

# SKATE LONGBOARD

Have you ever noticed how many roads there are in your neck of the woods? Everywhere you look, there are smooth, sloping asphalt waves—I mean, slopes—just waiting to be carved up. Get into a crouch or put your toes on the nose. Feel the flow as you—I mean, your kids—carve back and forth across the blacktop with the sun on their faces and the wind in their hair. Actually, let's not kid ourselves. I have a feeling you're going to be "borrowing" this board to relive those early glory days of skateboarding yourself.



## MATERIALS:

4 ft/1200 cm 1×7/25×-170 mm Brazilian Ipe wood\* (This sounds like an odd size but it's actually a factory-cut measurement. Look for Ipe wood at your local specialty lumberyard.)

2 super-wide 10-in/250-mm skateboard trucks  
(I like Independent-brand trucks, myself.)

One set of super-soft street wheels  
(Yup, they come 4 to a set.)

Eight bearings built for speed

4 ft/1200 cm clear grip tape, 10 in/250 mm wide

## FASTENERS:

1½-in/40-mm skateboard mounting hardware,  
for bolting the trucks to the deck

\* *A quick note about Ipe wood: It's an incredibly strong, dense wood that's resistant to splintering and nicking, which makes it super-durable for daily use. It's pretty weatherproof too, naturally resisting rot, decay, insects, and mold. Sunlight has little to no effect on its structural integrity, but it will eventually transform from its original reddish-brown color to a beautiful silver patina. What's more, Ipe wood is an environmentally responsible choice because it's harvested only from sustainable sources. It's also naturally fire-resistant, which I know will come in handy when you—whoops, I mean your kids—are heating up the street on their new deck.*



## TOOLS:

Measuring tape  
4-ft/120-cm level or straightedge  
Pencil  
Carpenter's square  
Felt-tip pen  
Drill with ¾-in/5-mm and ¼-in/6-mm bits

Band saw or jigsaw with wood blade  
Electric sander with a few sheets of 60-grit sand paper  
Screwdriver  
Utility knife or pocketknife  
Socket wrench with ½-in/12-mm, ¾-in/9-mm and ¾-in/18-mm sockets

