Trouble with Refinishing a Wood Floor

t's been said before, and we'll say it again; "It all begins with customer expectations." What the customer expects the final product to look like and perform will determine how flooring is refinished and what preparation is required. A square foot price quoted over the phone will not work with a refinish. Also, customers should be advised that refinishing with a surface finish, particularly with an old floor where unidentified products have been used, may have problems because of contaminates. They should be advised that with proper preparation and diligence to detail this is a rare occurrence.

Refinishing for this article means to sand the wood flooring to bare wood and apply a new finish. The following list items that need to be evaluated to help

avoid troubles with refinishing.

- Type of flooring
- Thickness of sandable surface
- Type of finish on the flooring
- Areas where pet or water stains are present
- Deep dents and scratches in the
- Movement or loose noisy flooring
- Cupping
- Crowning
- Gaps

Troubles with the type of flooring and thickness of surface

Solid NOFMA Certified 3/4" flooring can be refinished a number of times, 5 to 9 or more times, by a competent sanding contractor. For flooring that has been finished or refinished only 1 or 2 times

the wear layer is adequate for a number of additional sandings, some of which may be aggressive, if required. When the wear layer of the flooring approaches 1/8" either the nails can be exposed or the top of the groove edge becomes weak and can break.

To avoid exposing nails or breaking off the groove edge check the thickness of the flooring above the tongue. Check more than one place using a thin blade inserted in a gap somewhere in the center of the room or rooms. Checking the perimeter or a heating register may not give a good measure. If the flooring is near the 1/8" you can advise the customer you will re-sand but not aggressively with the expectation that some abuse, dents scratches etc., will not be removed and nails may show. And if excessive breakage



The before, showing carpet glue, tack strip, scratches and plenty of abuse.



The beginning: sanding on an angle to flatten the flooring.



Note the deep scratches. Advise that they will not be sanded out.

About the Author

Mickey Moore is currently the technical director of the Wood Flooring Manufacturers Association (NOFMA), a position he has held since 1988. Prior to joining NOFMA, Moore worked as a remodeling sub-contractor and QC inspector for a general contractor. Moore is a graduate of the University of Memphis with a degree in wood working technology and biology.



A deep gouge cannot be removed and required filling. Repairing these and similar issues was determined to be too costly.



This photos shows sanding around the gouge after the second application of filler.



The uneven flooring in the doorway required aggressive sanding. Again, repair was not an option.

occurs, replacing the flooring will be necessary. Try a test area first.

For thinner flooring and engineered flooring refinishing is often limited to 1 or 2 times, and depends on the wear layer. Trouble arises if the engineered flooring is not flat, particularly where over-wood between pieces is present, the sanding operation can result in exposing an underlying veneer or weakening the

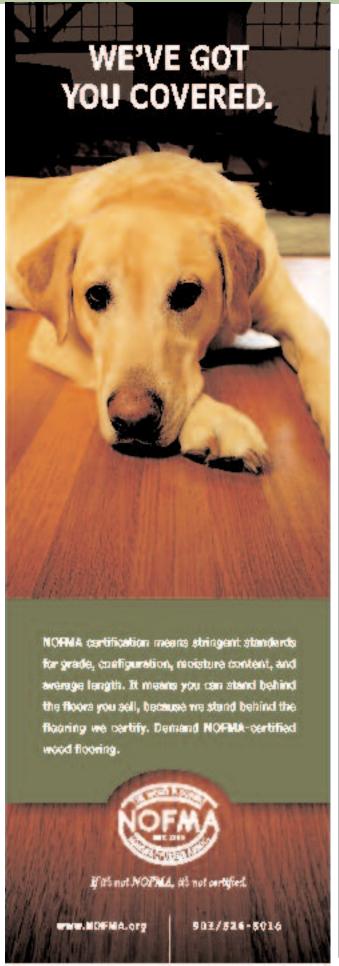
groove edge.

Beveled or eased edges also present a problem. Should you sand them away which may result in sanding considerable life from the flooring or leave them? All bevels will have to be scraped and sanded for new finish to properly adhere. Also, an aggressive sanding required to remove bevels may result in additional gaps due to the angle of the flooring edge.

Troubles with the type of finish

An older seal and wax finish system should probably remain a seal and wax finish since wax from the many years of waxing will likely be present in all crevices of the flooring. Finishing with a top coat urethane can result in the new finish peeling from wax contamination. For the floor that has only been occasionally waxed, urethane finishes will







The loose slats along the left wall had to be reinstalled for sanding.

likely perform with diligence to cleaning any gaps. Trowel filling the flooring can isolate wax missed during sanding and help avoid peeling finish.

