
Fall Protection Program



DARTMOUTH

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Purpose

The Dartmouth College Fall Protection Program serves to protect employees from the inherent risks related to falls from elevated surfaces and/or equipment. Falls from height are a leading cause of occupational injury and, as such, Dartmouth College strives to protect employees from these hazards through a hierarchy of controls: engineering controls, administrative controls, and personal protective equipment (PPE).

Scope

This Program applies to all Dartmouth College employees and all performing work at a Dartmouth College property including employees, contractors, and sub-contractors. This Program is implemented because Dartmouth College is subject the Occupational Safety and Health Administration (OSHA) standards on Personal Fall Protection in 29 CFR §1910.140 and §1926.500. This Program applies to employees working at heights performing general industry and construction work, as defined by OSHA.

The areas specifically covered in the standard and this program include:

General Requirements	§1910.140(c)
Personal Fall Arrest Systems	§1910.140(d)
System Performance Requirements	§1910.140(e)
Duty to Have Fall Protection	§1926.501
Fall Protection Systems Criteria	§1926.502

Responsibilities

Environmental Health and Safety is responsible to:

1. Maintain this program in accordance with applicable regulations and College guidelines.
2. Support departments in implementation of this program.
3. Provide support and training for employees that are affected by requirements of this program.
4. Develop and maintain an inspection process for equipment (detailed in the Fall Restraint/Arrest Systems sections) involved in this program.
5. Review the Fall Protection Program annually for updates with regulations and changes in conditions at the College.
6. Ensure rescue services are provided and a procedure is in place.
7. Manage the requirements for the rescue team – recordkeeping, training etc.

Managers/Supervisors are responsible to:

1. Ensure employees are trained to the Fall Protection Standard when they are required to perform work that meets the program requirements.
 - a. The program areas that may require fall protection are noted in “Program Requirements” section.

2. Ensure employees properly wear personal protective equipment provided to them.

Dartmouth Rescue Team is responsible to:

1. Immediately call 911 to notify emergency services in the event of a fall
2. Immediately notify EHS in the event of a fall
3. Perform rescue and recovery of an employee who has experienced a fall and is suspended by a personal fall arrest system.
4. Relinquish control of the rescue operation when asked to do so by EHS or the Fire Department.

Employees are responsible to:

1. Attend fall protection training.
2. Comply with all the requirements of this program.
3. Notify supervisor of new fall hazards, issues with equipment, or any other unsafe activity.

Contractor/Subcontractors are responsible to:

1. Create and follow own rescue plan. The Dartmouth Rescue Plan is not intended for contractor use.
2. Comply with all applicable requirements of this program.

Definitions

- Anchor points: A secure point of attachment for equipment such as lifelines, lanyards, or deceleration devices.
- Competent Person: a person who is capable of identifying existing and predictable hazards in any personal fall protection system or any component of it, as well as in their application and uses with related equipment, and who has authorization to take prompt, corrective action to eliminate the identified hazards
- Connector: A device used to couple (connect) parts of the fall protection system together.
- D (dee) Ring: A connector used:
 - (i) In a harness as an integral attachment element or fall arrest attachment;
 - (ii) In a lanyard, energy absorber, lifeline, or anchorage connector as an integral connector; or
 - (iii) In a positioning or travel restraint system as an attachment element.
- Deceleration device: Any mechanism that serves to dissipate energy during a fall.
- Deceleration Distance: The vertical distance a falling employee travels from the point at which the deceleration device begins to operate, excluding lifeline elongation and free fall distance, until stopping. It is measured as the distance between the location of an employee's body harness attachment point at the moment of activation (at the onset of fall arrest forces) of the deceleration device during a fall, and the location of that attachment point after the employee comes to a full stop.

