

Scaffold Guardrails

Bad

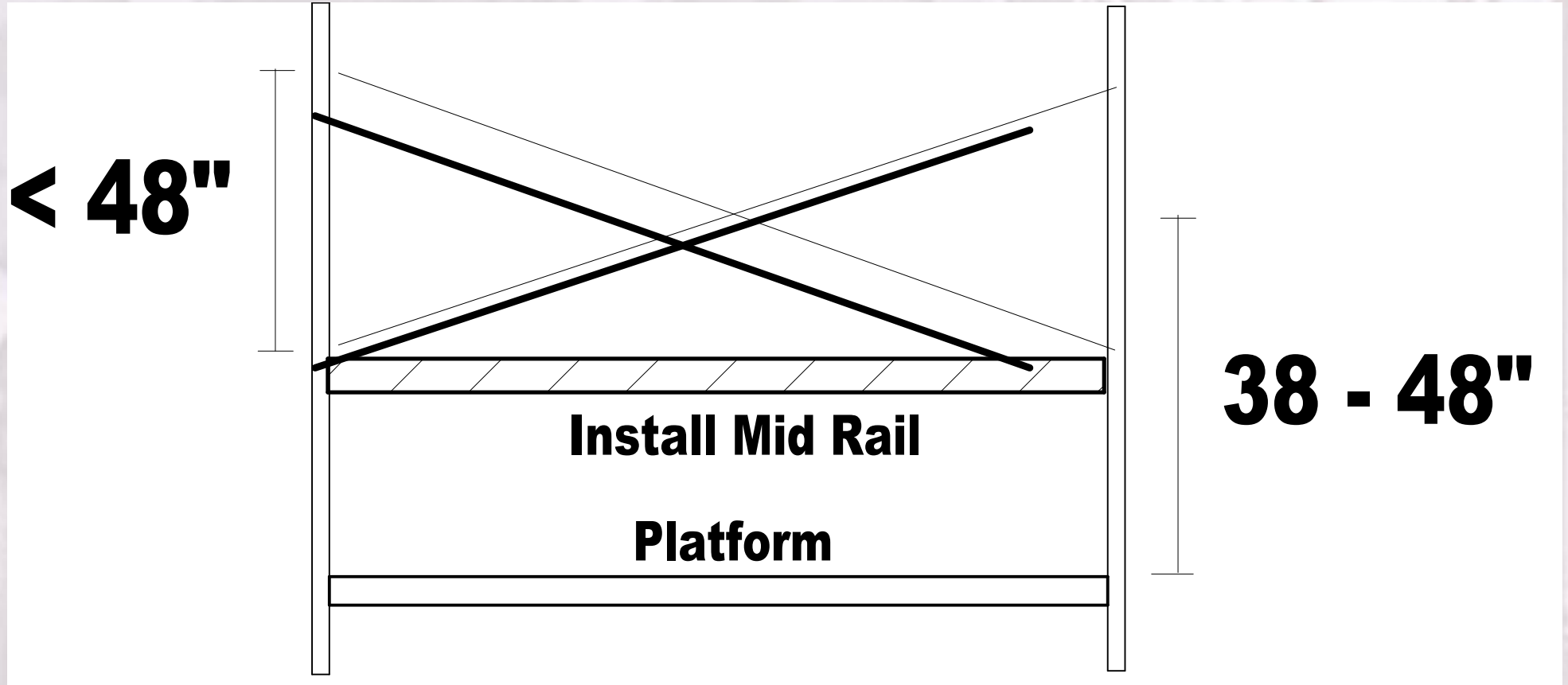


Better



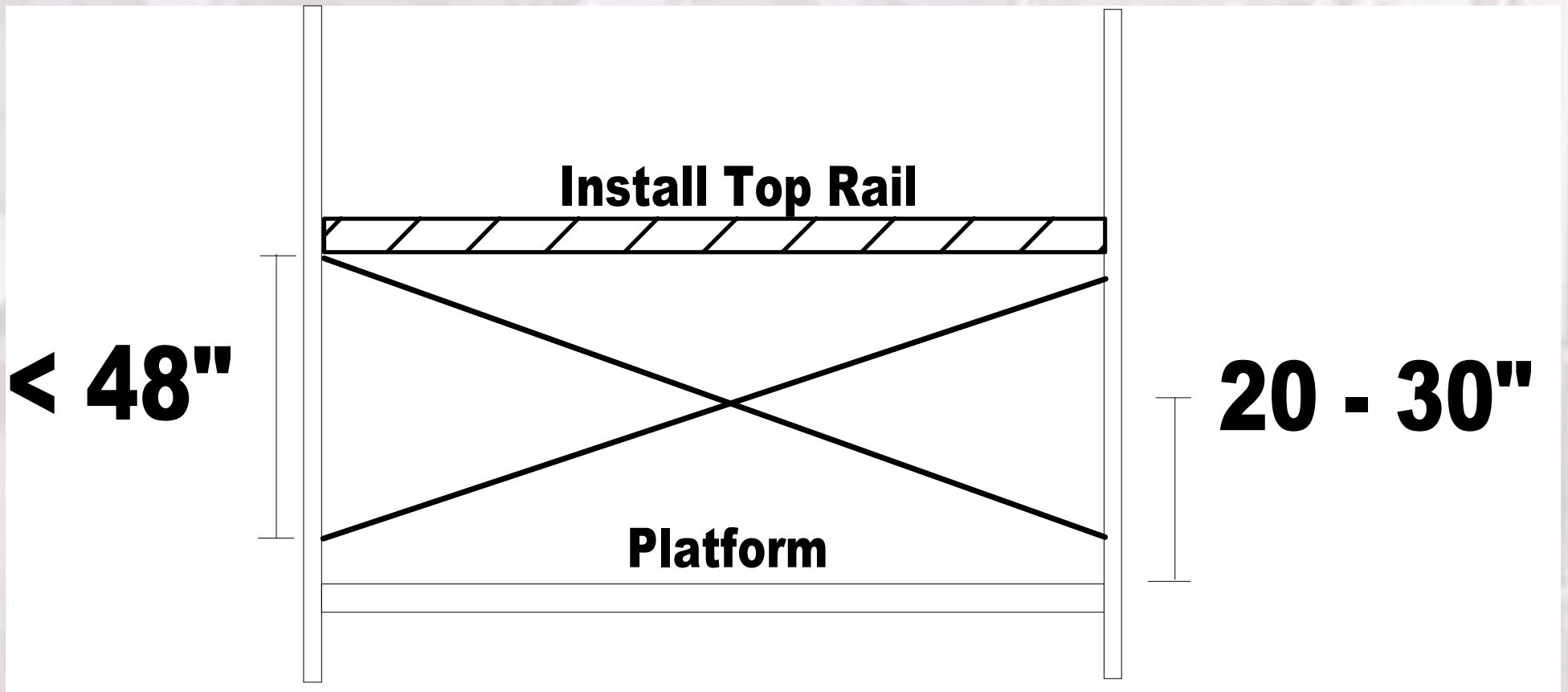
Be especially aware of scaffold ends!

Use of Braces for Guardrails



- **Brace can be used as a Top Rail.**

Use of Braces for Guardrails



- **Brace can be used as a Mid Rail**

Braces as Guardrails



- The guardrails are *in compliance* using a 2x4 as one rail and the brace as the other rail.
- May not be the safest way

Scaffold Erection & Dismantling

- “Competent Person” Determines Where Fall Protection is “Feasible” and Does Not Create a Greater Hazard
- Using Scaffolds as Anchorage Points?

