

HAND SAFETY GUIDE

CRUSH POINTS / HAND SAFETY AWARENESS



WHY is Hand Safety so important?



The #1 tool we all use each day is our HANDS.

- Almost half of all injuries [44%], and over half [56%] of all recordables are hand injuries. (RUN COMPANY STATS)
- Without your fingers or hands, your ability to work would be greatly reduced. Your hands are one of your greatest assets and must be protected.
- Hands are exposed to many hazards, such as cuts from sharp objects, smashing and pinching from moving machinery/material, joint and nerve pain, environmental contact (heat, cold, plants, insects), and chemicals.

Common causes of hand injuries include:

- ✘ Improper use of tools or using the incorrect tool
- ✘ Lifting or applying force incorrectly
- ✘ Using the wrong PPE / failing to utilize PPE
- ✘ Lack of awareness - complacency
- ✘ Inadequate assessment of risk
- ✘ Bypassing safety procedures
- ✘ Cutting corners or rushing



Kiewit



Start Card

Hand Hazard Assessment



4

ADDITIONAL HAZARD PLANNING / CONTROL(S)

Are there adjacent crews and / or operations that we need to coordinate with? *If yes, review each other's Start Cards.* Y N
N/A

What is the access for this operation?

What are the crush points most likely to cause a hand injury?

Section 4 – Operations Start Card

- Before starting your operation, ensure to identify all possible crush points / hand hazards and capture it on your start card.
- Identifying the possible hand hazards before starting your operation lowers your chance of suffering a hand injury.



Kiewit





PPE - Gloves

“Our Last Line Of Defense”

1. Choose the Right Glove: Use gloves designed for specific tasks to avoid hazards.
2. Ensure Proper Fit: Avoid gloves that are too large or too small; consult your supervisor for a better fit.
3. Replace Gloves When Needed: Check for damage before each shift; replace if necessary.

“Who’s counting on YOU to keep your hands safe?”



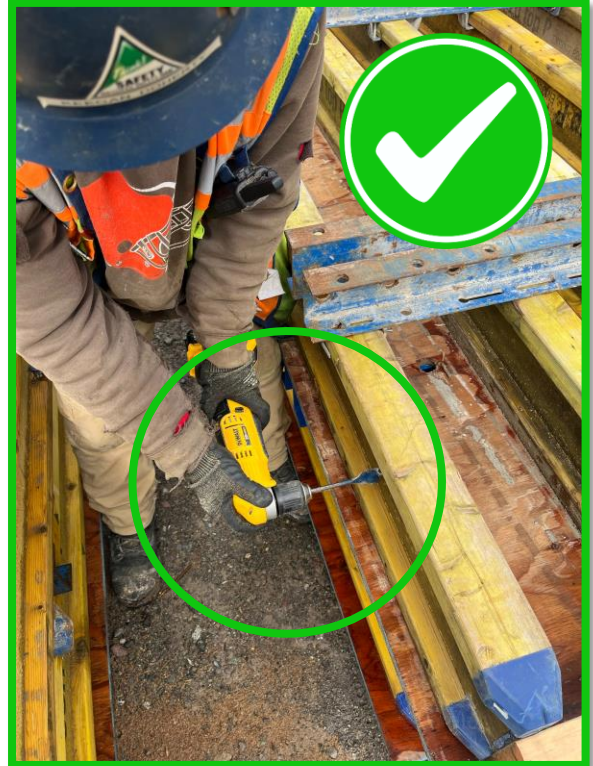
Kiewit



STRUCTURES DRILL OPERATION



Crush points between tool and adjacent materials if binding occurs.



- Pre-drill components at a designated workstation where possible
- Drill from a location where there are no adjacent materials or crush points
- Securely hold the tool with both hands to maintain control



STRUCTURES BUILDING FORMWORK



Crush points between formwork components when manually lifting and placing.



- Keep hands out of the line of fire of crush points when setting formwork components.
- Build formwork at a designated workstation.
- Lift formwork components with a teammate when required.



