

## The building envelope: Protects your investment

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Stephen Danner, president of A&O Danner Companies, a full-service general contractor and builder, knows that commercial building owners want to put on 'a good face' for tenants, visitors, neighbors and the community at large.

"The way a building looks speaks volumes about the quality of your products or services, and says you have pride in what your business stands for," said Danner. "Subconsciously, a pleasing exterior can give employees a more positive attitude, and put customers in a more friendly frame of mind."

But Danner adds, "Even more important than the building's appearance, its design, landscaping and amenities, are the less obvious aspects, the exterior envelope. The building envelope is the outer shell, the physical separator between the interior and the exterior environments. This is what protects the value of the investment."

"Owners and facilities managers shouldn't cut corners on the envelope," said Danner. "When installed and maintained properly, the 'envelope' will guard against moisture, protect the entire structural integrity, help maintain a healthy and comfortable working environment, and may result in significant energy conservation. Cutting corners can end up costing more over time."

Recently, A&O Danner was chosen to upgrade the envelope for the Rollins Court Condominiums in Cambridge. The complex includes 11 units with 3 building, unit size ranges from about 2,000 to 3,000 s/f each. Recent sales have been in the \$700,000 range. Total value of the envelope project is estimated at \$200,000.

The project includes 8,500 s/f of fiber cement siding, replacement of 80 windows and numerous French doors, and new PVC trim. Aiming for a paint-free, low-maintenance finish, all siding is factory-finished and guaranteed by CertainTeed, which recently added A&O Danner to their select certified contractor list.

"The condo association called us in to remove the old exterior sheathing and replace it with fiber cement siding," said Danner. "The structure was built in 1987 so this is a dramatic example of how new technologies have changed in a short period. We can increase the R-values (thermal rating). It will be a big cost-saver since the manufacturer warranties fiber cement for 50 years when correctly installed by a certified contractor. The energy and exterior care savings start today and continue for many years."

Building envelope engineering draws from all areas of building science and focuses on solving or preventing performance problems. Danner said, "We collaborate with owners, designers and engineers on new construction and renovation projects to create high-performance envelope systems. On existing structures, visual assessments are the less costly way to detect cracks, corrosion and other defects, but some owners opt for the more advanced (and more expensive) technique: three-dimensional laser scanning."

He sayid, "It's impossible to completely stop heat transfer, but you can slow it down by increasing

the thermal performance of building envelopes - foundations, walls, roofs - using the right materials to form a continuous blanket."

It's worth evaluating the building envelope for deficiencies and energy loss. In one test, engineers compared a properly insulated building and a similar structure that wasn't upgraded. Measurements revealed a 59% energy savings in the modified building.

A&O Danner's focus is on office, retail, industrial and multi-unit residential projects, mainly in New England. "We'll take on smaller and single-family residential projects on a selective basis, usually new home construction," Danner said.

The company's portfolio includes renovation of numerous high-end condos in Boston's Back Bay and South End neighborhoods, and recently completed five shops for British clothing retailer Jack Wills Outfitters, including stores on Nantucket, Martha's Vineyard and on Newbury St. About 80% of Danner's business comes from client referrals from or repeat business.

A&O Danner Cos. has completed several upscale condo renovations, upgrades and conversions, historical renovation, and numerous first-class office buildouts. Projects have been completed on time and on budget for commercial, retail and residential clients. The firm is licensed and insured in several states.

Stanley Hurwitz is president/founder of Creative Communications, Stoughton, Mass.

New England Real Estate Journal - 17 Accord Park Drive #207, Norwell MA 02061 - (781) 878-4540