



Worksite: _____ Instructor: _____ Date/Time: _____

TOPIC C450: LADDERS (EXTENSION)

Introduction: Extension ladders are used for reaching heights that can't be reached by other ladders. However, the unsafe use of extension ladders can cause serious injuries. Each year thousands of workers are seriously injured when they fall from ladders. Follow these guidelines for the safe use of extension ladders.

- Make sure the slip-resistant D-rungs are clean. Remove all debris that's attached itself to the ribbing. Wipe off any oils, dirt or accumulated materials that have attached themselves to the D-rung daily
- Check the guides on the bottom of the fly section to make sure they securely interlock the rails. There's a rail on each side of the ladder, make sure they interlock simultaneously
- Inspect the gravity spring locks that keep the fly section locked into place. Look for cracks or damage
- Check the extended pulley and rope system. Make sure the pulley is clean of debris. Check the rope for frays, loose strands and any materials that may have become attached to the rope. Replace immediately if damaged
- Make sure the rope clamp that ties the rope to the rung is secure and free of debris. Replace clamp if damaged
- Inspect the rail shield and shoe bracket for damage. The shield and shoe brackets protect the rails and must be in good condition
- The ladders shoe that keeps the ladder in position should be cleaned daily. After each movement of the ladder, make sure each shoe is in place with the slip-resistant pad and spur plate parallel to the ground or work surface. Cord-face ladder shoes are recommended for wet surfaces, rubber or neoprene ladder shoes for smooth dry floor surfaces and steel spikes for ice and snow
- Position the ladder securely, and tie it off to prevent it from slipping

Note: OSHA specifies that extension ladders can't be over 60 feet in length. Install positive stops on individual ladder sections to make sure they meet the required overlap. For ladders up 36 feet, the overlap should be at least 3 feet. If the ladder is between 36 feet and 48 feet, the overlap should be at least 4 feet. For ladders over 48 feet up to 60 feet, the overlap should be at least 5 feet. An overlapping section must be at least 10% of the working length of the ladder.

- Angle the ladder properly. The base should extend at least one-fourth of the ladders length. The minimum slope should be 50 degrees. For example, if the ladder extends up 20 feet, it should extend out 5 feet
- Protect the base of a tall occupied ladder if it could be struck by vehicles or pedestrians
- Never place a ladder in front of an unlocked, unguarded door
- Never place a ladder on boxes, tables, or other moveable objects
- To secure a ladder, nail or lash the ladder in place if it will be used repeatedly in the same spot
- Ascending and descending - Face the ladder at all times. Grasp the side rails with both hands
- Attach light, compact tools to the ladder or to yourself. Always observe the 3 point rule when ascending or descending a ladder
- Never over-reach while working from a ladder. Work with your body inside the ladders side rails. Move the ladder as needed to stay close to your work
- Make sure only one person stands on, or works from the ladder
- Don't use metal ladders around electrical equipment and near power lines
- Remove defective ladders from service

Conclusion: OSHA regulations require that workers who use ladders must be taught to recognize hazards relating to ladder use. Make sure you understand the proper construction, appropriate selection, load limits, placement, care, and other restrictions in ladder handling. All workers must be retrained as necessary to maintain their understanding of safe ladder practices. Follow these guidelines for safe ladder use.

Employee Attendance: (Names or signatures of personnel who are attending this meeting)

These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.