair blood flow.
- Can cause permanent tissue damage.
- Victim can become unconscious
- Death may result from heart failure.
- If necessary, seek medical assistance & give cpr.

Care of Frostbite

- Don't rub affected part.
- Don't use hot baths, or heat producing devices.
- Don't break blisters.
- Warm the frozen part with clothing, blankets, or with room temperature water.
- Once warm, exercise the part.
- Exception: do not walk on frostbitten feet.

Protection

- Prevention is the best way to deal with cold stress.
- Don’t drink alcohol, bathe, smoke, or take drugs before being exposed to cold.
- Dress in loose layers of dry clothing.
- Cover hands, feet, face, & head.
- In cold environment, keep moving.
- Dress appropriately

ELECTRICAL SAFETY

General Information

Electricity has ability to cause shocks, burns or fatalities. Project supervisors/foreman must inspect work areas prior to commencement of work to determine if there is actual or potential electrical hazard present in the work area or in close proximity to it. Overhead power lines are often easily identifiable, how ever electrical conduits or installations on existing roofs are often not. No work shall proceed until all electrical hazards identified and control measures in place. **Gensteel's** supervisor/foreman must consult with our client representative during evaluation and assessment stage. No object shall be brought closer to an energized overhead electrical conductor with a nominal phase-to-phase voltage rating set out in Column 1 of the Table to this subsection than the distance specified opposite to it in Column 2.

TABLE

Column 1	Column 2
Nominal phase-to-phase voltage rating	Minimum distance
750 or more volts, but no more than 150,000 volts	3 metres
more than 150,000 volts, but no more than 250,000 volts	4.5 metres
more than 250,000 volts	6 metres

Definitions

Grounding is a conducting connection between an electrical circuit or equipment and earth, or to a conducting body that serves as earth.

A *ground fault circuit interrupter* is a device for the protection of personnel that de-energizes a circuit or portion of a circuit.

Electrical Safety Procedures

- Only qualified electricians familiar with code requirements are allowed to perform electrical work (fixing of the tools/equipment, extension cords etc.)
- Employees are not permitted to work near an unprotected electrical power circuit unless they are protected against electrical shock by de-energizing the circuit and grounding it, or are protected by effective insulation or other means, and are wearing required personal protective equipment**.** Work around energized systems must be done in accordance with the site-specific procedure**.**
- If no site-specific procedure exists, **Gensteel's** office must be contacted to approve the process.
- Do not operate electrical tools or equipment in wet areas or areas where potentially flammable dusts, vapours, or liquids are present, unless specifically approved for the location.
- Avoid wearing rings, necklaces, or other conductive apparel.

Extension Cords

- Limit the use of extension cords as much as possible.
- Extension cords used with portable electric tools and appliances must be extra hard usage, heavy duty (no less than 12-gauge conductors for construction work) and of the three-wire grounding type.
- Flat electrical extension cords are prohibited.
- Elevate (at least 7 feet) or otherwise protect from damage electrical cords and trailing cables that could create a hazard to people in the area**.**
- Protect portable electric tools and cords by a ground fault circuit interrupter (GFCI) throughout each phase of the work**.** GFCI protection for temporary wiring is mandated on construction sites at all times.

In areas where water or moisture is present or likely to be present, always use ground fault circuit interrupters on power circuits**.** If permanent power circuits are not GFCI, use a portable GFCI box with electrical tools and equipment**.** Test interrupters on a regular basis. Provide suitable means for identifying electrical equipment and circuits, especially when two or more voltages are used on the same job**.** Mark circuits for the voltage and the area of service they provide. Inspect tools and cords on regular basis. If damage observed remove from use immediately and be fixed.

Special attention must be given to hoisting operation and placement of extension ladder to the proximity of electrical installations or power lines.

LOCKOUT AND TAGGING

General Information

This section provides standard procedures for rendering inactive any electrical equipment or operating systems (stored energy systems) when equipment is down for repair, removal, replacement, or installation of new equipment.

"Danger - Do Not Operate" tags must be used with locks. Tags are available from **Gensteel 's** office/shop.

Lockout and Tagging Procedures

Do not work or try to repair the equipment until it is de-energized and repair personal assigned by **Gensteel's** management.

PROTECTING EMPLOYEES & THE PUBLIC

Exterior Protection Procedures

When it is necessary to maintain employee or public use of work areas involving sidewalks, entrances to buildings, lobbies, corridors, aisles, stairways, and vehicular roadways, protect the public with appropriate guardrails, barricades, signs, temporary fences, overhead protection, temporary partitions, shields, and adequate visibility**. Gensteel will ensure to maintain the client's systems.**

Keep sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, and exits clear of obstructions to permit safe entrance and exit at all times.

Conspicuously post appropriate warnings and instructional safety signs**.**

When exit routes or assembly areas are affected by work, notify the project superintendent of the effect, General Contractor/owner to advise and implement alternatives.

Interior Protection Procedures

Before starting work in occupied buildings, **General Contractors** must coordinate and implement protective methods for/with **Gensteel's** management, supervisor/foreman or safety consultant. Include steps in the work plan to provide protection for people and property in areas that may be affected by the work**.** Electricity or gas hazards, excessive noise generation, chemical fumes, asbestos, fire prevention, welding sparks and exit blockage are examples of risks that should be considered in the plan.

While **Gensteel** will provide some form of protection against hazards for our workers, the **General Contractor** will provide further protection against hazards if other trades must be working within the vicinity of **Gensteel** .

The work plan should address these risks and include provisions for proper communication of the risks and related control measures**.** Control measures may include providing protective equipment, scheduling work during non-business hours, area evacuation, etc.

Gensteel reserves the right to refuse work where **General Contractors** /client fails to ensure safety of the workers/occupants inside the structure and insists that we should carry on the work as scheduled. **Gensteel's** supervisor/foreman must notify office immediately for further instructions.

SMALL TOOLS

General Information

Tools have potential to cause serious harm if not used in safe manner. Review provided procedures as general guidelines on safe use of tools.

Power, Air, and Hand Tools

- Power, air, and hand tools must be operated in accordance with the manufacturer's recommendations.
- Keep hand tools in good condition, inspected, cleaned, sharpened, oiled, and not abused**.** Replace worn tools immediately.
- Inspect tools for damage and worn parts before use**.** Remove damaged or frayed cords from service**.** Do not hoist or lower tools by the cord or hose; use handlines**.**
- A qualified person must inspect power tools before use and at least once per month**.**
- Do not force tools beyond their capacity or other shortcuts.
- Do not use power tools if safety equipment such as shields, tool rests, hoods, and guards have been removed or rendered inoperative.
- Employees must wear the required personal protective equipment when using tools under conditions that expose them to flying objects or harmful dust.
- Do not use gasoline-powered tools in unventilated areas, enclosed spaces, or outside of enclosed spaces**.** Dispense gasoline and other flammable liquids only from UL approved safety cans or equivalent.
- Inspect grinding wheels regularly for signs of fracture.
- Equip bench grinders with deflector shields and side-cover guards**.** Tool rests must have a maximum clearance of 1/8 inch from the wheel.
- Secure couplings to hoses supplying pneumatic tools to prevent accidental disconnection.
- Protect air-supply lines, inspect lines regularly, and maintain lines in good condition**.** Provide excess flow valves on supplying hoses exceeding 1/2 inch in diameter.

Powder-Actuated Tools

- Employees must not operate powder-actuated tools until they have satisfactorily completed the training for the tool and have evidence of this training readily available.
- Loads, studs, and nails used in powder-actuated tools must be specifically approved by the manufacturer for use in that tool.
- Do not use loads, studs, and nails in powder-actuated tools for any purpose other than recommended by the manufacturer.
- Do not use powder-actuated tools when adjacent areas are occupied by personnel.
- Powder-actuated tools must be designed so that discharging the powering load can only be accomplished when the barrel of the tool is firmly depressed against the work surface.
- Do not use powder-actuated tools in areas where hazardous accumulations of ignitable dust, gases, or liquids could be present or collect until the area has been proven free from such hazards with appropriate instrumentation**.**
- Goggles, face shields, or substantial eye protection must be worn by each person within 25 feet of the point of discharge.
- Personnel not directly involved with the operation of powder-actuated tools must stay clear of the operator.
- Do not leave powder-actuated tools or loads unattended at any time**.** Powder-actuated tools, loads, studs, and nails must be stored in a locked box or otherwise secured when not in use**.** Do not load the tool until ready for use.
- Handle misfires in accordance with manufacturer's training**.** Dispose of misfired loads safely in bucket filled with water **or follow manufacturer's instructions.**
- Misfired loads are considered to be ammunition.
- Powder-actuated tools must be regularly inspected and maintained**.** Maintenance work must be performed by competent technicians as directed by the manufacturer's literature**.** Parts used in maintenance or repair of powder-actuated tools must be exact replacement parts.

Hand-held Torches

- Never leave torches ignited and unattended.
- Make sure the cylinder is securely braced or tied so that it can't fall or be knocked over.
- Use only approved high-pressure hoses to connect torches to regulators.
- Operate the torch at the manufacturer's recommended pressure.
- Never direct the flame at, near, or toward the cylinder.
- Never use hand-held torches inside a building unless all precautions to prevent fire or explosion are taken.

Handling and Storage of Cylinders

- A suitable cylinder truck with chain or other secure form of fastening must be used to keep cylinders from being knocked over while in use or in storage**.** An acceptable cylinder wrench must be installed on each cylinder truck.
- Cylinders must be legibly marked to identify content.
- Do not store cylinders of oxygen near cylinders of acetylene or other fuel gas**.** Separate cylinders by a minimum of 20 feet, or with a five-foot non-combustible barrier with at least a two-hour fire rating**.** Do not place cylinders where they can contact an electrical circuit.
- Keep oxygen cylinders, cylinder valves, couplings, regulators, hoses, and apparatus free from oil and grease**.** Do not handle oxygen cylinders or apparatus with oily hands or gloves.
- Keep cylinders in storage away from sources of heat, flame. Remove combustibles from the storage area.
- Close valves on empty cylinders**.** Keep valve protection caps in place except when cylinders are in use or connected for use.
- Provide a suitable platform when moving cylinders by crane or derrick**.** Do not use slings, hooks, or electric magnets**.** Cylinder caps should remain installed on the cylinder until connected to equipment**.** Keep the cylinder cap near the cylinder when in use.
- Secure compressed gas cylinders in an upright position at all times, except for short periods of time when cylinders are being hoisted or carried**.** Empty cylinders must be labelled "Empty." If a cylinder is not equipped with a valve wheel, keep a key or cylinder wrench on the valve stem while in use**.** Acetylene cylinders should be protected in a cradle while being transported by crane or derrick.
- Do not store or take compressed gas cylinders into closed or confined areas, or near elevators or stairs.
- Store compressed gas cylinders in well-ventilated, proper construction storage racks that are labelled for the type of gases to be stored**.** If a leak develops in a cylinder and it cannot be immediately corrected, move the cylinder to a safe location outside the building.
- Visually inspect cylinders to ensure they are safe before use.

Guards

Moving machine parts must be safeguarded to protect operators from serious injury. Belts, gears, shafts, pulleys, fly wheels, chains, and other moving parts must be guarded if there is a chance, they could contact an individual.

As mentioned before, the hazards associated with moving machinery can be deadly. Hazardous areas that must be guarded include the following:

1. Point of operation. Area where the machine either cuts, bends, molds, or forms the material.
2. Pinch/nip point. Area where moving machine parts can trap, pinch, or crush body parts (e.g., roller feeds, intermeshing gears, etc.)
3. Sharp edges.

There are three types of barrier guards that protect people from moving machinery.

They consist of the following:

- Fixed guards
- Interlocked guards
- Adjustable guards

A fixed guard is a permanent machine part that completely encases potential hazards. Fixed guards provide maximum operator protection.

Interlock guards are connected to a machine's power source. If the guard is opened or removed, the machine automatically disengages. Interlocking guards are often preferable because they provide adequate protection to the operator, but they also allow easy machine maintenance. This is ideal for problems such as jams.

Self-adjusting guards change their position to allow materials to pass through the moving components of a power tool. These guards accommodate various types of materials, but they provide less protection to the operator.

***IMPORTANT*:** Guards must be in place. If a guard is removed to perform maintenance or repairs, follow lockout/tagout procedures. Replace the guard after repairs are completed. Do not disable or move machine guards for any reason. If you notice that a guard is missing or damaged, contact your supervisor and have the guard replaced or repaired before beginning work.
***NOTE*:** Hand-held power tools typically have less guarding in place than stationary power tools. Use extreme caution when working with hand-held power tools and always wear a face shield.

In addition to the safety suggestions for general power tool usage, there are specific safety requirements for each type of tool. The following sections cover safety guidelines for these types of tools:

Grinder Safety

Follow these safety guidelines when working with grinders:

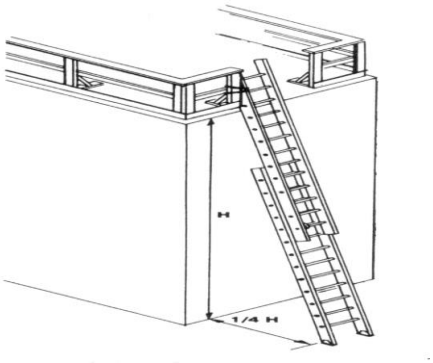
- Ensure that no combustible or flammable materials are nearby that could be ignited by sparks from the grinder wheel.
- Ensure that a guard covers at least 270 degrees of the grinding wheel on bench-mounted machines.
- Periodically check grinder wheels for soundness. Suspend the wheel on a string and tap it. If the wheel rings, it is probably sound. A dull sound indicates cracks in the wheel.

