

WELLESLEY COLLEGE		REV 01	Page: 1 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

Wellesley College Fall Protection Program

1.0 Purpose:

This program establishes the Wellesley College requirements for fall protection for Wellesley College employees on Wellesley College property and on remote sites. Where the requirements of this procedure cannot be met, the Site Safety Manager shall be contacted for consultation.

2.0 Scope:

This program covers any working surface where an employee may be exposed to a fall of six (6) feet or more in construction related work and four (4) feet or more in general industry related work. This program is written in accordance with provisions in 29 CFR 1910 and 1926.

3.0 Definitions:

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.

Body harness: 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.

Buckle: any device for holding the body belt or body harness closed around the employee's body.

Connector: 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).

Controlled access zone (CAZ): an area in which certain work (e.g., overhand bricklaying, roofing installation, roof repairs, etc.) may take place without the use of guardrail systems, personal fall arrest systems, or safety net systems and access to the zone is controlled.

Dangerous equipment: equipment which, as a result of form or function, may be hazardous to employees 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 an employee during fall arrest.

WELLESLEY COLLEGE		REV 01	Page: 2 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

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 an employee's body belt or body harness attachment point at the moment of activation of the deceleration device during a fall (at the onset of fall arrest forces), and the location of that attachment point after the employee comes to a full stop.

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 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. 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 employees from falling to lower levels.

Hole: means a gap or void 2 inches (5.1 cm) or more in its least dimension, in a floor, roof, or other walking/working surface.

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/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 3 in 12 (vertical to horizontal).

Lower levels: those areas or surfaces to which an employee 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.

Opening: a gap or void 30 inches (76 cm) or more high and 18 inches (48 cm) or more wide, in a wall or partition, through which employees can fall to a lower level.

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

WELLESLEY COLLEGE		REV 01	Page: 3 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

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

Qualified person: one with a recognized degree or professional certificate and extensive knowledge and experience in the subject field who is capable of design, analysis, evaluation and specifications in the subject work, project, or product.

Rope grab: a deceleration device which travels on a lifeline and automatically, by friction, engages the lifeline and locks so as to arrest the fall of an employee. A rope grab usually employs the principle 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 become 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 employees 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 employee movement, and which, after onset of a fall, automatically locks the drum and arrests the fall.

Snap-Hook: 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:

- 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
- 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 non-locking snap-hook as part of personal fall arrest systems and positioning device systems is prohibited.

Steep roof: a roof having a slope greater than 3:12 (vertical to horizontal). This means for every 12 horizontal inches, the roof's rise is three vertical inches or greater.

Toeboard: a low protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls for personnel.

Unprotected sides and edges: 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 (1.0 m) high.

WELLESLEY COLLEGE		REV 01	Page: 4 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

Walking/working surface: any horizontal or vertical surface on or through which an employee walks, works, or gains access to a work area or workplace location. This includes, is not limited to, floors, roofs, ramps, bridges, runways, formwork, and concrete reinforcing steel; but not including ladders, vehicles, or trailers on which employees must be located in order to perform their job duties.

Warning line system: 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.

Work area: that portion of a walking/working surface where job duties are being performed.

4.0 Procedure:

Fall protection is required at all Wellesley College facilities and remote work sites whenever employees may be exposed to unprotected sides or edges of surfaces that present a falling hazard of six or more feet to a lower level in construction related work or four feet or more in general industry related work (six/four). In addition, employees working above dangerous equipment materials or operations at a height of less than six/four feet shall be protected by a guardrail system, fences, barricades, or covers. Employees working above dangerous equipment, materials, or operations at a height of six/four feet or more shall be protected by a guardrail system or personal fall arrest system.

In addition to providing fall protection for employees exposed to unprotected sides or edges, toe guards shall be installed on the perimeter of a walking or working surface when people below that surface may be exposed to falling material.

