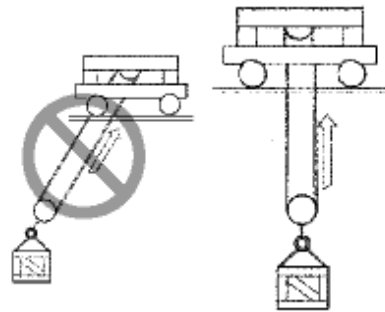


SAFE WORK PRACTICE

CRANES AND HOISTS

- Prior to use of any crane a pre-operational check must be performed.
- Only operators trained in the safe use of Overhead Cranes will be permitted to use any Crane at Capitol.
- Do not engage in any practice that will divert your attention while operating the crane.
- Operators should be able to estimate the weight of the load they are lifting. It is critical to know how much weight you are lifting/moving.
- Do not operate a crane if limit switches are out of order, or if cables show defects.
 - Do not lower the blocks below the point where less than two full wraps of cable remain on the drum.
 - Do not attempt lifts beyond the rated load capacity of a crane or slings.
 - Do not lift a load from the side. Centre the crane directly over the load before hoisting to avoid swinging the load.
- Do not allow anyone to ride on a load or hooks.
- Do not leave slings dangling from the load hook. Have sling hooks placed on the sling ring when carrying slings to the load.
- Do not raise loads higher than necessary to clear objects.
- Do not pass a load over workers.
- Do not reverse a motor until it has come to a full stop except to avoid accidents.
- Do not walk on the crane runway.
- Do not leave suspended loads unattended.





SAFE WORK PRACTICE

EMERGENCY RESPONSE PLAN

You are expected to participate and follow the emergency response procedures. Detailed Instructions on Emergency procedures can be obtained from the Capitol Safety Manual available from your Supervisor or Safety Coordinator.

SHOP PROCEDURES

Emergency Contact Numbers are located throughout the shop and in the lunch room.

- CALL 911 – To access Fire, Police, and Ambulance Services – Identify Address as 1500 Dublin Ave.
- Evacuation – Exit the Shop at the nearest exit and proceed to Assembly Point.
- Emergency Assembly point is at the North East Corner of the Shop – Near Gate 4

FIELD PROCEDURES

A Site Specific Emergency Plan must be prepared before work commences on a jobsite. This may be done by the customer or by Capitol personnel.

The Emergency Plan should consist of the following:

- Locations of Emergency Exits and Assembly Point
- Locations of Emergency Supplies and Equipment
- Identify First Aid Personnel
- Instructions on how to obtain Emergency Services
- Site Specific Hazards and Control Measures



SAFE WORK PRACTICE

FIRE PREVENTION

Prevention and protection go hand in hand. There are some basic items you should know about fire prevention which include:

- where fire extinguishers are located
- the types and capabilities of these fire extinguishers
- the proper operation
- and the emergency evacuation routes and assembly areas

YOU MUST KNOW THE EMERGENCY RESPONSE PROCEDURES YOU ARE TO FOLLOW IN THE EVENT OF A FIRE



SAFE WORK PRACTICE

GUARDRAILS / HANDRAILS

Whenever a danger of falling exists a guardrail may be required (i.e.) floor openings, platforms, and excavations)

- Handrails are required on stairways
- Guardrails must consist of a top rail, mid rail and a toe board.
- Never lean against guardrails or handrails.
- Guardrails are required to be between 36" and 42" in height.

If a falling hazard exists where a guardrail/handrail is not practical another form of Fall Protection **MUST** be used.

**NEVER LEAVE AN OPENING UNATTENDED AND REPORT UNSAFE
CONDITIONS TO YOUR SUPERVISOR**



SAFE WORK PRACTICE

HOUSEKEEPING

You are required to share the responsibility of good housekeeping by your personal work habits.

You are responsible to see that your work area is kept clean and free from slipping and tripping hazards.

CLEAN UP AFTER YOURSELF AT ALL TIMES



SAFE WORK PRACTICE

INSPECTIONS AND AUDITS

CAPITOL conducts on-site safety inspections and program audits which are necessary to evaluate safety performance and to identify areas which may need improvement or modification.

All employees are required to participate in audits and inspections.



