GRACE CHAPEL, LENOIR-RHYNE UNIVERSITY

HICKORY, NC



CASE STUDY



PRODUCT:

Architectural Split Face, Shot Blast and Trenwyth High Polish

PROPERTY OWNER: Lenoir-Rhyne University

ARCHITECT: Clark Patterson Lee Design Professionals, Raleigh, NC

MASONRY CONTRACTOR: Master Masonry, Inc., Hickory, NC

MANUFACTURER: Adams, An Oldcastle® APG Company



THE CHALLENGE

One of the distinctive features of the Grace Chapel is its voluminous space—the interior ceiling is 53 feet from the floor to the ceiling's peak. The floor plan is arranged as a cruciform so that when viewed from above the chapel appears to be a cross. Because the chapel plays host to a wide variety of musical presentations both within worship services and as stand-alone events, acoustical performance was a high priority for the design team.

THE SOLUTION

Echelon's three CMU products were a good choice for managing sound. The space is highly reverberant and perfectly suited for choral and orchestral performances. As a result, only a minimal sound system is required.

ECHELON® CONCRETE MASONRY UNITS PLAY A STARRING ROLE IN UNIVERSITY'S SIGNATURE BUILDING

Grace Chapel was built at the heart of the Lenoir-Rhyne University Campus in Hickory, NC, and immediately became a spiritual focal point for visitors to the University. Echelon® was proud to play a part in the construction of such an important structure on this beautiful campus located at the base of Blue Ridge Mountains. The 425-seat chapel serves the needs of weekly religious services as well as music concerts and special events. Additional support spaces include a pastor's office, sacristy and choir rehearsal space.



Designed by Architects Clark Patterson Lee, the chapel establishes a physical presence to the University's origins in the Evangelical Lutheran Church and acts as a religious center for students, faculty and staff. The project was designed with a concrete masonry structure with exposed interior walls. Architecturally, the building hearkens to the older campus Neo-Gothic buildings with its exterior Flemish bond brick pattern, arched openings, cast stone, arched wood beams and stone-like concrete masonry walls. The chapel's tower feature was patterned after the nearby Rhyne building.

Built as part of a \$65-million campaign, the new 10,000-square-foot chapel blends with its campus surroundings thanks to the selection of concrete masonry units (CMU) for both its structural and aesthetic qualities. The CMU walls consist of the Echelon brand's Architectural Split Face, Architectural Polished Face and Architectural Shot Blast units. Split Face masonry units are integrally colored pre-finished architectural concrete blocks with a beautiful, rough-hewn texture on one or more faces. The blocks are molded with two units attached face to face, which are then mechanically split apart after having been cured, leaving the split face with a rough texture, similar to natural stone. The splitting process reveals the aggregates used in the block, so different aggregates will give different appearances and no two units are exactly alike. While the concrete blocks are used for the building structure, they also provide an interior finish, which eliminates the need for other interior finishes. The block's durability greatly reduces the need for maintenance and upkeep. In addition, the block's fire resistant qualities easily meet local building code fire ratings requirements for the walls. All three concrete masonry unit textures used for the chapel were manufactured with the same material mix so that they all feature a consistent brown hue and exposed aggregates, which complements the wood trim used throughout the building. In addition, the three different textures of the Echelon CMUs allowed the designers to create unique wall accents from a single concrete masonry wall system.

Grace Chapel won an "Award of Merit" in the 2015 NCMA/ICPI Concrete Masonry Design Awards of Excellence. The program recognizes architects, designers, and product producers for their outstanding use of concrete masonry and hardscape products. The Design Awards Jury stated, "The use of concrete masonry on the interior with a backup of exterior veneer was an elegant solution. Inside, the concrete masonry details, with their combinations of large and small-scale units, is both inviting and quite handsome."

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