- Place the grinder tool rest 1/8 inch from the wheel and slightly above the center line.
- Allow the grinder to reach full speed before feeding material into the grinding position. Faulty wheels usually break at the start of an operation.
- Unless otherwise designed, grind on the face of the wheel.
- Use locking pliers or clamps to hold small pieces.
- Slowly move work pieces across the face of a wheel in a uniform manner. This will keep the wheel sound and maintain a flat cutting surface.
- Do not grind non-ferrous materials.
- Replace wheels that are badly worn or cracked.
- Never use a wheel that has been dropped or received a heavy blow, even if there is no apparent damage.
- Before using a new wheel, let it run a few seconds at full speed to make sure it is balanced securely.

LADDERS

Extension Ladders

- Do not use ladders with broken or missing rungs, broken or split side-rails, or damaged components**.** Damaged ladders must be tagged and immediately removed from the work area.
- Always face the ladder when climbing or descending**.**
- Protection from falls is a key consideration when climbing ladders above 10 feet – maintain 3 point contact.
- Keep ladders free of lines, ropes, hoses, wires, cables, oil, grease, and debris**.** Do not leave objects on ladders.
- Extend side rails 36 inches above the landing**.** When this is not practical, install a grab rail**.** Ladders in use must be tied, blocked, or otherwise secured.
- Ladders must be inspected before use and at least once per month**.**
- Do not carry tools or materials in your hands when climbing up or down the ladder.



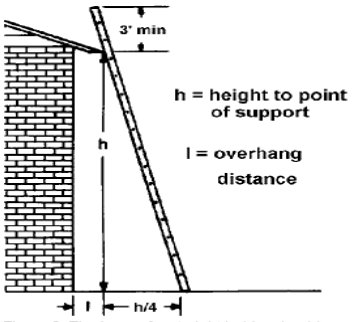


Figure 2. The base of a straight ladder should be one foot out of every four of height to the point of support

NB: No work shall be carried out from a ladder unless there is absolutely no other methods of work platforms that can be used (i.e. scaffolding, power elevating work platforms etc.) If ladders must be used for light duties, a written safe work procedure must be given to the supervisor/foreman on safe work off the ladder before the commencement of work and workers are to be instructed on the safe use of the ladder (documented and signed by each worker).

Reviewed By: Joe Henriques, President

Step Ladders

Setting Up - When you are setting up a step ladder:

- Read and understand the manufacturers instructions/ decals
- Make sure your manufactured step ladder complies with CSA standards
- Open the step ladder as far as it will go
- Lock the spreader arms in place
- Push the bracket shelf down into place
- Make sure the ladder is placed on an even surface and within easy reach of your work
- Don't stand a ladder on ice or snow
- Don't use an unstable object - like a rock or a brick - to level the ladder's feet
- If you are setting up in front of a closed door, open the door or lock it
- In some instances, you may be required to use a personal fall arrest system when using a step ladder. Refer to Fall Protection sheet

Maintenance - Always inspect the ladder before using it. Look for:

- Cracks
- Splits
- Twisted or jammed parts
- Loose screws, rivets or rungs

If you find something wrong with your step ladder - don't use it! Get a new one or repair it.

Balancing Your Safety

Climbing and balancing on a ladder requires skill and technique. Don't get careless or you may pay the price.

- Make sure your ladder is at a safe angle and stabilized
- Always climb and descend facing the ladder
- Use both hands to hold onto the upper steps (not the side rails)
- climb the ladder one step at a time
- Do not stand on the top two rungs unless it has a railed platform at the top or the manufacturer permits it; otherwise if you need to get higher, get a longer ladder
- Set tools or objects on the bracket shelf of the ladder - don't climb or descend with them in your hands
- Don't work with anything heavy in one hand - such as a paint bucket. Set it on the bracket shelf
- A good rule of thumb to maintain your balance: keep your belt buckle between the ladder's side rails - don't stretch or overextend yourself.

SCAFFOLD - WORK PLATFORM SAFETY

Basic Safe Work Procedures for Scaffold Erection

1. Before the erection of scaffolding, a short toolbox meeting shall be held by the erection crew to discuss erection procedures.

2. Competent member of the crew will go to the roof to locate appropriate anchors for lifelines. If the tear-down consists of 10 frames or nine bays wide, at least 4 ropes will be required. If anchor points are available, one rope should be utilized for every 2nd or 3rd bay of scaffolding. Be aware if a possible swing fall hazard. Anchor points must be able to withstand 5000 lbs.

3. The crew will then discuss and fill out the required site-specific fall protection plan including **rescue procedures**.

4. If it is required, the area will be cordoned off to prevent entry by unauthorized workers. Ensure no other work is being performed directly above where you will be erecting scaffolding.

5. Using base plates/screw jacks, stand end frames ensuring adequate sills or pads are used.

6. Connect the end frames with cross frames ensuring adequate sills or pads are used.

7. Install planks (minimum 20” wide) or manufactured aluminum deck.

8. Install the second row of end frames from the deck and install cross braces. Install handrails, if required, pig tails and end stops.

9. The worker on the top section must utilize fall protection equipment. Install the third row of end frames from the deck below. Install planks or manufactured decks from below as well.

10. Install cross braces, guard rails, pig tails and end stops.

11. Ensure building tie-ins are installed as work progresses. If three-foot-wide frames are used, the first row of building tie-ins will be at 9 feet (three times the minimum base dimension). The minimum distance for vertical tie-ins after this point is 20 feet. Horizontal tie-ins must be placed at a minimum distance of every third bay or 21 feet, whichever is less. Tie-ins must also be placed at each end of the scaffold.

12. Ensure adequate access to the scaffold is maintained at all times.

13. The erection and dismantling of a scaffold must be carried out under the supervision of a knowledgeable and competent person.

14. A scaffold must be erected with all braces, pins, ladders, screw jacks, base plates, sills, and other fittings installed as required/supplied by the manufacturer or supplier.

15. Work platforms must be at least 460 mm (18 inches) wide and if they are over 2.4 meters (8 feet) high, they must be planked, side by side, across their full width.

16. Scaffold planks must be of good quality, No. 1 spruce, free of defects such as loose knots, splits or rot, measuring (rough sawn) 51 mm x 254 mm (2 inches x 10 inches) in cross section.

17. Scaffold planks must be cleated or securely fastened to prevent them from sliding.

18. Overhand of scaffold planks must be between 150 mm to 300 mm (6 to 12 inches).

19. Guardrails must be provided on all work platforms exceeding 2.4 meters (8 feet)

20. Scaffolds must be tied into a building at vertical intervals not exceeding three times the least lateral dimension, including the dimension of any outrigger stabilizing devices.

21. Where scaffolds cannot be tied into a building, guy lines and/or outriggers should be used to provide stability.

22. Scaffolds must be erected, used and maintained in a reasonably plumb condition.

23. All means of access must be provided (i.e. ladder, etc) and shall be kept clear of all obstructions.

24. Ensure engineer drawings are submitted and inspection is performed by a competent worker where height of tube scaffold exceeds 15 meters (50 feet) and tube scaffold exceeds 30 feet.

25. Scaffold planks shall not span an excess of 2.1 meters (7 feet) without vertical support.

26. Do not climb scaffold frames – use a ladder.

Where a guardrail system is not practical, use personal fall protection system.

Note: The above procedures will vary somewhat depending on the type of components used. i.e.: width and height of frames. Engineering approved specifications may be required.

Rescue Procedures

- Each crew is equipped with a cellular telephone.
- If a worker falls and is suspended by fall arrest equipment, he will initiate self-rescue, if possible.
- If self-rescue is not possible, fellow worker(s) will initiate rescue procedures.
- If fellow worker(s) **cannot effectively and safety assists with rescue procedure, CALL 911.**

Scaffolds on Wheels or Castors

- All castors or wheels must be provided with a functioning braking device
- Breaks on the castors shall be engaged when working on the scaffold
- Ensure surface is firm and level prior to moving scaffold
- No workers shall mount scaffold unless the brakes are applied
- Workers on scaffolds above 2.4 meters (8 feet) must wear full body harness and be tied off to a fixed structure, if scaffold is required to be moved
- Do not climb scaffold frames use ladder.

Where guardrail not practical use personal fall protection equipment.

1. Scaffold mounted on castors or wheels shall be equipped with guy wires or outriggers to prevent its overturning if the height of the scaffold platform exceeds three times the least lateral dimension of the scaffold
    - measured at the base of the scaffold
    - if outriggers are used, measured between the outriggers

POWER ELEVATED WORK PLATFORMS

All operators must be trained and familiar with the machine they are operating and have proof of such training on that specific machine prior to its operation.

Use the right piece of equipment for the task. For example, do not:

- Use an "on slab" vehicle where an "off slab" designed unit is required
- Use an underrated unit for lifting people and materials
- Lift materials that extend too far beyond the platform
- Use a scissor type lift where a boom unit would be more appropriate
- Use a platform which will not reach the desired location (use of extenders, ladders, etc., is not permitted)
- All operators must know their daily inspection and maintenance duties regarding the machinery (especially if it is rented machinery and these duties are shared).
- 100 % tie-off is not required (not in fall arrest mode) if both feet are on the platform with the emergency switch off.

O. Reg 213/91 s. 148. (1) An elevating work platform,

(a) shall not be loaded in excess of its rated working load;

(b) shall be used and moved only in accordance with the manufacturer's written instructions;

(c) shall not be loaded or used in such a manner as to affect its stability or endanger a worker;

(d) shall not be moved unless all workers on it are protected from ejection by being attached to an adequate anchorage point on the elevating work platform by a method of fall protection; and

(e) shall not be used, in the case of a self-propelled or vehicle-mounted boom-type elevating work platform or a vehicle-mounted aerial device, unless all workers on it are attached to an adequate anchorage point on the elevating work platform by a method of fall protection. O. Reg. 345/15, s. 18; O. Reg. 242/16, s. 14 (1); O. Reg. 142/17, s. 21.

- All workers must wear a full body harness and shock absorbing lanyard while on any elevated work platform and secure lanyard to designated fixed point prior to moving in any direction.
- Never lift a load that exceeds the rating of the machine
- Check for overhead hazard, electrical lines before traveling, raising or lowering the platform
- "On slab" machines must be used only on smooth level and hard surfaces. The work surface should have a slope of less than 1 to 50 and be free of depressions, trenches or holes.
- "Off slab" machines can be used on rough terrain providing the following conditions are met:
- The work surface must have enough bearing capacity to support the machine
- The machine is not traveled in an elevated position over rough terrain
- Only machines with outriggers capable of lifting the machine should be used on sloped surfaces - stabilizers are not adequate for this type of operation

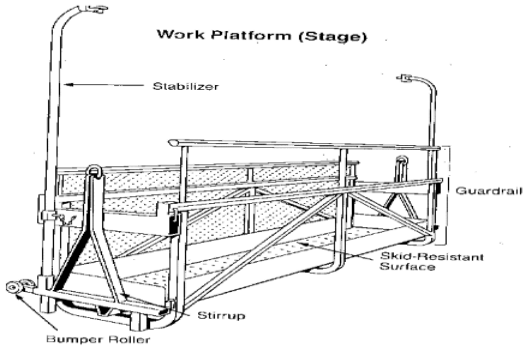
- Blocking under outriggers must be used on soft ground conditions
- Material used for blocking must be solid timber, not plywood or cement blocks
- All lifts must have loads properly secured and centered on the platform
- Ensure that device documentation and log book of maintenance is on device and up to date
- Do not place any loads on top rails of the equipment for purpose of lifting it, it can be done only if modification designed and approved by professional engineer.
- Do not use power elevating devices for material hoisting or supporting.

Exception to the rule:

Where professional engineer approves modification in writing including load rated capacity labels and approved drawings /specifications on the project device may be used as per those drawings/specifications.

SUSPENDED ACCESS EQUIPMENT

WORK PLATFORM (STAGE)



The swing stage platform must be equipped with secure top rails, mid- rails, toe boards, wire mesh, and properly sized stirrups. Swing stages have a specific capacity which is usually indicated on the stage itself. This capacity must not be exceeded. Should it be necessary to carry additional materials (besides personal tools), the user must be sure that the stage is rated to carry the additional load. All structural components must be securely fastened together according to the manufacturer's specifications. Properly sized and graded bolts and pins must be used to secure components together.

The floorboards may be metal or wood, and must be securely attached to the stage.

Various platform accessories are available from suppliers to improve safety and operation. For example, guides or wire rope stabilizers attached to the stirrups will reduce platform sway. Ground castors on the bottom of the platform facilitate horizontal movement. Bumper or guide rollers attached to the front of the platform provide clearance around small obstacles and protect the building face from the platform. On a swing stage, a worker must wear a safety harness and lanyard, secured by a mechanical "rope grab" to an independent lifeline that is attached to a proper anchorage on the structure.

Gensteel operations almost **never** include work off suspended access equipment. On rare occasion our clients may ask our welder on the project to assist with welding task that is accessible by suspended access equipment only. If such request is made, none of our workers or sub-contractors are permitted to enter and work off suspended equipment until they are trained by the client or the client provides the operators and supervises the welder.

HYGIENE

Drinking Water

- **General Contractors** shall ensure that adequate amount of portable drinking water is available for use of workers, Supervisor/Foreman to be aware of its location.
- Clearly mark containers used for drinking water and do not use them for other purposes.

Toilets and Washing Facilities

New Construction:

- **General Contractors** must provide toilets for workers according to applicable sanitary work standards and where required.
- **General Contractors** must provide adequate cleaning facilities for workers.

Occupied Buildings:

- Project Manager shall contact building owner/client and confirm if workers are permitted to use facilities/toilet inside the existing building.
- If permit ion is not obtained project manager shall arrange for portable toilet to be delivered to the project.

