Swing Scaffolds...Not for Swinging

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Greater Houston Chapter

Suspension scaffolds, sometimes referred to as "swing" scaffolds," are somewhat of a double-whammy in that they are suspended from a roof-top area, and the workers using this system are relying on the safety lines to which they are attached (and the corresponding counter-weights on the roof), as their sole sense of security. This particular scaffolding system actually "swings" in the wind, as it is suspended from the roof which can be ten, or twenty (or more) feet high from ground level. Safety is paramount for those who assemble the system, and those who work off the system.

DEFINITION

In OSHA's Subpart L (1926.450) Scaffold Standard, a "suspended scaffold" as: one or more platforms suspended by ropes or other non-rigid means from an overhead structure."

What are the possible ***weak links*** in this definition? How about:

- Suspended?
- Platforms?
- Ropes?
- Other Non-Rigid Means?
- Overhead Structure?
- Hangers?
- Two Motors?
- Stirrups?
- Raising?
- Lowering?
- Desired Work Levels?

ROOFTOP ENGINEERING

- Inspect safety lines daily (wear and tear?)
- Inspect anchor system daily (Secure?)
- Counter-weights are engineer-designed (for pre-determined weighs)
- Roof ledge chaffing (ropes can "sever" at the edge of the roof)
- If two workers are on the platform, each has a separate safety line (inspect daily)
- Check hardware securing safety lines on rooftop (too much slack)

SCAFFOLD MOTORS

- Ground Fault Insulators (GFI) tools, plugs, generators, power source, etc. (check daily
- Check fuse stations daily

HIGH WINDS/GUSTS/SHEAR THRUST

- Call Weather Bureau early each morning
- Look for wind shears/gusts
- Material blowing off roofs/scaffolds
- Safety line whipsawing
- Excessive sway in swing scaffolds
- High Winds: Bring all personnel/scaffolds down to ground level IMMEDIATELY

LOADS ON SCAFFOLDS

A ***rated load*** means the manufacturer's specified maximum load to be lifted by a hoist or to be applied to a scaffold or scaffold component.

What makes up this "***Load weights?"***

- Decking
- Personnel
- Personal Protective Equipment
- Motors (2)
- Material
- Equipment
- Safety Lines
- Safety Harnesses
- Safety Lanyards
- Tools
- Supplies
- Power Tools
- Hoist & Lines

Does the site superintendent/foreman/competent person/project engineer determine if the scaffold system's "maximum intended load" exceeds the calculations proposed by the manufacturer?

Here's OSHA's definition of ***"Maximum Intended Load":***

- Full Body Harness
- Shock-Absorbing Lanyard
- Safety Line
- Hard hard Hat (with chin strap)
- Wrap-Around Safety Goggles
- Heavy-Duty Work Gloves
- Heavy-Duty Work Boots
- Two-Way Radio/Cell Phone
- Respirator (if required)
- Tyvec Clothing (asbestos/lead/solvents/etc. exposure)

TRAINING

There's no such thing as "too much safety training" when workers are on swing scaffolds, suspended from rooftops by long ropes or wire rope. OSHA requires the swing stage assemblers to be fully trained in the procedures surrounding erection and dismantling of scaffolding systems.

All workers on these systems should be similarly trained in all of the hazards they face daily on these systems.

Two-Stage swing scaffolding systems take a lot of expertise, training, disciplining, and courage, to safely work in this unique environment.

It's a tall order, but can be mastered with an ongoing safety program that keeps a person's "safety talents" well oiled.