

Supplies and costs

2 Sheets of 4' x 8' x 1/2" Oak Plywood

It seems that 3/4" plywood or MDF (Medium Density Fiberboard) are the most popular choices of lumber for a poker table project. I chose 1/2 inch because I wanted the table to be lighter, and with the addition of the baseboard, the total thickness would be 1" in some areas.

Vendor: Home Depot

Cost: \$69.98 (2 sheets @ \$34.99)



Wood Glue

Not much wood glue is needed, and you could possibly event get away with not using it, but it's strongly recommended for the construction of the rail.

Vendor: Home Depot

Cost: \$4.99



1 Inch High Density Rail Foam

I was excited to get my project started and didn't want to wait for shipping of any items so I got my rail foam from Joann Fabrics. They didn't have a single sheet with the width I needed so I connected two sheets with hot glue. I would highly recommend NOT doing this. Nobody but I can really tell the difference, but I can feel some of the hardened glue in the seam of foam under the vinyl on the rail at the end of the table. I strongly recommend getting a single sheet of 1 inch high-density closed-cell foam. The best deal I have found is through YourAutoTrim.com. A single sheet of High Density 1" thick X 108" long X 54"

wide foam is about \$30 (\$21.95 plus shipping). I have ordered from them before and have been pleased with the quality and speed of shipping. It is cheaper and best of all, NO SEAMS!

Vendor: Joann Fabrics

Cost: \$40.93 (2.75 yards @ 14.56/yard)



1/4 Inch Closed Cell Foam

The quarter-inch foam is used for the playing surface, below the fabric. I highly recommend the foam from YourAutoTrim.com. It looks and feels similar the foam on the underside of a mouse pad.

Vendor: YourAutoTrim.com

Cost: \$24.51 (2.25 yards @ 8.95/yard + shipping)



Spray Adhesive

For securing foam to the rail and playing surface!

Vendor: WAL-MART

Cost: \$7.49



Staples

You are going to use a lot of staples. I'm unsure of the exact count, but get a couple boxes if you want to be safe.

Vendor: Home Depot

Cost: \$7.90 (2000 staples)

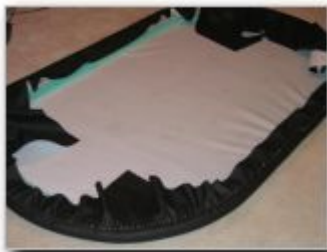


Vinyl

I used a black faux leather vinyl from Joann Fabrics. Joann had a bunch of assorted vinyls in the closeout sections, but this stuff was top notch. I figured if I was going to put in this much effort into a table, I would regret not getting the good stuff.

Vendor: Joann Fabrics

Cost: \$34.06 (2.75 yards @ 11.99/yard)



T-Nuts / Bolts / Washers

8 T-Nuts (5/16" x 3/8") are placed into the wood beneath the playing surface to secure the playing surface to the baseboard. 8 bolts and 8 washers are used to connect the baseboard to the playing surface from underneath the table.

Vendor: Home Depot

Cost: \$12.00 approx. (8 T-nuts, 8 bolts, 8 washers)



Mineral Spirits

Helps remove debris and prepares the race track for the application of polyurethane.

*Vendor: Home Depot
Cost: \$12.75 (1 quart)*



Clear Gloss Polyurethane

The key ingredient to protecting the race track and giving it its brilliance!

*Vendor: Home Depot
Cost: \$7.99 (1 pint)*



Sandpaper

Before the application of the polyurethane, and in between every coat, the racetrack must be sanded using a finer grit between every coat. Grits: 180 - 220 - 320.

*Vendor: Home Depot
Cost: \$15.00 approx. (assorted grits of sandpaper)*

3" Deep Jumbo Drop-In Dual Cup holders

The jumbo cup holders will hold a beer bottle, pint glass, wide low-ball glass, and even a soda in a full-sized stubby holder. A key element of the table!

Vendor: Smackdogg.com

Cost: \$28.90 (10 pack)



Folding Table Legs

A set of folding table legs for easy storage and portability.

Vendor: Home Depot

Cost: \$19.16 (set of 2)



Playing Surface Fabric / Speed Cloth

This turned out to be an expensive item for me. I initially bought a piece of Black Suede for approx. \$17. My eagerness to see what the table was going to look like had me place the race tack around the playing surface before it was completely dry... DON'T DO THIS. A few drops of polyurethane on the fabric and you will never get it off... it hardens and looks like someone "jizzed" on your table.

