



## FALL PROTECTION DEFINITIONS

Fall Hazard Risk Consultants

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| Term                          | Definition  |
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| <b>Aerial lift device</b>     | Equipment such as powered platforms, vehicle-mounted elevated and rotating work platforms, extensible boom platforms, aerial ladders, articulating boom platforms, vertical towers and powered industrial truck platforms   |
| <b>Anchorage</b>              | An engineered and designed point of attachment for lifelines, lanyards or deceleration devices  |
| <b>Body harness</b>           | Straps which may be secured about the employee 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  |
| <b>Confined space</b>         | <p>(1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and</p> <p>(2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and</p> <p>(3) Is not designed for continuous employee occupancy</p>                               |
| <b>Connector</b>              | A device, which 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 d-ring sewn into a body belt or body harness, or a snap-hook spliced or sewn to a lanyard or self-retracting lanyard,) |
| <b>Controlled access zone</b> | A work area designated and clearly marked in which certain types of work may take place without the use of conventional fall protection systems (guardrail, personal arrest, or safety net) to protect the employees working in the zone.   |
| <b>Deceleration device</b>    | Any mechanism, such as a rope, grabbing device, ripstitch lanyard, specially woven lanyard or automatic self-retracting lifeline/lanyard, which serves to dissipate a substantial amount of energy during a fall arrest, or otherwise limits the energy imposed on an employee during fall arrest   |

| <b>Term</b>                  | <b>Definition</b>   |
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| <b>Deceleration distance</b> | <p>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.</p> <p>It is measured as the distance between the location of an employee's body belt or body harness attachment point at the moment 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 employee comes to a full stop</p> |
| <b>Fall hazard</b>           | The act or circumstances that could result in the possibility of slipping or tripping on or falling off a surface.  |
| <b>Fall restraint system</b> | A fall protection system that prevents the user from falling any distance. The system is comprised of either a body belt or body harness, along with an anchorage, connectors and other necessary equipment. The other components typically include a lanyard, and may also include a lifeline and other devices.   |
| <b>Fixed ladder</b>          | A ladder, including individual rung ladders, which are permanently attached to a structure, building, or equipment.   |
| <b>Free fall distance</b>    | <p>The vertical displacement of the fall arrest attachment point on the employee's body belt or body harness between onset of the fall and just before the system begins to apply force to arrest the fall.</p> <p>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</p>  |
| <b>Guardrail system</b>      | A 42" barrier erected to prevent employees from falling to lower levels   |
| <b>Hole</b>                  | A void or gap 2 inches or more in its least dimension in a floor, roof, or other walking/working surface  |
| <b>Horizontal lifeline</b>   | A flexible line between two horizontal fixed anchorages to which a fall arrest device is connected  |
| <b>Infeasible</b>            | Impossible to perform the work using a conventional fall protection system (i.e., guardrail system, safety net system, or personal fall arrest system) or that it is technologically impossible to use any one of these systems to provide fall protection  |
| <b>Ladder</b>                | A device typically used to gain access to a different elevation consisting of two or more structural members crossed by rungs, steps, or cleats   |

| <b>Term</b>                           | <b>Definition</b>  |
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| <b>Lanyard</b>                        | A flexible line of rope, wire rope, or strap that has a connector at each end for connecting the body harness and to an anchorage point.   |
| <b>Leading edge</b>                   | The edge of a floor, roof, or formwork for a floor or other walking/working surface (such as a deck) which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed.   |
| <b>Lifeline</b>                       | 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 an anchorage.   |
| <b>Lower levels</b>                   | Those areas or surfaces to which and employee can fall. Such areas include, but are not limited to, ground levels, floors, platforms, ramps, runways, excavations, pits tanks, material, water, equipment, structures  |
| <b>Low-sloped roof</b>                | A roof having a slope less than or equal to 4 in 12 (vertical to horizontal).  |
| <b>Maximum Arrest Force (MAF)</b>     | Maximum dynamic loads applied to fall protection system and anchorage points   |
| <b>Maximum Intended Load</b>          | The total load of all employee, equipment, tool, materials, transmitted, wind, and other loads reasonably anticipated to be applied to a scaffold or scaffold component at any one time  |
| <b>Opening</b>                        | A gap or void 30 inches (76 centimeters) or more high and 18 inches (46 centimeters) or more wide, in a wall or partition through which employees can fall to a lower level.   |
| <b>Parapet</b>                        | A parapet surrounding the edge of a roof at least 42 inches for all general industry work  |
| <b>Permit-required confined space</b> | A confined space that has one or more of the following characteristics:<br>(1) Contains or has a potential to contain a hazardous atmosphere;<br>(2) Contains a material that has the potential for engulfing an entrant;<br>(3) Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or<br>(4) Contains any other recognized serious safety or health hazard. |

| <b>Term</b>                                | <b>Definition</b>   |
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| <b>Personal fall arrest system (PFAS)</b>  | A system used to arrest an employee in a fall from a working level.<br>It consists of an anchorage, connectors, full body harness and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.<br>As of January 1, 1998, the use of a body belt for fall arrest is prohibited |
| <b>Personal Protective Equipment (PPE)</b> | Protective equipment designed for the eyes, face, ears and body extremities   |
| <b>Rescue plan</b>                         | Strategy or procedure, planned in advance and practiced by designated rescue personnel, to retrieve safely a person who has fallen from an elevated work surface and who remains suspended in a full body harness, unable to perform self-rescue  |
| <b>Retrieval system</b>                    | Equipment (including a retrieval line, chest or full-body harness, wristlets, if appropriate, and a lifting device or anchor) used for non-entry rescue of persons from permit spaces   |
| <b>Rope grab</b>                           | A deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee.<br>A rope grab usually employs the principle of inertial locking, cam/level locking, or both   |
| <b>Safety monitoring system</b>            | A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.   |
| <b>Scaffold</b>                            | Any temporary elevated or suspended platform, at its supporting structures, used for supporting employees or materials or both  |
| <b>Self-retracting lifeline (SRL)</b>      | A deceleration device containing a drum-wound line which can be slowly extracted from, or retracted onto, the drum under slight tension during normal employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall  |
| <b>Snaphook</b>                            | A connector consisting of a hook-shaped member with a normally closed keeper, or similar arrangement, which may be opened to permit the hook to receive an object and, when released automatically closes to retain the object. Only locking snap hooks are permitted.  |
| <b>Steep roof</b>                          | A roof having a slope greater than 4 in 12 (vertical to horizontal).  |
| <b>Swing fall</b>                          | A condition that exists when a worker's anchorage point is not directly above the worker when he falls, causing his body to act like a pendulum, and greatly increasing the likelihood of him striking an object, scaffold or building when falling   |

| <b>Term</b>                        | <b>Definition</b>   |
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| <b>Tie-off adapter</b>             | Provides temporary anchorage point for fall protection system   |
| <b>Toe board</b>                   | A low protective barrier that prevents material and equipment from falling to lower levels and which protects personnel from falling  |
| <b>Total Fall Distance</b>         | This distance includes free fall distance + deceleration distance + harness d-ring slide + height of individual + safety factor   |
| <b>Unprotected sides and edges</b> | Any side or edge (except at entrances to points of access) of a walking/working surface (e.g., floor, roof, ramp, or runway) where there is no wall or guardrail system at least 39 inches (1 meter) high   |
| <b>Vertical lifeline</b>           | A component consisting of a flexible line for connection to an anchor point at one end to hang vertically and that serves as a means for connecting other components of a personal fall arrest system to the anchor point   |
| <b>Walking/working surface</b>     | Any surface, whether horizontal or vertical, on which an employee walks or works, including but not limited to floors, roofs, ramps, bridges, runways, formwork, and concrete reinforcing steel. Does not include ladders, vehicles, or trailers on which employees must be located to perform their work duties. |
| <b>Warning line system</b>         | A barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge and which designates an area in which roofing work may take place without the use of guardrail, body belt, or safety net systems to protect employees in the area  |
| <b>Work area</b>                   | Portion of a walking/working surface where job duties are being performed   |
| <b>100% protection</b>             | Remaining connected to one anchor point while connecting to the next anchor point; i.e., not disconnecting from one point before connecting to the next.  |