Kiewit





STRUCTURES BUILDING FORMWORK

Crush points between formwork plywood and components when manually lifting and placing.



- Keep hands out of the line of fire of crush points when placing plywood.
 - Look for openings between formwork components that are free of crush points.
- Build formwork at a designated workstation.



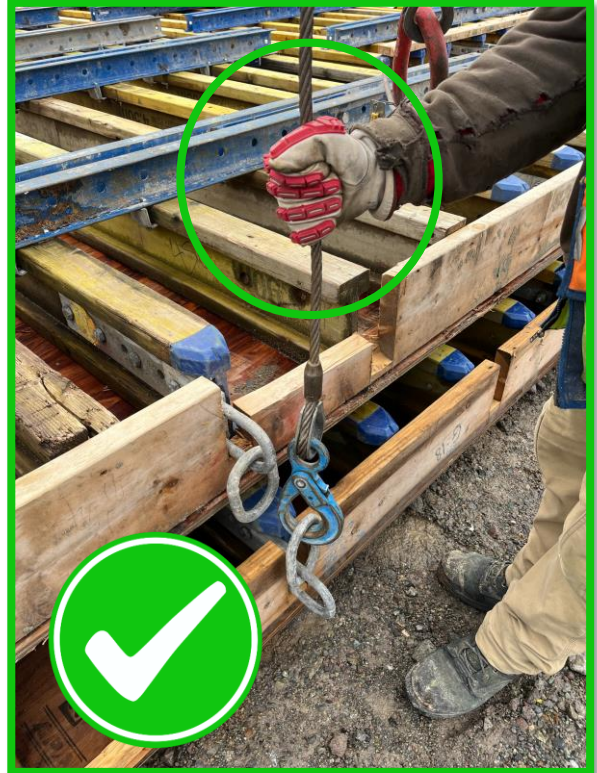
Kiewit





STRUCTURES RIGGING

Crush points in rigging equipment, hooks and shackles, etc.



- Keep hands out of the line of fire of crush points between rigging and adjacent materials.
- Keep hands away from crush points at connection points of rigging equipment.
 - Hold rigging from cable if required.
- Use gloves with impact protection



Kiewit



STRUCTURES SETTING FORMWORK



Crush points between formwork when setting into place.



- Keep hands out of the line of fire of crush points between formwork and adjacent structures.
- Ensure crew composition is adequate for taglines, crane signal person, form setters, etc.
- Communicate effectively between teammates



Kiewit

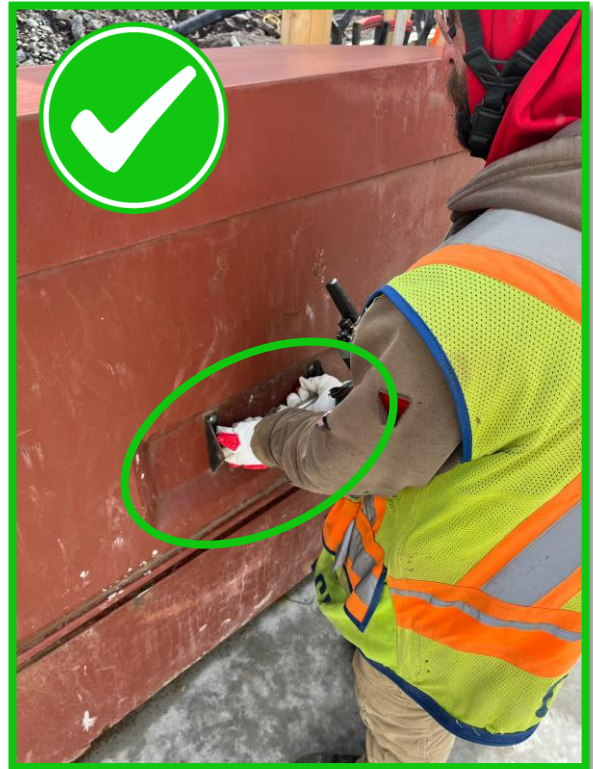
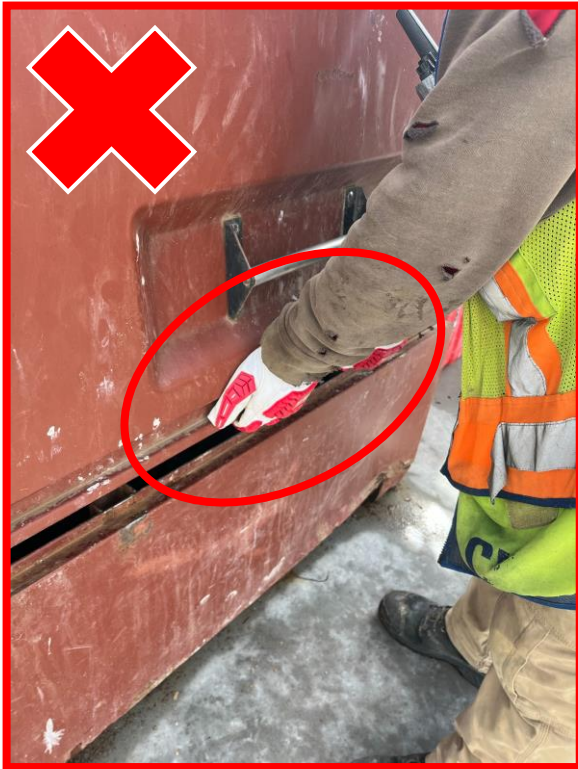