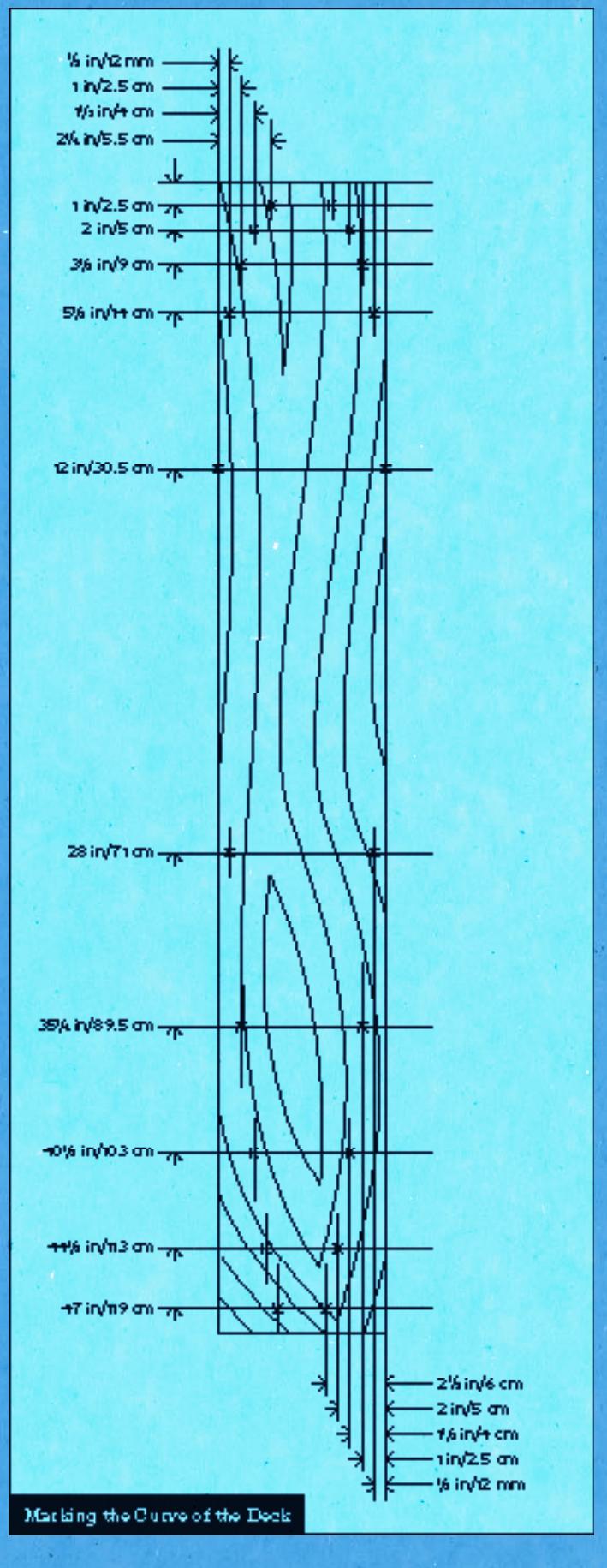
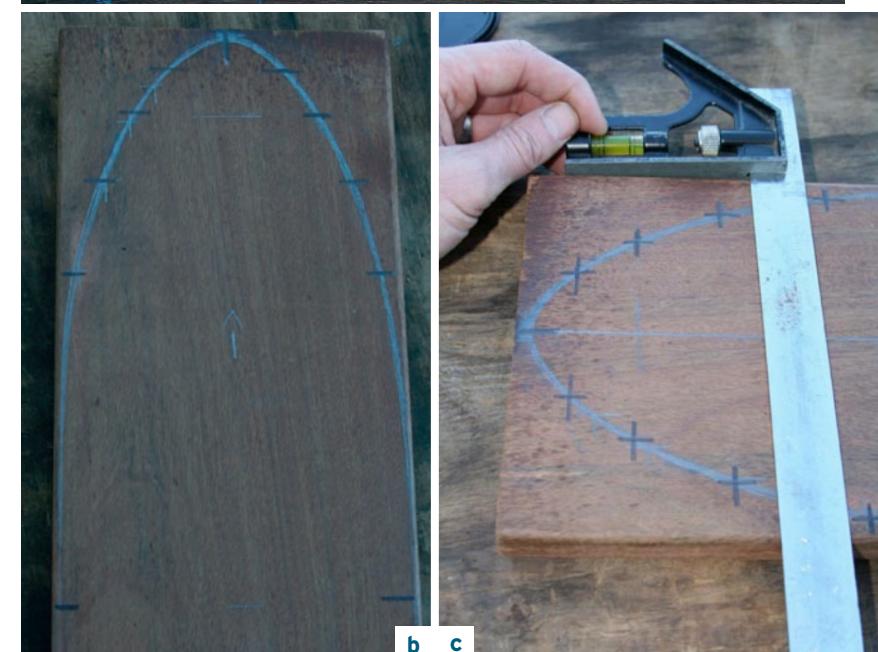
## INSTRUCTIONS:

