

Case Study: Understanding Moisture in Concrete Substrates



Introduction

With the rising popularity of hard surface flooring products such as LVT and LVP, many of which are installed over concrete substrates, moisture-related issues have become increasingly prevalent. Proper moisture testing and control are now more critical than ever to prevent costly flooring failures. This case study examines common challenges associated with moisture in concrete and how Taylor provides solutions to address these issues effectively.



Customer's pain points

Flooring contractors and installers often encounter moisture-related complications that impact flooring performance and longevity. Key concerns include:

- Lack of proper moisture testing, leading to unexpected installation failures.
- Misinterpretation of surface moisture readings due to unreliable impedance meters.
- Confusion regarding high moisture-tolerant adhesives and their limitations in moisture protection.
- High moisture and pH levels in older slabs indicating potential site-related moisture problems.
- The presence of below-grade slabs or compromised under-slab vapor barriers contributing to ongoing moisture intrusion.



Taylor's solution

To combat moisture-related flooring failures, Taylor offers education, advanced adhesives, and moisture mitigation solutions:

1. Industry Education and Best Practices

1. Promoting the use of ASTM-recognized moisture testing methods, including:
 1. ASTM F1869 Calcium Chloride testing.
 2. ASTM F2170 In Situ RH testing.
 3. pH testing per ASTM F710-05.
2. Encouraging documentation of all moisture testing results for future reference.
3. Emphasizing that high moisture-tolerant adhesives do not equate to moisture protection for flooring.

2. Innovative Adhesive Solutions

1. Taylor Dynamic® and Pinnacle®: These high moisture-tolerant adhesives provide superior bond strength in challenging conditions but require proper subfloor preparation.
2. Taylor Resolute®: A single-component moisture-cured adhesive forming an unlimited moisture vapor barrier, making it ideal for environments with high moisture and pH levels.

3. Comprehensive Site Evaluations

1. Assessing concrete age, previous flooring history, and signs of moisture intrusion.
2. Identifying compromised under-slab vapor barriers and below-grade slab risks.
3. Recommending appropriate moisture mitigation strategies before installation.



Conclusion

Understanding and addressing moisture issues in concrete substrates is essential to preventing flooring failures. Taylor provides industry expertise, advanced adhesives, and moisture control solutions that equip flooring professionals with the tools needed to navigate moisture challenges successfully. With a proactive approach to moisture mitigation, Taylor ensures durable, long-lasting flooring installations.