



**SAFEWAZE**  
A C A D E M Y





Equipment must be inspected prior to use by the user. If it does not pass inspection, it must be removed from service and destroyed! At least once a year,(or based on its usage could be more often) all equipment must have a documented inspection by a competent person (other than the user), following the manufacturers instructions.

Equipment should be checked for:

- *Product defects or damage*
- *Absence or illegibility of markings*
- *Lack of any elements affecting the equipment form, fit, or function*
- *Any product alteration*



All product parts must be inspected individually. (Hardware, Webbing, Stitch Patterns, and Labels) Examples of parts, depending on product, can include:

- Webbing Straps
- D-Rings
- Buckles
- Tongue or Billet
- Tongue Buckles
- Snap Hooks and Carabiners
- Steel Cables
- Retractable Web/Cable Function
- Thimbles
- Swivel Components and Retractable Lifeline Housing



## Fall Protection Equipment Inspection Guidelines\*

Inspection Frequency: Before Each Use and Annually



### HARNESSES

Check for DEFECTS:

- Label must be present
- Webbing (see Fig. A)
- D-ring(s)
- Buckle attachment points
- Tongue and grommets
- Tongue buckles
- Friction & mating buckles

**WARNING:**  
**NEVER ALTER YOUR HARNESS**



### LANYARDS

- Label must be present
- Webbing, cable or rope:  
Check for defects (see Fig. A & B)
- Connecting hooks:  
Check for proper operation
- Energy absorber:  
Check to ensure non-deployment

Fig. A: Webbing Defects



Fig. B: Cable Defects



### SELF-RETRACTING DEVICES

- Must have Date of Manufacture (DOM) and Serial Number
- Check entire length of cable/webbing for defects (see Fig. A & B)
- Conduct several "pull tests" to ensure brake is functioning correctly
- Ensure load indicator has not been activated
- Inspect connecting hooks and/or carabiners for damage
- Check housing for distortion, cracks or other damage

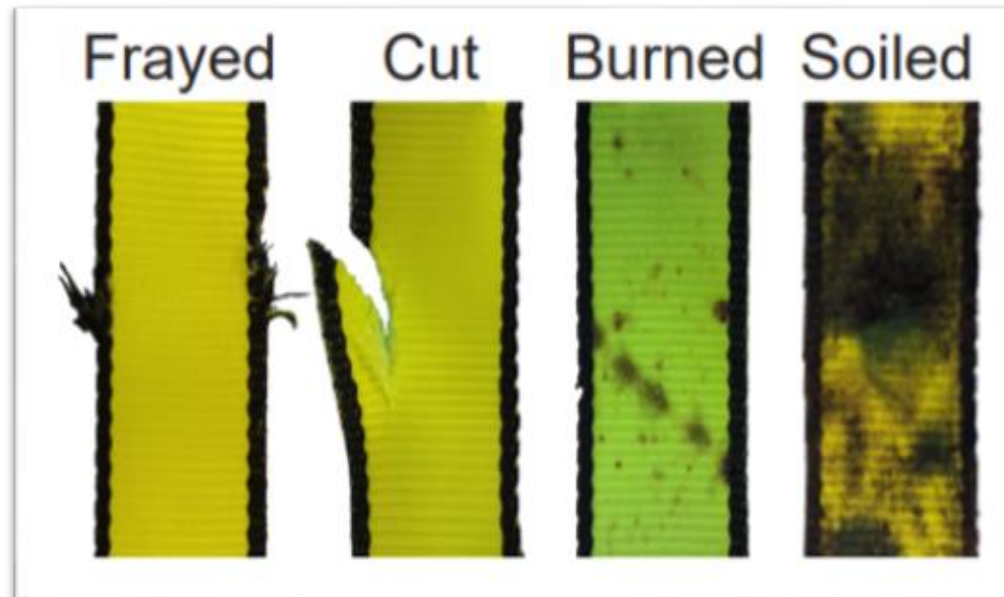
# PRODUCT INSPECTION: WEBBING STRAPS



For all products with webbing straps, use the following method for webbing inspection. Grasp the webbing in your hands 6-8 inches apart and bend the strap in an inverted “U” shape. Continue this procedure until all the webbing has been inspected.

