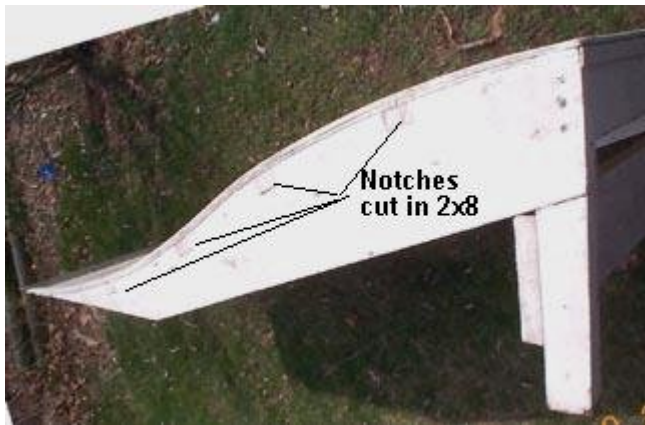


# Roller Blade ramp Plans



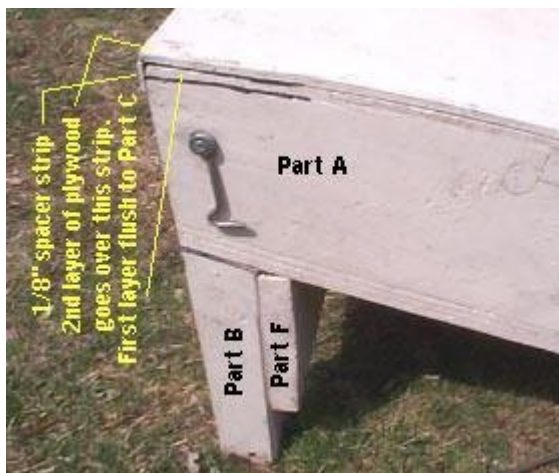
We didn't take any pictures during the building process, but i hope i can explain enough thru these pictures. Page one of the plans illustrates the layout of the ramp support pieces. Layout points A,B, and C first. Then draw perpendicular lines across the 2x8 every 3" starting at point A and working toward the B and then A. Then using the dimensions on the plan, measure out the distances to the curve. Connect the dots and cut the ramp support out. Use it as a template and cut 3 more!

Next you'll need to cut some notches in your ramp supports. Stack all 4 supports and lay them out at the same time. I used 1"x1-3/4" stock for my ribs, just because I had that size laying around. I'm sure you could use some standard sized 3/4" stock, but perhaps you should add another rib. The rib length is 31" which is the width of the ramps. This is because a sheet of plywood can be cut into 3 pieces 48" wide by 32", with the 32" way going across the width. Now there is 1/2" hanging off both sides that's removed with a flush trim bit

in your router. But more on that later.

This picture poorly illustrates the joinery at the legs. A half lap is cut into the ramp supports parallel to the end, 2-1/2" wide x 3/4" deep. A 2x3 leg with a matching half lap is screwed to the inside of the ramp supports, and a 2x4 ripped to 3" sits on top of the leg and connects the two ramp supports. A 1" filler block 3" long is needed to fill the gap between the back of the 2x4 spreader and the lap joint in the ramp support. A 31" 1x8 serves as a lower spreader between the legs. This piece also keeps the legs from racking when sideways pressure is applied to the ramp, caused by kids dragging this thing around. Page 3 of the plans shows how this all goes together better.

Now to assemble. Be sure to build on a flat level surface. Next you can fit the trimmed 2x4, Part C between the ramp supports and on top of the legs. It should fit flush at the top. If it doesn't, make it fit! Use 3" screws and construction adhesive to secure it. Make the filler block to fit into the void that remains. Construction adhesive alone should be ok if the block fits snugly enough. This piece will keep the legs from getting wobbly. Now fit the ribs part E into their slots flush to the outside of the ramp supports. More construction adhesive and a 2" screw down thru the rib into the support. Remember to pre



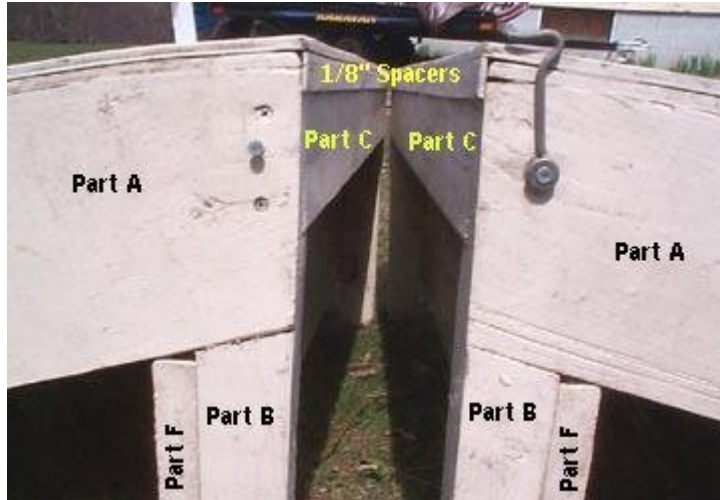
drill everything first. Now put the 2 ramp assemblies back to back and check for height. They should be about 16" high. The plans call for extra so you can trim off one leg in case things get racked during assembly. The top of the two ramps should be perfectly flush across the whole joint. This is important to make a smooth transition from one piece of the ramp to the other. This is also why it's important to build this on a flat surface!



