Hardwood Long and Wide Plank Installation Guidelines

With the sales growth of engineered hardwood in new home construction, Mannington is aware of some changes in the construction process of building these homes. For many years, the standard in the industry, for joist spacing for subfloor construction, was 16" on center. This was a time tested, consistent procedure when building new homes. This joist spacing, along with a 3/4" plywood sub floor, gave a solid foundation for flooring to be installed.

When stapling or nailing over a wood subfloor, Mannington hardwood planks greater than 48" long, and wider than 5" must be installed using the alterantive fastening method or glue assisted. Apply a thin bead of Mannington Mega glue (PVA) to the bottom of the groove, to lock the tongue and grove profile together, to minimize and potential movement, which could contribute to squeaks, cracking, or gapping. Another approved method is glue assist using Mannington Triple Stick adhesive in a serpentine pattern on the wood subfloor in conjuction with staples or cleats.

The new materials that are being used today, Engineered Joists and OSB, allow the builder to make some changes in how these houses are being built. The new engineered joist systems, allow the joist spacing to be increased from 16" on center, to 19.2", or even to a distance of 24" on center. This extra spacing on the joist system, without any increased thickness in the sub floor, can potentially contribute to some increased deflection of the sub floor. This deflection in the sub floor, can cause movement between the tongue and the groove of the hardwood panel, causing a squeak or crackle noise when the floor is walked on. Some hardwood manufacturers recommend that any sub floor over joist spacing of 19.2" or greater, should be at least 1 1/8" thick. Where this is possible, this may reduce the potential for squeak and crackle, as the sub floor will have less deflection, or movement.

Where it is not possible to add another 3/8" thickness to the sub-floor, Mannington Installation has come up with an alternative fastening method for our engineered hardwood. Our regular recommended installation procedure, over a wood substrate, is glue, using Mannington's' UltraSpread EZ adhesive, staple, using a recommended engineered flooring stapler, or nail, using an approved nailer for engineered hardwood. When the glue down method is used, it is recommended that a 1/4" underlayment is added, to eliminate any problems with the sub-floor, if a repair has to be made. When the staple down method is used, staples should be 1/4" crown, 18 gauge, and 1-3/8" long. Nail down method requires 18-20 gauge cleats at 1-1/4" long. The compressor regulator should be set between 80-90 psi., making sure the staple is properly seated in the nailer pocket of the tongue. When a nailer is used, be sure to check the alignment of the cleat, to determine if the cleat is properly seated in the nailer pocket, and is not causing any bumps in the veneer, or damaging the side edge of the hardwood.

When the joist spacing is 19.2" or greater, it is required that you apply a thin bead of Mannington Mega Glue to the bottom of the groove, to lock the tongue and groove profile together, to minimize any potential movement, which could contribute to squeak and crackle. When using this new method, you may choose to staple or nail down the hardwood, as either method is acceptable. The use of the Mega Glue, along with a staple or cleat, reduces the movement of the material as the sub floor deflects. This creates a much more uniform bond on the floor, and gives increased stability to the hardwood. By applying the Mega Glue to the bottom of the groove, there is little to no clean up that will have to be done.

This procedure after significant testing has reduced the possibility of cracking and squeaking, and minimizes the risk of gapping.. The use of Mega Glue has been tested against different brands of wood glue, with the opinion that the Mega Glue holds better, cleans up easier, and is easy to apply. In doing repairs, such as board replacement, the Mega Glue was able to be removed easily, and the area prepared for re-installation with minimum concern.

Be sure to register your new floor at Mannington.com/Register for a chance to win $100 and for proper warranty coverage.

