

Safe Sandbagging

Work safely to avoid injury

Shovelling Technique

Choose the proper shovel and use it correctly to reduce the risk of injury when shovelling fill into sandbags.

Shovel characteristics

The shovel should meet the following criteria:

- Weight – between 1.5-3 kg
- Length – between elbow and chest height
- Shape – triangular or round blades
- Handles can be added to shovels to keep the back and wrist straighter

Rate of work

- Do not shovel more than 22-33 kg of fill per minute

Guidelines

Follow these guidelines to safely fill sandbags:

- Work in pairs. One person should hold the bag while the other shovels in the fill.
- The person holding the bag should stand with feet shoulder-width apart and knees bent. Use of safety goggles and gloves are recommended.

OR

- Bag-holding racks can be constructed to hold bags open for filling (see left).
- The person shovelling should keep feet wide apart. Place front foot close to shovel.
- Put weight on front foot and dig shovel into fill.
- Shift weight to rear foot. Keep load close to body.
- Turn feet instead of twisting. Release load into bag.
- Fill the bag 1/3 to 1/2 full.
- If tying the bag, tie at top of bag to allow fill to conform to shape.
- Bags should weigh no more than 15-20 kg.
- Alternate between tasks every 15-20 minutes to allow muscle groups to rest.

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Lifting/Lowering Technique

Sandbags are heavy. Use appropriate techniques to put them in place.

- Feet should be shoulder-width apart and staggered so one foot is in front of the other. Place the back foot behind the bag to be lifted.
- Bend the knees. Do not bend over at the waist.
- Keep the back straight and chin tucked in.
- Grip one hand around the neck of the bag. Place the other hand under the bag.
- Stand up using the leg muscles.
- Keep arms and elbows close to the body.
- When lowering the bag bend the knees not your back.

Carrying Technique

- Keep bag close to the body.
- Don't twist the back. To change direction, shift foot direction and turn the whole body.

Other resources:

For more information on safe sandbagging, visit these links:

- <http://www.ag.ndsu.edu/pubs/ageng/safety/ae626w.htm>
- <http://www.lrb.usace.army.mil/emb/sandbag.html>
- <http://www.farmsafety.ca/farmsafe/vol30No2.pdf>
- <http://www.ccohs.ca/oshanswers/ergonomics/shovel.html>