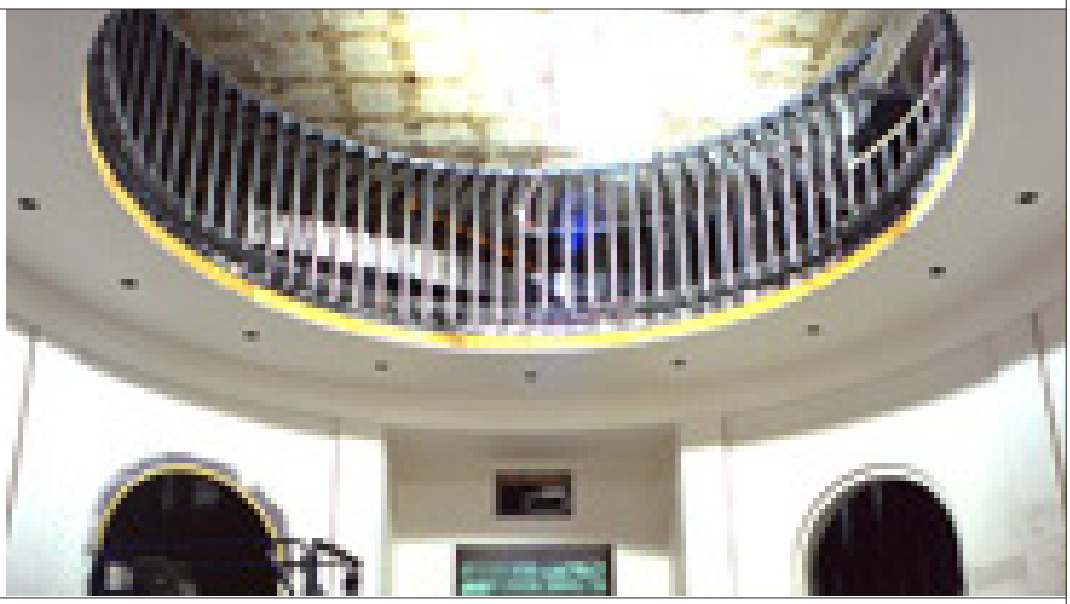
Project Profile

Creating a Plaster Masterpiece at the National Gallery

Application/Building Type:
Museum
Project Name:
National Gallery of Art
Location:
Washington, D.C.
Walls and Ceilings Contractor:
C.J. Coakley
Featured Products:
USG Structo-Gauge® Gauging Plaster
USG Red Top Keenes® Cement
USG Imperial® Brand B Gypsum Base



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A Complex Project

In 2002, the National Gallery of Art (NGA) completed an interior restoration of its West Building, which houses some of the nation's priceless art treasures. Built in the 1930s, the NGA has undergone various plaster renovations. The last one occurred in the '70s when, ironically, C.J. Coakley worked on the space. Today, the NGA has more art to display, more visitors to accommodate and a greater need for sturdy, dependable interior walls.

The NGA made a good choice in awarding general contractor Grunley-Walsh Joint Venture the contract, due to its longtime experience in renovation work in the Washington, D.C., area. Similarly, walls and ceilings contractor C.J. Coakley has probably handled more high-profile projects in the nation's capital than any firm. Company officials say they often win bids not on price, but on their high-end reputation.

The NGA dictated a high-end contractor because the West Building renovation is complex. It consists of GRG niches, coves, window eyelids and cornices, framing for radiused ceilings and interior columns made with United States Gypsum Company's Red Top® Keenes cement. The plaster walls—both new and patchwork—had to be integrated with finish millwork and some wood paneling bought by the gallery from a chateau in France.

Due to NGA's stringent standards, C.J. Coakley worked closely with the gallery to achieve the look it wanted. "There's good quality, there's excellent quality and there's NGA quality," said Doug Roach, C.J. Coakley vice president, speaking of the job's demands.

Over 16-gauge steel studs, crews sandwiched two layers of 1/2-inch gypsum drywall around 5/8-inch plywood. United States Gypsum Company's 1/2-inch Imperial® basecoat plaster was applied on top.

In consultation with the NGA, C.J. Coakley's Roach, Gonzales and project estimator Bill Brown convinced NGA architects to use a veneer plaster system featuring Imperial basecoat and Structo-Gauge® gauging plaster and lime finish. Use of a two-coat veneer plaster enabled C.J. Coakley to significantly upgrade the look and feel of the walls without sacrificing performance. The high-strength basecoat plaster achieves a durable hard surface.

"Most walls probably aren't straight, but on this job they are."

It also combines workability, strength and resistance to surface abrasion compared to standard gauging plaster. Other plaster topcoats leave visible joint lines where workers end their troweling on one day before starting the next.

"Sometimes it's hard to achieve a smooth finish," said Jim Bowman, C.J. Coakley plaster superintendent on the project. "That's why we like the Structo-Gauge plaster and lime. There's a real consistency to it. There's just no grain at all to it. It's almost glasslike when it gets hard."

Zero Tolerance

While making the plastering of 35,000 square feet of walls look easy, C.J. Coakley's crews had to work around obstacles to meet deadlines imposed by the construction schedule.

New environmental control systems, for example, slowed the work of the mechanical, plumbing and electrical trades. So, Gonzales started work on the walls, leaving the ceiling installations for the final stages of the project.

C.J. Coakley deployed several highly skilled framers and plasters. The crew plastered 35,000 square feet of walls in its first phase of work, which was completed in May. The second phase finished in June, and the third phase wrapped up in July.

Gonzales said assigning some of the company's top framers to the NGA project helped ensure that the walls came out straight and plumb. The veneer plaster is only about 3/32 inch thick, so the key to the straight walls came down to good framing.

"Another job might give a quarter of an inch tolerance every 10 feet. The NGA gave us zero tolerance, but that's precisely what we achieved," said Gonzales, who has since retired from the company. "These walls are straight. We built them straight —that's just how we work."

Manufactured by
United States Gypsum Company
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