Filling, Moving and Placing Sandbags During Flooding Disasters

Manually filling, moving and placing sandbags is physically demanding work. It involves repeatedly lifting and carrying heavy loads, and may involve working in awkward positions. This work may lead to back and other injuries.

Automated equipment to fill and move sandbags reduces heavy lifting and should be used when possible.

General Safety and Health Advice
- Use gloves to protect hands from chemically-treated sandbags and contaminants in sand and floodwater.
  • Avoid touching your eyes and mouth.
  • Wash your hands and face before eating or drinking.
  • Use safety glasses, particularly on dry and windy days and when working with automated equipment.
- Wear work boots (waterproofed if working in floodwater).
- Use waterproof gear if working in floodwater or rain.
- Use protective clothing if exposed to polluted floodwater.
- Wear reflective clothing when working at night.
- Use a personal floatation device when working near floodwater.

General Lifting Advice
- Do not overfill sandbags – fill bag 1/2 to 2/3 full.
- Keep load in front of and close to your body.
- Keep the lift between knee and waist height.
- Do not reach out, bend over, or twist when lifting.
- Lift with your legs, not your back.
- Use a good hand grip when lifting.

Filling Sandbags Safely

Manual Filling
- Using three-person crews works best:
  • Bagger - holds open and closes bags.
  • Shoveler - shovels sand into sandbags.
  • Mover - carries and places sandbags.
- Alternate positions every 20 to 30 minutes.
- Take frequent short rest breaks.

Bagging Safety
- Fold the bag opening outward and form collar to grip and keep the bag open more easily.
- Use a bag holder or rest the bag on the ground so that the opening is between knee and knuckle height.

Automated Filling
- Place bag so that the opening is at waist height.
- Put the bag on a support (ledge, pallet) to reduce the stress on the hands, shoulders and lower back.
- Fold the bag opening closed. Tie only if necessary.

Shoveling Safety
- Use a short handled, #2 rounded point shovel with straight shaft and D grip, bagger scoop or funnel to fill sandbags. A funnel can help limit spillover and cut down the number of loads needed to fill the bag.
- Bend the knees, not the back, to scoop sand.

Moving and Placing Sandbags Safely

Safety Advice for Transporters (Movers)
- Use General Lifting Advice to move and place bags.
- Carry bag in front of and close to your body.
- Carry bag at waist height using a cradle hold.
- When available use pallets to move sandbags to staging area.
- Drag the bag vertically, holding the folded end, if staging area or pallet is close (within 7 feet).
- Use a brigade line to pass bags to staging areas that are further away. Stagger the line and face each other to avoid twisting and turning.
- Do not throw sandbags – it stresses the back and shoulders.
- Elevate storage pallets to reduce bending when putting bags on or lifting bags from pallets.
- Straddle drop point with the bag between your ankles as you place it.

Source: OSHA Region V

For more complete information, see U.S. Army Corps of Engineers information on sandbag operations and OSHA's website, www.osha.gov.
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