The Art of Wood Floor Sanding: What Every Homeowner Should Know

If you have lived with hardwood flooring for any length of time, you know that nothing transforms a tired room quite like a proper sanding. Over the years I have seen oak flooring that looked beyond hope come back to life, and parquet flooring that seemed ready for the skip reveal a rich, warm grain after a single pass with the right machine. Wood floor sanding is not just about removing old varnish. Done well, it is the foundation of a finish that will last another decade. Done badly, it can leave you with dips, scratches, and a repair bill that far exceeds the cost of doing it right the first time.

This article draws on years of hands-on work with solid wood, engineered wood, and parquet flooring in London. The advice here comes from real jobs, not from a manual. Whether you are planning a DIY refresh or hiring a contractor, understanding what goes into a professional sanding job will save you time, money, and frustration.

Why Wood Floor Sanding Matters

The surface of a wood floor is surprisingly delicate. Daily foot traffic, furniture drag, and grit from shoes all wear down the floor finish. Over time, scratches and dull patches appear. A coat of varnish or lacquer on top of a worn surface only hides the problem temporarily. The real fix is to remove the old finish and a thin layer of wood, exposing fresh, clean timber. That is where wood floor sanding earns its keep. It levels the surface, opens the grain, and creates a clean substrate for a new floor finish.

I once worked on a Victorian parquet floor that had been painted over three times. The owner wanted a natural oak look. Sanding removed every trace of paint and revealed an intricate herringbone pattern that had been hidden for decades. That job took two full days with a heavy-duty floor sanding machine and a dust extraction system running constantly. The result was worth every minute.



Choosing the Right Floor Sanding Machine

Not all sanding machines are created equal. For large areas of solid wood or engineered wood, a drum sander is the workhorse. It uses sanding belts that rotate at high speed, cutting through old finishes quickly. For parquet flooring or any floor with uneven boards, an orbital sander is safer. It moves in a random pattern, reducing the risk of gouging the softer grain between harder summer growth rings.

I have seen DIY enthusiasts rent a heavy drum sander and try to sand an entire room in one afternoon. The result is almost always a wavy surface, because the machine digs in when you stop moving, and it leaves deep scratches that require hours of hand sanding to fix. A professional knows when to switch from a coarse grit to a fine grit, and how to overlap passes to keep the floor flat.

The dust extraction system is just as important as the machine itself. Wood dust is a serious respiratory hazard, and it also settles on every surface in your home. A good vacuum attachment on the sander captures most of the dust at source. For the rest, a shop vac with a HEPA filter is essential. I have used both Bona and Lägler dust extraction systems on commercial jobs, and they make a noticeable difference to both air quality and cleanup time.

Abrasives: The Right Grit for the Job

Abrasive paper comes in many grades, and choosing the right sequence is critical. For a floor with old varnish or lacquer, you might start with 24-grit or 36-grit sanding belts. That will strip the finish quickly. Then you move to 60-grit to remove the scratches left by the coarse paper. A final pass at 80-grit or 100-grit prepares the surface for the new floor finish. Going too fine, above 120-grit, can actually close the wood pores and make it harder for the varnish or oil to bond.

I once took on a contract sanding job for a large open-plan office. The client wanted a natural matt finish with Osmo oil. The spec called for a final sand at 120-grit. I knew from experience that Osmo oil penetrates better at a slightly coarser finish, around 80-grit. I discussed it with the client, we did a test patch, and the coarser finish looked better and felt smoother to the touch. That is the kind of judgment that comes from working with different materials over time.

Dealing with Imperfections

Even the best sanding cannot fix a floor that has structural issues. Gaps between boards, loose nails, or damaged boards need to be addressed before the sander comes out. Wood filler is useful for small cracks and nail holes, but it should be applied after the first sanding pass, not before. That way the filler sits flush with the sanded surface, and you do not sand it away again.



For deeper dips or uneven subfloors, a floor levelling compound may be necessary. This is a liquid that self-levels and dries hard, creating a flat base for the wood. I have used it on engineered wood floors where the original concrete slab had settled unevenly. It is not a job for the faint-hearted, because once you pour the compound, you have about 20 minutes to spread it before it starts setting.

Finishing: The Payoff

Once the wood floor sanding is complete, the floor is ready for its final coat. The choice of finish depends on the look you want and the traffic the floor will see. Varnish and lacquer form a tough plastic-like layer on top of the wood. They are durable and easy to clean, but they can look a bit artificial on older floors. Oils like Osmo penetrate the wood and leave a more natural, matt appearance. They need reapplication every few years, but many people prefer the feel and look.

I have a personal preference for hardwax oils on oak flooring. They bring out the warmth of the grain without the plasticky shine of a high-gloss lacquer. For parquet flooring in a hallway that

sees heavy use, a good quality varnish is hard to beat. Bona makes an excellent traffic-grade varnish that stands up to boots and pushchairs.

When to Call the Professionals

There is a limit to what a DIY enthusiast can achieve with a rented machine. If your floor has significant damage, if it is a valuable species like solid oak, or if you simply want a guaranteed result, hiring a specialist like London Floor Restoration is the smart move. They have the industrial-grade dust extraction systems, the range of machines for different wood types, and the experience to handle complex parquet patterns without damaging the tongues and grooves.

I have been called in to fix floors that were sanded by well-meaning homeowners who took off too much wood in one area, leaving a visible low spot. The repair involved fitting a new board, sanding the whole room again, and refinishing it. The total cost was more than three times the original quote for a professional job. Sometimes, the cheapest option is to pay for expertise upfront.

Maintenance Between Sandings

A properly sanded and finished floor should not need resanding for ten to fifteen years, depending on traffic. In the meantime, simple maintenance keeps it looking good. Use felt pads under furniture legs, sweep or vacuum regularly to remove grit, and clean spills immediately. If the floor finish starts to look tired, a light screen-and-recoat can restore the sheen without a full sanding.



I always advise clients to keep a few spare boards from the original install. If a board gets damaged beyond repair, having a matching piece avoids the headache of trying to match a floor that has aged differently. It is a small thing that saves a lot of trouble.

Wood floor sanding is part skill, part science, and part art. The skill comes from knowing how to handle the machine. The science comes from understanding abrasives, finishes, and wood behaviour. The art comes from seeing the potential in a tired floor and knowing exactly how to bring it back. Whether you do it yourself or hire a pro, the investment in a good sanding pays off every time you walk across a smooth, glowing floor.