



CONCRETE TRADE PROJECT DOCUMENT CONTROL

PROJECT OVERVIEW

Due to using unrevised drawings, a concrete contractor installed a cable bus opening through a battery room blast wall at the wrong location.

PROJECT DOCUMENT CONTROL ISSUES

Keeping updated design drawings with the current project revisions is crucial whenever drilling or cutting into blast walls.

- Construction projects undergo various changes, so the site supervisor must diligently ensure documented changes and updates are transmitted to all crew foremen before performing any work.

Not having a documented quality management process for document control exposes a contractor to failing to meet project objectives and opens them up to dangerous and costly mistakes.

When a design drawing is changed:

- **First**, the site supervisor should remove all affected drawings and replace them with the new approved drawings as soon as possible.
- **Second**, revised drawings should be transmitted to the crew foremen on- and off-site to ensure the entire project team is updated on the new design specifications.

LESSONS LEARNED

The actual cost of the crew using out-of-date drawings included:

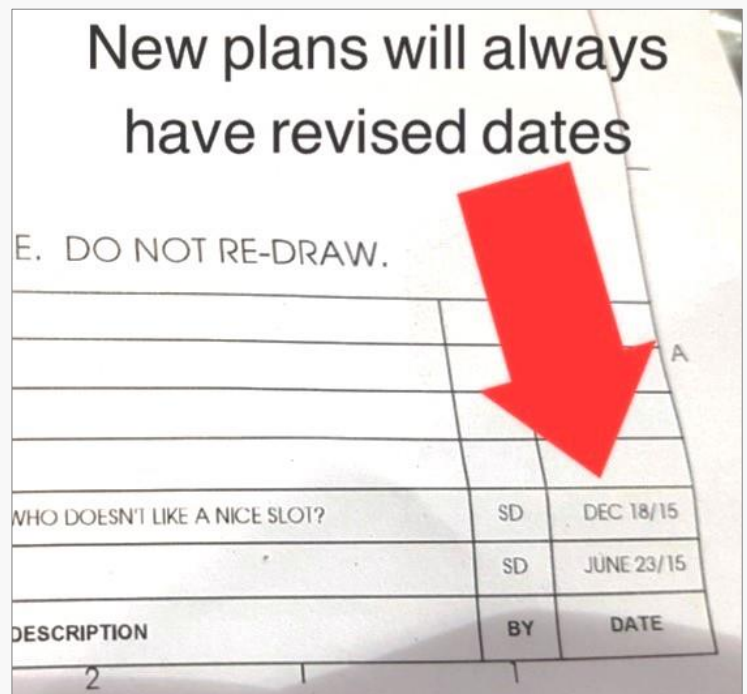
- The cost of reworking the concrete, installing the opening in the right location, and losing productivity.

The foreman could have avoided this event:

- If the design drawings are kept up-to-date with every change.
- It is also transmitted to the crew foremen on- and off-site to ensure the entire project team is updated on the new design specifications.

DISCUSSION QUESTIONS

1. If you are out in the field and you notice other contractors have revised plans and you do not, who would you talk to?
2. Have you ever worked on a project and discovered you did not have the current revision? What were the consequences?
3. Do we have the latest plans? How would you know?
4. What is your experience on a job where work has been done using old plans?





CONCRETE AND REBAR TRADE VEHICLE LOAD SECUREMENT SAFETY TOOLBOX TALK

OVERVIEW

Load Securement is a broad topic that covers all aspects of fastening or securing materials and equipment to a stable surface.

- This Concrete–Rebar Trade topic is geared toward securing materials to a company vehicle and equipment.

Properly secured materials and equipment will eliminate their potential to be accidentally dislodged.

- Failed load securement on US roadways over a four-year period has led to 200,000 crashes, resulting in over 500 deaths and 39,000 injuries.
- Materials and equipment are dislodged for several reasons, such as vehicle accidents or incidents, improper load ties, lack of load ties, removing load ties out of sequence, and many more.

LEARN AND APPLY THE FOLLOWING

Hazards of Working Around Vehicle Unsecured Loads

- Loads not secured on a project site have the potential to dislodge from their storage area, and materials may drop or fall onto workers, causing injury and damage to property.
- Unsecured or improperly secured loads on vehicles can destabilize vehicles, making it easy for a driver to lose control of the vehicle, resulting in rollovers, jackknife accidents, cargo loss, and increased danger for everyone on the road, not just the load driver.
- Unsecured items in the back of a pickup are known to disappear. Chances are they rolled out of the bed or were dislodged and caught by the wind. Where do they end up, hopefully landing safely on the road's edge?

Signs of an Unsecured Load

Look for trucks with 1) poorly or sloppily stacked materials, 2) loads stacked lopsided or uneven, 3) loads not strapped or tied down, and 4) overloaded vehicles.

Vehicle Load Securement Safety

- A. Keep workers not involved in vehicle loading and unloading tasks away from the area.
- Before use, maintain and inspect straps, tie-downs, and other fastening equipment.
 - Load materials evenly and keep equipment and materials level—secure loads following safe industry practices.
 - Stack and store materials with no more than a 4:1 height-to-base ratio.
 - Always inspect loads after securing them.
- B. After you start transporting a load, after a few minutes or a few miles of transportation, inspect the load. Look for 1) material that may suddenly shift and become unstable, 2) use caution when unstrapping the load, and 3) many loads require that unstrapping follow a sequence to prevent shifting, especially cylindrical materials.

Concrete–Rebar Trade: Vehicle Load Securement Hazards

- C. Rebar bundles bed well and seldom comes loose when properly tied down. Use an adequate number of ties to hold the bundle in place properly. See Figure 1.
- D. A flatbed truck must have a “headache” rack to prevent loads from suddenly sliding into the cab under hard braking or a collision.
- E. Form lumber is often times overloaded on a truck rack. When the truck experiences a severe braking event, the whole rack will shift and may injure the driver and others.
- F. Never transport heavy, unsecured construction equipment, even for a short distance or off public roads. Machines can slide off trucks or trailers much easier than one would expect.

DISCUSSION QUESTIONS

1. What are the hazards and signs of an Unsecured Load?
2. What are our project's requirements for safe Vehicle Load Securement?
3. Does everyone feel confident in their training in Vehicle Load Securement?

Figure 1 Use Several Tie Downs



Meeting Date:

Supervisor:

Employee Name: