

HIGH PERFORMANCE AIR & MOISTURE BARRIERS

RESTORING EXPECTATIONS AND DRIVING CHANGE IN THE STUCCO INDUSTRY



Gavin Semrow, founder of Ai Restoration, is partnering with Dörken to help aid in the remediation process and educate building professionals on the dangers of improper stucco and manufactured stone cladding installation.



RESTORING EXPECTATIONS AND **DRIVING INDUSTRY CHANGE**

Stucco and manufactured stone veneers have been used for decades in the building industry. These claddings were once viewed as a high-end, very aesthetically-pleasing cladding systems that were suitable for keeping water out long term.

Without the right underlying system, these cladding materials can cause water leaks and uncontrolled moisture, which leads to mold, wall rot, and decay. This eventually affects the aesthetics and structural integrity of a home if left untreated. Having been actively involved in the remediation industry for the past 23 years, Gavin has seen firsthand how invasive and devastating failing stucco, manufactured stone, and siding are to homeowners, home buyers, and building professionals alike.



As founder of Ai Restoration, his focus is solving problems related to water intrusion in building envelopes. Gavin has built Ai Restoration on a foundation of excellence, always striving to inspire and empower his employees to stay passionate and proactive, and provide the highest-quality craftsmanship.

STUCCO FAILURE CAPITAL

For most people, a house will be their biggest financial investment. Home ownership is the very symbol of achieving the American dream. In 2010, Pennsylvania was named the stucco failure capital of the United States. This crisis is devastating homeowners all over the area. They can't sell their damaged homes and they can't afford to fix them. As a result, the Pennsylvania General Assembly has since introduced *Regular Session 2019-2020 House Bill 879*. The bi-partisan legislation aims to protect consumers and provide recourse to address building practices that have allowed for construction failures, including stucco failure.

Even more alarming, experts say that this damage is invisible in 80-90% of cases – meaning homeowners are unaware of the issues that may be hiding within their walls. And with roughly 90,000 new single-family homes constructed in Southeastern Pennsylvania since 2001, the extent of the damage in the region may not yet be fully realized. For most, this issue and the associated repair costs have left them completely blindsided and in need of cost-effective solutions. "Repairs can cost anywhere from \$50,000 - \$400,000 per household," says Gavin. "It's becoming increasingly clear that there are continued issues with application techniques, and the industry needs to come together. We need to create a system that will make our buildings better, to specify the right system made up of the right products, and we need to follow up to ensure proper installation. It's the only way we can prevent future issues with these types of cladding."





THE STRUGGLES WITH STUCCO AND MANUFACTURED STONE

One of the biggest challenges that builders are facing is how to limit the dampness that can move through a wall from the outside, while managing moisture that originates from the inside of a wall. Without proper ventilation and drainage, moisture can accumulate between the water-resistive barrier and cladding of a building.

For highly absorbent reservoir claddings like stucco and manufactured stone, these challenges become even greater. Improper building with these materials can be a serious drawback, affecting not only homeowners and their properties – but also the credibility of builders and contractors down the line.

Gavin is seeing a trend within the industry, where building contracts have grown, deadlines have gotten tighter, and more subcontractors are coming onboard. The bad news is, in many cases, the more hands involved in the build, the higher the chance that things can get overlooked.

"The industry has gotten away from just a few contractors building a home, to a large number of different subcontractors building a home," continued Gavin. "With this approach, small parts of the exterior building system are overlooked, leaving everyone pointing fingers at one another. By specifying an effective system made up of the right products and proper installation, you'll have a better build."

THE REMEDIATION PROCESS

According to Gavin, when it comes to stucco and siding repair or replacement costs, the range varies based on the size and age of the home, how early the problem has been identified, and whether the homeowner is looking for a quick fix or a longer-term solution to their problem. This will determine the degree of the remediation applied to the home. Some building repair cases may only need maintenance while, unfortunately, many need full replacement of the exterior cladding along with the installation of a water/moisture/air barrier for all-important water and air tightness, as well as a suitable rainscreen product that will provide ventilation and drainage.

Interestingly, 95% of home wall rot today can be traced back to incorrect product selection, improper installation, and lack of maintenance. But Gavin stresses the importance of not generalizing because variables are always different. "Builders are not always to blame – we now have new technology, smarter products, and better building techniques that weren't known 10 years ago."

"Ai Restoration uses DELTA®-DRY on every stucco and stone veneer job we do. We have seen the science behind how this product works, but more importantly we have seen in the field that this product truly works."

- Gavin Semrow, founder, Ai Restoration.

2-IN-1 SOLUTION FOR BUILDERS AND CONTRACTORS



The new DELTA®-DRY & LATH gives you all the benefits of DELTA®-DRY, but also includes a fiberglass lath to create a one-step moisture control and lath system. Using DELTA®-DRY & LATH means installers no longer require a metal lath, which allows them to save time and effort. Plus, the alkaliresistant glass lath is not affected by chemicals and will not corrode.

DELTA®-DRY, one of Dörken's proven moisture-protection products, is designed to help protect structures from moisture, weather, and mold. A dual-chambered ventilated rainscreen, DELTA®-DRY stops moisture from moving through the wall from the outside and works to remove any moisture in the wall that originates from inside the home. Made from a semi-rigid, heavy-duty polyethylene membrane, DELTA®-DRY is the first of its kind to dry and drain and can't be penetrated by moisture.

"A major benefit of using these products is that we're creating a building envelope that is protective and preventative," says Gavin. DELTA®-DRY & LATH is designed to provide exceptional ventilation and drainage and protect against moisture. DELTA®-DRY & LATH is quick and easy to install, dramatically reduces risk, and provides superior drainage and ventilation through the air gap on either side of the membrane.

GAVIN'S OUTLOOK ON THE FUTURE

What advice does Gavin have for those looking to find a proactive approach to better building? He recommends looking at the science behind the problem and the fix. Don't look at just a single component to try and solve this catastrophic problem.

"We need to look at the science behind the problem and the fix, but we also need to listen to the experience of the experts in the remediation industry that are seeing firsthand the causes of and solution to stucco and siding failures. Add these two components together and we now have a proactive approach to better building."

There is still a lot of work to be done before homeowners and professionals can feel a sense of relief, but the good news is that there are experts like Gavin and Ai Restoration who are ready and willing to do what they can to make stucco and manufactured stone into a viable choice for builders, and homeowners once again.



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