



# FALL PROTECTION PROGRAM

EFFECTIVE: OCTOBER 2016

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## **1 PURPOSE**

- 1.1 The purpose of this policy is to protect employees from injuries resulting from slips, trips and falls. It is the policy of The San Bernardino Community College District (SBCCD) that all employees will be protected from exposure to fall hazards by incorporating engineering controls whenever possible, and by installing or implementing fall protection systems.
- 1.2 The effectiveness of the written fall protection procedures depends upon the active support and involvement of all employees who work with procedures and jobs requiring it. This written plan is intended to be used in implementing procedures to ensure that work with fall protection is carried out safely to minimize the possibility of injury or harm to our employees.
- 1.3 These written fall protection procedures establish uniform requirements designed to ensure that fall protection training, operation, and practices are communicated to and understood by the affected employees. These requirements are also designed to ensure that procedures are in place to safeguard the health and safety of all employees.

## **2 SCOPE**

- 2.1 This written Fall Protection Program applies all employees with potential exposure to falls of greater than 6 feet, except when an employee is inspecting, investigating, or assessing workplace conditions prior to the actual start of work or after all work has been completed.
- 2.2 These written fall protection procedures establish guidelines to be followed whenever an employee works on ladders, at heights, or with fall protection on SBCCD property. The rules established are to be followed to provide a safe working environment, and govern use of fall protection procedures and equipment.
- 2.3 This program specifically applies to the following SBCCD properties: San Bernardino Valley College and Crafton Hills College.
- 2.4 It is the policy of SBCCD to permit only employees trained in fall protection procedures to work in areas where fall hazards occur, to reduce likelihood of fall accidents and to help ensure a safe workplace.

## **3 REFERENCES/RELATED PROCEDURES**

- 3.1 OSHA 29 CFR 1926.500 - .503 Fall Protection
- 3.2 CCR Title 8, § 1669- 1672 Fall Protection
- 3.3 CCR Title 8, § 1675-1678 Ladders
- 3.4 29 CFR 1910.23 and 1910.28 Walking and Working Surfaces
- 3.5 29 CFR 1926.104 and 1926.105 Safety belts, lifelines, lanyards, and safety nets
- 3.6 29 CFR 1926.1051 Ladders
- 3.7 SBCCD Fall Hazards Assessment Form

## 4 RESPONSIBILITIES

- 4.1 The Campus President and Vice President of Administration are ultimately responsible for ensuring that the SBCCD Fall Protection Program is developed, implemented, and maintained.

The VP of Administrative Services for San Bernardino Valley College can be contacted at (909) 382-8958 and the VP of Administrative Services for Crafton Hills College can be contacted at (909) 389-3210.

General responsibilities for the President and Vice President of Administrative Services (or authorized designees) include, but are not limited to, the following:

- 4.2 The Campus President and VP of Administration are responsible for all facets of the plan and have full authority to make necessary decisions to ensure the success of this plan. Responsibilities include the following:

- 4.2.1 Develop and administer a program that is specific to the campus.
- 4.2.2 The plan administrator will develop and periodically review and revise the Fall Protection Program.
- 4.2.3 Evaluate fall hazards and identify work areas, processes, or tasks that require fall protection.
- 4.2.4 Select appropriate fall protection systems.
- 4.2.5 Monitor fall protection use to ensure that fall protection systems are used properly.
- 4.2.6 Ensure that all employees are properly trained.
- 4.2.7 Track fall-related injuries and near-miss incidences and implement program changes accordingly.

- 4.3 District Safety & Risk Management is responsible for working with the campus President/VP to ensure that fall protection is properly provided throughout campus. In addition to being knowledgeable about the program requirements for their own protection, supervisors will also ensure that the program is understood and followed by the employees under their charge.

- 4.4 Supervisors or Department Managers will:

- 4.4.1 Ensure that employees under their supervision (including new hires) have received appropriate training.
- 4.4.2 Ensure the availability of appropriate fall protection equipment.
- 4.4.3 Ensure that fall protection equipment is properly cleaned, maintained, and stored.
- 4.4.4 Be aware of tasks requiring the use of fall protection and wear appropriate PPE whenever working in designated areas.
- 4.4.5 Enforce the use of specified PPE in required areas in accordance with the facility procedures.
- 4.4.6 Assist in conducting and documenting fall hazard assessments and continually monitor work areas and operations to identify fall hazards.

- 4.4.7 Coordinate with the District Safety & Risk Management on how to address fall hazards or other concerns as they arise.
  - 4.4.8 Assure that contracts with outside vendors specify the company's position on fall protection, before they are to start the project.
  - 4.4.9 Assure that contractors performing special projects are advised, during the bidding process, that they are required to comply with the SBCCD Contractor Safety Program. This is to include supplying their employees with appropriate fall protection and related training that the scope of the job may dictate.
- 4.5 All SBCCD employees:
- 4.5.1 Ensure that all fall hazards are addressed before working in an area where they may be exposed.
  - 4.5.2 Inform a supervisor of any fall hazards that they feel are not adequately addressed in the workplace and of any other concerns regarding the program.
  - 4.5.3 Care for and maintain assigned fall protection equipment as instructed.
  - 4.5.4 Wear PPE at all times in designated areas, and be knowledgeable of the proper use and limitations.
  - 4.5.5 Immediately notify your supervisor of any problems you encounter with use of the required equipment.
  - 4.5.6 Actively participate in the training process.

