Side-Bonding & Panelization

Side-bonding is a term used to describe rows of flooring boards that have been effectively glued together by any wood sealer, and or finish coating products. During application sealers and or finish coatings seep into the side tongue and groove seams between flooring boards. As the coatings dry, they act as a gluing agent bonding adjacent rows of flooring boards together. Side-bonding is generally associated with the use of water-based finish products.

Panelization results from side-bonding, wherein groups of flooring strips become firmly bonded into larger sections or "panels", creating a panelized effect as the floorboards shrink. Panelization becomes pronounced as wood naturally contracts especially during drier times of the year, resulting in random gapping between panelized sections, rather than uniformly shrinking causing minimal gapping between every row of flooring.

Panelization is oftentimes more pronounced in facilities that fail to maintain uniform environmental humidity controls. The primary complaint with panelization is excessive shrinkage gaps that can be random in both size and location. The size of gaps is contingent upon the number of strips that are side-bonded and the amount of dimensional variance the flooring strips have experienced due to changes in wood moisture content.

As shrinkage occurs, areas where the bonding strength of the finish coatings exceeds the fiber strength of the maple flooring individual boards may split or splinter creating potentially dangerous conditions. If splinter/damage occurs to the flooring strips, discontinue the use of the athletic floor system and contact your MFMA sport floor contractor immediately.

If you have additional questions, please contact MFMA's Technical Director at 888-480-9138.

See Also: Humidity and Environmental Recommendations, Shrinkage Cracks

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