



## Course Goal

To develop an expanded understanding of fall protection safety systems as they apply to the general work environment. The scope of this knowledge includes the proper care, selection and personal use of these systems, and the provision of planning and guidance to others, under one's supervision, who are using these systems in accordance with the EM385 fall protection standard.

## Course Assessments

Students will need to meet the following objectives to earn a certificate of completion in this course. Should a student miss one or more objectives, they may need to re-take the course in its entirety before being eligible to receive a certificate.

1. Complete all challenge questions and workbook exercises.
2. Participate in the following workshops:
  - Workshop #1 – Anchor Points
  - Workshop #2 – Full Body Harnesses
  - Workshop #3 – Connector Compatibility
  - Workshop #4 – Vertical Systems
  - Workshop #5 – Horizontal Systems
  - Workshop #6 – Climbing and Positioning
  - Workshop #7 – Descent and Rescue
  - Workshop #8 – Equipment Inspections
  - Workshop #9 – System Analysis
  - Workshop #10 – EM385 Fall Protection Standard
  - Workshop #11 – Fall Protection Planning
3. Achieve a minimum of 70% on the closed book written test.

## Learning Objectives

### Working At Height

1. Appreciate the evolution and present state of fall protection.
2. Understand the importance of identifying fall hazards as they appear in the workplace.
3. Respect the gravity of working at any height.
4. Comprehend the frequency of fall accidents in the workplace.
5. Understand the dynamics of a fall event.

### Fall Protection Oversight

1. Identify the applicable fall protection regulations.
2. Understand the purpose of consensus groups and the guidance they provide for fall safety.
3. Appreciate the role that safety associations and organizations play establishing best practices for fall protection.
4. Comprehend the key elements and purpose of a company specific fall protection program.
5. Learn the importance of conducting due diligence.



#### Systems and Planning

1. Discover the meaning of fall protection systems.
2. Comprehend the proper order of selection of a fall protection system.
3. Understand the concept of eliminating the fall hazard.
4. Understand requirements for the passive systems identified.
5. Understand requirements for the restraint systems identified.
6. Understand requirements for the arrest systems identified.
7. Understand requirements for the administrative controls identified.
8. Learn the purpose and contents of a fall protection plan.
9. Comprehend the components and purpose of a fall hazard survey.

#### Anchor Points

1. Comprehend the definition and anatomy of an anchor point.
2. Understand the parameters of certified and non-certified anchorages.
3. Appreciate and identify the applicable anchorage strength requirements.
4. Understand selection and usage principles of common anchorage connector equipment.
5. Demonstrate an ability to properly assess anchor points.

#### Body Support

1. Identify the accepted body supports for personal fall protection systems.
2. Understand the working specifications and parameters for body belts.
3. Understand the working specifications and parameters for full body harnesses.
4. Discover standard harness considerations when selecting a full body harness.
5. Learn about the harness attachment point designs for various applications.
6. Properly don a full body harness and perform a partner check.
7. Demonstrate an ability to detect harness donning errors and provide the necessary corrections.

#### Connectors

1. Discover a variety of connecting devices.
2. Understand the basic purpose, design, and specifications of snap hooks and carabiners.
3. Understand the essential purpose, design, and specifications of lanyards.
4. Comprehend and calculate free fall distances in basic applications.
5. Understand the essential purpose, design, and specifications of energy absorbers.
6. Comprehend and calculate standard clearance requirements.
7. Understand the essential purpose, design, and specifications of self-retracting lifelines (SRL).
8. Understand the essential purpose, design, and specifications of vertical lifelines and fall arresters (VLL).
9. Understand the essential purpose, design, and specifications of horizontal lifelines (HLL).
10. Demonstrate an ability to properly install, assess, and use both vertical and horizontal systems discovered in this section.

#### Descent and Rescue

1. Identify the importance of the rescue component.
2. Understand the rescue requirements when using a personal fall protection system.
3. Comprehend the hazard and mitigation of suspension trauma.
4. Understand the purpose and contents of a rescue plan.
5. Gain awareness of basic rescue equipment and techniques.
6. Identify common post-fall protocols.



#### Equipment Care

1. Discover general equipment care principles.
2. Understand end-user equipment inspection requirements.
3. Comprehend fundamental maintenance principles.
4. Comprehend fundamental storage principles.

#### Work Applications

1. Identify possible specific regulatory requirements.
2. Identify considerations for fall protection systems for the construction and industrial sector.
3. Identify considerations for fall protection systems for the utilities and communications sector.
4. Identify considerations for fall protection systems for the transportation, energy, and mining sector.
5. Comprehend a basic overview of dropped object safety.
6. Complete a system analysis of a personal fall arrest system.

#### Engineering Manual 385

1. Discover the oversight group responsible for the program.
2. Gain an overview of the components of the written program.
3. Name key roles noted within the program.
4. Identify essential documents required by the program.
5. Identify the technical standards addressed within the program.
6. Review the fall protection technical standard for this program.

#### Fall Protection FAQs

1. Discover various fall protection resources.
2. Identify additional considerations for selecting a harness to purchase.
3. Comprehend capacity rating options for equipment.
4. Understand additional requirements for energy absorbers labeling.
5. Learn about the various classes of self-retracting devices.
6. Identify periodic inspections timelines for self-retracting devices.
7. Comprehend the definition and hazards associated with leading edges.
8. Identify a general time frame for the provision of prompt rescue.
9. Learn how to conduct a general assessment of a rescue plan.

#### Fall Protection Planning

1. Understand the process of planning for a personal fall protection system.
2. Develop a plan for protecting workers in a work-at-height scenario.