## 5 DEFINITIONS

- 5.1 Anchorage: a secure point of attachment for lifelines, lanyards, or deceleration devices.
- 5.2 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.
- 5.3 Competent person (qualified person): a person capable of identifying existing and predictable hazards in the work area and conditions, and who understands how to control or minimize those hazards.
- 5.4 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).
- 5.5 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.
- 5.6 Deceleration distance: the additional vertical distance a falling (person) travels from the moment of activation (at the onset of fall arrest forces) of the deceleration device to the location of the employee when he/she comes to a full stop.

- 5.7 Free fall: the act of falling before a personal fall arrest system begins to apply force to arrest the fall.
- 5.8 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.
- 5.9 Guardrail system: a barrier erected to prevent employees from falling to lower levels.
- 5.10 Hole: a gap or void 2 inches or more in its least dimension, in a floor, roof, or other walking/working surface.
- 5.11 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.
- 5.12 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.
- 5.13 Lifeline: a component consisting of a flexible line for connection to an anchorage. A vertical lifeline attaches to an anchorage at one end and hangs vertically. A horizontal lifeline attaches to an anchorage at each end and stretches horizontally. Both horizontal and vertical lifelines provide a point of connection for lanyards.
- 5.14 Lower level: 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.
- 5.15 Mechanical equipment: all motor or human propelled wheeled equipment used for roofing work, except wheelbarrows and mop carts.
- 5.16 Opening: a gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which employees can fall to a lower level.
- 5.17 Personal fall arrest system (PFAS): a system used to arrest an employee in a fall from a working level. It consists of an anchorage, connectors, and a body harness, and may include a lanyard, deceleration device, lifeline, or suitable combinations of these.
- 5.18 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.
- 5.19 Safety monitoring system: a safety system in which a competent person is responsible for recognizing and warning employees of fall hazards.
- 5.20 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.
- 5.21 Snap hook: a connector comprised of a hook-shaped member with a normally closed keeper. Snap hooks will be equipped with a self-closing, self-locking keeper which remains closed and locked until unlocked and pressed open for connection.

- 5.22 Toe board: a low protective barrier that will prevent the fall of materials and equipment to lower levels and provide protection from falls of personnel.
- 5.23 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 high.
- 5.24 Walking/working surface: 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, but not including ladders, vehicles, or trailers, on which employees will be located in order to perform their job duties.
- 5.25 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.

## 6 FALL PROTECTION

### 6.1 Hazard Assessment

- 6.1.1 The first critical step in developing a comprehensive fall protection program is the determination of need for fall protection. This is done through completion of a job hazard analysis (JHA) for each activity that has potential for fall hazards.
- 6.1.2 All work areas/tasks must be individually assessed using Form No. FP.A "Fall Hazard Assessment Form", to identify the associated fall hazard(s) and appropriate type of fall protection that is required.
- 6.1.3 It is the responsibility of District Safety & Risk Management to work with the applicable campus personnel to complete a Fall Hazard Assessment Form for each job task/work area. This responsibility may also be delegated to a designated SBCCD personnel or a safety consultant.
- 6.1.4 Work surfaces and environments, and job tasks must be evaluated to identify potential fall hazards.
- 6.1.4.1 Work surfaces that can pose fall hazards may include: flat and low sloped roof locations; exterior and interior equipment platforms, catwalks, towers, etc. 6 feet or more above the lower level; exterior and interior fixed ladders above 20 feet; mezzanine and balconies edges; and open excavations or pits.
- 6.1.4.2 Tasks that can pose fall hazards may include: tasks requiring use of articulating aerial lifts; tasks requiring employees to lean outside vertical rails of ladders; and task requiring construction of Scaffolding 10 feet in height or greater.
- 6.1.5 The following Table 1.0 lists all areas with fall hazards, the type of fall hazard in the area, and the employees who are affected by the fall hazard:

**Table 1.0-** Listing of Fall Hazards

Work Area/Task	Type of Hazard	Required Fall Protection	Affected Employee(s)
Building Roofs	Roof	Guard Rail	<ul style="list-style-type: none"> <li>• Maintenance personnel.</li> <li>• Painter</li> <li>• Other authorized campus employees, which have received proper training.</li> </ul>
Painting	Aerial Lift	Body Harness, Lanyard	<ul style="list-style-type: none"> <li>• Maintenance personnel.</li> <li>• Painter</li> <li>• Other authorized campus employees, which have received proper training.</li> </ul>

