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Sandbags are still the best way to put up a quick dike in times of need. They are useful for many things, but the main focus of this is for those fighting floods. It's easy to get a lot of sand delivered quickly, sandbags themselves are cheap, and with a little labor, anyone can protect their home.

Filling the sandbags is the bulk of the work; holding the bags while someone shovels is time consuming, back breaking and tedious. There are many inventions that can help with the process, but most of the ones that work well are expensive.

The Sandbag Tubes are a cheap, simple to make, tool that will reduce the amount of effort required to fill bags and speed up the process. Anyone can use them and they can be used over and over. Because they are so cheap and easy, many sets can be made and used simultaneously.

Advantages include-

- No one stuck bent over holding bags
- All participants can shovel
- Does not require lifting the shovel any higher than necessary
- All bags filled correctly and consistently (no heavy/light bags).
- Faster than many machines

Step 1 Buy the Materials

First you need to make sure you have all the required parts.

Parts needed:

- One 6" x 10' thin walled sewer pipe
- Two 8 foot 2x4s
- 1 5/8 construction screws (for attaching tubes)
- 3" construction screws or nails (for frame assembly)
- 2' 5" x 1'5" 1/4" or thicker plywood (optional but recommended)

Tools Needed:

- Saw to cut the tubing and 2x4
- Drill bit to pre-drill the holes for screws (right angle drill is easier)
- Powered screwdriver
- handheld jigsaw or router for cutting plywood (for optional top)

Step 2 Assemble your Tubes

First, get out the saw-

- Cut the sewer pipe into 6 sections (each 19-7/8" long)
- Cut the lumber into the following sections
 - (3) 2' 2"
 - (2) 1' 5-1/16"
 - (4) 6- 5/16"

Now, assemble the wood as shown in the diagram below, using the 3" screws (or nails) to hold the boards together.

Once you have your frame, you can see how you will slide the tubes into each hole. You will need to put the 1-5/8 screws through the tube and into the sides where it touches the boards on all four sides. There should be two screws at each spot. First, take your drill and pre-drill the 8 holes on each tube; one at 1" from the top and one at 2.5" from the top every 90 degrees. Now put the tube in the frame and put screws in each hole. The easiest way is with a right angle drill.

When all 6 tubes are screwed on, the tubes are usable. At this point, you can put on the optional top. The advantage of putting on the top is that it will prevent sand from falling down next to the tubes and pushing the bags down. If you are going to put the top on, cut the top to fit over the frame. Screw the top onto the frame boards. Now drill a hole and then using either a router or a hand jigsaw, cut the holes out for each tube.

Step 3 Using the Tubes

To use the tubes, you just need to flip it over and slide a bag on each tube. Roll it back upright and start shoveling to fill the bags. By design it will fill each bag to about 35lbs. Once you have filled all 6 tubes, pick it straight up and the sand will slide out of the tubes into the bags. Then you will have 6 perfectly filled sandbags.

As you could see from the video in the intro, it was easy for two young kids with small shovels to fill sandbags, averaging about 15 seconds a bag. This is at a work pace that almost anyone can do.

So there you have it, an hour of prepwork can save countless hours of bagging.