Aerial Work Platforms

- Boomlifts
- Scissorlifts
- Boom Trucks (Cherry Pickers)
- Mast Climbers

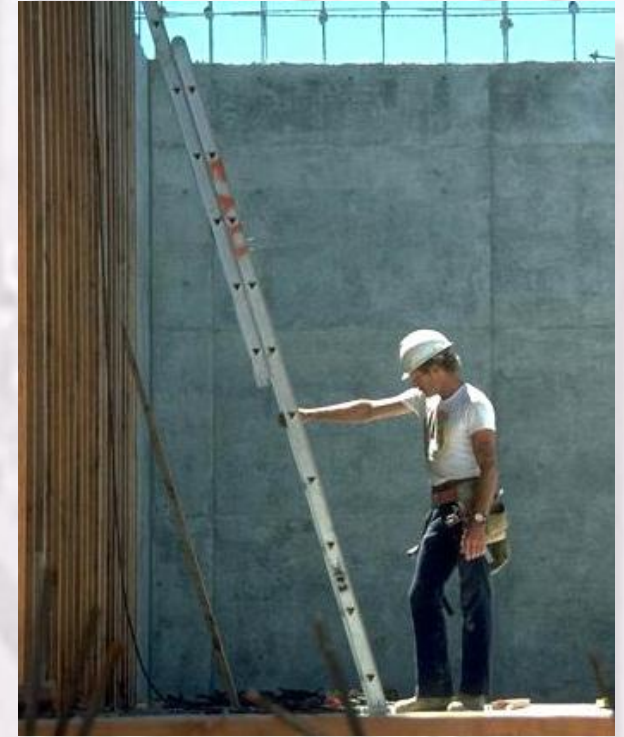
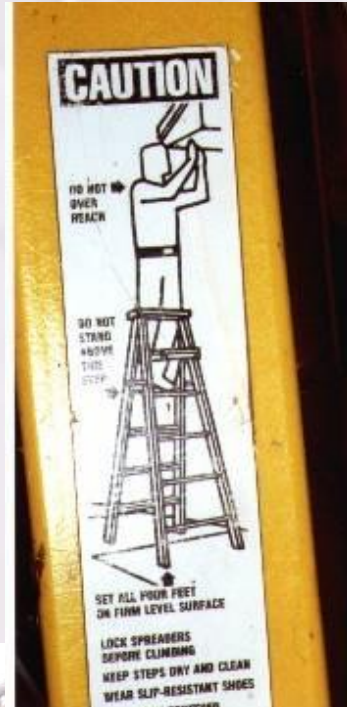


