Hazard Summary

Falls are a significant cause of workplace injuries and fatalities. The use of proper fall protection equipment is critical to protect the health and safety of workers.

A Class Frontal-Fixed Rail Ladder (FRL) [Class FRL] Fall Protection System is a permanently installed metal rail anchoring system used with an automatic fall arresting device called the trolley (carriage). The trolley travels freely on the rail, allowing the worker to use both hands while climbing up or down. Should the worker slip or fall, the device should lock, limiting the worker’s fall.

A worker was recently injured after falling twenty metres from a ladder attached to a tower while using a Class FRL Fall Protection System. In conjunction with the Canadian Standards Association (CSA) the Ministry of Labour has determined that the design of the Class FRL Fall Protection System used by the worker, which was certified to the standard CSA Z259.2.1-98 Fall Arresters, Vertical Lifelines, and Rails, did not address all potential fall conditions.

In particular, a Class FRL Fall Protection System may not adequately protect workers who fall backward while connected to a vertical rail. Leaning back pulls the trolley’s internal braking system off the rail, allowing the trolley to slide down the rail. If a worker falls backwards (as opposed to straight down or inwards) the trolley may not lock, allowing a worker to fall.
Locations and Sectors

Class FRL Fall Protection Systems are used on fixed vertical access ladders which normally do not have a cage, such as the ladders on communication towers, chimneys and water tanks (towers). Class FRL Fall Protection Systems are normally found in industrial and construction applications.

Precautions

Class FRL Fall Protection Systems currently certified to CSA standard Z259.2.1-98 and the CSA stamp on the side of the trolley units does not guarantee worker safety. The Ministry is working with the CSA to address this issue. In the interim, employers must take reasonable precautions to protect workers in these circumstances. This may include using alternate fall protection or access systems, as appropriate, for the adequate protection of the health and safety of the worker.

Employers who own or rent structures equipped with a Class FRL Fall Protection System must ensure that the Class FRL Fall Protection System is capable of protecting a worker from any type of fall (including a backward fall) before it is used. The Ministry recommends that employers contact the manufacturer or the CSA at mark.integrity@csagroup.org for assistance.

Employers who have workers climb structures which have a Class FRL Fall Protection System installed must ensure, before it is used, that the Class FRL Fall Protection System is capable of protecting a worker from any type of fall (including a backward fall).

Always follow the manufacturer’s instructions for the proper use of fall protection equipment.

This Ministry of Labour Alert has no legal effect and does not constitute and is not a substitute for legal advice. If you require specific assistance with respect to the interpretation of a legislative provision and its potential application to you, please contact your legal counsel.

Remember that while complying with occupational health and safety laws, you are also required to comply with applicable environmental laws.

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