



Trouble Free Wood Flooring Installations

Part of "Rick's Tips" From Rick Jones, Our Technical Specialist

I have installed hardwood floors for over 30 years. During this time I have experienced many issues and learned how to do it right. I have paid for a floor before that was my fault and I would like to help any other installer to not have to pay for a floor. It is very costly in dollars and your reputation to replace a floor. I have learned through my experience of installing floors, selling floors, teaching at the NWFA/NOFMA schools on how to install and inspect hardwood floors.

After the prep is done and assuming you have done all to insure a successful installation, it is time to start. Some of what I will say, you will tell me "I don't have time to do that". Well I ask you, how much time do you have to go back and repair a floor or in the worst case scenario replace a floor?

Do the following when you start, after the proper prep is done.

1. Find a starting point and lay out the installation. Whether you are starting on a wall or in the middle of a room or hall you still need to lay out a starting line through the longest point in the room(s). From this point you can find out, by using your tape measure, if the walls run off, or if the last piece is going to be too small of a fill piece or how it falls out in the other areas. I was taught and have always adhered to this point, "**Know when you will wind up before you get there**". If a wall is out of square or runs off you can address this before you get there or before a customer complains about you laying the floor out of square. You did not build the walls and you don't want to feel the blame when they are out of square.
2. Check the moisture content again in the subfloor and the wood before you start. Remember write on the subfloor the moisture at the time of installation, then log and document in your paperwork the readings. A phone with a camera can document the readings for your files. The conditions can change months later in the subfloor moisture and you will be looked at for this issue. With your documents and pictures, you will be found not at fault if changes occur. Also if the wood has gained excess moisture, the current readings can be compared to the original readings. Do this for engineered as well as solids. I have seen wood with very low moisture content take on the normal moisture for the region causing the floor to grow length wise for engineered and the ends peak and solid to cup. If the moisture is too low in the wood for the region and you install the wood, it becomes your problem and replacement.
3. Once you have determined how the job lays out then you can move your lines, using your starting/layout line. Anywhere you want to start, use that line and make your measurements from that point.
4. Now that you are set to start and to insure your rows will stay straight, nail down some scraps using sprig or concrete nails next to your line. This will give you something to hold

your wood straight against as you tap and push the boards together. You can pull these pieces up later and finish installing them. This is very important if you start in a long run through the middle of the installation. It is extremely important to start in the middle of your installation area if you are installing a solid wood floor. We know solid wood expands in a side to side manner across the grain but did you know when wood moves when nailed down, it moves more towards the tongue? This is because it is easier to move towards the tongue than to pull the other direction against the staples or cleats. So you should always start in the middle of the room/installation area, to take some pressure off the wood. I have seen floors look rippled when started on one side of a home and laid to the opposite side of the home just because of the pressure from normal growth. You could be forced to replace a floor that looks like this.

5. You now have the starting line set and ready to install but **“DO NOT START YET”**. All manufactures tell you to look at the wood before installing it. They will not pay for the replacement of defective pieces once they are installed. You will have to do this replacement at your expense and **“TIME”**. Find a spot where you have good direct sunlight and look at the wood. Every manufacture tells you to work out of 6 to 8 cartons and mix them. You tell me that you don't have time for this but when you have to redo a room or replace some boards this costs you **“TIME”** and **“TIME”** is money. So I ask you to look at the top of a board with the light glaring across it, and you should be able to see any flaws in the finish or wood. This is how the home owner looks at the floor and sees what they feel is a defect so you should also. You can quickly look at a board in the light and then stack the wood in size groups which will make it easier to find the right pieces as you lay the wood. If you do this you are not only looking for defective pieces but you also sorted the wood and mixed the cartons. If a finish problem does exist throughout the wood you will find it before you have it installed it. If you don't find it and an inspector finds it, this will cost you money and **“TIME”**. For example, you have to drive 1 hour to change out 3 boards before you go to do your money making job. What time have you lost? Easily half a day because you could not take 30 minutes to look at 1,000 sf of wood before you installed it. Don't tell me you don't have **“TIME”** to do the job right because it really is, **“You don't have the “TIME” to not do it right”**. Think about how much we all **“LOVE”** to have the lady of the house, who is now upset with us, standing over our shoulder while we repair her brand new floor. She has lost a lot of her respect for your abilities already for not doing it correctly the first time and wondering if you did not do it right in the beginning, how can you be doing it right now.
6. If possible, always use the manufactures recommended adhesive and if a brand is specified use that adhesive. I have seen manufactures turn down a claim for this alone. If they say you must use a moisture cured urethane then use one. Use a new trowel and the proper trowel according to what the manufacture calls for. A worn out trowel or the improper sized trowel will and does cause a floor to release due to not enough adhesive used. ***You are the responsible party once you start the job.*** I have seen a floor release because the home owner likes to open all the windows and the wood wants to move a little with the extra moisture in the air. I have seen the glue appear to have a problem and has crystalized but