## 6.2 Documenting Fall Hazard Assessments

- 6.2.1 List the name of the job task or work area to be assessed, the date on which the assessment was performed, name of the person (s) completing the evaluation and any other personnel involved in the assessment.
- 6.2.2 Evaluate each potential fall hazard that may be associated with the task.
- 6.2.3 Determine and list the appropriate fall protection to be used.
- 6.2.4 If completed by a designated SBCCD personnel or safety consultant, the hazard assessment will be submitted to the District Safety & Risk Management for review.
- 6.2.5 If changes in equipment or methods make a previously conducted fall hazard assessment obsolete, a new hazard assessment must be conducted when these changes are made.
- 6.2.6 On an annual basis the District Safety & Risk Management, designated SBCCD personnel, or safety consultant are responsible for reviewing and updating the Fall Hazard Assessment for each work area.
- 6.2.7 The annual review should include a reassessment of any changes in condition, equipment or operation procedures that could affect the potential hazards. This review should also cover any injury or illness records to spot any trends or areas of concern.

## 6.3 Fall Protection

- 6.3.1 There are three classes of fall protection employed on SBCCD campus. Each is based on the risk of exposure to hazards, and level of knowledge required by the employee.
- 6.3.2 They provide 100% fall protection, and will be implemented by SBCCD in descending order with Class 1 as the primary protection.
- 6.3.3 Class 1- Hazard Elimination
  - 6.3.3.1 A process or work activity is redesigned or engineered to eliminate employee exposure to a fall hazard. The best means of providing fall protection is always to eliminate the hazard.



- 6.3.3.2 SBCCD will eliminate employee exposure to fall hazards wherever feasible through the redesign of the worksite or other engineering controls.
- 6.3.3.3 SBCCD has implemented the following engineering controls to eliminate fall hazards:
  - 6.3.3.3.1 Guard Rails throughout the campus in elevated areas greater than 5 feet.
  - 6.3.3.3.2 Controlled Access Zones for roofs and overhead access utilizing chains with stanchions.
  - 6.3.3.3.3 Falling Object Protection using kick rails on any scaffolding related to construction on campus.
- 6.3.4 Class 2- Fall Protection System
  - 6.3.4.1 Fall protection systems passively barricade employees from reaching the hazard. No special training is required to know how to work safely around a fall hazard protected by a fall protection system.
  - 6.3.4.2 Guardrail Systems
    - 6.3.4.2.1 Will be erected at unprotected edges, ramps, runways, or holes where it is determined by the District Safety & Risk Management that erecting such systems will not cause an increased hazard to employees.
    - 6.3.4.2.2 Guardrails will be made from steel, wood, and wire rope for all worksites.
    - 6.3.4.2.3 Will be erected on the open sides of unenclosed elevated work areas more than 30 inches above the floor, ground, or other work areas of a building.
    - 6.3.4.2.4 When guardrail systems are used to protect workers from falls, the systems will be compliant with all force and construction requirements, as delineated in the above-referenced regulations.
    - 6.3.4.2.5 The top edge height of top rails, or (equivalent) guardrails will be 42 inches plus or minus 3 inches, above the walking/working level.
    - 6.3.4.2.6 Guardrail systems will be surfaced to protect workers from punctures or lacerations and to prevent clothing from snagging.
    - 6.3.4.2.7 Temporary guardrail systems will be visually inspected daily by a competent person, and a complete structural inspection will be completed weekly by a competent person.
    - 6.3.4.2.8 Permanent guardrail systems will be subject to a structural inspection annually by a competent person.

6.3.4.2.9 When guardrail systems are used to prevent materials from falling from one level to another, openings will be small enough to prevent passage of potential falling objects.

#### 6.3.4.3 Warning Line Systems

6.3.4.3.1 Warning line systems provide fall protection by making the employee aware of the location of the danger zone. In no case should an employee cross the warning line without some other form of fall protection.

6.3.4.3.2 The warning line shall be erected not less than six feet from all open sides of the work area.

6.3.4.3.3 Point of access, material handling areas, storage areas and hoisting areas shall be connected to the work area by an access path formed by two warning lines. When this path is not in use a barricade shall be placed across the path.

6.3.4.3.4 Warning lines shall consist of ropes, wires, or chains and supporting stanchions.

6.3.4.3.5 The warning line shall be between 34 and 39 inches high and shall be capable of resisting, without tipping over, a force of at least 16 pounds.

#### 6.3.4.4 Controlled Access Zone

6.3.4.4.1 A control access zone is a work area designated for certain types of work (like bricklaying) may take place without the use of conventional fall protection systems.

6.3.4.4.2 Controlled access zones are used to keep unauthorized employees from areas without guardrails or other forms of fall protection.

6.3.4.4.3 Control lines shall be erected not less than six feet and no more than 25 feet from each unprotected side of the work area.

