



COTTINGHAM & BUTLER

RISK MANAGEMENT SAFETY WEBINAR

Ladders and Scaffolds



PRESENTER



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TRAINING OBJECTIVES

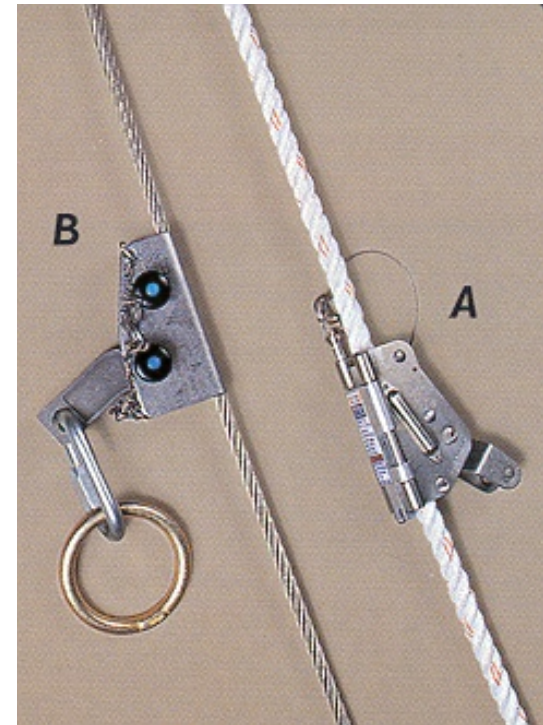
- Understand OSHA requirements for ladders
- Identify safe ladder use techniques
- Understand scaffold regulations
- Develop safe use techniques for scaffolding

FIXED LADDER REQUIREMENTS

- Old rule – Over 20ft required cage

New Rules

- Over 24 feet – must have a ladder safety system or fall arrest system in place
- Cages no longer considered fall protection
- Cages grandfathered in until 2036



LADDER TRAINING REQUIREMENTS

Each employee using ladders should be trained to recognize hazards related to their use. This includes:

- Nature of the fall hazards in the work area
- Correct procedures for placement, use, and maintenance
- Maximum intended load-carrying capacities

OSHA REQUIREMENT

Ladders shall not be loaded beyond the maximum intended load for which they were built nor beyond their manufacturer's rated capacity.

TYPE	DUTY RATING	USE	LOAD
1AA	Special Heavy Duty	Rugged	375 Lbs.
1A	Extra Heavy Duty	Industrial	300 Lbs.
1	Heavy Duty	Industrial	250 Lbs.
II	Medium Duty	Commercial	225 Lbs.
III	Light Duty	Household	200 Lbs.

SELECTING EXTENSION LADDERS

Height to Gutter or Top Support	Extension Ladder Height
9' max.	16'
9' to 13'	20'
13' to 17'	24'
17' to 21'	28'
21' to 25'	32'
25' to 28'	36'
28' to 31'	40'

Ladder heights are 9-11 ft. longer than the height to be reach to allow for the height/length lost when the ladder is positioned at an angle.

SELECTING STEP LADDERS

Choose a stepladder that is no more than 4 ft. shorter than the height you want to reach.

Maximum Height You Need to Reach	Stepladder Height
7	3
8	4
9	5
10	6
12	8
14	10
15	11
16	12
18	14
20	16

PROPER CONDITION AND INSTRUCTIONS

Inspect the ladder for visible defects.

- Never use a ladder that is broken or otherwise damaged.
- Remove damaged ladders from service and tag them as damaged.

Review the safety labels on the ladder.

- Always comply with the warnings and instructions.
- Labels must be legible



PORTABLE LADDER USE

- No fall arrest gear required when using a portable ladder properly
- Face the ladder when *ascending* or *descending* and maintain **three points of contact at all times**.
- Keep your body centered on the ladder.
- Never let your belt buckle pass either ladder siderail.



PLACEMENT TIPS

- Avoid setting up a ladder in high traffic areas or barricaded areas.
- Do not use metal or aluminum ladders near electrical lines.
- Place ladders on stable and level surfaces.

CORRECT PITCH?

