

ABC's of Fall Protection



Training Objective

- After the lecture, attendees will be able to identify fall arrest equipment by understanding the ABC principle to a satisfactory level.

What is fall protection?

- Fall protection is the backup system planned for a worker who could lose his or her balance at a height, in order to control or eliminate injury potential.
- Fall protection must be provided when workers are at:
 - 4 feet – general industry
 - 6 feet – construction

Why is fall protection important?

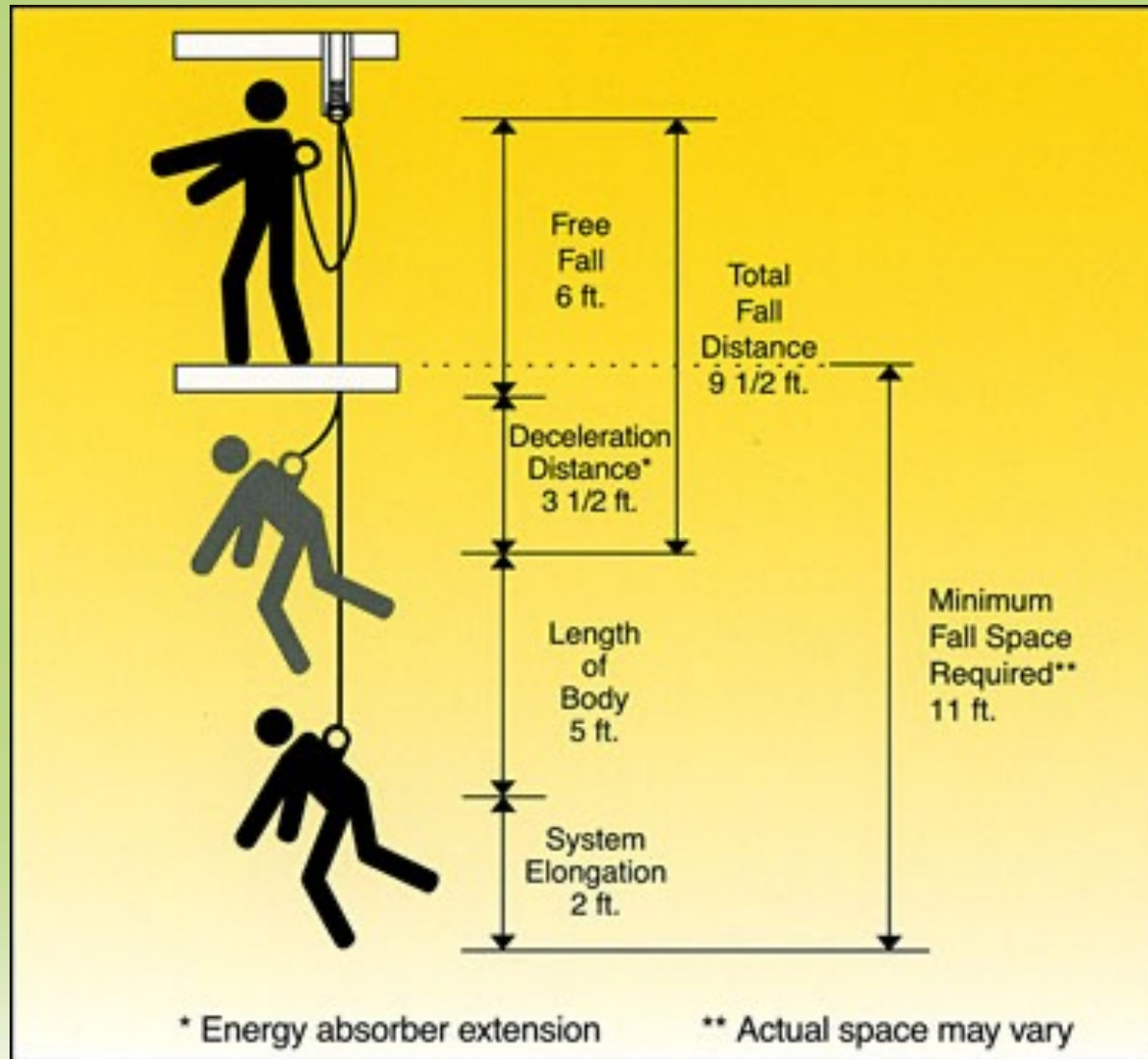
- Falls from heights can cause serious injury or death to workers.
- DOL lists falls as one of the leading causes of traumatic occupational deaths.
- 206 reasons!