- Fall Protection: any equipment, device, or system that prevents an employee from falling from an elevation or mitigates the effect of such a fall
 - Guardrail System: a passive method of fall protection built with a toprail 42" high (+/- 3") and a midrail built midway between the toprail and the walking-working surface. Guardrail systems must support at least 200 pounds of force without deflecting to less than 39" high on the toprail. The midrail must be capable of supporting at least 150 lbs. Guardrails must be at least ¼" thick. At Dartmouth, guardrails, especially (job-built guardrails) must be capable of protecting against the force of a person falling against the guardrail.
 - Covers: any cover used to protect an employee from tripping or falling into a hole or opening must be capable of supporting at least 2x the maximum intended load. Covers must be clearly marked with "Hole" or "Cover".
 - Handrail & Stair Rails: systems used protect employees from tripping on or falling from stairways. Requirements vary based on angle and purpose of stairs. Refer to OSHA §1910.29(f) for specific construction requirements.
 - Personal Fall Arrest System (PFAS): a system used to arrest an employee in a fall from a walking-working surface. It consists of a body harness, anchorage, and connector. Means of connection may include a lanyard, deceleration device, lifeline, or a suitable combination of these.
 - Restraint System: a combination of an anchorage, anchorage connector, lanyard (or similar), and body support which is used to eliminate the possibility of an employee reaching and going over the edge of a walking-working surface
- Fall Hazard: any condition on a walking-working surface that exposes an employee to a risk of harm from a fall on the same level or to a lower level
 - Working at heights: Dartmouth employees must be protected from falling any height greater than 4' (or at any height when there is a specific hazard such as dangerous machinery) when conducting work
 - note that while OSHA allows for construction work to be conducted up to 6' without fall protection, Dartmouth requires all work done by Dartmouth employees at 4' or higher to utilize fall protection, with few exceptions (see trigger heights in following section). Contractors and subcontractors may follow the OSHA trigger height of 6' for construction activities.
- Hole: a gap or opening on a floor, roof, horizontal walking-working surface, or similar surface that is at least 2" in its least dimension
- Lanyard: A flexible line of rope, wire rope, or strap that generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage.
- Lifeline: A component of a personal fall protection system consisting of a flexible line for connection to an anchorage at one end so as to hang vertically (vertical lifeline), or for

connection to anchorages at both ends so as to stretch horizontally (horizontal lifeline), and serves as a means for connecting other components of the system to the anchorage.

- **Opening:** a gap or open space in a wall, partition, vertical walking-working surface, or similar that is at least 30" high and 18" wide through which an employee can fall to a lower level
- **Unprotected Side or Edge:** any side or edge of a walking-working surface (except at points of access) where there is no wall, guardrail system, or stair rail system to protect an employee from falling to a lower level
- **Qualified Person:** A person who by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project

Program Requirements

Trigger Heights: Requirements for when fall protection is required are governed by the Occupational Safety & Health Administration (OSHA). There are a variety of trigger heights for fall protection based on the activity being performed. A general list is below. If an activity is not listed, contact the Dartmouth College qualified person for guidance.

Activity	Trigger Height	Notes
Working at heights (Dartmouth employees)	$\geq 4'$	Such as changing filters, changing light bulbs, painting, maintenance, restoration, etc
Mobile elevated work platform (MEWP)	Any height	Fall protection must always be worn and connected in the basket
Construction activity (contractors)	$\geq 6'$	Painting, maintenance, restoration, new construction, remodeling, etc.
Scaffolds (including scissor lifts)	$\geq 10'$	PFAS or guardrails must be used. Feet must always remain on the floor of the basket
Fixed ladders	≥ 24 ft	See note below regarding fixed ladders

Process: Dartmouth College will utilize passive fall protection systems (engineering controls) such as guardrails where possible. In the event a passive fall protection system cannot be used, or at such times the passive fall protection system must be bypassed (such as when an employee must go over a guardrail to reach a roof edge), Dartmouth College will utilize fall restraint or fall arrest systems.

Fall Restraint Systems: Fall Restraint Systems are preferred over Personal Fall Arrest Systems (detailed below) because they keep an employee from reaching an elevated edge. Therefore, the risk of fall is eliminated when properly utilizing a Fall Restraint System.

A Fall Restraint System consists of a full body harness, an anchorage, and a lanyard which is sized sufficiently short to prevent an employee from reaching the unprotected edge. Keep in mind that body belts used as part of a fall restraint system are not permitted at Dartmouth. The Fall Restraint System

must be designed and installed by a qualified person, who must also develop the procedures for using the system.

