

ProRent's Here's How - Floor Sanding

Here's how you can prepare, sand, finish and maintain all types of wooden floors including parquet, pre-finished and laminates. Follow the ProRent Here's How guide and you will enjoy the satisfaction of a job well done and the natural beauty of a wooden floor that will last for years.



Planning

It's easy to get professional results with the best floor sanders and finishes available.

Plan ahead, you will need to have enough free time to sand and finish your floor. The time needed will depend upon the size and condition of the floor. As a rough guide a 6m x 6m (20' x 20') solid hard wood floor in average to good condition that is sanded back to new wood will take about 3 days to sand and finish. Remember to contact ProRent and reserve the sanding equipment you need to hire in advance.

Tools

You will need some or all of the following tools and accessories to help you sand and finish your floor. Hammer, nail punch, personal protection equipment including dust respirator, eye protection, ear protection and gloves. Also masking tape, carpenters pencil, paint tray or bucket, applicators, brushes and tack rags. If you need any other tools, plan ahead and make sure you have all you need to prepare, sand and finish your floor.

Preparation

Remove all furnishings and drapes from the room. Tape up cupboards and doors to seal against dust. Remove old floor coverings and loose nails, staples, screws and any other unwanted fixings. Fix loose or broken boards and parquet. Take care to match any replacement pieces with the existing floor. Small gaps and holes can be filled before the last part of the sanding operation. Take care to get a good match with the surrounding wood. Fillers will take up finishes and stains differently to the wood. If in doubt always test making sure the filler is compatible with the stains and finish you intend to use. Larger gaps between boards can be filled with a fillet of matching wood. Glue the edges of the fillet and tap into place then plane down level with the floor surface.

Remove heavy wax, grease and dirt deposits by hand. Punch down all exposed nails and any other hardware below the floor surface. Repeat as necessary as you sand the floor, if nail heads become exposed. Sweep the floor clean immediately before sanding.



Warning - sanding exposed nails can produce sparks creating a fire hazard in the sander dust bag, tear abrasive sheets and discs and damage the floor sander.

Floor Sanding Technique

Drum Floor Sander

Load the sander with abrasive making sure that it is skin tight around the drum. Loose sheets will tear. Place the sander on the right hand wall (unless you are making an angled cut on uneven floors) with about two thirds of the floor in front of you. Start the sander with the drum off the floor then walk forward at an even pace and ease the drum to the floor. As you near the end of the pass, gradually raise the drum off the floor. Practice before turning on the sander.



Warning - never bounce the sanding drum on the floor or dwell in one place, as this will sand dips and hollows in the floor

Cover the same path you made on the forward cut by pulling the machine backwards. Ease the drum to the floor as you begin the backward pass until you reach the original starting point then lift the drum off the floor. Move the sander to the left and overlap the first cut by about 7cm (2¾"). Repeat the forward and backward passes moving progressively to the left as you complete each forward and backward pass.

When two thirds of the floor is sanded, turn the floor sander around and sand the remaining third in the same way. Overlap the one-third area by 0.6m to 0.9m (2' to 3') with the first two-third area to blend the two areas together.

Disc Floor Sander (Edger)

Load the abrasive disc making sure the retaining bolt is tight. Start the edger with the disc off the floor then lower the disc to the floor as you move the edger to one side. Sand in the direction of the grain along the walls, moving the edger from side to side. End sanding strokes should be semicircular. Blend the edges into the area sanded by the drum sander.

