Atlanta’s Gene Erwin Is Still Making the Rounds, Restoring Ornamental Plaster Around the Country

The oversize pick-up truck turns the corner of Courtland and Mitchell Streets, parallels the state capitol building for half a block and makes an abrupt left turn into a small parking lot immediately adjacent to the building’s back entrance. After exchanging obligatory identification pleasantries with the security detail, the driver temporarily eases the truck into the second of three available parking spots just as a large sedan pulls into the first slot, closest to the door. The main occupant of the sedan, recognizing the truck driver, deliberately stops to exchange greetings, and then advances briskly into the back entrance of the building.

Later in the day during a casual chat with the truck driver, he uses the conversation with the car’s occupant to mark a place in time.

“Wait a minute,” you think. “You’re on a first name basis with the guy?”

The truck driver smiles an impish grin and says, “No, but he knows me as ‘the plaster guy’.”

And that’s when it hits you. Even the governor of Georgia, a man with a professional peer group in the dozens, knows Gene Erwin as “The Plaster Guy.”

A Capitol Problem

Situated almost in the center of the urban sprawl that has become Atlanta, the Georgia State Capitol Building is a

By Michael A. Gardner
green-lawn, flower-tree oasis of classical-design beauty that seems to transport you back to a less hasty era. Built in 1893, clad in Indiana limestone and full of Georgia history the building is properly guarded by two front-entrance cannons and numerous lawn statues of state dignitaries. It is topped by a golden dome that shines with a brownish-yellow luster.

Sensing that almost 100 years of liberal interior renovations had taken their toll on the building, in 1993 the Georgia state legislature created the Commission on the Preservation of the State Capitol to ensure the long-term preservation of the building. The commission hired a local architect, Lord, Aeck & Sargent. Then the commission enlisted the assistance of a Historic American Buildings Survey team. Following that, the commission began using a photographic technique called photogrammetry to create a complete set of computer-generated documents of the existing conditions.

Two years later, the roof fell in. Literally.

**The Sky Is Falling?**

During the 1995 session of the General Assembly, pieces of ceiling plaster began to fall on public corridors. Now quickly cognizant of the urgency of the situation, the legislature rapidly appropriated funding and in 1996 the rebuilding of the building’s interior began.

However, what has taken place has been far from a typical rebuilding process because, according to Susan Turner of Lord, Aeck & Sargent, “from the beginning we’ve treated the build-
ing with an attitude more akin to stewards than traditional renovators. It was agreed early on that simply tearing out existing material and replacing it with new would be a mistake, for in doing so we would lose all evidence of the building’s original construction.”

“We wanted to be able to allow for a historical interpretation into the future,” Turner said. “We are restoring the building with the intention of making our work last for the next 100 years; therefore, at the end of the next century we wanted the next team that works on the structure to have the ability to dig down through our work and find the plaster and paint that the original craftspeople from the late 19th century had installed.”

A noble attitude, but with ceilings falling at your feet, how do you distinguish between the plaster that can safely stay in place for the next 100 years and the plaster that must be removed and replaced? It’s a tough question, especially when much of the plaster is four stories or more high in an atrium and looks fine from ground level.

So what do you do?

You call “The Plaster Guy”

PLASTER GUY TO THE RESCUE

A veteran of 57 European bombing missions, Erwin was putting himself through Ohio’s Kent State University on the GI Bill when he was offered the opportunity to make some side money working for the university’s maintenance department.

“After one day, I heard that the plaster patch crew made about twice the hourly wage of the other crews. Since I had the aptitude to work with plastering tools, I started patching plaster,” Erwin says.

He took quickly to the work and, following graduation, Erwin set aside his degree in business administration and stuck with the trade. An apprenticeship with a “high quality English plastering firm that was heavily into ornamental work” was fol-
In an attempt to improve the acoustics of many of the capitol's meeting areas, much of the original ceiling plaster was covered with acoustical tile, and many of the windows were covered with bulky drapes.

lowed by a stint as a journeyman plasterer and a subsequent 'turn as an apprenticeship instructor. From there, he became executive director of plastering organizations in Ohio and the southeastern United States. He also was technical director for the Contracting Plasterers and Lathers International and for The Association of the Wall and Ceiling Industries—International.

In 1981 Erwin launched a part-time consulting business. In 1986 he left AWCI to pursue the business full time. since then he has examined more than 1,000 buildings in 38 states and 13 foreign countries and seen just about every type of plaster installation imaginable.

Or so he thought until he walked into the capitol of his home state.

**SOMETHING NEW**

“I had never been approached about trying to test plaster to see if it would
be stable enough to remain in place and support new construction,” Erwin says. “I couldn’t find any third-party method to use to determine the strength of the material. So, in essence, we had to create a test method.”

What Erwin created derives from the spray-applied fireproofing industry and bond-strength tests that are commonly performed on installed fireproofing.

“I was fortunate to have been involved in the creation of the fireproofing bond-strength test method during the early 1970s,” Erwin says. “It’s a simple method of testing, and once I thought through what we were trying to test for on this project, the methodology seemed to fit perfectly.”

The fireproofing bond test involves adhering a flat disk (often a mayonnaise jar lid) with a hook in its center, to the underside of the material being tested. Once the disk has firmly adhered, measurable downward pres-
sure is exerted on it, either by pulling on or applying weight to the hook, until the fireproofing pulls from the substrate or the required strength criteria are achieved. Erwin took the logic of the fireproofing bond test method and modified it to work on plaster.

He couldn’t adhere a disk to the surface of the plaster “because it was the basecoat of the lime-sand plaster that we were concerned about, not the surface,” Erwin says. So small holes approximately 1 inch in diameter had to be drilled into the existing material. A wooden plug with a hook substituted for the disk, and Erwin’s experience created the criteria that established whether the substrate was sound.

“We knew we would be working with no testing standards,” Turner says, “so we needed someone who had experience within the industry and could apply that experience to our requirements. Gene’s outstanding reputation
within the industry was key to our approach, and all his methods have a satisfactory logic to them. We knew as soon as we began discussing the project that he would be invaluable to our endeavor. The fact that he lives in the Atlanta area made it even easier.”

Once the testing is complete, the holes in the portion of the plaster that is to remain in place are patched, and the renovation work is allowed to proceed.

In addition, much of the retained plaster material is being treated using a specialized process known as consolidation. This involves drilling small holes into the existing plaster and injecting an acrylic mix into the existing material. The acrylic mix slowly diffuses through the existing plaster, making it stronger and more easily able to support the subsequent construction.

“It’s my first experience with the process,” Erwin says. “It is fascinating to watch. I guess you never stop learning in this business.”

Late in the day, as you sit in his office in the Atlanta suburbs surrounded by neatly placed folders and binders containing a lifetime of work, Erwin begins to talk of how this is going to be the year that he actually “hangs it up and retires for good.” Then the telephone rings.

It’s an official from a southeastern university who is concerned about some cracks that have developed in a plaster project. Gould Mr. Erwin come out next week and take a look at it?

Intrigued, Erwin sets a date. And “The Plaster Guy” makes plans to attack just one more problem.