Fall Arrest Systems: Personal Fall Arrest Systems (PFAS) will be utilized as a last resort when employees cannot be protected from falling using a passive or restraint system as stated above.

The ABCD's of PFAS. A personal fall arrest system consists of:

- Anchor
- Body support (harness)
- Connector (lanyards, snaphooks, carabiners, dee rings)
- Deceleration device (rope grab, self-retracting lifeline, or shock absorber)

A PFAS must be designed and installed by a qualified person. PFAS components such as anchor points will be procured through reputable (must be new and made in U.S.) fall protection equipment vendors and installed according to the instructions included with such components.

PFAS shall be taken out of service after ten years, upon a duration specified by the manufacturer (whichever is sooner), upon being subject to a fall, or if damage is observed upon inspection.

One of the most critical components in a PFAS is the anchorage. Anchor points and travel restraint lines must be able to support without failure at least 5,000 pounds per person who will be attached. Care should be taken when selecting and installing PFAS anchor points. Often, anchor points will be located outdoors and exposed to weather. This exposure can adversely affect the longevity of the anchor point. The Dartmouth College qualified person must use care when selecting anchor point design and locations because of these unique circumstances.

All lanyards, harnesses, lifelines, restraints, etc. must be made of synthetic materials. Polypropylene rope used as a lifeline must contain an ultraviolet light inhibitor.

Personal fall protection systems and their components must be used exclusively for employee fall protection and not for any other purpose, such as hoisting equipment or materials. The PFAS must limit the maximum arresting force on the employee to 1,800 pounds.

Deceleration devices, lanyards, and harnesses used for personal fall protection must be compatible with all connectors used. Body belts are prohibited as part of a personal fall arrest system.

Fall Protection Plans: Dartmouth will not use Fall Protection Plans since conventional fall protection will be utilized.

Fall Restraint/Arrest System Inspections: All fall restraint/restraint system components must be visually inspected before each use. This pre-use inspection will be accomplished by the user. A pre-use inspection checklist is included as Appendix C. Records of pre-use inspections are not required to be kept. Damaged or otherwise compromised components will be taken out of service and EHS must be notified. Recurring inspections for fall restraint system components are identical to PFAS inspection requirements detailed below. Annual inspections (Appendix D) of all PFAS components including

anchorage are required to be completed and documented. Anchorages must also be certified upon construction and every 10 years thereafter by a qualified person.

Fixed Ladder Requirements

Dartmouth College will comply with OSHA's new mandates for fixed ladders greater than 24 feet, in accordance with 29 CFR 1910.28(b). For fixed ladders that extend more than 24 feet above a lower level:

- Existing Fixed Ladders (installed before November 19, 2018) must be equipped with a personal fall arrest system, ladder safety system, cage, or well. An example of a ladder safety system is included as Appendix E.
- New Fixed Ladders (installed after November 19, 2018) must be equipped with a personal fall arrest system or a ladder safety system.
- When a fixed ladder, cage, well, or any portion of a section thereof, is replaced, a personal fall arrest system or ladder safety system will be installed in at least that section of the fixed ladder, cage, or well where the replacement is located.
- On and after November 18, 2036, all fixed ladders must be equipped with a personal fall arrest system or a ladder safety system.

Scaffolding:

When working on scaffolding, fall protection is required for each employee more than 10 feet above a lower level. Fall protection must be either guardrails or a personal fall arrest system.

Guardrail specifications:

- The height of the toprail for scaffolds must be between 38 and 45 inches.
- The height of the midrail should be approximately halfway between the toprail and the platform surface.
- When the cross point of cross bracing is used as a toprail, it must be between 38 inches and 48 inches above the work platform.
- When the cross point of the bracing is used as a midrail, it must be between 20 inches and 30 inches above the work platform
- A cross brace cannot be used for both the toprail and the midrail
- Support scaffold footings shall be level and capable of supporting the loaded scaffold.

Personal Fall Arrest System

- Each employee on a single-point and two-point adjustable suspended scaffold shall be protected by both a personal fall arrest system and a guardrail.

PFAS Use: Personal Fall Arrest Systems must be used properly to ensure an employee is not subjected to excessive force in the event of a fall. Misuse of a PFAS can result in an employee's fall not being fully arrested. The full body harness worn by an employee must be worn as designated below.

