CONSTRUCTION SAFETY RESOURCE GUIDE











Training Resources

OSHA provides training resources here: <u>OSHA's Fall Prevention Campaign - Training Resources | Occupational Safety and Health Administration</u>

Definitions

Anchorage – A secure point of attachment for lifelines, lanyards or deceleration devices.

Body belt (safety belt) – A strap with means for securing it at the waist and for attaching it to a lanyard, lifeline or deceleration device. Note: Since January 1, 1998, OSHA has prohibited the use of a body belt as part of a personal fall arrest system. Exception: When used correctly, body belts are recognized by OSHA as an acceptable fall protection component when used as a part of either a restraining device that prevents a fall or a positioning device that limits a free fall to 2 feet.

Body harness – Straps that may be secured in a manner that will distribute the fall arrest forces over at least the thighs, pelvis, waist, chest and shoulders, with means for attaching it to other components of a personal fall arrest system.

Buckle – Any device for holding the body belt or body harness closed around the worker's body.

Competent person – One who can identify existing and predictable hazards in the surroundings or working conditions that are unsanitary, hazardous or dangerous to workers, and who has authorization to take prompt corrective measures to eliminate them.



Connector – A device that is used to couple (connect) parts of the personal fall arrest system and positioning device systems together. It may be an independent component of the system, such as a carabiner, or it may be an integral component of part of the system (such as a buckle or dee-ring sewn into a body belt or body harness or a snaphook spliced or sewn to a lanyard or self-retracting lanyard).

Controlled access zone (CAZ) – An area where certain work (for example, overhand bricklaying) may take place without guardrail systems, personal fall arrest systems or safety net systems; and where access to the zone is controlled.

Dangerous equipment – Equipment (such as pickling or galvanizing tanks, degreasing units, machinery, electrical equipment and other units) that, because of form or function, may be hazardous to workers who fall onto or into such equipment.

Deceleration device – Any mechanism (such as a rope grab, rip-stitch lanyard, specially-woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/ lanyards, etc.) that serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limit the energy imposed on a worker during fall arrest.

Deceleration distance – The additional vertical distance a falling employee travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which the deceleration device begins to operate. It is measured as the distance between the location of a worker's body belt or body harness attachment point of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the worker comes to a full stop.

Equivalent – Alternative designs, materials or methods to protect against a hazard that the employer can demonstrate will provide an equal or greater degree of safety for workers than the methods, materials or designs specified in the standard.

Failure – Load refusal, breakage or separation of component parts. Load refusal is the point where the ultimate strength is exceeded.

Free Fall – The act of falling before a personal fall arrest system begins to apply force to arrest the fall.

Free fall distance – The vertical displacement of the fall arrest attachment point on the worker's body belt or body harness between onset of the fall and just before the system begins to apply force to arrest the fall. This distance excludes deceleration distance and lifeline/lanyard elongation but includes any deceleration device slide distance or self-retracting lifeline/lanyard extension before they operate and fall arrest forces occur.



Guardrail system – A barrier erected to prevent workers from falling to lower levels.

Hole – A gap or void 2 inches or more in its least dimension, in a floor, roof or other walking or working surface.

Infeasible – Impossible to perform the construction work using a conventional fall protection system (that is, guardrail system, safety net system or personal fall arrest system), or technologically impossible to use any one of these systems to provide fall protection.

Lanyard – A flexible line of rope, wire rope or strap that has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline or anchorage.

Leading edge – The edge of a floor, roof or formwork for a floor or other walking or working surface (such as the deck) that changes location as additional floor, roof, decking or formwork sections are placed, formed or constructed. A leading edge is an "unprotected side and edge" during periods when it is not actively and continuously under construction.

Lifeline – A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline) that serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Low-slope roof – A roof having a slope less than or equal to a ratio of 4 in 12 (vertical to horizontal).

Lower levels – Those areas or surfaces to which a worker can fall. Such areas or surfaces include ground levels, floors, platforms, ramps, runways, excavations, pits, tanks, material, water, equipment, structures or portions thereof.

Mechanical equipment – All motor- or human-propelled wheeled equipment used for roofing work, except wheelbarrows and mop carts.

Opening – A gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which workers can fall to a lower level.

Overhand bricklaying and related work – The process of laying bricks and masonry units such that the surface of the wall to be joined is on the opposite side of the wall from the mason, requiring the mason to lean over the wall to complete the work. Related work includes mason tending and electrical installation incorporated into the brick wall during the overhand bricklaying process.

Personal fall arrest system – A system used to arrest a worker in a fall from a working level. It consists of an anchorage, connectors and a body harness. It may include a lanyard, deceleration device, lifeline or suitable combinations of these. Note: Since January 1, 1998, the use of a body belt for fall arrest has been prohibited.



Positioning device system – A body belt or body harness system rigged to allow a worker to be supported on an elevated vertical surface, such as a wall, and work with both hands free while leaning.

Qualified — One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work or the project.

Rope grab – A deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest a worker's fall. A rope grab usually employs the principles of inertial locking, cam/level locking or both.

Roof – The exterior surface on the top of a building. It does not include floors or formwork that, because a building has not been completed, temporarily becomes the top surface of a building.

Roofing work – The hoisting, storage, application and removal of roofing materials and equipment, including related insulation, sheet metal and vapor barrier work, but not including the construction of the roof deck.

Safety-monitoring system – A safety system in which a competent person is responsible for recognizing and warning workers of fall hazards.

Self-retracting lifeline/lanyard – A deceleration device containing a drum-wound line that can be slowly extracted from, or retracted onto, the drum under slight tension during normal worker movement, and after onset of a fall, automatically locks the drum and arrests the fall.

Snaphook – A connector comprised of a hook-shaped member with a normally closed keeper, or similar arrangement thatmay be opened to permit the hook to receive an object and, when released, automatically closes to retain the object. Snaphooks are one of two types:

- The locking type with a self-closing, self-locking keeper that remains closed and locked until unlocked and pressed open for connection or disconnection.
- The non-locking type with a self-closing keeper that remains closed until pressed open for connection or disconnection. As of January 1, 1998, the use of a nonlocking snaphook as part of personal fall arrest systems and positioning device systems is prohibited.

Steep roof – A roof having a slope greater than a ratio of 4 in 12 (vertical to horizontal).

Toeboard – A low protective barrier that will prevent the fall of materials and equipment to lower levels and provides workers with protection from falls.



Unprotected sides and edges – Any side or edge (except at entrances to points of access) of a walking or working surface (for example, floor, roof, ramp or runway) where there is no wall or guardrail system at least 39 inches high.

Walking/working (walking or working) surface – Any surface (whether horizontal or vertical) where a worker walks or works, including but not limited to floors, roofs, ramps, bridges, runways, formwork and concrete reinforcing steel. It does not include ladders, vehicles or trailers on which workers must operate perform their job duties.

Warning line system – A barrier erected on a roof to warn workers they are approaching an unprotected roof side or edge. It also designates an area in which roofing work may take place without the use of guardrails, a body harness or safety net systems to protect workers in the area.

Work area – The portion of a walking or working surface where job duties are being performed.

Sources

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