



Technical Information #12

CHOOSING THE BEST ADHESIVE FOR SOUND & MOISTURE CONTROL

Several wood floor adhesive manufacturers sell products that provide both a moisture and sound barrier when used under a wood floor. What types of adhesive are they? Is one any more effective than the other? If so, why?

There are two types of adhesive which advertise moisture and sound control: Urethane-based and Polymer-based.

What's the difference between the two when it comes to moisture?

Without getting too technical, it all comes down to the amount of moisture pressure and elapsed time. You are familiar with wood floor manufacturers' requirements that sub floor moisture pressure be measured at less than 3# per 1,000 SF in 24 hours. Existing tests prove that Polymer-based adhesives are up to five times more effective at limiting moisture vapor transmission (MVT) than are Urethane-based adhesives.

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

If your sub floor experiences hydrostatic moisture pressure above the manufacturer's specifications (3# per SF/ 24 Hrs/ 1,000 SF), up to five times as much moisture will penetrate the Urethane adhesive and will do so up to five times faster than the Polymer-based adhesive. Therefore, there's a higher probability that the wood floor will absorb more moisture than it can release into the air and therefore expand and cup up to five times more than when a Polymer-based adhesive is used. This typically results in unsightly, unacceptable, and unnecessary cupping.

So what about sound control- is there any advantage there?

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. Then look for a base layer that is thick enough to provide a barrier to sound and moisture. Don't just believe what the manufacturer has said. Such statements need to be substantiated with independent test data. (Independent Urethane adhesive sound test data as of this writing has not been provided by any manufacturer on their web site.)

Stauf Adhesives states unequivocally that 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.

Contact Stauf Technical Services at 901.820.0007 or on-line at www.staufusa.com for more details.

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