



The School District of Philadelphia



Fall Prevention and Protection Program



Table of Contents

I. Policy

II. Responsibilities

III. Fall Hazard Evaluation

IV. Fall Hazard Prevention and Control

V. Fall Hazard Education

VI. Procedure Review and Continuous Improvement

VII. Recordkeeping

VIII. Appendix

- Fall Prevention and Control Diagram
- Fall Hazard Assessment Form



I. Policy

This program provides the minimum safety requirements for protecting The School District of Philadelphia employees from potential injuries associated from fall hazards arising from indoor or outdoor work activities and to ensure that the Fall Prevention and Control Policy is successfully and consistently implemented.

This procedure is designed to protect SDP employees who perform work on elevated surfaces with an unprotected side or edge that is 4 feet or more above a lower level. This goal will be accomplished through effective education, engineering and administrative controls, use of fall protection systems, and enforcement of the program.

It does not cover work on portable ladders, vehicles, man lifts, or trailers, on which personnel must use in order to perform their job duties.

II. Responsibilities

- A. Supervisors should evaluate their work areas to determine if work is performed on surfaces (either horizontal or vertical) with an unprotected side or edge that is 4 feet or more above a lower level. If such fall hazards are identified they should be eliminated or controlled to ensure that all SDP employees are protected.
- B. Supervisors should ensure their personnel are familiar with these procedures, adhere to its guidelines, develop desktop procedures when necessary, and are provided necessary personal protective equipment.
- C. Identifying work locations that are “Higher Risk” areas with protection concerns.
- D. Supervisors should attend receive the appropriate training or designate an employee to be trained and qualified as the competent person.
- E. Ensuring appropriate training is provided for all employees who will be working in higher risk areas where fall hazards are prevalent.
- F. Employees should report potential hazards and accidents to the supervisor immediately.
- G. Employee should adhere to the recommended housekeeping practices & other safe work practices to prevent fall related incidents
- H. The Department shall have the primary responsibility for providing fall protection systems and appropriate training.
- I. The Safety Unit has the responsibility for assisting departments and facilities in developing appropriate fall protection plans, providing technical guidance and assisting with employee training in accordance to the fall protection policy.

III. Fall Hazard Evaluations

A competent person should determine if SDP employees will be performing unprotected elevated work tasks and shall conduct fall hazard evaluations to determine the appropriate protection.

Ramps, runways and other walkways



Constructions Areas

An appraisal of each exposure should be made to determine the most effective prevention and control strategies.

The following exposures are considered Unprotected Elevated Work:

Fixed Ladders - Ascending or descending fixed ladders which exceed 20 feet in height and are not equipped with a protective cage.

Building or Tree Maintenance - Tasks that require climbing to a height of at least 4 feet to conduct maintenance.

Leading Edges - Working within 6 feet of a leading edge that is 4 feet or more above lower levels.

Hoist Areas - Working near unprotected hoist areas.

Holes - Walking/working surfaces with holes more than 4 feet above lower levels.

Excavations - Excavations 4 feet or more in depth not protected by the use of a guardrail system, fence, barricade or cover.

Roofing Work - Working on sloped roofs with unprotected sides or edges 4 feet or more above lower levels.

Wall Openings - Working on, at, above, or near a wall opening where the outside bottom edge of the wall opening is 4 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.

Unusual Applications - There may be unusual applications where other configurations not addressed in this procedure may be present.

IV. Fall Hazard Prevention and Control

The SDP fall hazard prevention and control program should provide protection from all foreseeable fall hazards. Control strategies should be selected based on the following priority system:

1. Eliminate Fall Hazard
2. Prevent Fall Hazard
3. Arrest Falls
4. Administratively Protect People

One of the following systems should be in place whenever an employee is exposed to a fall of greater than four feet.



A. Fall Prevention

1. **Covers- are needed for holes in floors, roofs, and other walking/working surfaces must meet the following requirements:**
 - All covers must be capable of supporting, without failure, at least twice the weight of personnel, equipment, and materials that may be imposed on the cover at any one time.
 - All covers must be secured when installed so as to prevent accidental displacement by the personnel, equipment, or wind.