It's important that the low end of the 2x8 ramp lays flat on the ground. If it's a little off, you can adjust this with the leg height.



I added support at the lowest part of the ramp. I think I was thinking about initial impact of the skater hitting the ramp, but now I don't think there necessary. If you choose to add these supports, use a piece of poster board and trace the shape on the inside of the 2x8 ramp support (yellow arrow). Secure with a screw and construction adhesive in the bottom rib.



There is a lot of detail in this picture. A side view of the 2 ramps back to back. Take a look at the first layer of 1/4" plywood. Notice it goes up to the edge of the part C. The second layer is attached after a spacer strip is nailed in place. The second layer runs over this spacer. This allows the two ramps to be tight at the top even on uneven ground.

I'm sorry there are no pictures of applying the plywood to your frameworks. I'll do my best to walk you thru. First cut out plywood parts 1 & 2. Take plywood part 1 (the first layer of plywood) and dry fit it to your frame. Align it so that one of the 32" ends is half on the rib closest to the top of the ramp. This should leave you with a couple of inches over on the low end of the ramp. Yes, you will need to flex the plywood. Try holding it in place with clamps. Divide the overhang on both sides, should be 1/2" on each side. If your happy with this, take it off and apply construction adhesive to the the frame work where this piece will fit. Make sure to only cover on half of that upper most rib! lay the piece back on the frame, and starting across the top rib run some 1" drywall screws thru the plywood into the rib. Use clamps or small children to hold down the plywood while you secure the plywood at the second rib.



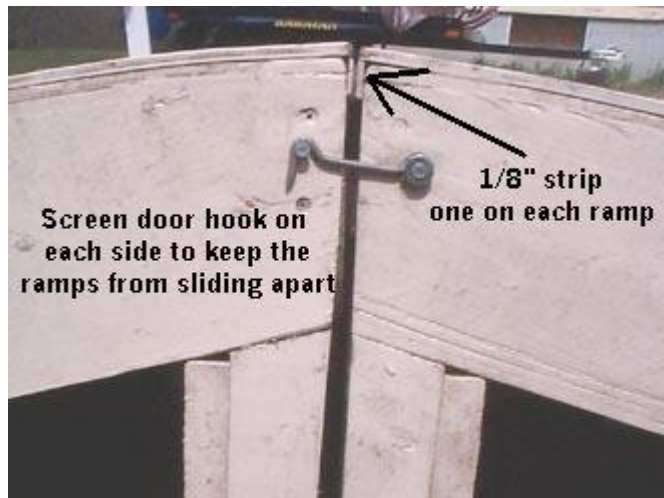
Continue to the bottom, then down the sides. When your secure, run down both sides with a flush trimming bit to clean off the extra plywood that over hangs the sides. Be careful at the bottom, where you will run out of surface for the ball bearing on the router bit to follow! Cut the bottom with a hand saw.

Now grab plywood part 2 and complete the top of the ramp in the same manner, apply glue to the frame, screw down the piece, then trim with a router.

Now cut 2 strips 1/8" thick from some 1x stock and cut to 31". Glue and nail it flush to the top side of the 1st layer of plywood. See the pic at left.

Now measure the length needed for plywood part 3. It should hang about 2" beyond the first layer at the bottom of the ramp, and some extra at the top! Cut the length needed and the rough width to 32 inches.

Apply a lot of construction adhesive to the top of the first layer of plywood and lay the 2nd layer on top of that. Divide the over hang on each side, then give yourself that 2 inches (or what ever you needed) extra at the bottom. Make sure you have extra at the top! Use clamps to flex the plywood near the bottom and secure with screws. Continue as you did the first layer, only working from the bottom and moving upward. Screw down at all the ribs and along the sides. Run around the top and sides with your router, be





careful at the bottom again, use a hand saw!

Finally you'll need some metal for the leading edge of the ramp. I had an old stop sign in the garage. I was able to cut two 30"x6-1/2" strips out of it. The metal is .085 thick, that's a little under 3/32". If you don't feel like swiping a stop sign off the end of your street, find something equivalent. Secure it with rivets.