

CRIBBING: RESCUING A PERSON TRAPPED UNDER HEAVY OBJECT

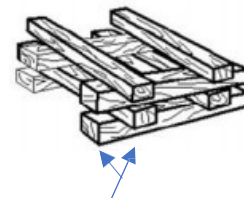
by incrementally lifting the object with a lever
and placing cribbing materials underneath to stabilize it (PM: pg. 20-22 & 27)



LEVERAGING: when a lever (a sturdy pole) is wedged under the edge of an object, and is pivoted down over a stationary fulcrum, the object will lift, using this 'mechanical advantage'.

A CRIB: a wooden framework used for supporting an object

BOX CRIBBING: arranging alternating parallel pairs of equal wood pieces layered perpendicularly, to form a square-shaped stable support.



- **Edges of the wood each hang over** the 'box' shape ~4", for added stability.
- **Cribbing material** should be of relatively uniform size. (2" X 4" X 24")
- **Wedge:** ½ crib piece, diagonally cut, used as a space-holder, as the crib goes up

'UNBOXED' CRIBBING: If evenly-sized material not available, improvise (e.g., fencing, tires or structural debris). Function over form

CRIBBING STEPS & ROLES

PREPARATION:

1. **Size-up of scene:** Gather facts, identify hazards, and establish priorities. Heavy gloves, eye & knee protection for all. 4 persons minimal for cribbing; 9+ persons best to fill roles. Seek medical professional & transport, for extricated survivors. Consider placing a tourniquet before lifting, if needed. (see Step 8, pg. 2 for details).
2. **GROUP LEADER:** formulates plan to identify how and where to lift and crib.
 - a. **Leader is positioned to view the entire operation** while remaining out of other rescuers' way.
 - b. **Loudly signals** each step. (and/or oversees lever and crib persons' signals)
3. **Gather necessary materials:** cribbing pieces: spacers/wedges. For lifting operations: lever, fulcrum blocks.
4. **1ST stabilize the object at all sides as needed, prior to lifting,** using cribbing & wedges

CRIBBING PROCESS:

5. **CRIBBERS:** positioned on either side of the collapsed object. As the object is lifted, add cribbing as needed one layer at a time.
 - a. **Each shouts “READY!”** when in a squatting position (for quick retreat), all anticipated materials in hand
 - b. **Each time enough space is created by the lever’s lift,** add an additional layer of wood pairs, each set perpendicular to the previous layer.
 - c. **Slide a wedge along crib to fill and hold** any extra space created by the lift that is less than the size of a crib piece.
 - d. **Each shouts “SET!”** immediately when your stacking is completed for that lift of the level.
6. **‘FEEDERS’:** **Continually place cribbing materials** to be readily accessible for Cribbers at each lift, while not a tripping hazard in case of rapid retreat. Assure that appropriately sized fulcrum blocks/material is accessible to Lever Person/s.
7. **LEVER PERSON:** **Place lever and fulcrum** at identified location. Lever should be 90 degrees perpendicular to the edge of the object being lifted, where the lever’s end can maintain a stable grip under the collapsed object.
 - a. **Ensure safe body positioning:** gloved fingers flat out; not curled under the lever. Feet are shoulder width apart, back and arms straighten. Avoid head directly over lever in case lever dislodges and pops up.
 - b. **Push down on lever** to lift the object when you hear **“READY”** from ALL Cribbers.
 - c. **Shout “RELEASING LEVER!”** when you hear ALL cribbers shout **“SET”**. Pause a moment to ensure cribbers’ hands are clear, and then raise lever.
 - d. **"Lift an inch; crib an inch":** gradual build up, for stability, safety, and efficiency
8. **Arrange for MEDICAL PROFESSIONAL** by survivor’s head, to monitor and be ready to treat and remove the survivor as soon as possible. Avoid fatal ‘crush syndrome’ when object’s weight lifts off survivor’s body -dangers from releasing back into the body now chemically compromised blood. Consider placing a tourniquet before lift, to block impure blood from circulating, until in a professional medical setting.

- a. **A less-compromised survivor may be released**, with precautions for their health, once object is adequately raised & supported.

9. **SAFETY PERSON**: assigned to monitor site, behavior, welfare

SAFETY:

- **Signaling danger: anyone can loudly call out “STICK IT!”**, e.g., for collapse of the heavy object, slip of lever. All immediately cease operations; get out of harm’s way. If time, cribbers stick a wedge onto current crib stack under object, to salvage any partial lift. Fresh evaluation of strategy.
- **Never put your hands underneath the collapsed object.** Use ‘Chop sticks’: to extract or place something under the heavy object being lifted, using 2 long pieces of wood/ other similar material as a tweezer.
- **Never leverage and crib at opposite ends of object at the same time** -this would increase instability. Lift and crib at one end, then repeat the process at the other end, as needed.
- **May have to crib and lift in more than one location**, for uneven conditions or to accommodate several trapped survivors.
- **Inconvenient debris may be moved** using 2 human lines facing each other, passing debris along in a zig-zag pattern, alternating between the 2 lines, thus minimizing back twists. Avoid obstructing rescue operations.

AFTERCARE OF SITE

- **Don’t leave an unsafe condition**, unless it’s necessary to evacuate immediately. When survivor is removed, reverse the leveraging and cribbing process to lower the object.
- **Collect the lifting/cribbing supplies** to be available for additional operations.