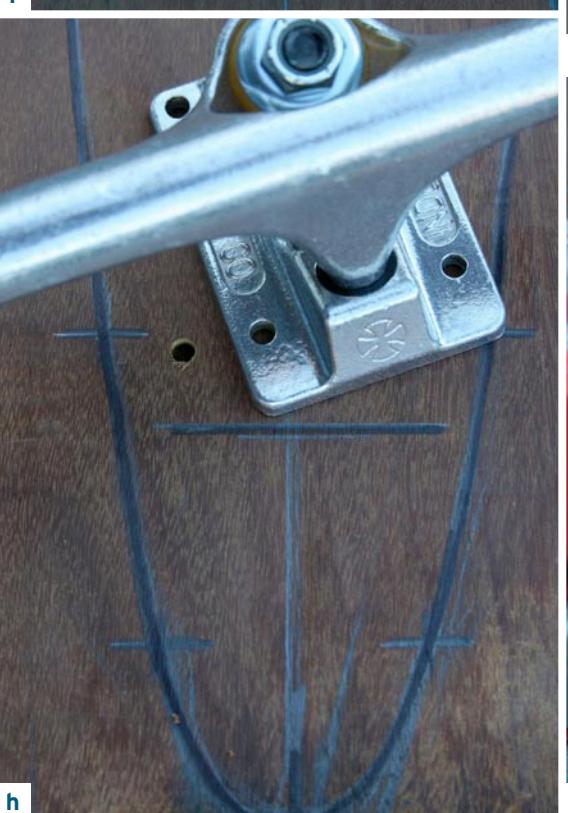
- 1 Look your board over and find an area that has the most attractive grain. We'll make this the nose (top) of the board. Now turn the board over—we'll be making all our marks on this side, which will be the underside.
- 2 Draw a centerline lengthwise on the board: use the measuring tape to measure  $3\frac{1}{2}$  in/9 cm from the edge and use your level and pencil to make a clean straight line.
- 3 Now we're going to start laying out the shape of the deck. This will be the beautiful, classic teardrop shape known as a "pin tail." This board, in Ipe wood, will look just as amazing carving down the street as it will when you get it home and hang it on your wall. Measure 1 in/2.5 cm from the nose edge and draw a line horizontally across the board with your carpenter's square. You may want to label this and the following marks with the measurements as you go, because you'll need to refer back to them. See **Marking the Curve of the Deck**.
- 4 Draw another horizontal line at 2 in/5 cm from the nose edge, one at  $3\frac{1}{2}$  in/9 cm, one at  $5\frac{1}{2}$  in/14 cm, and another at 12 in/30.5 mm. See images **a** and **b**.
- 5 Now, measuring from the long sides of the board, we'll make marks across these lines. When we're done with these steps, we should have a set of perfectly symmetrical marks on our board. Start by crossing the 1-in/2.5-cm line at points  $2\frac{1}{4}$  in/5.5 cm from each edge. See images **c** and **d**.
- 6 Cross the 2-in/5-cm horizontal line at points 1½ in/4 cm from the outside edges. See images **c** and **d**.
- 7 Cross the  $3\frac{1}{2}$ -in/9-cm horizontal line at points 1 in/2.5-cm from the outside edges. See images **c** and **d**.
- 8 Cross the  $5\frac{1}{2}$ -in/14-cm horizontal line at points  $\frac{1}{2}$  in/12 mm from the outside edges.

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- 9 And finally, at the 12 in/30.5 cm horizontal line, make a mark right on the outside edges.
- 10 Okay, that's it for the front section. We'll make some more horizontal lines now, for the tail shape. The first one will be 28 in/71 cm from the nose.
- 11 Draw another horizontal line at  $35\frac{1}{4}$  in/89.5 cm, one at  $40\frac{1}{2}$  in/103 cm, one at  $44\frac{1}{2}$  in/113 cm, and another at 47 in/119 cm.
- 12 Great. Now cross the 28-in/12-cm line  $\frac{1}{2}$  in/7 cm from each edge.
- 13 Now cross the  $35\frac{1}{4}$ -in/89.5-cm horizontal line 1 in/2.5 cm from both outside edges.
- 14 Cross the  $40\frac{1}{2}$ -in/103-cm horizontal line at points  $1\frac{1}{2}$  in/4 cm from the outside edges.
- 15 Cross the  $44\frac{1}{2}$ -in/113-cm horizontal line at points 2 in/5 cm from the outside edges.
- 16 Cross the 47-in/119-cm horizontal line at points  $2\frac{1}{2}$  in/6 cm from the outside edges.
- 17 Now we'll connect all of these points with a long, smooth freehand curve to form the pin-back shape of our deck. With your pencil, sketch out one curve. When you do the curve on the other side, make sure it looks exactly identical. Both curves should meet the edge of the board at the 12-in/30.5-cm horizontal line—this will be the widest part of the deck. Since most of your your—whoops, I did it again—your kid's weight will be on his front foot when he pulls heavy G's through the turns, this part has to be beefy.





