

FALL PROTECTION:

Leading Edge Safety Tipsheet

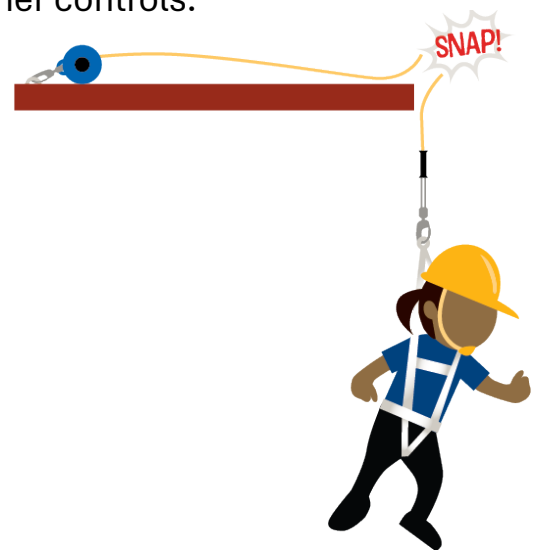
A **leading edge** is the unprotected side and edge of a floor, roof, or formwork for a floor or other walking/working surface (such as a deck) that changes location as components are added. It is called a **leading** edge because the location of the edge changes as workers add or construct additional floor, roof, decking, or formwork sections. When a leading edge is not actively and continuously under construction – and therefore is not moving, it is considered an “unprotected side or edge”.

Employers must protect all workers constructing a leading edge that is 6 feet or more above lower levels from falling through use of passive engineering controls (e.g., guardrails, safety net systems) and/or active systems (e.g., travel restraint or personal fall arrest systems).*

Visit [CPWR’s Tipsheet on Planning a Multi-Layered Approach to Fall Prevention and Protection](#) for more information on these and other controls.

When there is no overhead anchorage point available on a leading edge, workers often tie off at foot level. If they fall, it causes the lifeline to catch and pull taut on the leading edge. The positioning of the lifeline along the edge can also add increased force on both the lifeline and the worker’s body.

This can cause a standard lanyard or self-retracting lifeline (SRL) to break or be cut.

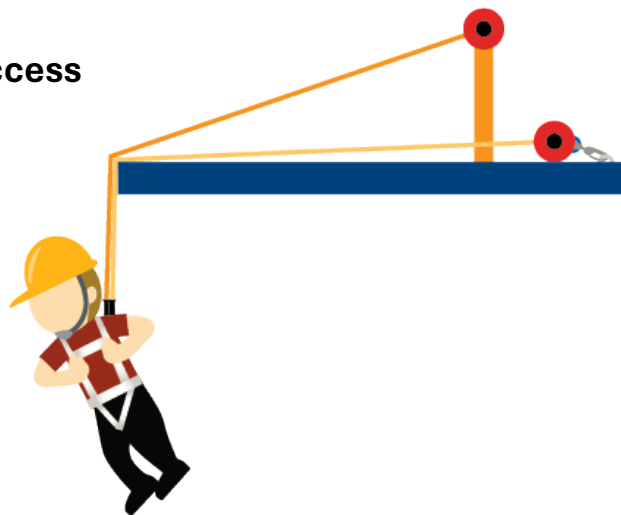


Always work with your competent person and your qualified person to ensure the best fall prevention and protection methods and equipment are in place. These may be the same person or two different people on your site. A **competent** person is capable of identifying and correcting fall-related hazards, while a **qualified** person is approved to supervise the design, installation, and inspection of fall protection and rescue systems.

**An exception to this rule occurs when the employer can demonstrate that these solutions are infeasible or create a greater hazard. In these cases, the employer must still develop and implement a fall protection plan which meets OSHA requirements. For more information, view [OSHA’s Hazard Alert](#).*

To Protect Workers on A Leading Edge, Consider Implementing the Following Measures:

1. Use a guardrail system or safety net system as close to the working level as possible. Safety nets can also help protect workers below from being struck by falling objects from above.
2. Use a fall restraint system to prevent access to the leading edge fall hazard.
3. Use overhead anchorage solutions whenever possible. Keep in mind that an overhead anchorage system does not automatically protect the lifeline from pulling taut and fraying/breaking on the edge. Pay close attention to the distance from the edge and angle created.



Look for the Class 2 icon to determine if an SRL can be used for anchorage positioned below the dorsal D-ring (i.e., for tying off at foot level)

4. Equip workers with **Class 2 SRLs** that are made of materials that can withstand a sharp edge and include energy/shock absorption. Class 2 SRLs have integrated permanent energy absorbers (shock packs) that remain in-line with the force vector during fall arrest. *Adding accessory shock packs to standard SRLs does NOT turn them into Class 2 SRLs.*

5. Consider the building materials being used. **Is the edge sharp, serrated, or abrasive?** If so, even a Class 2 SRL can fray and break after a fall is arrested. ANSI has added a test for use with sharp leading edges, however it is only for structural steel and does not consider other types of sharp and abrasive materials that make up many leading and non-leading edges and can lead to cutting and fraying of both Class 1 and Class 2 SRLs.

Remember that Class 2 SRLs require considerable clearance for deceleration, so it will always be safer to utilize guardrails or restraint systems to prevent the fall from occurring in the first place.



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