



National
Operational
Guidance

Hazard

**Contaminated or damaged work at
height equipment**



NFCC
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Hazard - Contaminated or damaged work at height equipment

Hazard Knowledge

Contaminated or damaged work at height equipment can present a significant hazard to operators relying on it to prevent injury caused by a fall.

Regulations require that a thorough examination of equipment and safety-critical parts is carried out by a competent person who must then complete a written report. For lifting equipment and any associated accessories used to lift people, this should be done:

- Before first use
- After assembly and before use at each location
- Regularly, while in service (at minimum 6 monthly intervals)
- Following exceptional circumstances

Contamination or damage will therefore normally occur when the equipment is being used or stored. Personnel must remain vigilant to anything that could present a risk to the integrity of the equipment and avoid putting it in a position that may cause contamination or damage.

Contamination may occur as a result of the location of the equipment, while damage is usually caused through misuse or exceeding working load limits.

Fire and rescue personnel should be aware at all times that they must try to preserve the equipment and that any damage or contamination must be reported.

If equipment is suspected of, or identified as, being compromised, it must be withdrawn, declared defective and managed under a strict quarantine procedure.

Equipment may be defective because of a known event or because of identified damage caused by use, misuse or poor storage. It may be that the equipment is contaminated and the substance and/or effects are unknown.

Quarantined equipment must undergo a thorough examination, where the competent person will decide whether the equipment can be reinstated or whether it should be permanently withdrawn and disposed of. Records must be amended to show the action taken.



Control measure - Protect work at height equipment in use

Control measure knowledge

Soft textile-type height safety equipment, including ropes and lanyards, is the most susceptible to damage from unprotected edges in the work at height environment.

Sharp or abrasive edges should be controlled using the following hierarchical approach:

- Remove (the hazard, where feasible)
- Avoid (the hazard)
- Protect (against the hazard)

After hazard removal, the best form of protection for textile equipment is to avoid contact completely. This can normally be achieved by using anchors and rigging configurations that completely avoid, or deviate from, edges or by using other equipment that holds the ropes away from the abrasive or sharp edge. Consideration must be given to the potential consequences of failure and shifts of positions. The access/rescue path of textile equipment must be fully assessed for potential hazards.

The following are examples of hazards that should be taken into account when protecting textile-type safety equipment:

- Sharp edges such as those found on steel work, cable trays, gratings, glass façades or composite panels
- Abrasive edges and surfaces such as coping stones, rock protrusions and corroded structures
- Trapping and cutting areas such as manhole covers, hatches or doorways
- Heat sources and the risk of melting from hot pipes, exhaust gases, lighting, etc.
- Corrosive substances such as chemical deposits or spillages
- Mechanical equipment, such as tools

Aside from personnel trying to avoid working where edges could compromise operational safety, the key control measure is to use supplementary equipment to protect the ropes when in contact with the edges in question: for example, rope-protecting edge rollers, tripods and cantilever frames.

Strategic actions

Tactical actions

Incident commanders should:

- Use equipment and procedures to protect rope and other work at height equipment from damage when in use



Control measure - Manage, inspect and test equipment

Control measure knowledge

At the conclusion of an incident vehicles and equipment should be returned to operational readiness with appropriate speed. Operational equipment should be inspected and tested according to service policy and any test results must be recorded. Cleaning or decontamination of equipment should be completed and the vehicle should be fully restowed. Where appropriate, any defective equipment should be clearly marked and, where necessary, removed from use.

Any equipment defects or deficiencies should be recorded, before leaving the incident ground and, where appropriate, the fire control room should be informed. The appliance commander is responsible for all personnel and equipment stowed on their vehicle.

It may be necessary to leave in place any cordons or signage to provide warnings of residual hazards. The details of this should be recorded, and if appropriate and feasible the equipment should be recovered at a later time.

Strategic actions

Fire and rescue services should:

- Have procedures for the post incident inspection and maintenance of operational appliances, equipment and other resources

Tactical actions

Incident commanders should:

- Conduct an inventory check and record any defects or deficiencies
- Ensure equipment receives appropriate after use inspection and testing before changing its availability status
- Record details of any equipment intentionally left at the incident ground, and schedule collection of it at an appropriate time
- Consider decontamination of personnel, PPE and equipment prior to redeployment
- Consider the condition and serviceability of PPE when assessing operational readiness for redeployment