I removed all the staples and re-covered the surface with a piece of faux moleskin for about \$25. After the new application, I contacted a local airbrush shop owner at the Mall of America who was confident his artists could airbrush a logo onto the surface. I asked for a small 8" x 8" logo in the exact middle of the table. The guy completely fucked it up by starting to airbrush a huge logo across the entire surface. I caught him doing this and he said he could fix it by going over it with black paint. He then put the small logo on the surface and it looked like crap, and it wasn't even in the middle of the table. They refunded my \$40, but I had to re-surface the table a third time.

If you are interested in applying a logo, there is a process that the casinos use for their tables called dye-sublimation ([Example #1](#); [Example #2](#)). It is a digital printing process for fabric. It is fairly expensive. I got a quote for \$250 for a single piece from [Banner Creations](#). If you have the budget this is the best option. They will not let you provide your own fabric as some fabric types will melt in their machine... and they run about \$20,000 per printer so you can understand why.

Air brushing causes the surface to be crusty. Silk Screening is not that durable and can cause the cards to flip-up.

If you do go with the silk screening option, don't put the logo in the center... put it on one or both sides of the center. This will make your silk screen last longer as the majority of action (raking chips, card action) occurs in the middle of the table..

Vendor: Joann Fabrics

Cost: \$23.94 (2.25 yards @ \$9.99/yard)



Equipment needed

Workspace

I used my garage. It was February in Minnesota, but I was lucky to catch a warm weather spell during my project.



Jigsaw

A blade with more teeth per inch is desirable. Fine cuts are needed for the racetrack.

Ruler/Straightedge (or marking rounded cuts)

I didn't have one of those large rulers with a hole in one end, so I used a piece of wood paneling and drilled a hole in one end and marked my measurements on the wood with a Sharpie... it worked fine.

Drill

I actually used two drills, one cordless and one non-cordless. The non-cordless came in handy for some of the heavier drilling. One drill should do you just fine.

Kitchen Knife

Ideally an electric bread knife will be the easiest way to cut the foam, but a standard serrated bread knife worked fine.

Electric Staple Gun

I didn't have one, so I picked one up from the Home Depot. I used a manual trigger staple gun on a previous table and I can tell you the electric gun is worth the extra \$20-\$30. It will help prevent carpal-tunnel syndrome.

Hammer

Helpful for pounding in some of those pesky staples that won't go all the way in.

Blow Dryer

This is optional, but I found it helpful for heating the vinyl and stretching it over the rail. It helped prevent wrinkling.

Pliers

Helpful for removing some of those pesky staples that won't go all the way in.

Box Cutter / Razor Blade / Scissors

For trimming vinyl and fabric.

Drill Bits and Spade Bit

Drill bits for pre-drilling guide holes and well as a spade-bit for counter-sinking the T-Nuts.

Paint Brush

For application of the clear gloss polyurethane.

Hole Saw (optional)

A hole saw would make cutting the drink holder holes easier. I used a jigsaw, but if I built a racetrack again, I'd buy a hole saw that attaches to your drill.

Hacksaw

I cut down the metal table legs 1.5 inches. This brought the height of the table down to 29 inches.

Saw Horses

Or construct some other way of elevating your materials.

C Clamps

Used in different applications throughout the project.

Duct Tape

8 - 5 inch strips duct tape will be needed.