				
Inspect	Position back D-ring between shoulder blades	Buckle up legs	Buckle up front	Adjust so the harness fits snugly and D-ring remains in the correct position

PFAS Rescue: A written rescue plan must be made to provide for the prompt rescue of an employee who has fallen and is suspended from a Personal Fall Arrest System (PFAS). This document does not have to be prepared for fall restraint systems, as they protect a worker from experiencing a fall. If an employee is suspended for more than several minutes, secondary injury can occur from a condition referred to as “suspension trauma”. The Dartmouth College Fall Rescue Plan is included as Appendix B. This rescue plan will be discussed **prior to** working at heights when PFAs is to be used and must include:

- Location of the working from heights activity
- PPE to be used
- List of assigned crew, foreman, authorized rescuer
- List of contact information
- Steps for rescue

Warning Line Systems

Warning lines will be used near unprotected roof edges. Warning lines consist of ropes, wires, or chains. The rope, wire, or chain will be flagged at not more than 6-foot intervals with high-visibility material and the line will be not more than 39 inches or less than 34 inches in height. The warning line will be erected not less than 6 feet from the roof edge and will have a break strength of 200 pounds. The warning line are erected around all sides of the roof work area. Employees should be trained not to go beyond the warning line without proper personal fall protection.

When using a warning line system for controlled access zones the provisions of the warning line system will be used.

Additional Requirements

Window washing shall not occur on window washer scaffolding. Employees shall use lifts and trucks. Free fall distances in a PFAS must be limited to the fullest extent possible.

Considerations for free fall distances are included in Appendix A. Fall distance is calculated by adding: (1) the free fall distance, (2) deceleration device distance, (3) D-Ring shift, (4) back D-Ring height, and (5) safety factor. Calculating the fall distance is an important step in determining if a PFAS or a fall restraint system is needed.

Training

All Dartmouth College employees that are exposed to falls from heights will be required to attend an initial training and an annual refresher in a classroom setting provided by EHS.

Initial training will consist of at least the following:

- Explanation, description, and uses of the various components of a personal fall arrest system
- Limitations of the fall protection equipment
- A review of acceptable anchor points
- Fall protection inspection procedures
- Hands-on training

Annual training will be provided and will consist of the following:

- Review of the equipment and its abilities and limitations
- A review of acceptable anchor points
- Fall protection inspection procedures
- Review of the procedures for use

Retraining will be provided under the following circumstances:

- Changes in the worksite present a hazard about which an employee has not been trained;
- Changes in the workplace render previous training obsolete;
- Changes in the types of fall protection systems or equipment changes render previous training obsolete; or
- Inadequacies in an employee's knowledge or use of fall protection equipment, fall protection systems, or scaffolding use indicate that the employee has not retained the requisite understanding or skill.

Construction (contractor) Work at Dartmouth College

Requirements

In addition to meeting the requirements above, construction work will be required to meet the requirements in this section. A site-specific written Fall Protection Procedure is required for all jobs where contractors are exposed to falls over six feet and will be using active methods of fall protection.

The Fall Protection Procedure shall be submitted to the appropriate Project Manager for all jobs prior to work commencing. The site-specific plan should be forwarded to EHS for review at least three working days prior to the start of work. The Site-specific plan shall include, at a minimum:

- Name of company, job site, person developing the plan, person approving the plan,
- Identification, by name, of the job site competent person,
- The method to be used to prevent falls at this job site
- Method to ensure compliance with the site-specific plan
- Certification of training for all workers at this job site

Dartmouth College prohibits the use of monitors for roofing work on low slope roofs. Guardrail systems, fall restraint systems, fall arrest systems or safety nets are allowed.

Dartmouth College does allow for other exceptions addressed in OSHA Regulation 29 CFR 1926 Subpart M, such as for Steel Connectors, Leading Edge Work, etc., however, the method to be employed to prevent falls must be specifically addressed in the site-specific fall protection plan.

Except for the prohibition of using a monitor for low slope roofing work, Dartmouth College will not dictate means and methods to achieve 100% fall protection for fall exposure defined above.