Stairs



Ladders

- Extension
- Step
- Vertical Fixed
- Job-built



Ladders

- Extension



Ladders

- Step



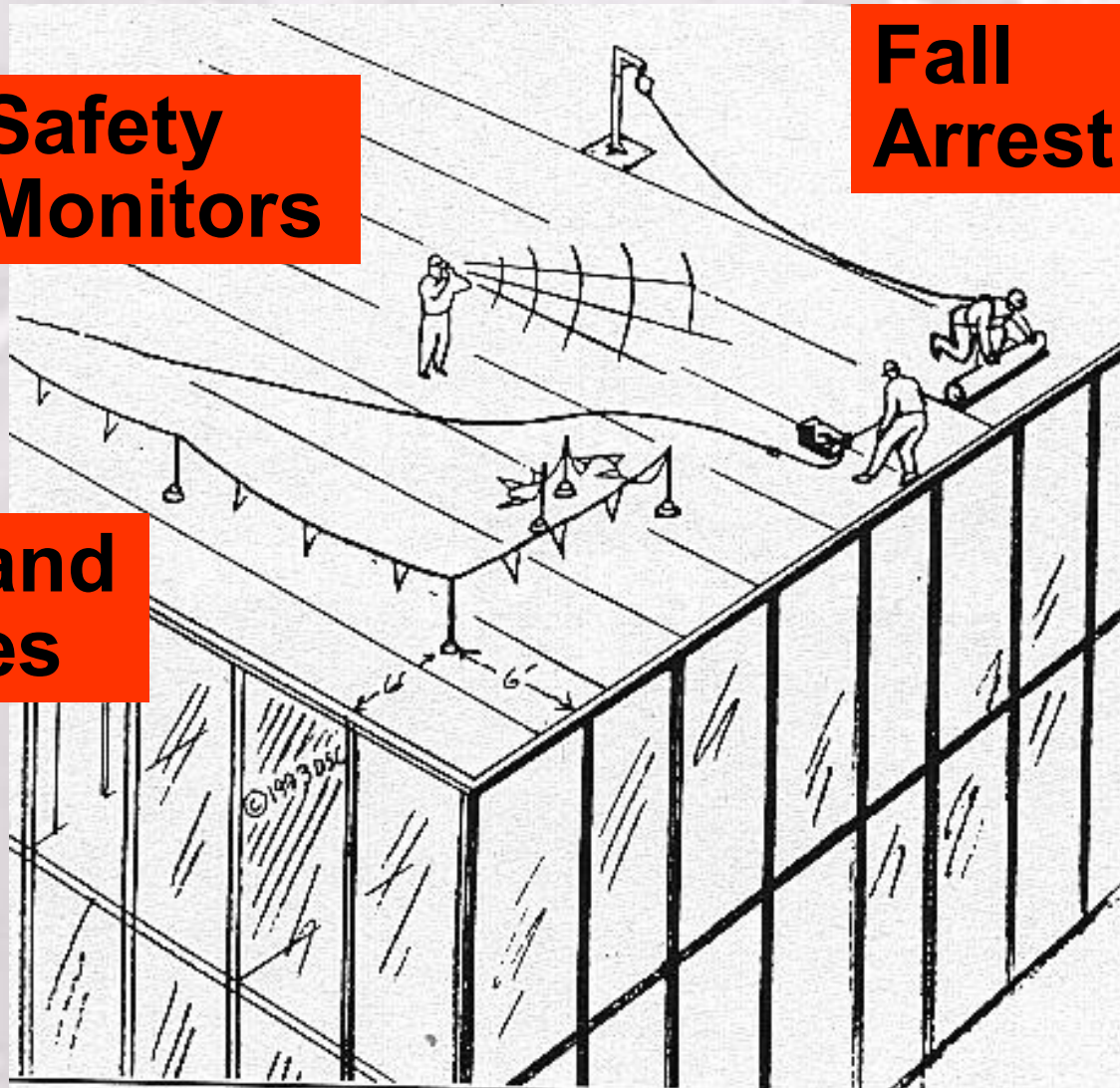
Roofs



Methods of Roof Fall Protection

**Safety
Monitors**

**Fall
Arrest**



**Guardrails and
warning lines**

Flat/Low Slope

- 4:1 Slope or Less
- Beyond the Use of Guardrails, OSHA Allows the Use of
 - Warning Lines
 - Safety Monitors
- Recommended:
 - Guardrails or PFAS where feasible
 - *Limited* use of lines and monitors on flat roofs only

Roof Warning Lines

- Must be 6 feet back from edges (10' with equipment)
- ***NO CAUTION TAPE!***



Roof Warning Lines

- These lines are down.
- Warning lines must be maintained at 34 - 39" above the working surface



Safety Monitor

- Oversees work outside the warning lines.
- Establishes the procedure to protect.
- Workers must receive special training.
- *Use should be extremely limited*



High Slope

- Over 4:1 Slope
- OSHA Mandates
 - Guardrails
 - Catch Platforms
 - Nets
 - Restraint Devices
 - Personal Fall Arrest Systems (PFAS)