MOTOR VEHICLES AND EQUIPMENT MAINTENANCE

Motor Vehicle and Heavy Equipment Procedures

- Motor vehicles must be properly equipped with back up alarm (if initially installed by the manufacturer) and maintained in accordance with the manufacturer's recommendations.
- Only authorized, licensed drivers are allowed to operate vehicles or equipment.
- Shut off the engine during fuelling and maintenance, or when leaving a motor vehicle unattended**. Always remove the key from the vehicle and must be with the operator.**
- Use wheel chocks during unloading or at any time when there is a possibility of the vehicle rolling
- Do not use a motor vehicle or equipment having an obstructed view to the rear, unless the vehicle has a backup alarm audible above the surrounding noise level or a guide or ask for assistance/signaller.
- Heavy machinery, equipment, or their parts which are suspended or held aloft by slings, hoists, or jacks must be substantially blocked or cribbed to prevent falling or shifting**.** Do not work under or between suspended loads
- Check vehicles at the beginning of each shift to ensure that equipment and accessories are in safe operating condition, and free of damage that could cause failure while in use.
- Do not ride with arms or legs outside of the truck body, in a standing position, on running boards, seated on side fenders, tailgates, truck cabs, cab shields, or on the load.
- Do not drive above the posted speed**.** Weather, traffic, width and characteristics of the road, type of motor vehicle, and existing conditions may reduce the speed limit.
- A competent person must inspect machinery and equipment prior to each use**.** Deficiencies must be corrected and defective parts replaced before continued use.
- Belts, gears, shafts, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts of equipment must be guarded if parts are exposed or create a hazard.
- An accessible fire extinguisher must be available at the operator stations or cabs of construction vehicles.
- Rollover protection is required for applicable equipment operated in the work area (per OHSA & its Reg.).
- Operators of vehicles or equipment are to use seat belts or other restraint devices at all times during operation of vehicles or equipment.

Reviewed By: Joe Henriques, President

FORKLIFT SAFETY

Management Expectations

All powered industrial trucks/forklifts are to be operated in a safe manner that ensures compliance with regulatory requirements. In doing so, employees are expected to adhere to the rules and procedural steps contained in policies and procedures relating to the "Safe Operation of Powered Industrial Trucks" which are designed to prevent accidents and injuries involving the operator, other employees, visitors, or materials. (The following should be used as a guideline as applicable.)

Pre-Use Inspection

- **do not** use forklift if any of the following conditions exist:
- the mast has broken or cracked weld-points.
- the roller tracks are not greased, or the chains are not free to travel.
- the forks are unequally spaced, or cracks exist along the blade or at the heels.
- the hydraulic fluid levels are low.
- the hydraulic line and fitting have excessive wear or are crimped.
- the fluid is leaking from the lift or the tilt cylinders.
- the hardware on the cylinders is loose.
- the tires are excessively worn, split or have missing tire material.
- air filled tires are not filled to the operating pressure indicated on the tire.
- the batteries have cracks or holes, uncapped cells, frayed cables, broken cable insulation, loose connections or clogged vent caps.
- propane cylinder damaged, not secured, leaking.

Starting the Forklift

- do not start or operate the forklift unless trained and permitted to do so.
- apply the foot brake and shift gears to neutral before turning the key.

Forklift Safety Rules – General

- do not exceed the lift capacity of the forklift. read the lift capacity plate on the forklift if you are unsure.
- follow the manufacturer's guidelines concerning changes in the lift capacity before adding an attachment to a forklift.
- lift the load an inch or two to test for stability: if the rear wheels are not in firm contact with the floor, take a lighter load or use a forklift with a higher lift capacity.

- do not raise or lower a load while you are en-route. wait until you are in the loading area and have stopped before raising or lowering the load.
- after picking up a load, adjust the forks so that the load is tilted slightly backward for added stability.
- drive with the load at a ground clearance height of 4-6 inches at the tips and 2 inches at the heels in order to clear most uneven surfaces and debris.
- drive at a walking pace and apply brakes slowly to stop when driving on slippery surfaces such as icy or wet floors.
- do not drive over objects in your pathway.
- do not drive into an area with a ceiling height that is lower than the height of the mast or overhead guard.
- steer wide when making turns.
- do not drive up to anyone standing or working in front of a fixed object such as a wall.
- obey all traffic rules and signs.
- sound horn when approaching blind corners, doorways or aisles to alert other operators and pedestrians.
- stay a minimum distance of three truck lengths from another operating mobile equipment.
- drive in reverse and use a signal person when your vision is blocked by the load.
- look in the direction that you are driving; proceed when you have a clear path.
- do not use bare forks as a man-lift platform.
- do not drive the forklift while people are on the attached man-lift platform.
- drive loaded forklifts forward up ramps.
- lower the mast completely, turn off the engine and set the parking brake before leaving your forklift.
- ask for assistance of signaler where view or path of travel obstructed.

Picking up a Load

- "square up" on the center of the load and approach it straight on with the forks in the travel position.
- stop when the tips of your forks are about a foot from the load.
- level the forks and slowly drive forward until the load is resting against the backrest of the mast.
- lift the load high enough to clear whatever is under it.
- back up about one foot, and then slowly and evenly tilt the mast backwards to stabilize the load.

Putting a Load Down

- "square up" and stop about one foot from desired location.
- level the forks and drive to the loading spot.
- slowly lower the load to the floor.
- tilt the forks slightly forward so that you do not hook the load.
- when the path behind you is clear of obstructions, back straight out until the forks have cleared the pallet.

Stacking One Load on Top of Another

- stop about one foot away from the loading area and lift the mast high enough to clear the top of the stack.
- slowly move forward until the load is squarely over the top of the stack.
- level the forks and lower the mast until the load is no longer supported by the forks.
- look over both shoulders for obstructions and back straight out if the path is clear.
- do not overload shelving or racks observe load rated capacity labels first.
- do not place or remove loose loads with forklift, secure the load to prevent it from tipping, rolling or collapsing.

Yard/Outside Storage

- ensure all materials stored in the manner that prevents tipping, rolling or collapsing
- inspect ground/surface conditions prior to operating forklift (ice, snow, pot holes etc.)
- do not operate if ground conditions unsafe – report to your supervisor or safety manager

Hand Truck Operations

- tip the load slightly forward so that the tongue of the hand truck goes under the load.
- push the tongue of the hand truck all the way under the load to be moved.
- keep the center of gravity of the load as low as possible by placing heavier objects below the lighter objects.
- when loading hand trucks, keep your feet clear of the wheels.
- push the load so that the weight will be carried by the axle and not the handles. the operator should only balance and push.
- place the load so that it will not slip, shift or fall. use straps, if provided, to secure the load.
- if your view is obstructed, use a spotter to assist in guiding the load.
- for extremely bulky or pressurized items such as gas cylinders, strap or chain the items to the hand truck.
- do not walk backward with the hand truck, unless going up stairs or ramps.

- when going down an incline, keep the hand truck in front of you so that it can be controlled at all times.
- move hand trucks at a walking pace.
- store hand trucks with the tongue under a pallet, shelf, or table.
- do not exceed the manufacturer's load rated capacity. read the capacity plate on the hand truck if you are unsure.

Lifting Equipment – General

- do not use chain slings if links are cracked, twisted, stretched or bent.
- do not shorten slings by using make-shift devices such as knots or bolts.
- do not use a kinked chain.
- protect slings from the sharp edges of their loads by placing pads over the sharp edges of the items that have been loaded.
- do not place your hands between the sling and its load when the sling is being tightened around the load.
- wear work gloves when handling rough, sharp-edged or abrasive material such as chains, cables, ropes or slings.
- do not alter or remove the safety latch on hooks. do not use a hook that does not have a safety latch, or if the safety latch is bent.
- lift the load from the center of hooks, not from the point.
- if rough terrain forklift is used in the field such as telehandler, operator must be trained in that particular type of telehandler and carry on his/her person written proof of training/competency.
- daily pre-shift inspections must be carried out and documented.
- operator must operate the forklift in accordance with instructions of manufacturer.
- use spotter where view of your path is obstructed.

TRANSPORTING HAZARDOUS MATERIALS

General Information

This section references regulatory requirements and corporate policies designed to protect employees, the public, and the environment; to promote safe transportation of chemical materials; and to enhance compliance with provincial and federal transportation laws and regulations.

Transportation Procedures

- Employees involved in transporting or shipping chemical materials are responsible for regulatory compliance and for promoting the safe transportation of dangerous goods.
- Only employees who have completed TDG training may package and prepare chemical materials for transport and transport the materials to our projects.

Reviewed By: Joe Henriques, President

NEW EMPLOYEE SAFETY POLICY

Gensteel should provide safety training to all newly hired employees. Each new employee will be given a copy of the safety manual.

General safety orientation containing information common to all employees should be reviewed, ***before beginning their regular job duties.*** Recommendations include (at a minimum):

- Review the Safety Manual, with extra time spent on: Accident & hazard reporting procedures, emergency procedures, first aid, personal protective equipment, and special emphasis programs (Drug-Free Workplace Policy, Return-to-Work Policy, Incentive Programs, etc.)
- Encourage & motivate employee involvement in safety. Make each accountable for their safety and the safety of their coworkers.
- Explain the workers' compensation system and fraud prevention
- Review any known workplace hazards.
- Conduct training on any topics that are not schedule to be addressed within a reasonable timeframe and are relevant to the employee's job.

Continual training should be provided to new hires. Each new hire should be assigned to work with an experienced worker for at least 6 months. The senior employee should act as a mentor and ensure that the employee is working safely and exhibits a positive safe attitude.

Such training shall include but not limited to:

- WHMIS – [Workplace Hazardous materials Information System Training]
- Site Safety Orientation & Hazard Recognition
- Working at Heights Certification Training
- Violence and harassment (Bill 168)
- Workers Health & Safety Awareness in 4 Basic Steps
- Supervisors Health & Safety Awareness in 5 Basic Steps

Additional training will be provided as needed (hazard or legislation specific).

YOUNG WORKERS (LESS THAN 25 YEARS OF AGE) – STUDENTS

Minimum allowable working age in construction in Ontario is **16** years of age. Where young worker or student is assigned to the crew, Supervisor/Foreman is responsible to in addition to "Company Safety Orientation Session" to closely supervise the worker either personally or by assigning young worker to experienced and competent worker for instructions, monitoring and guidance. Do not permit inexperienced worker, under training to carry out difficult tasks or tasks involving various power tools and equipment until satisfied that worker is adequately trained and capable of carrying those tasks in safe manner.

Young workers and new workers are the most vulnerable to workplace injury. A combination of inexperience, reluctance to ask questions and lack of maturity can lead young workers into lethal situations.

Gensteel is committed to educate young workers on job specific hazards and controls by assigning full-time competent supervision during project activities. Young and inexperienced workers will not be permitted to work alone or handle the task that they have not received training or instructions for.

NEW DEFINITION OF A WORKER UNDER THE OHSA

The government has just announced, effective immediately, that the formal definition of a worker, under the Ontario Health & Safety Act and Regulations (OHSA) has changed. Under Bill 18, coverage under the OHSA has been expanded to include the following:

Unpaid secondary school students, involved in school board approved co-operative education programs

- Unpaid learners within a post-secondary institution approved program
- Unpaid trainees who are not employees for the purposes of the Employment Standards Act because they meet certain conditions.

This alteration to the definition of worker to include these above-mentioned classes of unpaid workers is extremely significant. They now have the very same legal rights as paid workers, inclusive of the right to refuse or stop work when there is a danger to health and safety. This also however means, they have the same responsibilities under the OHSA as paid workers. Adherence to all applicable sections within the OHSA, such as wearing protective equipment is legally mandated. In turn, employers now have the same duties and responsibilities to these unpaid workers, under the OHSA, as they do paid workers.

NEW EMPLOYEE TRAINING (LESS THAN SIX MONTHS WITH THE COMPANY – NEW EMPLOYEE)

One of the most effective methods in determining worker's education and training needs is "Company Safety Orientation Session" Such session must be carried out on the first morning of the employment or day prior in order to determine worker's levels of competency and related knowledge. In addition, session gives the worker opportunity to learn about the company, type of activities and Injury & Illness Prevention Program requirements. Immediate Supervisors/Foreman are responsible for ensuring this process and informing upper management if any training is required and need to be scheduled prior to worker being assigned with task.

Upon discovery of lock of training immediate measures must be taken to arrange for adequate training and prevent worker from further carrying out the tasks where specific instructions or training is required or close and competent supervision not available.

YOUNG WORKERS – APPRENTICE (anyone under 25 years of age – young worker)

Where young worker or apprentice is assigned to the crew Supervisor/Foreman is responsible to in addition to "Company Safety Orientation Session" to closely supervise the worker either personally or by assigning young worker to experienced and competent worker for instructions, monitoring and guidance. Do not permit inexperienced worker, under training to carry out difficult tasks or tasks involving various power tools until satisfied that worker is adequately trained and capable of carrying those tasks in safe manner.

Annual Training Review – All Employees/Supervisors/Foreman

Management is responsible to conduct annual review of all employees in regards to safety training. Where refresher training is required on annual basis such as WHMIS – GHS 2015 all workers must be notified by their supervisors and course scheduled for attendance. Individual employees may schedule their WHMIS – GHS 2015 training at different times throughout the year at the worker's expense. It is also responsibility of individual employees to inform their supervisor of required training refresher dates.

FIRE PROTECTION POLICY

No worker or trade contractor is allowed to carry out hot work on our project prior to approval from our project supervisor and completion of Hot Work Permit. Where Hot Work Permit is issued by our client then client's Hot Work Permit must be completed and upon approval the work is to be carried out.

Project supervisor is responsible to ensure that locations of fire extinguishers are posted and clearly marked throughout the project.