ProRent's Tricks of the Trade

- When sanding a floor always aim to remove the minimum amount of wood. Use only as coarse an abrasive as needed. Over sanding reduces the life of the floor and dramatically increases the work needed to complete the job.
- Always test sand with a medium to fine grit abrasive first. If this will remove old finish and generally level the floor on the first cut, you do not have to use the more aggressive coarse grit abrasives.
- If the floor is uneven, cupped or crowned make sure there is no moisture problem.
- Make the first rough cut at 45° to the direction of the flooring to obtain a basic level.
- For new floors or for floors in buildings that have been left without heating always let the floor acclimatise for 1 to 3 weeks to its normal moisture content before sanding and finishing.
- Check the thickness of the floor before sanding by removing a skirting board, baseboard, moulding or heating register so you can measure the edge of the flooring. This is very important for pre-finished and laminate floors.
- If the floor has a hollow or deep scratch, make multiple passes forward and backwards across the area starting the first pass at a 30° angle to the hollow or scratch. Finish sanding in the direction of the grain. Only use fine grit abrasive.
- Use a soft lead carpenter's pencil to mark exposed nails, excessive scratches, holes, etc.
- When changing from one abrasive grit to the next, do not skip more than one intermediate grit.

Sanding Plank or Strip Floors

Floors in good condition - when the floor is in good condition - no uneven edges, cupping or crowning of planks and strips - start sanding in the direction of the planks or strips, with the wood grain. Start with a coarse or medium grit abrasive. Complete the first cut with the drum floor sander then sand up to the baseboards and door thresholds with the edger, using medium grit abrasive, blending the edges in with the main floor area. Sweep the floor. Using a medium grit abrasive sand the main floor area with the drum sander and then complete the floor with the edger using a fine grit abrasive. Sweep the floor. Finish sanding the main floor area with the drum floor sander using a fine grit abrasive.

Uneven floors - when the floor is uneven sand diagonally at 45° across the room in both directions using coarse grit abrasive. Only make one cut on both diagonals, this will achieve a basic level. Now complete the floor as for a level strip or plank floor. Use the same grit abrasive as was used on the 45° cut for the first cut parallel to the planks or strips.

Floors with an existing finish - when refinishing a floor remove as little of the existing surface as possible. If only a light sanding is required to prepare the floor for refinishing use the orbital floor sander. If the floor is badly marked and scratched and has to be sanded back to new wood it may be necessary to use a coarse open coat abrasive to remove the old finish. These abrasives will not clog with the old finish but take care, as they are very aggressive. Always try a medium grit paper first, particularly on a diagonal cut. If 90% of the old finish is removed and the floor is generally levelled, you do not need to use coarse grit abrasive.

Sanding Parquet and Block Floors

The grain of the wood will run in a number of directions so sand the floor in the direction of the main source of natural light in the room. If there is no source of natural light sand in the direction of the longest side of the room or, if the room is square, in the direction the furniture is laid out and how people normally use the room. This technique will help mask any imperfections in the floor. Complete the sanding operation as detailed for plank or strip floors.

Safety

- Follow all instructions carefully; always wear personal protection equipment as directed.
- Make sure the room is well ventilated at all times.
- Never smoke when sanding or finishing a floor.
- Keep power cables clear of the floor sanders at all times.
- Take care to dispose of sawdust safely, never throw sawdust into a fire or incinerator.

- Never leave a floor sander unattended with sawdust in the dust bag. Mixtures of sawdust and old finishes are subject to spontaneous combustion.

Finishing

Finishing a wooden floor is a very satisfying and rewarding job. As with sanding its important to be well prepared and to make sure you have ample time to complete the job. This includes leaving the floor for the right amount of time before using it – after all your hard work you don't want to scratch and mark the floor by using it too soon.

Paintright has a range of modern, environmentally friendly wood lacquers for all types of wooden floors and interior wood surfaces. Traditional qualities blended with modern technology make Paintright the ideal choice for the professional and homeowner. Take time to choose the right coatings for your floor and remember to always follow the instructions carefully.

Finish Preparation

Allow ample time to apply the finish, it's best to start at the beginning of the day to give yourself time to apply the number of coats required all in one day. If the area to be finished cannot be completed in one day you will need to lightly sand the floor before applying another coat the next day.

Clean up the whole room taking care to vacuum up dust from window frames, skirting boards, baseboards, doorframes etc. It's a good idea to vacuum several times to allow any airborne dust to settle so the room is as clean as possible.

