## Introduction:

## Why are we talking about fall restraint or arrest systems?

Today, we will start the tailgate training by showing a video about Hans Petersen. Hans was a junior solar installer, who died after he fell 45 feet off the roof of a three-story apartment building. After the video we will talk about why Hans fell. We will discuss what our fall hazards are on this jobsite and how the use of personal fall protection equipment will prevent such falls.

Falls are the leading cause of construction worker injury and death.
Have you or someone you know ever had a serious fall? Can you tell us about it?

Show Video: CDPH/FACE: Preventing Falls in the Solar Industry (5-6 min)

## QUESTIONS TO ASK THE CREW AFTER SHOWING THE VIDEO:

1. In the video, Hans is on the roof checking the alignment of mounting rails without wearing any personal fall protection equipment. How often do you see workers on roofs without fall protection?
2. While Hans was walking backwards, what are the main reasons he fell off the roof?
3. Have you or someone you know ever had a serious fall? Can you tell us about it?

Let's talk about fall restraint or fall arrest systems on this jobsite:
4. What's the difference between a fall restraint and a fall arrest system?
5. What's our company's fall protection rescue plan? What's not a rescue plan?
6. Have a worker demonstrate putting on and wearing the fall protection gear. Have the crew ask questions and provide suggestions while this is happening.

## Key training points (taught best through demonstration)

## General

Fall protection is required at $71 / 2$ feet. Trigger heights vary with some tasks (see Pocket Guide).$\square$ Workers must be tied off to the basket when working in aerial devices.
$\square$ Fall protection equipment should be inspected daily and twice a year by a competent person.3 basic components of a personal fall protection system: 1) Anchor point; 2) Harness or (body belt for fall restraint or positioning); 3) Connector (lanyard).
$\square$ Connecting D-ring of the harness must be located between the shoulder blades.

## Fall restraint

Rigged so there is no free fall over the edge. Worker can only reach the edge of working level.Anchorage points shall be capable of supporting 4 times the intended load.Body belts or harnesses may be used for personal fall restraint.Lanyards must be secured to a structural member or rigged lines.Rigged to allow the movement of employees only as far as the sides of the working level.For horizontal movement, the rigging allows the attached lanyard to slide along with worker.
## Fall arrest

A full body harness is required. Body belts cannot be used.The anchor point (tie-off point) must support 5000 pounds per worker.$\square$ Allow a maximum free fall distance of 6 feet so an employee will not contact any lower level.
$\square$ If rope grabs are used they must be continually re-adjusted so free fall is not more than 6 feet.A retractable lifeline or shock-absorbing lanyard and its connectors are used to link a full-body harness to the anchor. Never hook lanyards together.

## Rescue

$\square$ There must be a fall protection rescue plan for each job site. (911 is not a rescue plan).Rescue plan should be designed to raise or lower the worker to safety.
$\square$ All workers must be trained on what to do if they fall and or witness another worker fall.

## AFTER THE TRAINING, EMPLOYER ACTIONS TO TAKE:

Example: Make sure the crew has received training by a competent person on fall protection being used on this job.
1.
2.

## AFTER THE TRAINING, SAFE WORK PRACTICES THAT WORKERS CAN DO:

Example: Adjust your body harness throughout the day to keep the D ring between your shoulder blades.
1.
2.