**18** Okay, let's continue the curve through the tail section. Follow the edge of the board from the 12-in/30.5-cm horizontal in an almost-straight line. When you get about two-thirds of the way to the 28½-in/71-cm horizontal, start to curve in toward it.

**19** Carefully connect all the rest of the crossed points.

**20** To complete the tail, go right to the end of the board and connect the two lines with a half circle.

**21** Now go back over the layout of your curves and make sure all the transitions from point to point are smooth. The best way to do this is to sight down the length of your the board. How do things look? Take a moment here to tune in to the board. There aren't a lot of handmade decks out there, so savor your contribution to the art of board shaping. Soak up the sights and smells, and let it flow. See image e.

**22** So, do you have a sweet-looking curve on your board? Great! Now carefully trace it with your felt-tip pen so it's easier to see when you cut it with the jigsaw.

**23** Before we cut, though, let's predrill the holes for the trucks. Draw a horizontal line on the underside of the board 2 in/5 cm from the nose with the carpenter's square.

**24** Now get your drill and the  $\frac{3}{16}$ -in/5-mm bit ready. Place one of the trucks on the centerline so the front of it is flush with the 2-in/5-cm line and the king pin and rubber bushing is facing the middle of the board. Truck placement has to be dead-on and level along the centerline of the board, so be sure to be accurate here. If the trucks are out of alignment, the board will want to go in two directions at once. Two directions on one board = bad idea. See image f.

**25** Is everything lined up? OK. Hold the truck down firmly and, using the pencil, trace the position of each hole onto the deck. Now measure the positions of each hole on the truck, i.e., the distance of the center of each hole from the front edge and from the centerline. Using your carpenter's square, double check that the holes you marked on the deck match the measurements you just made. Drill four pilot holes, one through the center of each hole in the truck.

**26** If everything looks good, remove the truck. Now place the board on a smooth scrap-wood surface and, using the same  $\frac{3}{16}$ -in/5-mm bit, drill the holes for the trucks all the way through the board. Make sure to hold the board down firmly so you don't splinter the wood when the drill comes through the other side.

**27** So that you—whoops . . . oh, never mind—don't feel the screw heads as you're carving the asphalt jungle, let's make some countersinks on the topside of the deck. To do this, use a  $\frac{1}{4}$ -in/6-mm bit and put the drill into reverse. Put the bit in one of the holes and start the drill. Now rotate in a circle as you tilt the drill about 45°. Practice on a scrap piece of wood first if you like. Don't forget to put the drill in reverse so you don't gouge your deck. See image g.

**28** Make another line 3 in/7.5 cm from the tail of the board and repeat the same process down there with the other truck. Putting the rear truck forward by an inch makes for a stronger connection, since the board will be pretty thin at that end. Again, make sure the kingpin and bushing are facing the middle of the board and that the back edge of the truck is flush on the 3-in/7.5-cm line. See image h.

**29** Alright, let's free the skateboard from the block of wood it's trapped in. A band saw is really ideal for this, but a jigsaw will work well too. Take your time and follow the line exactly. If you feel an error coming on, make it on the outside of the line. Or give your self a little breathing room and cut a hair outside of the line. You can always sand it down, but you can't put wood back. Start all your cuts from the nose and tail, cutting toward the 12-in/30.5-cm mark. See image i.

