RAMP SURFACE INSTALLATION GUIDE

Ramptech EST. 1986

RAMP★ARMOR®
SURFACING TECHNOLOGY

Ramp Surface

Installation Tips

How to Pre-Drill

Ramp Surface

Ramp Surface
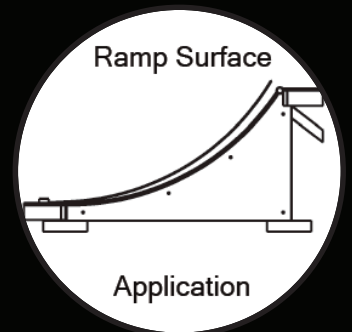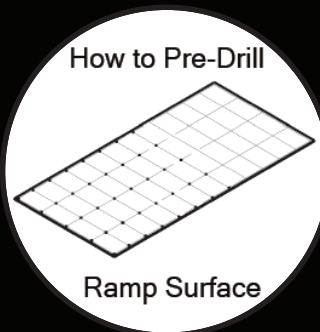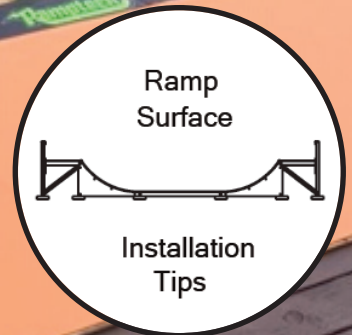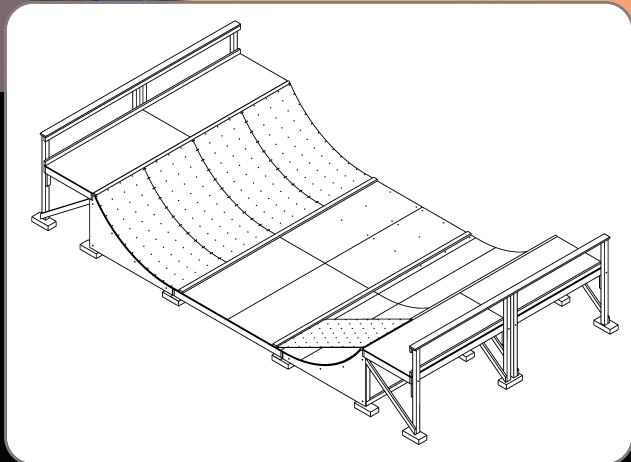
Application

Ramp Surfaces, Prep and Application

First there was plywood, which rotted and split as quickly as it was installed. Next, masonite emerged, only to disintegrate in the rain a few days later. Steel is very slippery, hard to work and requires constant refinishing. We won't even get into paints and sealers, which do nothing for a ramp surface. Believe you me; it's all been tried before.

Take a good look at any above ground skate park out there and you'll see that professional ramp builders use a material called a Phenolic laminate. Why do these professionals use these Phenolic sheets? Good question! Time has shown that nothing else can handle the combination of weather and the constant pounding that comes from the 4 wheels of a skateboard.

Phenolic laminate sheets are weatherproof, durable, drillable, cut-able (tool-able), require no paints and last a very long time. Ramp Armor has been the dependable and affordable choice since 1999. These sheet goods are not available at Home Depot, Lowes or any other building supply retailer. They must be pre ordered and will ship directly from the manufacturer in a freight truck, arriving it about 2 weeks.

Dave Anderson Styles Through a Smith Grind.

Installation Tips

Drainage: Before you apply the ramp surface, drill out ½" holes in the flat bottom area and on the decks of your ramp in a 24" x 24" hole pattern. This allows for quick drainage of water. Standing water or puddles on a ramp are not good. The idea here is to allow water to flow through the ramp, like it would on a deck.

Evan David With a Layback at Veterans Memorial Park, VA. One of the Oldest Vert Ramps in the World.

Overlap the Seams: The ramp surface sheeting must overlap the plywood substrates that are below it. This is the most common practice of any over layment construction because it ensures strength.

Ramp Surface Screws: You need to use exterior type deck screws to fasten the surface to the ramp. These are either painted screws or stainless steel deck screws (best). As the word "stainless" implies, they won't leave a stain on your ramp surface, because they don't rust. Other screws tend to leave long black stains from water trickling down the walls from the screw holes. These screws should be 2 ½" – 3" long and should hit the wood joists (2X6 framing) below the plywood substrate. They should not be hitting just the plywood, this will make the screw strip, back out and possibly cause injury.

