

CHAPTER 2

SAND & FINISH STRIP & PLANK

Job-Site Preparation and General Sanding Guidelines – See Chapter 1

Part I - Sanding Previously Finished Floors

SAFETY NOTE: ALWAYS WEAR NIOSH-APPROVED RESPIRATORY PROTECTION. WHEN APPLYING FINISH PRODUCTS, FOLLOW THE RECOMMENDATION IN THE MSDS SHEET PROVIDED BY THE FINISH MANUFACTURER.

NOTE: When sanding a previously finished floor, ascertain whether the floor finish contains lead. Floor finishes applied before 1978 may contain lead. Test kits are available to determine the presence of lead in floor finishes and other architectural coatings. Abide by local, state and federal guidelines for handling and disposal of lead-based products. For more information, visit the U.S. Environmental Protection Agency website at www.epa.gov/lead.

- A. It is not necessary to fully sand the floor to restore the finish unless the floor has visible dents, wear patterns or permanent cupping, or the customer wants to change the color of the floor. A screen and recoat may suffice. See Chapter 4, Recoating a Previously Finished Floor. Cupped floors should not be sanded until the moisture content of the wood flooring and the subfloor have stabilized.
- B. If the floor was factory-finished, determine what type of finish was applied. High-abrasion finishes such as aluminum oxide may be more difficult to sand. High-abrasion finishes may respond better by using a fine-grit (80-grit or finer) abrasion to remove the surface finish.
- C. If the floor was previously site-finished, use a coarse-grade abrasive to remove the previous finish. Refer to Appendix C.
- D. Prior to sanding the entire floor, the bevels of beveled-edge flooring should be cleaned to remove finish, stain and debris. This step should also be repeated after the final sanding and prior to applying finish. Care should also be taken in applying finish on beveled-edge flooring to ensure that finish does not “pool up” within the bevels, especially in butt-joints. In addition, make the customer aware that sanding a beveled-edge product will change the profile of the bevel. In the case of a micro-bevel product, it is possible that the bevel will be eliminated.

Part II – Sanding Newly Installed Strip & Plank

- A. Check the moisture content of the wood floor prior to sanding. Sanding and finishing or sealing should occur when the floor has been acclimated to the proper moisture content for normal living conditions for temperature and humidity. (For a more detailed discussion of acclimation, refer to the companion piece to this publication, the National Wood Flooring Association’s *Installation Guidelines and Methods*.) If the floor is installed in an adhesive application, sanding and finishing should occur after the adhesive has cured and the moisture content of the wood has returned to normal. Follow the adhesive manufacturer’s recommendations for proper curing time.

- B. Load the professional sanding machine and edger with the proper sequence of sandpaper as shown in Appendix C and Appendix D.
- C. The first cut with the big machine should be at a 7-15 degree angle to the length of the boards, using the finest grit possible that will flatten the floor. (The National Wood Flooring publication *Wood Species Used in Wood Flooring* includes suggestions on sanding sequences for some of the more difficult to sand species.)



Figure 2-1

- D. When two-thirds of the floor is complete, turn the sander in the opposite direction and repeat the process on the remaining third. Cuts made in the one-third area must overlap the first cuts by two to three feet to blend the two areas together. To avoid creating a trough, be careful not to stop the sander in the same spot each pass by staggering the overlap every 2-3 passes. (See Figure 2-1)
- E. After the first cut with the big machine, use an edger to sand edges and other places inaccessible to the sanding machine, using the finest grit possible that will flatten the floor.
- F. The second cut with the big machine should be parallel to the grain, using the next appropriate grit of sandpaper, not skipping more than one grit between sanding cuts. See Appendix D.
- G. After the second cut, use an edger to sand edges and other places inaccessible to the big machine, using the same grit that will be used on the final sanding cut with the big machine.
- H. Fill the floor before the final straight cut. Spot-fill beveled-edged products; square-edged products may be spot- or trowel-filled. Use a commercial filler or putty that is compatible with the stain and/or finish that will be applied, or make your own filler with dust from the final edging mixed with a compatible mixing agent to form a thick paste.

- I. The final sanding cut should be parallel to the grain, using the last sequenced grit, not skipping more than one grit between sanding cuts. See Appendix D.
- J. Hand scrape corners, around doorjambes and other areas where the edger cannot be used. Apply even pressure, scraping in the direction of the grain. After scraping use a sanding block and paper (same grit as on sanding machine) to blend the flooring. Sanding the bevel with the corner of the block may be necessary on bevel-edged products.
- K. Examine for visible edger and sander marks. To prevent dishing out the grain from excessive screening, use a buffer, multi-disc sanding machine or oscillating sander over the entire floor to remove sanding imperfections. This step may not be appropriate for all wood species.



SAFETY NOTE: SPONTANEOUS COMBUSTION IS A DANGER. Sanding dust is highly flammable. To minimize the risk, never operate the sanding machine when the bag is more than half full. Also, never leave the sanding machine with dust in the bag or any bag of dust in your vehicle or on the job site. For more information on Spontaneous Combustion, see Sanding Safety, Appendix F.

Part III – Finishing – See Chapter 1