Rolling Cabins

SWEEP RESISTANT TINY HOMES



Note: The structure on the cover was our first attempt and differs in design and materials from the plans in this zine.

EVERYONE DESERVES SHELTER!

Inspired by Heater Bloc's open-source DIY Tent Heaters, we've put together plans for a simple Rolling Cabin. It measures 6' by 7', enough for a bed and a bit of space. It's about 6 feet high with a sloping roof. It's insulated with 1 inch rigid foam. Most importantly, it has four heavy duty casters (wheels), allowing it to be easily pushed by 1 or 2 people. This is crucial as it allows folks to leave a spot once the city has posted it to be swept.

SWEEPS KILL!

We've built one house and are experimenting with design tweaks and different materials for our second. The first one cost about \$650 to build but it could probably be done cheaper. Build your own! Innovate! Get creative!



Apart from being pushed along on its wheels, this design allows for the entire shelter to be dismantled into flat sections in under 30 minutes, so it can also be moved by vehicle.

You can reach us with questions, improvements or collaborations at rollingcabins@protonmail.com

MATERIALS

Rough Estimate of Total Material Cost: \$654

Raw Materials: \$572

- Lumber x35 (2"x3"x8'): \$119
- Rigid foam insulation x6 (4'x8' Polystyrene 1"): \$75
- 8' solid rubber casters w/ brakes x4 (Harbor Freight): \$96
- 1/2" sheathing plywood x2 (4'x8' sheets): \$50
- Coroplast x10 (4'x8' White .157"): \$155
- Galvanized Utility Fence $x \frac{1}{2}$ roll (36"x25'): \$22
- Used Door & hardware (Habitat for Humanity Restore): \$35
- Plexiglass sheet (for window): \$20

Fasteners/hardware: \$82

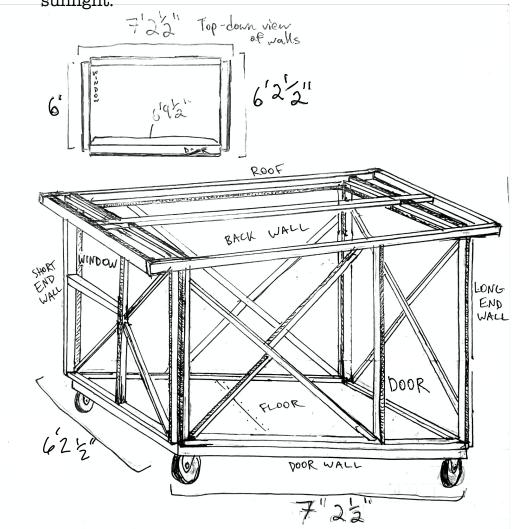
- 2 1/2" star screws (5 lb): \$38
- 1 5/8" star screws (1 lb): \$6
- 3/4" lath screws (2 lb): \$14
- 3/4" fence staples (1 lb): \$6
- Bolts, nuts & washers for wheels (16 of each): \$13
- 2" Hitching Ring: \$5

Everything can be found at Home Depot, Harbor Freight or a used materials store (that last one for the door, mostly). For bonus points, there are always construction sites.

You'll need basic carpentry tools: A circular saw and a drill, as well as standard hand tools; an impact driver and a table saw are invaluable but you can manage without them.

PLANS

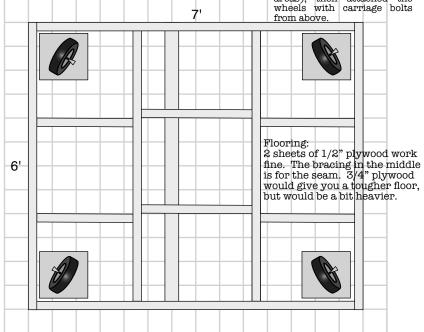
This designed is framed in 2"x3" lumber to reduce weight. It's skinned with Coroplast, the stuff yard signs are made of, because it is a fairly cheap, tough, lightweight, and waterproof material. We highly recommend buying a 10 pack as it costs twice as much if you buy it by the individual sheet. The rolling cabin is insulated with 1" rigid foam insulation on the walls and roof. Two sheets of 1/2" plywood are used for the floor. There's a plexiglass window because humans need sunlight.