Do Not Use Tar Paper Under the Ramp Surface: I guess someone thought that tar paper would somehow keep the substrate plywood dry? Thing is, when you puncture tar paper with 65 screws for every sheet of ramp surface – it's going get wet. This process will do absolutely nothing except waste your money. Instead please send this money to charity.
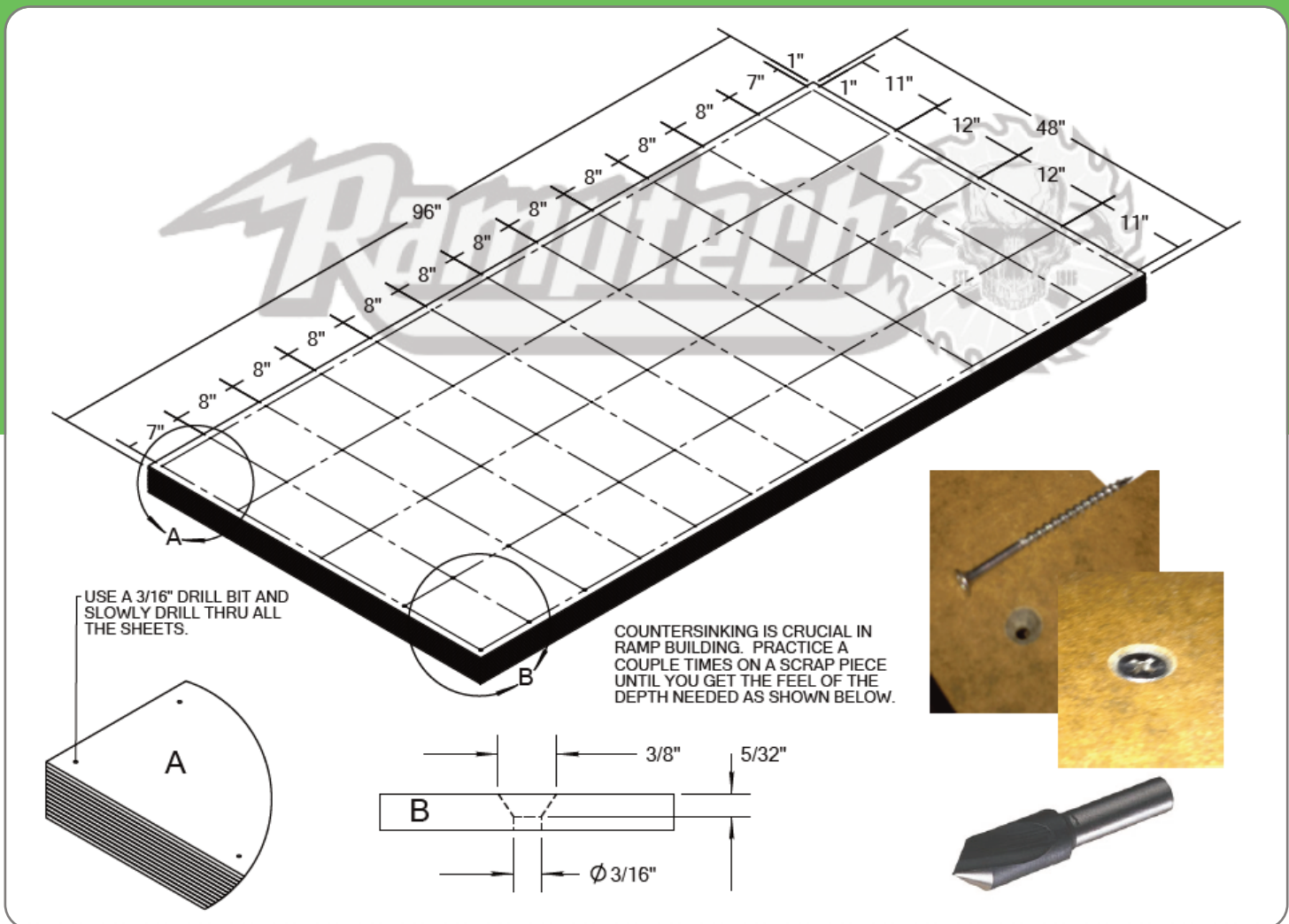
Ramp Surface Prep

I will instruct you on how to "Pre-Drill" all of the Ramp Armor sheets at once in a pile. This is done by using one common hole pattern for the entire stack of sheets. Typically ramps are framed on 8" centers, so we will use the 8" x 12" hole pattern for this example. If your framing is different you will have to adjust this hole pattern to correspond with your ramp framing. You can also use a thin rip of plywood or something flexible that is 8' long to use as a template to apply to your wall (in the curves, then the flat) and mark where the joists are. Then use this template to mark your sheets. As you may already know, you want these screw holes (screws) to hit the joists with in the ramp.