the claim was denied because a worn out or too small a notch trowel was used. An inspector or manufacturer can tell how much glue was used and the size of trowel used when they take up part of the loose floor. Hollow spots develop very quickly in low areas if you do not prep properly and smooth out the dips, you will have issues and repairs which cost **"TIME"** and money.

7. You are now laying the wood that you have inspected. Remember to keep the ends joints staggered by at least 6" to 8" and leave the required expansion. The industry rule is the expansion should be the thickness of the floor you are installing. This expansion is required at all vertical non-moving objects that the wood butts up to, such as walls, columns, and other floor coverings, etc. The expansion can be covered by moldings. *An inspector will point out very quickly the lack of proper expansion space and will find this to be the cause of the failure sometimes even if this was not the primary cause.*
8. Take your time because going fast does not make you a good installer but it can make you leave end or side joints with a small gap or make you miss a defect that you did not find before. Most installers when they find a defect after they are a row or two past the defect don't take care to replace it at the time and hope it will go undetected. The **"TIME"** to go back and replace this piece(s) is great and again has upset the home owner.
9. Once you have finished installing the wood the job is done... **"Wrong"**. The job is complete when you have cleaned the floor, puttied any spots that may need to be filled and all the moldings have been installed properly. Properly installed is filling the nail holes in the quarter round and any other moldings that are nailed down. Use putty that blends well with the wood and grain. You sometimes need more than one color of putty to do the job correctly. MOLDINGS cover the expansion space and the correct size of molding is a must. If you need to leave 1/2 " expansion you must use 3/4" quarter round not shoe molding and definitely do not decrease the expansion space to accommodate the size molding supplied unless you can undercut the drywall to obtain more expansion space as needed. Who is responsible? **"YOU ARE RESPONSIBLE"** and the blame will always come back to you as you are the Professional. If you have to go back to fix or cut back a floor it costs you **"TIME"** and we know **"TIME"** is money.
10. The floor has been installed, cleaned and all trash removed; NOW the job is COMPLETE.
11. Please if nothing else always remember these tips:
 1. Look at the wood before you start the installation and sort defects or wood you don't like the looks of. All manufacturers will take care of a carton of non-installed defects and be glad they were not installed.
 2. Check the moisture contents of the wood and subfloor plus document readings.
 3. Lay out the floor so there are no surprises during the installation such as out of square walls, etc.
 4. Clean the adhesive off the floor before it dries. It is almost impossible to remove urethane after it dries and it is your responsibility.
 5. Remove and replace any bad boards that you installed before completing the job and do not leave them hoping no one notices them.

6. Remember you take full responsibility for the subfloor, wood and installation once you start the installation. It is easier to stop or not do a job than to pay for a floor.
7. **"TIME"** is money and you will see **"TIME"** is mentioned and highlighted many time by me. We can't make more time but we can always work and make more money.