

# which wheels are best on which surface?

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Go to any online forum and someone will have a definitive answer. But the truth is that choosing wheels has more in common with choosing your flavor of ice cream than it does with a set right or wrong answer. You like chocolate? I'm fond of pistachio, but think vanilla tastes best on cakes. In other words, what might be perfect for one skater may be the absolute worst wheels in the world for you – today. But next week they might work great on another surface. Never trust anyone who tells you that everyone should use the same exact wheels (or any other gear)! Choosing the right wheel involves a lot of factors, including (in no particular order):

- Surface you'll use it on (the type, location, dirtiness, humidity, etc)
- What you're accustomed to and what wheels your favorite skater wears (we are all predisposed to love what our heroes are skating on!)
- Your level of experience
- Your height and weight
- Your skating "style," especially your stride and stance
- The position you play now
- Your training / bouting goals
- YOUR TASTE

A lot of those choices can be summed up as: just how grippy do you want your wheels to be? Grippy wheels tend to be considered slower – though I would argue that a slower unimpeded lap speed does not necessarily mean a slower trip through the pack. Firm wheels are also often referred to as faster, but again, that's unimpeded lap speed. You can also achieve grippiness with your stride, so as a training tool, I use the slipperiest wheels I can stand. But for the sake of deciding, I can say definitively that grippy wheels are softer and create more friction (which equals grip but can also mean more work), while firmer wheels roll longer with less friction (and less grip, requiring a lower and more balanced stride). All wheels fall somewhere into that soft vs. hard, grippy vs. slippery, "slow" vs. "fast" continuum.

To make things slightly more complicated, the method most skaters use to determine relative "grippiness" of wheels is

totally flawed. **Durometer is not a reliable way to figure out how grippy wheels are.** In the first place, the durometer listing that is painted on most wheel models is a moving target the manufacturers aim for, not the actual tested durometer of the particular wheel you're looking at. In the second place, wheels are made of different urethane formulas that react differently to outside factors, especially friction. Check out the Sin City Skates blog for more info on durometer: <http://tinyurl.com/2brjl8>.

There is a good way to combat how confusing this stuff gets: try them out! The best thing a league can do is to institute "wheel sharing." Encourage skaters to test old wheels (preferably with a crap set of bearings you don't want anymore) so other skaters can try them. I would encourage everyone to try out as many wheels as they can, including your wife's old bald ones and the crap your boyfriend used on his skateboards in the 80s. The best side result of trying out lots of wheels is that you lose your dependency on wheels in general; grip becomes more something you achieve from your stride and less linked to the perfect set of wheels for the specific conditions of the moment.

But, let's pretend you're on an island with a roller derby track (let's call it Derby Island and make it tropical... sigh). This awesome island offers you the opportunity to play derby, but no one speaks your language and their wheels are totally unidentifiable. You are on your own and there are a lot of choices! Don't fret. There are some relatively tried and usually true wheel-to-surface combos that are a great place to start when you're discovering what will work best for you.

## sport court

What we call "sport court" is usually blue composite tile hockey flooring and comes in lots of varieties, some far more grippy than others, but most of them fairly grippy when clean. But they aren't usually clean, and with that layer of sport court schmutz (don't think about what it is!) the surface is usually slowish/grippy but slippery on top. For most skaters, this is where you want a medium firm to grippy wheel:

- Radar Flat Outs (any color)

- Firm Radar Tuners (green, pink, orange)
- Firm Sure Grip Fugitives (green, pink)
- Atom Lowboys and Trackers
- Hyper Witch Doctors (blue)
- Soft formula aluminum hub wheels like:
  - Speedrays (blue, red)
  - Powers (red, pink)
  - Hyper Cannibals (blue)

### wooden rink floor

When was the last time it got a coat of urethane? You can tell because if it was recently, it is probably super duper grippy; if not so recent, it can be ridiculously slippery. Your best bet in this case is to ask skaters on your team what they recommend and then weigh that info against what you know about the factors we discussed at the outset. If they have a phenomenally low stride and you're a beginner, you probably want something grippier than what they like. If she's a 5'2" < 100 lb and you're 6' 180lb, you probably want something firmer than she needs, etc.

### concrete (painted or rough)

If the concrete is smooth and was painted recently, you might be lucky enough to use really inexpensive wheels! If its rough concrete, you should use cheap wheels. Try out firm to really firm wheels, especially the firmest of the nylon hub wheels. Generally speaking, I don't recommend poly BD (soft), or high end nylon and aluminum hub wheels on concrete because even the smoothest concrete eats them. It just gets too expensive. They may perform well on the concrete, though, so if you're rich, go nuts! For an intermediate (not wealthy) skater with a decently low stride, I would start with the cheapest ones and move into grippier (often more expensive) wheels if it was warranted:

- Stock wheels from R3s, Boxers and other cheap skates
- Radar Caymans, Demons and Flat Outs / Flat Outrageous (FO are the grippiest)
- Sure Grip Twisters and Zooms
- Radar Demons
- Atom Queen B and Tracker

### concrete (slippery)

Is it unpainted, polished, slippery concrete you're on? Well, sorry – that gets expensive. If you can paint it, it will make a difference, as will regular mopping with a cleaner-degreaser like Traction. But if you can't do that, most skaters will want the grippiest wheels they can get (and will usually need new

ones regularly, so they should really get in the habit of rotating to extend their life), including:

- Sure Grip Fugitives, blue or black, even grippier with orange Fugitive Pushers
- Atom G-Rods
- Radar Tuners (black, blue, red) – slightly less grippy
- Omegas (if you like narrow wheels) – slightly less grippy

### asphalt, tennis courts, outdoor basketball courts

DO NOT waste your money on expensive wheels! If you're a badass, use the cheapest, hardest indoor wheels you can find. If you want more traction, use the lowest profile (62mm), widest outdoor wheels possible. Taller wheels in the super soft outdoor formulas feel wobbly on tight track cuts and turns, in my experience (though they are awesome for actual rolling-down-the-sidewalk skating). The good news is that manufacturers are racing to create hybrid wheels – bouncy, softish outdoor urethane formulas in the wide, low profile classic indoor shape – to serve the growing population of skaters scrimmaging and practicing on asphalt, basketball courts or just about any flat surface. This summer should see far more options in this area. In the meantime, try:

- Atom Centuris (1st generation hybrid)
- Sure Grip Aerobics or 62mm Motion
- Radar Zen or Energy

### all-around good bets

Good all-around wheels for most common surfaces are, in my experience, not too expensive and work passably on any normal bouting surface. For me, that's the medium-to-grippy combos like:

- Radar Flat Outs & Tuners
- Sure Grip Fugitives
- Atom G-Rods (more grippy) and D-Rods (similar to Fugis)

For more experienced skaters with a better stride:

- Atom Tantrums
- Hyper Witch Doctors
- Soft alum hubbed wheels

For skaters eager to try firmer wheels:

- Firm aluminum hub wheels
- Atom Lowboys and Stokers (even firmer)

In closing, I want to assure you, dear reader, that no wheel manufacturers paid to get any of these endorsements or ever has any input into what I recommend ever. The information above is 100% my opinion, based on my own and my teammates experiences. Thanks for reading! 🌍