



Overview

A connecting device is used to connect a fall protection harness to an anchoring point.

Connecting lines come in three types:

Self-Retracting Lifelines are widely used in construction to provide fall protection, especially where workers must move about to handle or install materials. The devices let the user move the full length of the line but stop and lock at any sudden pull. This action is designed for fall-arrest, not for travel restraint.

Shock-Absorbing Lanyard are used to reduce the impact forces during a fall.

Positioning and Restraint Lanyards are used to limit the distance or amount of movement from a particular anchoring point. The connecting lines are attached to an anchoring point or harness with a carabiner. A carabiner is a metal loop with a sprung or screwed gate that is used to quickly connect components in safety-critical systems.

Fall Protection Equipment Selection



Self-Retracting Lifeline



Shock-Absorbing Lanyard

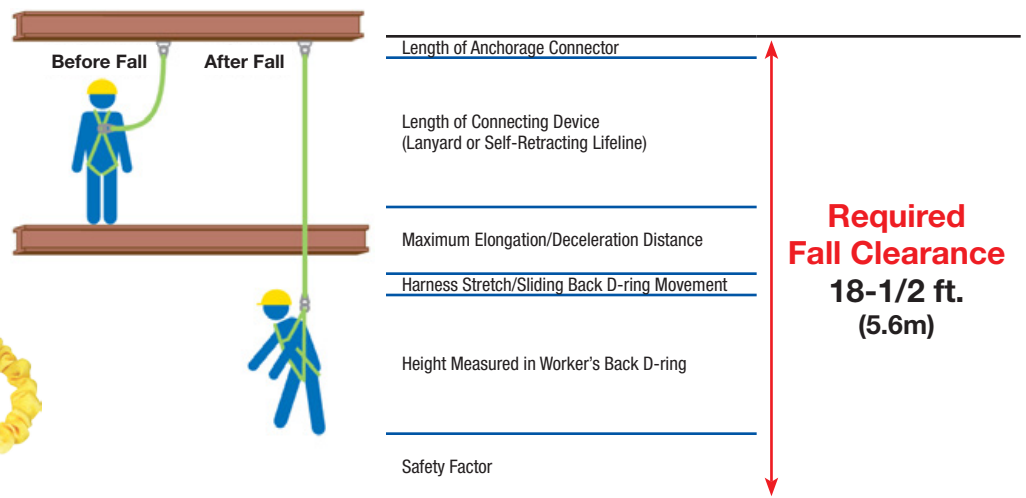


Restraint Lanyard



Shock-Absorbing Lanyard or Self-Retracting Lifeline?

Always know your fall distance and select proper equipment to meet the fall clearance.



Remember...

Under 18-1/2' – always use a self-retracting lifeline

Over 18-1/2' – use a shock-absorbing lanyard or self-retracting lifeline

Anchorage/Anchorage Connectors



Example of a Self-Retracting Lifeline used with a Temporary Anchor



Example of a Permanent Anchor Point



Example of a Restraint Lanyard in use



Example of a Shock-Absorbing Lanyard in use



Example of a Temporary Anchor

Anchorage connectors are designed as the intermediary for securing a connecting device to an anchorage. Careful consideration should be given to selecting a proper anchorage for ultimate safety. The anchorage should be easily accessible, located a safe distance above any lower obstacles, and support 5,000 lbs. (22kN) per worker.

The Importance of Anchorages

Carefully planned and selected anchorages are crucial factors in worker protection and safety. Should a fall occur, the worker will be suspended from the anchorage and his life will depend on its strength.

In addition to selecting an anchorage, it is also important to make a distinction between the anchorage itself and an anchorage connector. For example, an anchorage could be an I-beam, while a cross-arm strap or choker wrapped around this beam and permitting attachment is the anchorage connector.

Swing Fall Hazard

If a fall occurs while using a shock-absorbing lanyard or self-retracting lifeline connected to an anchorage point that is not positioned directly overhead, a swing fall or pendulum effect will occur. Striking an object while swinging can lead to serious injury. Since self-retracting lifelines allow greater horizontal and vertical mobility than standard 6' shock-absorbing lanyards, extra care should be taken to reduce swing falls.

Whether using shock-absorbing lanyards or self-retracting lifelines, it is very important to position your anchorage point directly overhead whenever possible to minimize swing falls.