SAFE WORK PRACTICE

LADDERS

- Inspect all ladders for defects prior to use. If unsafe, do not use and report defects to your supervisor.
- Do not climb or descend a ladder without free use of both hands
- Verify that ladders maintain a 4:1 safe working angle.
- Check that all ladders are secured and extend 1 meter (3 feet) above the point of access (local legislation may vary slightly)
- Step ladders must be fully opened with spreader arms locked
- Do not work off the top two rungs of a ladder
- Do not use a painted wooden ladder
- Always maintain three points of contact with the ladder at all times
- Never position or handle ladders near electrical lines



SAFE WORK PRACTICE

MANUAL LIFTING

Wherever possible, manual lifting should be avoided. Effective ways of eliminating having to handle materials by hand are as follows:

- Hand Trucks
- Forklift
- Overhead Cranes
- Jib Cranes
- Hand Operated Hoists

If your only option is to handle an object manually, consider the following:

Ask for a co-worker for assistance on items too heavy or awkward to handle by yourself.

Leg muscles are stronger than back muscles. Lift with your legs, not your back. Bend knees, keep back straight and avoid twisting.

Plan before you lift – consider weight, size, shape, path of travel, and set down location. Get help if necessary.

Protect your hands and fingers from rough edges, sharp corners, and metal straps. Keep hands and fingers out of pinch points between the load and other objects.

NOTE: If an operation is repetitive or performed often bring the issue to the attention of your supervisor. Development of a properly designed lifting fixture can eliminate the need for manual handling of materials.



SAFE WORK PRACTICE

OCCUPATIONAL HYGIENE / ENVIRONMENTAL

Hygiene:

Hygiene hazard, occupational factors or illnesses arising in and from the workplace, which may cause impaired health and well being, sickness or significant discomfort and inefficiency, will be identified and controlled.

Environmental:

You should make every reasonable and practicable effort to protect the environment from the negative effects of contaminants which are used as part of Capitol's ongoing operations.

ALL INCIDENTS THAT COULD NEGATIVELY IMPACT THE HEALTH OF ANY WORKER OF THE ENVIRONMENT MUST BE REPORTED TO YOUR SUPERVISOR



SAFE WORK PRACTICE

FIELD OPERATIONS

When operations and /or policies dictate the use of personal protective equipment, the use of such equipment will be mandatory. Basic personal protective equipment may be included but is not limited to the following:

- **Hard Hats** – CSA/ANSI approved hard hats will be worn on all project at all times
- **Footwear** – CSA/ANSI approved footwear will be worn on all projects at all times.
- **Fall Arrest Equipment** – When there is no other form of protection from falling, employees shall wear approved fall arrest equipment
- **Respiratory Protective Equipment** – The proper type must be worn when performing any operation where an oxygen deficiency may exist, to where air circulation is not sufficient to prevent inhaling of harmful amounts of dust, toxic fumes, mist, or vapors.
- **Eye and Face Protection** - All eye and face protection must be CSA/ANSI approved. Safety glasses with side shields or goggles must be worn on all jobsites, at all times. When grinding, a face shield must be worn in addition to the eye protection.
- **Hearing Protection** – CSA/ANSI approved hearing protection must be worn when the sound level in the work area exceeds the permissible occupational exposure limit.
- **Hand Protection** - Appropriate gloves must be worn when handling rough, sharp, or hot objects; and caustics, acids, solvents, concrete or chemicals.
- **Clothing** – It is mandatory that shirts with at least four-inch sleeves be worn at all times. Shorts are not to be worn on site at any time. Do not wear gloves, loose clothing or jewelry where they may create a hazard.

IF IN DOUBT AS TO THE TYPE OF CLOTHING OR LEVEL OF PROTECTIVE EQUIPMENT REQUIRED, CONTACT YOUR SUPERVISOR BEFORE PROCEEDING.



SAFE WORK PRACTICE

PERSONAL PROTECTIVE EQUIPMENT (PPE) – SHOP OPERATIONS

Personal protection equipment is designed to provide an effective barrier between you and potentially dangerous objects, substances and processes.

The following personal protective equipment is **MANDATORY** in Capitol's shop:

- **Hard Hats** – CSA/ANSI approved hard hats will be worn on all project at all times
- **Footwear** – CSA/ANSI approved footwear will be worn on all projects at all times.
- **Eye and Face Protection** - All eye and face protection must be CSA/ANSI approved. Safety glasses with side shields or goggles must be worn at all times. When grinding, a face shield must be worn in addition to the eye protection.
- **Hearing Protection** – CSA/ANSI approved hearing protection must be worn at all times.

IF IN DOUBT AS TO THE TYPE OF CLOTHING OR LEVEL OF PROTECTIVE EQUIPMENT REQUIRED, CONTACT YOUR SUPERVISOR BEFORE PROCEEDING.



