

# HOW TO FILL SANDBAGS

## Sandbag Construction

The use of sandbags is a simple, but effective way to prevent or reduce flood water damage. Properly filled and placed sandbags can act as a barrier to divert moving water around, instead of through, buildings.

Do not use garbage bags, as they are too slick to stack. Do not use feed sacks, as they are too large to handle. Use bags about 14-18" wide, and 30-36" deep.

A heavy bodied or sandy soil is most desirable for filling sandbags, but any usable material at or near the site has definite advantages. Gravelly or rocky soils are generally poor choices because of their permeability.

Sandbag barriers can easily be constructed by two people, as most individuals have the physical capability to carry or drag a sandbag weighing approximately 30 pounds.

## How to fill a sandbag



Filling sandbags is a two-person operation. Both people should be wearing gloves to protect their hands. One member of the team should place the empty bag between or slightly in front of widespread feet with arms extended. The throat of the bag is folded to form a collar, and held with the hands in a position that will enable the other team member to empty a rounded shovel full of material into the open end. The person holding the sack should be standing with knees slightly flexed, and head and face as far away from the shovel as possible.

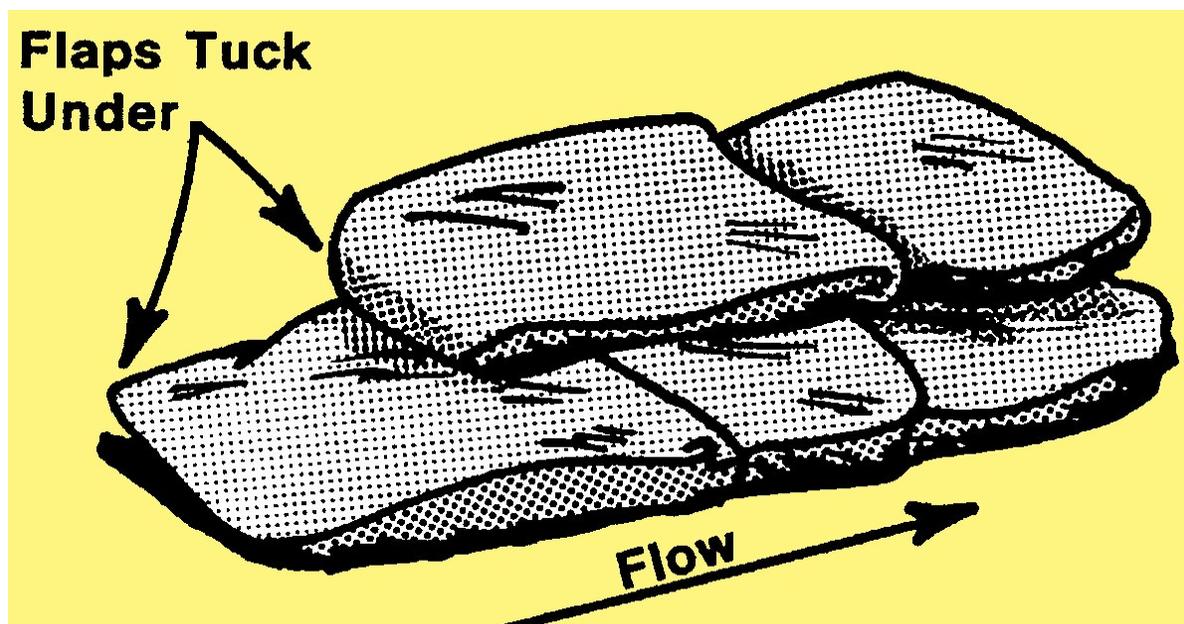
The shoveler should carefully release the rounded shovel full of soil into the throat of the bag. Haste in this operation can result in undue spillage and added work. The use of safety goggles and gloves is desirable, and sometimes necessary.

Bags should be filled between one-third ( $1/3$ ) to one-half ( $1/2$ ) of their capacity. This keeps the bag from getting too heavy, and permits the bags to be stacked with a good seal.

For large scale operations, filling sandbags can be expedited by using bag-holding racks, metal funnels, and power loading equipment. However, the special equipment required is not always available during an emergency.

### **Sandbag placement**

Remove any debris from the area where the bags are to be placed.



Fold the open end of the unfilled portion of the bag to form a triangle. If tied bags are used, flatten or flare the tied end.

Place the partially filled bags lengthwise and parallel to the direction of flow, with the open end facing against the water flow. Tuck the flaps under, keeping the unfilled portion under the weight of the sack.

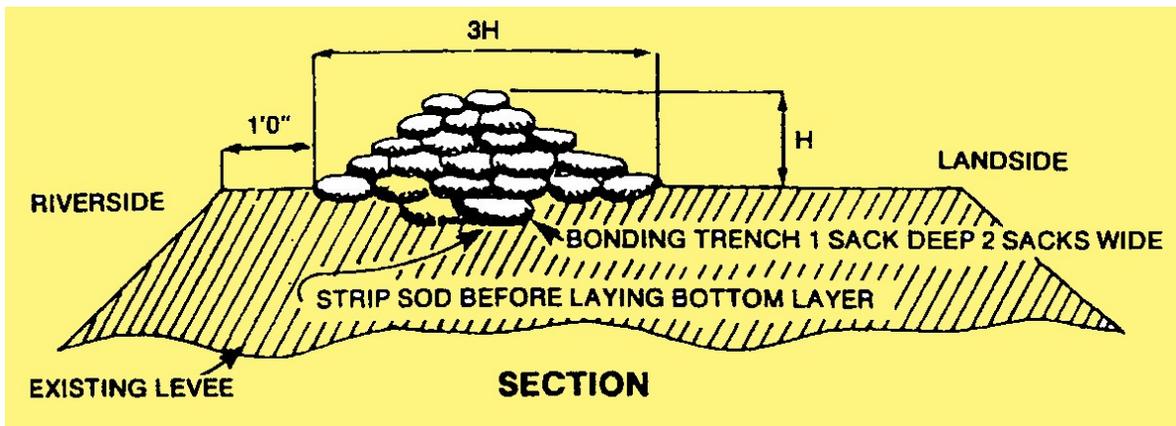
Place succeeding bags on top, offsetting by one-half ( $1/2$ ) filled length of the previous bag, and stamp into place to eliminate voids, and form a tight seal.

Stagger the joint connections when multiple layers are necessary. For unsupported layers over three (3) courses high, use the pyramid placement method.

## Pyramid Placement Method

The pyramid placement is used to increase the height of sandbag protection.

Place the sandbags to form a pyramid by alternating header courses (bags placed crosswise) and stretcher courses (bags placed lengthwise).



Stamp each bag in place, overlap sacks, maintain staggered joint placement, and tuck in any loose ends.