Hoist Areas: If 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

Holes: Each employee on a walking/working surface shall be protected from objects falling through holes (including skylights) by covers. All other covers are capable of supporting, without failure, at least twice the weight of employees, equipment, and materials that may be imposed on the cover at any one time. All covers shall be color coded or they shall be marked with the word "HOLE" or "COVER" to provide warning of the hazard

Excavations: Each employee at the edge of an excavation 6 feet or more in depth shall be protected from falling by guardrail systems, fences, or barricades and at less than 6 feet when not readily apparent.

Falling object protection: When an employee is exposed to falling objects, the employee will wear a hard hat and shall implement one of the following measures:

- Erect toeboards, screens, or guardrail systems to prevent objects from falling from higher levels; or,
- Erect a canopy structure and keep potential fall objects far enough from the edge
- Barricade the area to which objects could fall, prohibit employees 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.
- Toeboards must be a minimum of 3 1/2 inches in vertical height from their top edge to the level of the walking/working surface
- If possible, employees working at height shall use tool lanyards to prevent accidental dropping of tools and other equipment from height.
- If tool lanyards are not available, the area under where the work is taking place must be restricted from access to other workers and the public

Guardrails, screens, mesh and safety net systems shall be installed to specifications required by OSHA's Fall Protection Systems Criteria and Practices (29 CFR 1926.502(b)-(c)).

All connectors for fall arrest systems and positioning device systems are drop forged, pressed or formed steel or made of equivalent materials and have a minimum tensile strength of 5,000 pounds. Lanyards and vertical lifelines shall have a minimum breaking strength of 5,000 pounds. Lifelines shall be protected against being cut or abraded.

New Construction

Fall protection should be considered at the design phase of new construction. New construction provides the opportunity to design fall hazards out of building maintenance activities. Some things to consider when designing low sloped roofs are:

- In the design phase for new buildings, identify mechanicals that do not require specific rooftop placement and locate at least 15 feet from the leading edge.
- If mechanicals are required on the rooftop or above occupied levels, design to house critical equipment within rooftop penthouse enclosures.
- If mechanicals are required on the rooftop or above occupied levels and cannot be housed within rooftop (penthouse) enclosures, surround equipment with a conforming parapet wall or standard railing.
- On roofs with mechanicals, rated/fixed anchor point systems may be installed as a supplement to conforming parapet wall or standard railing to provide fall protection for miscellaneous activities (window washing, snow and ice removal, drain cleaning, etc.).
- On roofs without mechanicals, rated/fixed anchor point systems may be installed providing fall protection for miscellaneous activities (window washing, snow and ice removal, drain cleaning, etc.).

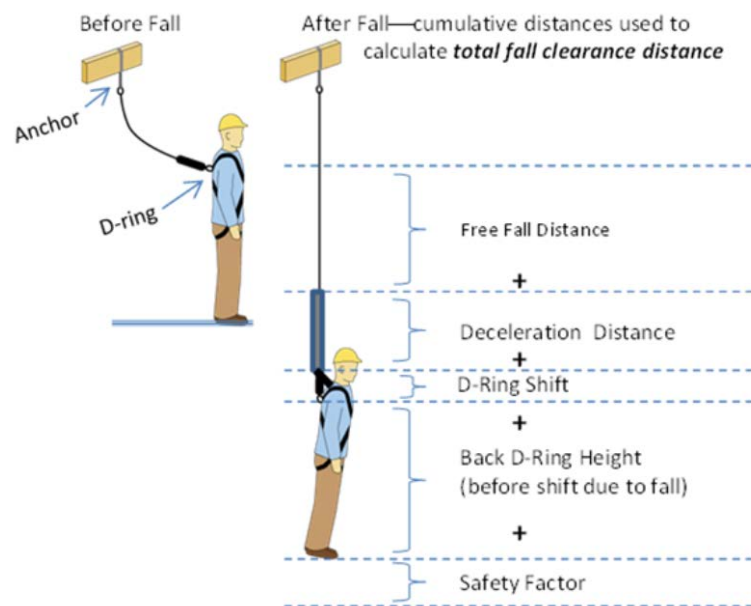
Similarly, fall protection requirements should be considered when specifying air handling equipment. Priority should be given to air handling equipment that do not include a fall exposure.