5.0 Guardrail System Requirements:

When guardrails are installed the following criteria shall be met:

Guardrails consist of a top rail and mid rail. The top rail must be able to withstand a force applied within two inches of the top edge of the rail of 200 lb. in all directions. The top rail shall be 42 inches plus or minus 3 inches above the guarded surface level and must remain at a height of 39 inches when subjected to a 200-lb. load. No permanent deformation is permitted in the system when the force is removed.

The mid rail shall be provided between the top rail of the guard system and the guarded surface. The mid rails shall be positioned such that the openings in the system are no more than 19 inches in their least direction. Mid rails shall be capable of withstanding a force of 150 lbs applied in any direction without permanent deformation.

WELLESLEY COLLEGE		REV 01	Page: 5 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

The ends of all top rails and mid rails shall not overhang the terminal posts, except where such overhang does not constitute a hazard.

Guardrail systems must be surfaced to prevent employee injury from punctures or lacerations, and to prevent snagging of clothing.

5.1 Guardrails at Hoisting Area

When guardrail systems are used at hoisting areas, a chain, gate or removable guardrail sections shall be placed across the access opening between guardrail sections when hoisting operations are not taking place. 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.

When a personal fall arrest systems is used in hoist areas it shall be rigged so as to include the features of a restraint system allowing the movement of the user only as far as the edge of the walking/working surface. The personal fall system shall also be rigged and used so as not to cross into the path of the hoist or the hoisted materials.

6.0 Personal Fall Protection:

A personal fall protection system may be used in those situations where it is either not feasible to install guardrail systems or the work activity and location are of a temporary nature.

Personal fall protection systems and their components shall be used only for fall protection and not for hoisting tools and materials.

Anchorage for fall protection shall be capable of supporting 5000 lbs. per person attached or shall be designed, installed and used under the supervision of a qualified person. Permanently anchored connectors shall be inspected annually by a qualified person.

Prior to use, personal fall protection systems shall be inspected for wear and damage. Defective components shall be removed immediately from service if their function or strength is compromised.

All snap-hooks and carabineers used with personal fall protection systems shall be of the self-locking or double locking type in order to prevent roll out.

WELLESLEY COLLEGE		REV 01	Page: 6 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

Mechanical devices used for fall protection, such as retractable lanyards and employee hoists shall be inspected and re-certified by the manufacturer or qualified person as indicated by the manufacturer.

Personal fall protection systems or their components subjected to impact loading shall be immediately removed from service and shall not be used again unless inspected by a competent person and determined to be undamaged and suitable for reuse. Harnesses and lanyards subject to impact loading shall be removed from service, rendered unusable, and disposed of.

7.0 Fall Protection Systems:

Fall arrest systems shall be designed to stop a free fall within six (6) vertical feet of the initiation point. This system may be comprised of a full body harness, D-Ring, lanyard, double locking snap hook, or carabineer, and an adequate tie-off anchor point.

Personal fall arrest systems shall be worn with the attached point of the body harness located in the center of the employee's back near the shoulder level.

Only body harnesses are allowed for personal fall protection systems. Body belts are prohibited. Body belts may only be used as a positioning device.

Personal fall protection shall be rigged to limit the free fall to no more than six feet and shall bring the employee to a complete stop and limit maximum deceleration distance to 3.5 feet. Tie-off points should be at the highest accessible point and above the waist at a minimum.

Whenever feasible, lanyards must be tied off to a structural member or eyebolt installed specifically for fall protection systems.

To avoid a swing fall, anchorage points should be directly above the worker. Under no circumstances will conduit, piping, ductwork, or HVAC equipment be used as an anchorage point.

Where vertical space allows, lanyards shall have shock absorbers or deceleration devices. All lanyards shall have double locking snap hooks. Lanyards shall not be looped around an anchorage point and attached back to themselves by the snap hook unless the manufacturer specifically designed the lanyard to be used in such a manner. This practice will weaken the lanyard; use an anchorage connector strap. Lanyards shall be 6 ft. or shorter depending on the height of the job.

For each situation where a fall protection system is utilized, provisions for a prompt rescue of a fallen employee shall be made prior to beginning work. Alternatively, it shall be ensured that a fallen employee can provide self-rescue.