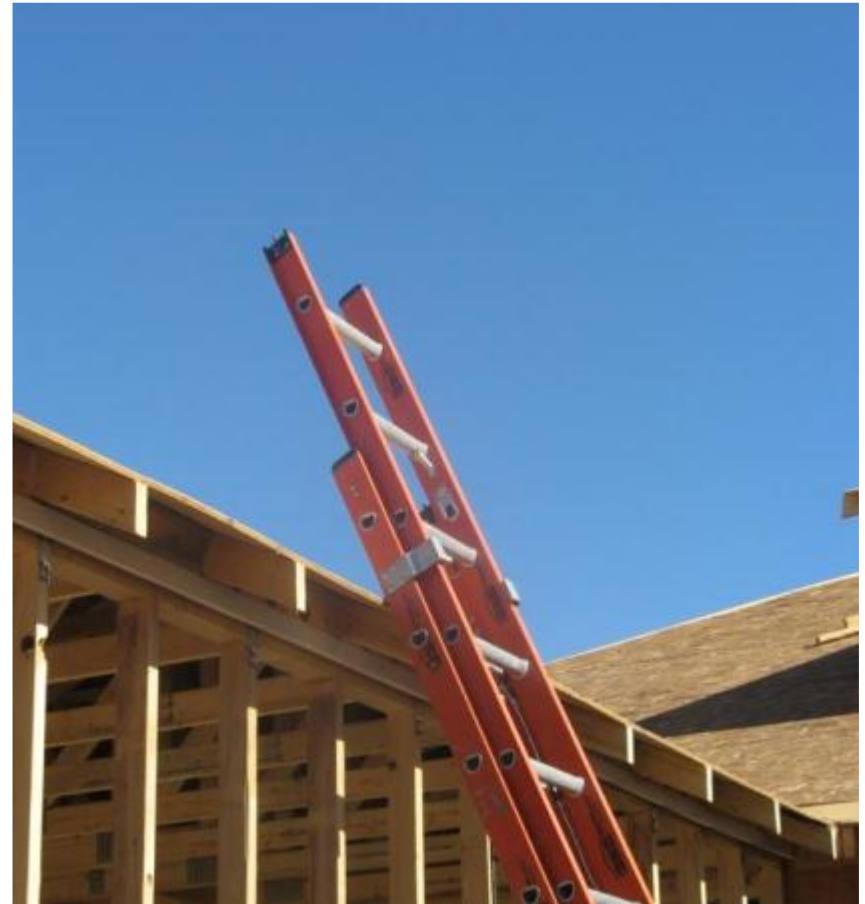


ANY HAZARDS?



PROPER HEIGHT EXTENSION LADDERS

When using an extension ladder for access to another level, the ladder must extend at least 3 ft. (.9 m) above the landing to provide a hand hold for getting on and off the ladder.



SECURE AND STABILIZE LADDERS

- Extension ladders should be secured at the top or bottom to prevent movement.
- The base of an extension ladder must be secured in place by using the safety feet on the ladder or other effective means.

SECURED AT THE TOP



SECURED AT THE BOTTOM



UNSTABLE BASE



SECURE AND STABILIZE LADDERS, CONT.

Uneven Surface

When the surface is not level, use a ladder leveler (accessory) to provide even contact points.



SCAFFOLDS



SCAFFOLDING GUIDELINES

- Scaffolding that is 10 ft. or higher must be equipped with guardrails.
- A competent person must supervise the set-up and take down of all scaffolding.
- Walls that support exterior scaffold must be capable of supporting, without failure, the weight of the scaffold and four times the maximum intended load on the scaffolding.
- Scaffolding must be fully planked, and planks must be secured so they cannot move.

WILL THIS SCAFFOLD HOLD 4 TIMES THE INTENDED LOAD?



