

Cold Weather Safety Field Checklist

Electrical Inspection



Electrical shocks and burns can happen at any workplace that uses electrical machinery, tools, or equipment. The risk increases dramatically when work is carried out in cold, damp, or wet conditions. To make matters worse, freezing temperatures and wet skin and clothing intensify shock, which makes workers more vulnerable to serious and even fatal injuries. That's why it's essential to take special precautions for high-risk work, including carrying out an electrical safety field inspection before each work shift and, where necessary, once work begins in response to changes in conditions such as the onset of rain. Here's an Electrical Safety Field Inspection Checklist that you can adapt for your own use.

Electrical Safety Field Inspection Form (Wet, Damp, Snowy, or Freezing Conditions)

Inspection Information

Site/Facility: _____

Building/Area/Work Zone: _____

Date of Inspection: _____ Time: _____

Inspector Name & Title: _____

Weather Conditions (check all that apply):

☐ Rain ☐ Snow ☐ Ice ☐ Freezing Rain ☐ Standing Water ☐ Sub-Zero Temperatures ☐ Thaw/Condensation

1. General Conditions

- ☐ Work area is free of standing water where electrical equipment is used.
- ☐ Snow and ice have been cleared from electrical work areas where practicable.
- ☐ Temporary electrical setups are protected from moisture exposure.
- ☐ No improvised covers (plastic bags, tarps not designed for electrical use, etc.) are in use.

Comments/Corrective Actions:

2. Power Sources & Panels

- ☐ Electrical panels are closed, secured, and dry.
- ☐ Temporary panels are approved and weather-rated.
- ☐ There are no signs of moisture ingress, corrosion, or ice buildup.
- ☐ Panel access is clear of snow and ice.
- ☐ Breakers and labels are legible.

Comments/Corrective Actions:

3. Ground Circuit Fault Interruption (GFCI) Protection

- ☐ GFCI protection is present on all required circuits.
- ☐ Portable GFCIs are used where permanent GFCIs are unavailable.

- ☐ GFCIs are tested are before use.
- ☐ GFCIs are tested are before the start of shifts.
- ☐ No bypassed, taped-over, or disabled GFCIs are in use.
- ☐ Tripping GFCIs are investigated and corrected and not ignored.

Comments/Corrective Actions:

4. Extension Cords & Temporary Wiring

- ☐ Only CSA-approved cords are used.
- ☐ Cords are rated for outdoor and cold-weather use.
- ☐ Cords are free of cuts, cracks, exposed conductors, and damaged insulation.
- ☐ Cords remain flexible (not stiff or brittle).
- ☐ Connections are elevated and protected from snow, slush, or water.
- ☐ Household/light-duty cords are not in use.
- ☐ Cords are routed to prevent damage from vehicles, equipment, or ice buildup.

Comments/Corrective Actions:

5. Tools & Electrical Equipment

- ☐ Tools are approved for wet or outdoor use where applicable.
- ☐ Equipment is rated for expected temperature range.
- ☐ There is no visible moisture inside tool housings.
- ☐ Guards, switches, and insulation are intact.
- ☐ Battery-powered tools are used where feasible.
- ☐ Defective tools are tagged and removed from service.

Comments/Corrective Actions:

6. Temporary Lighting, Heaters, and Heat

Trace

- ☐ Temporary lighting is rated for wet/cold conditions.
- ☐ Portable heaters are approved and used per manufacturer instructions.
- ☐ Heaters are plugged directly into approved receptacles (not daisy-chained).
- ☐ Heat trace systems are properly installed and undamaged.
- ☐ Circuits and power bars are not overloaded.
- ☐ Cords and plugs are free of ice and condensation.

Comments/Corrective Actions:

7. Work Practices & Controls

- ☐ Electrical work is minimized during wet or freezing conditions.
- ☐ Equipment is de-energized and locked out where required.
- ☐ No energized work is performed without authorization and controls.
- ☐ Workers wear appropriate PPE and protective clothing for conditions.
- ☐ Workers are aware of increased shock risk in wet/cold environments.

Comments/Corrective Actions:

8. Training & Awareness

- ☐ Workers are trained on cold-weather electrical hazards.
- ☐ Workers know how to test GFCIs.
- ☐ Workers understand OHS stop-work and refusal rights.
- ☐ Toolbox talks or reminders are provided when conditions change.

Comments/Corrective Actions:

9. Final Assessment

- ☐ **SAFE TO PROCEED** – All required controls are in place.
- ☐ **NOT SAFE TO PROCEED**– Work stopped until corrective actions are completed.

Inspector Signature: _____

Supervisor Acknowledgement: _____

Inspection Notes

Cold temperatures and moisture dramatically increase electrical shock severity. Any damaged, stiff, or wet electrical equipment must be removed from service immediately.