SAFE WORK PRACTICE

SAFE OPERATING PROCEDURES

CAPITOL frequently requires hazardous work to be carried out which utilizes specialized procedures. "Safe operating procedures" clearly describe the steps to be followed which this kind of work is involved. Employees may be asked to participate in the development of these procedures.

Safe Operating Procedures are to be made available to all employees and reviewed with employees performing the tasks assigned.



SAFE WORK PRACTICE

SAFETY COMMUNICATION SYSTEMS

This communication system is established to advise you on health and safety issues, regulations, programs and responsibilities related to your job.

- Safety Orientation
- Safe Work Procedures
- Pre-job Safety Instruction (PSI)
- Tailgate Safety Meetings
- Weekly Safety Meetings
- Workplace Safety & Health Committee Meetings

**THE SUCCESS OF THESE TWO – WAY COMMUNICATION SYSTEMS IS
DEPENDENT UPON YOUR ACTIVE PARTICIPATION**



SAFE WORK PRACTICE

SCAFFOLDS

You shall verify that the scaffold is safe and meets all regulatory requirements.

Prior to using a scaffold check that:

- the base of the scaffold is sound, level, and in adjustment – sills, screw jacks, bases
- the legs are plumb and that all braces are installed,
- all locking devices are secured,
- all cross members are level,
- all ties are in place, secured, properly installed and in good condition and
- the working platform meets regulatory requirement.

You should immediately report any visible defects in the scaffolding to your supervisor.

When working from scaffolding, you shall:

- climb the scaffolding using the proper means and never climb on the braces
- Maintain good housekeeping practices in all work areas,
- check that suitable means of raising and lowering equipment and materials are used and
- immediately replace any guardrails temporarily removed for the purpose of hoisting equipment or materials

In addition to the foregoing, you shall never:

- remove any structural part of the scaffold with first checking with your supervisor
- place a load on the scaffold greater than its design capacity
- rest on or place equipment or material on the guardrails and
- Undermine the base of the scaffold.

When working with rolling scaffolds, you shall:

- secure or remove all materials and equipment from the platform before moving the scaffold.
- apply the caster brakes at all times when the scaffold, and
- have sufficient help available when moving a rolling scaffold, and
- Be alert for hazards such as holes or openings in the floor, overhead obstructions, slopes and debris.

Riding a rolling scaffold is not recommended.

**ALL SCAFFOLDS WILL BE ERECTED AND MAINTAINED IN ACCORDANCE
WITH THE MANUFACTURER'S SPECIFICATIONS.**



SAFE WORK PRACTICE

TOOLS

The following rules apply while working with tools and equipment at Capitol Steel

- Unsafe tools, frayed and defective electrical cords and extensions and unguarded machinery must not be used.
- Report unsafe conditions to your supervisor.
- When using electrically powered equipment or portable hand tools, verify that they are properly grounded.
- The use of double insulated tools is recommended.
- Only an approved low combustion cleaning solvent shall be used to clean tools.
- When safety guards are removed from tools for repairs or adjustments, the tool must be made inoperative and properly tagged.



SAFE WORK PRACTICE

VEHICLES AND EQUIPMENT

The following rules apply while working with and around vehicles and equipment:

- Operations of equipment without authority will result in termination.
- Seat belts shall be worn at all times.
- Do not ride on running boards or stand up in a moving vehicle.
- The driver shall not remain in the cab of a truck when it is being loaded or unloaded from overhead by a crane.
- Vehicles and equipment shall be operated lawfully and safely at all times
- All vehicles and equipment must be shut down for refueling or cleaning
- Repair procedures shall be followed as specified by the manufacture's maintenance procedures.
- When vehicles or equipment are stuck or broken down, their removal will be performed under the direction of a supervisor.
- Safety and repair requirements of your machine are to be reported to your immediate supervisor
- Removal of LOCK OUTS or DO NOT OPERATE tags without proper authority is prohibited and may result in termination.



SAFE WORK PRACTICE

WELDING AND CUTTING

Welding is a fundamental component of the work performed at Capitol Steel. The hazards and control measures require a great deal of thought and planning. The following is a brief overview of potential hazards and general control systems.

Detailed information is available from the Canadian Welding Bureau guide to Welding Health and Safety and the America Welding Society – Safety & Health Fact Sheets. Both of these guides are available from the Safety Coordinator..

