

## Set design Risk Assessment Guidance

- Lighting fixtures on set Must conform with Canadian National Standard for the product type listed in part 2 of the Canadian Electrical Code and be verified by third party accredited certification bodies such as CSA, UL or Intertek. Often LED lights have been installed with power supplies and decoders that have a 'component' type mark, but the system as a whole has not been certified as meeting the required standard. Provincial safety authorities are responsible for enforcing electrical product certification and compliance with the electrical code. Ask the set wire person to ensure that all lighting fixtures are certified as meeting local standards.
- When a set floor is built above grade the structure must be built according to local building codes or under the direction of a professional engineer.
- If the set has a second story floor that will support people, material, or equipment the set must be constructed according to the directions of a professional engineer.
- Gas fireplaces, flame bars, torches etc. used on a set require a permit from the authority having jurisdiction.
- All windowpanes must be shatter proof. Glass windows can be tempered, or have a safety film applied to prevent unsafe shattering.
- Glass curtain are non-structural panels of glass that typically extend from floor to ceiling and may be inclined. Glass curtain walls and skylights should be installed or constructed according to professional engineer's or manufacturer's directions.
- Cut greens can be highly flammable. All cut greens used on sets must be treated with a fire retardant that meets the requirements of NFPA 140, the standard that stages are required to meet for fire protection. The treatment of greens should be recorded, and the greens should be labeled with the date of treatment.
- Video walls, or multi monitor set ups should be installed according to manufacturer's or professional engineer's directions.
- A fixed ladder is a vertical ladder that is permanently fastened to a wall or other part of a structure. Fixed ladders must be installed according to the manufacturer's instructions or be designed and installed according to local standards. Local standards will normally require an engineer's approval.
- Any elevated working surfaces over ten feet need to be protected by guardrails that meet the requirements of occupational health and safety regulations.
- When glass railings are used as guards against a fall the design must be approved by a professional engineer.
- When a moveable piece of scenery or a set element, not including lighting, electrical or camera equipment, is suspended above a set it must be installed according to a professional engineer's directions.
- Fabric and materials used on sets must be treated with a fire retardant and the treatment should be recorded. Some consumer products such as upholstered furniture have been pre-treated and will be identified as such on the label.
- Elevating devices, elevators or elevating platforms designed to lift performers must be built to manufacturer's or professional engineer's specifications.

- Scenic elevated walkways or catwalks must be constructed according to a professional engineer's directions.
- Picture vehicles parked on a set should have a minimal amount of fuel in the fuel tank.
- Moving elements on a set that might strike or crush a person should be constructed or installed according to manufacturer's or professional engineer's instructions. Example: a draw bridge
- Set footprint. Each set should allow at least a four foot fire lane around the entire set.
- Any working area of the set that is over four feet must be protected by a guardrail that meets local occupational health and safety regulations.
- Ceilings and roofs over 600 square feet may require additional fire protection. This can be accomplished by designing removable or flown ceilings, dropping in sprinkler heads, or installing heat detectors.
- Set elements intended to support people ten feet or above grade require manufacturer's or professional engineer's instructions. Examples: a gallows, or a pirate's plank
- Set elements intended to support a heavy object require manufacturer's or professional engineer's instructions. Example: a car on an automotive lift.
- Set windows that are adjacent to fire lanes often call for lights to be placed outside of them which will block the fire-lane. When designing a set allow room for lighting that will not block the fire-lane.
- When a ceiling or roof is designed that will not support the weight of a person, but may appear to, limit access with barricades and ensure that warning signage is posted.
- Stairs and steps with four risers or more require hand-rails.
- Floor openings should be covered or guarded according to written procedures when not in use.