Appendix A: Fall Distance Clearance

Free fall distances in a PFAS must be limited to the fullest extent possible. OSHA does not allow a free fall greater than 6 feet to help protect against excessive arresting force in the event of a fall.

Considerations for free fall distances include:

Shock Absorbing Lanyards



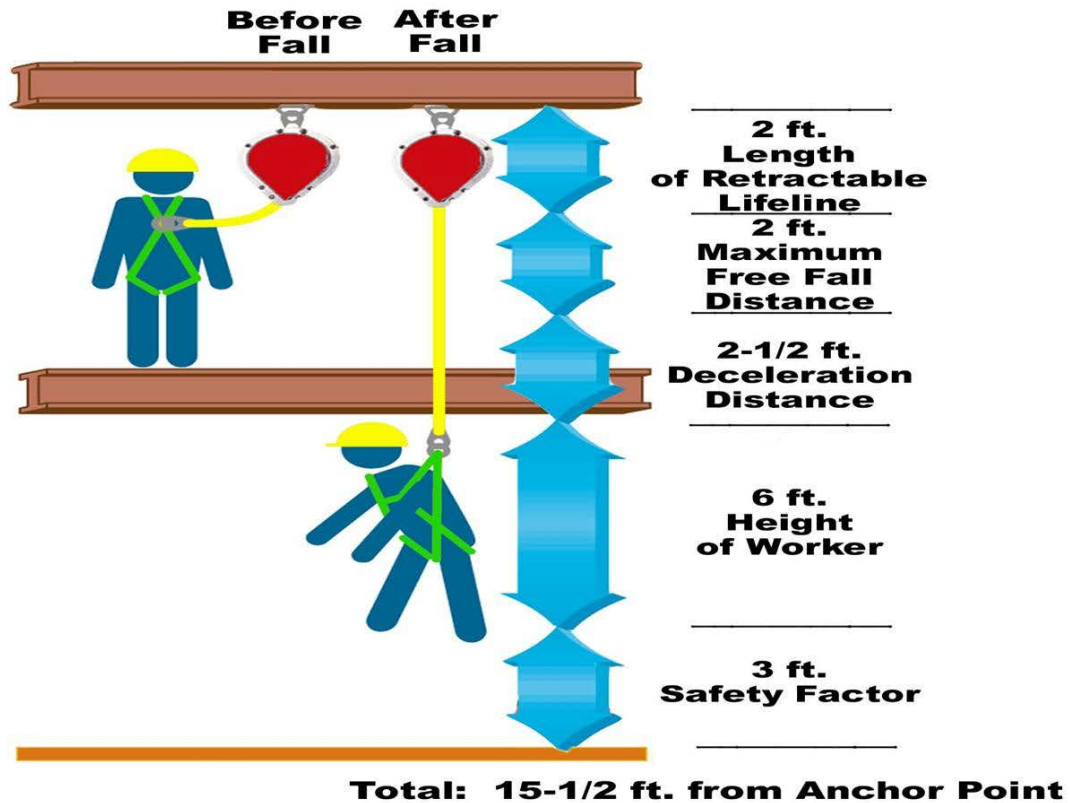
As pictured above, total fall clearance is calculated by adding:

$$\begin{aligned} & \text{Free Fall Distance (distance prior to engaging deceleration device)} \\ & + \\ & \text{Deceleration Device Distance (3.5' constant unless more specific info is available)} \\ & + \\ & \text{D-Ring Shift (1' constant)} \\ & + \\ & \text{Back D-Ring Height (5' constant)} \\ & + \\ & \text{Safety Factor (2' constant)} \\ & \hline & \text{Total Fall Clearance} \end{aligned}$$

Keep in mind that equipment or materials on the ground must be considered.

