

Outlet:Walls & CeilingsProject:Brentwood Elementary (Austin, TX)

Building Envelope Consultant:	Engineered Exteriors
General Contractor:	Bartlett Cocke
Subcontractors:	Lasco Acoustics & Drywall, Division 7 Waterproofing

Products: 70,000 sf DensElement® Barrier System sheathing 15,000 sf DensDefy™ Liquid Barrier

Acing a School Renovation: Protecting a Structure Against Water Intrusion

Project overview

Brentwood Elementary School, originally constructed in the 1950s, is part of the Austin Independent School District in Austin, Texas. This neighborhood community school is proud of their traditions and looks forward to an exciting future. As an arts-focused school, offerings include two-way dual language programs at all levels and a Creative Learning Initiative, among other outreach programs. But for this school – or any school – to be successful, it all starts with strong, safe, buildings.

After undergoing multiple renovations over the years, the school – at 90,000 enclosed square feet - decided to undertake a full-scale, modern renovation designed to bring the buildings up to where they needed to be.

General Contractor Bartlett Cocke, Baytown, Texas, was brought on board, and Ryan Rios took the helm of the project.

Rios is a Texas A&M graduate and has been in the construction industry for about five years. As the general contractor on the Brentwood project, Rios shared, "Our goal was to bring some new, modern elements into the school."

First order of business: create a mockup of the materials to be used in construction to determine compatibility. Right off the bat, a challenge presented itself.

The Challenge

As soon as the mockup to determine how the various products worked together was up for review, it became clear there was an issue: The liquid barrier product chosen for the project wouldn't adhere properly to the already installed integrated DensElement[®] Barrier System sheathing from Georgia-Pacific.

"Essentially, the original product specified just wasn't sticking to the DensElement® during tests," commented Rios. "We decided to reach out to manufacturer Georgia-Pacific for assistance."

Georgia-Pacific field sales manager Jay Metcalf, an industry veteran, received the request from his customer and sprang into action.

According to Rios, Metcalf shared that "he had something in the works that could potentially solve the issue."

Metcalf, a Georgia-Pacific employee since 2017, prides himself on his accountability and response time. "We live in a world where your phone is at your fingertips, and we at GP want to make sure that if there are questions, we give them the highest sense of urgency."

Throughout the installation process of any Georgia-Pacific product, collaboration is emphasized from start to finish. Field sales staff is available to share tips, tricks, and advice when installing Georgia-Pacific building products, to include questions around specific technical details. The idea is to leverage the personal experience of the field staff and merge it with the technical experience behind the company to provide the highest level of service.

"Part of the GP values we create are to be part of the process, not just at the beginning, but all the way through to the end of the project. Being involved in the mockup process, being able to come out to the site and help advise the installers on best practices – it's a huge value we add," said Metcalf.

Adding to the collaborative team: Darren Clayton with Lasco Acoustics & Drywall, the DensElement[®] Sheathing and DensDefy[®] Liquid Flashing installer, and Zane Trayler with Division 7 Waterproofing, the DensDefy[™] Liquid Barrier installer.

The Solution

Metcalf visited the elementary school jobsite and shared product data information on Georgia-Pacific's new DensDefy™ Liquid Barrier and suggested making the change from the previous product to allow for quick installation and project continuity between the integrated WRB sheathing system and block wall structures on the project.

DensDefy[™] Liquid Barrier is a single-component, monolithic, elastomeric, STP-based fluid-applied air- and water-resistive barrier introduced in July 2021. Once applied, it produces a seamless, durable membrane on exterior gypsum sheathing, wood sheathing, CMU, and concrete walls. Developed to help protect against water intrusion and mitigate the risk of unwanted air movement, the product cures quickly (even in wet conditions), is vapor permeable, and works side by side with DensElement[®] Barrier System to provide a high-performance, highly durable WRB-AB system across multiple substrates. Knowing the crew was unfamiliar with DensDefy[™] Liquid Barrier, Metcalf was invested in the process every step of the way by being on call and onsite to collaborate, answer questions, and take his time reviewing the data and information. This level of support made it easy for the crew to learn installation techniques and raise their comfort level. Once all information had been thoroughly reviewed, the green light was given to move ahead. The product was added to the mockup ahead of a full review by the drywall consultant on the project.

Lasco Acoustics & Drywall, established in 1988 and headquartered in Dallas, Texas, has completed well over 10,000 projects with a staff known for dependability, fairness, and dedication to customer satisfaction. Darren Clayton has worked with them since 2014 and brings 13 years of experience in the drywall industry to the table.

"This project was our first experience with DensElement® Barrier System (including the DensDefy® Liquid Flashing)," remarked Clayton. "We spent several hours on the mockup collaborating with Jay to fully understand all details of the project, coaching our guys through the installation of both products, and this not only started the project off well and on the right note, but it was also a huge part of our success."

Clayton fully admits to being a little nervous in the beginning because DensDefy[™] Liquid Barrier was new to him, but shares that once they got going on the installation, there was nothing to be nervous about.

"Installation was very easy to pick up, especially when combined with our years of experience," commented Clayton. "It went faster than we thought it might. The coverage rate was there, just like what the product data said it was supposed to be: you roll it on, back roll it once, and you're covered."

The Results

With one system, backed by one warranty from Georgia-Pacific, both products received top marks from all involved with the project.

Zane Trayler, project manager, Division 7 Waterproofing, installer of the DensDefy™ Liquid Barrier: "My experience with the Georgia-Pacific technical team was very positive. If we had any issues, the GP tech team was there, happy to help, willing to do what it took to push the project forward toward success."

Rios agrees: "I would recommend DensDefy™ due to the sole fact it's from one of the largest manufacturers in this industry; plus, you gain the value of the GP warranty, which is huge. They stand behind their product."

While once nervous about using a new product, Clayton is now a convert: "For future projects, I feel like with the experience we've had on this project, we have no concerns (with either product). Anytime we called with questions, GP was there to answer the phone. If they didn't have the answer right away, it came quickly; there was no downtime waiting on them for answers."

"If you were to list the top three concerns on a commercial project, water intrusion is up there, if not number one," concluded Metcalf. "There was an initial learning curve, especially with it being Lasco's first job with the DensElement® Barrier System, but we were able to get them to a place of comfort and familiarity quickly. If it's someone's first job, you want to bring that little extra TLC – but ultimately, we want to provide that level of service to everyone; even if it's their 15th job. Our attention to detail isn't going to change – we're going to be here for them, and we're going to leverage our capabilities as GP. Because if our customers have that level of comfort, it ultimately leads to success."

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