Factory finished flooring also can present sanding and finishing trouble. Finishes with the ceramic, titanium, etc. additives are very difficult to sand off. Extra cost is involved in the extra abrasive and time required to complete the sanding. Sanding with a finer grit paper may more effectively remove finish. The eased edge products require that the edge be sanded flat or scraped for a new finish to properly adhere.

Areas to repair or not repair

Pet stains, diaper stains, etc. will normally have stained the flooring through the thickness and will not sand out. Don't say you can sand them out until test sanding the area. And if repair is chosen be sure to match with a similar grade, grain pattern, and species. Also match the general spacing. If there are spaces between every board, add some spaces in the repair. Avoid trouble with a sand only decision by sanding a test area and staining with the chosen color and asking the customer to approve the result before completing the sanding operation.

Water stains can also be surface stains or penetrate deep into the flooring. Planters that have leaked are likely to require board replacement. Carpet pads can stain flooring either through the chemical plasticizers or from water and the cleaning process. Even an aggressive sanding may not remove the waffle shadow. Sanding a test area is often necessary to advise weather or not the stain or pattern can be removed. It will also determine the amount of sanding necessary and avoid the trouble associated with the request for additional money for the extra work.

Dents, deep scratches and gouges are very difficult to remove. Inform the customer you can: (1) Sand normally and some prominent scratches etc. will remain in the finished floor. (2) Sand aggressively, requiring additional time and materials, to remove most of the item if sufficient thickness is present. (3) Repair the areas with new wood. Dent and gouges from pianos, rocking chairs, chairs with the metal casters, and appliances, will require repair with new wood since excessive sanding will be required in a single area.



A finished area. Note the cross scratches on the slats and the uneven bevels.

Noisy, loose flooring

Loose flooring can interfere with the performance of surface Movement between boards can stretch new finish along the flooring edges or cause the layers or coats of finish to separate resulting in white lines along these edges or peeling finish. So, re-fastening a loose floor is necessary before finish is applied. Use fasteners that have rough or deformed shanks- flooring cleats, galvanized casing nails, twist or coated flooring nails or trim screws. For the generally loose floor using flooring cleat face nailer throughout the floor will likely be necessary. Place the nail in the open grain whenever possible to better hide when filled; 2 or 3 colors of filler to match the surrounding wood color can also help hide the numerous cleats. Noisy floors can generally be fixed in the same ways. An additional fix is to fasten from underneath, when accessible, with screws. Choose a length that will extend within 1/4" of the flooring face, pre-drill a pilot hole, and back the screw with a flat washer. Remember to advise that eliminating each and every place of movement or noise is not a realistic expectation.

Cupping

First ask or determine if the cupping is permanent or seasonal. Only sand a cupped floor if it is a permanently cupped floor. If the cupping changes seasonally, first determine the source of

moisture causing the cupping and remedy. Then sand the flooring after completing a heating season. The heating season will normalize the flooring. Sand a month or so after heating is discontinued so an average environmental condition is reached and the remaining cupping if present is considered permanent. Advise that sanding a significantly cupped floor removes a lot of the wear surface along the edges and reduces the number of future sandings.

Gaps

First determine if the customer actually wants the gaps filled. Debris etc. in gaps can interfere with filler adhering to the edges of flooring. Proper cleaning may not be possible and result in filler breaking out of the gap. Another problem is that filling normal seasonal gaps can result in cupping or even buckling if the seasonal expansion space is removed. Determine which gaps are seasonal that will not be filled and which gaps are permanent.

Permanent gaps can be filled if there is no



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The finished floor; the scratches, uneven bevels, gouges, and some uneven areas are not prominent features when viewed from a standing position.

The result: a very satisfied customer.

movement between the boards. Filler in gaps 3/64" and less can be expected to perform for years if the gap is cleaned and completely filled. The occasional gap up to 3/32" wide can be filled, but requires special attention. The gap should be extra clean along the edges and the filler forced down and onto the tongue. A second filler application may be required because of filler shrinkage. Another process is to glue slivers or tapered shims of flooring into the gaps. This is especially effective for the larger gaps. The shim should be selected for color and grain to blend with the adjoining strips. A board repair can also be made with a wider board to fill the larger gaps.

What the customer wants and expects and can be realistically achieved determines what procedures you will use and what risks you will encounter when refinishing a wood floor. The communication between the contractor and customer should result in realistic expectations. Properly communicating options and what to expect will result in a satisfied customer. The photos included in this article are from a very old and abused solid 9" x 9" NOFMA parquet floor with bevels and a lot of gaps. The customer was advised the resulting refinish would not be perfect. All the gouges and scratches would not be removed, gaps would not be filled, and some of the bevels would not be uniform. The old floor was probably a seal and wax finish and we advised this would be the best choice for the refinish. The result was a properly performing finish and a very satisfied customer. FCI



CIRCLE 12



CIRCLE 26