Localized or minor fires may be handled by trade workers, trained in how to properly use fire extinguishing equipment.

a) Fire extinguishers shall be readily available near all open-flame operations, including welding operations, fuel fired equipment, where combustible or flammable liquids are stored, handled or used, and at each workshop of 300 or fewer square meters of floor area. All trades to comply.
b) Fire extinguishers are to be marked with their appropriate manufacturer symbols designating its class and use and its WHMIS GHS 2015 supplier label. These fire extinguishers are to be routinely inspected on a monthly basis and tagged as such, indicating the date of inspection and by whom/a competent person. 4A40BC class fire extinguishers are required.

c) CLASSIFICATION OF DRY CHEMICAL FIRE EXTINGUISHERS

CLASS A	CLASS B	CLASS C
Ordinary Flammable	Flammable Liquids and Gases	Electrical
- Trash - Cloth - Wood - Rubber - Paper - Plastics	- Oils - Gasoline - Oil based paints - Propane - Acetylene - Gases - Solvents	- Motors - Switch-gears - Electrical panels - Electrical wiring

Workers assign as spotters must be trained in safe use of fire extinguishing equipment and be able to provide record of training upon request. (O. Reg. 213/91 s. 52(1.1)

Reviewed By: Joe Henriques, President

WELDING SAFETY PROCEDURES

Electric Welding

1. Ensure fire extinguishers are charged and available in immediate work area.
2. Ensure electrical cord, electrode holder and cables are free from defects (no cable splices are allowed with in 10 feet of the electrode holder)
3. Ensure PPE (welding helmets, head cap, high top-hard toed shoes, fire resistant gloves, flame-retardant coveralls, leather apron, welding goggles with at least #4 filter lenses etc.) are available and have no defects.
4. Ensure the welding unit is properly grounded.
5. All defective equipment must be repaired or replaced before use.
6. No welding permitted near flammable or combustible materials.
7. The **General Contractor** is to place welding screen or suitable barricade around work area to provide a fire safety zone and prevent injuries to other trades working within the vicinity of **Gensteel**.
8. Do not block emergency exits.
9. Uncoil and spread out welding cable.
10. To avoid overheating, ensure proper contact of work leads and connections, remove any metal fragments from magnetic work clamps.
11. To avoid electric shock do not wrap welding cables around a body part and avoid welding in wet conditions.
12. Do not wear clothing made of synthetic fibers when welding.
13. Assign fire watch where necessary and where flammable materials are stored.
14. Only adequately trained and certified workers are permitted to perform welding tasks.
15. Post “DANGER” signs in location to worn others of hazard.

Oxyacetylene Welding

1. Ensure fire extinguishers are charged and available in immediate work area.
2. Ensure PPE (welding helmet, head cap, high top – hard toed shoes, fire resistant gloves, flame – retardant coveralls, leather apron, welding goggles with at least #4 filter lenses etc.) are available and have no defects.
3. Fasten cylinders securely. (Do not handle cylinders roughly. Chain cylinders in an upright position to a wall or cart. When regulators are not on cylinders, keep safety caps in place. to prevent damage to valves)
4. Never use oil on welding equipment. (Oil and grease may ignite spontaneously, when in contact with oxygen).
5. Open cylinder valves correctly. (Open the valve of acetylene cylinder no more then ¾ of a turn so it can be closed quickly in case of emergency. Open the valve the oxygen tank fully. While welding or cutting, leave the valve wrench in position.).
6. Keep the tip pointed away from your body. (Do not saturate your clothing with oxygen or acetylene. Before and while lighting the flame, keep the tip pointed away from your body.).

7. Light the flame with approved lighter. (Using matches to light the torch brings fingers to close to tip.).
8. Set the operating pressure carefully. (Never use acetylene at a pressure over 15 psi. Follow the manufacturer's recommendations for the correct operating pressures for the metal being welded and for the tip size being used.).
9. Do not smoke or allow anyone else to smoke near the oxy-fuel gas welder. (If fuel gas were to leak from the unit, smoking could provide ignition and cause a fire or an explosion.).
10. Treat the flame with respect. (Keep the flame and heat away from the cylinder, hoses and people. Never lay down a lighted torch. Be sure the flame is out before laying down the torch. Never walk around with a lighted torch.).
11. Control flashbacks and backfires. (Make certain that reverse flow-check valves and flash arrestors are installed on the oxygen and acetylene lines.).
12. Do not leave the work area until the cylinder valves are closed. (Be sure the cylinders valves are closed and pressure is relieved from the hoses before you leave the work area.).
13. Never stand in front of a regulator while you are opening a tank valve.
14. Do not weld or cut on containers that that have held flammable materials.
15. Remove regulators and replace protective caps before transporting cylinders.
16. Store oxygen cylinders away from acetylene cylinders. (A non-combustible wall at least 5 feet high should be used to separate the cylinders.
17. Handle hot metal with pliers or tongs.
18. Check connections for leaking gases.
19. Assign fire watch where necessary and where flammable materials are stored.
20. Post "DANGER" signs in location to worn others of hazard.
21. The **General Contractor** is to place welding screen or suitable barricade around work area to provide a fire safety zone and prevent injuries to other trades working within the vicinity of **Gensteel**.
22. **Gensteel** will provide portable smoke extractors.

TIG Welding

1. Only adequately trained and competent workers are permitted to perform TIG welding.
2. Ensure fire extinguishers are charged and available in immediate work area.
3. Wear required PPE as per SDS.
4. Clean the area to be welded.
5. Use pure tungsten of the proper diameter (3/32 diameter for all welding 100 amps and lower and 5/32 diameter for over 100 amps.
6. Grind the tungsten end to a point.
7. Set the polarity of your welder to Straight Polarity (electrode negative)
8. Turn the power on to your welder.
9. Make your initial voltage and amperage settings.
10. Open the valve to your flow meter.
11. Clamp the ground cable to your work piece.
12. Keeping the tungsten away from yourself or the work piece, tap the foot pedal or arc start button and adjust the gas flow to 15-20 on the argon scale of your flow meter.

13. Set the shielding gas post flow to approximately 3-5 seconds corresponding to tungsten diameter (3 seconds for 3/32 and 5 seconds for 5/32 tungsten) – this will allow the shielding to flow after the arc is stopped to keep the tungsten from being contaminated during cool down.
14. Hold the torch approximately 15 degrees from vertical and tungsten about 1/16 from the weld joint.
15. Strike the arc and watch for it to stabilize and form a puddle on both pieces to be joined.
16. Apply the filler metal to the forward edge of the puddles until they join together.
17. Do not touch the tungsten to the filler rod at any time while welding.
18. The filler rod will become “live” and capable of giving electrical shock. to bare skin.
19. Do not weld near combustible materials.
20. Assign fire watch where necessary and where flammable materials are stored.
21. Post “DANGER” signs in location to worn others of hazard.

Reviewed By: Joe Henriques, President

HOT WORK PROCEDURES

Upon arrival to the work location crew foreman/supervisor shall obtain the information from the **General Contractors**/client if Hot Work Permit is required.

Hot Work Permit Procedures

1. When practical objects to be welded cut or heated must be moved to a designated safe location.
2. Prior to performing hot work permit (if required) must be obtained from **General Contractors**/client.
3. All precautions on the Hot Work Permit must be met prior to any work.
4. The Hot Work Permit is only good for the date(s) and time noted on the permit. Fire Watch person shall sign the permit when fire watch ended.
5. **Gensteel's** portion of the fire watch will be signed and the final fire watch to be done by the permit issuers.
6. All other personnel (employees, contractors, building occupants) must be suitably protected against hazards generated by the work. i.e. heat, sparks, fumes, welding rays, etc. by the **General Contractor**.
7. The supervisor is required to check the requirements of the hot work permit.

Hot Work Procedures

1. Where practical, all combustibles shall be relocated at least 35 feet from the immediate work site. Where relocation is impractical combustibles shall be protected with flame proof covers, shielded with metal, guards, curtains, or wet down material to help prevent ignition of material.
2. Where cutting and welding is done near walls, partitions, ceilings, or on a roof combustible construction, fire resistant shields or guards shall be provided to prevent ignition.
3. Welding shall not be attempted on a metal portion, wall, ceiling or roof having a covering or on walls having combustible sandwich panel construction.
4. Cutting or welding of the metal shall not be undertaken if metal in contact with combustible materials and could cause ignition.
5. In areas where there is dust accumulation of greater than 1/16 inch and welding/hot work will be conducted all dust accumulation shall be cleaned up prior to starting welding/hot work task.
6. Suitable extinguishers shall be provided and maintained for instant use.
7. A fire watch person shall be provided during and ½ hour past the completion of welding project.

Hot Work Prohibited Conditions

Cutting and welding shall not be permitted in the following situations:

1. In areas not authorized by **General Contractors**/Client or **Gensteel**
2. Floor and wall opening cannot be covered/protected by the **General Contractor.**
3. Flammable vapours or gases are present.
4. Appropriate fire fighting equipment is not available or provided by the **General Contractor.**
5. In the presence of potentially explosive atmospheres, e.g., flammable liquids or gases.
6. In areas near the storage or large quantities of exposed, readily ignitable materials.

Fire Watch Responsibilities

The fire watch must know:

1. His/her ONLY duty is fire watch.
2. When they can terminate the watch
3. How to use provided fire extinguisher.
4. How to alarm others if fire is beyond the incipient stage

Reviewed By: Joe Henriques, President

CONFINED SPACE

The purpose of **Gensteel 's** confined space program is to set procedures that will ensure workers safe entry into confined spaces and permit-required confined spaces to perform routine tasks associated with their employment.

Gensteel will follow the General Contractor's guidelines for confined space entry and all legislative requirements.

A confined space is defined as fully or partially enclosed space,

1. that is not both designed and constructed for continuous human occupancy and
2. in which atmospheric hazards may occur because of its construction, location or contents or because of work that is done in it."

Note: If you have a space that is fully or partially enclosed, the two conditions – (a) and (b) above – must both apply before the space can be considered a "confined space"

Examples of confined spaces include manholes, stacks, pipes, storage tanks, trailers, tank cars, pits, sumps, hoppers, and bins. Entry into confined spaces without proper precautions could result in injury, impairment, or death due to:

- an atmosphere that is flammable or explosive;
- lack of sufficient oxygen to support life;
- contact with or inhalation of toxic materials; or
- general safety or work area hazards such as steam or high pressure materials.

Confined Space Assessment

The only way to determine if a "space" meets the definition for a "confined space" is to evaluate it. Consider the following 3 questions:

1. Is the space fully or partially enclosed?
2. Is the space not both designed and constructed for continuous human occupancy?
3. Might an atmospheric hazard occur?

If you have fully or partially enclosed space:

Is it designed and Constructed for Continuous Human occupancy?	Might an Atmospheric Hazard occur?	Is it confined space?
Yes	Yes	No
Yes	No	No
No	Yes	Yes
No	No	No

Prior to Entry

Before any worker enters a confined space, adequate assessment of the hazards related to the confined space must be carried out by competent worker and written plan developed and communicated to all parties affected. Also, enquire with client/**General Contractors** if more than one employer will be entering confined space and if coordination document has been prepared.

The Assessment

The assessment shall be recorded in writing and shall consider:

1. The hazards that may exist due to the design, construction, location, use or contents of the confined space; and
2. The Hazards that may develop while work is done inside the confined space.

The assessment shall contain the name of competent worker who carries out the assessment and competent person must be knowledgeable, trained and experienced.

Proof of competency must be kept on company files.

Coordination Document

Before any worker enters the confined space, the **General Contractors** shall prepare a coordination document to ensure that duties imposed on employers in regard to confined space are performed. The copy of this document shall be provided to each employer of workers who perform work in the same confined space and J.H.S.C. or health and safety representative if any.

Entry Permit

Entry permit must be issued prior to entry and all requirements of the permit met.

Reviewed By: Joe Henriques, President

Assignment of Responsibility

In administering this Confined Space Program, **Gensteel** will follow the General Contractor's guidelines for confined space entry and all legislative requirement.

- Monitor the effectiveness of the program.
- Provide atmospheric testing and equipment as needed.
- Provide personal protective equipment as needed.
- Provide training to affected employees and supervisors.
- Provide technical assistance as needed.
- Preview and update the program on at least an annual basis or as needed.

Program Manager

The Program Manager is responsible for managing the Confined Space Program, and shall:

- Ensure that a list of confined spaces at all **Gensteel's** worksites is maintained.
- Ensure that cancelled permits are reviewed for lessons learned.
- Ensure training of personnel is conducted and documented.
- Coordinate with outside responders.
- Ensure that equipment is in compliance with standards.
- Ensure that the ***Responsible Person*** in charge of confined space work shall:
- Ensure requirements for entry have been completed before entry is authorized.
- Ensure confined space monitoring is performed by personnel qualified and trained in confined space entry procedures.
- Ensure a list of monitoring equipment and personnel qualified to operate the equipment is maintained on file.
- Ensure that the rescue team assembled at the project has simulated a rescue in a confined space
- Know the hazards that may be faced during entry, including the mode (how the contaminant gets into the body), signs or symptoms, and consequences of exposure.
- Fill out a permit.
- Determine the entry requirements.
- Require a permit review and signature from the authorized Entry Supervisor.
- Notify all involved employees of the permit requirements.
- The permit does not need to be posted near entry but must be made readily available to every person involved with confined space.
- Renew the permit. A separate entry permit must be issued each time work is to be performed in a confined space and before any worker enters confined space.
- Determine the number of Attendants required to perform the work.
- Ensure all Attendant(s) know how to communicate with the entrants and how to obtain assistance.

- Post any required barriers and signs.
- Remain alert to changing conditions that might affect the conditions of the permits (i.e., require additional atmospheric monitoring or changes in personal protective equipment).
- Ensure periodic or continuous atmospheric monitoring is done according to permit requirements.
- Ensure that personnel doing the work and all support personnel adhere to permit requirements.
- Ensure the permit is cancelled when the work is done.
- Ensure the confined space is safely closed and all workers are cleared from the area.

