

Written by the Technical Committee of the film and video industry's joint sector-based working group and produced by the Commission de la santé et de la sécurité du travail du Québec.



ASSOCIATION DES
PRODUCTEURS DE
FILMS ET DE
TELEVISION DU
QUÉBEC

Fire prevention

1. Before renting or occupying a house or a building, the producer must ensure that it meets fire prevention standards and that it contains the necessary fire fighting equipment, in compliance with the *National Fire Code*.
2. The distance to be covered between any point in the building and the closest exit must not exceed 25 m when there are no automatic extinguishers (sprinklers), or 45 m if there are sprinklers throughout the building. At least two exits must lead directly outside the building. No objects must block the flow of water from the automatic extinguishers (sprinklers).
3. The location of emergency exits must be clearly indicated. Exits must be unobstructed on both sides. If the usual exits are blocked due to filming or recording, others must be provided.
4. A passageway at least 1.2-m wide and 3-m high must be provided around scenery and emergency exits. This passageway must be kept clear at all times, and all pipes, wires, conduits, etc., crossing it must be covered with cable mats.
5. Electrical wires obstructing exits or passageways must be inserted in cable mats and covered. Their presence must be indicated.
6. Fire hose cabinets must be kept clear of obstacles at all times.

Access and parking for fire fighters

7. The transportation coordinator or the unit manager must ensure that all areas around the work site(s) are accessible to fire department vehicles via lanes with a minimum width of 6 m and an overhead clearance of 5 m, and whose turning radius allows passage of the equipment.
8. Unless approval has been received from the municipal fire department, vehicles used for production must not block the fire fighter access lanes and must leave a clearance of 2.5 m on each side of hydrants, siamese connections and sprinklers.

Smoking prohibited

9. In Québec, the *Tobacco Act* (December 1999) prohibits smoking in public places and in the workplace. The unit crew must therefore install “No Smoking” signs and the production crew must comply with this prohibition.
10. Smoking is prohibited in the following areas:
 - near the finishing zones where aerosol products are used;
 - near flammable accessories or scenery (such as curtains);
 - in any area where flammable liquids or gases are used or stored (for example, for pyrotechnic special effects or in fuel distribution or refueling areas);
 - in any area where pyrotechnic special effect devices are used or stored;
 - under a tent or an inflatable structure;
 - in the locations indicated by the Société de protection des forêts contre le feu (SOPFEU).

Open flame special effects and fire stunts

11. Any type of fire produced on site must be officially approved by the municipal fire department. The safety coordinator must have received a copy of the permits issued and be aware of the use that will be made of the flames as per the script.
12. When open flame special effects or fire stunts are planned:
 - The call sheet must include a note warning the production crew. This note must specify that the set will then be considered “closed”, meaning that only essential personnel may be present. The note must also be given to subcontractors;
 - No one under 16 years of age has the right to be near the set, unless he/she is considered a professional stunt performer or written permission has been obtained from his/her parents or guardians.

Open flame special effects

13. When the filming or recording of a scene involves open flame special effects and flammable liquids or gases will be used, the special effects coordinator must inspect the site and report to the safety coordinator. Amongst other duties, he must:
- approve the choice of filming or recording location;
 - ensure that anything that could start a fire is eliminated: surfaces brought to high temperature, lighting and electrical equipment, areas reserved for smokers;
 - ensure that pipes, valves and fittings, manifolds and equipment comply with the standards in the *Safety Code for the construction industry* and those relating to propane gas: CAN/CSA B149.1-002 and CAN/CSA B149.2-00;
 - check the storage conditions for portable tanks, canisters and equipment used;
 - ensure that “No Smoking” signs are installed in areas where the use of flammable substances may be prolonged and in storage areas;
 - check whether the permit to use flames has been obtained;
 - restrict all fuel distribution activities to safe and approved zones;
 - ensure that fire fighting equipment is available and accessible on the filming or recording site (for example, extinguishers, fire hoses or fire department vehicles).
14. To obtain flame effects, flammable substances including rubber cement, gasoline, kerosene and other petroleum products are used. The person who handles these substances must not light the fire. This person and the person who lights the fire must wear safety glasses, gloves and any other protective equipment recommended by the product manufacturer.
15. When the flame effect is significant:
- the members of the production crew who have to work near the flames must wear non-flammable clothing made of cotton or wool or treated with a fire retardant solution (a special fire blanket can also be used as a screen). They must also wear the respiratory protective equipment recommended by the product manufacturer;
 - the producer, or his representative, must ensure that there is a local exhaust ventilation system for exhausting the smoke;
 - two emergency exits must be planned in order to be able to leave the filming or recording site.
16. If oxygen tanks are used, combustible materials must be kept at a distance. Tanks that are not being used must be stored outside the building, 10 m away from any combustible material or gas.

