

AUTHENTIC AND RICH IN EVERY WAY CASE STUDY

RESIDENTIAL COLLEGES
AT VANDERBILT UNIVERSITY
NASHVILLE, TN





“Windows really are the eyes of a building. You can put all the attention you want on the other aspects of the facade and the interior, but if the windows aren’t good quality, you’re sunk.”

Steve Knight, AIA, Principal and Project Manager
David M. Schwarz Architects

+ PROJECT SNAPSHOT

Architect

Hastings Architecture, Architect of Record
David M. Schwarz Architects, Design Architect

Installer

Alexander Metals

Product

GT2200 E. Bronson Ingram College
GT6700 Nicholas S. Zeppos College

General Contractor

R.C. Mathews Contractor, E. Bronson Ingram College
Layton Construction and R.C. Mathews Contractor,
Nicholas S. Zeppos College

+ CHALLENGE

There were a number of challenges, including:

- tight timelines
- a first-time partnership with the installer
- an entirely different approach to window installation (by elevation, not floor to floor)
- the windows themselves (single hung, many of which were Gothic in E. Bronson Ingram College, and huge operable Gothic arch-top casement windows in Nicholas S. Zeppos College)

+ AUTHENTIC AND RICH IN EVERY WAY

Vanderbilt University’s residential colleges stand as a testament to what can be accomplished when a bold vision and an uncompromising pursuit of excellence is brought to life through team-wide collaboration.

“I think what stands out to me the most is that this is the kind of quality and craftsmanship you might see 100 years ago,” says Joey Riggan, project manager for Alexander Metals, the projects’ Nashville-based window installer. That’s exactly what the university and David M. Schwarz Architects (DMSAS) envisioned when they embarked on the designs for E. Bronson Ingram and the three additional residential colleges that will be completed in time for the university’s 150th anniversary in 2023.

They saw structures that could fit seamlessly into what the DMSAS website calls “the rich and stylistically eclectic blend of late 19th and early 20th century architecture found throughout the Vanderbilt University campus.” At the same time, they aspired to create structures that could stand side-by-side with the residential colleges found at Yale, Princeton and Oxford.

E. Bronson Ingram aces the test. So does the Nicholas S. Zeppos College, the teams’ second project, which opened in August, 2020.

And among all the painstaking details and features that contribute to the colleges’ timeless aura, windows from Graham Architectural Products play an essential role. As DMSAS Principal and Project Manager Steve Knight, AIA, says, “Windows really are the eyes of a building. You can put all the attention you want on the other aspects of the facade and the interior, but if the windows aren’t good quality, you’re sunk.”

E. Bronson Ingram was in the design stage when, as Graham Sales Rep Donn Gallatin recalls, a Vanderbilt administrator visited the University of Richmond, where the Graham product was installed. They were so

impressed by the Graham windows, that upon returning to Nashville, they suggested that the design team look into the Graham product. Gallatin, having worked with Vanderbilt in the past, was contacted and, suddenly, Graham was being considered for E. Bronson Ingram as well as future work on the additional residential colleges. It was 2015.

Bill Wilder, Graham’s director of technical sales, says there were two different parts to the E. Bronson Ingram structure. “One of them had huge single-hung windows with these Gothic windows that came to a point, and the other one had old steel casement-looking windows. We went hard after both of them.” Wilder took samples down to David M. Schwarz and Gallatin presented samples to Hastings Architecture, the architect of record. Says Wilder, “I think everyone was pretty impressed by how we were able to replicate both.”

In July of 2016, Graham learned it had been awarded the single hung portion. Sara Atherton, AIA, LEED AP and assistant principal at Hastings Architecture, the architect of record, says, “We looked at several manufacturers and I think we found three that had a profile which the designers were happy with. Then we created a matrix and factored in the energy efficiency, the aesthetics and the cost. In the end the Graham window was the best value.”

However, the design team opted to go with a more expensive steel window for the casement.

Recognition of the Graham value proposition became clearer in the planning for the next project: Nicholas S. Zeppos College. Whereas E. Bronson Ingram had twice as many steel windows as Graham’s aluminum windows, Nicholas S. Zeppos featured a significantly higher number of Graham windows – in this case, Graham’s GT6700.

Says Gregory Hoss, principal and president of DMSAS, “It was very important to us to try and emulate some of the more historic windows

that were generally made of steel at that time. And of any aluminum window that we’ve seen, I think the Graham casement window that we ended up using on Zeppos was far and away the closest to achieving those sightlines and the relative quality of construction and joinery.”

Atherton adds, “The Graham window is more energy efficient because the steel window only has ¾ of an inch insulated glass whereas the Graham has an inch, so it works out better from a performance standpoint and getting the insulation right. But really the main reason was the value”

These projects had their share of hurdles. As Tim Cooper, another Graham rep, points out, “It was a very tight timeline – a major schedule push. But everyone stepped up. It took a big team collaboration.”

Moreover, Alexander Metals and Graham had never before worked together. “That’s always a concern when you don’t have a working relationship with a supplier,” says Riggan, “especially going into a job of this magnitude. But it has worked out. Absolutely.”

Because of the highly detailed masonry façade, the team chose to install windows elevation-by-elevation, rather than floor-by-floor. “It required you to have an exorbitant number of windows of different types, sizes and shapes all at the same time,” says Riggan.

While there were delays on the initial project, adjustments have been made to increase efficiency. By releasing Graham earlier, Riggan says, “We’re having the windows produced and delivered, and we’re staging them at our facility prior to the start date of the first elevation. So we’ll have all the windows at our facility before we even put the first window in on the job site.”

Graham has made internal adjustments, too. Gallatin says, “Michael DeRosa (Graham’s chief operating officer) has that plant humming like no plant in the country. He came up with a system that dramatically shortened the amount of time necessary for line changeover.”

Nicholas S. Zeppos College had issues too. Cooper explains, “The curved casement windows were the biggest hurdle we had to overcome. They were operable, curved casement windows, and some were as large as 3 feet (wide) by 8 feet (high). That was a challenge, because they were heavy, so they were hard to fabricate to begin with. Then we got into hardware issues due to the weight of the sash and the need for hardware that would work properly on a curved casement window.”

In recognizing E. Bronson Ingram in its AIA Middle Tennessee 2019 Design Awards, the jury said, in part, “The jury recognizes the herculean effort to study, detail/document, and construct a historical architectural style on a large scale that is authentic and rich in every way.”

The Graham window fits right in. As Wilder says, “I think our GT6700 is a unique blend of historic accuracy meets higher end thermal and structural performance. And that’s the name of the game – especially for a university like Vanderbilt, which has all these really cool, venerable buildings that need modern performance.”

Concludes Riggan, “We wouldn’t have been able to do it without Graham’s help. It was a cumulative effort. It takes time to develop a relationship. But I think this has turned into a very, very good, positive relationship for all concerned at Graham and Alexander Metals. As a matter of fact, we’re using Graham for another project here in Nashville that’s not even associated with Vanderbilt.”

One final note: Graham has already been awarded the contract on Vanderbilt’s third residential college, as well.



1551 Mt. Rose Avenue + York, PA 17403 + 800.755.6274 + grahamwindows.com