

# Mobile generators

## on construction projects



Construction projects such as bridge or road construction usually need a mobile generator to supply power for workers' tools or for lights. A mobile generator must be grounded to protect workers from electrical shocks and burns.

The Ontario Electrical Safety Code (OESC), Rule 2-004, specifies when an application for inspection is required for work on an electrical installation.

### When must you apply for an inspection by the Electrical Safety Authority (ESA)?

If a mobile generator is rated above 12 kW or 240 V, and if the electrical equipment is either hardwired or connected to the generator by single-conductor cable connections (also called Cam-Lok connectors) an inspection by the ESA is required. The contractor must apply for the inspection before the work begins or within 48 hours after it begins.



**Generators connected to Cam-Lok connectors must be inspected by the ESA**

The contractor must also apply for an inspection when a generator is used to supply plug-in, Cam-Lok, or hard-wire-connected equipment during the construction phase (set up or tear down) for large special events or celebrations. Those include outdoor concerts, outdoor festivals, live performances, agricultural fairs and carnivals, trade and consumer shows, and movie and TV shoots. An application for inspection by ESA should be made at least a week before the event.

### When is an inspection not required?

An inspection by ESA is not required for mobile generators rated above 12 kW or 240 V when the equipment is connected to the generator by a cord or plugged in through receptacles mounted on the generator.

Plugging portable equipment such as tools into a mobile generator is not considered to be an electrical installation. The user must follow the manufacturer's instructions installation as defined in the OESC for grounding the generator. (See the Construction Projects regulation 213/91, s.93(3) and s.185(1).) Portable tools must be plugged into a receptacle protected by a ground fault circuit interrupter (GFCI) (O. Reg.. 213/91, s.195.2).

Contact ESA's Customer Service Centre at 1 877 ESA SAFE (372 7233)

### How IHSA can help

IHSA has an Electrical Safety Talk that can help workers understand some of the safety considerations when they are using a mobile generator. In addition, Chapter 26 of the *Construction Health and Safety Manual* (M029) covers electrical safety and information related to generators. Visit [ihsa.ca](http://ihsa.ca) to search for this and other valuable information.