**30** Great! Your deck is free! Now it's sanding time. This step will take 45 minutes to an hour. Start by sanding down the sawn edge so it's flush with the curves you laid out, making any rookie sawing maneuvers disappear. When you're done with that, round off all the corners so they're perfectly smooth. Yes, sanding takes time, but this is the soul of the project. Now you can really get into honing the board. When you ride this hot rod and see how sweet it is, you'll really thank yourself for putting in the time on this step. It's Zen time. Sand, grasshopper, sand. See image j.

**31** Man . . . looks sweet, huh? Good job. Now it's time to let your drawing skills shine. With the thick felt-tip pen, draw something cool on the topside of the board. I like a nice rolling wave, myself. Whatever it is, sketch it out and draw it on some scrap wood first for practice. Once it looks the way you want, draw it on your deck. See image 1.

**32** Okay, now it's time to install the trucks, wheels, and bearings. Use the 1½-in/40-mm mounting hardware and ¾-in/9-mm socket wrench to secure the trucks. The bolt heads should sink nicely into your predrilled holes. To install the wheels, press a bearing into each side with the ½-in/12-mm socket wrench. There should be two washers on the end of each axle. Make sure you place one on either side of each wheel when you mount them. After mounting each wheel, tighten each axle nut down tight. This will seat the bearings. Then back off each axle nut until the wheels spin freely but don't move side to side. See image m.

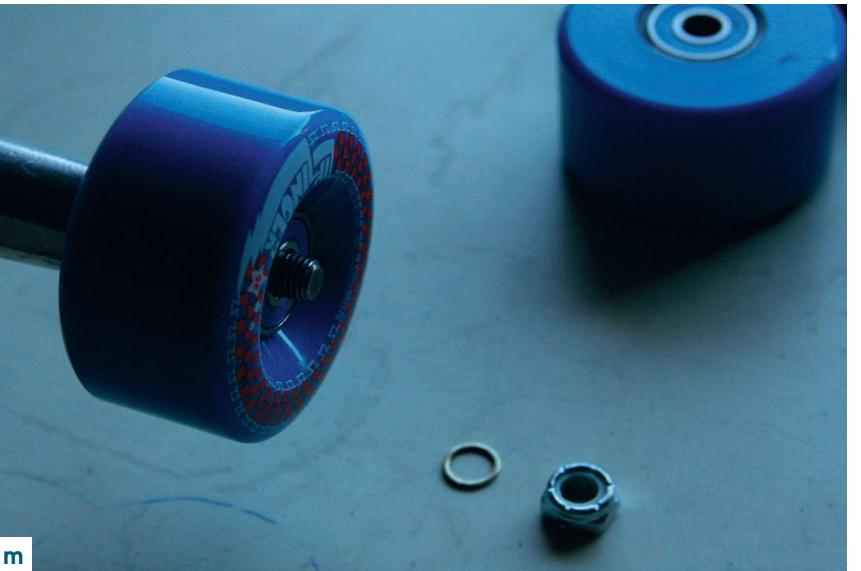
**33** Cover the top of the deck with clear grip tape. Make sure the surface is clean, and slowly peel and stick the grip tape as you go. Make sure you don't create any bubbles. You should have extra tape hanging off the sides.

**34** With the screwdriver held at a 45° angle, rub really hard along all the edges of the board. This will define a line at the edge so you can easily take the utility knife and cut off the excess grip tape. To do this, hold the grip tape level, but angle your utility knife in toward the middle of the board as you cut. Using this method, cut all the way around the edge of the board until all the excess is gone. See images n and o.

**35** Carry the ¼-in/18-mm socket wrench with you as you take a few cruiser runs. Use the wrench to adjust the trucks to your liking. You don't want speed wobbles when you're bombing down the steepest hill in the neighborhood. If your trucks are way too loose, tighten those babies up, and vice versa. Have fun, and don't forget to let your kids borrow this board every once in a while!



**1**



**m**



**n**



**o**