

Protecting New Vinyl Sports Flooring from Moisture in Katy, Texas Schools

Elementary school gymnasiums all over the U.S. are being renovated to meet today's "fitness for life" trends in physical education and take advantage of modern building technologies. Katy, Texas' Independent School District (ISD) made the decision to update its schools' gym floors with new vinyl sports flooring. The technology in the chosen sports floor offers Katy ISD cost efficiency due to less maintenance and injury protection from its non-slip properties. The district had been having trouble with cupping and bubbling of the existing rubber gymnasium floors due to moisture issues. They brought in Everett Shumaker of Floor-Tex Commercial Flooring in Conroe, Texas to help them assess their moisture issues and find a solution, before the new sports floors were installed.

Floor-Tex has a long history of managing moisture's impact on different types of flooring. With Texas' heavy rainfall, hurricanes and proximity to large bodies of water, Houston and nearby towns like Katy

deal with high humidity and ground water issues year-round—especially in the summer months.

To resolve the moisture issues for Katy ISD, Shumaker recommended applying TEC® LiquiDam™ Penetrating Moisture Vapor Barrier to the substrate before installing the new gym sports floors. TEC LiquiDam is Shumaker's go-to solution for moisture mitigation. Though he has tried other products, Shumaker prefers LiquiDam for its ease-of-use, good price point and proven performance in managing the MVER. Katy ISD then hired Shumaker to do the remaining gym floor installations. This past summer, Shumaker completed the gym floor at Bonnie Holland Elementary School, Floor-Tex's sixth Katy ISD gym floor installation that were prepped with TEC products.

Bonnie Holland Elementary School has a 10,000 square foot space that serves as both its gymnasium and its cafeteria. Floor-Tex needed to remove the existing rubber floor and complete the preparation for the new vinyl sports flooring. Before the application of TEC LiquiDam, the substrate had to be prepared properly. With LiquiDam, no shot blasting is required on clean, sound concrete.

This means the concrete is free of surface coatings, sealers and curing compounds, contaminants, has a strong durable surface layer and is clear with no dirt or dust. In this particular case, shot blasting was necessary because of contaminants left on the slab after the existing floor was removed. The floor was then ready for the LiquiDam application.

To resolve the moisture issues, TEC® LiquiDam™ Penetrating Moisture Vapor Barrier was applied to the substrate before installing the new gym sports floors.



Floor-Tex first cordoned off 10x15 foot grids, as recommended by TEC, for the LiquiDam application. Each 2-part gallon bucket preparation of LiquiDam provided exactly the right amount of coverage per grid in the Bonnie Holland space.

“LiquiDam is so easy to use that I never have to worry about my guys mixing and applying it properly.”

-Everett Shumaker

The grid method made it simple for the Floor-Tex team to effectively apply the one coat needed of LiquiDam. After pouring out the entire bucket in each grid, the crew carefully used a trowel to spread the product. Then they methodically back rolled the surface with

nap foam rollers to evenly distribute the LiquiDam into a smooth continuous film. Shumaker appreciates how easy it is to make sure LiquiDam has covered all cracks and voids given its easy-to-see blue color. Shumaker further explained why he likes LiquiDam, “I have had zero failures and know TEC stands behind its products. I have TEC Tech Support on speed dial if I ever do have any questions, and I always get a prompt response. LiquiDam is so easy to use that I never have to worry about my guys mixing and applying it properly.” In under 5 hours the LiquiDam was dry, and because LiquiDam only requires one coat, the gym-cafeteria substrate was ready for the next step.

Katy ISD had faced another challenge, besides the water issues, prior to Floor-Tex’s involvement. In the schools with the dual-use gym-cafeterias, the new sports floors were being permanently indented by the heavy cafeteria tables that were placed on the surface each day for the lunch hours. Once Shumaker learned of this additional issue, he was able to investigate and then devise a solution. The problem turned out to be that the generous cushioning under the sports floor was being crushed by the weight of the lunch tables. Shumaker’s solution was to eliminate the cushion in the area of the gym that became the cafeteria.

Eliminating the cushion meant that Shumaker would need to do some additional floor preparation

TEC® Feather Edge Skim Coat was used to level a narrow transition line between two areas in the dual-use gym-cafeterias.



TEC® Multipurpose Primer ensured the adhesive would adhere well to the prepared floor surface.



to bridge the with-cushion area and the without-cushion area. He turned to TEC® Feather Edge Skim Coat to level the narrow transition line between the two areas in the gym-cafeterias. Feather Edge is a fast-setting, cement-based compound designed to smooth and level irregularities from featheredge up to 1/2” (12 mm). Feather Edge leveled the Bonnie Holland transition line and rapidly set in just 15 minutes. Floor-Tex then moved on to prime the entire area in preparation for the new vinyl sports floor. Floor-Tex applied TEC® Multipurpose Primer to ensure the adhesive would adhere well to the prepared floor surface.

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-Everett Shumaker

Bonnie Holland Elementary School now has a beautiful new wood-look vinyl sports floor in its gym-cafeteria. The low maintenance floor is also safe for the children to learn new exercises and improve

their physical fitness. Just as the new physical education curriculum aims to promote lifetime fitness, Floor-Tex’s floor preparation with TEC LiquiDam aims to promote long-term moisture-free performance of the new sports floor.



Contact your local sales rep to request a demo.
Have a question? Visit TECQuestions.com.



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