Entry Supervisors

Entry Supervisors shall be qualified and authorized to approve confined space entry permits. The Entry Supervisor(s) shall be responsible for:

a. Determining if conditions are acceptable for entry.
b. Authorizing entry and overseeing entry operations.
c. Terminating entry procedures as required.
d. Serving as an Attendant, as long as the person is trained and equipped appropriately for that role.
e. Ensuring measures are in place to keep unauthorized personnel clear of the area.
f. Checking the work at least twice a shift to verify and document permit requirements are being observed (more frequent checks shall be made if operations or conditions are anticipated that could affect permit requirements).
g. Ensuring that necessary information on chemical hazards is kept at the worksite for the employees or rescue team.
h. Ensuring a rescue team is available and instructed in their rescue duties (i.e., an onsite team or a prearranged outside rescue service).
i. Ensuring the rescue team members has current certification in first aid and cardiopulmonary resuscitation (CPR).

Attendants

Attendant(s) must be stationed outside of the confined workspace and shall:

- Be knowledgeable of, and be able to recognize potential confined space hazards.
- Maintain a sign-in/sign-out log with a count of all persons in the confined space, and ensure all entrants sign in and out.
- Monitor surrounding activities to ensure the safety of personnel.
- Maintain effective and continuous communication with personnel during confined space entry, work, and exit.
- Order personnel to evacuate the confined space if he/she:
- observes a condition which is not allowed on the entry permit;

- notices the entrants acting strangely, possibly as a result of exposure to hazardous substances;
- notices a situation outside the confined space which could endanger personnel;
- notices a hazard within the confined space that has not been previously recognized or taken into consideration;
- must leave his/her work station; or
- must focus attention on the rescue of personnel in some other confined space that he/she is monitoring.
- Immediately summon the Rescue Team if crew rescue becomes necessary.
- Keep unauthorized persons out of the confined space, order them out, or notify authorized personnel of an unauthorized entry.

Rescue Team

The Rescue Team members shall:

- Complete a training drill using mannequins or personnel in a simulation of the confined space prior to the issuance of an entry permit for any confined space.
- Respond immediately to rescue calls from the Attendant or any other person recognizing a need for rescue from the confined space.
- In addition to emergency response training, receive the same training as that required of the authorized entrants.
- Have current certification in first aid and CPR.

Entrants/Affected Employees

Employees who are granted permission to enter a confined space shall:

- Read and observe the entry permit requirements.
- Remain alert to the hazards that could be encountered while in the confined space.
- Properly use the personal protective equipment that is required by the permit.
- Immediately exit the confined space when:
- they are ordered to do so by an authorized person;
- they notice or recognize signs or symptoms of exposure;
- a prohibited condition exists; or
- the automatic alarm system sounds.
- Alert Attendant(s) when a prohibited condition exists and/or when warning signs or symptoms of exposure exist.

Training

Gensteel will provide training so that all employees whose work is regulated by this Confined Space Program acquire the understanding, knowledge, and skills necessary for the safe performance of their duties in confined spaces.

Training shall include the recognition of hazards and safe work practices.

Up to date written records showing who provided the training, when and who received the training must be maintained.

Training Frequency

Responsible Person shall provide training to each affected employee:

- before the employee is first assigned duties within a confined space;
- before there is a change in assigned duties;
- when there is a change in permit space operations that presents a hazard for which an employee has not been trained; and
- when **Gensteel** has reason to believe that there are deviations from the confined space entry procedures required in this program, or that there are inadequacies in the employee's knowledge or use of these procedures.
- when new amendments to confined space regulations applicable.

The training shall establish employee proficiency in the duties required in this program, and shall introduce new or revised procedures, as necessary, for compliance with this program.

Hazard Recognition and Other General Training

All employees who will enter confined spaces shall be trained in entry procedures. Personnel responsible for supervising, planning, entering, or participating in confined space entry and rescue shall be adequately trained in their functional duties prior to any confined space entry.

Training shall include:

- explanation of the general hazards associated with confined spaces.
- discussion of specific confined space hazards associated with the facility, location, or operation.
- reason for, proper use, and limitations of personal protective equipment and other safety equipment required for entry into confined spaces.
- explanation of permits and other procedural requirements for conducting a confined space entry.
- a clear understanding of what conditions would prohibit entry.
- procedures for responding to emergencies.

- duties and responsibilities of the confined space entry team.
- description of how to recognize symptoms of overexposure to probable air contaminants in themselves and co-workers, and method(s) for alerting the attendant(s).

Refresher training shall be conducted as needed to maintain employee competence in entry procedures and precautions.

Plan - Specific Training

a) Training for atmospheric monitoring personnel shall include proper use of monitoring instruments, including instruction on the following:
    - proper use of the equipment;
    - calibration of equipment;
    - sampling strategies and techniques; and
    - exposure limites (PELs, TLVs, LELs, UELs, etc.).
b) All workers personnel assigned to confined space task must follow written plan.
c) Training for Attendants shall include the following:
    - procedures for summoning rescue or other emergency services; and
    - proper utilization of equipment used for communicating with entry and emergency/rescue personnel.
d) Training for Emergency Response Personnel shall include:
    - rescue plan and procedures developed for each type of confined space that is anticipated to be encountered;
    - use of emergency rescue equipment;
    - first aid and CPR techniques; and
    - work location and confined space configuration to minimize response time.

Verification of Training

Periodic assessment of the effectiveness of employee training shall be conducted by ***Competent Person***. Training sessions shall be repeated as often as necessary to maintain an acceptable level of personnel competence.

IDENTIFICATION OF HAZARDS AND EVALUATION OF CONFINED SPACES

Survey

Competent Person shall ensure a survey of the worksite is conducted to identify confined spaces. This survey can be partially completed from initial and continuing site characterizations, as well as other available data (i.e., blueprints and job safety analyses). The purpose of the survey is to develop an inventory of those locations and/or equipment that meet the definition of a confined space. This information shall be communicated to personnel, and appropriate confined space procedures shall be followed prior to entry. The initial surveys shall include air monitoring to determine the air quality in the confined spaces. The potential for the following situations shall be evaluated by **Competent Person.**

- flammable or explosive potential;
- oxygen deficiency; and
- presence of toxic and corrosive material.

Hazard Re-Evaluation

The **Competent Person** shall identify and re-evaluate hazards based on possible changes in activities or other physical or environmental conditions that could adversely affect work. A master inventory of confined spaces shall be maintained. Any change in designation of a confined space will be routed to all affected personnel by **Competent Person**.

Pre – Entry Hazard Assessment

A hazard assessment shall be completed by **Competent Person** prior to any entry into a confined space. The hazard assessment should identify:

- the sequence of work to be performed in the confined space;
- the specific hazards known or anticipated; and
- the control measures to be implemented to eliminate or reduce each of the hazards to an acceptable level.

No entry shall be permitted until the hazard assessment has been reviewed and discussed by all persons engaged in the activity. Personnel who are to enter confined spaces shall be informed of known or potential hazards associated with said confined spaces.

Hazard Controls

Hazard controls shall be instituted to address changes in the work processes and/or working environment. Hazard controls must be able to control the health hazards by eliminating the responsible agents, reduce health hazards below harmful levels, or prevent the contaminants from coming into contact with the workers.

The following order of precedence shall be followed in reducing confined space risks.

Engineering Controls

Engineering controls are those controls that eliminate or reduce the hazard through implementation of sound engineering practices.

Ventilation is one of the most common engineering controls used in confined spaces. When ventilation is used to remove atmospheric contaminants from a confined space, the space shall be ventilated until the atmosphere is within the acceptable ranges. Ventilation shall be maintained during the occupancy if there is a potential for the atmospheric conditions to move out of the acceptable range. When ventilation is not possible or feasible, alternate protective measures or methods to remove air contaminants and protect occupants shall be determined by **Competent Person** prior to authorizing entry. When conditions necessitate and can accommodate continuous forced air ventilation, the following precautions shall be followed:

- Employees shall not enter the space until the forced air ventilation has eliminated any hazardous atmosphere.
- Forced air ventilation shall be directed so as to ventilate the immediate areas where an employee is or will be present within the space.
- Continuous ventilation shall be maintained until all employees have left the space.
- Air supply or forced air ventilation shall originate from a clean source.

Work Practice (Administrative) Controls

Work practice (administrative) controls are those controls which eliminate or reduce the hazard through changes in the work practices (i.e., rotating workers, reducing the amount of worker exposure, and housekeeping).

Personal Protective Equipment (PPE)

If the hazard cannot be eliminated or reduced to a safe level through engineering and/or work practice controls, PPE should be used. **Competent Person** shall determine the appropriate PPE needed by all personnel entering the confined space, including rescue teams. PPE that meets the specifications of applicable standards shall be selected in accordance with the requirements of the job to be performed.

Entry Permits

The Confined Space Entry Permit is the most essential tool for assuring safety during entry in confined spaces with known hazards, or with unknown or potentially hazardous atmospheres. The entry permit process guides the supervisor and workers through a systematic evaluation of the space to be entered. The permit should be used to establish appropriate conditions. Before each entry into a confined space, an entry permit will be completed by **Competent Person**.

The **Competent Person** will then communicate the contents of the permit to all employees involved in the operation and post the permit conspicuously near the work location. A standard entry permit shall be used for all entries.

Key Elements of Entry Permits

A standard entry permit shall contain the following items:

- space to be entered.
- purpose of entry.
- date and authorized duration of the entry permit.
- name of authorized entrants within the permit space.
- means of identifying authorized entrants inside the permit space (i.e., rosters or tracking systems).
- name(s) of personnel serving as attendant(s) for the permit duration.
- name of individual serving as entry supervisor, with a space for the signature or initials of the entry supervisor who originally authorized the entry.
- hazards of the permit space to be entered.
- measures used to isolate the permit space and to eliminate or control permit space hazards before entry (i.e., lockout/tagout of equipment and procedures for purging, ventilating, and flushing permit spaces).
- acceptable entry conditions.
- results of initial and periodic tests performed, accompanied by the names or initials of the testers and the date(s) when the tests were performed.
- rescue and emergency services that can be summoned, and the means of contacting those services (i.e., equipment to use, phone numbers to call).
- communication procedures used by authorized entrants and attendant(s) to maintain contact during the entry.
- equipment to be provided for compliance with this confined space program (i.e., PPE, testing, communications, alarm systems, and rescue).
- other information necessary for the circumstances of the particular confined space that will help ensure employee safety.
- additional permits, such as for hot work, that has been issued to authorize work on the permit space.

Permit Scope and Duration

A permit is only valid for one shift. For a permit to be renewed, the following conditions shall be met before each re-entry into the confined space:

- Atmospheric testing shall be conducted, and the results should be within acceptable limits. If atmospheric test results are not within acceptable limits, precautions to protect entrants against the hazards should be addressed on the permit and should be in place.
- **Competent Person** shall verify that all precautions and other measures called for on the permit are still in effect.
- Only operations or work originally approved on the permit shall be conducted in the confined space.

A new permit shall be issued, or the original permit will be reissued if possible, whenever changing work conditions or work activities introduce new hazards into the confined space. **Competent Person** shall retain each cancelled entry permit for at least one (1) year to facilitate the review of the Confined Space Entry Program. Any problems encountered during an entry operation shall be noted on the respective permit(s) so that appropriate revisions to the confined space permit program can be made.

Entry Procedures

When entry into a confined space is necessary, either the Entry Supervisor or **Competent Person** may initiate entry procedures, including the completion of a confined space entry permit. Entry into a confined space shall follow the standard entry procedure below.

Prior To Entry

The entire confined space entry permit shall be completed before a standard entry. Entry shall be allowed only when all requirements of the permit are met, and it is reviewed and signed by an Entry Supervisor. The following conditions must be met prior to standard entry:

- Affected personnel shall be trained to establish proficiency in the duties that will be performed within the confined space.
- The internal atmosphere within the confined space shall be tested by **Competent Person** with a calibrated, direct-reading instrument.
- Personnel shall be provided with necessary PPE as determined by the Entry Supervisor.
- Atmospheric monitoring shall take place during the entry. If a hazardous atmosphere is detected during entry:
  a) personnel within the confined space shall be evacuated by the Attendant(s) or Entry Supervisor until the space can be evaluated by **Competent Person** to determine how the hazardous atmosphere developed; and
  b) controls shall be put in place to protect employees before re-entry.

Opening A Confined Space

Any conditions making it unsafe to remove an entrance cover shall be eliminated before the cover is removed. When entrance covers are removed, the opening shall be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent anyone from falling through the opening. This barrier or cover shall protect each employee working in the space from foreign objects entering the space. If it is in a traffic area, adequate barriers shall be erected.

Atmospheric Testing

Atmospheric test data is required prior to entry into a confined space. Atmospheric testing is required for two distinct purposes:

(1) evaluation of the hazards of the permit space, and

(2) verification that acceptable conditions exist for entry into that space.

If a person must go into the space to obtain the needed data, then Standard Confined Space Entry Procedures shall be followed. Before entry into a confined space, **Competent Person** shall conduct testing for hazardous atmospheres. The internal atmosphere shall be tested with a calibrated, direct-reading instrument for oxygen, flammable gases and vapours, and potential toxic air contaminants, in that order. Testing equipment used in specialty areas shall be listed or approved for use in such areas by **Competent Person.** All testing equipment shall be approved by a nationally recognized laboratory, such as Underwriters Laboratories or Factory Mutual Systems.

Evaluation Testing

The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity. The analysis shall identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed, and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data and development of the entry procedure should involve a technically qualified professional (i.e., consultant, certified industrial hygienist, registered safety engineer, or certified safety professional).