2. **Guardrail Systems – are needed at an unprotected edge, hole or excavations 4 feet or higher and must meet the following requirements:**
 - Top rails must be 42 inches \pm 3 inches above the walking/working surface and must be capable of withstanding, without failure, a force of at least 200 pounds in any outward or downward direction, at any point. If wire rope is used for top rails, it must be flagged at not more than 6-foot intervals with high-visibility material.
 - Midrails must be installed midway between the top rail and the walking/working surface. The midrail must be capable of withstanding, without failure, a force of at least 150 pounds applied in any outward or downward direction, at any point along the midrail.
 - Be erected on all unprotected sides of the edge or hole of working surface.
 - Be provided with a gate (at access points such as ladder ways), or be so offset that a person cannot walk directly into a hole or off a leading edge.
 - Guardrail systems must be have a smooth surface to prevent punctures, lacerations or snagging of clothing to personnel.

3. **Falling Object Protection**

When the potential exist for falling objects to create a hazard, each person must wear a hard hat and one of the following measures must be implemented:

- Erect toe boards, screens, or a guardrail system to prevent objects from falling from higher levels.
- Erect a canopy structure and keep potential fall objects far enough from the edge of the higher level so that those objects would not go over the edge if they were accidentally displaced.
- Barricade the area to which objects could fall, prohibit personnel from entering the barricaded area, and keep objects that may fall far enough away from the edge of a higher level so that those objects would not go over the edge if they were accidentally displaced.



B. Personal Fall Protection Systems

Personal fall arrest systems require the use of three main components. 1) A safety harness, 2) the connecting device and 3) the anchorage point. Their use must comply with the minimum requirements below:

1. General Requirements

- Employers are required to provide employees with the necessary equipment to protect against fall hazards.
- The employer shall be responsible to assure its adequacy, including proper maintenance, and sanitation of such equipment.
- Defective components must be tagged and removed from service.
- The user is responsible for the safety equipment in his/her possession and all manufacturers' instructions must be followed.
- Personal fall arrest systems and components subjected to impact loading must be immediately removed from service and must not be used again.
- When a personal fall arrest system is used at hoist areas, it must be rigged to allow the movement of the personnel only as far as the edge of the walking/working Surface
- The uses of body belts are prohibited.

2. Connector devices:

- This device can be a rope or web lanyard, rope grab or retractable lifeline.
- Must be secured in the center of the wearer's back between shoulder blades
- Only locking snap hooks may be used.
- Horizontal lifelines will be designed by a qualified person and installed in accordance with the design requirements.
- Lanyards and vertical lifelines need a minimum breaking strength of 5,000 pounds.
- Lanyards must be secured such that personnel can neither free fall a maximum of 6 feet or allow contact with the lower level.
 - To ensure this, add the height of the worker, the lanyard length and an elongation length of 3.5 feet. Using this formula, a six-foot worker with a six foot lanyard would require a tie-off point at least 15.5 feet above the next lower level.
-
- Lanyards may not be clipped back onto itself (e.g. around an anchor point) unless specifically designed to do so.
- If vertical lifelines are used, each employee will be attached to a separate lifeline.
- Lifelines need to be protected against being cut or abraded



3. Anchorages

Secure anchor points are the most critical component when employees must use fall arrest equipment. Personal fall arrest equipment must be independently attached to an Anchorage capable of supporting at least 5,000 pounds per person or must be designed, installed, and used as part of a complete Personal Fall Arrest System which maintains a safety factor of at least two, as determined by a qualified supervisor. As a minimum, anchorage systems must be in accordance with OSHA Standard 1926.502 (d)(15)

4. Safety Net Systems

Safety nets must be provided when working more than 25 feet above the lower level and the use of ladders, scaffolds, catch platforms, temporary floors, safety lines or personal fall arrest systems are impractical and in accordance with OSHA 1926.105.

C. Administrative Procedures

1. Alternative Fall Protection Plan Development

Alternative fall protection plans can only be used when personnel are conducting Leading Edge work and when (department) can demonstrate that it is not feasible or it creates a greater hazard to use conventional fall protection equipment. The Fall Protection Plan must be prepared by a qualified individual and be reviewed and approved by the Safety Officer. The plan must be specifically developed for the site where the leading edge work is being performed and must be in accordance with OSHA Standard 1926.502(k).

2. Safety Monitoring System

A Safety Monitoring System is an alternative fall protection system in which the first line supervisor designates a safety monitor who must be on the same walking/working surface as the monitored personnel, within visual sighting distance and close enough to recognize then communicate with personnel of fall hazards. The safety monitor system must be in accordance with 1926.502(h):

3. Controlled Access Zone

A controlled access zone is an area designated and clearly marked, in which leading edge work may take place without the use of a guardrail system, a safety net system or personal fall arrest system. Control access zones must extend along the entire length of the unprotected or leading edge and be in compliance with OSHA Standard 1926.502(g).

V. Fall Hazard Training

Each employee who may be exposed to fall hazards will be trained an annual basis to recognize the hazards and the procedures to follow to minimize the hazards. A competent person must provide guidance in methods to minimize the fall



The competent person must train employees in the following areas:

- Fall hazards in the work area
- Correct procedures for erecting, maintaining, disassembling and inspecting the fall protection systems used
- Use and operation of the fall protection systems used
- Role of employees in fall protection plans
- What rescue procedures to follow in case of a fall
- Overview of the OSHA fall protection standards

A training record will be maintained for each employee. The record will contain the name of the employee trained, date of training and the signature of the person who conducted the training. Retraining should be done if there is a change in the fall protection system being used or if an employee's actions demonstrate that the employee has not retained the understanding or skills important to fall protection.

VI. Procedure Review and Continuous Improvement

- A. Each Department will evaluate Fall Prevention and Control Procedures at least annually to ensure their effectiveness and application to work activity. The evaluation will be performed to ensure that the procedures are current and practical, and that the regulatory requirements are being implemented.

VII. Recordkeeping

- A. Hazard Evaluations Hazard evaluations should be recorded and maintained in applicable files.
- B. Education - Each Department must maintain records of Fall Protection Education and are encouraged to enter the data into each person's education record. The following minimum data must be recorded:
1. Personnel trained
 2. Date of training
 3. Proficiency results
 4. Instructor
- C. Procedure Review – Records of annual procedure reviews must be kept

