The Art of Wood Floor Filling: Restoring London's Historic Floorboards

Walking across a well-worn pine floor in a Georgian terrace in London, you can feel the history under your feet. But with that history often comes gaps, cracks, and the kind of wear that makes a room feel draughty and unfinished. Over the years, I've worked on dozens of these floors, and one of the most misunderstood steps in professional restoration is wood floor filling. It's not just about making things look tidy; it's about structural integrity, thermal efficiency, and the long-term health of the wood.

When a client first calls about their floor, they usually mention the gaps between the boards. Maybe they can see daylight through the floorboards in a Victorian flat, or the gaps are collecting decades of dust and debris. The instinct is to fill everything flush, to create a perfectly smooth surface. But that's where judgment comes in. A solid wood floor, especially one made from oak or pine, moves with the seasons. It expands in the humid London summer and contracts when the heating comes on in winter. If you fill every gap rigidly, you risk cracking the boards or popping the filler out when the wood shifts.

Understanding the Materials

There's a world of difference between filling a new oak floor and restoring a 150-year-old pine one. The species dictates the approach. Oak is dense and stable, so it takes a harder, more resinous filler. Pine is softer and more porous, so it needs a filler that flexes slightly and accepts stain well. I've seen beautiful pine floors ruined by a filler that was too hard; it sat proud of the surface after the first winter, catching every footstep and looking like a patchwork repair rather than a restoration.

The choice of top coat also affects your filling strategy. If you're finishing with a hard lacquer or polyurethane, you need a filler that bonds tightly and sands flush without shrinking. If you're using oil or wax, the filler must absorb the finish in the same way as the surrounding wood, or it will stand out as a dull spot. Hardwax oil, for example, is a favourite of mine because it penetrates the wood and leaves a natural sheen, but it demands a filler that doesn't block the pores entirely. A poor filling job under hardwax oil looks patchy and amateurish.



The Practical Side of Wood Floor Filling

Let me walk you through a typical job. The floor is a mix of oak and pine boards in a commercial space in central London. The client wants a durable finish that can handle foot traffic but also respects the age of the building. The first step is always sanding. We use dustless sanding equipment with a vacuum attachment, which is non-negotiable in a working office or a residential flat where people are living. The sanding stage opens the grain of the wood and removes old varnish, wax, or oil. It also reveals the true extent of the gaps and cracks.

After sanding, I assess the gaps. Some are seasonal movement gaps that should be left alone, maybe just a light brush with a soft filler to stop draughts. Others are deep cracks or missing knots that need a proper wood filler. For deep voids, I sometimes use a mix of sawdust from the sanding stage and a clear binder, which gives a colour match that's almost invisible. For larger gaps between boards, a flexible gap filling compound is better. It stays slightly elastic, so it moves with the wood without cracking.

This is where the phrase **wood floor filling** comes into its own. When I talk to clients, I explain that wood floor filling is not one single task; it's a set of decisions made on every board. You might fill a knot hole in one board with a two-part epoxy filler, then use a water-based wood

filler on a shallow scratch a foot away. The key is knowing which product to use where, and how to apply it so it doesn't shrink or crack.

Choosing the Right Filler

There are dozens of products on the market, but I tend to stick with a few reliable brands. Bona and Osmo both make excellent fillers that are compatible with their finishing systems. Pallmann also has a range that works well under lacquer. For oil finishes, I often use a paste made from the same oil mixed with fine wood dust. Tung oil is a classic choice for a natural look, but it takes patience because it cures slowly. If you're working on a floor that will be stained, you need a filler that accepts stain evenly. Some fillers are stain-resistant, which creates a blotchy result if you're not careful.

I learned a valuable lesson early in my career from an old carpenter who swore by the methods he saw on This Old House. He taught me that the best filler is often the one that matches the wood's behaviour, not just its colour. A filler that looks perfect in the tin can look terrible when the wood expands in the spring. That's why I always test a small area and wait a few days, especially if the floor has been recently sanded and the humidity has changed.

The Role of the Top Coat

Once the filling is done and sanded smooth, the floor is ready for its finish. The choice between varnish, lacquer, wax, or oil changes how the filler will look in the long run. A hard polyurethane lacquer is great for commercial spaces because it's tough, but it also highlights any unevenness in the filling. If the filler wasn't sanded perfectly flush, the lacquer will magnify that imperfection. Oil and wax are more forgiving because they don't build a thick film. They soak into the wood and the filler together, creating a more uniform appearance.





Hardwax oil is a middle ground that I use often. It gives a durable surface with a natural matte look, and it's easy to repair later. If a board gets scratched, you can sand that area and reapply oil without having to strip the whole floor. That's a big advantage in a busy London home or a commercial hallway. But hardwax oil requires the wood floor filling to be done meticulously, because any filler that sits above the surface will be visible through the thin oil layer.

Common Mistakes and How to Avoid Them

I've seen plenty of floors that were filled badly, and the mistakes usually fall into a few categories. First, using a filler that's too hard for a softwood floor. Pine boards will dent around the filler, leaving the filler standing proud. Second, filling gaps that should have been left open for movement. The boards then buckle or the filler cracks and falls out. Third, not sanding the filler flush after it dries. Even a tiny ridge catches light and looks like a scar.

Another mistake is applying filler too thickly. It's better to apply two thin layers than one thick one, because the filler dries more evenly and shrinks less. I always tell my team to think of wood floor filling like plastering a wall: thin coats, patience, and a good sanding between each layer. Rushing the process leads to a floor that needs redoing in a year.

Practical Tips for DIY Enthusiasts

If you're tackling a floor yourself, start small. Choose a room that's not too large and where the boards are in reasonable condition. Buy a small tub of a reputable wood filler and test it on a hidden area. Apply it with a flexible plastic spreader, pressing it into the gaps firmly. Wipe off the excess with a damp cloth before it dries, which saves a lot of sanding later. Once it's fully dry, sand it with fine grit paper, then vacuum thoroughly before applying your finish.

For gaps between boards, consider whether you really need to fill them. A gap of 3mm or less is often better left alone, especially if the floor is oiled and the gaps are uniform. They allow the wood to breathe and move. Filling them with a rigid compound can cause more problems than it solves. I've turned down work where the client wanted every tiny gap filled, because I knew it would lead to a failed floor within two seasons.

The Bigger Picture of Professional Restoration

Wood floor filling is just one part of a larger process. Professional restoration involves assessing the subfloor, dealing with any damp issues, sanding to the right grit, and then applying the appropriate finish. In London, where many buildings are old and the climate is damp, the condition of the wood varies from board to board. A good restorer reads the floor like a map, deciding where to fill, where to leave, and where to replace a board entirely.



Using quality products from brands like Bona, Osmo, and Pallmann makes a difference, but skill matters more. I've seen a skilled craftsman achieve a beautiful finish with basic materials, and I've seen expensive products wasted by poor technique. The same applies to dustless sanding: it's not just about comfort, it's about getting a clean surface for the filler and finish to bond to. Dust left on the wood will create a weak bond, and the filler will lift over time.

So when you think about **wood floor filling**, think of it as a craft, not a chore. It's the step that turns a tired, draughty floor into a solid, beautiful surface that will last for decades. Whether you choose oil, wax, varnish, or lacquer, the quality of your filling determines the quality of the final result. Take your time, use the right materials, and don't be afraid to leave some gaps open if the wood needs to breathe. Your floor will thank you for it.