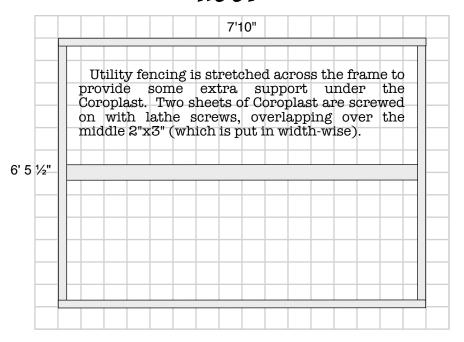
FLOOR

= 6"

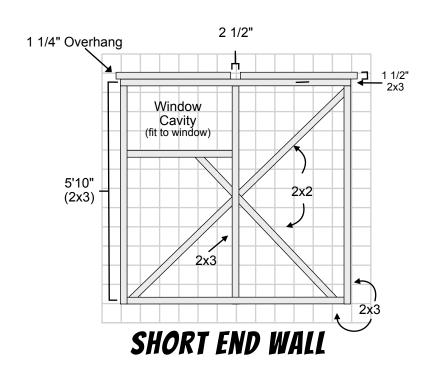
Wheels: We cut little plywood squares and screwed them to the bottom of the floor (to reinforce & thicken the wheel areas), then attached the wheels with carriage bolts



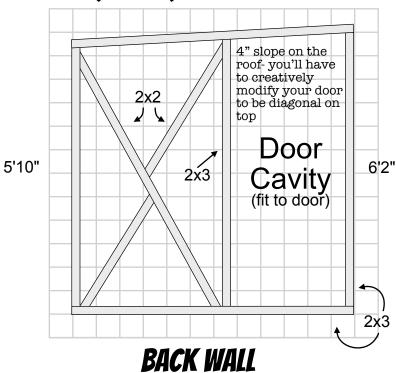
ROOF

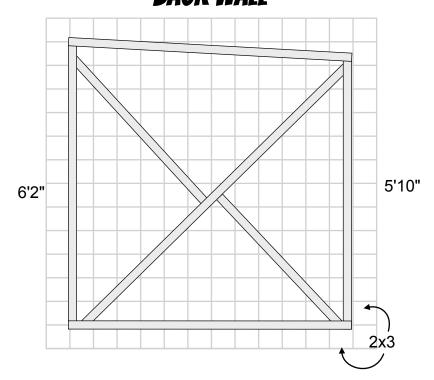


The little 2x2 spacers on top of each wall are so that the roof fits in seamlessly - the center 2'x3' of the roof lays flat. 1 1/4" Overhang 6'2" (2x3) LONG END WALL

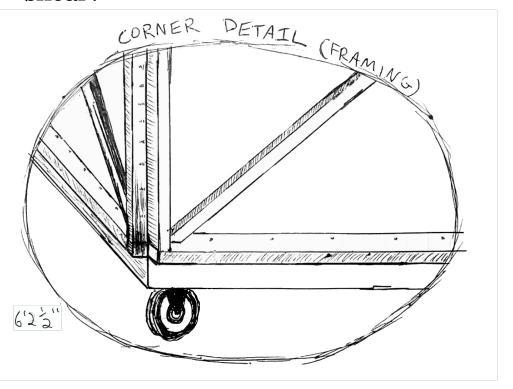


(FRONT) DOOR WALL

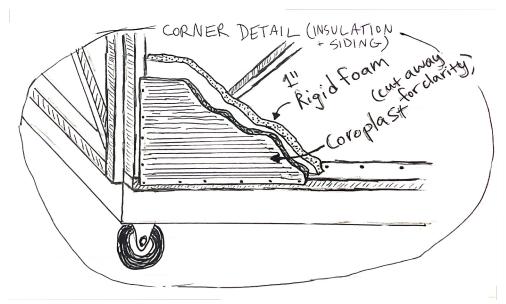




All 4 wall sections screw into the floor and each other. Then the roof fits on top and gets screwed in where it overlaps the tops of the walls. The walls hang 1 1/4" over on all sides (half the 2x3's width). This is so the screws are accessible for disassembly and reassembly. The diagonal bracing is cut from 2x2s (in reality 1 1/2" by 1 1/2"-all dimensional lumber is a half inch smaller than its name) and is placed to the inside half of the wall studs. Diagonal bracing is crucial to avoid shear!



The 1" insulation is then placed to the outside half of the wall studs, up against the bracing, in large rectangles. It's held against the bracing by the Coroplast sheets, which are screwed to the studs from the outside. So each wall can be fully built with insulation and siding before transport and assembly.



Get building!
For collective liberation!
Housing for all! We take care of us!
Stop the sweeps!