

HEALTH AND SAFETY ADVISORY

Self-Retracting Devices with Leading Edge Capabilities

Self-retracting devices (SRDs) are commonly used in the construction industry to help prevent falls. There are several types of these devices:

- Self-retracting lifelines (SRLs) that are anchored overhead
- Self-retracting lifelines with retrieval capabilities (SRL-Rs)
- Self-retracting lifelines with leading edge capabilities (SRL-LEs).

This advisory deals with self-retracting lifelines with leading edge capabilities (SRL-LEs).

According to CSA Z259.2.2: *Self-Retracting Devices*, SRDs are suitable for applications where the device is anchored lower than the elevation of the dorsal D-ring on the worker's full-body harness and where the extracted lifeline can bear against an edge or surface during fall arrest.

Because of this, SRDs have been recommended for use where there is a chance that a fall could occur over an edge—roofing, high-rise formwork, and receiving materials at elevation, to name a few.

However, CSA's Fall Protection Technical Committee issued a safety bulletin cautioning their use. This bulletin, entitled *Self-Retracting Lifelines with Leading Edge Capabilities (SRL-LEs)*, states the following:

Historically, self-retracting devices have not been designed or tested for falls over an edge. In the new edition of CSA Z259.2.2-17 [self-retracting devices], it includes a new class self-retracting lifeline with leading edge capability (Class SRL-LE) with test provisions for over-edge testing.

As per Clause 7.7.2.3 of CSA Z259.2.2-17, it requires testing over a sharp steel edge. Testing over concrete, stone, steel decking or other materials are not covered by this edition of the standard. If you are using equipment in and around edges not covered by this standard, contact the equipment manufacturer to confirm use in the specific application.

Do not use class SRL devices over any leading edge and only use class SRL-LE devices over leading edges approved by the manufacturer.

WARNING: If the SRL-LE you're using has not been tested and certified for the surface you're working on (e.g., concrete, stone, steel decking), it may fray and cut through as it travels repeatedly over the surface edge during a fall arrest (see example below).



It is important to note that Ontario's Construction Projects regulation requires all vehicles, machines, tools, and equipment to be used in accordance with any operating manuals issued by the manufacturer. (O. Reg. 213/91, s.93(3))

In addition, the regulation requires an employer to ensure that a worker who may use a fall protection system is adequately trained in its use and given adequate oral and written instructions by a competent person. (O. Reg. 213/91, s.26.2(1))

These sections of the regulation apply to the equipment (i.e., SRL-LEs) referred to in the safety bulletin issued by the CSA's Fall Protection Technical Committee. This committee is regarded as a trusted source of information that provides credible, reliable, and current information on the selection, care, and use of fall protection equipment.

IHSA staff and stakeholders are grateful to the committee for providing the critical information contained in this bulletin.

It is hoped that this advisory will receive wide distribution and help ensure the correct use of SRLs in the construction industry.

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