

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
TÉLÉVISION DU
QUÉBEC

Hoisting apparatus

1. Hoisting apparatus must be used by people who have received the necessary training provided by the applicable standard and maintained by qualified people according to the manufacturer's instructions.
2. Different standards govern the use of most elevating platforms:
 - Portable Elevating Work Platforms, 2nd ed. (CSA-B354.1-04);
 - Self-Propelled Elevating Work Platforms, 2nd ed. (CSA-B354.2-01);
 - Self-Propelled Boom-Supported Elevating Work Platforms, 2nd ed. (CSA-B354.4-02);
 - Safety Code on Mobile Cranes (CSA Z150-1974);
 - Safety Standard for Low Lift and High Lift Trucks: American national standard on motorized and non-motorized lift trucks (ASME B.56.1);
 - Safety Standard for Rough Terrain Forklift Trucks (ASME B.56.6-2002).
3. During indoor work, it is recommended that an electric hoisting apparatus be used unless it is possible to ensure air quality by checking the carbon monoxide concentration using a detector that measures the exposure values for the periods indicated in the table below. This type of detector is offered by distributors of specialized occupational health and safety equipment.

Permissible exposure value weighted for an 8-hour period	35 ppm
Permissible value for a 15-minute period if: maximum 4 times per day and 60 minutes between period	between 35 ppm and 200 ppm
Permissible exposure value weighted for a 15-minute period	200 ppm

4. Hoisting apparatus must be inspected before each use to ensure that it operates properly. Particular attention must be paid to the control systems and structural components.
5. Any defects must be reported to the department head or to the safety coordinator.

6. The operator must begin by examining the site in order to evaluate the risks, and particularly, to locate any sources of electrical energy. An aerial work platform must never be used above a source of electrical energy.
7. The producer or his representative must stop the work whenever a component or a part of the equipment could come within the following minimum approach distances for power lines:

Voltage between phases (volts)	Approach distance
< 125,000	3 m
125,000 to 250,000	5 m
250,000 to 550,000	8 m
> 550,000	12 m

8. Someone must ensure that the work surface is stable and level, and that nothing could cause it to tip or become unstable. Before using the equipment, any anticipated movement must be studied in order to locate aerial obstructions, vehicle and pedestrian traffic, holes in the asphalt, slopes, etc.
9. Hoisting apparatus must be used in accordance with the manufacturer's instructions, particularly on sloping surfaces. On sloping surfaces, the equipment must never be left unattended, unless wheel chocks have been used to immobilize it. If the hoisting apparatus has a braking mechanism, it must be applied when personnel are being lifted.
10. Members of the production crew on the platform must wear individual fall protection equipment, namely a safety harness connected by a lanyard with an energy absorber to an anchor on the platform.
11. In planning the filming or recording, the department head that will be using the hoisting apparatus must choose it according to the weight to be lifted.
12. A ladder, scaffold or other type of hoisting device must never be used on a platform. It is also prohibited to sit or climb on the guardrail of a platform.

13. Elevating work platforms should not be used when the climatic conditions are unfavorable (electrical storms, heavy rain, extreme cold or heat, winds over 40 km/hour), unless specific measures have been taken to ensure safety. In the event of an electrical storm, all deployable equipment must be returned to the ground.
14. It is prohibited to secure an elevating platform to a structure other than the hoisting apparatus to which it is connected (a building, for example).
15. When there are vehicles or pedestrians on site, the work area for the hoisting apparatus and its platform must be marked off with barricades and appropriate signs (benches, cones, flags, etc.) It is prohibited to travel under the lift mast of hoisting apparatus without the permission of the department head.
16. When hoisting apparatus is equipped with stabilizers, they must be in the locked position on a solid base plate before lifting people.
17. The operator must operate the platform's controls in such a way as to avoid any sudden movement.
18. A platform must not be used for performing welding work, unless all battery terminals have been disconnected and the manufacturer's recommendations are followed.
19. The device used to supply power to the distribution or lighting circuits must be grounded.
20. An elevating platform must be completely controlled by the operator who is on it (primary controls). When the hoisting apparatus is moving, the operator must be assisted by a person on the ground who ensures that there are no obstacles and who monitors the movement of the apparatus. This person must remain in constant visual contact with the operator.
21. The secondary control system (on the ground) must never be used to move the hoisting apparatus unless the operator on the platform requests it or is unable to move the platform himself. It is prohibited for the person on the ground to use the apparatus' secondary controls without the operator's consent.
22. The manufacturer's manual, which contains information on the operation, verification and maintenance of the hoisting apparatus, must be in good condition and stored in the hoisting apparatus.

Using material hoisting apparatus to lift personnel

23. When a lift truck is used to raise a platform, the platform must encircle the forks and be secured to the apron of the lift truck.
24. The total load lifted must not exceed 50% of the lift truck's rated load, and the operator must remain at the controls throughout the work.
25. A lift truck must not be moved when someone is on the platform.
26. If a platform other than that designed by the lift truck manufacturer is used, it must comply with an engineer's plans. These plans, as well as a plate indicating the rated load and the total weight of the platform, the manufacturer's name, and reference to the plans submitted, must be located in the equipment.
27. When a mobile crane is used as hoisting apparatus to lift personnel, it must be equipped with a limit switch for the hook or with a boom of sufficient length to maintain a distance of at least 3 m at all times between the pulley and the main hook. Jamming of the hook in the pulley can thus be prevented.

References

Regulation respecting occupational health and safety, S-2.1, r. 19.01: last modified: August 2, 2001, updated to April 2, 2002. Québec, Éditeur officiel, 2002. vii, (sections 245 to 265).

Québec. *Safety Code for the construction industry, S-2.1, r. 6: last modified: September 18, 2003, updated to December 23, 2003. [S.l.], Québec, Éditeur officiel, 2003. xvii, (sub-sections 2.15.1 to 2.15.10).*

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