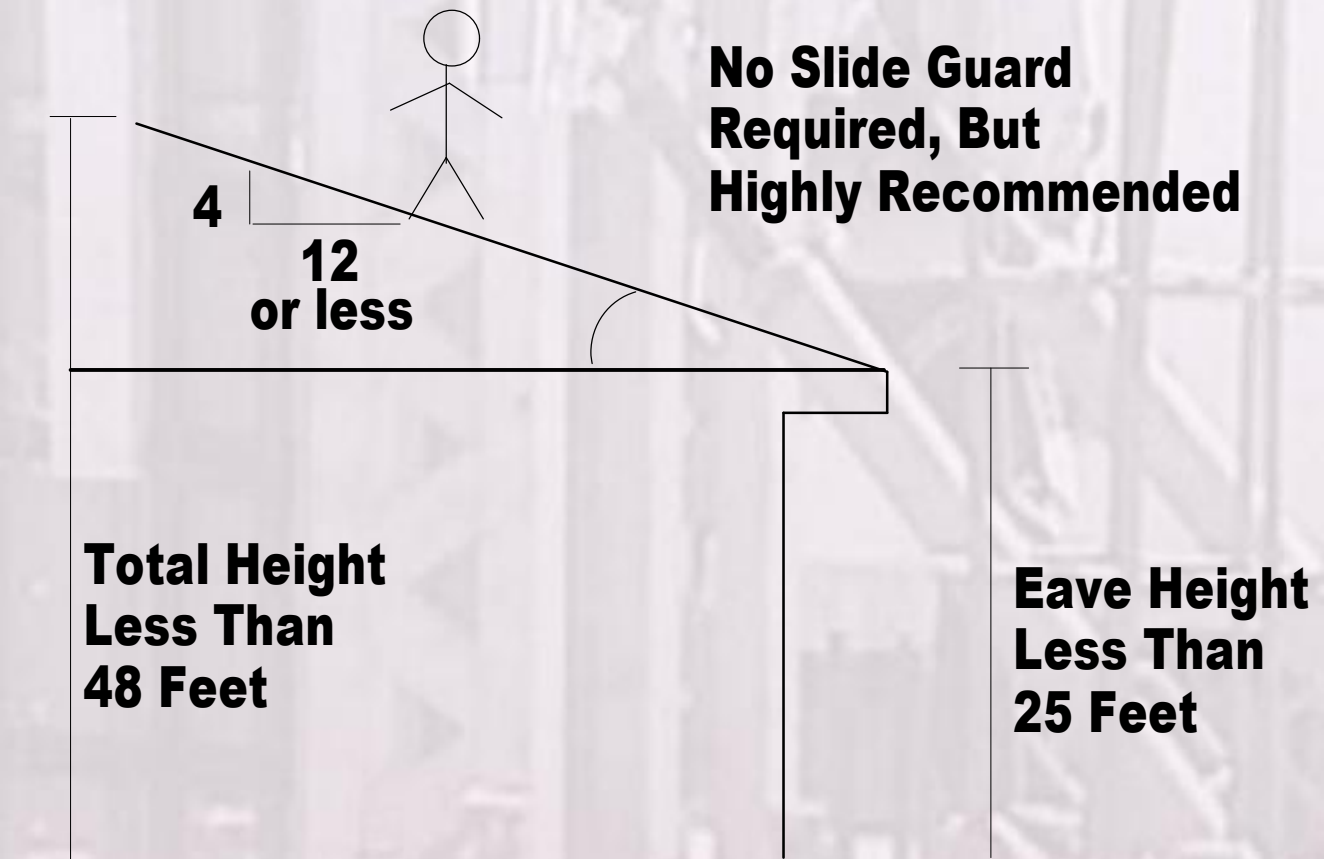


Residential-type Construction

- Wood frame
- Maximum eave height 25'
- Maximum total building height 48'
- *Additional definitions*

Residential-type Roof Requirements (4:12 or less)

- Safety Monitors must not be performing work.
- Warning lines are OK 6 feet back.