STRUCTURES

JOB BOXES



Crush points in Job Box doors and hinges.



- Keep hands out of the line of fire of crush points when opening and closing Job Boxes.
- Keep hands away from hinges.
- Communicate with adjacent workers that could be exposed to the line of fire.
- Use designated handles on Job Boxes.
- Secure open doors in windy environments.



Kiewit





STRUCTURES

BURKE BARS & PRYBARS

Crush points between burke bar and adjacent materials.



- Keep hands out of the line of fire of crush points between the burke bar or prybar and adjacent materials and structures.
- Securely position the burke bar or prybar against the material to avoid slipping.
- Use stable footing and an athletic stance.
- Keep teammates out of the line of fire of handles.



Kiewit



STRUCTURES

LADDERS



Crush points in ladder hinges and between rungs and rails.



- Setup and take down ladders in locations with sufficient space where they won't shift or become displaced.
- Keep hands out of crush points created in ladder hinges and rails.
- Don't allow extension ladder sections to freefall – use supplied ropes and rung locks



Kiewit



STRUCTURES

MEWP's



Crush points between MEWP basket and structure



- S
- Don



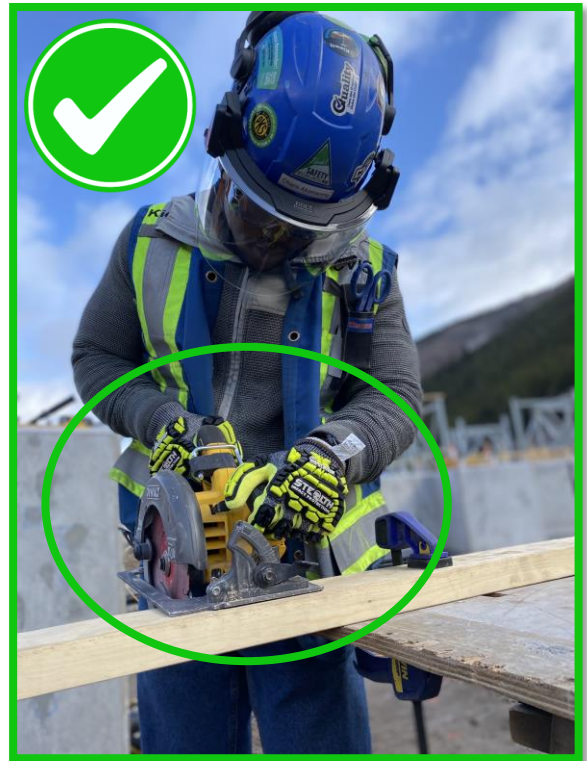
Kiewit





SMALL TOOLS SKILL SAW

Line of fire - lacerations



- Disconnect the power source before making any adjustments, changing accessories, or storing the tool.
- Keep hands away from cutting area and blade.
- Keep your second hand on auxiliary handle, or motor housing. NEVER place your hand behind the saw blade.
- DO NOT reach under the work.
- NEVER hold the piece being cut



