



PAUL SCHMITT'S & MICHAEL BREAM'S SKATEBOARD EXPERIMENTS

How could you build a skateboard press?

To build a strong skateboard, you need to fuse many layers of wood together. The overlapping wood grain provides a durable board that is less likely to snap when subjected to the forces of riding the board and landing tricks. Skateboard manufacturers use machines that apply tremendous pressure to this sandwich of wood and glue.

Paul Schmitt runs one of the world's largest skateboard manufacturing companies, and he gets to use all kinds of cool machines. But when he was a kid, he didn't have access to these machines, and he wanted to build skateboards. But how? What could he find around his house that would give him the pressure he needed to build a skateboard deck?

Hmm. Something heavy. Something *really* heavy. Dining room table? Nope, not heavy enough. Huge stack of books? No, that won't work either. Wait a second! How about a car? That could work! Once Paul glued his sheets of wood together, he asked his mom to park the family car on top. Great idea! A car can weigh 2 tons, so by parking one wheel on the wood sandwich, you've got about a half of a ton of pressure.



*Paul Schmitt in his
skateboard factory.*

Did it work? It might have, but when mom left for work the next morning, the pressure was lost, and the board fell apart. The glue didn't have enough time to dry.

So Paul tried again. This time, he built a mold, to hold the wood layers together, then he squeezed it together with a car jack (the tool mechanics use to lift cars). This gave him *12 tons* of pressure, and he could keep that pressure applied for as long as needed for the glue to set. And guess what. It worked! Paul made many skateboards with this homemade device.

Now that he owns his own skateboard factory, Paul uses heavy machines that apply 25 tons of pressure to the boards he manufactures. But even as a kid, he used everyday household items and came up with the tools he needed to build strong skateboards for his friends.

How can you build a cool AND environmentally friendly skateboard deck?

With most skateboards, if you want your feet to get a good grip on the board, you have to cover the top of the board with grip tape - a kind of sandpaper.



Michael Bream starting on a new skateboard.

Michael Bream is the owner of Gravity Skateboards, and he wondered if there could be another way to prevent skateboard riders from slipping. Could he find a substitute for grip tape? And if he could use recycled materials, it would save energy.

How about clear plastic tape? Well, you'd see the design, but plastic tape wouldn't provide any grip. It might even cause the board to become *more* slippery. Plus, plastic is not the most environmentally friendly material, and Michael is always looking for ways to lessen his company's environmental footprint.

So what else is clear? Hey, what about glass? Glass is made from sand, after all! Glass on a skateboard? Well, not a sheet of glass, but what if you could grind up tiny pieces of glass and glue them on? That would give the skateboard deck a rough surface, kind of like sandpaper, but you'd see right through it!

So Michael found someone who's in the business of grinding up recycled glass. He then designed a special machine that could apply this glass material with glue to the tops of his skateboards.

After some experimentation and quite a few tries, this new method worked! The glass provides a rough surface for a good grip, and it even let's a design show through! So the next time you throw a glass bottle into the recycling bin, just think... that glass may find its way onto the top of a brand new skateboard!



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