Cutting the plywood

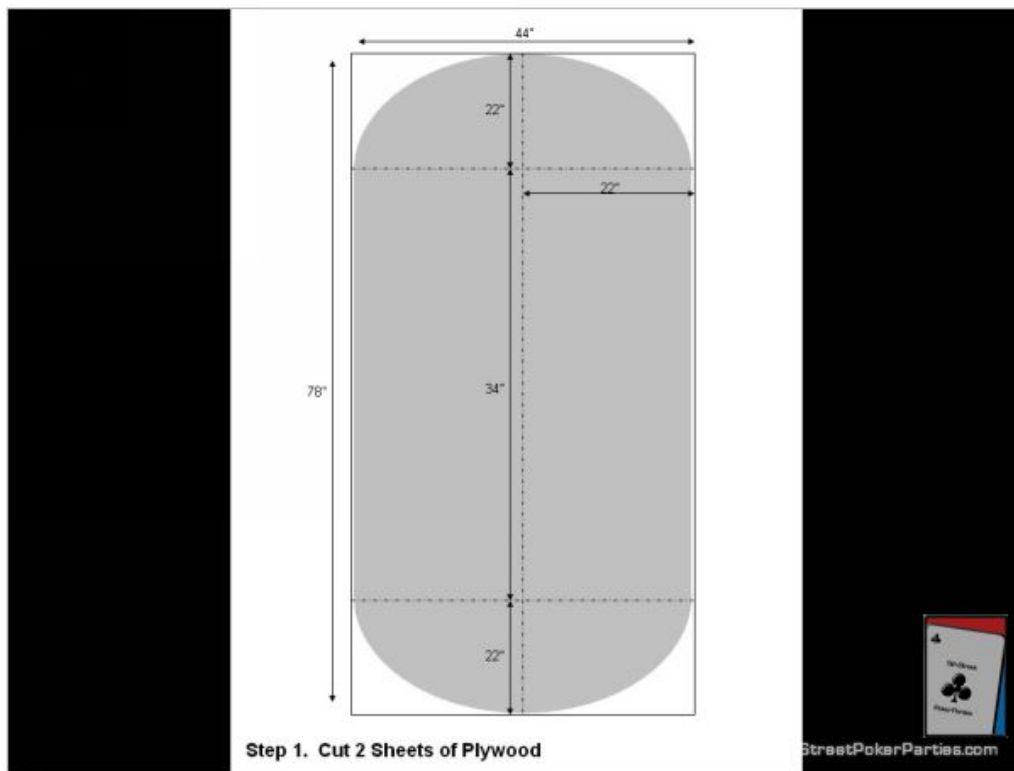
Define your measurements

The first step in making your cuts is determining the length and width of your table. For my purposes, I cut the plywood down to 44" x 78" sheets from the 4' x 8' sheets I got from Home Depot.

To make the rounded cuts you will need to define some further measurements:

- First, divide the width of your table by 2. With our measurements this figure was $44" / 2 = 22"$.
- Then measure 22" from the end of the table, make a mark.
- Measure 22" from each side of the table, make a mark.
- Highlight the point at which these points intersect.

Continue with this same process for the other end of the table.



Build your ruler

If you already have a long metal ruler / yard stick with a hole at the end, you can skip this step. I didn't have one, so I had to create my own using a piece of wood trim/paneling.

Simply cut your wood panel down to about 3 or 4 feet and drill a hole at one end.

Use a marker and measure to 22" (or whatever your math came to above) from the back side of the hole you drilled.

The image shown shows me making a mark at 23", but that is only because my drilled hole was exactly 1 inch from the end of the wood panel. I simply measured from the end of the panel, including the 1 inch for the hole.



Make the rounded cuts

Place a finishing nail into the highlighted intersection point you defined above. Then place the drilled hole of your measuring panel over the nail.

With your pencil firmly placed on the 22" line of your measuring panel, trace your rounded cut line from one side of the table to the other. Complete this task for both ends of the table.

Use your jigsaw to cut along your rounded cut lines.

Sand down any inconsistencies on the edges.



Use your cut piece as a template

Place your cut piece on top of your second piece of plywood and line up the sides. Using the top piece as a guide, trace around your rounded cuts.

Make the rounded cuts on piece #2 with the jigsaw. You will now have 2 pieces of cut plywood.

Mark the matching sides with an asterisk, one on each sheet of wood so they can be matched up perfectly later.

Identify your best looking sheet that will be used for your race track, felt insert and under-rail. The other sheet will be used for the rail and baseboard.