It is critical to look for:

- Frayed Edges
- Broken Fibers
- Pulled Stitches
- Cuts
- Burns
- Chemical Damage
- Heat Damage



# PRODUCT INSPECTION: D-RINGS



For all products containing D-rings, it is critical to look for:

- Distortion
- Cracks
- Breaks
- Rough or Sharp Edges



# PRODUCT INSPECTION: BUCKLES



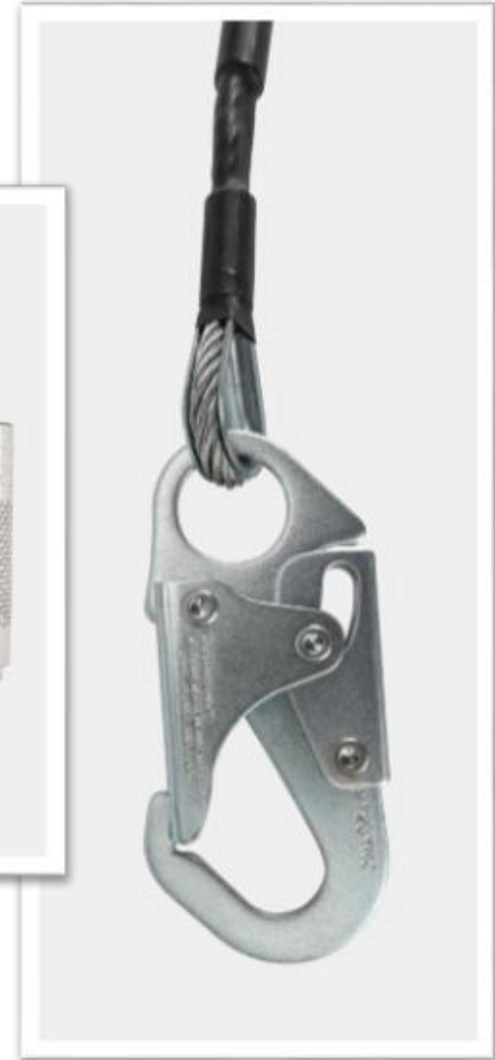
- Thoroughly check buckles, including tongue buckles, on any products that may have them.
- Inspect all buckles, making sure they are free of distortion.
- Check the outer and center bars and make sure they are straight.
- On tongue buckles, overlap the buckle frame so that they move freely back and forth in their socket. Move them so the roller turns freely on the frame.
- Check for loose, distorted, or broken grommets.
- The belts should not have any additional holes.



# PRODUCT INSPECTION: SNAP HOOKS AND CARABINERS



- Thoroughly inspect snap hooks and connectors, such as carabiners, on any product that contains them.
- Snap hooks should not be cracked or distorted.
- Snap hook keepers must be free of burrs, clean, and not bent.
- Check to make sure that all snap hooks and/or carabiners can close and lock properly.



# PRODUCT INSPECTION: STEEL CABLES



All steel cables on any product that contains them must be thoroughly inspected in the following manner.

When inspecting steel cables, always wear gloves. After grasping the metal with your hands 6-8 inches apart, rotate the cable with opposite movements with both hands.

Make sure to check for:

- Cuts
- Frayed areas or unusual wearing patterns on the wire
- Broken strands: will separate from the body of the cable if they are present





Thimbles must be firmly seated in the eye of the splice on any product containing them. It is also important to inspect:

- Loose or Cut strands
- Sharp edges
- Distortion
- Cracks





# ANSI Z359.14-2021

Competent Person Fall Protection



# SAFETY REQUIREMENTS FOR SELF-RETRACTING DEVICES



ANSI/ASSP Z359.14-2021 “Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems”

