



Job 309 East Paces

Owner The Loudermilk Companies – Knox Properties – The Redan Group

Location Atlanta, Georgia

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As the old saying goes - everything old becomes new again. Here in the design and construction industry we can definitely see that there is a trend towards restoring, preserving or even faking historical architecture and exteriors. As desirable as this aesthetic may be, it usually comes at a high price in terms of budget and schedule.

So what happens if you want the look for less time and money? Enter, Sto panel technology. The use of pre-fabricated exterior wall panels can be a cost and time-saving solution that can deliver value in multiple ways.

Context/need

[The 309 East Paces project team](#) was tasked with renovating the oldest “high rise” building in the Buckhead submarket. The Owner was keen to mimic the aesthetic of an old brick building but with a cost-conscious budget and speed-to-market a top priority. Three original concepts were proposed by the design Architect with the Owner selecting the final concept of a brick building with large industrial-style windows. Balfour Beatty introduced the Sto panel solution as a cost-saving measure that could allow the team to deliver the desired aesthetic in a short amount of time AND actually increase the square footage of the building.

Solution

The use of Sto panels saved the Owner close to \$500,000. Sto panel technology offers prefabricated wall panel solutions available in a variety of exterior finishes. The panels are lightweight, energy efficient and require less time for installation compared to traditional masonry or traditional EIFS. The off-site manufacturing of the STO wall panels ran concurrently with the demolition of the exterior façade/building contents down to the structural core & shell.

The installation of the panels is also speedy, with the possibility of up to 12,000 square feet of paneling erected per week. The panels on this particular project were erected in just twenty-two (22) work days, saving the team an estimated 7,000 man hours compared to what would have been spent if they had built the exterior wall system on-site.

The panels not only accomplished the faux-brick finish, they also allowed for the window receiver track (L-receptor) to be installed in the shop. This enabled the Pella windows to install from the INSIDE. The windows were then able to be stocked by the buck hoist prior to panel erection. The windows installed immediately following the windows, allowing the building to be dried in under eight (8) weeks! All of this work fell under the panel fabricator / installer which made the complete building envelope under the responsibility of one subcontractor (yep you guessed it: a one stop water tightness warranty).

Sto paneling is an estimated 15 times safer than field applied exteriors. It not only defers field work to the shop, but minimizes work at height. In addition, the off-site manufacturing of the panels insulated the project schedule against potential weather delays. Unlike traditional masonry, the off-site manufacturing of the panels can be completed irrespective of weather conditions.

Challenges

The 309 East Paces project was an ideal fit for Sto panel technology as it does not have complicated skin elevations, balconies, or dissimilar exterior finishes to contend with.

The project schedule didn’t allow for demolition to be complete prior to beginning fabrication of the Sto panels; an obvious challenge when fitting panels to an existing building. To get around this, the team took selective measures and built tolerance for adjustment into the panel fabrication. Overall, this strategy worked out well with only minor adjustments required to compensate for the lack of comprehensive measurements. This includes: varying-sized vertical caulk joints from elevation to elevation as well as a “closure plate” between the edge of the slab and the back of the panel. The existing edge of slab also needed to be cut in some places to ensure the panels fit tightly to the building. Some or all of these adjustment measures could have been mitigated if the schedule had allowed more time for an accurate field measure of the building.

Additional benefits

In addition to significant cost and time savings, the use of Sto panel technology on this site actually helped contribute an increase in the gross building square footage by 2,000 square feet. How does that work? The building’s original skin (which was completely demolished) consisted of concrete masonry unit (CMU) and brick. The CMU sat on the slab infilling from top of slab to bottom of beam. Now, the new skin sits outboard of the edge of slab which means an addition 8” was gained around the entire perimeter of the building. In addition, there was a perimeter heating system that was demolished and replaced with a new central HVAC system typical of modern office building construction.

Is this innovation right for my project?

Sto panel technology will work best for projects that fall into the following categories:

- Renovation OR New Construction projects
- A project where speed to market is a priority
- A design that requires a brick-look or faux brick-look or any type of exterior EIFS/stucco finish – several unique finish options are available from Sto
- A building sizable enough to warrant panelizing
- A specification requiring a drainable EIFS system
- Sto panel technology DOES NOT lend itself well to complicated skin elevation with balconies / other exterior finish systems