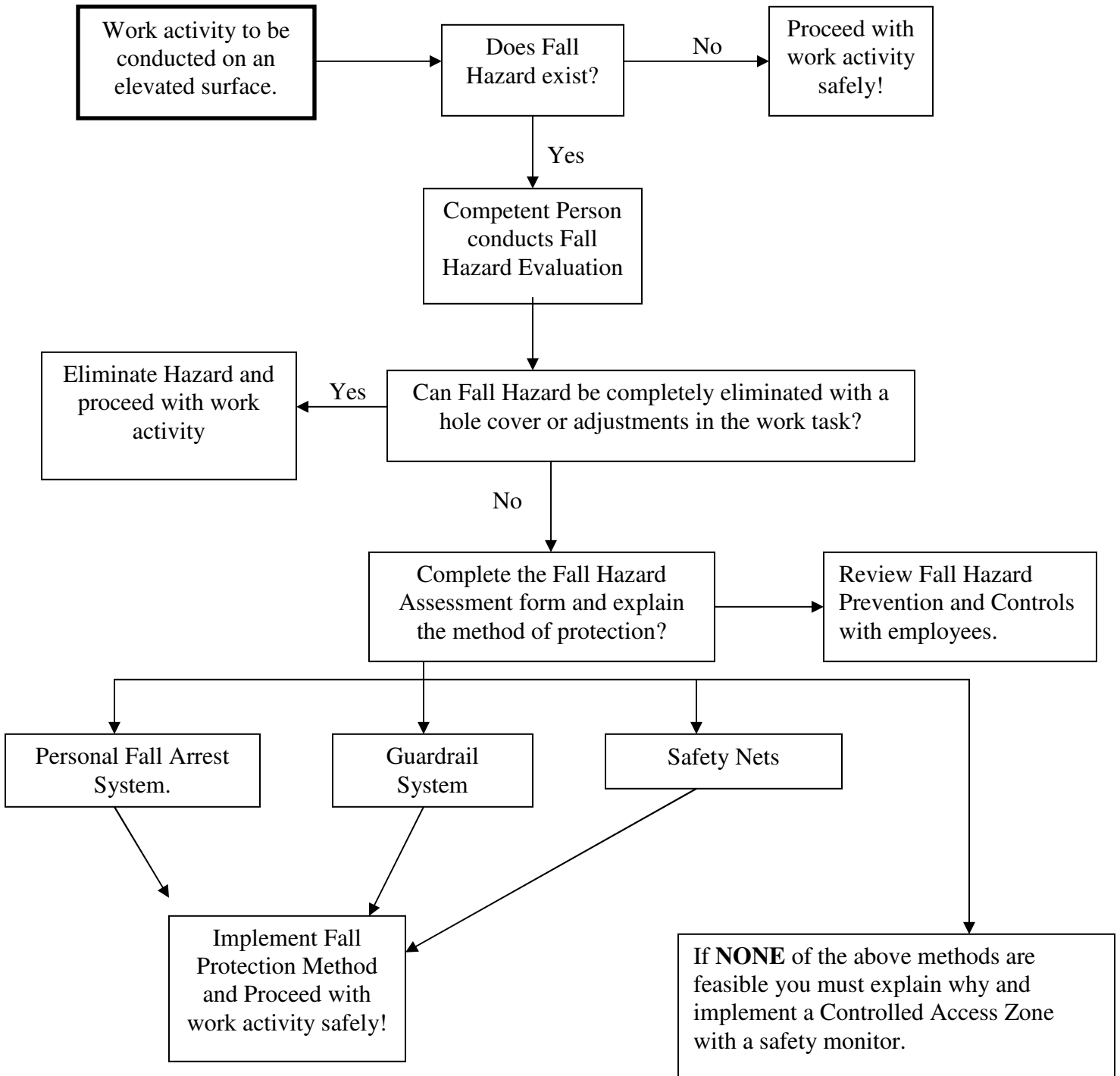
VIII. Appendix

- Appendix A: Fall Prevention and Control Diagram
Appendix B:



Appendix A

Fall Prevention and Control Diagram





Fall Protection Program *Fall Hazard Assessment*

Designation:		Location:	
Date Assessed:	199	Related Operating Procedures Reviewed:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Location Marked and Entry Controlled:	<input type="checkbox"/> Yes <input type="checkbox"/> No

FALL HAZARD ASSESSMENT CHECKLIST

1. Can an employee enter the area without restriction and perform work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Are fall prevention systems such as cages, guardrails, toeboards, manlifts in place?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. Have slipping and tripping hazards been removed or controlled?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4. Have visual warnings of fall hazards been installed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5. Can the distance a worker could fall be reduced by installing platforms, nets etc.?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6. Are any permanently installed floor coverings, gratings, hatches, or doors missing?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7. Does the location contain any other recognized safety and or health hazards?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8. Is the space designated as a Permit Required Confined Space?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9. Have anchor points been designated and load tested?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Assessment Information: (indicate specifics with initials)

Initials	Hazard	Remarks/Recommendations
	Total potential fall distance:	
	Number of workers involved:	
	Frequency of task:	
	Obtainable anchor point strength:	
	Required anchor point strength: (not less than 5000 lbs)	

Additional Requirements:

- ♦ Potential environmental conditions that could impact safety:

Initials	Condition	Remarks/Recommendations

- ♦ Possible required structural alterations:

Initials	Alteration	Remarks/Recommendations

- ♦ Possible task modification that may be required:

Initials	Task	Remarks/Recommendations



THE SCHOOL DISTRICT OF PHILADELPHIA
 [Enter Department Name Here]

• Breakdown of vertical and horizontal movement: (sketch out work task):

• Training requirements:

Initials	Requirement	Remarks/Recommendations

• Personal protective equipment required:

Initials	Requirement	Remarks/Recommendations

Approved

AUTHORIZATION

I certify that I have conducted a Fall Hazard Assessment of the above designated location and have detailed the findings of the assessment on this form. * Further detailed on attachment: Yes No

Name:	Signature:
Title:	Date:
	Time:

ASSESSMENT FORM RETENTION INFORMATION

ATTACHMENTS

Permanent Retention File:	Location:	*Yes	No
Date Filed:	Filed By:	*See Following Pages	