Technical Bulletin: Inspection of Webbing



Date: 6-20-2025

Purpose

This bulletin outlines inspection procedures and rejection criteria for synthetic webbing components used in fall protection equipment. Proper inspection is critical for identifying damage that may compromise strength, flexibility, or performance.

General Inspection Guidelines

Webbing must be inspected **before each use** by the authorized user and at **intervals determined by the employer** (at least annually) by a **Competent Person** as defined by OSHA 29 CFR 1926.32(f).

Webbing Damage Criteria

Immediately Remove from Service if Any of the Following Are Observed:

- Cuts or Frays: Longitudinal cuts, fraying of edges, or broken yarns.
- Tears or Rips: Any tearing or separation of fibers that could reduce structural integrity.
- **Burns:** Melting, hardening, or discoloration due to exposure to flame, sparks, or high heat.
- Holes or Punctures: Penetrations in the webbing that compromise load distribution.
- Abrasion: Worn areas, especially at contact points or where webbing contacts hardware.

UV Degradation and Fading

UV exposure is a known contributor to webbing deterioration over time. While color fading alone does not mandate removal, it **should always prompt further inspection** for other indicators of UV damage:

Signs of UV Degradation Include:

- Noticeable color fading, especially when compared to covered or protected sections.
- Stiffness or brittle texture in localized areas or across the entire strap.
- Dark or discolored spots that may suggest chemical exposure or UV hardening.
- Cracking or glazing visible under tension or when flexed.

Note: Webbing that has become stiff, lost pliability, or shows signs of embrittlement may fail under dynamic loading δ even if tensile strength appears unaffected in static condition.

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When in Doubt

If the inspector is **unsure about the condition of any section of webbing**, or observes **any combination of faded color, texture changes, or questionable damage**, the equipment must be **removed from service and evaluated by a Competent Person**.

Competent Person Responsibilities

The final decision to **continue use, repair, or remove** a piece of equipment lies solely with a designated Competent Person. They must evaluate the item against:

- Manufacturer inspection instructions
- OSHA 1910.140(c)(18) and 1926.502(d)
- ANSI Z359.2 inspection guidance

Documentation

All formal inspections should be documented using the employer's designated inspection form or tracking system. Ensure:

- Date of inspection
- Inspectorôs name and signature
- Observed conditions
- Action taken (pass, repair, remove from service)

Limitations and Disclaimer Acknowledgment

- The Qualified Person must acknowledge that SureWerx and Reliance make no warranty or performance claims for non-Reliance HLL systems or arrest devices used with SkylineÊ stanchions.
- It is the responsibility of the Qualified Person to ensure full compliance with OSHA 1910.140, 1926.502(d)(8), ANSI Z359.6, and Z359.14 standards when configuring systems involving mixed components.
- All evaluations, decisions, and modifications must be **documented** and retained in accordance with company safety policy and applicable regulations.