6.3.4.4.4 Control lines shall consist of ropes, wires, or chains and supporting stanchions.

6.3.4.4.5 The warning line shall be between 39 and 42 inches high and shall be capable of resisting a force of at least 200 pounds.

6.3.4.4.6 Control lines also must be connected on each side to a guardrail system or wall.

#### 6.3.4.5 Guarding Holes

6.3.4.5.1 Every floor opening measuring twelve inches or more in its smallest dimension shall be provided with a secured cover or a guardrail.

- 6.3.4.5.2 When not in use, holes will be covered or provided with guardrails along all unprotected sides or edges.
- 6.3.4.5.3 When holes are used for the passage of materials, the hole will have not more than two sides with removable guardrail sections.
- 6.3.4.5.4 If guardrails are used at unprotected sides or edges of ramps and runways, they will be erected on each unprotected side or edge.
- 6.3.4.5.5 A cover shall guard manholes, trapdoors, pits, ladderway floor openings, and chute openings. When the cover is not in place, the opening shall be protected by removable standard guardrails.
- 6.3.4.6 Wall Openings and Stairs
  - 6.3.4.6.1 Wall openings and open sided stairs that are more than four feet above a lower surface shall be guarded by standard railings or handrails.
  - 6.3.4.6.2 Standard railings must be 42 inches high with a mid rail and toe board. They must also be able to withstand a force of 200 pounds without failing.
  - 6.3.4.6.3 Stair rails (handrails) shall be 36 inches to 42 inches above the leading edge of the tread. On new construction intermediate rails or guards shall be in place so that a six-inch diameter sphere can not pass through at any point.
- 6.3.4.7 Excavations
  - 6.3.4.7.1 Fall protection will be provided to employees working at the edge of an excavation that is 6 feet or deeper.
  - 6.3.4.7.2 Employees in these areas are required to use the fall protection systems as designated in this program.
  - 6.3.4.7.3 Excavations that are 6 feet or deeper will be protected by guardrail systems, fences, barricades, or covers.
  - 6.3.4.7.4 Walkways that allow employees to cross over such an excavation will be equipped with guardrails.
- 6.3.4.8 Protection from Falling Objects
  - 6.3.4.8.1 No materials or equipment will be stored within 6 feet of working edges.
  - 6.3.4.8.2 Excess material, equipment, and any debris will be kept clear of the working area by removal at regular intervals.
  - 6.3.4.8.3 When toe boards are used as protection from falling objects, they will be erected along the edges of the overhead walking or working surface for a distance sufficient to protect persons working below.

- 6.3.4.8.4 Toe boards will be capable of withstanding a force of at least 50 pounds applied in any downward or outward direction at any point along the toe board.
- 6.3.4.8.5 Toe boards will be a minimum of 3.5 inches tall from their top edge to the level of the walking/working surface, have no more than 0.25 inches' clearance above the walking/working surface, and be solid or have openings no larger than 1 inch.
- 6.3.4.8.6 Tools, equipment, or materials shall never be piled higher than the top edge of a toe board.
- 6.3.4.9 Safety Monitoring System
  - 6.3.4.9.1 Safety monitoring systems designate a competent person to monitor the safety of other employees.
  - 6.3.4.9.2 The safety monitor is expected to warn the other employee when they get near the edge of the structure.
  - 6.3.4.9.1 Safety Monitoring Systems shall **not** be used unless all other systems have been determined to be infeasible.
- 6.3.5 Class 3- Personal Fall Arrest Systems (PFASs)
  - 6.3.5.1 Where acceptable fall protection or restraint systems are not feasible, employees will use a PFAS or other fall protection method with equivalent protection.
  - 6.3.5.2 A PFAS will consist of a full body harness, shock-absorbing lanyard with locking type snap-hook, and an anchor point capable of supporting 5000 pounds per worker.
  - 6.3.5.3 A PFAS will do all of the following:
    - 6.3.5.3.1 Limit maximum arresting force on an employee to 1,800 pounds when used with a body harness;
    - 6.3.5.3.2 Be rigged so that an employee can neither free fall more than 6 feet nor contact any lower level;
    - 6.3.5.3.3 Bring an employee to a complete stop and limit maximum deceleration distance an employee travels to 3.5 feet; and
    - 6.3.5.3.4 Have sufficient strength to withstand twice the potential impact energy of an employee free-falling a distance of 6 feet or the free fall distance permitted by the system, whichever is less.
  - 6.3.5.4 All components of a PFAS will meet the specifications of the OSHA Fall Protection Standard, and will be used in accordance with the manufacturer's instructions.

**Note\*\*** The use of body belts in a fall protection system is prohibited, but body belts can be used in a positioning device system.

