



## Gothic Revival at Vanderbilt

*New dorm's elegant doors feature custom millwork and African mahogany.*

### CASE STUDY

In the summer of 2016, **Vanderbilt University** in Nashville, Tennessee, embarked on a transformative three-phase, \$600 million construction project aimed at revitalizing its student housing. As part of this initiative, two older dormitories were demolished to make way for a new, state-of-the-art facility: Barnard Hall, a 205,000-square-foot dormitory designed to house 340 upperclassmen. The new dorm was designed as a “living-learning facility,” a concept that fosters student immersion and community building—an approach increasingly favored in higher education. The building features a variety of amenities, including dining halls, meeting rooms, study spaces, shared kitchens, and laundry facilities, all designed to support the academic and social needs of students.

For the Division 8 portion of the project, McCarthy, Jones & Woodward (MJW), a division of The Cook & Boardman Group, LLC, was tasked with supplying and installing the doors, frames, and hardware. MJW’s expertise would be crucial to bringing the sophisticated design to life, ensuring both aesthetics and functionality were achieved.

The inspiration behind the design was derived from the architectural style of Ivy League universities in the Northeast. This project represents a starting point for the university’s broader initiative to enhance and expand student housing, accommodating the increasing number of students enrolling in recent years.

The design’s complexity and elegance made the project truly stand out. It featured a high level of detail, including four different species of wood veneer used on the doors, along with extensive millwork and stonework around the door openings.

### Custom Millwork and Mahogany Doors

For the custom millwork required for Barnard Hall, MJW collaborated **with Exactitude, a division of The Cook & Boardman Group**. Due to the specific configuration of the door layout, it was necessary to pre-install the wire harnesses in-house before glazing the glass and shipping the doors. Installing the harnesses on-site after the doors were hung would have been impossible, as the team of installers had to navigate them around multiple 90-degree corners to access the locksets. This pre-installation process ensured a smooth installation once the doors arrived on-site.

Exactitude pre-machined the doors to accommodate a variety of hardware, including mortise exit devices, pivot hinges, floor closers, and door contacts. By working closely with MJW, Exactitude ensured the gothic frames were delivered with precise measurements and proper alignment, including confirming the top radius for the gothic arch.

Exactitude provided custom-milled doors for 16 openings across Barnard Hall, each crafted from African mahogany. Many of these doors incorporated the gothic architectural style that is a defining feature of Vanderbilt’s campus. The faculty entrance door was made from FSC-certified mahogany, featuring a gothic-style top, a custom glass lite layout, and a stained finish, highlighting the level of customization involved.

## The Right Frame for the Job

For the frames, Steelcraft manufactured the F-Series three-sided flush frames, which were installed by MJW. These frames are renowned for their durability and long-term functionality in commercial environments. Each frame features die-mitered corner connections at the head and jamb, universal hinge preparations that allow for easy field conversions, adjustable base anchors, and factory-applied rust-inhibiting primer. The construction of the frames, along with the hardware preparations and reinforcements, met ANSI A250.8-2014 standards and satisfied all necessary fire ratings and safety requirements, ensuring both compliance and longevity.

## Securing the Building

Security was a critical component of the project, with the university emphasizing the need for advanced access control systems and surveillance capabilities. Anderson explains, “Vanderbilt was very focused on security and ensuring the safety of their students and staff. They wanted a robust system that included both access control and surveillance cameras.”

As part of the security package, the following systems and components were installed:

- **Von Duprin latch bolt and push pad monitor switches** with quiet electric latch retraction
- **Von Duprin 98/99 Series RX Request to Exit and LX Latchbolt Monitoring**
- **ASSA ABLOY Fail-Secure Mortise Locks** for secure access points
- **Integrated Door Position switches** for enhanced door management.

These systems were designed to meet the university’s high security standards, providing students and staff with peace of mind as they navigated the building.

## Sustainability and LEED Certification

The completed Barnard Hall was awarded LEED Gold certification, recognizing the project’s commitment to sustainability and high-performance building standards. The careful attention to sustainable design elements, energy-efficient systems, and environmentally responsible materials contributed to this prestigious certification. Upon completion, Vanderbilt Chancellor, and Provost Susan Wente expressed her gratitude, saying, “I congratulate everyone whose vision and talents have created this remarkable residential college, which will provide sustainable living and learning spaces for generations of students to come.”



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## A Successful Collaboration

The Barnard Hall renovation project was not just a physical transformation of the campus—it was a testament to the power of collaboration and meticulous planning. MJW, Exactitude, and Steelcraft worked seamlessly together to bring the vision to life, delivering high-quality craftsmanship and solutions that met both aesthetic and functional requirements.

The success of the Barnard Hall renovation sets the stage for future collaborations as Vanderbilt continues to improve and expand its facilities. With its stunning design, cutting-edge security features, and commitment to sustainability, Barnard Hall stands as a modern, forward-thinking student housing facility that will serve the university for years to come.

