2021 PCI DESIGN AWARDS

RETAIL BUILDING

NORDSTROM NYC FLAGSHIP

NEW YORK, NEW YORK

Being asked to update a certified historic landmark can bring added pressure to any project. But it is also a great opportunity for companies to demonstrate the versatility of their people and their design choices. This was the case for the team in charge of renovating Nordstrom's flagship store in New York City.

Originally built in 1912 by architects Carrère and Hastings, the Beaux-Arts-style building was the architects' first true skyscraper at 20 stories. The building's use of Vermont white marble under an ornate copper cornice was meant to reflect the splendor of the automobile era. But in 1959, the street-level façade was replaced with flat, gray granite slabs and aluminum curtain walls, destroying the iconic aesthetic.

CallisonRTKL was hired to redesign the façade and bring it back to its original glory, but sourcing and replacing that quantity of white marble was prohibitively expensive.

"We needed to balance our fiscal responsibility to the client's budget and construction schedule with our emotional responsibility to this historic landmark," says Bridgette Hyde, lead designer with CallisonRTKL. "The design intent was always to restore as much of the original Beaux Arts details as possible, and the key to doing so was materiality."

So the team partnered with Gate Precast Company to create a custom precast concrete panel that would elicit a modern take on the grand façade, while keeping the project on schedule and budget.

To convince the New York City Landmarks Preservation Commission that it could work, Gate fabricated full-size precast concrete mock-ups of the cornice profiles and base with a partial physical submittal. They also experimented with techniques to produce a marbled effect on the cast stone. The quality of those models helped the project team secure the commission's approval to move forward with precast concrete.

SANDED BY HAND

Due to the building's age, there were no detailed drawings that the team could use to ensure a precise precast concrete fit, which was a challenge. "We could not go off of assumptions nor afford a delay in the field," says Chris Cruze, project manager at Gate Precast.

To achieve the required precision, his team had to expose the steel structure to see what needed to be adapted, then work with the engineering team to create

KEY PROJECT ATTRIBUTES

- **Precast concrete design approved by New York's Historic Landmark Commission to replicate an original white marble façade.**
- **Three-dimensional modeling gave the project teams the detailed view they needed to align connections to the existing steel structure.**
- **The precast concrete producer produced a "marbled" effect on the cast stone to exactly match the existing marble.**

PROJECT AND PRECAST CONCRETE SCOPE

- **Retrofit the lower façade on the historic Nordstrom flagship store in Manhattan using precast concrete to mimic original Vermont white marble.**
- **The project included 85 precast concrete elements.**
- **Erection was completed over three summer months.**

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— Bridgette Hyde, CallisonRTKL

PROJECT TEAM:

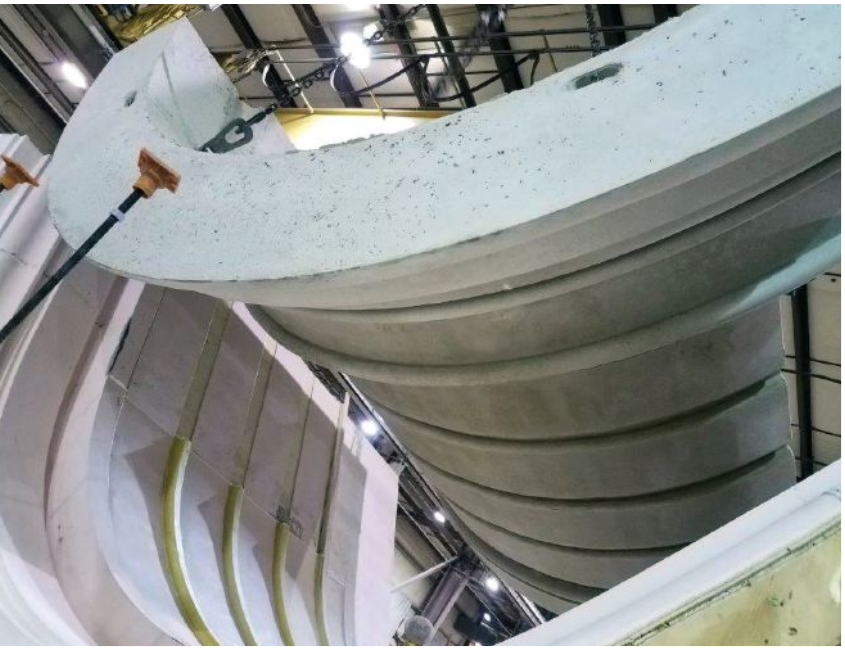
OWNER: Nordstrom, Seattle, Wash.

PCI-CERTIFIED PRECAST CONCRETE PRODUCER AND PRECAST CONCRETE SPECIALTY ENGINEER: Gate Precast Company, Ashland City, Tenn.

ARCHITECT: CallisonRTKL, Seattle, Wash.

ENGINEER OF RECORD: Coffman Engineers, Seattle, Wash.

GENERAL CONTRACTOR: J.T. Magen & Company, New York, N.Y.



Photos: Gate Precast Company.

custom precast concrete connections. "Our drafting team modeled the desired façade and worked on making the precast façade fit with the building by dodging steel, brick, and thinning panels up where needed," he says.

The architects used three-dimensional modeling to give everyone in the team a detailed view to piece together the façade with a paneling method that would connect to the existing steel structure.

Master mold builders used the models to create the intricate details to achieve the desired look. The precast concrete molds consisted of multiple height steps and radii. The form buildup was built to add as much detail as the carpenters could achieve, stacking several layers of wood of various shapes and sizes to within around ⅛ in. Different mold-finishing techniques were used to obtain the desired detail and crispness of the finished product. Then the majority of the sanding was done by hand to accommodate all of the tight steps and radii.

By the time the finished panels were on-site, the erection team had everything they needed to meet the exacting requirements of the historic façade. "The speed at which the façade was constructed is an important part of the project's success," Hyde says.

It's another great example of how the versatility of precast concrete helps project owners address the cost, time, and aesthetic challenges that so many projects face. "The efficiency and resiliency of the precast concrete material allowed for the creation of a façade that brings back the historical past and will last for years in Manhattan's harsh urban environment," says Paul Hjorten, project manager for CallisonRTKL. ●