Cut the rail and baseboard

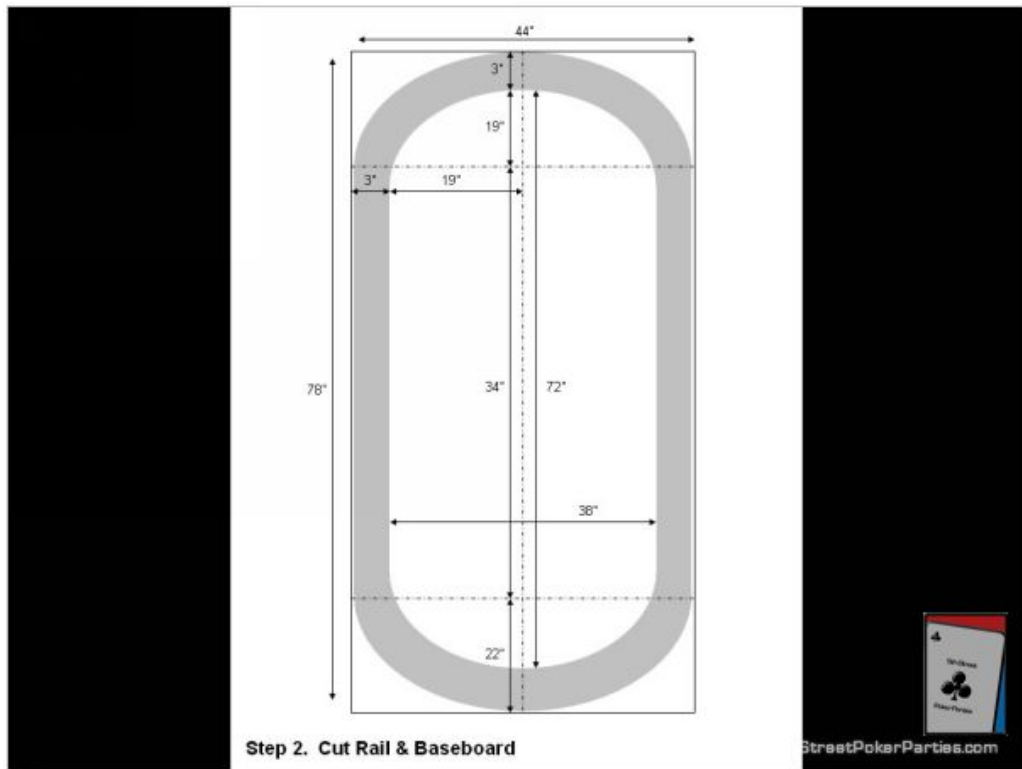
I decided to make a 3 inch rail because I was making a smaller table and wanted to maximize the playing surface area. The norm seems to be a 4 inch rail. Some people go as far as making a 5 inch rail. I think this is too large once the 1" rail foam and vinyl is wrapped around the wood.

Measure 3 inches in from the mark on your measuring stick (19" from the hole) and make a new mark. Use this new marking to trace the cut line for the rail.

Drill a starting hole on your cut line so you can have a spot to fit your jigsaw blade through. Don't make too big of a hole, just one barely big enough to get the blade through.

Make your cuts with the jigsaw. Support the rail with scrap wood while making your cuts so the rail does not bend or break.





Cut the under rail

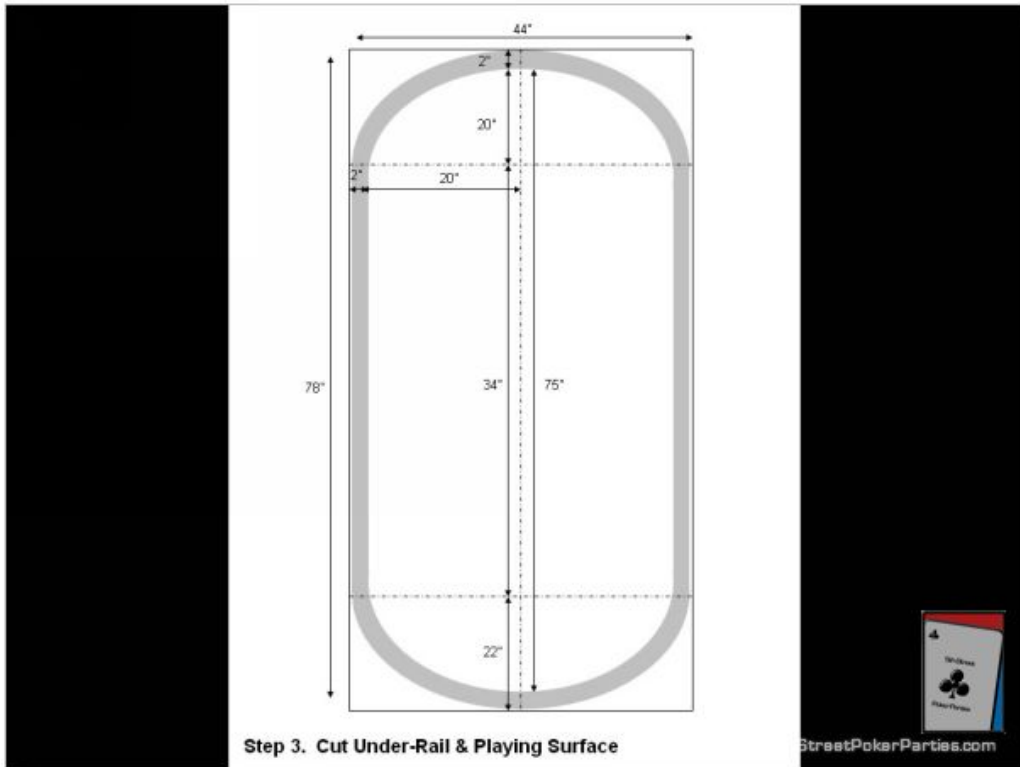
The plans here show a 2 inch under-rail. I made a last-minute change to a 1.5 inch under-rail.