Retractable Lifelines

Fall Clearance Calculation (for Retractable Lifeline)



Appendix B: Dartmouth College Fall Protection & Rescue Plan

Company (circle Dartmouth if applicable): _____ Dartmouth College

Date:

Department:

Phone:

Email:

Supervisor Name:

Supervisor Email:

Supervisor Phone:

Job Site Competent Person: (check if supervisor)

Competent Person Phone:

Competent Person Email:

Rescue Team Contact Name:

Rescue Team Contact Phone:

Description of the project taking place at heights:

If using Personal Fall Arrest System, you must complete the following:

PFAS User Name:

PFAS User has been trained? (circle one): Yes / No

Pre-Use Personal Fall Arrest System Inspection Completed: Yes / No

Name of the Rescue Team Contact:

Phone Number of the Rescue Team Contact

In the event of a fall:

1. Call the Hanover Fire Department immediately: 911
2. Notify EHS at (603) 646-1762
3. After rescue has been completed, EHS requires that any Dartmouth College employee who has been subject to a fall while wearing a harness undergo medical evaluation.

Appendix C: Pre Use - Personal Fall Restraint/Arrest System Inspection Checklist

Name:

Date:

Equipment:

Equipment Age:

Instructions: Inspect each element listed below to ensure all components are in good working order. Paperwork does not need to be saved but serve as a guide to assist with the inspection process, except in the case that a component fails this inspection. Any component of a fall arrest system that fails this inspection must be noted on this checklist, removed from service, and EHS must be notified.

FULL BODY HARNESS		
Hardware	Accept:	Reject:
D rings, buckles, keepers, back pads. Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion, rust	Notes:	
Webbing	Accept:	Reject:
Inspect for cuts, burns, tears, abrasions, frays, excessive soiling, discoloration	Notes:	
Stitching	Accept:	Reject:
Inspect for pulled or cut stitches	Notes:	
Labels	Accept:	Reject:
Ensure labels are present and legible	Notes:	
Lanyard		
Hardware	Accept:	Reject:
Snap hooks, carabiners, adjusters, keepers, thimbles, and D rings. Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion, proper operation	Notes:	
Webbing	Accept:	Reject:
Inspect for cuts, burns, tears, abrasions, frays, excessive soiling, discoloration	Notes:	
Stitching	Accept:	Reject:
Inspect for pulled or cut stitches	Notes:	
Synthetic Rope	Accept:	Reject:

Inspector for pulled/cut yarns, burns, abrasions, knots, excessive soiling, discoloration	Notes:	
Energy Absorbing Component	Accept:	Reject:
Inspect for elongation tears, excessive soiling	Notes:	
Labels	Accept:	Reject:
Ensure labels are present and legible	Notes:	
Snap Hooks and Carabiners		
Physical Damage	Accept:	Reject:
Inspect for cracks sharp edges, burrs, deformities, and locking operations	Notes:	
Excessive Corrosion	Accept:	Reject:
Inspector for corrosion, which affects the operation and/or strength	Notes:	
Anchorage		
Integrity	Accept:	Reject:
Inspect for signs of damage, corrosion, burrs, and ensure solid attachment to solid surface	Notes:	

Appendix D: Annual - Personal Fall Restraint/Arrest System Inspection Checklist: Harness

Name:

Department:

Title:

Instructions: Inspect the element listed below to ensure all components are in good working order. Any component of a fall arrest system that fails this inspection must be noted on this checklist and immediately removed from service. Records are to be saved for at least three years.

Full Body Harness		
Model:		Manufacture Date:
Serial Number:		Lot Number:
Purchase Date:		
Hardware	Accept:	Reject:
D rings, buckles, keepers, back pads. Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion, rust	Notes:	
Webbing	Accept:	Reject:
Inspect for cuts, burns, tears, abrasions, frays, excessive soiling, discoloration	Notes:	
Stitching	Accept:	Reject:
Inspect for pulled or cut stitches	Notes:	
Labels	Accept:	Reject:
Ensure labels are present and legible	Notes:	

Overall Pass/Fail:

Signature:

Date:

Annual Personal Fall Restraint/Arrest System Component Inspection Checklist: Lanyards

Name:

Department:

Title:

Instructions: Inspect the element listed below to ensure all components are in good working order. Any component of a fall arrest system that fails this inspection must be noted on this checklist and immediately removed from service. Records are to be saved for at least three years.

