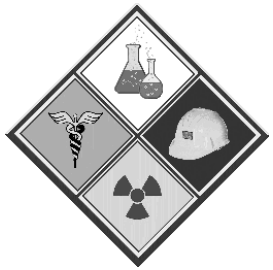
What services does EHS&EM provide for this Program?

- Monitors the overall effectiveness of the program
- Provides awareness training
- Conducts material inspections
- Assists with developing work practices

Who may I contact to find out more?

You may contact the Environmental, Health Safety & Emergency Management Office at (434) 395-2940, or on our website at http://www.longwood.edu/safety/index.html.



E N V I R O N M E N T A L
H E A L T H S A F E T Y A N D
S E R V I C E S

Environmental, Health Safety & Emergency Management Office
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Farmville, VA 23901

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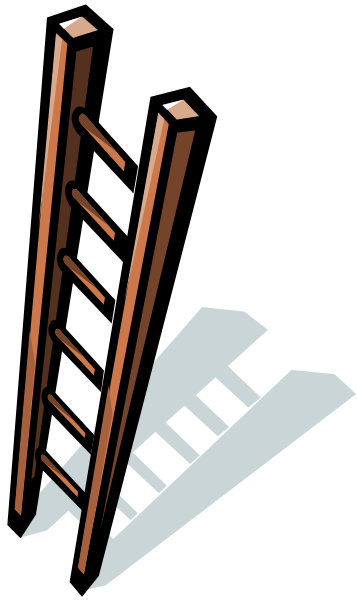
Safe Ladder Practices



What are the hazards?

Ladders are a simple and common tool used in most workplaces; however, they do pose a hazard if used inappropriately or incorrectly. There are over 24,000 injuries each year in construction-type activities related to falls from stairways and/or ladders. Of those injuries, more than 11,000 result in lost days of work, and believe it or not, about 36 of them are fatalities!

Common types of minor injuries from falls from ladders include:

⇒ fractures
⇒ sprains and strains
⇒ cuts and punctures

What are the design requirements for portable, self-supporting ladders?

Ladders must be capable of supporting at least 4 times the maximum intended load, except for extra-heavy-duty type 1A metal or plastic ladders, which are only required to sustain at least 3.3 times the maximum intended load. Always purchase and use ladders that are rated for at least "heavy-duty" use.

Ladder rungs, cleats, and steps must be parallel, level, and uniformly spaced when the ladder is in position for use. They may not be spaced less than 10" apart, nor more than 14" apart, as measured between center lines on rungs/cleats/steps.

Ladder components must be smooth-surfaced to prevent punctures, lacerations, or snagging of clothing.

Wooden ladders cannot be covered with any type of opaque covering, such as paint, except for the identification or warning labels which may be placed on one face only of a side rail.

What are the requirements for safe ladder use?

1. Ladders may be used only on stable and level surfaces, unless secured to prevent accidental displacement or movement.
2. Ladders may not be used on slippery surfaces, such as wet concrete floors or muddy ground, unless they are secured or slip-resistant feet are used which provide adequate protection.
3. Ladders should not be placed in any location where they can be displaced or bumped into by workplace activities or traffic, such as passageways, doorways, or driveways. Secure the ladder to prevent accidents, or barricade the area to keep activities and traffic away from the ladder.
4. The access area around the top and bottom of the ladder must be kept clear of scrap materials and debris.
5. When ladders are used to access an upper landing surface, ex. a roof, the ladder side rails must extend at least 3' above the upper landing surface to provide adequate handholds.
6. Ladders must be maintained free from of oil, grease, and other slippery materials.
7. Ladders may not be loaded beyond the maximum intended load for which they were built, nor beyond their manufacturer's rated capacity. Estimate 250 pounds per person, plus any tools, equipment, and materials which will be in use while on the ladder.
8. Ladders may only be used for the purpose, and in the manner, for which they were designed. For example, most ladders are not designed to be used in a horizontal position as a walkboard or platform.
9. When climbing up or down the ladder, always face the ladder and maintain at least 3 points of contact (2 hands/1 foot or 2 feet/1 hand). In other words, pull tools and materials up with a rope or have them handed up to you, rather than carrying them up the ladder.
10. Do not stand on the top 2 rungs of stepladders. The stability is decreased when the weight is concentrated at the top of the ladder. If you need a taller or longer ladder to perform the job safely, make arrangements to borrow one or have one available before you begin your task.
11. Extension ladders should be placed at a proper climbing angle. Use a 4:1 ratio for setting ladders, or for every 4' in height of the ladder, move the bottom of the ladder out from the wall or structure 1 foot. For example, a 20' ladder will be placed 5' from the base of the wall you will be accessing.
12. Metal ladders should never be used near electrical equipment—fiberglass is recommended.
13. Ladders may not be altered or spliced in any manner.
14. Ladders may not be moved, shifted, or extend while you are on the ladder. Climb down, make the adjustment, and climb back up!

How do I perform a ladder inspection?

Ladders should be inspected by a Competent Person on a periodic basis, and after any occurrence that could affect their safe use.

If they are found defective, they must be marked or tagged as "Do Not Use", and must be withdrawn from service until properly repaired or replaced.

Examples of defects include, but are not limited to:

- structural defects (bent or missing frame)
- broken or missing rungs/cleats/steps
- broken or split rails
- corroded components
- excessive rust
- any other faulty or defective component, such as