Measure 1.5 inches in from initial 22" mark you made on your measuring stick (20.5" from hole). Use this new marking to trace the cut line for the under-rail.

Drill a starting hole on your cut line so you can have a spot to fit your jigsaw blade through. Don't make too big of a hole, just one barely big enough to get the blade through.

Make your cuts with the jigsaw. Support the rail with scrap wood while making your cuts so the rail does not bend or break.

Your leftover piece will be cut again to create the racetrack and the playing surface.



Cut race track and playing surface

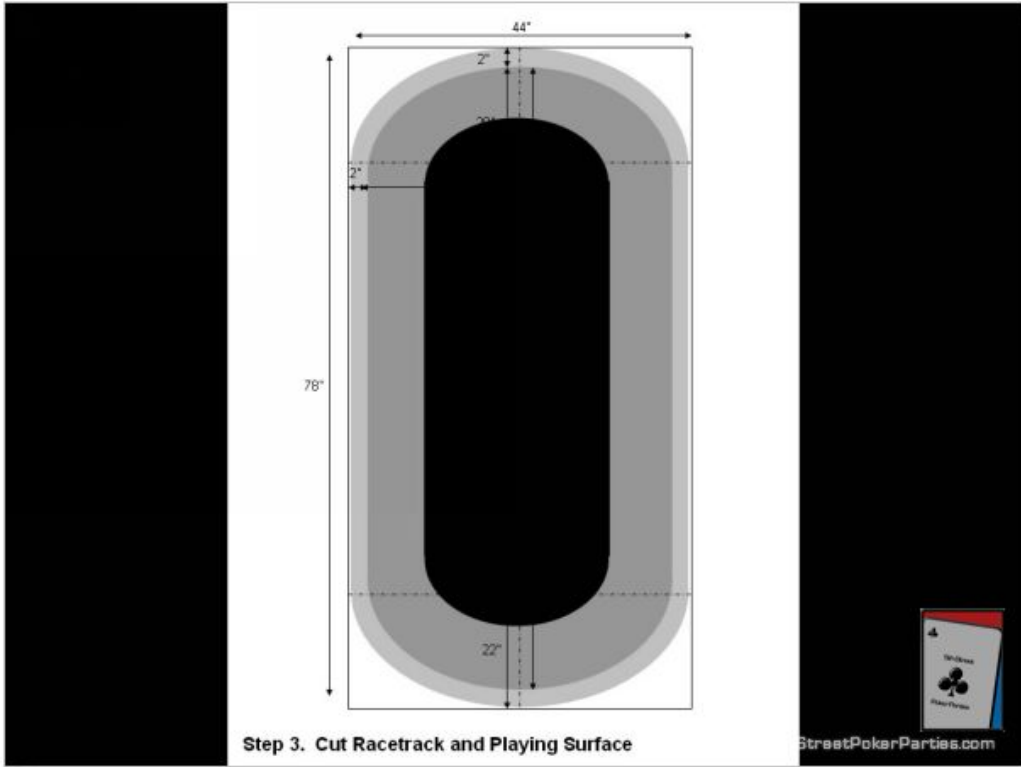
Our racetrack will be cut to be 6.5" in width. 1.5" of the outside of the racetrack will be covered by the rail.

Measure 14.5 inches from the back of the drill hole on your measuring stick. Use this new marking to trace the cut line for the under-rail.