17. When the flame effect is significant, the special effects coordinator must call the production crew to a meeting before filming or recording, during which a rehearsal will take place detailing the planned action and each person’s role. He must, for example, indicate who will use the extinguishers, explain the response to fight the fire, and do a rehearsal of the intervention.
18. The special effects coordinator must preferably simulate a fire by using such things as flammable liquids and gases, rather than having an object actually burn to obtain the desired effect.
19. Extinguishers must be available on site, and the designated people must be able to use them in relation to the flammable products used.
20. During filming or recording of a flame effect, a first aid attendant (see guideline 9, section 8) assigned solely to this task must be on site.

Fire stunt

21. Any scene simulating a body on fire must be performed by a competent professional stunt performer.
22. The stunt performer must arrive on the set with compliant protective equipment (fire protection equipment – protection suit made of Nomex or the equivalent, fire extinguishing equipment, and in some cases, respiratory equipment) and with his assistants, who are aware of the risks inherent in the stunt.
23. If, during the scene, only part of the stunt performer’s clothing is on fire, at least two people, each equipped with an appropriate extinguisher and specially trained to use it, must be on site. If a large part of the body is on fire or the flames could prevent the stunt performer from breathing or seeing well, at least three people, each equipped with an appropriate extinguisher and specially trained to use it, must be on site.
24. The location manager or the unit manager must prepare an emergency response plan and give it to the production manager.
25. Before the stunt begins, CO₂ extinguishers weighing at least 7 kg loaded must be available within reach of the responders and ready to be used in the event of an emergency.
26. If there are combustible materials in the area where the stunt will take place, the stunt coordinator must make sure that they are treated with fire retardant.

27. Before the stunt begins, the stunt coordinator must call the production crew to a meeting during which a rehearsal will be carried out detailing the planned action and each person's role. He must mainly indicate who will use the extinguishers, explain the response for fighting the fire, and do a rehearsal of the intervention.
28. During filming or recording of a scene involving a body on fire, a first aid attendant assigned solely to this task must be on site.
29. Insofar as possible, scenes involving a body on fire must be filmed indoors, on condition that the building is approved by the fire department. In this case, check for draughts. If the scenes are filmed or recorded outdoors, check the wind conditions.
30. Stunt performers must wear wigs made of natural hair and apply an aqueous gel over all exposed skin. The stunt coordinator must determine who among the members of the production crew should take the same precautions.

References

Safety Code for the construction industry.

National Fire Code (NFC), 1995 Edition.

Guideline 1 on General responsibilities.

Guideline 5 on Site maintenance.

Guideline 9 on First aid.

Guideline 11 on Flammable liquids.

Guideline 12 on Air quality.

Guideline 13 on Construction and demolition.

Guideline 16 on Explosives and pyrotechnic equipment.

Guideline 18 on Stunts.

Guideline 25 on Controlled substances.

Pyrotechnics Special Effects Manual, Natural Resources (Canada).

Note. – The information contained in this guideline is not exhaustive and does not replace current standards, laws and regulations.