- 6.3.5.5 The use of non-locking snap hooks is prohibited.
- 6.3.5.6 D-rings and locking snap hooks will have a minimum tensile strength of 5,000 pounds and be proof-tested to a minimum tensile load of 3,600 pounds without cracking, breaking, or suffering permanent deformation.
- 6.3.5.7 Lifelines, Ropes, and Straps
  - 6.3.5.7.1 Lifelines will be designed, installed, and used under the supervision of the District Safety & Risk Management. They will be equipped with horizontal lifeline connection devices capable of locking in both directions on the lifeline when used on suspended scaffolds or similar work platforms that have horizontal lifelines that may become vertical lifelines.
  - 6.3.5.7.2 Self-retracting lifelines and lanyards that automatically limit free fall distance to 2 feet or less will be capable of sustaining a minimum tensile load of 3,000 pounds applied to the device with the lifeline or lanyard in the fully extended position.
  - 6.3.5.7.3 Ropes and straps (webbing) used in lanyards, lifelines, and strength components of body belts and body harnesses will be made of synthetic fibers. Lanyards and vertical lifelines will have a minimum breaking strength of 5,000 pounds.
  - 6.3.5.7.4 When vertical lifelines are used, each employee will have a separate lifeline.
- 6.3.5.8 Anchorages
  - 6.3.5.8.1 Anchorages will be designed, installed, and used under the supervision of a qualified person, as part of a complete personal fall arrest system that maintains a safety factor of at least 2.
  - 6.3.5.8.2 Anchorages used to attach personal fall arrest systems will be independent of any anchorage being used to support or suspend platforms and will be capable of supporting at least 5,000 pounds per person attached.
- 6.3.5.9 Personal fall arrest systems, covers, or guardrail systems will be erected around holes (including skylights) that are more than 6 feet above lower levels.
  - 6.3.5.9.1 Covers will be able to support at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time.
  - 6.3.5.9.2 To prevent accidental displacement resulting from wind, equipment, or workers' activities, all covers will be secured.
  - 6.3.5.9.3 All covers will be color-coded or will bear the markings "HOLE" or "COVER."

## 7 GENERAL SAFETY/ BEST PRACTICES

### 7.1 Work Surfaces

- 7.1.1 To prevent slipping, tripping, and falling, all places of employment, passageways, storerooms, and service rooms must be kept clean and orderly and in a sanitary condition.
- 7.1.2 The floor of every workroom will be maintained in a clean and, so far as possible, dry condition.
- 7.1.3 Where wet processes are used, drainage will be maintained and false floors, platforms, mats, or other dry standing places are provided where practicable.
- 7.1.4 To facilitate cleaning, every floor, working place, and passageway will be kept free from protruding nails, splinters, holes, or loose boards.
- 7.1.5 Spaces used for industrial or storage purposes must be maintained so that loads do not exceed approved load ratings. Load ratings should be posted in the affected area

### 7.2 Ladders

- 7.2.1 Employees will be protected from falling from fixed ladders when the fall potential is 20 feet or more, by cages or ladder safety devices.
- 7.2.2 Whenever a guardrail, stair railing, floor opening or secured hole cover will not provide the protection necessary to prevent a fall, a Personal lifeline system including harness, body belt and life line will be used.
- 7.2.3 Climbing protection systems, such as climbing safety devices used on fixed ladders when a cage cannot be used.
- 7.2.4 Fixed ladders shall be inspected at least annually to insure their condition, stability, and adequacy.
- 7.2.5 Portable ladders shall have non-conductive side rails if they are used where the employee or the ladder could contact exposed electrically energized parts.
- 7.2.6 All portable ladders, except wood stepladders will be provided with slip resistant feet to prevent accidental displacement.
- 7.2.7 Ladders of proper type and length to reach the working height shall be selected. In addition, the ladder's manufacturers rated capacity shall not be exceeded.
- 7.2.8 The sections of extension ladders shall not be used individually. Sections must overlap according to the manufactures design.
- 7.2.9 Stepladders shall be equipped with a metal spreader or locking device to securely hold the front and back sections in open position.
- 7.2.10 Stepladders shall not be used as a straight ladder by leaning them against a wall unless manufactured to do so.
- 7.2.11 The following best practices will be followed:
  - 7.2.11.1 The employee shall use both hands and shall face the ladder when going up and down.

- 7.2.11.2 Any needed material shall be raised or lowered using a hand line.
  - 7.2.11.3 Ladders shall not be moved, shifted, or extended while occupied.
  - 7.2.11.4 Workers shall not stand higher than the second rung from the top on a stepladder, or higher than the third rung on other ladders.
  - 7.2.11.5 Ladders shall not be placed in front of doors opening toward the ladder unless the door access is blocked open, locked, or guarded, or access is blocked to prevent use. The area around the top and bottom of ladders shall be kept clear.
  - 7.2.11.6 Ladders shall not be placed on boxes, barrels, vehicles, or other unstable bases to obtain additional height.
  - 7.2.11.7 If an employee must stand on a ladder and perform work at heights greater than six feet above another level, that employee shall either have a second person holding the ladder the entire time they are on the ladder, or shall wear approved fall protection equipment and be tied off with a lanyard secured to an approved attachment point (not to the ladder).
  - 7.2.11.8 When used to gain access to a rooftop, the top of a ladder used should extend at least three feet above the point of contact.
  - 7.2.11.9 Where possible, a second person to hold the ladder should be used, especially on uneven ground.
- 7.2.12 All vehicle-mounted platforms, including extendible boom platforms, vertical towers and combinations thereof, shall be in compliance with applicable regulatory standards, and operated in accordance with the SBCCD Powered Industrial Truck Program.

