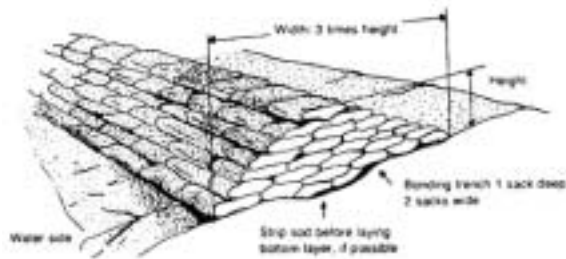


## Building Dikes to Prevent Minor Surface Flooding

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Water from melting snow or heavy rains can flood houses, equipment and supplies. A 1- to 3-foot high sandbag or earth dike can offer protection from shallow flooding. HOWEVER, it should be clearly understood that such dikes offer NO protection from flash floods.

STACKING SANDBAGS



A sandbag dike can be constructed as follows:

1. Select a site that uses natural land features to keep the dike as short and low as possible. Avoid trees and other obstructions that would weaken the structure. Do not build the dike against a basement wall. Leave about 8 feet of space to maneuver between the dike and the building.
2. Remove ice, snow and sod down to bare soil from a strip of land about 8 feet wide, if possible. Dig a bonding trench in the center that is 2 bags wide and 1 bag deep.
3. Fill and lap sand bags as described in the directions and figure below.

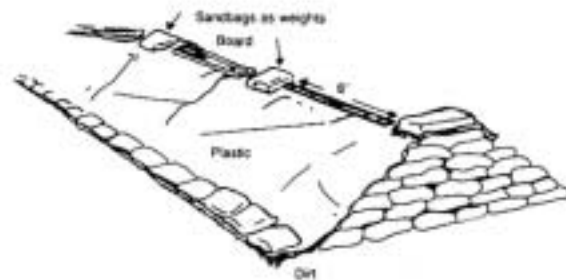
HOW TO FILL AND LAP SANDBAGS



- a. Fill about half full of clay, silt or sand, but do not tie them.
- b. Start the bottom layer lengthwise to the dike and alternate direction of bags so cracks are staggered. Lap the bags' unfilled portion under the next bag.

- c. Tamp thoroughly in place with a flat board.
- d. Build the dike three times as wide as high.

SEALING THE DIKE



4. Instructions are below and a figure on how to seal the dike is above.
  - a. On the water side, spread a layer of soil or sand 1 inch deep and about a foot wide along the bottom of the dike.
  - b. Lay polyethylene plastic sheeting over the loose soil so that its edge extends 1 foot from the bottom of the dike. Extend the upper edge of the sheeting over the top of the dike. The plastic sheeting should be a minimum of 6 mils thick.
  - c. Lay the plastic sheeting down very loosely so the force of the water will easily conform it to the sand surface. The force of the water could puncture the plastic if it is stretched too tight.
  - d. On the water side, place a row of tightly fitted sandbags on the bottom edge of the plastic. Lap the bags together and tap them in place as described in direction 3.
  - e. Put sandbags down the top edge of the plastic at about 6 foot intervals. Place boards or soil between these sandbags to prevent wind from disturbing the plastic. Avoid walking on the plastic or avoid puncturing it with sharp objects.

Bags required for 100 linear feet of dike	
Height of dike	Bags required
1 foot	800
2 feet	2000
3 feet	3400