Kiewit





SMALL TOOLS RECIRPOCAL SAW

Line of fire – cuts from saw



- Secure the material being cut.
- ALWAYS place two hands on the saw when operating to keep hands out of the line of fire.
- Keep saw firmly seated on the material being cut.
- Deenergize saw before changing blade. Keep gloves on.



Kiewit





SMALL TOOLS GRINDER

Line of fire - LACERATION



- Prior to inspecting or changing the grinder disc, ensure the grinder is disconnected from the power source.
- Adjust the guard to direct sparks away from yourself and others in immediate area.
- During the operation, ensure both hands are on the grinder. ALWAYS use the safety handle on the grinder.
- Position yourself firmly standing both feet apart to prevent major kickback.





SMALL TOOLS BANDSAW

Changing Blades - LACERATION



- ALWAYS operate the tool with two hands, try not to pivot the saw when cutting to avoid warping or breaking the blade.
- Use a vice, clamp, or have a partner hold for stability while cutting.
- Keep hands out of line of fire of the cutting head, blade wheels, and drive belts when modifying or adjusting the material (e.g. applying lubrication, shifting the material to be cut, etc.)
- Ensure minimum cut level 4 gloves are being worn during operation.
- Always wear gloves and de energize tool before inspecting/replacing blade.



Kiewit





CIVIL

Cleaning Tracks

Abrasions/ Impact cleaning tracks



- DO NOT place hand in between the track to remove any object, rock or dirt.
- Turn off machine before cleaning tracks.
- Inspect shovel to make sure it is in good working condition and free from splinters that has potential to pierce glove.
- Impact gloves are recommended.



Kiewit





CIVIL

Opening Doors / Housing

Crush Points – Equipment Doors / Housing



- Use equipment handles to eliminate hand hazards.
- Be aware of your hand placement.
- Ensure latch is active to prevent wind slamming door / housing closed.
- Being present and not rushing will prevent most of these incidents.
- **Always** wear your gloves outside of equipment.





CIVIL Backfill Operations

Plate Tamper – Crush Points



- Be aware and document on start card all possible crush points when using plate tamper.
- Ensure to have proper hand placement when in operation.
- Impact / Anti Vibration gloves are recommended





LIFTING & RIGGING

Moving Material

Tag Lines



- B
- E



Kiewit





LOGISTICS CONCRETE BARRIER PICKERS

Crush/Amputation points



- Hands must only be in the area identified by manufacturer when first positioning the lift then step back away from barrier keeping a clear distance.
- **NEVER KEEP HANDS ON LIFT WHILE BOOMING UP.** If identified markings wear away, reapply with paint and or tape.



Kiewit





LOGISTICS HANDLING MATERIALS

Crush points between materials, lids, and covers, etc.



Gloves – our last line of defense

- When lifting or placing material, be aware of your hand placement before setting material down.
- When moving material, ensure hands are out of any possible crush points.
- When rolling or picking up Rebar/dunnage, make sure you pay attention to your hand placement, keeping fingers and hands out of crush points.
- Impact gloves are recommended when material handling



Kiewit





LOGISTICS HANDLING MATERIALS

Crush points between materials, pallets, etc.



- W
-
-
-



Kiewit





LOGISTICS HANDLING MATERIALS

Crush points on tailgates



-
-
-
-



Kiewit



LOGISTICS RATCHETING STRAPS



Crush points in ratchet components and between straps and material.



- Use the provided handles on ratchet straps.
- Keep your hands out from between strap and the load.



