

Proposal Number: 2018-OA-009

Rule 12-022 - New

**Description of Change: Requirements for cables and raceways installed in metal
corrugated roof decking**

Proposed by: Electrical Safety Authority

Background:

A proposal was submitted by the roofing association to the CE Code 2018 to prohibit wiring to be installed not only within roof systems or roof decking, but also exposed locations adjacent to roof systems or roof decking unless there is a separation of not less than 38 mm. The proposal was defeated. The provided rationale would add cost to the installation, with not enough evidence that the proposed 38 mm would prevent large nails from damaging conductors. The proposal is being discussed at the CSA Section 12 subcommittee.

The proposed Ontario amendment is considered to be the first step in preventing conductors in a concealed location, allowing the roofing industry to work on CE Code changes regarding exposed locations. Some other jurisdictions, Newfoundland & Labrador, and New Brunswick, already prevent conductors to be installed in concealed locations or where subject to mechanical injury.

Rationale:

The practice of installing conductors concealed in the roof decking is a hazard as there are no visible conductors.

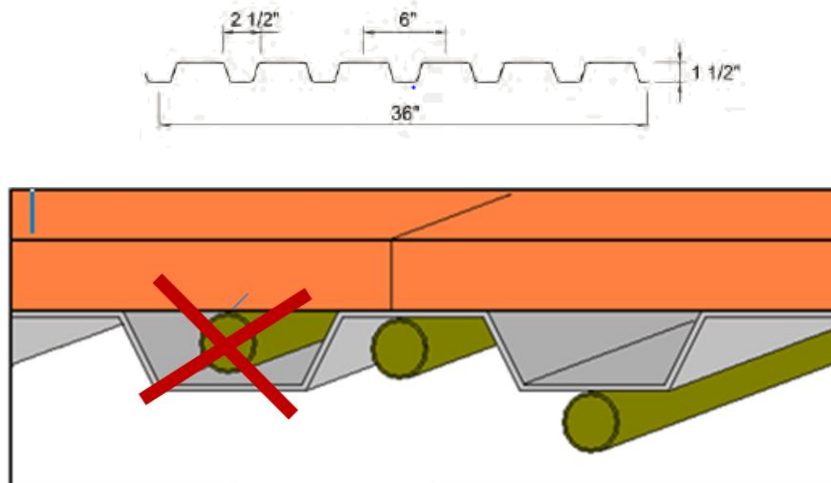
The intent is to raise awareness of this safety issue and prevent the installation of conductors in concealed locations. A concealed location means the concealed channel space under roofing material/insulation, where no conductors should be installed due to the fact that the conductors are not visible from top or bottom.

This is a first step in introducing both the electrical industry as well as the roofing industry as to some of the hazards that are present with concealed conductors. If one can see the conductors from below or above, one can plan their work.

The pictures below show a recent incident while cutting a hole in the roof for ventilation. The cutting was performed and conductors were cut as no visible conductors were observed.



The following diagram shows the intent of the proposal:



Proposed Change:

Add new Rule 12-022

12-022 Cables and raceways installed in metal corrugated roof decking

(1) Cables or raceways installed in accordance with this Section shall not be installed in concealed locations within corrugated roof decking.