FALL PROTECTION EQUIPMENT SAFE WORK PRACTICES

REVIEWD AUGUST 14 2015 OH&S CODE PART 9

A fall protection system must be used when work is done where a fall of 3 m (9.84 ft.) or more may occur, when a fall from a height of less than 3 m involves a risk of injury greater than the risk of injury from the impact on a flat surface, or when using a scissor lift, man lift, etc.

Equipment inspection

All equipment must be inspected: Prior to each use

- At regular intervals (monthly, every 6 months, or annually)
- Records of regular interval inspections must be kept.

Donning full body harness

1. Hold harness by back D-ring and shake harness to allow all straps to fall in place.

2. If chest, leg, and/or waist straps are buckled, release straps and unbuckle at this time.

3. Slip straps over shoulders so D-ring is located in middle of back between shoulder blades.

4. Pull leg strap between legs and connect to opposite end. Do the same with second leg strap.

5. Connect chest strap and position in mid chest area. Tighten to keep shoulder straps taut.

6. After all straps have been buckled, tighten all buckles so harness fits snug, but allows full range of movement. Pass excess strap through loop keepers.

Installing connecting equipment

- Connecting equipment must include the following items:
    - Lifeline
    - Rope grab

- 4-foot web lanyard

- Cable lanyard (for use with temporary anchorages only)

Note: *At no time shall a knot or hitch be used to attach personal fall protection equipment to anchorage locations.*

After the lifeline has been connected to the anchor location, the remainder of the equipment must be installed.

This equipment must be assembled as follows:

1. The rope grab must be placed on the lifeline with the proper orientation. "UP" must be oriented to the anchor.
2. One snap hook on the 4 foot (1.22 m) web lanyard must be connected to the back D-ring of the harness (fall arrest attachment point), and the snap hook on the other end must be connected to the rope grab.
3. The lifeline must be installed in the rope grab so that the rope length is short enough to restrict worker travel to the unguarded edge.

Note: *If the worker can reach the edge and face a free fall situation, this is not fall restraint, and fall arrest procedures must be developed. A written Fall Protection Work Plan must be prepared for this work.*

Inspection information (from Miller fall protection) Harness inspection

Webbing: Grasp the webbing with your hands 6 inches (152mm) to 8 inches (203mm) apart. Bend the webbing in an inverted "U" as shown. The surface tension resulting makes damaged fibers or cuts easier to detect. Follow this procedure the entire length of the webbing, inspecting both sides of each strap. Look for frayed edges, broken fibers, pulled stitches, cuts, burns, and chemical damage.

D-rings/Back pads: Check D-rings for distortion, cracks, breaks, and rough or sharp edges. The D-ring should pivot freely. D-ring back pads should also be inspected for damage.

Attachment of buckles: Inspect for any unusual wear, frayed or cut fibres, or broken stitching of the buckle or D-ring attachments.

Tongue/Grommets: The tongue receives heavy wear from repeated buckling/unbuckling. Inspect for loose, distorted, or broken grommets. Webbing should not have additional punched holes.

Tongue buckles: Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges.

Friction and mating buckles: Inspect the buckle for distortion. The outer bars and centre bars must be straight. Pay special attention to corners and attachment points at the centre bar.

Web lanyard inspection

Hardware (snaps): Inspect closely for hook and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper locks must prevent the keeper from opening after the keeper closes.

Thimbles: The thimble must be firmly seated in the eye of the splice. The splice should have no loose or cut strands. The edges of the thimble must be free of sharp edges, distortion, or cracks.

Web lanyard: While bending webbing over a pipe or mandrel, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discoloration, cracks, and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching.

Rope grabs and lifelines

Frequency of inspection:

- A Supervisor must inspect the rope grab and lifeline at least annually.
- Record the results of each formal inspection in the equipment inspection log.
- Before each use, visually inspect the equipment by following steps listed in the following inspection sections.

Rope grab inspection step (see figure on right)

1. Inspect action of locking roller. It should be free to travel the full length of the guide slots.
2. Inspect the lanyard connection handle for freedom of motion. There should be no binding or sticking. Inspect for wear on the nose of the handle where it contacts the roller. The level must push the roller into the rope.
3. Inspect handle spring. It should be in its correct place and undamaged.
4. Inspect the detent pin. The top button should spring back up when pushed down. The pin should easily slide through the rope grab body and hinge.

5. The rope grab hinge must pivot freely and close completely. Check that the gravity lock on the hinge works freely. When the rope grab is held upside down, the gravity lock should drop down and prevent the hinge from fully closing. Inspect the hinge for signs of rope wear. There should be no dips or depressions worn into the rope channel.
6. Inspect labels and markings. All labels and markings must be present and fully legible.
7. Inspect each system component or subsystem following the associated manufacturer's instructions.
8. Record the inspection date and results on the equipment inspection log in the forms section of this program

Carabineer Inspection

Carabineers may be used from time to time in fall protection systems and require inspection before use**.**

The following items should be checked prior to using a carabineer:

- Check that there is a locking mechanism — non-locking carabineers are not permitted with fall protection equipment
- Check the gate and the closure to ensure that they are not damaged and operate smoothly and clean as required. Blow out mechanisms with an air hose

  Caution: Do not *lubricate with oil or grease-based lubricants, as they will attract dirt and grit.*
- Check that spring-loaded closures are operating as required. Discard any that do not close as designed
- Check the gate to ensure it is not bent from use
- Check the latch mechanism to ensure it is not broken
- Check that the carabineers are not bent or misaligned
- Check to ensure that carabineers are not cracked or fractured

Important safety considerations

Take the following important safety considerations into account:

- Personal fall protection equipment subjected to fall arrest or impact forces must be immediately removed from service, tagged **DO NOT USE**, and destroyed
- A professional engineer must inspect anchors involved in a fall arrest situation
- ***Do not*** alter, repair, or make substitutions to fall protection equipment or components
- Remove equipment found to be in defective condition from service and destroy it

- Only the manufacturer or those authorized by the manufacturer in writing may perform repairs on fall protection equipment (Refer to manufacturer's specifications for further details.)
- Extreme working conditions (harsh environments, prolonged use, etc.) may require increasing the frequency of inspections

Cleaning

Basic care of all safety equipment will prolong its durable life and contribute toward the performance of its vital safety function. Proper storage and maintenance after use are as important as cleansing the equipment of dirt, corrosives, or contaminants. Storage areas should be clean, dry, and free of exposure to fumes or corrosive elements.

Nylon or Polyester: Remove all surface dirt with a sponge dampened in plain water. Squeeze the sponge dry. Dip the sponge in a mild solution of water and commercial soap or detergent. Work up a thick lather with a vigorous back and forth motion, then wipe with a clean cloth. Hang freely to dry, but away from excessive heat.

Drying: Equipment should dry thoroughly without close exposure to heat, steam, or long periods of sunlight.

RELATED SWP & HAA

Fall Protection code of practice.

Scaffolding

Ladders