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**BACKGROUNDER**

**Stucco Buildings and the Damaging Effects of Moisture –**

**Why a Simple Drainage Plane Can Avoid Costly Renovations**

Stucco buildings can face extremely costly and damaging structural problems due to the fact that, without a proper drainage plane, water is trapped, and the building’s walls become a breeding ground for mold.10

Synthetic Stucco (EIFS) was a “lawsuit magnet” in the 90’s. Water could not escape, and caused severe rotting. It has been brought back successfully, but with a drainage plane incorporated into the design.4

All stucco is susceptible to water trapping issues. In Minnesota, homeowners have had repair bills upwards of $175,000, and even $700,000. Some homes have been rebuilt more than once.6 The problem is nationwide. In Florida, buildings were tested over time by Roger G. Morse AIA, and Paul E. Haas CSP, CIH. They concluded that stucco in Florida is failure-prone, and that water control capabilities are greatly improved with drainage plane implementation.10

In Pennsylvania, stucco problems are rampant. A family trying to sell their home ended up having it torn down to the studs, and needing upwards of $120,000 in repairs after a stucco test was conducted by a prospective buyer. Not visible from the outside, once the stucco was removed, it was made apparent that the entire house was rotting.3

Also in Pennsylvania, a family had to spend $200,000 to keep their million dollar home. The rot caused by trapped water from stucco was so bad that a home inspector was able to crush a 2x6 stud with his bare hands. The same home inspector stated that in the Philadelphia area, stucco house rot is a billion dollar problem.5

A high end contractor in Philadelphia believes the solution to homes new and old that are experiencing water damage behind stucco is the incorporation of a rain screen system.4

A monastery in WI is currently seeking to raise money to cover $50,000 repairs for stucco and mold removal.7

A Civic Center in British Columbia, Canada is also currently facing a massive repair bill caused by stucco and mold created by stucco-trapped water. Their cost is estimated at $4 million. The building is only 20 years old.9

A City Hall Annex in Destin, FL is requiring a $70,000 repair after water damage was found in the building. Further assessment showed that “exterior stucco walls had been absorbing water for years resulting in wood rot and water damage. 1”

Construction and architecture websites, Contractors, Architects, and Home Inspectors all recommend the implementation of a rain screen design for prevention of catastrophic water damage in buildings with stucco cladding.

Who is VaproShield?

For over a decade, VaproShield has designed and manufactured high performance mechanically attached and self-adhered vapor permeable water resistive barriers (WRB), air barrier (AB) membranes and accessories to create a total solution-based approach to protecting the building envelope. Their innovative features, such as integrated tape on the membranes, permeable hybrid fluid-applied flashing for rough openings, WRB sealant and various other accessories, have been rigorously tested together to maximize life-long building envelope performance and minimize building failure rates.

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