When Stopping A Fall

- Fall arrest system must-
 - Limit max force on an employee to 1,800 pounds when used with a body harness.
 - Be rigged so that an employee cannot free fall more than 6 feet.
 - Bring an employee to a complete stop and limit the employee's max deceleration distance to 3.5 feet.

Fall Distance



ABC's of Fall Protection

- A = Anchorage
- B = Body Harness
- C = Connecting Device



A = Anchorage Point

- Also known as the tie-off point, this is the point of attachment for the lanyard or lifeline.
- Anchor must support 5,000 lbs of pressure or twice the expected load.
- Anchor points can be permanent, others are removed once the work is completed.

A = Anchorage Point



I-Beam Adjustable Strap



Roof Tie-Off



Permanent Roof-top

B = Body Harness

- Body harness is the combination of straps that distribute the force of the fall over the chest, thighs, waist, pelvis and shoulders.
- Harnesses have buckles and adjustable straps for proper fitting. Some are sized while others are universal.
- Connecting D-ring should be located right between the shoulder blades.

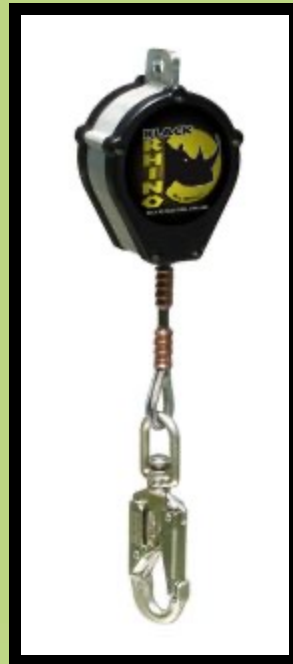
B = Body Harness



C = Connecting Device

- Connecting devices link the body harness to the anchor point.
- Lanyards, retractable lifelines and shock-absorbing lifelines are different types of connecting devices.

C = Connecting Device



It's a System

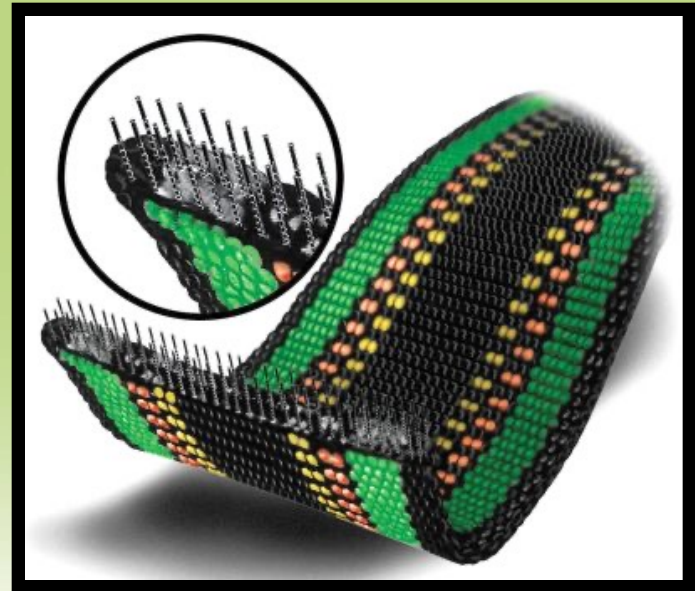
- Individually these components will not provide protection from a fall.
- However, when used properly and in conjunction with each other they form a personal fall protection system that becomes a vital part of your safety.

