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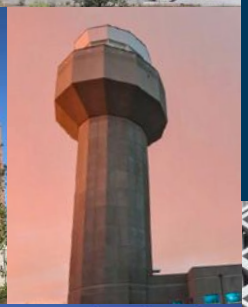
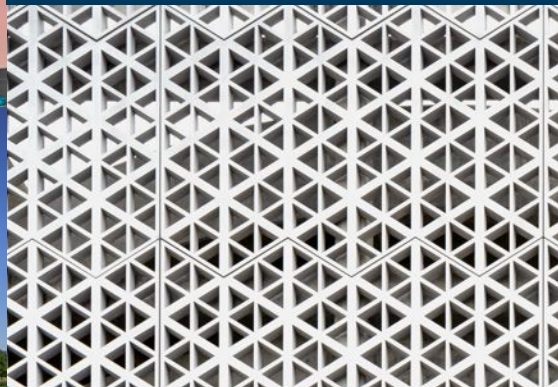
## DESIGNING WITH PRECAST CONCRETE

DIGITAL EDITION

SPRING 2025


# 2025 PCI DESIGN AWARDS





# Government and Public Building

## GENERAL ASSEMBLY BUILDING

RICHMOND, VIRGINIA

### PROJECT TEAM

**Owner:** Commonwealth of Virginia, Richmond, Va.

**PCI-Certified Precast Concrete Producer and Precast Concrete Specialty Engineer:** GATE Precast, Oxford, N.C.

**Architect:** Robert A.M. Stern Architects, New York, N.Y.

**Associate Architect:** Glavé & Holmes, Richmond, Va.

**Engineer of Record:** Silman, Washington, D.C.

**General Contractor:** Gilbane Building Company, Richmond, Va.

**PCI-Certified Erector:** E.E. Marr Erectors, Baltimore, Md.

**Project Size:** 414,000 ft$^2$

Just a decade ago, the offices of Virginia's General Assembly faced significant programmatic and functional challenges. Spread across several buildings, House and Senate members worked in undersized, dimly lit rooms with low ceilings and ill-proportioned legislative hearing rooms with columns that impeded sight lines. Officials eventually deemed these conditions untenable, leading to the decision to design and construct a modern facility that consolidates the offices into a single building. The state's new General Assembly Building occupies a full block site, anchoring the northwest corner of Richmond's Capitol Square. The massive, 414,000 ft$^2$ facility came to life through the design work of Robert A.M. Stern Architects and GATE Precast's production of nearly 1300 precast concrete panels.

### ROOTED IN HISTORY

The new building meets contemporary General Assembly requirements while expertly complementing the character of Richmond's historic Capitol Square district. The 10-story, masonry-clad tower for the offices of house delegates and senators rises above a four-story podium with publicly accessible legislative committee rooms and a variety of supporting amenities. Both the podium's height and architectural expression reinforce the historic cornice height maintained by other civic buildings in the area. Carefully colored, textured, and detailed precast concrete panels emulate limestone across much of the building's exterior. Through meticulously detailed prefabrication techniques, joints—which typically are not visible on limestone façades—were avoided.

According to Preston Gumberich, partner with Robert A.M. Stern Architects, a precast concrete panelized façade system was chosen

**Photos:** *© Francis Dzikowski | OTTO and RAMSA*


for the project principally due to the material's durability, aesthetic flexibility, and economy. The reinforced panels are on the larger, thicker size in part to simulate the depth of shadow and reveal of a coursed, hand-laid limestone block façade.– an approach which pays homage to architecture of the past while simultaneously enabling the General Assembly Building to blend with nearby structures in the Capitol Square District.

"This precast concrete system allowed for significant freedom of design in creating traditionally detailed architectural elements such as cornices and entablatures, fluted pilasters, deep set windows, and ornamental spandrel panels—all of which intentionally recall key elements of the restored 1912 limestone façades of the historic Life Insurance Company of Virginia," Gumberich said. "Precast concrete also allowed for a high level of quality control, including the precise fine-tuning of the concrete mixture's color and, to some degree, its surface texture as well, to match the limestone of that historic façade."

Several innovative accomplishments were realized on the project. To retain the color palette of the historic façade while keeping budget and constructability concerns in mind, the architecture team met with the general contractor Gilbane Building Company on a weekly basis for more than a year. This collaborative approach was key in preserving the design intent of retaining the aesthetics of the original structure and providing the powerful, institutional feel of an established government building. Sustainability was another key consideration for the project team, and, through a variety of efforts and resource efficiency work deployed on the project, the building is on track to receive LEED Gold certification from the U.S. Green Building Council. At the center of the sustainability effort was the use of precast concrete, which helped the team meet its goal to source at least 10% of all construction materials within 500 miles of the project.

Through the dedicated efforts of the entire project team and the use of precast concrete panels, Virginia's new General Assembly Building both recalls the state's past and meets the needs of a 21st-century legislature.

"In part, through the incorporation of a thoughtfully detailed, fabricated, and installed precast concrete façade system, this important new building provides a noble and fitting structure designed to facilitate collaboration, public engagement, and effective government in the Commonwealth of Virginia for generations to come," Gumberich said.

## KEY PROJECT ATTRIBUTES

- Virginia's General Assembly Building is a massive, 414,000 ft$^2$ structure that unifies legislative operations in a single location with modern amenities and a stunning design.
- The new building meets contemporary General Assembly requirements while aesthetically complementing the character of Richmond's historic Capitol Square district.
- Modern spaces and amenities fit for today's legislators have replaced the small, dimly lit offices and legislative hearing rooms of the previous facilities.

## PROJECT AND PRECAST CONCRETE SCOPE

- The façade of the new Virginia General Assembly Building is adorned with 1,294 precast concrete panels encompassing nearly 150,000 ft$^2$.
- Precast concrete delivered an expansive range of advantages to the project, including design freedom, a high level of quality control, durability, and sustainability.