WELLESLEY COLLEGE		REV 01	Page: 7 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

8.0 Restraint Devices:

A restraint or tether system incorporating a restraint line between an anchorage point and an employee's body harness shall be rigged so that the employee is prevented from walking or falling off an elevated work surface. Restraint lines shall be capable of supporting at least twice the potential impact load of an employee's fall or 3,000 pounds, whichever is greater.

9.0 Specific Applications:

9.1 Floor Holes and Skylights:

Covered holes in the floor or other work surfaces that present a potential fall of 6 feet or more shall be protected in one of the following manners:

- The cover over the opening shall be designed and reinforced to carry the intended load. Covers located in vehicular aisles shall be capable of supporting at least twice the maximum axle load of the largest vehicle expected to cross over the cover.
- All other covers shall be capable of supporting two times the weight of employees or equipment that may be on the cover at any one time.
- All covers shall be marked with the word "HOLE" to provide warning
- A floor hole less than one foot in its least dimension such to provide passage of piping, or other equipment that may vibrate or expand, need only be guarded by a toe board to prevent the feet of people from entering the hole.
- Skylights or floor openings shall be protected through a guardrail system.

9.2 Wall Openings:

Openings through building walls, such as equipment access doors and some windows, need to be guarded by fall protection system if their lower edge is 39 inches above a work surface. Wall openings should be closed and locked so that the casual person cannot accidentally open them whenever they are not in use. In addition, the door should be conspicuously marked to warn of a falling hazard if they are opened. If the locked door is not strong enough to meet a 200-pound force then a guardrail system must be installed.

If work activity requires employees to reach around the opening then appropriate grab handles shall be installed. These grab handles shall meet all anchorage criteria. If grab handles are not feasible, the employees shall be tethered off such that they may not go through the opening.

9.3 Aerial Lifts

WELLESLEY COLLEGE		REV 01	Page: 8 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

Any Wellesley College employee and any contractor performing work on Wellesley College property or remote sites shall use personal fall protection equipment when working from any aerial lift regardless of if the lift is a Wellesley College lift, rental unit, or contractor owned lift. This requirement includes boom lifts, scissors lifts, cherry pickers, fork-truck-mounted man baskets, and any other aerial lift equipment. The personal fall protection equipment to be utilized will include at a minimum a harness, lanyard, and appropriate anchorage.

10.0 Roofing Fall Protection

10.1 Roofing Work on Low-Slope Roofs

Each employee engaged in roofing activities on low-slope roofs, with unprotected sides and edges 6 feet or more above a lower level, shall be protected from falling by guardrail systems, personal fall arrest systems, or a combination of warning line system and guardrail system, or warning line system and personal fall arrest system, or warning line system and safety monitoring system. Or, on roofs 50-feet or less in width the use of a safety monitoring system alone [i.e. without the warning line system] is permitted.

On the Wellesley campus, Pendleton Hall has several newer roofs; some are green (vegetated) roofs. The newer roofs on Pendleton have permanent anchorages installed. When working on these roofs, workers shall utilize retractable lanyards or lanyards that are pre-rigged to serve as fall prevention.

When working on the L-Wing or E-Wing roofs it is required to ensure that there are no activities taking place in the building's various laboratories that involve the use of the lab fume hoods. All lab fume hoods are to be turned off and any lab work requiring fume hoods is to be completed or secured.

10.2 Roofing Work on Steep Roofs

Each employee on a steep roof with unprotected sides and edges 6 feet or more above lower levels shall be protected from falling by guardrail systems with toe-boards, or personal fall arrest systems.

In some cases, such as working on steep slate roofs on the campus, the roofing worker may utilize an articulating boom lift as a platform to work from.

10.3 Warning Line Systems

The warning line shall be erected around all sides of the roof work area. When mechanical equipment is not being used, the warning line shall be erected not less than 6 feet from the roof edge.

WELLESLEY COLLEGE		REV 01	Page: 9 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

No employee shall be allowed in the area between a roof edge and a warning line unless the employee is performing roofing work in that area.

