

Information and Operating Instructions Safety Harnesses and Lanyards

General Information

ONLY TO BE USED BY A TRAINED COMPETENT PERSON

Safety harnesses and lanyards are not life saving equipments. If they are not use properly, they can cause serious injuries which may be fatal. They are designed to limit the distance of fall, but do not eliminate them. The Health and Safety Guidance recommends pre-checks and detailed inspections every six months or earlier if use in severe conditions. Before use, harnesses and lanyards should be checked and most important, the user should know what to look for and how to use it correctly. Great care is required with these equipments.

Key Rules and Regulations

The Work at Height Regulations 2005 (as amended) Planning Regulations 4 and 6 (1, 2) section 17, It states that:

1. You must plan for emergencies and rescues.
2. Take account of the risk assessment carried out under regulation 3 of the Management of Health and Safety at Work Regulations.

Inspections

Pre-Use Inspections

- Must be carried out all the time before use.
- Use hands and eyes for the inspection process.
- All equipment must be check.
- Visual inspections must be done in good light condition.
- Pass through hands to detect any abnormalities.

Pre-Use Inspection for all Harnesses

1. Starting on one side, hold the whole body of the harness towards you.
2. Hold the belt with your hand six to eight inches apart and bend the strap into an inverted U.
3. The above step must be done for the whole length. Pay attention to broken fibres, chemical damage, cuts, burns, stitches and contaminations.
4. Pay special attention to the buckles and D-Rings looking for the defects as stated above.
5. Any rivets if present should be immovable. Rivets should be in good conditions.
6. Inspect for distorted, broken and loose grommets.
7. Tongues, sliding bar and Friction buckles should be free from distortion or any defects.

Pre-Use Inspection for Lanyards

1. Start the inspection from one end and work to the opposite end.
2. Rotate slowly the lanyard to examine the entire circumference.
3. Particular attention should be paid to spliced ends.
4. Watch for cuts, frayed areas or any unusual appearance while rotating the steel lanyard.
5. Observe each side of the webbed lanyard while bending webbing over a pipe or mandrel. Observe any abnormalities such as chemical damage and contamination. Pay also attention to breaks in stitching.
6. To bring light to any worn, broken, cut or fuzzy fibres, rotate the rope lanyard while inspecting end to end length.

Operating Practice for the Rescue and Standard Harness (see figures last page)

1. Hold the harness using the rear D-Ring.
2. Gently shake harness to allow straps to fall in place.
3. Release straps and unbuckle if chest, leg and waist straps are buckled.
4. Slip straps over the shoulders so that the D-Ring is located in middle of back between shoulders blades.
5. Pull leg strap between legs and connect to opposite end. Repeat with second leg strap. Make sure straps are not twisted and the webbing is

lying flat. (Any twisted strap will increase pressure on the body which may be fatal).

6. Connect chest strap and position in the mid-chest area. Tightened to keep shoulder and leg straps taut.
7. When all straps are buckled, tighten so that harness fits snug but allows full range of movement Pass excess strap through loop keepers.
8. Secure extended D-Ring to the Velcro strap on the Left side rear strap below rear D-Ring.

Anchoring lanyard to anchor points

Working in one position

- Use a restraint lanyard (1.3m) in order to work in one position without much mobility.
- Clip-on and clip-off mechanism from a safe position behind the handrail.
- Always use a horizontal tube.
- Ensure clip cannot slide out of tube.
- Clip on above the head.
- Use proper scaffolding clips on the lanyards if necessary.

Working in multi-position

- Use the Auto Reel Fall arrest Lanyard (2.5m) or the standard lanyard (1.8m) in order to prevent fall.
- First clip-on and last clip-off must be from a position of safety which is behind a handrail.
- Always use a horizontal tube.
- Ensure clip cannot slide out of tube.
- Clip on above the head.
- Use proper scaffolding clips on the lanyards if necessary.
- Use two lanyards if necessary.
- Clip one on before unclipping the other to be able to move horizontally.

Energy Absorbing Lanyard Criteria & Guidance for Clearance

If energy absorbing lanyards are used in a situation where the anchor is positioned close to a surface which the user might fall onto (e.g. the ground), it is essential that enough clearance is allowed for extension of the energy absorber.

An adequate clearance distance should be ensured for the user to fall into. The following calculation is a guide:

User height + Lanyard length + Extension of lanyard + Safety margin

$$= 2\text{m} + 2\text{m} + 1.75\text{m} + 1\text{m} = 6.75\text{m}$$

Maintenance of the Harness and Lanyard

Provided the harness is inspected and maintained in accordance with manufacturers recommendations the maximum lifespan of the harness should be 5 years. However this is dependant on conditions of work and frequency of use. If there is any concern or issues, contact the nearest Marwood Group Depot.