Inspect the floor carefully. Spot fill missed cracks and nail holes. Allow the filler to dry hard, then hand sand or use a small palm sander with the same grit as final machine sanding.

Now remove all traces of dust from the floor by first vacuuming and then wiping over with a Tack Rag. Only a tack rag will remove all the dust from the grain of the wood for a perfect finish.

Stain Application

Always test the compatibility of the stain with the floor finish you are going to use. Stains may affect the drying and adhesion of the floor finish. Carefully follow the stain application instructions and allow to dry thoroughly before applying the floor finish.

Finish Application

Applying most coatings is easy; a Floor Finish Brush will give the best results and maximize film build. Always test with the number of coats required before full application.

Carefully follow the detailed instructions included on each pack of product. On softwoods with water based finishes the first coat will tend to raise the grain of the wood making your nice smooth floor feel rough! This is normal - simply sand between coats of finish using an Orbital Floor Sander with an abrasive pad for a perfect result.

Always recoat within the time specified in the instructions. If this is not possible, lightly sand between coats to ensure perfect adhesion between each coat of finish.

Plan your application so you can exit the room, starting in a corner. Generally you will work with the grain of the wood. Work at a steady pace and do not use too many brush strokes as this will reduce film build and leave brush marks. Let the product flow naturally across the floor and find its own level.

Tricks of the Trade - Finishing

- Use a Tack Rag to remove fine dust from the grain of the wood that vacuuming alone will not collect.
- Always use a fine white bristle brush, if a stray bristle falls out and is not seen it will not show up as much as a black bristle.
- If you are finishing your floor with a gloss finish apply a satin or matt finish as the first coat. This will act as a tell tail because when it becomes exposed it can be easily seen and you know it's time to refinish the floor. Use a gloss finish for the first coat when the final finish is satin or matt.
- Do not over brush, allow the product to flow and find its natural level. This will maximize film build and add life to your floor.
- Always refinish your floor before it is worn through to the wood. If the wood becomes exposed the whole floor will have to be re-sanded to new wood.

Maintenance

Floors are the hardest wearing surfaces in the home and work place. Take time to protect and care for your floor to help maintain its beauty and prolong its life.

The first and best line of defence for any wooden floor is barrier matting. Matting removes grit and other solids from footwear. Ideally always remove outdoor footwear and avoid high heel shoes, heavy work boots and soles with nails and steel tips. Use mats and rugs in areas of high traffic.

Sweep and vacuum regularly followed by a damp mop. Quality coatings do not need polishing to keep their good looks - just keep it clean.

Overtime it's natural for floors to dull down, pick-up scratches and marks. Day to day scuff marks can be removed using a non-abrasive cream cleaner. Refinish your floor before it becomes too worn. The floor finish is designed to provide a wear layer for your floor as well as enhancing the beauty of the wood.

Abrasive Paper Guide

ProRent Floor Sander and Disc Floor Sander (Edger)

Abrasive Paper Guide	Application and Floor Type
Grit 24 Open Coat (Coarse non-clogging)	For removing surface coatings from old floors such as varnish, stains and wax polishes. For the rapid sanding and removal of scratches and marks. Sanding level the joints of sub-flooring like particle board and masonite.
Grit 24 (Coarse)	For the rapid sanding and removal of scratches and marks. Sanding level the joints of sub-flooring like particle board and masonite.
Grit 40 Open Coat (Coarse/Medium)	For removing surface coatings from old floors such as varnish, stains and wax polishes. For the rapid sanding and removal of scratches and light marks. Sanding level the joints of sub-flooring like particle board and masonite.
Grit 80 (Medium)	For first sanding of new level wood floors. First sanding after sanding with a drum sander.
Grit 100 (Medium/Fine)	Intermediate sanding of all types of wood floor.
Grit 120 (Fine)	For final sanding of all types of wood floor. First sanding of cork or composition floors. For sanding between coats of solvent based and 2 pack varnishes and lacquers.