

## **Technical Bulletin**

## TB121509-001

## **Shock Absorbing Lanyards for Work Positioning**



Incorrect Use of Shock Absorbing Lanyard as a Positioning Device

By design, Reliance FatPack™, SkyLine™, QuickStop™, and BlackMAX™ shock absorbing lanyards are only designed for use as a deceleration device as part of a complete Personal Fall Arrest System (PFAS) or Travel Restraint System and should not be used as a work positioning lanyard. ANSI Z359.1-2007 requires that shock absorbing lanyards deploy at a threshold of 450 lbs (2kN). In some scenarios, this deployment threshold may be exceeded if used as a work positioning lanyard. Additionally, Reliance FatPack™ dual leg lanyards incorporate independent energy absorbers on each leg that are bar tacked together with stitching designed to activate the "fatpack" at a threshold of 300 lbs.

Shock absorbing lanyards may be used as part of a travel restraint system as an additional factor of safety, but it is recommended that any travel restraint systems using shock absorbing lanyards be designed and used under the supervision of a qualified person.

## **OSHA** requirements for Positioning Devices:

Positioning device systems and their use shall conform to the following provisions:

- (e)(1) Positioning devices shall be rigged such that an employee cannot free fall more than 2 feet (.9 m).
- (e)(2) Positioning devices shall be secured to an anchorage capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds (13.3 kN), whichever is greater.
- (e)(3) Connectors shall be drop forged, pressed or formed steel, or made of equivalent materials.
- (e)(4) Connectors shall have a corrosion-resistant finish, and all surfaces and edges shall be smooth to prevent damage to interfacing parts of this system.
- (e)(5) Connecting assemblies shall have a minimum tensile strength of 5,000 pounds (22.2 kN)
- (e)(6) Dee-rings and snaphooks shall be proof-tested to a minimum tensile load of 3,600 pounds (16 kN) without cracking, breaking, or taking permanent deformation.
- (e)(7) Snaphooks shall be sized to be compatible with the member to which they are connected to prevent unintentional disengagement of the snaphook by depression of the snaphook keeper by the connected member, or shall be a locking type snaphook designed and used to prevent disengagement of the snaphook by the contact of the snaphook keeper by the connected member. As of January 1, 1998, only locking type snaphooks shall be used.
- (e)(8) Unless the snaphook is a locking type and designed for the following connections, snaphooks shall not be engaged:
  (e)(8)(i) directly to webbing, rope or wire rope; (e)(8)(ii) to each other; (e)(8)(iii) to a dee-ring to which another snaphook or other connector is attached; (e)(8)(iv) to a horizontal lifeline; or to depress the snaphook keeper and release itself; (e)(8)
  (v) to any object which is incompatibly shaped or dimensioned in relation to the snaphook such that unintentional disengagement could occur by the connected object being able to depress the snaphook keeper and release itself.
- (e)(9) Positioning device systems shall be inspected prior to each use for wear, damage, and other deterioration, and defective components shall be removed from service.
- (e)(10) Body belts, harnesses, and components shall be used only for employee protection (as part of a personal fall arrest system or positioning device system) and not to hoist materials.

If more information is required, reference ANSI Z359.3-2007, which specifically covers Work Positioning and Travel Restriction products, or contact Reliance Fall Protection for additional guidance.