



Building Dikes to Prevent Minor Surface Flooding

Water from hurricane rains can flood floors and damage yards, wells, feed supplies, machinery and other property. Flooding is more likely where surface drainage is poor or drainage systems nonfunctional.

How many bags will you need?	
To construct 100 linear feet of dike:	
Dike Height	Bags Needed
1 foot	800
2 feet	2,000
3 feet	3,400

A 1- to 3-foot-high sandbag or earth dike offers protection from shallow flooding (water depth less than 3 feet). Ask a construction firm, lumber yard or emergency management office where to buy sandbags in your area. A sandbag dike can be constructed as follows:

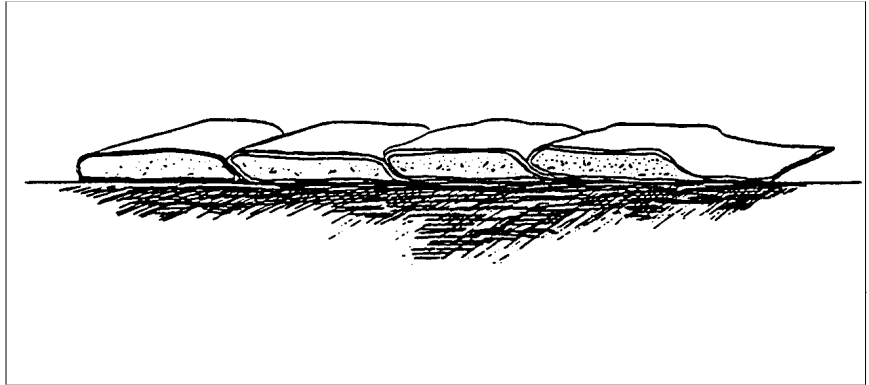
- Select the site for the dike, making the best use of natural land features to keep it as short and low as possible. Avoid trees or other obstructions which would weaken the structure. Do not build the dike against a basement wall. Leave about 8 feet of space to maneuver between the dike and buildings.
- Fill and lap sandbags. (If you are building the dike on a lawn you may omit the bonding trench.)
 - Fill bags almost half full of clay, silt or sand. Do not tie.
 - Alternate direction of bags with bottom layer lengthwise of dike. Lap unfilled portion under next bag.
 - Tamp thoroughly in place.
 - Build the dike 3 times as wide as high.
- Seal the finished dike to increase its watertightness. To seal the dike:
 - Spread a layer of earth or sand 1 inch deep and about 1 foot wide along the bottom of the dike on the water side.
 - Lay polyethylene plastic sheeting so that the bottom edge extends 1 foot beyond the bottom edge of the dike over the loose dirt. The upper edge should extend over the top of the dike. (This plastic sheeting, available from construction supply firms, lumberyards and farm stores, should be about 6 mil thick. It comes in 100-foot rolls and is 8 or 10 feet wide.)

This document is IFAS publication DH 908.

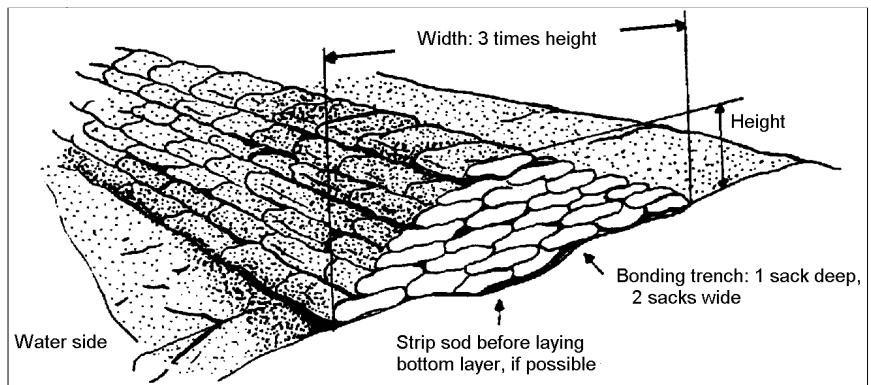
Adapted by UF/IFAS from:
*Disaster Handbook for
 Extension Agents*
 (Wisconsin Cooperative
 Extension Service)

- Place a row of tightly-fitting sandbags on the bottom edge of the plastic to form a watertight seal along the water side.
- Place sandbags about 6 ft apart to hold down the top edge of the plastic. Place boards or dirt between these sandbags to prevent winds from disturbing the plastic. As you work, avoid puncturing the plastic with sharp objects or by walking on it.

How to Fill and Lap Sandbags →



How to Stack Sandbags →



How to Seal the Dike →

