RPO Driveway Dock Launch Ramp

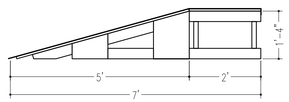
Ramp Plans Online
http://www.rampplansonline.com

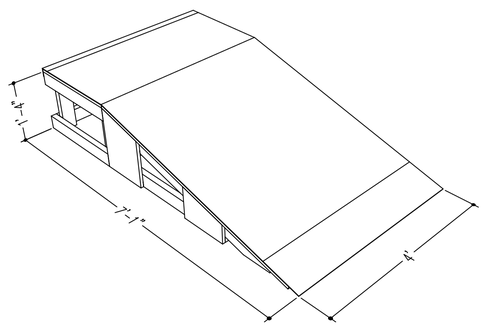
Introduction

scale: 3/4"=1'

The design of the RPO Driveway Dock Launch Ramp emulates a loading dock with a launch ramp portion leading over a box section to clear before dropping back down. The design mimics a loading dock you can skate in your driveway!

The plans for this ramp include a Ramp portion and a Box portion. Together they form the Launch Dock; separately they become a miniature driveway skate park. The ramp portion can be used as a launch ramp or a bank ramp, and the box can be used alone for grinds or quick manuals. The box is also great for mobility, easily fitting in the back of a pick-up truck or some SUV's.





Materials & Tools

scale: n/a

Materials:	Quantity:
2" x 4" x 96" Wood Studs*	11
8' x 4' x 3/4" CDX Plywood*	1
8' x 4' x 1/8" Hardboard or Masonite*	1
2" x 2" x 4' @1/8" Thick Angle Iron	1
10" x 4' x 14 ga. Steel Plate	1
3" Exterior Grade Wood Screws	as needed
1-1/4" Exterior Grade Wood Screws	as needed

* Choices for lumber types and finishes vary. Choices for riding surfaces vary. Check out our website for further information on choosing the materials that are best for you: **http://www.rampplansonline.com**

Tools:**

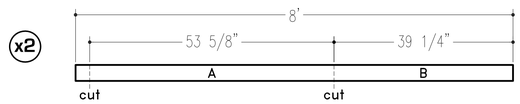
Circular Saw	#10 Countersink Bit
Power Drill	3/16" Drill Bit
Pencil	Safety Glasses
Screw Bits	Work Gloves
Tape Measure	Hammer
Clamp	

** Check out our website for further information about this list of tools: **http://www.rampplansonline.com**

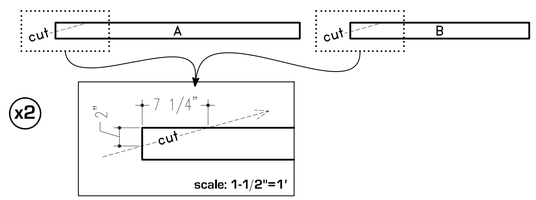
Step 1

scale: 3/4"=1'

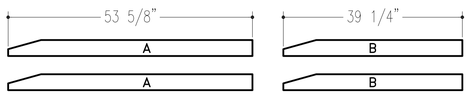
Begin by building the launch ramp frame.
Mark and cut two 2"x4" wood studs for the sides of the launch ramp. **Please measure and cut the following pieces carefully! They need to be as precise as possible!** Repeat this step two times.



Next cut a small wedge off of each piece. Refer to the enlarged diagram. **It's the same measured cut on both pieces!** Don't forget to mark each piece (A) or (B) as shown. Also note it's probably easier to cut the wedge in the direction of the arrow when using a circular saw!



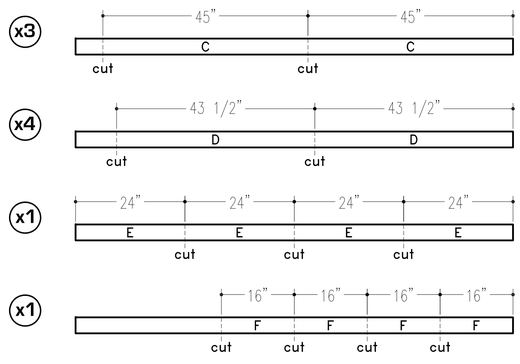
Now you should have four pieces; two at 4'-5 5/8" and two at 3'-3 1/4".



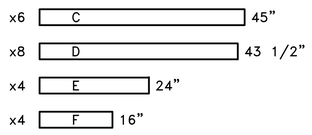
Step 2

scale: 3/4"=1'

Now cut the rest of the 2"x4" cross braces and verticle supports from the remaining 8' long studs. **Mark each piece as shown as you cut!** Some will have similar but different lengths.



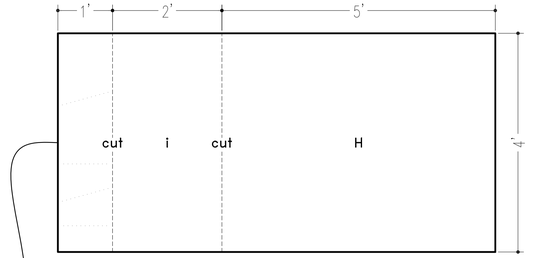
Be sure to mark the pieces! Keep them organized for construction.



