



Project 1: Portable Shower

Step 1: Build the base.

- a. Cut one 2 x 4 x 8 board into two 24-inch pieces and two 21-inch pieces. With 12 x 3-inch stainless steel screws, join the pieces together to make a 24-inch square frame, predrilling the holes using a 3/16-inch drill bit.
- b. Cut two 2 x 4 x 8 boards into five 24-inch slats. Lay the slats across the frame, spacing them equally. Attach the slats to the frame with 10 x 3-inch stainless steel screws.
- c. Mount two casters on the side of the frame for transporting. Mount the handle on the opposite side of the casters. Screw in the floor flange to the top end of the center slat using a 1 1/2-inch male adapter.

Step 2: Assemble the tree.

- a. Using a miter saw, cut the PVC as follows:

From the one 1 1/2-inch x 12-foot pipe:

- one 2 1/2-inch piece
- one 7-inch piece
- two 17-inch pieces

- one 21 1/2-inch piece
- two 10 1/2-inch pieces
- one 13-inch piece

From the 1/2-inch x 10-foot pipe:

- one 2 1/2-inch piece
- one 65-inch piece
- one 14-inch piece

b. Clean the pipes thoroughly with pipe cleaner; any debris or ink can become leak points over time. Working from bottom to top, test-fit the PVC pieces as shown in the diagram. Use utility scissors to cut the insulation into small strips. Wrap a strip of insulation around the end of the 1/2-inch pipe before you connect it to the 1 1/2-inch wye pipe. Glue the pieces together with pipe cement, making sure to glue the 1/2-inch watering branch and the 1 1/2-inch watering branch last.

c. Spray-paint the entire tree, and let dry.

d. Using a 5/16-inch drill bit, drill several holes on the underside of the watering branch. Cap off the other branches.

e. Screw the tree into the floor flange using 10 x 3/4-inch screws. Attach the hose.

Lowe's List

Skill level: **Intermediate**

Rough cost estimate: **\$125***

Lumber: **\$10**

Hardware and supplies: **\$115**

Rough time estimate: **1 day**

LUMBER**

3 treated deck boards, 2 x 4 x 8

HARDWARE AND SUPPLIES

2 packages of (12 x 3-inch) stainless steel screws

2 packages of (10 x 3-inch) stainless steel screws

2 packages of (10 x 3/4-inch) stainless steel screws

2 (2-inch) rigid casters (#169308)

1 (5 1/2-inch) utility pull/handle (#308981)

1 package of PVC cleaner (#23542)

1 package of PVC cement (#23464***)

1 (1 1/2-inch) floor flange (#30256)

1 (1 1/2-inch) male adapter (#23290)

2 PVC SCH 40 solid core pipes, 1 1/2-inch x 12-foot (#23830)

1 (1 1/2-inch) tee (#23394)

3 (1 1/2-inch) wye (#23377)

4 (1 1/2-inch) SCH40 slip caps (#23899)

1 PVC plain pipe 200-315psi, 1/2-inch x 10 feet

1 (1/2-inch) SCH40 45-degree elbow (#23888)

1 (1/2-inch) SCH40 90-degree elbow (#23867)

1 (1/2-inch) SCH40 cap (#23937)

1 (1/2-inch) slip x thread adapter (#23861)

PVC swivel (1/2-inch, #194638***)

bulk tubular pipe insulation, 3/4-inch x 6-foot (#24433)

spray paint (Rust-Oleum, Hammered Silver)

1 (1/2-inch x 25-foot) marine/camper hose

TOOLS

miter saw

drill/driver with bits

utility scissors

tape measure

pencil

*Does not include labor costs or applicable taxes, which vary by market, or the cost of tools. Pricing for commodity items may vary due to market conditions.

**Availability varies by market for lumber species and sizes.

***Availability varies by market.