Drill a starting hole on your cut line so you can have a spot to fit your jigsaw blade through. Don't make too big of a hole, just one barely big enough to get the blade through. This is very important as this cut will be visible when the table is completed.

Make your cuts **CAREFULLY** with the jigsaw. Support the rail with scrap wood while making your cuts so the racetrack does not bend or break.

Smooth the inside of the racetrack with sandpaper and round the edges slightly.



Constructing the rail

Glue the rail to the under rail

Set the RAIL piece on the saw horses so that the underside is facing up. Place the under rail on top of the rail making sure that the pieces match up (we marked alike sides earlier).

Apply the wood glue to outside 1.5 inches of the rail.

Place the under-rail on top of the rail and clamp the two pieces together.

Let the wood glue dry for 30 minutes...

Remove excess glue with a clean, damp cloth.



Attach the rail with screws

Drill guide holes for the wood screws.

Attach the under-rail to the rail with 3/4" wood screws.

Remove the C Clamps

Place the rail over the racetrack/playing surface piece to confirm a proper fit.



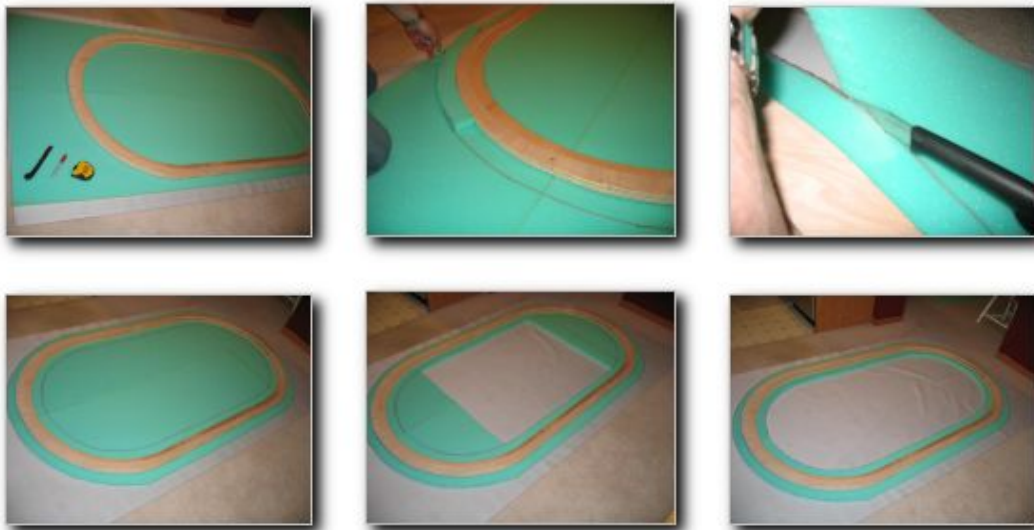
Apply the rail foam

Lay the rail over the 1" high density rail foam.

Cut a 2" piece of foam from the unused end to use as a tracing guide for the outside of the rail and a 1.5" piece of foam as a tracing guide for the inside of the rail.

Cut along the cut lines with a serrated bread knife.

Once the foam is cut, apply the spray adhesive to the wood rail and lay down on the foam.



Wrap the rail in vinyl

Start by having another beer... because this part SUCKS!

To attach the vinyl to the outside of the rail:

- Start on one side of the rounded rail and work your way around to the other side other the rounded rail.
- Staple the outside of the rounded sections first.
- Pull the vinyl towards you at an angle in the direction of the last staple.
- Staple the outside of the straight edged sections.
- Hammer in any staples still sticking out.

To attach the vinyl to the inside of the rail:

- Cut out a rectangle in the inside of the rail, leaving 6 inches of vinyl to wrap around the straight edged sections.
- Cut long triangular strips from the edge of the cut out rectangle towards the rounded sections of the rail.
- When cutting the triangles, don't cut too close to the rails, leave about 4 inches uncut.

- Start on one side of the rounded rail and work your way around to the other side other the rounded rail.
- Staple the inside of the rounded sections first.
- Pull the vinyl towards very tight. I used a hairdryer to soften and expand the vinyl. When the vinyl cools, it will contract pulling the vinyl even tighter. You want to do your best not to leave any wrinkles. This is very important.
- Staple the inside of the straight edged sections.
- Hammer in any staples still sticking out.

