

CASE STUDY

AVALON AT GREYROCK PLACE – A LOOK BACK AT THE FIRST HIGH-RISE IN NORTHEAST PLUMBED WITH CPVC

Mechanical Plumbing & Heating, Inc.

Hamden, CT

Established: 1993

Labor Savings Estimated at 25 – 35 Percent; FlowGuard Gold® CPVC System Provides Contractors with Competitive Advantage Against Larger Shops

If you're a small- to medium-sized plumbing contractor, there's probably one major concern you face almost daily – how to effectively compete against the larger shops? For Mechanical Plumbing & Heating, Inc., located in Hamden, Connecticut (near Yale in New Haven), the answer came in finding a way to produce more work in less time. And key to improving productivity was converting to FlowGuard Gold® CPVC pipe and fittings.

"We became interested in the CPVC product because we heard about its labor savings," said Frank Barucci, president of the 11-year-old, family-owned business. "I've always been interested in cutting edge products, because I believe what we do can always get better and easier."



Barucci and his 18-man team first put the FlowGuard Gold CPVC system to the test in three bathrooms at their own shop. That was back in 2000 when the benefits of CPVC systems were still somewhat unknown in the Northeast. Barucci was so impressed with the product's ease of installation and reliability that he shortly thereafter attended FlowGuard Gold CPVC University (FGGU) in Cleveland, Ohio, a hands-on training facility designed to familiarize contractors with CPVC installation techniques.

"We liked the product before we went to school, but after hearing more there, we knew it was going to present us with an incredible opportunity," said Barucci.

During his training at FGGU, Barucci learned some things he did not previously know about CPVC. For instance, he was surprised to learn of the product's high heat tolerances – up to 180 degrees. He was also pleasantly surprised with the pipe's insulating value, which meant less condensation and heat loss.

Over the past several years, Barucci has insisted that all of his plumbers attend FGGU to gain valuable hands-on experience and learn the latest installation tips and techniques. In late 2002, Barucci, who exclusively does commercial work primarily for apartments, hotels and assisted living centers, opted to use FlowGuard Gold pipe and fittings for the first time in a high-rise application.

Avalon at Greyrock Place, an 18-story, 306-unit residential high-rise that opened in 2003, became the first documented high-rise in the Northeast to be plumbed with CPVC pipe. Since that time, Barucci has plumbed numerous other commercial buildings with FlowGuard Gold CPVC systems, but back in 2002, it was considered somewhat of a bold move in an industry that is often slow to change products and procedures. Adding to the challenge was the fact that Avalon at Greyrock Place was no ordinary project with rents starting at \$3,000 per month for one-bedroom.

"We chose to use CPVC at Greyrock Place for the same reason we first started using it – it gave us the ability to do a lot of work in little time," said Barucci. "The labor savings and manpower reduction it allows, especially on these bigger jobs, is tremendous. At Greyrock, we had 15 people working. Had we used copper, I would have needed a lot more people to finish in the same amount of time. We were on a tight deadline. With the schedule they allowed us, I would have had to pay additional people to finish the job on time."

Not only was the Greyrock project the first high-rise in the Northeast plumbed with CPVC, but it was also one of the first commercial projects to use CPVC on the heating side. "Few people use CPVC for the heating side, but we had had no problems using FlowGuard Gold pipe for the heat," said Barucci. "We ran the pipe from the heater to the air handler system which heats the individual units."



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Type of Construction:
Residential – High-Rise

Installation Type:
New

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To ensure adequate water pressure all the way to the 18th floor, we additionally used 6" Corzan® CPVC pipe (a companion product to the FlowGuard Gold CPVC System) in the basement/parking garage, with 2" FlowGuard Gold risers. That provided us with water pressure of 80 psi in the basement."

For Barucci, a one-time exclusive copper user and part of a 50+-year family plumbing tradition, this was a major change in the way he does business. "If I had my way, every single foot of pipe we install would be CPVC,"



said Barucci. "Whenever I bid for spec work, I show the alternative and compare the job costs using copper vs. CPVC. If we're doing design/build business, we automatically specify FlowGuard Gold CPVC pipe and fittings. It's so much easier. There's no cleaning or soldering. You just snip and glue. The speed is incredible."

Over time, Barucci has discovered added benefits of using the FlowGuard Gold / Corzan CPVC system, such as improved insulation properties and lighter material weight, which eases maneuverability. And, on-the-job changes or repairs are also completed in record time without need to re-fabricate or return to the shop for adjustments.

The tenants of Greyrock Place will also personally experience the benefits of Barucci's choice. Because of the superior insulating capabilities of CPVC, FlowGuard Gold pipe and fittings have been proven in NSF testing to be four-times quieter than copper with regard to water flow noise. And they virtually eliminate water hammer (the banging sound commonly heard in pipes when a valve shuts quickly). This "quiet" factor is especially important in high-rise situations, where the larger number of "neighbors" can create more water flow noise and banging pipes. These same insulating properties also help reduce condensation around the pipe to minimize the risk of drip-damage to walls and furnishings.

From a value standpoint, Barucci was realizing substantial savings long before copper prices hit current record levels. But with copper prices projected to spiral upward for the foreseeable future, Barucci expects the cost differential to increase significantly between metal and CPVC installations.

"It just doesn't make sense to do a high-rise with copper today," said Barucci. "I can do a bigger job with less manpower at the same speed it would take me to complete it with copper using more people. By finishing jobs in record time, I am in a better position to compete against the larger firms and take on the bigger jobs. This product is absolutely great!"

Since Lubrizol's development of CPVC plumbing systems over 45 years ago, more than four (4) billion feet of CPVC pipe has been installed in homes, condominiums, buildings, apartments and hotels, including OVER twelve (12) million homes. For more information on the FlowGuard Gold® plumbing system, including pipes, valves, joining cement, caulks, sealants and tools, call 1-888-234-2436, X7393, or visit www.flowguardgold.com.

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