

# Dog Wheelcart Ramp

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This was actually made from my home-made A-frame. It's a good model to use as it's the perfect width for a corgi cart and folds in half to get out of the way as needed. It's for 4 stairs, and is 16' long, about the right gradient you'd need for a wheelcart dog.

**NOTE: This is NOT adequate to support a human!**

It should be built so there is still stair space available for humans to go down the stairs beside the ramp.



## Materials

### Woodwork:

- (1) 4'x 8'x 1/2" plywood cut into two 2'x8' pieces (let lumber store cut it!). Thicker plywood is better but will add weight.
- (4) 1"x2"x8' to stiffen plywood.
- screws long enough to screw in plywood supports without poking thru.
- (2) 2"x4" door hinges
- (16) bolts just long enough to go thru: plywood, holes in hinges, and nuts.
- (16) nuts for the above bolts.
- Outdoor paint
- 2'x17' length of Astroturf (or other brand fake grass)

PVC Framework - Schedule 40 PVC, 1/2" is good but 3/4" is better, note that part counts are what worked for mine, yours might need a bit more or less depending on actual construction.

- Roll of wire for sides, at least 32' long and minimum 2' high
- staple gun
- (22) PVC Ts (approx!)
- (2) PVC 4-ways (approx!)
- (14) PVC Elbows (approx!)
- 91' PVC (approx!)
- Electrical zip ties, ca 4" long.
- Sturdy metal can approximately 18" high (see below 1<sup>st</sup>)
- PVC glue or 1/2" screws



### Woodwork:

Attach the two 2' edges of the two 2'x8' plywood pieces with the door hinges with the bolts so they can fold up. This makes a 16' long length. On the other side screw the 1"x2"x1's to each side of the bottom of each plywood piece for extra support. Paint board to prevent decay. Attach Astroturf to the top surface. Note that some astroturf gives more traction in one direction, if so align it so there's maximum traction for going upramp. It's good to have some overlap over the ground at the top and bottom of the ramp.

### PVC Framework

Glue or screw? PVC glue is dicey, as it sets extremely fast and leaves no room for mistakes. Screws can be screwed into predrilled holes to hold joints into PVC lengths. Using neither risks the structure falling apart as PVC will work it's way out of the joints. If you use glue, some screws are recommended so you can take the ramp framework apart in decent sized sections when necessary. PVC primer is not necessary.

Prop woodwork up on the stairs so it's at the proper angle with temporary supports underneath while building PVC framework. It's better to start with the bottom support structures, at the top of the stairs first, then work your way down. Build the top structure afterwards. Exact PVC lengths vary with your particular setup.

Bottom supports should be no more than ca 2.5 ft apart. Note that the woodwork should rest on the T joints of the bottom support, not the underside PVC lengths themselves. The upstairs bottom support uses an elbow instead of a T, the rest use Ts. I used 6 bottom supports for my 16' long ramp.

The side and top PVC structure holds the wire up as well as holds the bottom supports together. Fencing the sides is a **MUST**. A dog in a wheelchair will fall off the side and can get severely injured. The top supports hold the whole thing together as well as prevents humans from using it. This ramp is NOT built to support human weight.

When building the PVC side you just have to start at the top and work your way down. Usage of T's vs. 4-way's on the side varies with your heights, so numbers different from what I listed are likely. PVC is cheap though, so having an extra left over or going back for more isn't a big deal.

Hardware cloth with ca 1/4" holes would be better than the 3" x 1" x2 ft high fencing I used for the sides, or plywood would be good too. Secure wire to the PVC with electrical zip ties. Attach the bottom edge to the side of the plywood with a staple gun so the wire can't bulge out when a wheel hits it; otherwise the wheel can get stuck between the wire and edge of woodwork.

Miscellaneous - It's good to provide some sort of guide/chute at the bottom of the ramp so the dog learns to be guided straight at the ramp bottom instead of trying to cut around the bottom too sharp.

I highly recommend building a gateway to block the top of the stair access to prevent dogs from trying to use the stairs. A simple rectangle PVC frame can be ziptied onto the PVC ramp framework, wire put over it, and a simple hook can be put on the other side to hook it to the stairway frame (partially seen in photos).

If a dog gets too weak to go up the ramp by itself, you can attach a rope to the dog's cart and pull the dog up.

