

TOEBOARDS AT MATERIAL LOADING

SAFETY TOOL BOX TALK

As we have said in the past safety is a journey and that we are always learning and improving. Such is still the case. I was taught by the safety director before me that no toeboard there was acceptable. We also have had numerous OSHA inspections and the missing toeboard has never been sighted. This all changed with the latest OSHA inspection. OSHA said "you need toeboards there".

At this point our best judgment is to start putting toeboards at material areas or "landing decks" to avoid future citations and possible injury from falling objects. You can do this in a couple of ways: 2 short boards, or a 16 foot 2x4. Either way is fine. A 16 foot scaffold board would be too heavy and awkward to move around up there and if you feel the short boards are too awkward please go with the 2x4.

THE USE OF GRINDING CUPS

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We have had two incidents now while using polishing or honing stones on a grinder. One was several years ago when using the stone to grind bull nose on the corner of block. The stone wheel came apart and struck the user in the eye, causing permanent blindness in that eye. Just this month another employee using the same type of honing stone on a grinder was injured by the stone again coming apart striking the man in the shoulder. And last week in your check a safety page was sent out telling of a man that died when a grinder wheel came apart and struck him in the head.

A line must be drawn in the sand. The types of stones that have resulted in the injuries are pictured at the right. There could be several reasons why the incidents happened: stone was left in weather and became weak or it was not used properly. Whatever the case, we will no longer use honing stones.

Acceptable cup grinders are one piece all metal cups that will not expose workers to the hazards of honing stones. Please help prevent any further incidents by disposing of honing stones and only using cup grinders.

RIGGING

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Rigging looks like an easy operation, one that doesn't seem to require any particular skill or experience. But don't be fooled. Many people who've thought "anyone can do it" have lost fingers or hands, or suffered more serious injuries while rigging. So I'm going to point out some of the "do's and don'ts."

Get Your Signals Straight

Appoint one member of the crew to act as signalman, and instruct the crane operator not to accept signals from anyone else. The signalman and operator should meet on hand signals. The signalman must not order a move until getting an "all ready" from each crewmember. Each worker in turn must be in the clear before giving an "all ready" to the signalman. If you must hold on to the chain, sling, choker, or what ever to maintain tension, be sure your hands and feet are out of the way of pinch points before giving an "all ready."

Protect Your Hands

If it isn't possible to release the chain, sling, or choker, be sure your hand is clear of pinch points. In fact, keep your hand far enough away so that a frayed wire or splinter on the chain can't catch your glove and jerk your hand into a pinch point.

Watch Out for Rock and Roll

It's almost impossible to position the hook exactly over the load center. So, watch out for a swing or roll. Anticipate the direction of the swing or roll and work away from it. Never place yourself between material, equipment or other stationary objects and the load. Stay away from stacked material that may be knocked over by a swinging load.

Stay Out From Under

Never get under a suspended load, and keep out from under the crane's boom too. The chances are that nothing will break. But are you willing to bet life and limb that it won't?

Set it Down Carefully

When it's necessary to guide a load, use a tag line or hook. If you have to walk with a load, keep it as close to the ground as possible. Before hand, look over the spot where the load is to be landed. Remove unnecessary blocks or the objects that might fly up when struck by the load. When lowering or setting a load, keep your feet and all other parts of your body out from under. Set the load down easily and slowly. Then, if it rolls on the blocking, it will shift slowly and you'll be able to get away.

Teamwork is the Secret of Safety

Teamwork is important on any job to prevent injury to yourself or others. But on a rigging job, this goes double.

PALLET JACK SAFETY

SAFETY TOOL BOX TALK

Pallet Jacks are commonly utilized pieces of equipment on our jobs. Some are motorized but many are manual. There are two risks associated with utilizing a pallet jack, your feet and your back.

We had an employee roll a pallet jack loaded with block up on his foot injuring his ankle. In British Columbia a young worker at a warehouse was using a manual pallet jack to move a load down a loading ramp with a 9 percent slope. The worker was walking the pallet jack backwards, guiding it down by its steering handle. The 1,000-pound load was within the limits for the pallet jack, but the pallet jack sped up on the slope. The pallet jack's rear wheel assembly struck the worker's foot. His ankle was fractured.