## 8 OPERATIONS

### 8.1 Pre-Work Check

- 8.1.1 Prior to beginning work in any area or on any device where fall hazards exist, a pre-work Work Area Check must be completed. Inspection items may include:
  - 8.1.1.1 Stairs- all required covers or guardrails must be in place, all handrails are in place, all treads and risers are in good repair, and non-slip surfaces are in place on stairs.
  - 8.1.1.2 Ladders- gripping safety feet in place and secure, all parts and fittings are secure, non-slip surfaces are in place on rungs, all ladders will be set up properly and safely.
  - 8.1.1.3 Loading Dock Areas- dock blocks are up and in place when dock is not in immediate use, only trained personnel perform duties in the area, and dock doors kept closed when a truck is not backed against it.
  - 8.1.1.4 Platforms- guardrails are in place and securely attached, toe boards are in place and secure, and all platforms meet OSHA specifications for design and safety.

- 8.1.1.5 Floor & Wall Openings- all openings are safely covered or blocked from access. If not safely covered and blocked from access, the opening has someone assigned for constant attendance to it.
- 8.1.2 If any one of the conditions described in pre-work Work Area Check is not met for the area or piece of equipment posing a potential fall hazard, then employees may not perform that work until the condition is met. If the condition cannot be remedied immediately, a supervisor or the District Safety & Risk Management must be notified of the problem.
- 8.1.3 Prior to each use, ladders will be inspected as follows:
  - 8.1.3.1 Damaged (cracked, bent or broken) ladders shall not be used. Improvised repairs shall not be made to defective ladders.
  - 8.1.3.2 Ropes on extension ladders shall be free from frayed or worn spots.
  - 8.1.3.3 The person performing the inspections is authorized to remove the ladder from service by marking it "DANGEROUS, Do Not Use" and/or discarding it in the nearest adequate trash container.
- 8.1.4 Prior to each use, PFASs will be inspected as follows:
  - 8.1.4.1 Visually inspect for mildew, wear or damage, and other deterioration. Damaged or defective components will be removed from service. All components will be protected from cuts and abrasions while in use and during storage.
  - 8.1.4.2 PFASs and their components subject to impact loading will be immediately removed from service and not used again unless inspected and determined by a competent person to be suitable for reuse.
  - 8.1.4.3 The user shall check the ratings to ensure the equipment is adequate for use.
  - 8.1.4.4 Visually check all components (hardware, lanyards, lifelines, anchorages, etc.) to ensure proper and secure connections before each use, and ensure proper adjustment and snug fit on their person.
- 8.2 Scheduled Inspections
  - 8.2.1 Self-retracting lanyards/lifelines shall be:
    - 8.2.1.1 Serviced per manufacturer specifications (usually every year);
    - 8.2.1.2 Inspected monthly and after any fall, by a Supervisor; and
    - 8.2.1.3 Inspected by the user before each use.
  - 8.2.2 Each personal fall arrest system shall be inspected on a quarterly basis. The inspection will be documented using a Quarterly Fall Protection Inspection Form (Appendix B). The inspection will include, but is not limited to, the following:
    - 8.2.2.1 Tie-off adapters/anchorages will be inspected for integrity and attachment before each use.



- 8.2.2.2 Horizontal lifelines will be inspected before each use for structural integrity of line and anchors.
- 8.2.2.3 Hardware should be examined as stated below. If any of the below conditions are present, remove the item from use immediately.
  - 8.2.2.3.1 Snaps- shall be inspected closely for hook and eye distortions, cracks, corrosion, or pitted surfaces; the latch spring should exert sufficient force to firmly close the latch; and latch locks must prevent the keeper from opening when the latch closes.
  - 8.2.2.3.2 Thimble- must be firmly seated in the eye of the splice, and the splice should have no loose or cut strands; the edges of the thimble must be free of sharp edges, distortion, or cracks.
- 8.2.2.4 Shock Pack (shock absorbing pack)
  - 8.2.2.4.1 The outer portion of the pack shall be examined for burn holes and tears.
  - 8.2.2.4.2 Stitching on areas where the pack is sewn to d-rings, belts, or lanyards shall be examined for loose strands, rips and deterioration.
  - 8.2.2.4.3 If any of the above conditions are present, the lanyard shall be removed from service immediately.
- 8.2.3 Ladders
  - 8.2.3.1 Periodic (annual) inspections shall be performed on all ladders, fixed and portable. The checklist included in Appendix C shall be used and the person performing the inspection is authorized to remove unsafe ladders from service.
  - 8.2.3.2 To show that the annual inspection has occurred, a color-coded sticker or piece of tape should be placed on the inspected ladder's side rail. The employee inspecting the ladder shall initial and date the color-coded sticker or tape.
  - 8.2.3.1 The department using the ladder is responsible for inspecting ladders under its control.
- 8.3 Cleaning and Maintenance of Equipment
  - 8.3.1 It is important that all equipment be kept clean and properly maintained. Basic care of all safety equipment will prolong the durable life of the unit and will contribute toward the performance of its vital safety function.
  - 8.3.2 Equipment should be inspected, cleaned, and maintained at regular intervals so it provides the requisite protection.
  - 8.3.3 Ladders shall be stored in safe, dry locations, and out of walkways to prevent tripping.
  - 8.3.4 The following are general requirements for the storage and maintenance of personal fall protection equipment:

- 8.3.4.1 Hang equipment in a cool, dry location in a manner that holds the shape of the equipment.
- 8.3.4.2 Follow manufacturer recommendations for inspections.
- 8.3.4.3 Clean with a mild, non-abrasive soap and hang to dry. Don't use strong detergents.
- 8.3.4.4 Do not store equipment near excessive heat, chemicals, moisture, or direct sunlight.
- 8.3.4.5 Do not use in areas with exposure to fumes or corrosive materials.
- 8.3.4.6 Avoid dirt or other types of buildup on equipment.
- 8.3.4.7 Equipment should dry thoroughly without close exposure to heat, steam, or long periods of sunlight.
- 8.3.5 Full body harnesses and lanyards/shock absorbing lanyards shall be stored hanging in an enclosed cabinet to protect from damage.
- 8.3.6 All harnesses, lanyards, tie-offs and anchorages involved in a fall will be destroyed.
- 8.4 Accident Investigations
  - 8.4.1 All incidents that result in injury to workers, as well as near misses, regardless of their nature, will be reported and investigated.
  - 8.4.2 Investigations will be conducted by the District Safety & Risk Management, or other competent person, as soon after an incident as possible to identify the cause and means of prevention to eliminate the risk of reoccurrence.
  - 8.4.3 In the event of such an incident, the Fall Protection Program will be reevaluated by the District Safety & Risk Management to determine if additional practices, procedures, or training are necessary to prevent similar future incidents.
- 8.5 Emergency Response
  - 8.5.1 SBCCD has established procedures to ensure that employees receive prompt emergency medical attention. The Emergency Operations Plan (EOP) will provide for prompt rescue; or will ensure the capability of an immediate self-rescue.
  - 8.5.2 These procedures/plans identify key rescue and medical personnel, equipment available for rescue, emergency communications procedures, retrieval methods, and primary first-aid requirements.
  - 8.5.3 Supervisors will ensure that each employee thoroughly understands the rescue plan and has immediate access to emergency phone numbers.
  - 8.5.4 If an emergency occurs:
    - 8.5.4.1 Call 911 or other emergency numbers in the response plan.
    - 8.5.4.2 Secure the scene from unauthorized personnel, and assign personnel to meet rescuers to direct them to the accident scene

8.5.4.3 Make certain that only qualified personnel attempt a technical rescue.

8.5.4.4 Provide comfort care and check vital signs if victim is accessible; if necessary, administer CPR and attempt to stop any bleeding per standard first-aid procedures.

8.6 Training Program

8.6.1 All employees will successfully complete the appropriate level of fall protection training prior to beginning work in areas of high fall hazards, doing work requiring fall protection devices, or using fall protection devices. This includes all new employees, regardless of claimed previous experience.

8.6.2 The training program includes classroom instruction and operational training on each specific area of fall hazard involved in the work of the employee.

8.6.3 The District Safety & Risk Management or Safety Consultant is responsible for conducting the training.

8.6.4 Supervisors or Department Managers will identify all new employees and make arrangements with the H&S Manager to schedule the classroom instruction.

8.6.5 Table 2.0, lists the SBCCD employees that are currently authorized with the listed protection system.

**Table 2.0-** Listing of Authorized Employees

Employee Name/Title	Department	Fall Protection System Training
Contact District Safety & Risk Mgmt. for a current list of authorized employees at (909) 382-4040, or email <a href="mailto:srm@sbccd.cc.ca.us">srm@sbccd.cc.ca.us</a> .	Maintenance & Operations	Aerial lifts- Full Body Harness. Ladder

8.6.6 Employees will be trained in the following areas:

8.6.6.1 Nature of fall hazards in the work area;

8.6.6.2 Regulatory requirements;

8.6.6.3 Correct procedures for erecting, using maintaining, disassembling, and inspecting fall protection systems;

8.6.6.4 Role of each employee in the safety monitoring system when the system is in use;

8.6.6.5 Correct procedures for equipment and materials handling and storage;

8.6.6.6 SBCCD requirements for reporting incidents that cause injury to an employee;

8.6.6.7 Employees must be able to demonstrate that they understand all of the above provisions before they are allowed to begin working while using a fall protection system;


