

MAFES Dawg Tracks

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MISSISSIPPI STATE UNIVERSITY™
MS AGRICULTURAL AND
FORESTRY EXPERIMENT STATION

Don't Fall

When you are a child jumping and rolling around is a daily activity. However, the older we get the less fun that sounds. We come to understand that, "It's not the fall that kills you. It's the landing."

To prevent from being injured from falls and avoid the likely bad landing, precautions need to be taken whenever there are elevated surfaces over 4 feet in general workplaces or over 6 feet high in construction...

- ✓ Guard every floor hole or wall opening into which a worker can accidentally walk (use a railing and toe-board or a **floor hole cover**).
- ✓ Provide a **guard rail and toe-board** around every elevated open sided platform, floor or runway.
- ✓ Regardless of height, if a worker can fall into or onto dangerous machines or equipment (such as a vat of acid or a conveyor belt) employers must provide guardrails and toe-boards to prevent workers from falling and getting injured.

Other means of fall protection that may be required on certain jobs include safety harnesses and lines, **safety nets, stair railings and hand rails**.

A common solution to fall protection is a **personal fall arrest system**. Like a chain, if the end user selects an incorrect component of this personal fall arrest system, or there is an incompatible connection, the link fails and the chain breaks. End users need to be trained so that they understand the limitations of their equipment and how to select the correct equipment for the task with which they're involved. If there is a task where you need a personal fall arrest system, having the correct and compatible components is critical so please ask for guidance before making these purchases.

3 Components to a Personal Fall Arrest System:

1. **Anchor** – A secure point of attachment for equipment such as lifelines, lanyards, or deceleration devices.
 - Capable of supporting at least 5,000 pounds for each employee attached.
 - Can be permanent or temporary depending on their location and how often or duration of work being done at the location.
 - Must be high enough for a worker to avoid contact with a lower level should a fall occur.
 - The anchorage connector should be positioned to avoid a "swing fall."
2. **Connecting Device** – The critical link which joins the body wear to the anchor (Ex: shock-absorbing lanyard, fall limiter, self-retracting lifeline, rope grab, etc.)
 - Potential fall distance must be calculated to determine type of connecting device to be used. Typically, under 18-1/2 ft., always use a self-retracting lifeline/fall limiter; over 18-1/2 ft., use a shock-absorbing lanyard or self-retracting lifeline/fall limiter.
 - Shock-absorbing lanyards can expand up to 3-1/2 ft. when arresting a fall; attach lanyards to the harness back D-ring only; never tie a knot in any web lanyard – it reduces the strength by 50%.
3. **Harness** – Straps that secure about the employee in a manner to distribute the fall arrest forces over at least the thighs, pelvis, waist, chest, and shoulders, with a means for attaching the harness to other components of a personal fall protection system.
 - Must be worn with the attachment point of the body harness located in the center of the employee's back near shoulder level.

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Sources:
<https://www.osha.gov/SLTC/fallprotection/>
<https://simplifiedsafety.com/blog/three-components-of-a-personal-fall-arrest-system>
https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDAR&p_id=1291