ELECTRICAL

Potential Hazards

1. falls from ladders
2. struck by failing ladders or materials falling from ladders
3. tripping over ladders
4. lifting heavy ladders (MSI)
5. striking persons or objects when carrying ladders
6. contact with electrical equipment or energized conductor
7. ladder rung failure
8. ladder instability
9. pinch points upon opening/closing

Personal Protective Equipment Required

Hard hat	CSA Boots	Fall protection
Eyewear	Hearing protection	Skin protection (clothing)

PROCEDURES

An electrical hazard can be defined as a dangerous condition where a worker could make electrical contact with energized equipment or an electrical conductor. The nature of construction work results in many situations where electrical contact could occur if precautions are not taken.

STEPS:

1. Lockout electrical equipment that is to be worked on or serviced.
2. Inspect electrical equipment for any damage prior to each use.
3. Inspect electrical cords for defects: check the power cord for cracking, fraying, and other signs of wear or faults in the cord insulation.
4. Know where breakers and boxes are located in case of an emergency.
5. Inspect the plug end for cracks and for missing, loose or faulty prongs.
6. Pull the plug, not the cord when unplugging equipment.

DO NOT:

1. Work on potentially energized equipment without proper lockout procedures in place.
2. Use equipment, outlets or cords that are damaged or have exposed wiring.
3. Bypass the switch and operate equipment by connecting and disconnecting the power cord.
4. Block access to circuit breakers or fuse boxes.
5. Use electrical equipment in wet conditions or damp locations, unless the tool is connected to a GFCI.
6. Use a metal ladder or scaffold near any exposed energized electrical circuits or equipment.

GENERAL SAFE WORK PRACTICES:

1. Ensure that all electrical circuits and equipment are installed in accordance with the requirements of the appropriate legislative body.
2. Ensure that electrical panels and switches controlling a service supply, feeder or branch circuit are protected from physical or mechanical damage.
3. Install Ground Fault Circuit Interrupters (GFCIs) where the risk of electric shock is greater in areas that are wet or damp.
4. Ensure you develop and follow proper lockout procedures when working on energized equipment.
5. Ensure you develop and implement safe work procedures for working near overhead electrical lines.
6. Ensure equipment is properly grounded using a three-prong plug or is double-insulated and labeled accordingly (CSA).

7. Turn off equipment before connecting it to a power supply and disconnect the power supply before making adjustments or changing accessories.
8. Inspect equipment for signs of damage before each use, especially electrical cords and switches. Tag defective equipment clearly with an "Out of Service" tag.
9. Use only approved extension cords that have the proper wire size (gauge) for the length of cord and power requirements of the equipment that you are using.
10. Ensure that a cable or wire used for temporary electrical distribution is adequately guarded or securely suspended overhead to provide adequate clearance.
11. Keep power cords away from heat, water, oil, sharp edges and moving parts.