

Morphosis Architects

The Emma and Georgina Bloomberg Center

New York, New York, United States

Project

Cornell Tech contracted Morphosis Architects to design and develop the Emma and Georgina Bloomberg Center, the first building to be constructed at their new technology and entrepreneurship campus on Roosevelt Island in New York. The Bloomberg Center is a four-story, 160,000-square-foot building that will be utilized as Cornell Tech's academic headquarters. To successfully complete the project, Morphosis needed to implement a BIM solution to meet the requirements of all stakeholders and maintain the project schedule. Setting a new standard for sustainable academic buildings in New York, the Bloomberg Center is designed to achieve net-zero energy and a Platinum LEED rating.

Solution

Bentley's BIM applications supported a comprehensive BIM strategy and allowed the project team to explore intricate architecture and coordinate complex building systems through a unified design methodology. Aligning with Cornell Tech's interdisciplinary academic mission, the design merges site planning, building planning, engineering, and architecture into an integrated, performative, and collaborative environment. An energy canopy with a solar panel array maximizes energy performance while providing thermal regulation and reducing load.

Outcome

The comprehensive BIM strategy improved communication and data sharing among consultants and contractors, built trust with stakeholders, and kept construction on schedule. Bentley applications also reduced project costs by facilitating open dialogue among project participants. This level of discussion eliminated miscommunication in pre-construction services and helped resolve building system clashes before installation, minimizing field conflicts and avoiding rework.

Software

Bentley's modeling applications directly supported the success of this highly innovative and pioneering project, as they provided an environment for the development and communication of accurate and interoperable information for all stakeholders. Bentley's AECOsims Building Designer provided project teams with flexible and accurate authoring capabilities for the design, documentation, and construction of innovative and groundbreaking projects. MicroStation allowed the team to link directly to design information on the 3D model and, along with ProjectWise, synchronize the geospatial location of project files, models, and documents. These capabilities made it easier to share information with all team members.