

1. Project Context

Short e-learning compliance training on ladder safety for all construction employees. Program completion and evaluation tracking through LMS. On site evaluation assessed by managers and tracked in LMS.

2. Project Requirements

Cost - \$500.00

Timelines – 1 week

3. Learning Requirements

Information about the audience:

Audience profile: On the line construction workers ages 18-70. Includes both new and experienced employees. Prefer hands-on style of training.

Learning environment: At main construction center (new hires) or during designated times on site

4. Course Objectives

By the end of this training, learners will be able to:

1. Check all safety measures before using the ladder
2. Set up the ladder correctly
3. Climb and use the ladder safely

Performance goals:

Learners will demonstrate 100% accuracy on all assessments by the end of the course.

5. Instructional Strategy

Experiential, learner centered – some learners will know this information

Interactive as much as possible

6. Assessment Strategy

Purpose: to demonstrate skill acquisition

Frequency: several times throughout the program

Formative: open-ended, interactive

Summative: Learners will assess pictures and or videos of on-the-job workers for mistakes with ladders with focus on open-ended questions

Learners will explain the ladder safety process through a self-recording and on-screen, moveable items

Reflection/Evaluation:

Have they learned anything new?

How will they use what they learned on the job?

How comfortable teaching someone?

How comfortable correcting someone?

What did they like the most about training?

Ideas for improvement?

7. Course Format Or Structure

Detailed Content Outline: see below

No. of modules - 4

No. of slides in each module – no idea yet

Content strategy at each level.

8. Development Tools

Authoring tools used – Rise 360

Other tools -

9. Project Sign Off Sheet

Taking concurrence from all key players.

Content outline

Part 1: Prior knowledge – What do you know about tool safety? Why is tool safety important?

- Basic tool safety – use the right tool for the right job, don't use broken or damaged tools, wear the correct safety gear, use tools correctly, carry tools securely, be aware of surroundings, put tools away

(Ladders are tools. Many of the basic safety rules that apply to most tools also apply to the safe use of a ladder)

- **1a. Objectives - How do ladders pose safety dangers for you and others you work with?**

Part 2: Preparation – Why do people fall off ladders on the job? How could a fall from a ladder affect you?

- Self-check: If you feel tired or dizzy, or are prone to losing your balance, stay off the ladder.
 - Wear clean slip-resistant shoes with heavy soles
 - Why? Don't slip, avoid foot fatigue, good traction
 - Use toelines, a tool belt, or an assistant to hold materials
 - Why? to free your hands when climbing
- Environmental check: Do not use ladders in high winds or storms.
- Equipment check: Before using a ladder, inspect it to confirm it is in good working condition.
 - The ladder you select must be the right size for the job.
- Duty Rating: the ladder load capacity must be greater than the total weight of the climber, tools, supplies, and other objects placed upon the ladder.
 - The length of the ladder must be sufficient so that the climber does not have to stand on the top rung or step for work purposes
 - There is no correlation between the ladder length and weight capacity. So do not assume that a ladder with longer reach has a higher weight capacity.

(Factors contributing to falls from ladders include haste, sudden movement, lack of attention, the condition of the ladder (worn or damaged), the user's age or physical condition, or both, and the user's footwear.)

Part 3: Ladder set up – What should you do to set up a ladder?

- The ladder must be placed on firm level ground and without any type of slippery condition present at either the base or top support points.
 - Ladders must not be placed in front of closed doors that can open toward the ladder. The door must be blocked open, locked, or guarded.
 - Read the safety information labels on the ladder.
 - The on-product safety information is specific to the type of ladder on which it appears. You are not considered qualified to use the ladder until you are familiar with this information.
- Only one person at a time is permitted on a ladder unless the ladder is specifically designed for more than one climber (such as a Trestle Ladder).

Part 4: Climbing the ladder – What do you think is important to know about climbing a ladder?

- Stability and grip are key
 - Why? Decrease chance of slipping and falling
- Climb slowly, deliberately and avoid sudden movement
- 3 Points-of-Contact: face the ladder, keep your stomach between the middle side rails
 - Keep 2 hands and 1 foot, or 2 feet and 1 hand in contact with the ladder steps, rungs and/or side rails at all times while climbing the ladder
 - Keep a firm grip on the ladder - do not hand-carry any objects that can interfere with grip
 - Do not overreach or over-lean while working so that you don't fall off or pull the ladder sideways

(In this way, the climber is not likely to become unstable in the event one limb slips during the climb)

- Only move ladders when you are completely off of it

Citation:

<https://www.americanladderinstitute.org/page/BasicLadderSafety>

https://www.osha.gov/sites/default/files/publications/portable_ladder_qc.pdf