Designing safe mobile equipment access areas

Click on the highlighted areas to learn more.
Ensure ladders meet or exceed standards

- Maintain even rung spacing from the ground level to the cab.
- Be sure that rungs are flat and deep enough to place the foot comfortably.
- Avoid using circular bars or rods as rungs when possible.
- Choose rungs with small openings on the tread so contaminants cannot accumulate.
- Add non-slip coatings or grooves on the rungs to increase grip.
- Ensure handholds run the entire length of the ladder.

Did you know?

- Flexible-railed bottom rungs on mobile equipment can be especially hazardous.
- Getting off mobile equipment is more dangerous than getting on.
Provide an access platform with stairs

- Construct and use access platforms with stairs and guardrails that allow operators to enter and exit the cab directly.
- Eliminate the use of vertical ladders for access to mobile equipment when possible.

Did you know?
- Most ingress and egress injuries on front-end loaders occur on equipment with vertical ladders.
Provide adequate and appropriate lighting

- Ensure the lighting is uniform across the parking area.
- Space lights so adjacent beams overlap in order to avoid dark pockets.
- Regularly check light levels in parking areas using a lux/light meter to ensure they are between 2-4 foot-candles or 22-43 lux.
- Paint the stairs, ladder, and platform in a color that has a high contrast to the contaminant to make it easier to detect the contaminant.

*Did you know?*

- Insufficient lighting around mobile equipment can make it hard to detect hazardous ground or ladder conditions.
Provide a designated parking area for mobile equipment

- Keep parking areas free from hazardous ground conditions like ruts, rocks, hoses, and ice.
- Provide designated walkways with clearly marked crosswalks to parking areas.

*Did you know?*

- Injuries when accessing equipment are often due to ruts, grooves, rocks, hoses, pipes, pallets, crib blocks, and slippery surfaces like ice, snow, or mud in the parking area.
Provide cleaning stations with housekeeping supplies in parking areas

- Provide housekeeping supplies at a designated and marked location in the parking area to allow workers to remove contaminants from the equipment.

- Typical housekeeping supplies include:
  - Shovels
  - Brooms
  - Brushes
  - Ice scrapers
  - Salt or sand
  - Paper towels
  - Window cleaner
Provide boot cleaning stations close to the mobile equipment

• Provide boot brushes and boot cleaning stations on the ground near mobile equipment to help workers remove any contaminants from boots prior to getting on equipment.

• Provide boot cleaning stations at entrances to buildings and sheds.

Did you know?

• Muddy boots and hurrying are some of the contributing factors to slips when getting onto or off of front-end loaders.
Conduct a pre-shift and scheduled inspection

- Include ladders, stairs, handholds, and platforms in inspections.
- During pre-shift inspections, look for loose, damaged, or broken components and contaminants.
- During regularly scheduled inspections, look for potential failures like cracks and loose, damaged, or broken components like rungs and doors that allow excessive or unexpected movement.
- Use a checklist to help ensure no items are overlooked.
Ensure the mine has a policy for safe operating procedures

- Discourage jumping off of equipment
- Always use three points of contact
  - Provide backpacks, shoulder straps, or a pulley system to carry tools, equipment, lunch bags, and water bottles onto and off equipment.
- Always use fall protection when working at heights
  - Provide adequate, labelled tie-off points and encourage the use of a personal fall arrest system.
  - Encourage fall protection use especially when performing maintenance, window cleaning, and other work at heights around mobile equipment.
- Encourage the use of the “buddy system” when loading large items
  - Have one person at ground level and one person on the equipment to transport large items onto and off the equipment.
- Periodically remind people who access mobile equipment of best practices and risks associated with ingress and egress