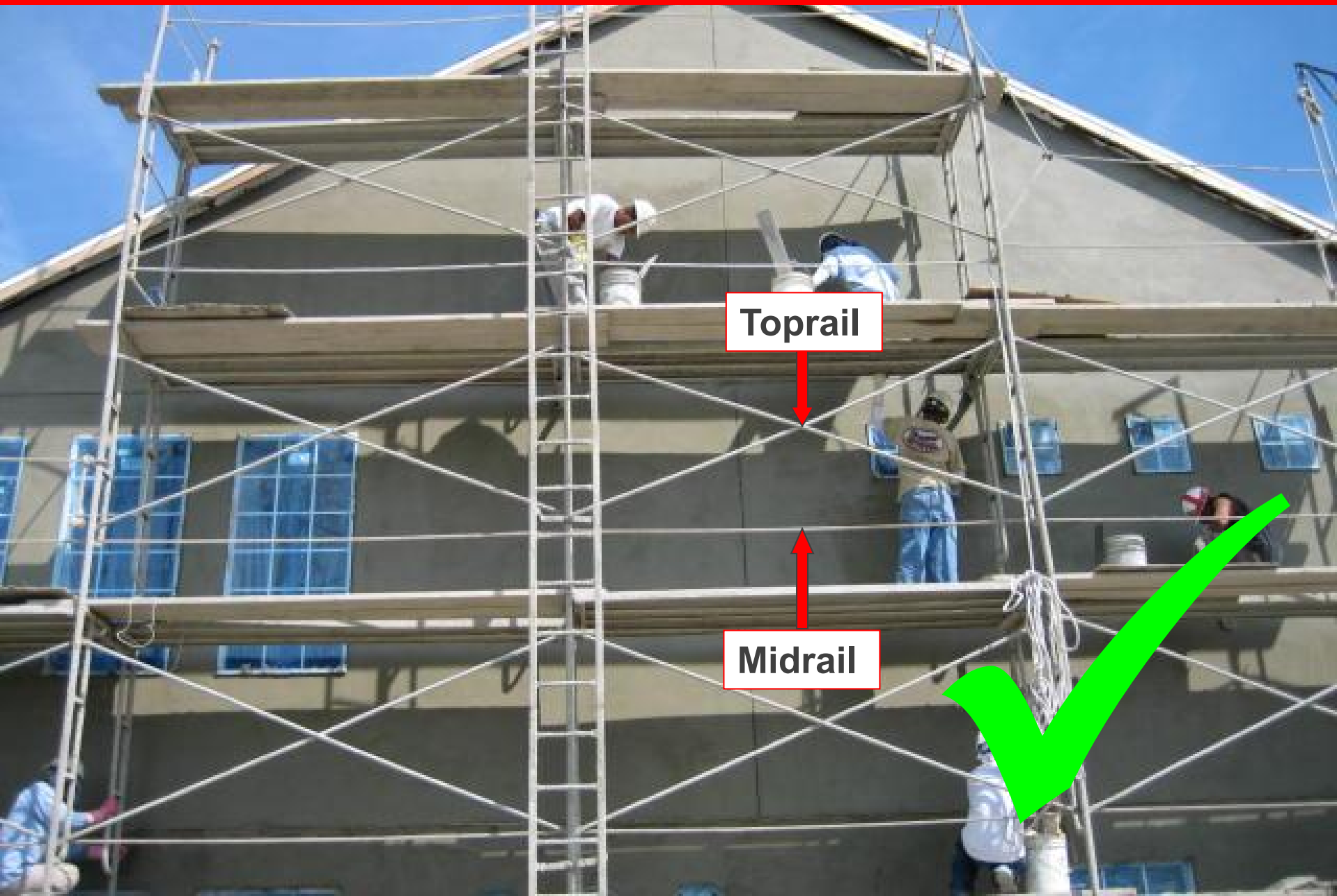
MASONRY BLOCKS ARE NOT ACCEPTABLE



GUARDRAIL REQUIREMENTS- SCAFFOLDS

- Toprails Between 38" and 45" High
- Guardrails to 200 Lbs/Midrails to min. 75 Lbs – 150 lbs depending on Toprail capacity.
- Cross Bracing OK as Guardrail if Between 20" and 30" for Midrail 38" to 48" for Toprail
- Protect from Falling Objects
 - All Workers on Scaffolds MUST Wear Hard Hats

Cross Bracing OK as Toprail



SCAFFOLD ACCESS

- Ladders Needed if Access More Than 2'
- Don't Climb Cross Braces
- Place Ladders Securely





PLANKING

- Platforms shall not deflect more than $1/60$ of the span when loaded
- Must be able to support 4 times the intended weight-determined by competent person

MILL 10
 SEL STR
SCAF PLK
D. FIR S. DRY

SPID: DNS IND 65
KD19 S-DRY (7)
SCAFFOLD PLANK



FULLY PLANKED?





FULLY PLANKED



PFAS USED WITH LADDER JACK SCAFFOLD OVER 10' (MAX HEIGHT 20')



SUMMARY

- Understand OSHA requirements for ladders
- Identify safe ladder use techniques
- Understand scaffold regulations
- Develop safe use techniques for scaffolding
- Identify unsafe conditions when using ladders and scaffolds



LADDER / SCAFFOLD INFORMATION RESOURCES

- <https://www.osha.gov/SLTC/etools/scaffolding/planking.html>
- <https://www.osha.gov/Publications/OSHA3150/osha3150.html>
- <https://www.osha.gov/SLTC/etools/construction/falls/4ladders.html>
- <https://www.osha.gov/laws-regs/regulations/standardnumber/1926/1926.1053>
- <https://www.millerfallprotection.com/en/osha-ladder-safety-brochure>

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