



## Horizontal Use of Self-Retracting Lifelines

Miller Fall Protection recommends that the Miller® brand of self-retracting lifelines (SRL's) be mounted to an overhead anchorage connector whenever possible and to a suitable anchorage point. However, due to the lack of an overhead anchorage, mounting the SRL's for horizontal use may be necessary.

The following should be considered when mounting SRL's for horizontal use:

- Exceeding a six foot free fall;
- An increased swing fall potential;
- The locking speed of the SRL may vary in the event of a fall due to friction between the lifeline and the platform edge;
- The SRL may lock up quicker than the workers walking pace and thus cause a fall by jerking the worker off balance;
- Increased lifeline abrasion on work platforms and/or surfaces (contact with sharp edges should be avoided);
- Lifeline may be pinched between two surfaces causing excessive lifeline wear and weakness.

During flat roofing, leading edge or similar applications; a suitable anchorage connector such as a temporary horizontal lifeline may be utilized. Care when rigging the SRL should be taken so as not to impede the free movement of the lifeline. SRL's will receive greater wear and will require more frequent inspection and service when used in applications other than vertical. Web type SRL's will wear quicker than wire rope devices and therefore, web type SRL's may require more frequent inspection and service when used horizontally. Miller SRL's should be mounted as depicted on the attached drawing (**FIG. 1**, below). Mounting the unit on its side will increase the wear on the lifeline, labels and housing. Miller Fall Protection has designed and recommends the use of the Miller RoofStrider (Model No. 9054) for these applications. The RoofStrider is a small, tripod-like bracket

that attaches and holds the Miller SRL's in a proper horizontal position. It allows for 360° rotation and keeps the SRL off the ground and in proper position during horizontal use.

If the cable of the SRL has the potential to travel over the edge of a flat surface, the potential for cable shear may exist. This is due to a 90° bend in the lifeline, the sharp edge of a platform and fall arrest forces created by the falling worker. For this application we would recommend a rubber bumper or padding around the sharp edge and the use of a Miller SofStop™ shock absorber (U.S. part no. 928LS) between the workers harness and the snap at the end of the Miller SRL. This will help protect the lifeline and reduce the impact forces in the event of a fall.

**NOTE: Additional fall arrest clearance must be calculated to compensate for the deceleration distance (42 inches) that will occur when the shock absorber is deployed.**

Please note that we do not normally recommend the use of a separate shock absorber in conjunction with SRL's. This recommendation is application specific, due to the ability of the cable:

- To come in contact with the perimeter edge;
- To see a 90° bend (this reduces the strength of the wire rope by approximately 50%);
- To see potential fall arrest forces in excess of the cable shear strength (the SofStop shock absorber will keep the forces below the shear strength of the wire rope).

Employee training on the proper selection, use and care of personal fall arrest equipment is necessary prior to using fall arrest equipment. The training should make the users aware of how to recognize existing and potential fall hazards and how to eliminate, prevent or control these hazards. Elimination could be in the form of engineering out the hazard. Prevention could be a restraint or passive system and control would be the use of personal fall arrest systems. Training on identification of potential hazards that could result from the use or misuse of certain types of fall arrest equipment should also be covered.

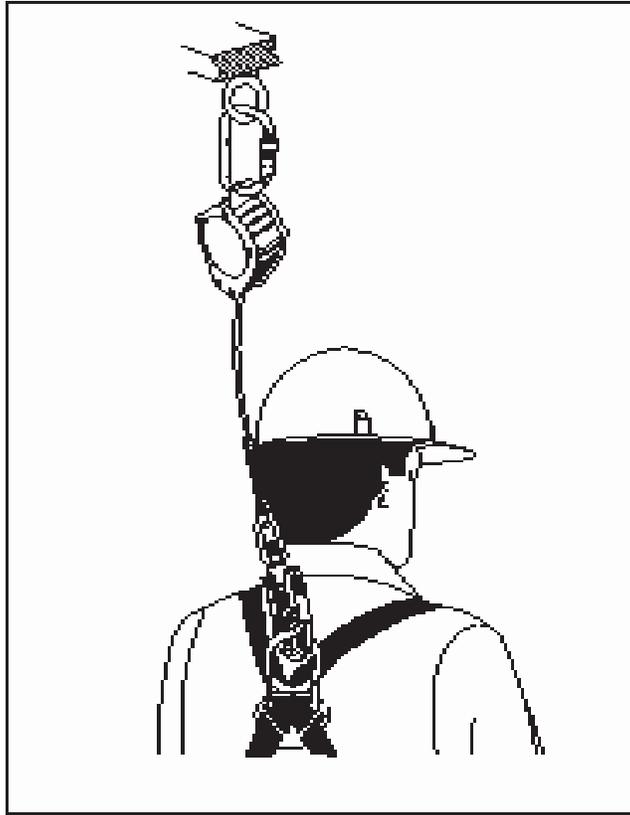


FIG. 1