Kiewit





LOGISTICS BANDING MATERIALS

Crush points in bander components and between bands and material.



- When banding keep your hands out of crush points between the band and materials
- When ratcheting bands keep your hands out of the gears and the crimper
- When crimping do not put your fingers under the bands



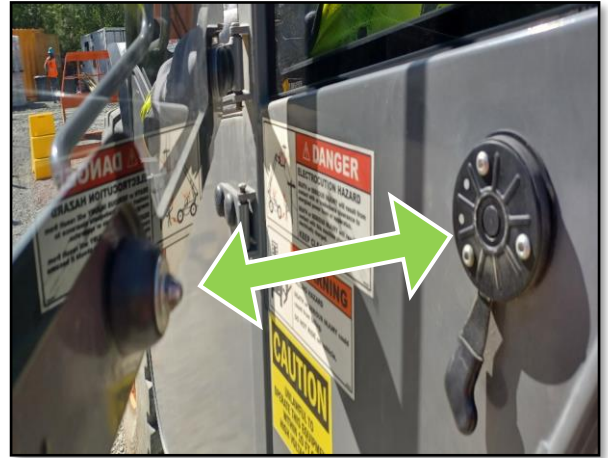
Kiewit





LOGISTICS TELEHANDLER OPERATION

Crush points in window and door frames.



- Keep hands in machine when operating any equipment
- Ensure door is secured when open to prevent wind blowing it shut
- If window is open, ensure it is secured in the latch to prevent wind blowing it shut



LOGISTICS FORK OPERATIONS



Crush points between fork components.



- The fork release latch can crush fingers if twisted in the wrong seating position
- Use both hands with body squared to the fork carriage. With the forks near the ground pull it up and rotate the adapter into place
- Position hands so that at no time your hands come between the adapter and the back end of the seated fork
- Keep hands and fingers out of crush points between the fork and the fork carriage.



Kiewit

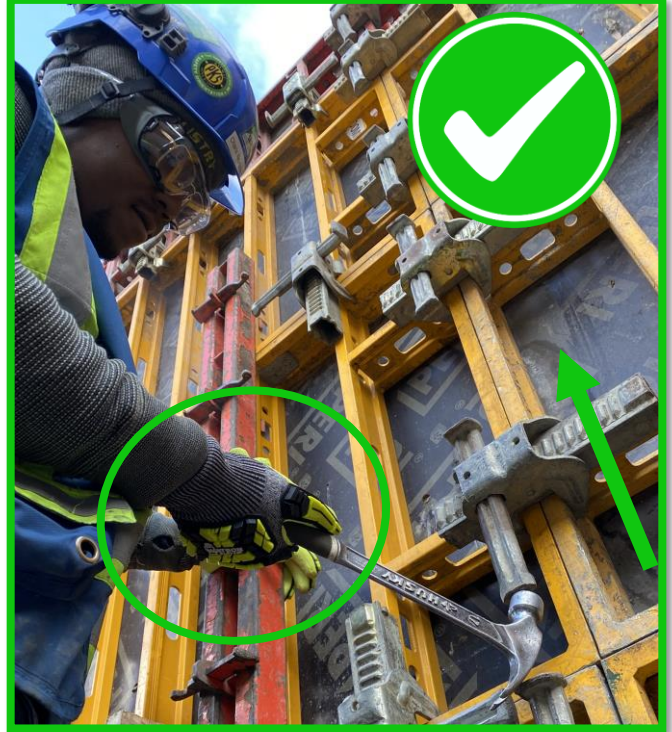
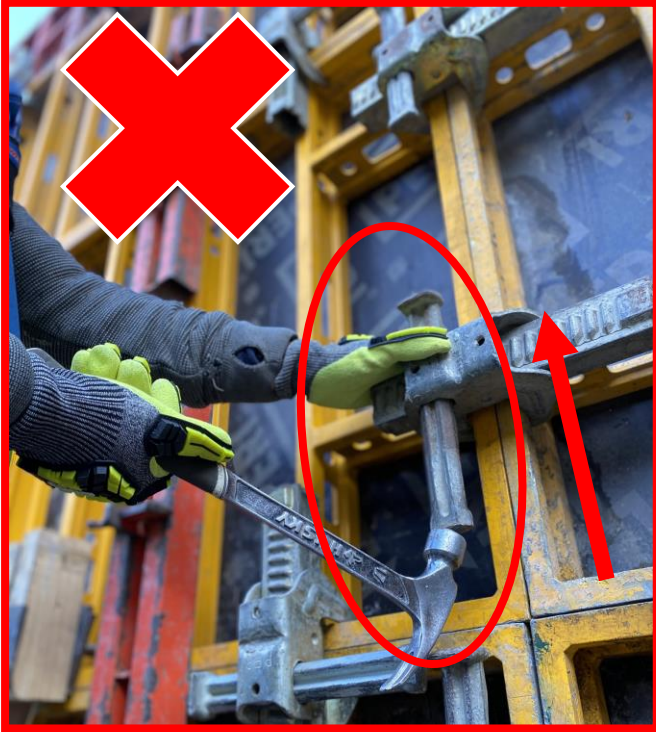