Note: A common mistake is to try and put the sheets on the ramp without drilling/countersinking first. This method of attempting to drill and countersink on the walls gets awkward because it fights gravity and makes mistakes happen.
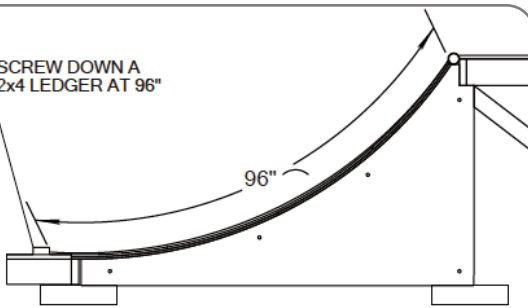
How to "Pre-Drill" Your Ramp Surface

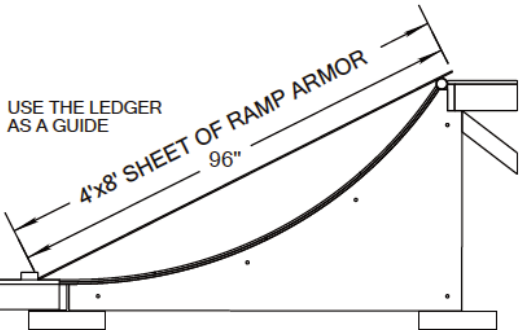**Note:** 2 People are Needed For This Project

1. Begin with the a stack of anywhere from 10-50 Ramp Armor sheets as it sits on the pallet. Align all of the sheets edge to edge, so that they line up with each other.
2. With your tape measure, lay your tape out the 96" direction. Mark every 8" OC in the field. On the ends, come in 1" from the edge. Lay your tape out the 48" direction. Mark every 8" OC in the field. On the ends, come in 1" from the edge.
3. Snap this grid pattern vertically and horizontally with your chalk line.
4. Begin drilling using 3/16" drill bits, {make sure you have a few new bits). Drill as far down as the bit will allow. Go slowly, drill straight and let the bits breath {to reduce heat). Drill until the entire grid is drilled.
5. Take these drilled sheets off, {it could be 10-12 sheets} and set them aside.
6. You will notice the sheets below {still on the stack) have the drill mark on them, use these marks to keep on drilling all the way through the entire stack.
7. Now you will counter sink (3/8" countersink) all of the holes in these sheets.
8. Be very careful with the countersinks when they are new, cuz they will drill through the sheet.
9. It takes a little practice to get the countersink right. The countersunk hole width is approximately 3/8" wide on the surface and has to accommodate the screw you are using. Test fit the width and depth with the screw carefully.
10. Now all of the sheets are drilled/countersunk and are ready to apply to the ramp.
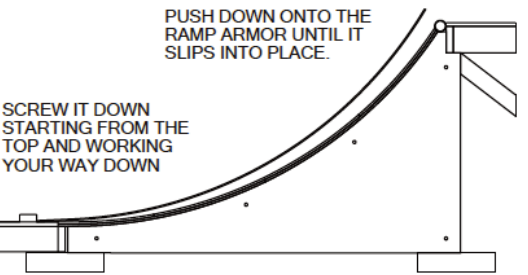

USE A 3/16" DRILL BIT AND SLOWLY DRILL THRU ALL THE SHEETS.

COUNTERSINKING IS CRUCIAL IN RAMP BUILDING. PRACTICE A COUPLE TIMES ON A SCRAP PIECE UNTIL YOU GET THE FEEL OF THE DEPTH NEEDED AS SHOWN BELOW.

SCREW DOWN A 2x4 LEDGER AT 96"

96"

USE THE LEDGER AS A GUIDE

4'x8' SHEET OF RAMP ARMOR 96"

PUSH DOWN ONTO THE RAMP ARMOR UNTIL IT SLIPS INTO PLACE.

SCREW IT DOWN STARTING FROM THE TOP AND WORKING YOUR WAY DOWN

Ramp Surface Application

Note: **Begin With the Walls First**

1. Measure down 96" exactly from the bottom of your coping and place a pencil mark on the plywood on each side of your ramp (on the same wall). You can also use a plywood scrap that is exactly 96" long for this measurement. Snap a chalk line between these 2 marks.
2. Precisely on this line, screw down 2x4s across the ramp (leaving the 96") space. Repeat the exact same thing on the other side of the ramp.
3. Now that you have the ledger boards as an even and stable ledger line, place the 4x8 Ramp Armor sheets onto the ledger boards. They will be ridged/straight and not yet flexed into the curve.
4. Line up the first sheet all the way to one edge of the ramp. Now one at a time, press the sheets into place. While you are doing this, it's useful to have a block of wood handy to smack the sheets around side to side to get them where you want them to go. Go ahead and align all of the sheets on the wall. From the top down, tack screws into every other hole on the sides of the sheets. Watch the alignment of the sheets; they made need to move a bit with the wood block. Repeat this on the other side of the ramp.
5. Go ahead and fill in all of the screws for the walls on both sides.
6. Remove the ledger 2x4s.
7. Install the flat bottom sheets up against the bottom edges of the wall sheets, keeping an eye on lining up these rectangles in a "square" fashion as you go. If you need to make cuts to make these flat bottom sheets fit, measure and cut them now. Again only tack the edges until all of the sheets are down. Once they are all down and aligned, finish off the screws.

APPLY RAMP ARMOR ON THE WALLS FIRST, REMOVE LEDGERS, APPLY TO FLAT BOTTOM

START HERE

1/2" DRAINAGE HOLES SPACED 24"x24"

THE RAMP ARMOR TOUCHES THE BOTTOM SIDE OF THE COPING

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