## SPECIFICATIONS COMPARISON

| ANSI Z359.14 - 2014            |                                             |                           |
|--------------------------------|---------------------------------------------|---------------------------|
| Specifications                 | Class A                                     | Class B                   |
| Max Free Fall                  | Specified by Manufacturer<br>(Typically 2') | Specified by Manufacturer |
| Max Arrest Distance            | 24"                                         | 54"                       |
| Avg Arrest Force (Ambient)     | ≤1,350 lbs.                                 | ≤900 lbs.                 |
| Avg Arrest Force (Conditioned) | ≤1,575 lbs.                                 | ≤1,125 lbs.               |
| Max Arrest Force               | ≤1,800 lbs.                                 | ≤1,800 lbs.               |
| Test Weight                    | 282 lbs.                                    |                           |
| Static Load                    | 3,000 lbs. (1 min.)                         |                           |

| ANSI Z359.14 - 2021            |                     |                                                  |
|--------------------------------|---------------------|--------------------------------------------------|
| Specifications                 | Class 1             | Class 2                                          |
| Max Free Fall                  | 24"                 | 72"                                              |
| Max Arrest Distance            | ≤42"                | Indicated on SRL Labeling and Instruction Manual |
| Avg Arrest Force (Ambient)     | ≤1,350 lbs.         | ≤1,350 lbs.                                      |
| Avg Arrest Force (Conditioned) | ≤1,575 lbs.         | ≤1,575 lbs.                                      |
| Max Arrest Force               | ≤1,800 lbs.         | ≤1,800 lbs.                                      |
| Test Weight                    | 310 lbs.            |                                                  |
| Static Load                    | 3,600 lbs. (1 min.) |                                                  |

# SAFETY REQUIREMENTS FOR SELF-RETRACTING DEVICES



ANSI/ASSP Z359.14-2021 “Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems”

- Introduced classes of (SRD).

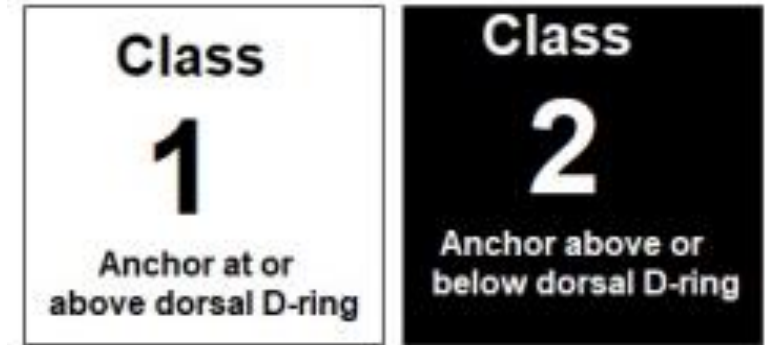
Class 1:

- Self-retracting devices which shall be used only on overhead anchorages and shall be subjected to a maximum free fall of 2’ or less, in practical application.

Class 2:

- Self-retracting devices which are intended for applications where in overhead anchorages may not be available or feasible and which may be, in practical application, be subjected to a free fall of no more than 6’ over an edge.

\*A Class 2 device shall undergo both Class 1/Class 2 testing to be complainant with ANSI/ASSP Z359.14-2021



# SELF-RETRACTING DEVICES INSPECTION



| Type Of Use          | Application Examples                                           | Conditions Of Use                                                                                       | Inspection Frequency<br>Competent Person |
|----------------------|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|------------------------------------------|
| Infrequent to Light  | Rescue and confined space, factory maintenance                 | Good storage conditions, indoor or infrequent outdoor use, room temperature, clean environments         | Annually                                 |
| Moderate to Heavy    | Transportation, residential construction, utilities, warehouse | Fair storage conditions, indoor and extended outdoor use, all temperatures, clean or dusty environments | Semi-annually to annually                |
| Severe to Continuous | Commercial construction, oil and gas, mining                   | Harsh storage conditions, prolonged or continuous outdoor use, all temperatures, dirty environment      | Quarterly to semi-annually               |



**THANK YOU!**