Lanyard		
Model:	Manufacture Date:	
Serial Number:	Lot Number:	
Purchase Date:		
Hardware	Accept:	Reject:
Snap hooks, carabiners, adjusters, keepers, thimbles, and D rings. Inspect for damage, distortion, sharp edges, burrs, cracks, corrosion, proper operation	Notes:	
Webbing	Accept:	Reject:
Inspect for cuts, burns, tears, abrasions, frays, excessive soiling, discoloration	Notes:	
Stitching	Accept:	Reject:
Inspect for pulled or cut stitches	Notes:	
Synthetic Rope	Accept:	Reject:
Inspector for pulled/cut yarns, burns, abrasions, knots, excessive soiling, discoloration	Notes:	
Energy Absorbing Component	Accept:	Reject:
Inspect for elongation tears, excessive soiling	Notes:	
Labels	Accept:	Reject:
Ensure labels are present and legible	Notes:	

Overall Pass/Fail:

Signature:

Date:

Annual Personal Fall Restraint/Arrest System Component Inspection Checklist: Hooks & Carabiners

Name:

Department:

Title:

Instructions: Inspect the element listed below to ensure all components are in good working order. Any component of a fall arrest system that fails this inspection must be noted on this checklist and immediately removed from service. Records are to be saved for at least three years.

Snap Hooks and Carabiners		
Model:		Manufacture Date:
Serial Number:		Lot Number:
Purchase Date:		
Physical Damage	Accept:	Reject:
Inspect for cracks sharp edges, burrs, deformities, and locking operations	Notes:	
Excessive Corrosion	Accept:	Reject:
Inspector for corrosion, which affects the operation and/or strength	Notes:	

Overall Pass/Fail:

Signature:

Date:

Annual Personal Fall Restraint/Arrest System Component Inspection Checklist: Anchorages

Name:

Department:

Title:

Instructions: Inspect the element listed below to ensure all components are in good working order. Any component of a fall arrest system that fails this inspection must be noted on this checklist and immediately removed from service. Records are to be saved for at least three years.

Anchorage		
Model:		Manufacture Date:
Serial Number:		Lot Number:
Purchase Date:		
Physical Damage	Accept:	Reject:
Inspect for cracks sharp edges, burrs, deformities, and locking operations	Notes:	
Excessive Corrosion	Accept:	Reject:
Inspector for corrosion, which affects the operation and/or strength	Notes:	

Overall Pass/Fail:

Signature:

Date:

Annual Personal Fall Restraint/Arrest System Component Inspection Checklist: Lifelines

Name:

Department:

Title:

Instructions: Inspect the element listed below to ensure all components are in good working order. Any component of a fall arrest system that fails this inspection must be noted on this checklist and immediately removed from service. Records are to be saved for at least three years.

Self-Retracting Lifeline		
Model:		Manufacture Date:
Serial Number:		Lot Number:
Purchase Date:		
Impact Indicator	Accept:	Reject:
Inspect for activation (rupture of red stitching, elongated indicator etc.)	Notes:	
Screws/Fasteners	Accept:	Reject:
Inspect for damage and ensure all screws and fasteners are tight	Notes:	
Housing	Accept:	Reject:
Inspect for distortion, cracks and other damage. Inspect anchoring loop for distortion and damage	Notes:	
Lifeline	Accept:	Reject:
Inspect for cuts, burns, tears, abrasion, frays, excessive soiling and discoloration, broken wires	Notes:	
Locking Action	Accept:	Reject:
Inspect for proper lock-up of brake mechanism	Notes:	
Retraction/extension	Accept:	Reject:
Inspect spring tension by pulling lifeline out fully and allowing it to retract fully	Notes:	
Hooks/carabiners	Accept:	Reject:
Inspect for physical damage, corrosion, proper operation and markings	Notes:	
Reserve Lifeline	Accept:	Reject:
Inspect retention systems for deployment	Notes:	

Labels	Accept:	Reject:
Ensure labels are secure and legible	Notes:	

Overall Pass/Fail:

Signature:

Date:

Appendix E: Ladder Safety System Example

A ladder safety system is a system designed to eliminate or reduce the possibility of falling from a ladder. A ladder safety system usually consists of a carrier, safety sleeve, lanyard, connectors, and body harness. Cages and wells are not ladder safety systems.