Most pallet jacks truly aren't meant to be utilized on ramps and certainly not with the load behind you. However, there is danger of running over your feet even on flat surfaces. Most manual pallet jacks have their back wheels exposed and if you don't watch your feet position or are unable to stop a heavy load, your feet become the target.

Pulling heavy loads with a pallet jack can also cause back injuries as you try to start the load moving. Ensure you are square to the load and utilize both hands to pull the load utilizing the pallet jack handle. If it requires a lot of force then more often than not, stop and look under the wheels, there is probably a piece of a pallet or a nail or other object under the wheels. Your back is worth far more than a piece of wood.

HAZARDS IN POURING GROUT

SAFETY TOOL BOX TALK

STRAINS/SPRAINS

1. Use pump or other machine grouting
2. Don't overfill the buckets
3. Use proper lifting posture
4. Place grout tub as close as possible to pour area
5. Don't under-man the grout pouring crew
6. Rotate employees on crew

CONCRETE BURNS

1. Don't make skin contact with grout
2. Wear gloves, safety glasses and/or long sleeves if necessary
3. Use "dip bucket" to pour into "pour buckets"
4. Wash up thoroughly at lunch and when done

DRUM HANDLING

SAFETY TOOL BOX TALK

Improper handling of drums and barrels can result in severe injuries. These include painful back sprains, smashed toes and fingers, or exposure to hazardous chemicals if the contents are leaking. Proper work practices can minimize your risk of injury, so consider the following tips.

- Prior to handling the drum read the label on the drum and look for symbols, words or other marks that indicate if its contents are hazardous, corrosive, toxic or flammable. If the drum isn't labeled, consider the contents hazardous until they are positively identified.
- Look around the drum to see if it is leaking. Before cleaning up any spill, make sure the substance has been identified. Make sure that you've been trained in the hazards of the chemical, and have the correct materials for cleaning it up. Find and review the appropriate MSDS.
- Before moving the drum or barrel, replace missing bungs and/or lids and secure as necessary.
- Depending upon the contents of the drum, estimate its weight. Determine whether you can move it yourself or if you need assistance. A 55-gallon drum can weigh 400-800 pounds.
- If you decide to move it yourself, use a forklift if one is available, a hand truck or a drum cart that is designed specifically for drum handling.
- To upend a barrel or drum, a drum lifter bar is preferable. If one is not available, crouch in front of the drum, knees apart and firmly grasp the chime on each side. Keep your back straight and use your leg muscles to lift. Balance the drum on the lower chime, shift your hands to the far edge, and ease the drum into the upended position.
- Protect your hands, feet, back and face during this work. Safety shoes should be required when moving heavy drums. Gloves, eye protection, aprons, and other personal protective equipment may be needed, depending upon the contents of the drum.
- Be sure to use material handling equipment whenever possible, and get help when you need it! Most importantly, simply purchase 5 gal. containers rather than 55 Gal. Drums!

DANGER USING UTILITY KNIVES

SAFETY TOOL BOX TALK

There's one hand tool that demands your respect over many others in the workplace, a tool that can cut you to the bone in an instant - the utility knife.

Many accidents involving utility knives occur for the following reasons:

- Drawing the knife towards you instead of away from your body.
- Working with a dull blade. (Dull blades require more pressure, increasing the potential for injury.)
- Trying to cut more than the knife can handle.
- Having extremities in the cutting path.
- Using damaged tool.
- Improperly storing the knife with the blade extended.
- Neglecting to inspect the tool before use.

There have been cases where workers have suffered injuries from exposed blade tips. This is because the blades did not completely retract into the handle. That's why it's important for workers to use the proper size blades or replace defective retraction mechanisms. Some companies use self-retracting utility knives - the blade automatically retracts into the handle when not in use.

Problems also arise when some employees don't have or can't find a utility knife supplied by the company. As a result, they tend to use whatever is handy, such as a pocket knife or other tool with a sharp edge. This can quickly turn hazardous if the tool slips or is used incorrectly.