10.3.1 Warning Line Locations

When mechanical equipment is being used, the warning line shall be erected not less than 6 feet from the roof edge which is parallel to the direction of mechanical equipment operation, and not less than 10 feet from the roof edge which is perpendicular to the direction of mechanical equipment operation.

Points of access, materials handling areas, storage areas, and hoisting areas shall be connected to the work area by an access path formed by two warning lines.

When the path to a point of access is not in use, a rope, wire, chain, or other barricade, equivalent in strength and height to the warning line, shall be placed across the path at the point where the path intersects the warning line erected around the work area, or the path shall be offset such that a person cannot walk directly into the work area.

10.3.2 Warning Line Construction

Warning lines shall consist of ropes, wires, or chains, and supporting stanchions erected as follows:

- The rope, wire, or chain shall be flagged at not more than 6-foot intervals with high-visibility material.
- The rope, wire, or chain shall be rigged and supported in such a way that its lowest point (including sag) is no less than 34 inches from the walking/working surface and its highest point is no more than 39 inches from the walking/working surface.
- After being erected, with the rope, wire, or chain attached, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds applied horizontally against the stanchion, 30 inches above the walking/working surface, perpendicular to the warning line, and in the direction of the floor, roof, or platform edge.
- The rope, wire, or chain shall have a minimum tensile strength of 500 pounds and after being attached to the stanchions, shall be capable of supporting, without breaking, the loads applied to the stanchions as described above.
- The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

10.4 Controlled Access Zones

Controlled access zones and their use shall conform to the following provisions:

WELLESLEY COLLEGE		REV 01	Page: 10 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

- When used to control access to areas where leading edge and other operations are taking place, the controlled access zone shall be defined by a control line or by any other means that restricts access.
- When control lines are used, they shall be erected not less than 6 feet nor more than 25 feet from the unprotected or leading edge.
- The control line shall extend along the entire length of the unprotected or leading edge and shall be approximately parallel to the unprotected or leading edge.
- The control line shall be connected on each side to a guardrail system or wall.

10.4.1 Control Line Construction

Control lines shall consist of ropes, wires, tapes, or equivalent materials, and supporting stanchions as follows:

- Each line shall be flagged or otherwise clearly marked at not more than 6-foot intervals with high-visibility material.
- Each line shall be rigged and supported in such a way that its lowest point (including sag) is not less than 39 inches from the walking/working surface and its highest point is not more than 45 inches from the walking/working surface.
- Each line shall have a minimum breaking strength of 200 pounds.

10.5 Safety Monitoring Systems

Safety monitoring systems and their use shall comply with the following provisions:

- A competent person shall be designated to monitor the safety of other employees and the employer shall ensure that the safety monitor complies with the following requirements:
 - The safety monitor shall be competent to recognize fall hazards.
 - The safety monitor shall warn the employee when it appears that the employee is unaware of a fall hazard or is acting in an unsafe manner.
 - The safety monitor shall be on the same walking/working surface and within visual sighting distance of the employee being monitored.
 - The safety monitor shall be close enough to communicate orally with the employee.
 - The safety monitor shall not have other responsibilities which could take the monitor's attention from the monitoring function.
 - Mechanical equipment shall not be used or stored in areas where safety monitoring systems are being used to monitor employees engaged in roofing operations on low-slope roofs.

WELLESLEY COLLEGE		REV 01	Page: 11 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

- No employee, other than an employee engaged in roofing work (on low-sloped roofs) shall be allowed in an area where an employee is being protected by a safety monitoring system.
- Each employee working in a controlled access zone shall be directed to comply promptly with fall hazard warnings from safety monitors.

11.0 Inspection and Maintenance

Each user of fall protection equipment must be taught how to conduct a visual inspection of each part of their equipment, including the webbing harness, buckles, D-rings, lanyards, anchor points, etc., what they should be looking for, and whom they should immediately notify in the event they believe they have a problem. Users shall be informed that they are required to conduct these visual inspections at least once daily, and that any indication of tearing, rubbing, weather corrosion, dry rot, damage, cuts, pinches, etc., will be sufficient cause to have the equipment immediately removed from service and destroyed.

- Personal fall arrest equipment shall be inspected prior to each use for wear, damage, and other deterioration, and defective components shall be removed from service.
- All fall protection equipment shall be inspected at least every six months after entering initial service by a competent person.
- Equipment shall be inspected by the user before each use, and, additionally, by a competent person other than the user at intervals of no more than one year.
- Inspection criteria for the equipment shall be set by the user's organization. Such criteria shall be equal to or exceed the greater of the criteria established by the standard or the manufacturer's instructions.

11.1 Safety Harness Inspection

Beginning at one end, holding the body side of the harness toward the user, grasp the harness with both hands six to eight inches apart. Bend the harness in an inverted "U". The surface tension resulting will make damaged fibers or cuts much easier to see. Perform this inspection to a small section at a time, over the entire harness. Inspect for frayed or broken strands. Webbing must be free of knots, excessive soiling, heavy paint buildup, and rust staining. Inspect for chemical or heat damage indicated by brown, discolored, or brittle areas. Inspect for ultraviolet damage, indicated by discoloration and splinters or slivers on the web surface. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut, or burned stitches will be readily seen.

WELLESLEY COLLEGE		REV 01	Page: 12 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

Special attention should be given to the attachment of buckles and D-rings to webbing. Note any unusual wear, frayed or cut fibers, or distortion of the buckles or D-rings. Buckle tongues should be free of distortion and overlap the buckle frame and move freely back and forth in their socket. The tongue or billet of the harness receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted, or broken grommets. Rivets should be tight and unmovable with the fingers. Body side rivet base and outside rivet burr should be flat against the harness material.

Any damaged or questionable harnesses must be taken out of service, rendered unusable [i.e. cut up], and disposed of.

11.2 Lanyard and Hardware Inspection

When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so the entire circumference is checked. Spliced ends require particular attention.

11.2.1 Steel Lanyards

While rotating the steel lanyard look for cuts, frayed areas, or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyard.

11.2.2 Webbing Lanyards

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, or charring are obvious signs of chemical or heat damage. Webbing must be free of frayed, cut, or broken fibers. Inspect for tears, abrasions, mold, burns, and discoloration. Inspect stitching for pulled or cut stitches. Broken stitches may be an indication the energy absorbing lanyards have been impact loaded and must be removed from service. Webbing must be free of knots, excessive soiling, heavy paint buildup, and rust staining. Inspect for chemical or heat damage indicated by brown, discolored, or brittle areas. Inspect for ultraviolet damage, indicated by discoloration and splinters or slivers on the web surface. All of the above factors are known to reduce webbing strength. Damaged or questionable lanyards must be replaced.

11.2.3 Rope Lanyards

Rotation of the rope lanyard while inspecting from end to end will bring to light any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in the original diameter.

WELLESLEY COLLEGE		REV 01	Page: 13 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

11.2.4 Energy / Shock Absorbing Lanyards

Inspect energy absorbing hardware (snap hooks, buckles, swages, etc.). These items must not be damaged, broken, distorted, worn, or have any sharp edges, burrs, or corrosion. Ensure the connecting hooks work properly. Hook gates must move freely and lock when closed.

Webbing must be free of frayed, cut, or broken fibers. Inspect for tears, abrasions, mold, burns, and discoloration. Inspect stitching for pulled or cut stitches. Broken stitches may be an indication the energy absorbing lanyards have been impact loaded and must be removed from service. Webbing must be free of knots, excessive soiling, heavy paint buildup, and rust staining. Inspect for chemical or heat damage indicated by brown, discolored, or brittle areas. Inspect for ultraviolet damage, indicated by discoloration and splinters or slivers on the web surface. All of the above factors are known to reduce webbing strength. Damaged or questionable webbing must be replaced.

Inspect energy absorber to determine if it has been activated. There should be no evidence of elongation. Ensure energy absorber cover is secure, not torn, and undamaged.

