



RADIATION THERAPY: Aluminum panels separate Polumbo's home (above café) from Con Edison.

The great divide

How heavy metal made a historic home livable

By ADAM BONISLAWSKI

RANDY POLUMBO IS NO STRANGER TO New York City real estate's rugged side. Living on Avenue D in the '80s, he had cockroaches in his apartment so big he used to spray-paint their backs to color-code them. At another dwelling, on Water Street, there was a tree growing in the building's foyer when he moved in.

His current pad, though, was a project even by those standards. Three years ago, Polumbo purchased, from the South Street Seaport Museum, the Jasper Ward House — a 19th-century counting house on Peck Slip next to what was then the Fulton Fish Market. The place was, Polumbo says, "a derelict shell," a nearly 200-year-old building sans plumbing, gas or electricity.

Even more problematic was the Con Edison plant abutting its northern wall. Having ramped up production after 9/11 to compensate for a damaged substation at Ground Zero, the plant was giving off elevated levels of potentially dangerous electromagnetic radiation — much of it flowing right into Polumbo's new home.

So he decided to do what any reasonable person in his situation would — shield his apartment from the radiation by constructing a gigantic metal wall.

Before moving into his new home, Polumbo, a sculptor, general contractor and fledgling restaurateur (his café,



Residents
Shari Elf,
Randy Polumbo
and Weezer.

Dodo, occupies the bottom floor of the building), built a three-story wall of quarter-inch-thick aluminum panels, fastening them together with several thousand steel bolts and coating the seams and battens with what he calls a "super-conductive blue goo."

Needless to say, the result is definitely eye-catching (think "Little House on the Prairie" meets Swiss bank vault). But

thanks to the wall, Polumbo's abode now boasts radiation levels on par with Central Park.

"I've always been a little bit of a mad scientist," Polumbo says. "I've done art projects that involved radio waves, solar power, things like that, so I understood pretty well how all of that worked."

All the same, this was no sure thing. To have professionals install such a shield would have cost upwards of \$80,000 — out of Polumbo's price range. Doing the work himself, though, left him with no guarantee it would be effective. He had a shielding company survey the site before he began, but even though Polumbo and his crew were all skilled carpenters, none had worked on anything like this before.

To further complicate matters, they wouldn't be able to tell if the shield was working until the entire job was done.

"It was one of those things where if you do it halfway, you don't get 50 percent, you get nothing," Polumbo recalls.

And so the plan became not just to build, but to overbuild. Had he been able to afford the high-end computer modeling such jobs typically entail, Polumbo might have gotten by with a lighter design. Instead, he simply threw up as much aluminum as he could afford.

"What I did was advance a couple of tiers further than was absolutely necessary," he says. "I might have been able to do less if I had paid for the modeling, but that would have cost more than the shielding itself."

In the end, overkill worked. A month after they began, the crew tightened the final screws. Polumbo took out his EMF detector and did a sweep of the building. Where radiation levels had once hovered above 70 milligauss (the standard unit of measure for electromagnetic radiation), they were now around two or three — well below the 10 milligauss threshold recommended for residential dwellings and less, in fact, than one typically picks up walking a New York City street.

Still, it wasn't until the end of that summer that Polumbo truly felt confident. Worried the wall might not stand up to the season's high temperatures and the city's elevated power demands, he kept his EMF detector close at hand.

"When I first put up the shielding I checked [for radiation] once a minute," he says. "Then I checked it once an hour. Then I checked it once a week. Once we went through the summer and the demand was up really high, then I felt like I could say, 'OK, that's working.'"

He's since settled into a more comfortable once-a-month sweeping.

"It was a bit of a gamble," he says of the entire process, "but I was pretty sure we were going to be able to make it work."