	Oxy Fuel	SMAW GTAW GMAW FCAW	SAW	PAW Air Carbon Arc Cutting
Shock			✓	✓
Fire	✓	✓	✓	✓
Burn	✓	✓	✓	✓
Radiation	✓	✓	* ✓	✓
Heat	✓	✓	✓	✓
Fumes/Gases	✓	✓	* ✓	✓
Noise		✓		✓

* may be hazardous in some circumstances



Controlling Hazards:

Shock

- Ensure Cables are Grounded correctly – Do not ground through Equipment or through a pipe which may carry gas or flammable liquid
- Ensure Cables are in good repair (No Cuts, burns, or abrasions)
- Ensure Electrical connections are correct

Fires

- Where possible, shield welding operations by means of curtains, portable screens etc.
- Remove all combustible materials from areas where welding will be performed.
- Always follow rules where hot work permit systems exist.
- Always wear appropriate clothing for welding.
- It is mandatory to use flashback arrestors for Oxy Fuel operations

Burn

- Use appropriate protective clothing to cover exposed skin to avoid burns from welding sparks and Ultraviolet or Infrared Radiation.
- Keep area clear of combustible materials.
- If other workers may come in contact with hot metal work, take precautions to warn them using caution tape, placards, or chalk.

Radiation

- To protect from Arc Flash always use an approved Welding Helmet with appropriately shaded lens.
- Use appropriate protective clothing to cover exposed skin.

Heat

- If other workers may come in contact with hot metal work, take precautions to warn them using caution tape, placards, or chalk.
- Welding in a confined space can create a dangerous hot environment; insulating blankets, ventilation and rest breaks can reduce the risk of heat stress.



Fumes/Gases

- Ensure adequate ventilation is available for welding operations
- Use appropriate Personal Protective Equipment (PPE) where proper ventilation cannot be provided.
- Always store Compressed Gases securely and in designated locations.

Noise

- Always use approved Hearing Protection

Before You Start - Consider the Following

Our work environment is constantly changing. Circumstances change which require us to modify our control measures. The following are additional considerations that may radically alter a safe work plan.

- Welding in confined Spaces
- Welding Containers that have held Hazardous Materials
- Site Specific Rules – Hot Work Permits
- Weather – Temperature, Snow, Rain etc.

When conditions change - change your plan!

SAFE WORK PRACTICE

WHMIS / HAZCOM

Workplace Hazardous Material Information Systems (WHMIS)/ Hazardous Communications (HAZCOM)

provide the worker with vital information about hazardous materials or substances.

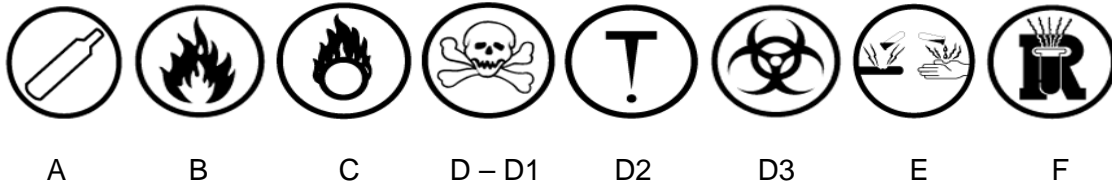
The Key elements are:

- Labels
- Material Safety Data Sheets (MSDS)
- Worker Education

Always take the time to read the WHMIS/HAZCOM instruction labels. The label tells you:

- material and supplier identification
- hazard symbols
- risks
- precautionary measures
- first aid measures

The following are the eight WHMIS/HAZCOM hazard symbols



- A – Compressed gas
- B – Flammable and Combustible
- C – Oxidizing Material
- D – Poisonous and infectious Materials
- D1 – Materials causing immediate & serious toxic effect
- D2 – Materials causing other toxic effects
- D3 – Biohazardous infectious materials
- E – Corrosive Material
- F- Dangerously Reactive Material

For your reference, Material Safety Data Sheets are available for all hazardous products at project locations.

DON'T BE AFRAID TO ASK. IT IS YOUR RIGHT TO KNOW!!



SAFE WORK PRACTICE

WORKING ALONE POLICY

- a. Wherever possible situations arise where employees may be working alone should be AVOIDED wherever possible.
- b. It is necessary to assess all working alone situations to determine conditions that may result in an injury to the workers working alone and attempt to reduce the probability of such an incident.
- c. To provide a means of securing assistance for workers working alone in the event of an accident or similar incident.
- d. Joint Consultation and cooperation.
- e. If working alone is absolutely necessary refer to the Working Alone Policy in the Capitol Steel Safety Manual.