Verification Testing

A confined space that may contain a hazardous atmosphere shall be tested for residues of all identified or suspected contaminants. The evaluation testing should be conducted with specified equipment to determine that residual concentrations at the time or testing and entry are within acceptable limits. Results of testing shall be recorded by the person performing the tests on the permit. The atmosphere shall be periodically retested (frequency to be determined by **Competent Person** to verify that atmospheric conditions remain within acceptable entry parameters.

Acceptable Limits

The atmosphere of the confined spaces shall be considered to be within acceptable limits when the following conditions are maintained:

- oxygen: 19.5 percent to 23.5 percent;
- flammability: less than 10 percent of the Lower Flammable Limit (LFL); and
- toxicity: less than recognized American Conference of Governmental Industrial Hygienists (ACGIH) exposure limits or other published exposure levels [i.e., OSHA Permissible Exposure Limits (PELs) or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs)].

Isolation and Lockout/Tagout Safeguards

All energy sources that are potentially hazardous to confined space entrants shall be secured, relieved, disconnected, and/or restrained before personnel are permitted to enter the confined space. Equipment systems or processes shall be locked out and/or tagged out as required by the Occupational Health & Safety Act and Regulations for Construction Projects prior to permitting entry into the confined space. In confined spaces where complete isolation is not possible, **Competent Person** shall evaluate the situation and make provisions for as rigorous isolation as practical. Special precautions shall be taken when entering double-walled, jacketed, or internally insulated confined spaces that may discharge hazardous material through the vessel's internal wall. Where there is a need to test, position, or activate equipment by temporarily removing the lock or tag or both, a procedure shall be developed and implemented to control hazards to the occupants. Any removal of locks, tags, or other protective measures shall be done in accordance with the Occupational Health and Safety Act and Regulations for Construction.

Access/Egress Safeguards

Means for safe entry and exit shall be provided for confined spaces. Each entry and exit points shall be evaluated by **Competent Person** to determine the most effective methods and equipment that will enable employees to safely enter and exit the confined space. Appropriate retrieval equipment or methods shall be used whenever a person enters a confined space. Use of retrieval equipment may be waived by the **Competent Person** if use of the equipment increases the overall risks of entry or does not contribute to the rescue. A mechanical device shall be available to retrieve personnel from vertical confined spaces greater than five (5) feet in depth.

Warning Signs and Symbols

All confined spaces that could be inadvertently entered shall have signs identifying them as confined spaces. Signs shall be maintained in a legible condition. The signs shall contain a warning that a permit is required before entry. Accesses to all confined spaces shall be prominently marked.

Emergency Response

Competent Person shall maintain a written plan of action that has provisions for conducting a timely rescue of individuals within a confined space, should an emergency arise. The written plan shall be kept onsite where the confined space work is being conducted. All affected personnel shall be trained on the Emergency Response Plan.

MATERIAL HANDLING/LIFTING

Whenever practical, heavy lifts should be done with mechanical lifting devices. When manual handling is required, dollies, trucks and similar devices should be used where practical. Workers should know their physical limitations and the approximate weight of materials they are trying to lift. Workers should be encouraged to get help when a lifting task may be more than they can safely handle.

- The right way to lift is the easiest and safest.
- Take a firm grip; secure a good footing; place the feet a comfortable distance apart; bend the knees; keep the back straight and lift with the leg muscles.
- Use gloves or hand patches and required when handling sharp, rough, heavy or hot material.
- Never carry a load so large that it obstructs vision or is too heavy to be safely lifted without assistance.
- If steps and handrails are provided, use them.
- Walk only on sturdy clear paths.

SIGNAGE

Warning Signs

Warning signs containing word “DANGER” must be placed:

- adjacent to hoisting area
- where hazardous vapours, fumes or dusts present
- below overhead work
- at confined space entrance
- on top of protective covering
- where covering is missing

COMPRESSED GAS SAFETY

- always handle compressed gases with extreme caution. Compressed gas cylinders may only be transported or hoisted on site where a suitable crib, secured from movement, is used.
- only competent authorized and trained workers are to handle compressed gas cylinders.
- use, store and transport all compressed gas cylinders adequately secured in an upright position. Storage cages or racks must be made available in a safe location away from work areas, 25 feet from the outside of the building.
- after using a compressed gas cylinder, ensure the valve has been closed. Cylinder valves must also be covered with their appropriate screw on caps.
- upon discovery of a compressed gas leak from a cylinder, hose, valve or other connection, discontinue use, remove from work area (if safe) and report immediately. Under no circumstances, is a leaking compressed gas cylinder to be used
- empty containers of compressed gases should be stored separately from full or partial containers. Flammable materials should be stored separately from oxidizers. Only a day's supply or less of compressed gas is to be stored indoors, at any time
- store cylinders in upright condition unless design permits otherwise when not in use
- ensure that all gauges, hoses, fittings are in good condition. Damaged equipment shall be taken out of service immediately and replaced or repaired
- no part of cylinder shall be subject to temperature higher than 55 °C
- transport in accordance with all legislated requirements and TDG.

Reviewed By: Joe Henriques, President

SUMMARY OF PERSONAL CONDUCT

Non-prescription drugs or alcohol - Non-prescription drugs or alcohol will not be allowed on the job and any employee found to be in possession of, or under the influence of, drugs or alcohol, will be refused from working and is liable to be severely disciplined or terminated from employment.

Reporting injuries and accidents/incidents - All injuries and accidents/incidents, no matter how minor, must be reported immediately to your supervisor. The supervisor will conduct his investigation and report to management.

Reporting unsafe practices and conditions - If you should notice any unsafe practice or condition on the job, you are obligated by law and by this company to report the situation immediately to your supervisor, so corrective action can be taken.

No jumping - No person shall jump from one level to another and anyone discovered jumping will be reprimanded and subject to immediate termination from employment. Use proper means of egress and access.

Tools - Never place tools or materials near edges to openings or levels, as these items may fall onto someone below. Keep all tools and materials at least six feet back from edges and openings (whenever possible)

Seek assistance when lifting heavy items - Always seek assistance or use mechanical lifting devices when attempting to lift heavy material. Avoid awkward positions and always lift with the legs, not your back. Your back is very susceptible to injury in a bent position.

Horseplay is not permitted - Do not engage in any prank, contest, and feat of strength, unnecessary running or boisterous conduct.

Do not remove guardrails or coverings - Do not remove or make ineffective, any protective device, equipment or thing, required by your employer or the Occupational Health and Safety Act and it's regulations, If your work requires the removal of such a protective device as a guardrail or covering, use the appropriate safety measures to protect yourself and other workers and when your work is finished or you leave the area, replace the protective device immediately. Report any the presence of any missing or defective, protection device, immediately to your supervisor.

Obey no smoking rules - Smoking is strictly prohibited near flammable or combustible gases and materials, and all indoor construction areas. Obey all signage in areas forbidding smoking.

Know Your Limitations - Never work at heights if you are afraid to do so or if you are ill or subject to dizzy spells. Tell your foreman. He will respect you of being honest and as sign you to other suitable work. Always work within your limitations.

Harassment - Any form of harassment is strongly prohibited and subject to immediate dismissal. No worker shall engage in inappropriate conversations or make inappropriate comments to our client female staff. All correspondence is to be carried out through project superintendent. Violators will be permanently terminated.

Work in well- lit conditions - Always work in adequately lighted conditions. Use task lighting stations in un-serviced areas. No one is allowed to work in the dark.

Avoid working alone - Always use the "buddy system" to avoid working alone. If it is necessary to do so, arrangements should be made to check on the worker at fifteen-minute intervals, by the worker's foreman. Confined space work however, requires constant tendering of the isolated worker(s) and there are strictly regulated procedures to follow in this kind of situation. Check with your foreman for instructions before entering any confined space.

Woodwork platforms - Work platforms shall be a minimum 18 inches wide and be designed and constructed to support and resist at least four times the anticipated load. Workers are to refrain from using spools, pails, ladders etc. or poorly constructed benches as a support for planking. All platforms must be suitably cross braced to provide stability.

SET FINES BY THE ONTARIO COURT OF JUSTICE

Schedule 67

***Occupational Health and Safety Act* (as it relates to Ontario Regulation 213/91)**

Item	Offence	Section	Set Fine
1.	Worker failing to work in compliance with subsection 26.1(2) of Ontario Regulation 213/91 by not being adequately protected by fall protection	28(1)(a)	$295.00
2.	Worker failing to work in compliance with section 115 of Ontario Regulation 213/91 by using loose object as workplace or as support for object	28(I)(a)	$195.00
3.	Worker having or using stilts or leg extension devices contrary to section 116 of Ontario Regulation 213/91	28(I)(a)	$195.00
4.	Employer failing to ensure compliance with stilts and leg extension devices requirements in section 116 of Ontario Regulation 213/91	25(I)(c)	$295.00
5.	Supervisor failing to ensure worker working in compliance with stilts and leg extension devices requirements in section 116 of Ontario Regulation 213/91	27(1)(a)	$295.00
6.	Worker failing to work in compliance with subsection 195.1 (1) of Ontario Regulation 213/91 by using inadequately grounded cord-connected electrical equipment or tools	28(1)(a)	$195.00

Schedule 67.1

Ontario Regulation 213/91 under the *Occupational Health and Safety Act*

Item	Offence	Section	Set Fine
1.	Worker failing to wear protective headwear	22	$195.00
2.	Worker failing to wear protective footwear	23	$195.00
3.	Worker failing to wear eye protection	24	$195.00
4.	Worker failing to use provided protective respiratory equipment	46 (2)	$195.00
5.	Worker who may be endangered by vehicular traffic failing to wear prescribed garment	69.1	$195.00
6.	Operator leaving the controls of machine unattended	102	$195.00
7.	Signaller failing to wear prescribed garment	106 (1.1)-(1.4)	$195.00
8.	Worker failing to wear adequate personal protective equipment while using fastening tool	117 (3) (a)	$195.00
9.	Worker failing to wear adequate eye protection while using fastening tool	117 (3) (b)	$195.00
10.	Worker failing to wear full body harness connected to fall arrest system while on suspended equipment	141 (1)	$295.00

Schedule 67.3

Occupational Health and Safety Act **(as it relates to Regulation 851 of the Revised Regulations of Ontario, 1990)**

Item	Offence	Section	Set Fine
1.	Employer failing to ensure a safe work surface for worker under s. 11 of Reg. 851	clause 25 (1) (c)	$295.00
2.	Supervisor failing to ensure worker is working on a safe work surface under s.11 of Reg. 851	clause 27 (1) (a)	$195.00
3.	Worker failing to work on a safe work surface under s.11 of Reg. 851	clause 28 (1) (a)	$195.00
4.	Supervisor failing to ensure worker works with guarded opening under s. 13 (1) of Reg. 851	clause 27 (1) (a)	$295.00
5.	Worker failing to work with guarded opening under s.13 (1) of Reg. 851	clause 28 (1) (a)	$195.00
6.	Supervisor failing to ensure worker works with covered opening under s. 15 of Reg. 851	clause 27 (1) (a)	$295.00
7.	Worker failing to work with covered opening under s. 15 of Reg. 851	clause 28 (1) (a)	$195.00
8.	Supervisor failing to ensure worker uses a machine with adequate guarding under s. 24 of Reg. 851	clause 27 (1) (a)	$295.00
9.	Worker failing to use a machine with adequate guarding under s. 24 of Reg. 851	clause 28 (1) (a)	$295.00
10.	Supervisor failing to ensure worker uses a machine with adequate guarding under s. 25 of Reg. 851	clause 27 (1) (a)	$295.00
11.	Worker failing to use a machine with adequate guarding under s. 25 of Reg. 851	clause 28 (1) (a)	$295.00
12.	Supervisor failing to ensure worker uses a machine with adequate guarding under s. 26 of Reg. 851	clause 27 (1) (a)	$295.00
13.	Worker failing to use a machine with adequate guarding under s. 26 of Reg. 851	clause 28 (1) (a)	$195.00
14.	Supervisor failing to ensure worker works with effective operating control that acts as a guard under s. 28 (c) of Reg. 851	clause 27 (1) (a)	$295.00
15.	Worker failing to work with effective operating control that acts as a guard under s. 28 (c) of Reg. 851	clause 28 (1) (a)	$295.00
16.	Employer failing to provide safe chain saw under s. 39 of Reg. 851	clause (25) (1) (a)	$295.00
17.	Employer failing to ensure that chain saw provided under s. 39 of Reg. 851 is used safely	clause 25 (1) (d)	$295.00
18.	Supervisor failing to ensure worker uses a chain saw safely under s. 39 of Reg. 851	clause 27 (1) (a)	$195.00
19.	Worker failing to use chain saw safely under s. 39 of Reg. 851	clause 28 (1) (a)	$195.00
20.	Supervisor failing to ensure no work is done on or near live exposed parts of electrical installations, equipment or conductors without the power supply being disconnected, locked out and tagged under s. 42 (1) of Reg. 851	clause 27 (1) (a)	$295.00