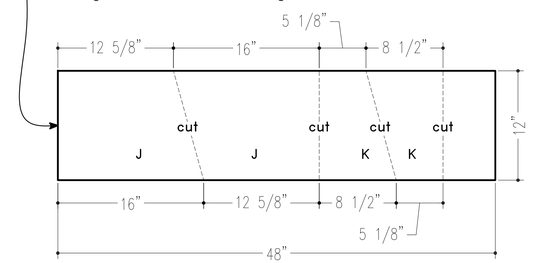
Step 3

scale: 3/4"=1'

Measure and cut the 3/4" plywood sheet.
Follow the measurements below. First, cut off the 1' section , then the 2' section, and then the 5' section as shown



Make the cuts shown on the 12" x 48" piece as shown below. Note that this drawing is at double scale as the drawing above!

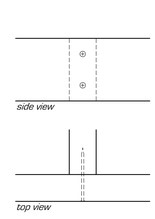


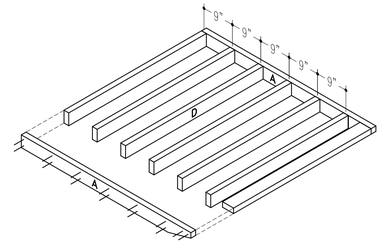
scale: 1-1/2"=1'

Step 4

scale: 3/4"=1'

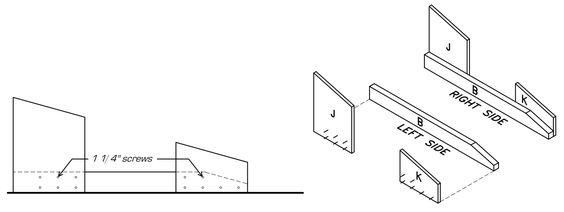
Begin construction of the ramp frame. Using a butt joint, take seven cross braces (D) and attach them to the two angle cut pieces (A) as shown. Space them about 9" apart, on center. Use four 3" wood screws per stud, two through each end.





Butt Joint scale: 3"=1'

Next, attach pieces (J) and (K) to the remaining angle cut pieces (B) as shown. Make sure you have two sides, left and right, and that they are reflections of one another! Use a handful of 1 1/4" screws per piece for attachment. See the profile drawing below for correct fit and connections.

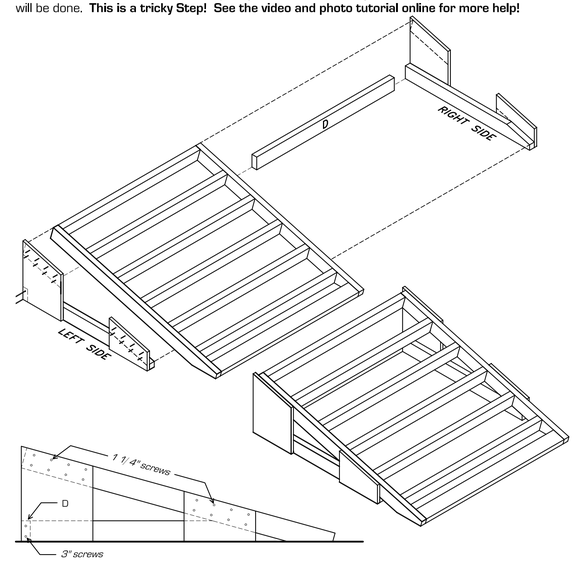


Ramp Profile scale: 1"=1'

Step 5

scale: 3/4"=1'

Next, attach the righ and left side supports to the completed surface frame using a handful of 1 1/4" screws as shown. Also, attach the remaining piece (D) to the right and left side supports with four 3" wood screws as shown. Everything should sandwich together nicely! Now the ramp frame will be done. **This is a tricky Step! See the video and photo tutorial online for more help!**



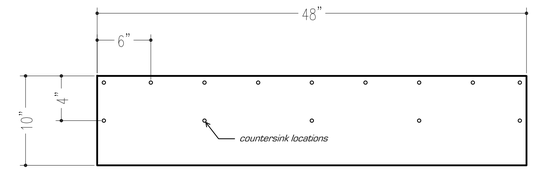
Ramp Profile scale: 1"=1'

Step 6

scale: 1-1/2"=1'

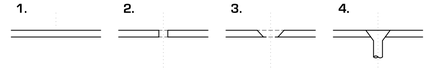
Prepare Metal Threshold Plate. Before attaching the metal plate to the ramp, you will first need to pre-drill holes and coutersinks so that the screw heads lay flush with the metal. This is a very easy process! You will need your 3/16" drill bit and your #10 countersinking bit.

Begin the process by marking the location of the countersinks. Evenly space out an ample amount of countersinks along one edge of the metal plate; eight or nine holes spaced 6" or less apart from one another should be enough. Next, add a few more holes about four inches away from the previous row. This row does not require as many holes; three to five holes spaced apart evenly will be fine. See the drawing below as an example.



Follow these steps to Pre-Drill the holes in the Metal Plate:

1. Use a drill tap to make a small indentation where the hole will be drilled.
2. Use a 3/16" drill bit to drill a hole all the way through the steel.
3. Use a 1/8" to 3/8" (#10) countersink bit to bore out space for the screw head.
4. The screw head should fit flush (or slightly below) the surface of the metal plate.



scale: 1' = 1'

Do not drill all the way through the metal plate with the countersink bit!

Watch a video of this step online: http://www.rampplansonline.com