TECHNICAL INFORMATION #12



Choosing The Best Adhesive For Sound & Moisture Control

Several wood floor adhesive manufacturers sell products that provide moisture and sound barrier when used under a wood floor. What types of adhesives are they? Is one any more effective than the other? The two types most sufficient for moisture and sound control are urethane-based and polymer-based.

What is the difference between the two when it comes to moisture?

The most significant difference is the amount of moisture pressure and elapsed time. Wood floor manufacturers require that subfloor moisture pressure be measured at less than 3 lbs. per 1,000 SF in 24 hours. Existing tests prove that polymer-based is up to five times more effective at limiting moisture vapor transmission (MVT) than urethane-based.

What does that mean in the real world for your floor?

If your subfloor experiences hydrostatic moisture pressure above the manufacturer's specifications (3#/24hr/1000SF), up to five times as much moisture will penetrate the urethane-based. It will also penetrate up to five times faster than polymer-based. Therefore, there's a higher probability that the wood floor will absorb more moisture than it can release into the air and expand and cup up to five times more than when a polymer-based is used. This typically results in unsightly, unacceptable, and unnecessary cupping.

So what about sound control? Is there any advantage?

You've heard the saying, 'Trust, but verify'? Nothing could be more important than verifying the facts in this case - demand independent third-party testing from the adhesive manufacturer and the documents to prove it. Make sure to compare slab thicknesses and whether or not an acoustical ceiling was installed, as both will significantly increase the apparent sound barrier. Do not just believe what the manufacturer has said. Such statements need to be substantiated with independent test data. (Data from an independent urethane adhesive sound test has not been provided yet by any manufacturer on their website.)

STAUF USA believes there is a big difference between these two types of adhesives for meeting moisture and sound codes. The results you will get are significant and should be carefully considered when choosing a wood floor adhesive to provide adequate, long-term moisture and sound protection.

Visit www.staufusa.com for more information, or call Technical Services at (901) 820-0007.