21.	Worker working on or near live exposed parts of electrical installations, equipment or conductors without the power supply being disconnected, locked out and tagged under s. 42 (1) of Reg. 851	clause 28 (1) (a)	$295.00
22.	Supervisor failing to ensure worker uses protective equipment and procedures while doing electrical work under s. 42.1 (2) of Reg. 851	clause 27 (1) (a)	$295.00
23.	Employer failing to provide portable electrical tool protected by a ground fault circuit interrupter under s. 44.1 of Reg. 851	clause 25 (1) (a)	$295.00
24.	Employer failing to ensure portable electrical tool protected by a ground fault circuit interrupter provided under s. 44.1 of Reg. 851 is used	clause 25 (1) (d)	$295.00
25.	Supervisor failing to ensure worker using a portable electrical tool protected by a ground fault circuit interrupter under s. 44.1 of Reg. 851	clause 27 (1) (a)	$195.00
26.	Worker failing to use a portable electrical tool protected by a ground fault circuit interrupter under s. 44.1 of Reg. 851	clause 28 (1) (a)	$195.00
27.	Employer failing to ensure that lifting device is operated safely under s. 51 (2) (b) of Reg. 851	clause 25 (1) (c)	$295.00
28.	Supervisor failing to ensure operator of a lifting device works safely under s. 51 (2) (b) of Reg. 851	clause 27 (1) (a)	$295.00
29.	Operator of lifting device failing to work safely under s. 51 (2) (b) of Reg. 851	clause 28 (1) (a)	$195.00
30.	Supervisor failing to ensure worker works on or near an immobilized and secure unattended vehicle under s. 57 of Reg. 851	clause 27 (1) (a)	$295.00

31.	Worker failing to immobilize and secure unattended vehicle under s. 57 of Reg. 851	clause 28 (1) (a)	$195.00
32.	Supervisor failing to ensure worker works around attended lifting equipment when forks, bucket, blades and similar parts are unsupported under s. 58 of Reg. 851	clause 27 (1) (a)	$295.00
33.	Worker working around unattended lifting equipment when forks, bucket, blades and similar parts are unsupported under s. 58 of Reg. 851	clause 28 (1) (a)	$195.00
34.	Supervisor failing to ensure that worker does not bring object closer than specified distance to overhead electric supply line under s. 60 of Reg. 851	clause 27 (1) (a)	$295.00
35.	Worker bringing object closer than specified distance to overhead electric supply line under s. 60 of Reg. 851	clause 28 (1) (a)	$295.00
36.	Employer failing to provide safe portable ladder under s. 73 of Reg. 851	clause 25 (1) (a)	$295.00
37.	Employer failing to ensure that a portable ladder provided under s. 73 of Reg. 851 is used safely	clause 25 (1) (d)	$295.00
38.	Supervisor failing to ensure worker uses a portable ladder safely under s. 73 of Reg. 851	clause 27 (1) (a)	$195.00
39.	Worker failing to use portable ladder safely under s. 73 of Reg. 851	clause 28 (1) (a)	$195.00
40.	Supervisor failing to ensure worker works around safely secured temporarily elevated machinery, equipment or material under s. 74 of Reg. 851	clause 27 (1) (a)	$295.00
41.	Worker failing to work around safely secured temporarily elevated machinery, equipment or material under s. 74 of Reg. 851	clause 28 (1) (a)	$195.00
42.	Supervisor failing to ensure worker works on a safely secured machine under s. 75 of Reg. 851	clause 27 (1) (a)	$295.00
43.	Worker failing to work on a safely secured machine under s. 75 of Reg. 851	clause 28 (1) (a)	$295.00
44.	Supervisor failing to ensure worker works on a machine with proper precautions where starting may endanger the safety of a worker under s. 76 of Reg. 851	clause 27 (1) (a)	$295.00
45.	Worker failing to work on a machine with proper precautions where starting may endanger the safety of a worker under s. 76 of Reg. 851	clause 28 (1) (a)	$295.00
46.	Employer failing to ensure appropriate head protection provided under s. 80 of Reg. 851 is used	clause 25 (1) (d)	$295.00
47.	Supervisor failing to ensure worker wears appropriate head protection under s. 80 of Reg. 851	clause 27 (1) (a)	$195.00
48.	Employer failing to ensure appropriate eye protection provided under s. 81 of Reg. 851 is used	clause 25 (1) (d)	$295.00
49.	Supervisor failing to ensure worker wears appropriate eye protection under s. 81 of Reg. 851	clause 27 (1) (a)	$195.00
50.	Employer failing to ensure appropriate foot protection provided under s. 82 of Reg. 851 is used	clause 25 (1) (d)	$295.00

51.	Supervisor failing to ensure worker wears appropriate foot protection under s. 82 of Reg. 851	clause 27 (1) (a)	$195.00
52.	Employer failing to ensure proper skin protection provided under s. 84 of Reg. 851 is used	clause 25 (1) (d)	$295.00
53.	Supervisor failing to ensure worker works with proper skin protection under s. 84 of Reg. 851	clause 27 (1) (a)	$195.00
54.	Worker failing to work with proper skin protection under s. 84 of Reg. 851	clause 28 (1) (a)	$195.00
55.	Supervisor failing to ensure worker wears fall protection equipment under s. 85 of Reg. 851	clause 27 (1) (a)	$295.00
56.	Employer failing to ensure protective clothing provided is worn to protect from hazards caused by molten metal under s. 93 of Reg. 851	clause 25 (1) (d)	$295.00
57.	Supervisor failing to ensure worker wears protective clothing provided to protect from hazards caused by molten metal under s. 93 of Reg. 851	clause 27 (1) (a)	$195.00
58.	Worker failing to wear protective clothing provided to protect from hazards caused by molten metal under s. 93 of Reg. 851	clause 28 (1) (a)	$195.00

Ontario Court of Justice
Last Updated: April 1, 2018

SCHEDULE 67.4

Regulation 851 of the Revised Regulations of Ontario, 1990
under the *Occupational Health and Safety Act*

Item	Offence	Section	Set Fine
0.1	Worker beginning work on electrical installations, equipment or conductors without ensuring safety requirements have been met	42 (1) and (2)	$250
1.	Worker failing to use protective equipment and procedures while doing electrical work	42.1 (2)	$350
2.	Worker failing to wear appropriate head protection	80	$250
3.	Worker failing to wear appropriate eye protection	81	$250
4.	Worker failing to wear appropriate foot protection	82	$250
5.	Worker failing to wear fall protection equipment	85	$350

Ontario Court of Justice
April 1, 2018

SCHEDULE 66.2

Occupational Health and Safety Act

Item	Offence	Section	Set Fine
1.	Employer failing to cause workers to select at least one health and safety representative	8 (1)	$550
2.	Employer failing to cause joint health and safety committee to be established	9 (4)	$550
3.	Employer failing to prepare written occupational health and safety policy	25 (2) (j)	$550
4.	Employer failing to develop occupational health and safety program	25 (2) (j)	$550
5.	Employer failing to maintain occupational health and safety program	25 (2) (j)	$550
6.	Employer failing to prepare workplace violence policy	32.0.1 (1) (a)	$550
7.	Employer failing to prepare workplace harassment policy	32.0.1 (1) (b)	$550
8.	Employer failing to develop workplace violence program	32.0.2 (1)	$550
9.	Employer failing to maintain workplace violence program	32.0.2 (1)	$550
10.	Employer failing to assess risks of workplace violence	32.0.3 (1)	$550
11.	Employer failing to reassess risks of workplace violence	32.0.3 (4)	$550
12.	Employer failing to provide information and instruction on workplace violence policy	32.0.5 (2)	$550
13.	Employer failing to provide information and instruction on workplace violence program	32.0.5 (2)	$550
14.	Employer failing to develop written workplace harassment program	32.0.6 (1)	$550
15.	Employer failing to maintain written workplace harassment program	32.0.6 (1)	$550
16.	Employer failing to provide information and instruction on workplace harassment policy	32.0.8 (a)	$550
17.	Employer failing to provide information and instruction on workplace harassment program	32.0.8 (a)	$550

Reviewed By: Joe Henriques, President

NEW EMPLOYEE SAFETY CHECKLIST – GENSTEEL

Employee Name: _____ ID: _____
Date Employed: _____ Date: _____
Checklist Completed: _____
Checklist completed by: _____
Type of Work: _____
Summary of Work Experience: _____
Supervisor: _____

Ask Employee: *Do you have any physical conditions or handicaps which might limit your ability to perform this job? If so, what reasonable accommodation can be made by us?* _____

Did the employee have a pre-employment drug test? o Yes o No physical? o Yes o No
Any work restrictions indicated from the physical? _____

The Supervisor and new employee should review the following safety concerns. Check & discuss all that apply.

o Provide the employee with a copy of the Safety Manual.
o Company safety policies & programs (Review of written policies & program manual)
o Safety rules (general & specific to job) _____
o Safety rule enforcement _____
o Use of tools & equipment _____
o Proper guarding of equipment _____
o Proper clothing & personal protective equipment __
o Materials handling _____
o Accident & Hazard Reporting Procedures _____
o Housekeeping _____
o Special hazards of the job (Fall Protection, Fire Protection, Hoisting, Wind, Cold/Heat Exp.)_____
o Emergency Procedures _____
o Employee Responsibilities/Accountability: _____
o Overview of workers' compensation _____
o Hazardous materials (WHMIS)_____
o Location of First Aid Kits_____
o Vehicle Safety/Equipment Safety
o Where to go for medical treatment _____
o Other: Drug-Free Workplace, Return-to-Work, Teams, Incentives, Lock-Out/Tag-Out, etc.

Employee shall receive additional training in: _____
Probationary period is from _____ to _____
Employee agrees to cooperate fully with the safety efforts of the employer, follow all safety rules, and use good judgment concerning safe work behaviour.
o Yes o No (Have employee sign for manual)
Comments: _____
Trainer/Supervisor: _____ _____
Employee: _____
Date: _____

Reviewed By: Joe Henriques, President

HOT WORK PERMIT (SAMPLE)

BUILDING:
LOCATION:
DATE ISSUED:
TIME ISSUED:
DATE EXPIRED:
TIME EXPIRED:
DEPARTMENT OR COMPANY:
FOREMAN OR SUPERVISOR:
PHONE:
WORK DESCRIPTION:
EQUIPMENT ID:

Issued By: _____

Today's Date: _____

Reviewed By: Joe Henriques, President

APPENDIX 1

Full Body Harness - Annual Inspection Checklist

Harness Model/Name:
Serial Number:_____ Lot Number:_____
Date of Manufacture:_____ Date of Purchase:_____
Comments:

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Hardware: includes D-rings, buckles, keepers and back pads. Inspect for damage, distortion, sharp edges, burrs, cracks and corrosion.	Accepted Rejected	
2) Webbing: Inspect for cuts, burns, tears, abrasions, frays, excessive soiling and discoloration.	Accepted Rejected	
3) Stitching: Inspect for pulled or cut stitches.	Accepted Rejected	
4) Labels: Inspect, making certain all labels are securely held in place and are legible.	Accepted Rejected	
5) Other:	Accepted Rejected	
6) Other:	Accepted Rejected	
7) Overall Disposition:	Accepted Rejected	Inspected By: Date Inspected:

Reviewed By: Joe Henriques, President

APPENDIX 2

Lanyards - Annual Inspection Checklist

Lanyard Model/Name:_____
Serial Number:_____ Lot Number:_____
Date of Manufacture:_____ Date of Purchase:_____
Comments:

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Hardware: (includes snap hooks, carabiners, adjusters, keepers, thimbles and D-rings) Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion and proper operation.	Accepted Rejected	
2) Webbing: Inspect for cuts, burns, tears, abrasions, frays, excessive soiling and discoloration.	Accepted Rejected	
3) Stitching: Inspect for pulled or cut stitches	Accepted Rejected	
4) Synthetic Rope: Inspect for pulled or cut yarns, burns, abrasions, knots, excessive soiling and discoloration.	Accepted Rejected	
5) Energy Absorbing Component: Inspect for elongation, tears and excessive soiling.	Accepted Rejected	
6) Labels: Inspect, making certain all labels are securely held in place and are legible.	Accepted Rejected	
Overall Disposition:	Accepted Rejected	Inspected By: Date Inspected:

Reviewed By: Joe Henriques, President

APPENDIX 3

Snaphooks/Carabiners - Annual Inspection Checklist

Hook/Carabiner Model/Name:
Serial Number:_____ Lot Number:_____
Date of Manufacture:_____ Date of Purchase:_____
Comments:

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Physical Damage: Inspect for cracks, sharp edges, burrs, deformities and locking operations.	Accepted Rejected	
2) Excessive Corrosion: Inspect for corrosion, which affects the operation and/or the strength.	Accepted Rejected	
3) Markings: Inspect and make certain marking(s) are legible.	Accepted Rejected	
4) Other:	Accepted Rejected	
5) Other:	Accepted Rejected	
6) Other:	Accepted Rejected	
Overall Disposition:	Accepted Rejected	Inspected By: Date Inspected:

APPENDIX 4

Self-Retracting Lanyard/Lifeline - Annual Inspection Checklist

Self-Retracting Lanyard/Lifeline Model/Name:_____
Serial Number:_____ Lot Number:_____
Date of Manufacture:_____ Date of Purchase:_____
Department/Location:_____
Comments:

General Factors	Accepted/Rejected	Supportive Details/Comments
1) Impact Indicator: Inspect indicator for activation (rupture of red stitching, elongated indicator, etc.).	Accepted Rejected	
2) Screws/Fasteners: Inspect for damage and make certain all screws and fasteners are tight.	Accepted Rejected	
3) Housing: Inspect for distortion, cracks and other damage. Inspect anchoring loop for distortion or damage.	Accepted Rejected	
4) Lanyard/Lifeline: Inspect for cuts, burns, tears, abrasion, frays, excessive soiling and discoloration. (See impact indicator section.)	Accepted Rejected	
5) Locking Action: Inspect for proper lock-up of brake mechanism.	Accepted Rejected	
6) Retraction/Extension: Inspect spring tension by pulling lanyard out fully and allowing to retract fully (lifeline must be taut with no slack).	Accepted Rejected	
7) Hooks/Carabiners: Inspect for physical damage, corrosion, proper orientation and markings.	Accepted Rejected	
8) Labels: Inspect, making certain all labels are securely held in place and are legible.	Accepted Rejected	
Overall Disposition:	Accepted Rejected	Inspected By: Date Inspected:

APPENDIX 5

Ladder Risk Assessment

Where a step ladder must be used on site, this assessment must be read by the worker(s) using the step ladder and the procedures outlined must be adhered to.