It is normal to have to pull out certain sections of staples to pull the vinyl tighter and re staple.

Trim down the vinyl near the edge of the staple lines.

Ahhh... now you should be glad you are done! The hard part is over.



Attach the rail

Attach the rail, see how it looks.

Make sure the rail fits well over the racetrack. You may have to trim the vinyl further for a snug fit.

I had applied a single coat of polyurethane to the playing surface to help protect the wood from spills and provide some additional strength.



Securing playing surface to base

Insert T nuts into playing surface

We had a crazy winter sunset this evening...

I did this backwards as you can see in the photos, it is easier if you use the spade bit first then drill holes for the bolts...

The T-Nuts allow the playing surface to be secured from underneath the table to the baseboard.

Center the playing surface on the baseboard and elect 8 points on your playing surface to insert the T-nuts. The T-Nuts should be placed outside of where you will place the folding table legs. You may consider attaching the folding table legs before this step.

Use the spade bit to drill about 3/8" inch into your defined T-Nut placements. When the T-Nut is inserted it should be flush with the wood playing surface.

Use a standard drill bit (3/8") to drill through the middle of your spade bit holes and all the way through the baseboard.

I used a hammer to make sure the T-nuts were fitting snug into their holes. Once the T-Nuts are secure, bolt the playing surface to the baseboard from underneath.

Place strips of duct tape over each of the T-nuts to ensure they stay in place and make sure there are no depressions visible after the foam is applied.



Building the race track

Define drink holder placement

I was ready to start cutting the holes for the drink holders, but the drink holders had not arrived yet. The drink holders I ordered were a Jumbo 3" deep dual cup holder from Smackdogg.com. The product description defined that the width of the cup holders were 4" wide in diameter. There was a 1/4" lip on the drink holders, so the openings were to be cut at 3 3/4" in diameter.

I used a roll of tape as a tracing template, simply removing enough tape so the roll was exactly 3 3/4" in diameter.

To determine the placement of each drink holder, I measured to determine the internal circumference of the racetrack. The measurement was 155". With 10 drink holders the distance between the exact centre of each drink holder was 15.5".

Each tracing for the drink holders were placed 3/4" from inside of the racetrack. You don't want to center these in the middle of the racetrack because the rail will overlap the racetrack by 1.5".

The table will really only seat 8-9 people comfortably, but the layout would look goofy only using 9 drink holders... so 10 drink holders were traced.

Inside each circle a point is highlighted for a starter hole, and a gradual starter cut line is drawn into the outer cut line of the drink holder.



Cut drink holder holes into race track

A 3 3/4" hole saw can be used here and will create a nicer cut, but a jigsaw will work just fine. It's just a little more work.

Utilize your 'C' clamps to keep the racetrack from moving.

Drill starter holes on the highlighted points inside each circle.

When using the jigsaw, it is important to stay on the cut line. If you go too far outside the cut line the hole may not be able to hold the drink holders.



Cut drink holder holes into base

Secure the playing surface to the baseboard with the use of the T-nuts. Lay the racetrack over the playing surface. It is important to mark which side of the racetrack is up. You will apply the polyurethane to this side.

Trace the drink holders onto the baseboard using the racetrack as a template.

Inside each circle a point is highlighted for a starter hole, and a gradual starter cut line is drawn into the outer cut line of the drink holder.

Drill starter holes on the highlighted points inside each circle.

Using the jigsaw, cut holes in the baseboard using the cut line.



Clean and prepare the race track

Define a place wear the race track can reside undisturbed and sand the surface of the race track with a course grit sandpaper (60). Brush off any sawdust that has collected on the racetrack. Use a clean rag and apply mineral spirits to clean and prepare the surface of the racetrack.

Allow 45 minutes for the mineral spirits to dry... relax and enjoy some Celebrity Poker Showdown.



Apply polyurethane to the race track

1st coat of polyurethane:

- Sand the surface of the racetrack with a 60 grit sandpaper (this ensures an even surface and proper adhesion).
- Clean the surface of all dust.
- Apply a very light coat of polyurethane for the first coat.
- Use a clean brush and go with the grain of the wood.
- Brush lightly at a 45 degree angle.
- Make sure there are no air bubbles. Bend down so your eyes are at the same level as the racetrack surface.
- Allow 3 hours to dry.