CRANE DANGER: EIGHT SIGNS TO WATCH FOR

SAFETY TOOL BOX TALK

OUTRIGGERS, CRAWLER TRACKS, OR TIRES RAISED OFF THE GROUND WHILE OPERATING.

This is an extremely dangerous condition that indicates the crane is being overloaded and may tip over or collapse. The wrong move in this situation can cause a catastrophe.

OPERATING CLOSE TO POWER LINES OR OTHER DANGEROUS OBJECTS.

Electrocution due to contact with power lines is the leading cause of crane related fatalities. Detailed federal regulations for proximity to high voltage sources must be strictly enforced.

RIDING THE LOAD OR CRANE HOOK.

This is a serious violation of federal safety regulations. Crane structures and cables have far lower strength margins for handling material than what is required for lifting personnel. Workers must never be suspended from a crane boom.

VISIBLE STRUCTURAL DAMAGE ON THE CRANE OR RIGGING.

There is little or no back up system in the load-supporting components of most cranes. A damaged component can fail completely and without warning, causing the boom or load to fall.

MODIFICATIONS MADE BY ADDING EXTRA COUNTERWEIGHT OR HOLDING DOWN THE REAR OF THE CRANE.

All job-initiated modifications are illegal and may permit overloading the crane. If not approved by the crane manufacturer in writing, these modifications can over stress critical structural components, which could cause failure of the crane.

A CRANE OPERATING NEAR A TRENCH OR EXCAVATION.

Cranes exert extremely high loads on the soil near the tracks, outriggers, or tires. A crane set up in close proximity to an excavation can cause soil failure, crane turnover, and possible disaster.

THE CRANE IS NOTICEABLY OUT OF LEVEL WHILE OPERATING.

There is no faster way to collapse a crane boom than to impose a side force on the boom. Working out of level creates a dynamic side force that means a crane collapse may be imminent.

THE CRANE'S HOIST LINE IS NOT VERTICAL AT ALL TIMES DURING OPERATION.

This indicates improper operation. A hoist line that is not vertical obviously indicates that the load is not hanging straight down. Out of plumb loads can cause crane collapse by generating side forces on the boom. In some instances, the crane may tip over if the load swings.

CRANE AND MATERIAL HANDLING SAFETY

SAFETY TOOL BOX TALK

QUALIFIED OPERATORS

A frequent cause of accidents is an operation in which the regular machine operator isn't available, a "quick pick" is necessary and someone who isn't qualified gets behind the controls. Allowing someone to operate equipment without knowing their level of experience could mean disaster.

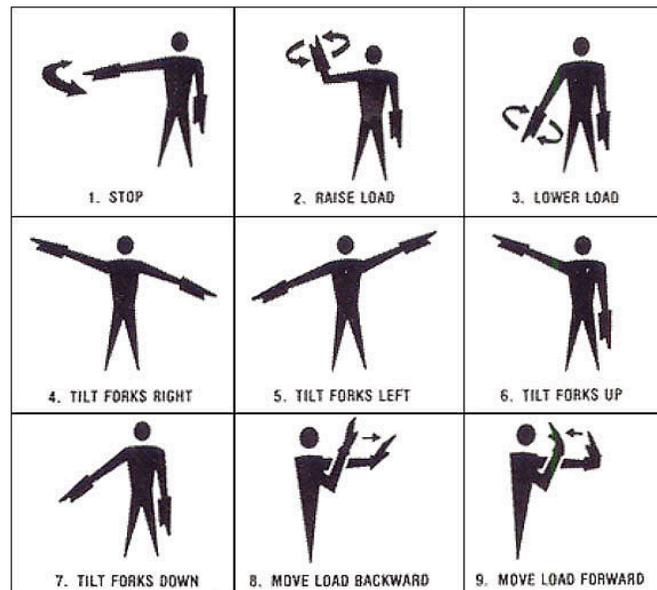
What does it mean to be "qualified"? A qualified person is usually one who can demonstrate an understanding of the equipment by education, experience, or both. An operator "wanna-be" may say he or she is qualified, but not have evidence of training or be able to fully explain the purpose of controls on the equipment. Always have a "new" operator demonstrate his or her abilities without a load and well away from other workers.

