

## APPENDIX E - GLOSSARY

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### **Anchorage**

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

### **Body belt (safety belt)**

– a strap with means both for securing it about 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 which prevents a fall or a positioning device that limits a free fall to 2 feet.

### **Body harness**

– straps which may be secured about the worker 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 is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to workers, and who has the 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 snap-hook spliced or sewn to a lanyard or self-retracting lanyard).

### **Controlled access zone (CAZ)**

– an area in which certain work (for example, overhand bricklaying) may take place without the use of 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) which, as a result 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.) which 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 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 worker comes to a full stop.

**Equivalent**

– alternative designs, materials, or methods to protect against a hazard, which 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.

**Excavation**

– means any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

**Failure**

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

**Freefall**

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

**Freefall 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.

**Formwork**

– means the total system of support for freshly placed or partially cured concrete, including the mold or sheeting (form) that is in contact with the concrete as well as all supporting members including shores, reshores, hardware, braces, and related hardware.

**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.

**Hoist Areas**

– Each employee in a hoist area shall be protected from falling 6 feet (1.8 m) or more to lower levels by guardrail systems or personal fall arrest systems. If guardrail systems, [or chain, gate, or guardrail] or portions thereof, are removed to facilitate the hoisting operation (e.g., during landing of materials), and an employee must lean through the access opening or out over the edge of the access opening (to receive or guide equipment and materials, for example), that employee shall be protected from fall hazards by a personal fall arrest system.

**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 which generally 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) which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed. A leading-edge is considered to be 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), and which 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 4 in 12 (vertical to horizontal).

**Lower levels**

– those areas or surfaces to which a worker can fall. Such areas or surfaces include, but are not limited to, 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 jointed 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.

**Precast concrete**

– means concrete members (such as walls, panels, slabs, columns, and beams) which have been formed, cast, and cured prior to final placement in a structure.

1926.501(b)(12) "Precast concrete erection." Each employee engaged in the erection of precast concrete members (including, but not limited to the erection of wall panels, columns, beams, and floor and roof "tees") and related operations such as grouting of precast concrete members, who is 6 feet (1.8m) or more above lower levels shall be protected from falling by guardrail systems, safety net systems, or personal fall arrest

systems, unless another provision in paragraph (b) of this section provides for an alternative fall protection measure. Exception: When the employer can demonstrate that it is infeasible or creates a greater hazard to use these systems, the employer shall develop and implement a fall protection plan which meets the requirements of paragraph (k) of 1926.502.

Note: There is a presumption that it is feasible and will not create a greater hazard to implement at least one of the above-listed fall protection systems. Accordingly, the employer has the burden of establishing that it is appropriate to implement a fall protection plan, in lieu of implementing any of those systems.

### **Qualified**

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

### **Ramps**

– means an inclined walking or working surface that is used to gain access to one point from another.

### **Residential Construction**

– OSHA’s interpretation of residential combines two elements, both of which must be satisfied for a project to fall under the definition of “residential construction.” The end-use of the structure being built must be as a home, i.e., a dwelling, and the structure being built must be constructed using traditional wood frame construction materials and methods. Traditional wood frame construction materials and methods will be characterized by:

Framing materials: Wood (or equivalent cold-formed sheet metal stud) framing, not steel or concrete; wooden floor joists and roof structures. Exterior wall structure: Wood (or equivalent cold-formed sheet metal stud) framing or masonry brick or block.

Methods: Traditional wood frame construction techniques.

NOTE: The limited use of structural steel in a predominantly wood-frame home, such as a steel I-beam to help support wood framing, does not disqualify a structure from being considered residential construction.

Employees working six (6) feet or more above lower levels must be protected by conventional fall protection methods or alternative fall protection measures. An example of an alternative fall protection measure is the use of warning lines and safety monitoring systems during the performance of roofing work on low-sloped roofs. (4 in 12 pitch or less).

OSHA allows the use of an effective fall restraint system in lieu of a personal fall arrest system.

### **Runways/Walkways**

– means a portion of an elevated platform used only for access and not as a work level. No ramp or walkway shall be inclined more than a slope of one (1) vertical to three (3) horizontal (20 degrees above the horizontal). If the slope of a ramp or a walkway is steeper than one (1) vertical in eight (8) horizontal, the ramp or walkway shall have cleats not more than fourteen (14) inches apart which are securely fastened to the planks to provide footing.

**Rope grab**

– a deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest the fall of a worker. 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. This does not include floors or formwork which, 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 which can be slowly extracted from, or retracted onto, the drum under slight tension during normal worker movement, and which, after the 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, which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object.

Snap hooks are generally one of two types:

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

**Steep roof**

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

**Toeboard**

– a low protective barrier that will prevent the fall of materials and equipment to lower levels and provide workers protection from falls.

**Trench (Trench excavation)**

– means a narrow excavation (in relation to its length) made below the surface of the ground. In general, the depth is greater than the width, but the width of a trench (measured at the bottom) is not greater than 15 feet. If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet or less (measured at the bottom of the excavation), the excavation is also considered to be a trench.

**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.

**Wall openings**

– are where the outside bottom edge of the wall opening is 6 feet or more above lower levels and the inside bottom edge of the wall opening is less than 39 inches above the walking/working surface.

**Walking/working (walking or working) surface**

– any surface (whether horizontal or vertical) on which a worker walks or works, including but not limited to floors, roofs, ramps, bridges, runways, formwork and concrete reinforcing steel; but not including ladders, vehicles, or trailers, on which workers must be located in order to perform their job duties.

**Warning line system**

– a barrier erected on a roof to warn workers 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 harness, or safety net systems to protect workers in the area.

**Work area**

– that portion of a walking or working surface where job duties are being performed.