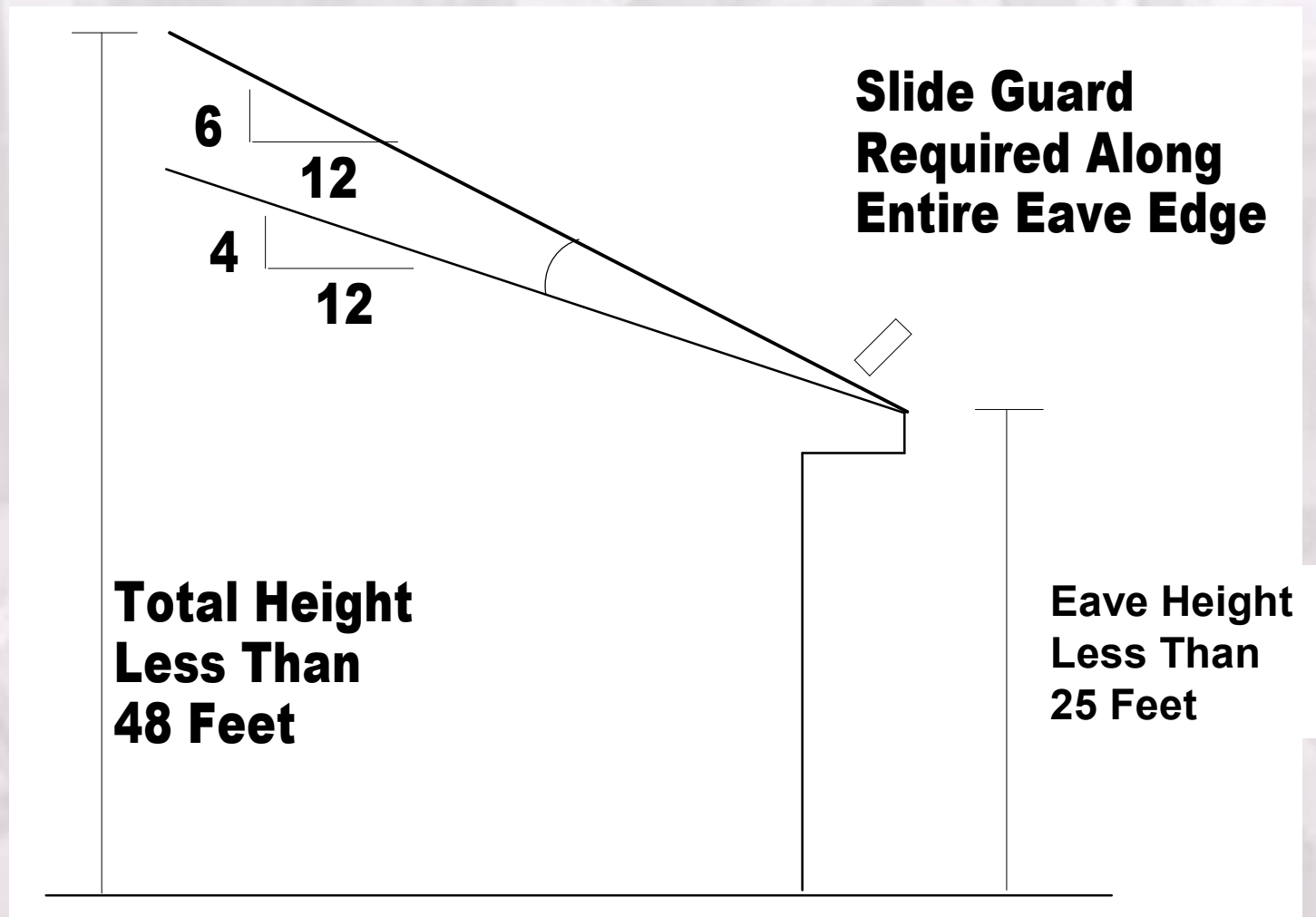


Roof Edge Slide Guards



- Slide guard must extend across the entire eave.

