

## Proper Lifting:

The entire point of proper lifting is to avoid injuries. While there are different specifics for ergonomic lifting in various situations, the one overarching factor is to never lift using your back or hips as the primary driving force of the vertical movement.

**Real time judgment tip:** If you EVER feel like a squat lift isn't generating enough power to lift, find a partner to help. If you cannot get a solid grip, use a tool. If you cannot lift with your legs, then try with yours and a coworker, or a tool.

## General guidelines for lifting:

1. Preparation - secure the load, route, and self. Stretch/warm up.
2. Lift - legs are for lifting, everything else is for something else.
3. Carry - stability first, movement second.
4. Set - lifting in reverse. Legs are still for lifting, everything else is for something else.

## Highly detailed steps for safe lifting:

1. Inspect the object you're planning on moving, the desired location of leaving the object after moving, the path through which the object shall move, and any intersecting paths that others might utilize while the object is in motion.
2. Secure the object to whatever vehicle has been judged as effective—pallet jack, dolly, yourself, etc.
3. Verify personal posture. Maintain as close-to-core center of gravity as possible. Keep both feet firmly planted and within standard deviations of shoulder-length apart.
  - a. For unassisted lifting, squat with a squared shoulder position and aligned back and hip position. Check your grip and recheck your center of gravity now that load is attached to you.
  - b. For tool assisted lifting, utilize appropriate tool usage guidelines.
    - I. When using a dolly, ensure that the center of gravity of the load is as close to the guide rails as possible, while you maintain a squared standing posture.
    - II. When using a pallet jack, your posture should be close to a squared standing rest.
4. Lift the load.
  - a. For unassisted lifting, after ensuring appropriately stable back and hip alignment against center of gravity, stand by extending your knees and allowing ONLY your ankles and hip rotations to RETURN to a resting position. If you cannot simply stand by extending your knees **without non-leg related joints moving**, then you do NOT have a properly secured load or posture.
  - b. For tool assisted lifting, utilize appropriate tool usage guidelines.

- i. When using a dolly, ensure that the wheels remain stably underneath the load while the dolly handle remains close to your resting center of gravity.
    - ii. When using a pallet jack, ensure appropriate environmental space for jacking the handle if on a manual jack, as well as ensure that the pallet has no impeding surroundings for the lift.
5. Transport the load.
  - a. For unassisted lifting, maintain your vertical stance and walk with a standard gait. If you cannot take casual steps while holding a load, then the load is heavier than is safe for you to transport with unassisted lifting. Find a coworker or use a tool.
  - b. For tool assisted lifting, follow appropriate tool guidelines.
    - i. When moving with a dolly, keep the handle close to your center of gravity while walking normally, while the wheels remain firmly in contact with the ground.
    - ii. When moving with a pallet jack, ensure appropriate environmental space for moving the jack handle, path width including load swing, and never allowing any person, yourself included, to put any body part or worn clothing article near or near under a pallet.
6. Set the load down. Just as when lifting the load, ensure appropriate postures and safety considerations.
  - a. For unassisted lifting, maintain your squared posture, ensure your feet are within appropriate standard deviations of shoulder width apart, and squat with the load at a controlled rate. Release your grip only after ensuring this landing location is clear.
  - b. For assisted lifting, follow appropriate tool guidelines.
    - I. When moving with a dolly, return the dolly to its vertical resting position, keeping the center of gravity and wheels as vertically aligned as possible.
    - II. When moving with a pallet jack, ensure that the landing position includes enough space to remove the pallet jack after dropping. During pallet jack release, do NOT fully release the hydraulics all at once. A slow pallet release doubles for safety, both allowing time for any incidentals to move if other safety policies weren't properly observed, as well as reducing risk of aggravating the pallet load. An aggravated pallet load runs the risk of breaking and falling onto the surroundings, yourself included.