LEAN SAFETY BEST KNOWN METHODS

Abstract

The Safe Build Alliance is working to gather Best Known Methods in Lean that benefit the construction project. The benefit could enhance safety, efficiency, or quality. Please consider those activities that are conducted by multiple trades, ergonomic innovations, housekeeping best practices or anything that eliminates waste. We are looking for lean tools and actual activities that can be shared throughout the Safe Build Alliance Construction Community.

Remember, *Waste* is:

Defects – anything that created re-work

Overproduction – building more than is ready to be installed resulting in storage and/or housekeeping issues

Waiting – wasted time waiting for the next trade, waiting for late deliveries, etc.

Non-Utilized Talent – Underutilizing peoples' skills; light duty work due to an injury Transportation – moving anything more than once before it becomes work in place Inventory – extra storage of anything, storing concrete formwork or similar materials after completion

Motion – unnecessary movement of people, taking too many steps to distribute something that can be distributed via use of material handling equipment, etc.

Extra-processing - Higher quality than required

Please submit your Lean BKM's to dtoy@andersen-const.com Lean Champions:

Knight Cancer Research Building Lean Construction / Lean Safety Best Known Methods

Bret McGuire / ASI Structures

BKM: Riding Trowel Bump Rails

How does it work?

Guardrails, rated at 200lbs do not provide adequate protection for a riding trowel should the trowel leave the concrete deck surface. The quality requirements for the project required riding trowels be used on elevated decks to meet the specifications of the project. Safety bump rails were developed that provided the additional strength required to keep the riding trowel from leaving the slab in an emergency. The safety bump rails are installed on elevated decks where the riding trowels are exposed to a leading-edge hazard. Where the deck is wide enough to stop the riding trowel short of the leading edge, the bump rails are not required.

How does this benefit the project?

Prior to this project, riding trowels were prohibited from being used on elevated decks. The combination of bump rails, safe operating procedures, and pre-use checklist satisfied the safety requirements and provided a solution to the projects strict concrete flatness specifications.

Why is this a Lean Method?

Riding trowels are a more efficient method of finishing concrete. Meeting the floor flatness requirements allowed the project to proceed without re-engineering the concrete pour process or developing another solution. This method was adopted by other projects within Andersen Construction and is now a Corporate Best Method for concrete finishing.

Please attach or include photos of the before & after