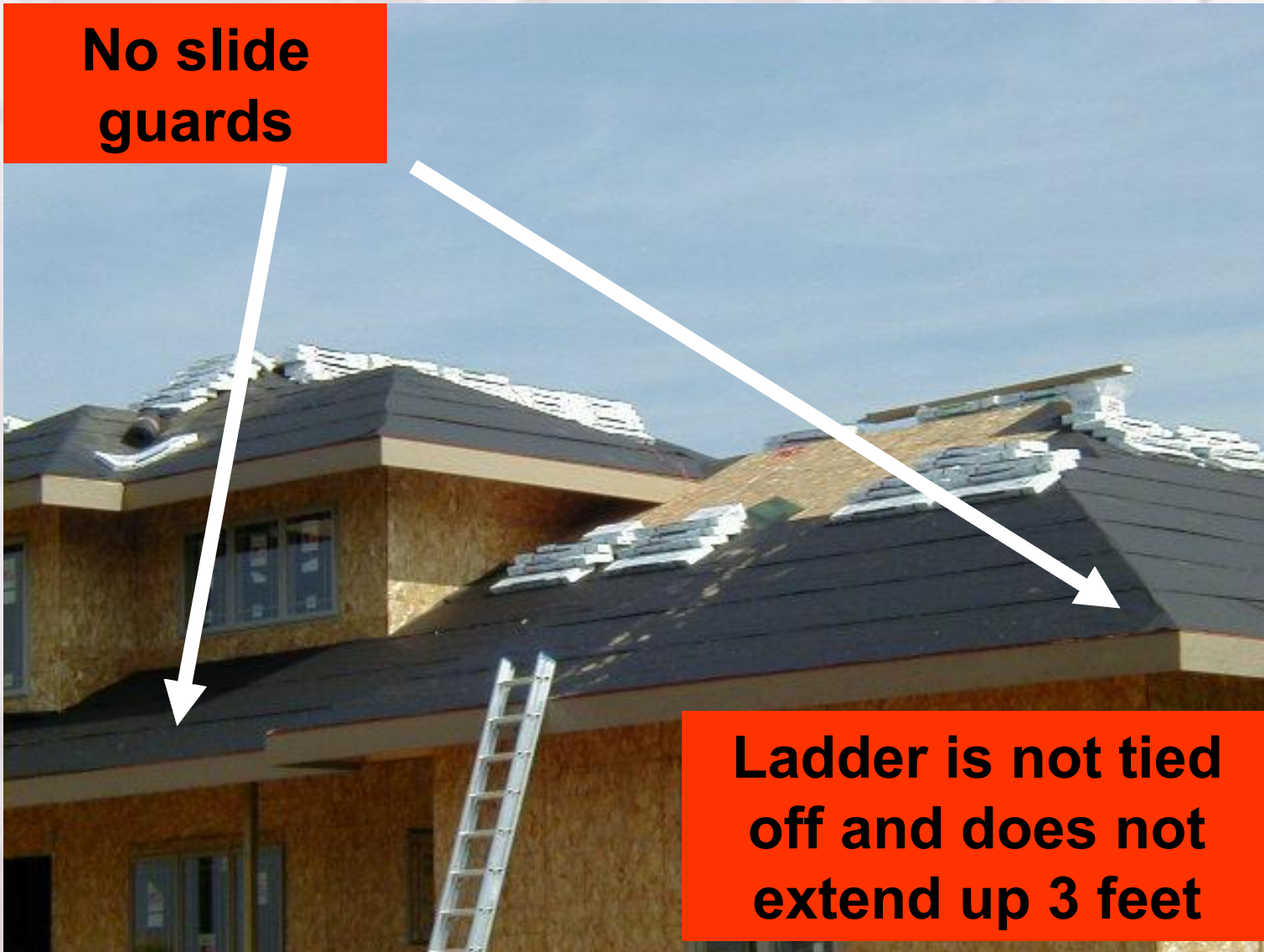
Residential-type Roof Requirements (4:12 - 6:12)



- Guards must be extend across entire eave.

What's Wrong on this 6:12 Roof?

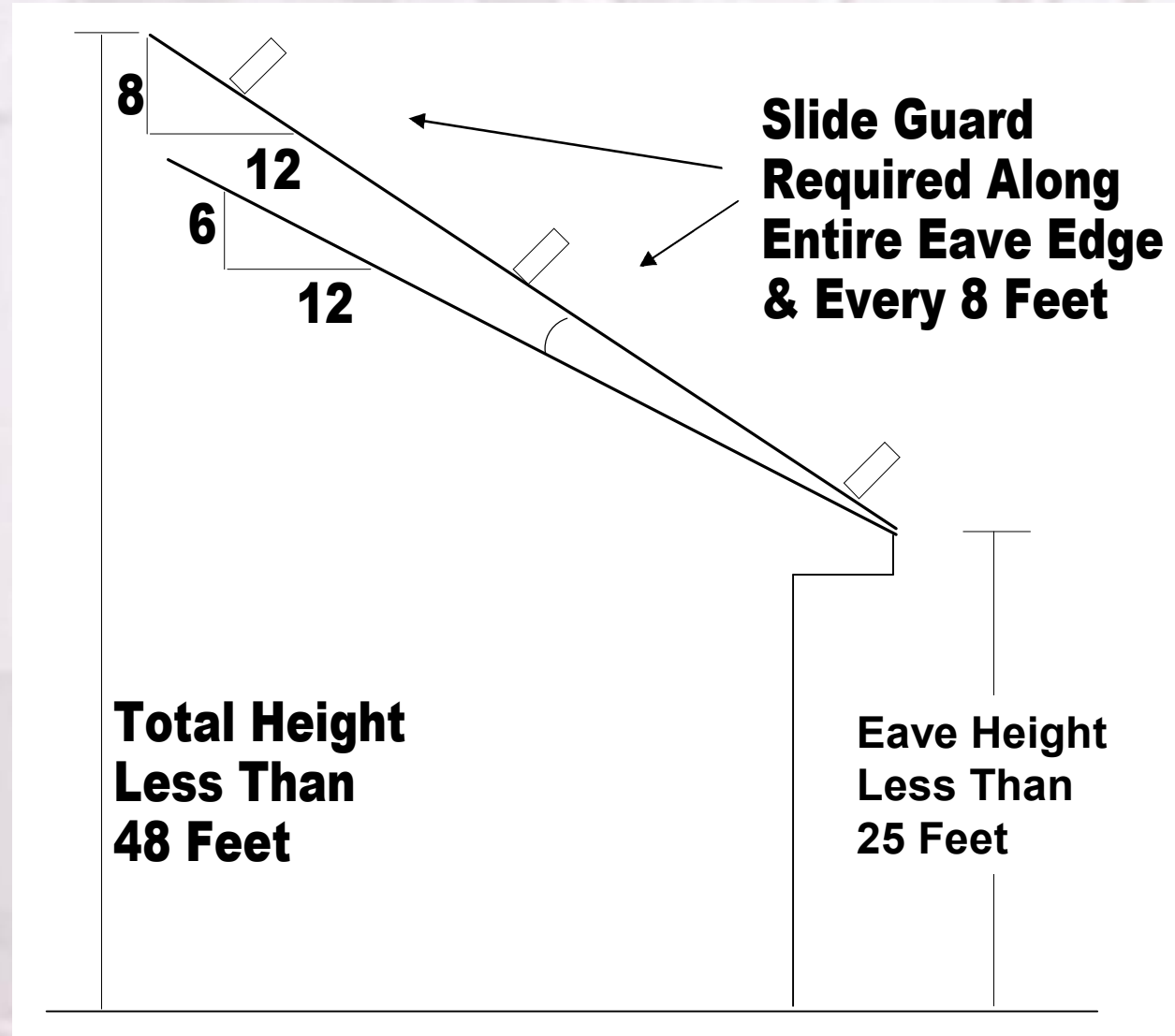
No slide guards



Ladder is not tied off and does not extend up 3 feet

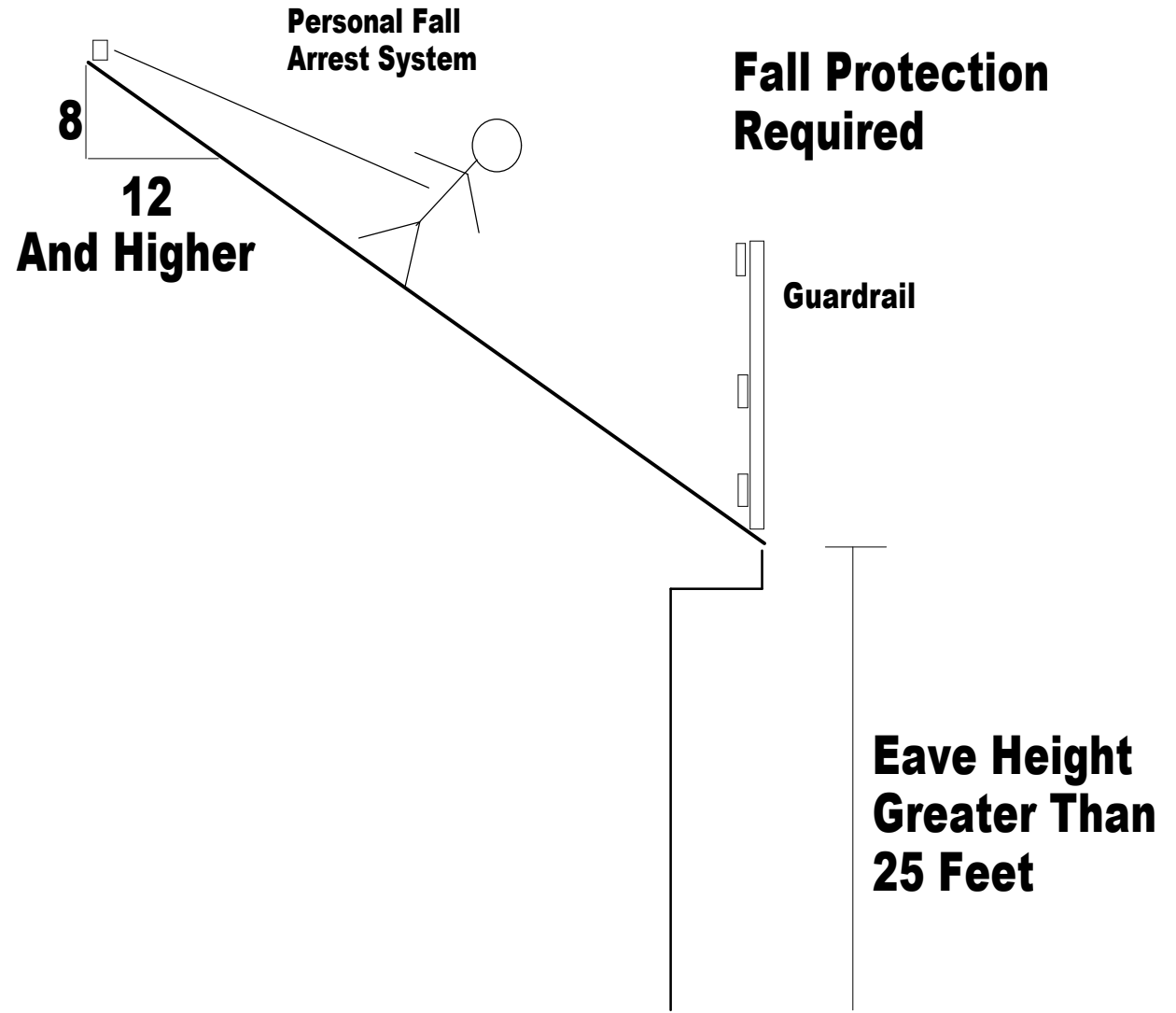
Residential-type Roof Requirements (6:12 - 8:12)

- While standing on the plank below, the employee must secure roof jacks, then climb up to the plank and continue to install the roof.
- Remove in reverse order.



Residential-type Roof

(Over 8:12 pitch or over 25 feet high)



- Conventional fall protection must be utilized.

Roof Guardrails



Guardrails are a positive option on high slope roofs