Equipment Do's and Don'ts

- Do inspect for wear and damage before use.
- Do remove from service after a fall for inspection.
- Don't use to lift materials.
- Don't attach to guardrails or hoists.

Webbing

- Webbing are the ropes and straps used in lifelines, lanyards, and strength components of body harnesses. The webbing must be made of synthetic fibers.



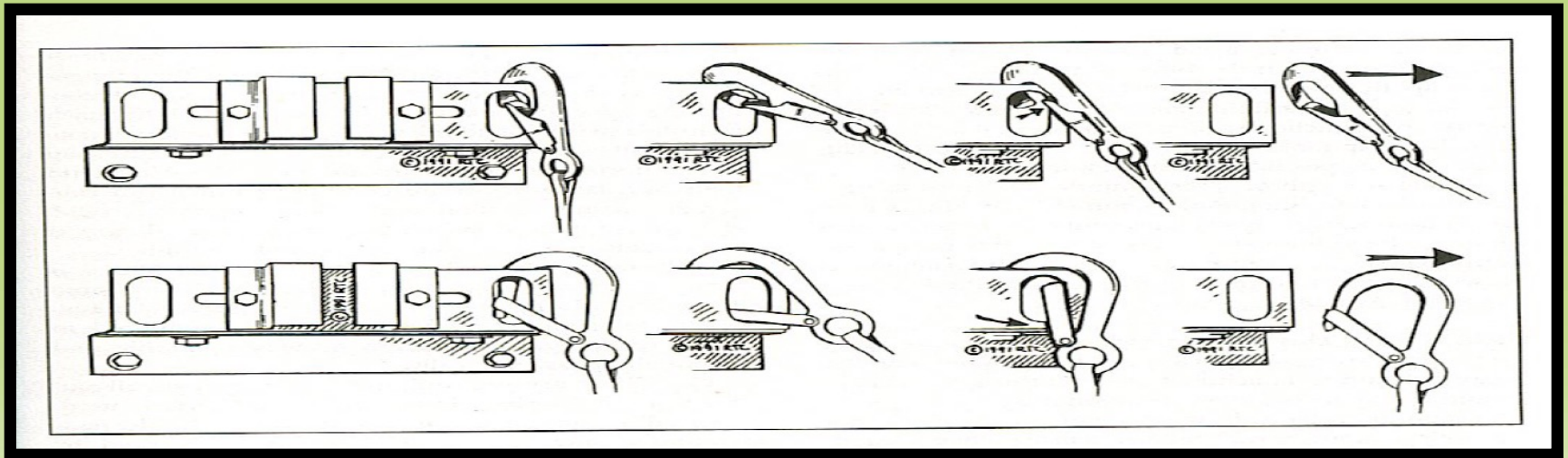
Snaphooks

- Snaphooks must have a minimum tensile strength of 5,000 pounds, and be proof-tested to a minimum tensile load of 3,600 pounds without cracking, breaking, or becoming permanently deformed.



Rollout

- Rollout occurs when the snaphook disengages from the anchor point.



Fall Protection Rescue

- The hierarchy of fall protection rescue is simple:
 - self-rescue by the worker who has fallen,
 - assisted rescue by co-workers, and, if all else fails,
 - calling in professional rescuers, Murray Fire Department.

Good or Bad Fall Protection?



A?

B?

C?

Good or Bad Fall Protection?



A?

B?

C?

Good or Bad Fall Protection?



A?

B?

C?

Review

- Defined fall protection
- Discussed importance of fall protection
- Identified ABC's
 - Anchorage
 - Body Harness
 - Connecting Device
- System works together
- Identified good and bad examples



"You weren't listening. I said, 'Don't fall.'"