

## Self-Retracting Lanyards –Are You Using the Right One?

There are several types of Self Retracting Devices available on the market today; Self Retracting Lanyards (SRL's), self-retracting lanyards with integral rescue capability (SRL-Rs), and self-retracting lanyards with leading edge capability (SRL-LEs). Depending on the type of work you are doing that day, an Ironworker may use one, or all three of these types of SRL's. For the purpose of this safety letter, we will discuss two types, SRL and SRL-LE.

### SRL or SRL-LE?

#### **SRL**

Typical SRL's are classified as Type A, a designation given by ANSI Z359.14. Type A SRL's are used when the worker can be anchored to an overhead structure and the cable is not in jeopardy of contacting the edge of a walking working surface. A good example of when to use a Type A SRL is when it is used to "tie off" an employee that is ascending/descending a ladder.

#### **SRL-LE**

SRL-LE's or Self Retracting Lanyards for Leading Edge work, should be used when an employee is tying off at or near foot level and performing work where a fall may lead to the cable contacting an edge of a walking working surface. ANSI designates SRL-LE's as a Type B retractable. A good example of when to use a Type B SRL is for decking operations, anchoring to a beamer on open steel, or erecting Pre-cast twin T's.

### Cable or Webbing?

SRL's are made either from webbing or cable. Performing any type of hot work, welding, cutting or grinding will necessitate the use of a cable SRL. SRL's made from webbing are lighter and good options only if you are not conducting leading edge or hot work. SRL's have a typical cable diameter of 3/16" and SRL-LE's have a typical cable diameter of 7/32". The cable of SRL-LE's is designed thicker to resist cutting on sharp edges.

### Can/Will you contact something below you if you fall?

One important part of the decision process when choosing what SRL to use is fall distance. SRL-LE's have shock absorbers on the end of them to lessen the impact to the fallen worker. That shock absorber also means that the worker will fall farther before coming to a complete stop. SRL-LE's have a maximum arrest distance of 54" while SRL's have a maximum arrest distance of 24". If you use an SRL-LE you will need to add the extra 2'6" into your total fall distance when developing your fall protection plan.

## Do This!

- Use only SRL-LE's when performing leading edge activities like decking or erecting pre-cast
- Only use cable style SRL's when performing any type of hot work.
- If using SRL's installed overhead be sure not to work more than 30 degrees from the attachment point to minimize swing falls.
- Inspect you SRL prior to every use. Look for visual indicators that the SRL has been impact loaded.
- Inspect the cable or webbing of the SRL prior to every use. storage locations

## Don't do this!

- Do not use SRL's (Type A) for leading edge work like decking or erecting pre-cast.
- Do not use webbing SRL's for any hot work activities.
- Do not work more than 30 degrees from the anchorage point when using overhead attached SRL's.

### ANSI Z359.14 Visual examples of SRL and SRL-LE



SRL



SRL-LE