THE WEIGHT OF AN OBJECT BEING LIFTED ISN'T ALWAYS CLEAR

Don't guess and never put equipment under load to see if it "can handle it." Cranes must be equipped with a lifting chart that will enable the operator to determine the safest swing and boom angle(s).

WHO'S IN CHARGE HERE?

In a word, the operator. Why? The qualified operator is controlling the load and knows the equipment's limitations. An operator often has to take directions - but who's? All too often, more than one worker will attempt to give the operator signals. It's at that point that the operator should put the load back down and get a few things straight. **Uniform hand signals must be used.**



RIGGING THE LOAD

Both the way a load gets rigged and the type and condition of the rigging equipment used plays a critical role in any safe lift. Examine the condition of rigging equipment:

- Has it been left laying in the dirt or rotting in the back of someone's pick-up?
- If it's a wire rope sling, are there kinks, flattened areas, or individual broken wires or strands?
- If it's a synthetic web sling, is there any color show-through evident?
- If it's steel alloy chain, does it have a tag identifying its capacity? When was it last proof-load tested?

Any one of these conditions means the rigging equipment should be taken out of service. "Taken out of service" means cutting it apart so it won't be left around for someone who might not recognize the hazard.

CONTROLLING THE LOAD

Now that the load is up, who's exposed? The basic rule is: No one puts any part of their body under a suspended load. Even with the best crane and the newest rigging equipment available, the variables of any lift dictate that only personnel involved with the operation be in the immediate area.

- Never place any portion of your body under a suspended load.
- Once a load is aloft, it should be controlled by a tagline.
- Never take up positions near fixed objects when a load is placed under tension. The load may move sideways and cause a pinch point.

CRANE AND MATERIAL HANDLING SAFETY FORM

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SUPERVISOR OBSERVATIONS

List the hazards which the supervisor has observed since the previous safety meeting and the remedies used to correct them.

WORKERS OBSERVATIONS

List the hazards which the worker has observed since the previous safety meeting and the remedies used to correct them.

CONTAINER AND HOT WORK

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Containers that have held flammable, combustible or acid liquids can remain explosive or harmful even after the liquid has been removed. The liquid in the container is replaced by air which mixes with the hazardous vapors. This combination can be explosively ignited by a spark or heat. In fact, these containers are normally *more* explosive than a full container.

How many times have you seen a 5 gallon pail or a 55 gallon drum being used as a welding or grinding stand? This is very dangerous. Any sparks produced could ignite the vapors. Also, the torch flame, heating the container, could ignite the vapors within the drum. The auto-ignition temperature of many flammable vapors is far below the melting point of steel. Some auto-ignition points are as low as 450 degrees.

Never attempt to do any hot work on a container.

Don't forget, vapors can travel to a source of ignition that is located well away from the work area. For this reason, always replace the cap on any container. With the cap off there is a greater likelihood of product vapors escaping into the air where they could be ignited, or where a source of ignition could be accidentally introduced into the opening.

BULK MORTAR SAFETY

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Most jobs are now using silos and bulk mortar bags in making mortar. We believe this is less hazardous than using 90 lbs. individual bags to make mortar considering each bag must be manually lifted from a stack and put on top of the mixer, posing more of a chance for lifting strains. Just because the bulk mortar is less hazardous does not mean there are no hazards involved.

One such hazard was brought to our attention not long ago and is not the first time I have heard of it. It came in the form of a Near Miss. The forklift operator had lifted the bulk mortar bag with the forklift and a second crew member began to pull the plastic off of the bag while it was elevated. While pulling down on the plastic the straps holding the bag ripped loose from the bag and it came crashing to the ground. These bags weight a ton and could cripple or kill a man if it were to land on him.

As I said, this was a near miss and no one was hurt because a safety rule was being followed. What safety rule was it? **DON'T GET UNDER A SUSPENDED LOAD!** We have heard this rule over and over again and thankfully it was being followed that day.

