

# HOW TO BUILD A FIELD HANDWASHING STATION IN 10 EASY STEPS FOR UNDER \$20

Michele Schermann and Annalisa Hultberg  
*University of Minnesota, Bioproducts and Biosystems Engineering,  
Agricultural Health and Safety Program*  
Jill Randerson  
*Kidzibits, Inc., Minneapolis, MN*

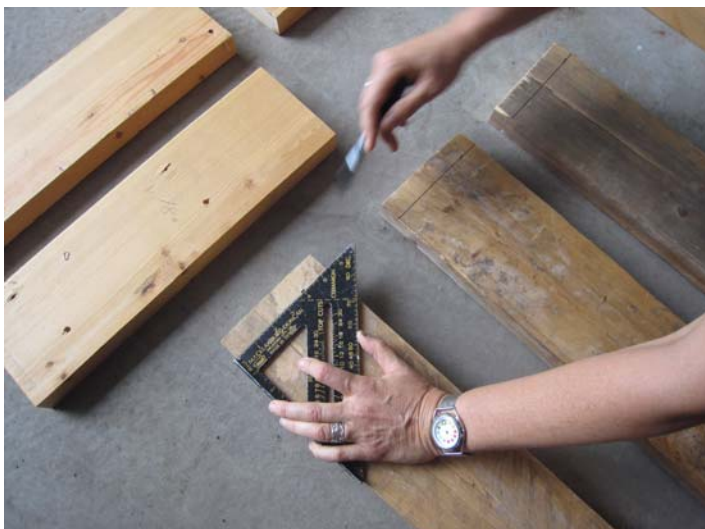
Field handwashing stations can be rented from sanitation companies or you can purchase field handwashing stations from various sources. They are easy to build with a few purchased, found, and salvaged materials. See the materials list at the right and instructions below.

## 1. Get some wood. Make the sides.



For this stand, we used  
4 - 36" 2x6  
4 - 18" 2x6" for the sides of the stand. We decided a stand 36" high would be good for handwashing. You can choose any height you wish.

## 2. Square off the ends and cut them to the right sizes (for the height and size you want).



### Materials list.

1. **Water container** -- the blue container holds 5 gallons of water and has an open/close valve. Available at big-box home hardware store in the camping section. \$9.99
2. **Soap.**
3. **Trash can** with a lid so paper towels don't blow around in the wind. We used an old rag container found in the barn.
4. **Water catching bucket** (5 gallon bucket)
5. **Dishpan.** Another found item, is the "drawer" under the water container and holds single use paper towels. You can use whatever you want for this. Doesn't need to be a dishpan.
6. **Wood** (salvaged). 2x6's, 2x4's, and plywood for the top, sized to fit.
7. 60 2.5" **screws.**
8. **Bungee cord**



This is how the sides will look. They aren't screwed together yet. At this point we decided to use the dishpan as the drawer because we had one and wouldn't need to purchase anything else.

← The top cross piece was placed slightly below the very top to create a lip for the dishpan "drawer" to slide on.



**3. Screw the crosspieces in place.** We used 2.5" screws, 4 on each end (16 total per side, 32 for both sides). We drilled holes before we drilled the screws so that the wood wouldn't crack.



Here you can better see how we placed the top cross piece down from the top to be the dishpan drawer slide.

Now we have our sides built.





**4. Figure out how wide to cut the width-wise crosspieces.**

Placing our dishpan on the “drawer slides” we measured and determined that crosspieces of 14.5” would work. We cut 4- 14” pieces of wood. This time we used 2x4s.



**5. Screw the bottom widthwise crosspieces onto the other crosspieces.**

You could also turn them the other direction and screw them into the side pieces. With the crosspieces turned flat, they make a bigger flat area in case you want to put something on those pieces.

**6. Screw the top widthwise crosspieces in place.**

Notice that these are turned up and down (vs flat like the bottom pieces) and screwed through the side supports. They are low enough so that the dishpan drawer fits in the remaining space.



**7. Next, cut a scrap of plywood, old countertop, pieces of wood, or other flat material to fit the top of the stand.**



**8. Screw the top in place.**



**9. Install your dishpan drawer.** That is where you will have the single use hand towels.

**10. Get the rest of the parts together.**

Use a bungee cord to hold a 5-gallon water container on the top. Supply soap. (See photo on the first page if you forgot what this looks like)

Put a bucket underneath the spigot of the water container to catch the water. You might want to put a rock in the bottom of the bucket if you are in a windy area. Do not empty the bucket of water in the produce field.

Have a lidded trash can handy for the used towels to keep the used towels from blowing away.

**Final notes**

This is just an idea plan. You can make this any size you want and with any materials. You could change the boards and install a paper towel dispenser under the top, or you could mount a paper towel holder on the side. If you do that, you will need to remember to remove it when it rains so your paper towels don't get wet. If you really want to be fancy, you could cover the top of the stand with a vinyl fabric covering so that it will stay dry and the plywood won't warp. Cut vinyl fabric slightly bigger and staple to the bottom side of the top.

Of course this stand won't last forever, but for a seasonal handwashing station in the field it works very well. Remember to use clean, potable water for handwashing, not rain water or surface water.

See the video, "How to build a handwashing station" at <http://safety.cfans.umn.edu/videos.html>

More information about on farm food safety can be found at: <http://safety.cfans.umn.edu>

---

2011. Developed by the University of Minnesota Agricultural Health and Safety Program team. Funding through a partnership between the MN Fruit and Veg Growers Association and the USDA-Risk Management Agency.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all of its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs). USDA is an equal opportunity provider and employer.