

# 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>