WINGER

WEEKLY SAFETY MEETING

FALL PROTECTION - GUARDRAILS

Guardrail Systems

- Guardrail systems consist of a toprail, midrail, toeboards, and support posts.
- Guardrail systems can be constructed of 2 x 4 lumber, steel, wire rope, or other equivalent materials that meets the performance/ strength requirements for adequate fall protection.
- The anchoring of support posts and framing of members for railings of all types MUST be of such construction that the completed structure is capable of withstanding 200 pounds of force in any outward or downward direction.
- Guardrail system components **SHALL** have a surface that prevents injuries such as punctures and lacerations, and prevents snagging of clothing.
- The height of the toprail **SHALL** be between 39 inches and 45 inches above the walking / working surface and be able to support at least 200# or more.
- Midrails **SHALL** be installed at a height midway between the top edge of the guardrail and the walking / working surface and be able to support at least 150# or more.
- Toeboards **SHALL** be a minimum of 3.5 inches in vertical height, with no more than 1/4 inch clearance to the floor, to help prevent tools and materials from falling to a lower level and be able to support at least 100# or more.
- When guardrails systems are used at hoisting areas, a chain, gate, or removable guardrail section **SHALL** be placed across the access opening when hoisting operations are not taking place.
- When guardrails systems are used at holes or skylights, they **SHALL** be erected on all unprotected sides or edges of the hole.
- When guardrail systems are used around holes used for ladder access, they **SHALL** be provided with a gate, or be offset so that a person cannot walk directly into the hole.
- When any part of a guardrail system is removed to facilitate material handling, all personnel working near the opening MUST use a personal fall arrest system (PFAS).

Cable Guardrails


Figure 5

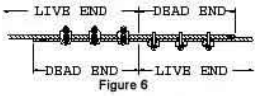

Figure 6

- A cable guardrail system also consists of a toprail and midrail with an intermediate vertical member.
- MUST be at least 1/4" diameter wire rope and flagged every 6 feet with danger tape.
- Vertical upright members MUST be installed every 8'.
- Install wire rope clips (cable clamps) properly. Use the correct size and number of clips.
- **NEVER** install U-bolts on the live end of the wire rope. The live end is where the saddle goes, so remember, "**NEVER** saddle a dead horse".

Holes / Wall Openings / Covers

When a building is under construction, there may be many openings in the floors, roofs, and walls. Every opening MUST be guarded by one of these means:

1. A cover fastened over the hole / opening and labeled.
2. A guardrail system that protects all exposed sides.
3. An employee guarding the hole / opening. For example, an employee may guard a chute for construction debris.

- A **"hole"** refers to a gap or void **2 inches** or more in its least dimension, in a floor, roof, or other walking / working surface.
- An **"opening"** refers to a gap or void 30 inches or more high and 18 inches or more wide, in a wall or partition, through which personnel can fall to a lower level.
- Hole covers are rigid covers that prevent personnel from falling through temporary openings and holes in walking / working surfaces.
- Hole covers MUST be capable of supporting, without failure, at least twice the weight of personnel, equipment, and materials that may be imposed on the cover at any one time. If plywood is used as a cover, it MUST be at least 3/4 inch thick.
- Hole covers MUST be secured when installed so as to prevent accidental displacement by the wind, equipment, or personnel.
- Install the hole covers so as to eliminate any tripping hazards.
- Hole covers MUST be labeled with the word **"HOLE"** or **"COVER"** to provide warning of the hazard.
- When the cover is not in place, the hole or opening MUST be constantly attended by someone acting as a "safety watch" or SHALL be protected on all exposed sides by a guardrail system.

Meeting Date: _____ Trainer: _____

Supervisor: _____ Location: _____

Attendees: (Please print clearly)

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

WINGER

WEEKLY SAFETY MEETING

FALL PROTECTION – GUARDRAILS QUIZ

1. Guardrail systems consist of a toprail, midrail, toeboards & support posts. True or False?

2. The anchoring of support posts and framing of members for railings of all types MUST be of such construction that the completed structure is capable of withstanding _____ pounds of force in any outward or downward direction.
   A. 200
   B. 300
   C. 500

3. The height of the toprail shall be between 39 and 45 inches. True or False?

4. Cable guardrail must be at least ¼ inches diameter wire rope and flagged every 6 feet. True or False?

5. When guardrails are used at holes or skylights, they shall be erected on all unprotected sides or edges. True or False?

6. When any part of a guardrail system is removed to facilitate material handling, all personnel working near the opening MUST use a personal fall arrest system (PFAS). True or False?

7. A "hole" refers to a gap or void 2 inches or more in its least dimension, in a floor, roof, or other walking / working surface. True or False?

8. Hole covers MUST be capable of supporting, without failure, at least twice the weight of personnel, equipment, and materials that may be imposed on the cover at any one time. True or False?

9. If plywood is used as a cover, it MUST be at least ¾ inch thick. True or False?

10. **NEVER** install U-bolts on the live end of the wire rope. The live end is where the saddle goes, so remember, "NEVER" saddle a dead horse. True or False?

11. Hole covers must:
    A. Be capable of supporting, without failure at least twice the weight
    B. Be secured as to prevent displacement
    C. Be labeled with the word "HOLE" or "COVER".
    D. All of the above

12. When a hole cover is not in place it must be attended by a safety watch or hard barricaded. True or False?

Printed Name: _____ **Trained by:** _____

Signature: _____ **Trained by Signature:** _____

Date: _____ **Location:** _____