All labels must be present and fully legible. Labels must be replaced if illegible or missing. Labels may only be replaced by the manufacturer. If labels cannot be replaced, the unit is to be disposed of as damaged.

11.2.5 Snap-Hooks

Snap-hook latching mechanisms must be inspected carefully for corrosion, dirt, damage, or abuse. Damaged hooks almost always indicate lack of proper use. Snap-hooks that become ineffective because of these problems must be destroyed. Only snap-hooks that operate in as-new condition shall be used.

11.3 Cleaning the Equipment

Clean lanyard and harness with water and a mild soap solution. Do not use bleach or bleach solutions. Wipe off hardware with a clean, dry cloth, and hang to air dry. Do not force dry with heat. An excessive buildup of dirt, paint, etc. may prevent the full body harness from working properly, and in severe cases degrade the webbing to a point where it weakens and should be removed from service.

12.0 Restrictions

WELLESLEY COLLEGE		REV 01	Page: 14 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

Safety harness, lanyards, and lifelines are to be used only for employee fall protection and for absolutely no other use. Once used to arrest a free fall, regardless of the distance, the fall protection equipment involved (safety harness, lanyard, and/or lifeline) must be immediately removed from service and destroyed to ensure that it can never be reused.

Only employees trained in fall protection, the use of fall protection equipment, and authorized to use fall protection equipment shall be allowed to work in areas requiring fall protection equipment and use fall protection equipment.

14.0 Exceptions

This section intentionally left blank

13.0 Responsibilities:

13.1 Employees:

- Inspect all equipment prior to use.
- All affected employees must understand the requirements of this document and the equipment the employee is using.
- Store all fall protection equipment in a manner that will not subject it to damage.

13.2 Supervisors:

- Arrange for site-specific fall protection plans to be developed for each work site by a qualified person prior to beginning any work.
- Enforce the use of fall protection in their areas or scope of work.
- Assure all employees that may be exposed to a fall greater than 6/4 feet are trained in fall protection methods and understand how to use all the equipment.
- Plan intended elevated work surfaces sufficiently to ensure the requirements of this document have been addressed.
- Assure all fall protection equipment in the department is well maintained.
- Survey all areas affected by these requirements and correct areas that do not meet the requirements of this document.
- In cooperation with the Health and Safety department, conduct a thorough incident investigation, root cause analysis, and corrective action determination in the event of any safety incident, significant near miss, or fall on a job site.

13.3 Health and Safety Department:

- Ensure that the fall protection program is reviewed annually.

WELLESLEY COLLEGE		REV 01	Page: 15 of 15
SAFETY POLICY: FALL PROTECTION			
APPROVED BY:	<i>Environmental Health & Safety Department</i>		Rev. 8/6/2018

- Ensure potential fall protection issues are addressed during design reviews.
- Address issues pertaining to fall protection that may not have been addressed in this document.
- Ensure all employees covered by this document have received appropriate initial training.
- Maintain employee training records and provide copies of training records to HR for inclusion in individual employee HR records.
- Provide retraining when employees show deficiencies in performance of fall protection requirements, this program changes, or when new equipment is introduced or existing equipment is modified.
- In cooperation with the job supervisor, conduct a thorough incident investigation, root cause analysis, and corrective action determination in the event of any safety incident, significant near miss, or fall on a job site.

13.4 Contractors:

- Contractors will provide their own fall protection equipment unless there is fixed equipment or anchorages provided by Wellesley College or the Wellesley College contractor that are unique to the job.
- Contractors will follow the regulation set by OSHA for construction under title 29 CFR 1926 Subpart M and where applicable, under General Industry under 29 CFR 1910.
- All contractors working on jobs for Wellesley College where fall protection is required will provide fall protection training documentation for all workers on the job when asked by Facilities.

Record of Annual Review and Revisions		
Date	Section	Description of Revision
8.6.18	13.3	Included responsibilities of an accident or near miss
8.6.18	13.4	Provide documentation on training when asked by Facilities.