CONCRETE OPERATIONS

Formwork

Crush Points – Releasing panel pins



- When releasing panel pins, be aware of your hand placement
- Keep hands out of line of fire
- Impact gloves are recommended





CONCRETE OPERATIONS

Formwork

Lacerations + Punctures from Tie-Wire / Sharp Edges



- Ensure all tie wire ends are bent inwards eliminating puncture / lacerations hazards
- Wear long sleeves and proper gloves
- Best practice: Use magnet to clean up metal debris inside forms – eliminating puncture/laceration hazards



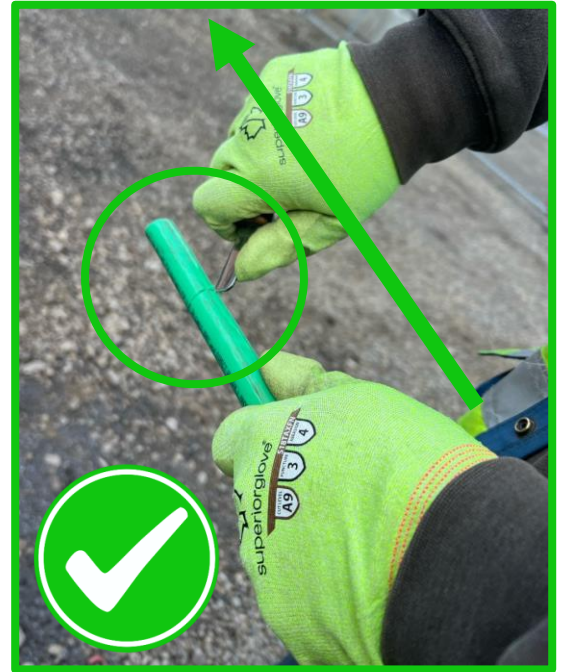
Kiewit





ELECTRICAL Stripping Cable

Line of fire lacerations – Stripping Cable



- Self retracting knives are the only approved knives on Kiewit sites. Other safety knives, such as Klein cable splicing knives or round tip insulation knives will be permitted and provided for use by specific disciplines only.
- Ensure the hazards related to knife use are documented on your start card associated with the task.
- A minimum cut level 4 glove MUST be worn.
- Always hold the knife by the handle.
- DO NOT cut towards yourself or others,
- ALWAYS cut away from yourself.
- DO NOT use your thumb to stop the blade
- NEVER throw a knife to a co worker



Kiewit





SURVEY STAKING LAYOUT

Crush point while hammering survey stakes



- Be aware of possible crush points while hammering survey stakes into the ground.
- Ensure proper hand placement (hand below top of stake) – safe to allow hammer to contact top of stake.
- Use a firm grip while swinging hammer
- Ensure proper hammer selection for operation.



Kiewit



“What Hand Safety means to our people...”



Kiewit