- 8.6.6.8 Operational training components may include a review of the pre-operational check, specific to the work area/task, use of personal protective equipment, and accessing of areas with fall hazards.
- 8.6.7 Employees that use ladders shall be trained in hazard recognition and techniques that may be used to minimize risk to themselves and people nearby.
  - 8.6.7.1 Training shall be conducted by a competent person and must include the following:
    - 8.6.7.1.1 The nature of fall hazards
    - 8.6.7.1.2 The proper steps in the use of fall protection systems
    - 8.6.7.1.3 Placement, proper use, and care of ladders
    - 8.6.7.1.4 Recognition of load-carrying capacities of ladders
    - 8.6.7.1.5 Review of the Standard
  - 8.6.8 Training will be delivered to employees in one, or a combination of, the following formats:
    - 8.6.8.1 Scheduled group training sessions to be conducted by District Safety & Risk Management (SRM) or a safety consultant designated by SRM;
    - 8.6.8.2 One-on-one instruction by the District Safety & Risk Management or designated SBCCD personnel; or
    - 8.6.8.3 Computer training sessions, using a web-based learning management system (LMS).
  - 8.6.9 Refresher training will be provided whenever:
    - 8.6.9.1 Changes in the workplace, the types of fall protection systems, types of equipment to be used render previous training obsolete;
    - 8.6.9.2 Inadequacies in an affected employee's knowledge or use of fall protection systems or equipment indicate that the employee has not retained the requisite understanding or skill; and
    - 8.6.9.3 Annually
  - 8.6.10 Documentation
    - 8.6.10.1 Group and one-on-one training sessions will be documented on the individual Employee Training Record. This will be maintained in the employee's file in the Human Resources Department.
    - 8.6.10.2 Computer training sessions will be documented in the LMS utilizing an internal reporting infrastructure. The District Safety & Risk Management will have access to print summary completions reports as well as individual completion certificates.
- 8.7 Contractors

- 8.7.1 Contractors working in or on SBCCD property will be required to follow the guidelines set forth in this Fall Protection Program. Contractors will be informed of these requirements in the in the pre-job meeting.
- 8.7.2 Contractors will also be required to submit verification of current and adequate training and for any of their employees working in area requiring such training, as delineated in this Fall Protection Program.
- 8.8 Disciplinary Procedures
  - 8.8.1 Constant awareness of and respect for fall protection procedures and compliance with all safety rules are considered conditions of employment.
  - 8.8.2 Supervisors reserve the right to issue disciplinary warnings to employees, up to and including termination, for failure to follow the guidelines of this program.
- 8.9 Program Review and Update
  - 8.9.1 This Plan will be reviewed whenever:
    - 8.9.1.1 Changes at the worksite(s) render any section of this Program obsolete;
    - 8.9.1.2 There are changes in the types of fall protection systems or equipment to be used by employees;
    - 8.9.1.3 Incidences of falls resulting in injury demonstrate inadequacies in the design or use of fall protection systems or equipment; and
    - 8.9.1.4 Annually



## Safety Program Approval Form


Safety Program: **Fall Protection Consolidated Safety Program – San Bernardino Valley College – September 2016**

Reviewed by:  Date 09/19/16  
Whitney J. Fields

SBCCD Director, Safety & Risk Management

Approved by:  Date 9.21.16  
Scott Stark


SBVC/Vice President Administrative Services/Business Services

Approved by:  Date 9.21.16  
Diana Rodriguez  
SBVC President



## Safety Program Approval Form

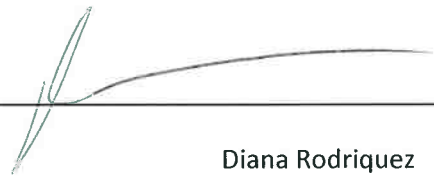
Safety Program: **Fall Protection Consolidated Safety Program – San Bernardino Valley College – September 2016**

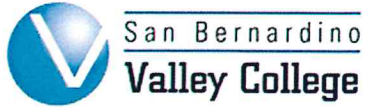
Reviewed by:  Date 09/19/16  
Whitney J. Fields

SBCCD Director, Safety & Risk Management

Approved by:  Date 9.21.16  
Scott Stark


SBVC/Vice President Administrative Services/Business Services

Approved by:  Date 9.21.16  
Diana Rodriguez  
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## Safety Program Approval Form

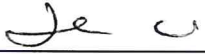
Safety Program: **Fall Protection Consolidated Safety Program – Crafton Hills College – September 2016**

Reviewed by:  Date 09/19/16  
Whitney J. Fields

SBCCD Director, Safety & Risk Management

Approved by:  Date 9/23/16  
Michael Strong

CHC/Vice President Administrative Services/Business Services

Approved by:  Date 9/27/16  
Dr. Wei Zhou  
CHC President