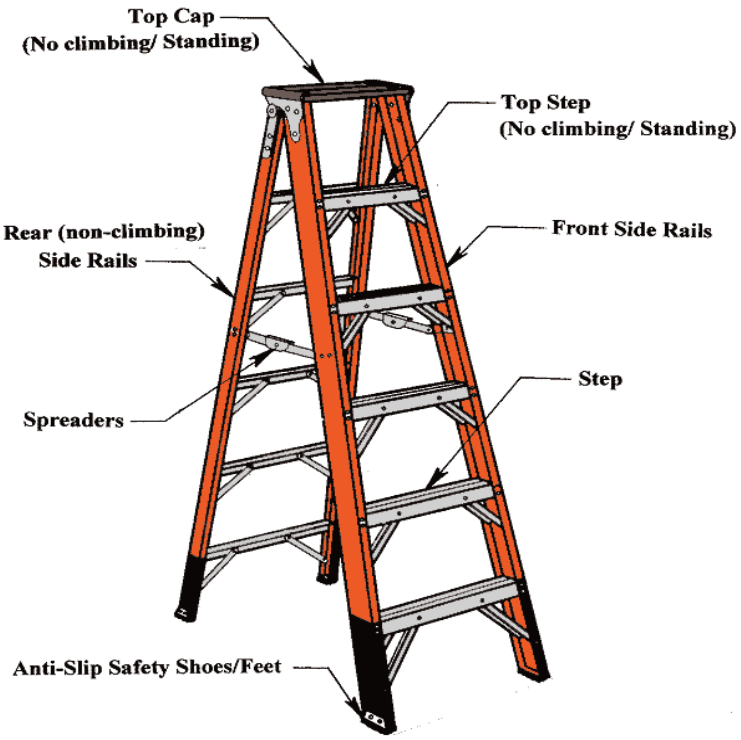
1. The worker must do a full assessment of the location that the ladder will be used to ensure the area is clear of hazardous material and the floors are even
2. Observe your surroundings when setting up the step ladder and address any hazards (uncapped rebar, water, debris, etc.)
3. If the ground is soft or uneven, level the area out and/or use a sheet of plywood to stabilize the placement of the ladder.
4. Prior to the use of the step ladder, the worker should check the ladder for any defects. If defects are found, the worker should inform the supervisor. And the ladder taken out of service.
5. The step ladder must be used in conjunction with manufacturer's specifications and instruction.
6. The worker will not climb above the last three steps.
7. A step ladder must always be used with the legs fully extended and the hinge locked.
8. When climbing up or down the step ladder, three-point contact must be maintained
9. Position the ladder in the direction of use, do not extend yourself. With the belt buckle as a guideline, do not extend yourself beyond the side rails of the step ladder.
10. High powered hammer or chipping tools must not be used when on a step ladder
11. If a fall of 3m or more is possible (measuring from the floor to the worker's feet a fall arrest system must be in place
12. If the ladder is to be set up in an area where there is a risk of falling 3m or more (beside an area where there is a guardrail set up) a fall arrest system must be used
13. Any area where the safe use of a 12 ft step ladder cannot be achieved, an alternate access system must be used

APPENDIX 6

Safe Work Procedures When Working Off Ladders

Stepladders

The Stepladder is a self-supporting portable ladder that is non-adjustable in length, with flat steps and a hinged design for ease of storage. It is intended for use by one person.



Stepladder

Reviewed By: Joe Henriques, President

General Information

1. Stepladders range in size from 3 ft. to 20 ft. in length along the side rail. Stepladders shorter than 3 ft are considered Step Stools. The highest standing level on a stepladder is slightly more than 2 ft from the top of the ladder. The highest standing level is required to be marked on the specifications label on the side rail of the product. Therefore, when planning your job, the maximum work height is established by adding the user's height and reach to the highest standing level of the stepladder.
2. A stepladder must not be used unless its base is spread fully open and the spreaders locked. Stepladders are not to be used as single ladders or in the partially open position.
3. In order to prevent tipping the ladder over sideways due to over-reaching, the user must climb or work with the body near the middle of the steps. The ladder should be set-up close to the work.
4. Never attempt to move the ladder without first descending, relocating the ladder, and then re-climbing.
5. Do not attempt to mount the ladder from the side or step from one ladder to another unless the ladder is secured against sideways motion.
6. In an effort to avoid losing your balance and falling off the stepladder, the user must not step or stand higher than the step indicated on the label marking the highest standing level. The user must also not step or stand on the Top Cap or bucket/pail shelf.
7. When ascending or descending the ladder, always face the ladder and maintain a firm hand hold. Do not attempt to carry other objects in your hand(s) while climbing.
8. The braces on the rear of a stepladder are not intended for climbing or standing and must not be used for that purpose. Note, however, that special stepladders are available with steps on both the front and rear and are intended for two users at the same time.
9. The anti-slip feet at the bottom of the stepladder side rails must be present and in good condition prior to using the ladder. The ladder must not be used on ice, snow or slippery surfaces unless suitable means to prevent slipping is employed.
10. A stepladder must never be placed upon other objects such as boxes, barrels, scaffolds, or other unstable bases in an effort to obtain additional height.

Minimum Distance from Electrical Power Lines

Unless special measures and procedures are in place, ladders must be protected from making contact with energized conductors and kept safe distances away:

Minimum Distances from Live Power Lines

Nominal Phase-to-Phase Voltage	Minimum Distance
750 or more volts, but not more than 150 000V	3m
More than 150 000V, but no more than 250 000V	4.5m
More than 250 000V	6m

General Ladder Selection and Safe Use

1) **Ladder Selection**
** All ladders brought on site must be CSA approved – as per O. Reg. 213/91 s. 80(1)
s. 80(1) a portable ladder at a project shall be manufactured and shall meet the design, performance, test and marking requirements of a Grade 1, Grade 1A or Grade 1AA ladder in the CSA Standard Z11-12, Portable Ladders. O. Reg 345/15, s. 13

Working from ladders poses the risk of falling and the decision to use a ladder from which to work should be considered the least desirable method. Safer alternate methods such as performing work from stairs, scaffolding or elevating platforms should be considered first. When selecting a ladder:

1. **Select** the most appropriate type of ladder for the task to be performed.
    - step
    - straight
    - extension
    - platform

2. Select most **appropriate material.**
    - aluminum
    - fiberglass (only use fiberglass near electrical equipment)
    - wood
    - select proper ladder height to position yourself so you don't have to stand on the upper rungs
    - check for overhead power lines
    - use fiberglass when working on or near electrical conductors

3. **Inspect Ladders Prior to Use**

Before using a ladder, be sure to inspect it to ensure it is in good working condition and safe to use. Inspect ladders for:

- defects such as broken or missing rungs, cleats, safety feet or rails.
- slippery substances on rungs
- stability
- inspect for structural integrity
- joints should be tight and secure
- hardware and fittings should be secure, not damaged or badly corroded
- moveable parts should operate freely
- check side rails and rungs for signs of damage, cracks, fraying (fiberglass)
- test rung locks (extension ladders)
- check ropes, cables and pulleys

Damaged or defective ladders must be immediately tagged and removed from service and not used. – notify your supervisor immediately

4. **Set-Up**
    - check the work and surrounding areas for hazards such as overhead wires, slippery or uneven surfaces, traffic etc.
    - ensure the area at base and top of ladder is free/clear of obstructions
    - ensure ground/surface is firm and level
    - keep metal and wood ladders away from power lines and other live conductors
    - place ladders on firm, level ground
    - position ladder at proper angle (straight and extension) and secure in position.
    - open ladder fully (step ladder)
    - take appropriate measures to protect the base of the ladder from any activity that could bang it (e.g. people, doors, vehicles).
    - have someone guard or block the area while work is being performed on the ladder
    - post warning signs or use pylons if necessary

5. **Safe Climbing and Use**
    - only one person is permitted on a ladder at the same time
    - do not overreach
    - always face the ladder and keep your hips (center of gravity) between the rails
    - maintain 3-point contact with ladders (1 hand and 2 feet or 2 hands and 1 foot) when climbing or descending ladders.
    - keep hands free when climbing ladders. use a tool belt or rope to raise tools.
    - ensure soles of shoes are clean and not slippery
    - never climb a damaged, bent or broken ladder.
    - get help when carrying long or heavy ladders.

- be aware of surroundings when carrying ladders;pay particular attention to overhead obstacles and people around to avoid striking them.
- do not use ladders if you tire easily, are subject to fainting spells, are using medicine or are physically limited.

Do Not Use A Ladder If You:

- have a sore back, legs, arms, hands
- have dizziness, nausea, light headedness
- are taking medications that affect your balance or concentration

If you experienced a dizzy spell on a ladder:

- stop and drape arms over a rung
- wait until spell passes
- slowly and carefully descend ladder.

6. **Storing and Transporting Ladders**
   - ladders should be supported to prevent sagging
   - do not store items on top of ladders
   - when carrying a ladder:
     - hold middle side rail and tip front slightly upward
   - watch for swing in the tail end
   - watch for overhead hazards
   - get help with long ladders (>12ft)

Proper Care

A thorough inspection must be made when the ladder is initially purchased and each time it is placed into service. Clean the climbing and gripping surfaces if they have been subjected to oil, grease or slippery materials. Working parts, bolts, rivets, step-to-side rail connections, and the condition of the anti-slip feet (safety shoes) shall be checked. If structural damage, missing parts, or any other hazardous defect is found, the ladder must not be placed into service and either discarded or competently repaired.

Ladders exposed to excessive heat, as in the case of fire, may have reduced strength. Similarly, ladders exposed to corrosive substances such as acids or alkali materials may experience chemical corrosion and a resulting reduction in strength. Remove these ladders from service.

In the event a ladder is discarded, it must be destroyed in such a manner as to render it useless. Another person must not be afforded the opportunity to use a ladder that has been deemed unsafe.

Storage racks for ladders not in use should have sufficient supporting points to avoid sagging which can result in warping the ladder. Other materials must not be placed on the ladder while it is in storage.

Reviewed By: Joe Henriques, President

Working from Ladders

A worker must wear adequate means of fall protection with the lanyard tied off to either a fixed support or a lifeline (engineered) whenever the worker is:

site specific rescue plans shall be developed for workers using fall protection methods

- 3 metres (10 feet) or more above the floor; or
- above operating machinery; or
- above hazardous substances or objects
- falling through an opening on a work surface

Workers can reduce ladder fall risks by doing the following:

- frequently inspect & maintain ladders.
- match tasks to appropriate ladders.
- set up ladders correctly.
- climb & descend ladders properly

Using Ladders at the Beginning of Each Job

- select the appropriate ladder for your task or job.
- inspect the ladder before you use it; make sure it is in sound condition — clean and undamaged.

Placing a Ladder

- move the ladder near the work you are doing.
- angle the ladder properly. the base should extend not less than one-fourth the ladder's length. the minimum slope should be 50 degrees.
- place a solid rest for the rail tops across window openings.
- protect the base of a tall, occupied ladder if it could be struck by vehicles or pedestrians.

Never

- place a ladder in front of an unlocked, unguarded door.
- place a ladder on boxes, tables, trucks, or other moveable objects.

Securing a Ladder

- nail or lash a ladder in place if it will be used repeatedly in the same spot.
- select a ladder that will extend at least 1 metre (900 mm) above the access area it is serving.

Avoid

- working on ladders in exposed areas during a severe storm or strong wind.
- working on ladders covered with ice or snow.
- using a portable ladder if an approved stairway could be used instead.

Ascending and Descending

- face the ladder at all times.
- grasp the side rails with both hands; you have a better chance of avoiding a fall if a rung or step fails.
- raise and lower heavy, awkward loads with a hand line or hoist.

Avoid

- sliding down the ladder.
- climbing when your hands or shoes are slippery.
- using your hands for carrying items.
- carrying awkward loads when ascending or descending a ladder.
- placing tools or materials on a ladder if they could fall off or can be knocked over

Metal Ladders

- make sure steps and rungs have a skid-resistant surface that minimizes the risk of slipping. ("skid resistant" means corrugated, knurled, dimpled, or coated with skid-resistant material.)

Avoid

- using any ladder with conductive side rails near exposed, energized equipment. (such ladders must be permanently, legibly marked with the words, "**WARNING — Do Not Use Around Energized Electrical Equipment.**")

APPENDIX 7

Structural Steel Erection & Fall Arrest System – Engineered Drawings

DRAWINGS ARE ATTACHED AT THE BACK OF THIS DOCUMENT

Reviewed By: Joe Henriques, President

WORKER/SUPERVISOR/ACKNOWLEDGMENT

I state that I have attended the safety orientation and have read and received a copy of the **Gensteel** safety rules and regulations. I also understand that this rules and procedures are not a definitive guide addressing every situation and circumstances, there for it is my responsibility to ask for instructions and guidance if not sure how to proceed safely.

I also acknowledge that I have read and understand the Anti-Harassment and Violence Policy of **Gensteel as well as the Zero Tolerance of Drugs and Alcohol** at all of our workplaces. I agree to adhere to this policy and will ensure that employees working under my direction adhere to this policy. I understand that if I violate the rules of this policy, I may face legal, punitive, or corrective action, up to and including termination of employment and/or criminal prosecution.

I further state that I understand these rules and requirements and acknowledge that compliance with the safety rules and regulations is a condition of employment. If I violate the safety rules or fail to report an injury to my supervisor or project superintendent immediately, I understand that I am subject to termination, in accordance with company policy.

_____

Recipient Signature

_____

Date

_____

Supervisor's Signature

_____

Date