Inspecting Your Harnesses & Lanyards

You trust your life to your fall protection equipment. It makes a lot of sense to take time and inspect the equipment. But you don’t have much choice: OSHA requires that fall protection equipment be inspected before each use. If the equipment is defective, you must remove it from service.

What should you look for?

The following are some of the common causes of wear, damage, and deterioration of fall protection equipment. (Always read and follow the manufacturer’s inspection guidelines for detailed inspection requirements.)

Connectors and snaphooks

If you fall, the first component that will be stressed is the connector or snaphook. Make sure the snaphooks are operating properly. Carefully inspect all the metal hardware for damage or defects.

Excessive dirt

Construction work can be very dirty and your fall protection gear can get grimy fast. All sorts of contaminants can come into contact with the harness or lanyard. The webbing can be made of fibers and when these fibers get dirty they can weaken as the dirt abrades the fibers. Try to keep your fall protection gear as clean as possible.

Fading

The sun’s rays can damage harness fibers. Since every harness is exposed to different amounts of the UV rays it’s hard to tell which ones could fail. If your harness is stiff and/or faded, you may want to have a competent person, or the manufacturer, inspect it to see if it’s still providing the needed protection and is safe to use.

Cuts, tears, and holes

Inspect the webbing for tears, cuts, or holes. The webbing can be damaged or worn from constant contact with tools, equipment, or materials. Look at the edges of the webbing, but don’t forget areas around snaphooks, buckles, or connectors.

Burns or areas that look eaten away

Fall protection equipment used in hazardous environments (chemical mixing, molten metal pouring, welding and other hot work) needs special attention. Certain chemicals can eat into the fibers, destroying them and causing the webbing to fail. Webbing can be severely damaged in a very short period of time in an environment like this.

How often should you inspect the gear?

You may need to inspect your gear several times during the course of a shift if working in a hazardous location or with dangerous materials. The consequences of having your fall protection fail should be the driving force behind your equipment inspection process.
Fall Clearance Calculation
(for Cross Arm Strap)

Before Fall

After Fall

2 ft. Length of Anchorage Connector

6 ft. Length of Lanyard

3-1/2 ft. Deceleration Distance

6 ft. Height of Worker

3 ft. Safety Factor

Total: 20-1/2 ft. from Anchor Point