EESA

ENTERTAINMENT ELECTRICAL SAFETY ASSOCIATION

Protection of Cables From Traffic In The Entertainment Industry

This bulletin is prompted by an increasing number of incidents. Lack of due diligence and improper use of cable protection have contributed to numerous hazardous and life threatening situations. Proper planning and adhering to Ontario Electrical Safety Code (**OESC**) requirements can aid in avoiding such situations and mitigate personal liability.

What are the requirements?

The **OESC** rule 2-200 requires electrical equipment be guarded so that adequate provision is made for the safety of persons and property.
Furthermore, **OESC** rule 66-450(c) requires that single conductor cables be protected from physical damage and not present a trip hazard in pedestrian walkways or roadways.

Note; Rule 66-456(1) requires that *connections to single conductor cables shall not be accessible to unqualified persons*. Additional precautions may be necessary to satisfy this requirement.

When do we protect cables?

The main areas of concern are vehicular and pedestrian traffic that may cause damage to any cables, posing a safety hazard to the public and production personnel.

a) Vehicular traffic

There is no provision in the **OESC** to run cable across active roadways. Proper planning and location of equipment must be used to avoid roadway crossings. Any exceptions must be cleared with your local AHJ (Authority Having Jurisdiction).
Cables must be protected on non-active roadways (driveways, parking lots, cart/bike paths, closed roads, etc) where limited vehicular traffic may be encountered. Protection can be achieved using manufactured channel mats. Constructed ramps may be acceptable subject to inspection. Channel mats and ramps have no speed rating, therefore any vehicular traffic must pass over the protected cables *slowly and with caution*.
Consult your local municipality for guidance on traffic control requirements.

b) Pedestrian walkways

Cables must be protected from damage and covered or guarded to not present a trip hazard. Flat mats, channel mats or ramps can be used. When selecting appropriate protection, consider the potential volume and nature of traffic, i.e. large crowds/queues, midways, animals (horses, etc), wheelchairs, strollers, non-motorized vehicles.

All manufactured cable protection must be used following the manufacturer's instructions. Misuse can cause electrical shock and injury. Cable protectors are intended for temporary use only and must be in accordance with all applicable electrical, building and safety codes.

Things to consider for location survey. Plan before set-up.

- Generator location – avoid roadway cable crossings. Volume, direction and type of traffic that may be encountered must be considered. Any exceptions must be cleared with your local AHJ.
- Multiple generators – consider using multiple small generators to meet the requirement and avoid roadway crossing.
- Cable routing – avoid high traffic areas such as driveways, doorways, walkways, bike paths.
- Adequate supply of protection to cover all cables exposed to traffic.
- Types of cable protection required – flat mats, channel mats, constructed ramps.
- Traffic control – trained personnel, cones, signs.
- Consider the effect of power disruption due to lack of proper cable protection.