2nd coat of polyurethane:

- Sand the surface of the racetrack with a 120 grit sandpaper.
- Clean the surface of all dust.
- Apply a heavier coat of polyurethane for the second coat.
- Use a clean brush and go with the grain of the wood.
- Brush lightly at a 45 degree angle.
- Make sure there are no air bubbles. Bend down so your eyes are at the same level as the racetrack surface.
- Allow 3 hours to dry.

3rd coat of polyurethane:

- Sand the surface of the racetrack with a 180 grit sandpaper.
- Clean the surface of all dust.
- Apply another coat of polyurethane.
- Use a clean brush and go with the grain of the wood.
- Brush lightly at a 45 degree angle.
- Make sure there are no air bubbles. Bend down so your eyes are at the same level as the racetrack surface.
- Allow 3 hours to dry.

4th coat of polyurethane:

- Sand the surface of the racetrack with a 220 grit sandpaper.
- Clean the surface of all dust.
- Apply another coat of polyurethane.
- Use a clean brush and go with the grain of the wood.
- Brush lightly at a 45 degree angle.
- Make sure there are no air bubbles. Bend down so your eyes are at the same level as the racetrack surface.
- Allow 3 hours to dry.

5th coat of polyurethane (optional):

- Sand the surface of the racetrack with a 320 grit sandpaper.

- Clean the surface of all dust.
- Apply another coat of polyurethane.
- Use a clean brush and go with the grain of the wood.
- Brush lightly at a 45 degree angle.
- Make sure there are no air bubbles. Bend down so your eyes are at the same level as the racetrack surface.
- Allow 24 hours to dry before use.

My drink holders finally arrived so I had to see how they looked in the racetrack.



Covering the playing surface

Prepare the surface with spray on adhesive

Clean the playing surface so that it is clean and dry.

You will want to use your baseboard as a platform to unroll your foam onto. Stand up your playing surface against a wall to apply the spray adhesive. Once the spray adhesive is applied, you will want to place the playing surface (spray adhesive side down) on top of the unrolled foam while the playing surface is still slightly wet.

Shake the can for 1 minute.

Apply a medium coat of the spray adhesive to the playing surface. Hold the can 8-12 inches from the surface and use sweeping motions.



Cover the playing surface with 1/4" foam

The foam cover is a 1/4" closed cell foam. It is similar in feel to the base of a computer mouse pad.

Unroll the foam over the baseboard. The playing surface is placed on top of the foam (adhesive side down) immediately after application of the spray adhesive.

Allow the foam to bond to the playing surface for one minute. Then, flip over the playing surface and trim the foam right up against the edges of the playing surface with a razor blade. Try to keep these cuts as clean and flush to the edges of the playing surface as possible.



Cover the playing surface with fabric

Clean the foam surface so that it is free from loose debris.

You will want to use your baseboard as a platform to unroll your fabric onto. Make sure the fabric is laid flat and free of wrinkles, Place the playing surface (foam side down) on top of the unrolled fabric.

The fabric used for the final product can be any number of types. Anything that will be durable and not pill while still allowing the cards to slide smoothly across the surface will work. The most popular fabrics are velveteen. Moleskin works great too. For more information on the application of a logo to the fabric, see the [Supplies & Costs](#) section.

Trim the fabric so that there is about 6 inches on each side to be stretched and wrapped around the edges.

Pull the fabric tightly and wrap around the edges of the playing surface. Use an electric staple gun to secure the fabric to the playing surface. Make sure that the fabric is pulled tightly enough so there will be no visible wrinkles.

You will use a lot of staples. Use a hammer to pound in any pesky staples that won't go all the way in.



Attaching the folding legs

Cut down the legs

It appears that most casino card room tables are in the height range of 28-29 inches. To achieve this height, the Waddell Folding Table Legs need to be cut down about 1.5 inches. These cuts can be achieved using a hacksaw.

Attach the legs to the base

To create a secure base, two pieces of 12" x 12" x 1/2" plywood are cut from leftover scraps. These pieces are used so that 3/4" wood screws can be used to attach the folding table legs to the baseboard. If these pieces are not used the 3/4" wood screws would poke through the baseboard and into the playing surface. We need the playing surface to be removable so we can re-fabric if necessary. This is why we installed the T-nuts. If 1/4" wood screws are used, the legs would not be secure enough for long-term stability.



The final product...

