

# CASE STUDY

Building Owner Saves 30–40% by Switching from Copper to FlowGuard Gold® CPVC Pipe & Fittings

## Progressive Plumbing

Orlando, FL

Established: 1985

### Progressive Plumbing's Technical and Estimating Skills Put To The Test On Waverly's Unique S-Shaped, High-Rise Design

Few markets have experienced the type of surge in commercial construction that characterizes the greater Orlando area. Everywhere you look – from the hospitality industry to multi-unit residential complexes – business is booming. To successfully ride the tide of commercial prosperity, companies need to know how to anticipate industry demands and demonstrate that they can adapt to changes within the industry without losing their quality or pricing advantage.

Progressive Plumbing, which opened its doors in 1985 and is today one of the largest, independent, locally owned plumbing contractors in Central Florida with 130 employees, is an example of a company that has honed its technical and estimating skills to tackle even the most difficult projects and complete them to satisfaction on time and on budget.

"You can't survive in an industry that moves as fast as this one without staying on the leading edge," notes Bill Lawson, president of Progressive Plumbing. "We pride ourselves on being innovators. We're always looking at new methods, technologies and ways to improve what we do. In fact, we were one of the first plumbing companies in this area to offer fabricating services, which not only provides higher quality, more consistent results, but also allows us to identify problems earlier in the building process."

In addition to fabricating services, Progressive Plumbing has a full CAD department which prompted it to specialize in design-build and design-assist work. It was the company's strong reputation in design, combined with its outstanding portfolio, which includes 35,000 hospitality units, that won it the opportunity to bid on a very unique, multi-unit residential project in downtown Orlando.



Waverly at Lake Eola is noteworthy, not only because of its location in the upscale Thornton Park area and its involvement in the ongoing revitalization of the downtown

area, but also because of its vastly different (not to mention tremendously challenging from an installation standpoint) S-shape that mimics the appearance of an ocean wave.

The 23-story, 263-unit luxury apartment building, which markets units starting at \$1,500 per month and progressing into the thousands, is so distinctive, in fact, that it won the "Engineering Project of the Year" in 2002 from The Central Florida Chapter of ASPE.

"It was probably one of the most challenging projects we've ever done," explains Lawson. "Nothing was perpendicular inside because of its shape. Even the corridors are S-shaped. As a result, we spent a lot of time in the fabrication shop working out problems and overcoming obstacles. But in the end, we hit every single wall!"

Despite the unprecedented challenges, Lawson estimates that, from start to finish, the entire project lasted about 18 months.

In order to keep the project on budget, Progressive relied on a trusted and proven option – FlowGuard Gold® CPVC pipe and fittings, instead of copper.

"Nearly 99% of the time, builders come back saying that a project is not within budget and they start looking for areas where they can cut cost without sacrificing quality," says Lawson. "That's why we offer value engineering upon request. For those projects where copper is originally specified, we often automatically re-estimate our costs using FlowGuard Gold® CPVC. And, depending on the size of the project, those savings are considerable."

In the case of the Waverly, Progressive estimated a savings of 30 – 40% on the installed cost of the domestic water system.

"We have this comparison estimating business down to a science," says Lawson. "We utilize a very detailed costing analysis that breaks down the savings that can be readily realized by the owner."

According to Lawson, much of the savings generated in labor results because the FlowGuard Gold® CPVC system is installed with a convenient, reliable one-step solvent cement joining system which eliminates the need for the more time-consuming soldering method utilized when installing copper pipe. The result is a faster, easier installation.

"Any time you can control labor in the field it's a real benefit, because labor is your biggest variable," Lawson explains. "If we had used copper instead at the Waverly, we would have had to assign more people additional hours in order to make the deadline. Given the tight job market, it's



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**Type of Construction:**  
Residential – High-Rise

**Installation Type:**  
New

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hard to find good qualified construction people all the time. So not only is it more expensive to use more plumbers, but sometimes it's not so easy having the extra people to assign."



Lawson acknowledges the importance of continually finding ways to get advantages over the competition. "Economic costs drive everything in this business," says Lawson. "Yes, there's always the drive for quality and meeting deadlines, but most projects are cost driven. Finding a way to save as much money as we do simply by converting to CPVC is a tremendous value to our ability to stay competitive and continue growing."

However, Lawson is quick to add that his company's preference for FlowGuard Gold® CPVC as a building material is not based on costs alone. "It is simply a better product," says Lawson. "Owners are very sensitive to leaks, especially today with all the concern and lawsuits involving mold. We have experienced a number of problems with pinhole leaks when using copper. We had to completely convert a Marriott Timeshare to CPVC because of corrosion problems. Over at Rollins College Sutton Hall, the copper was all eaten up. You could actually take your fingers and squeeze through the holes. The problem is there is no consistency when it comes to the failures, and no one seems to be able to offer a sound solution. With the FlowGuard Gold® CPVC product, we're able to install with more confidence. It's more reliable even in the tough coastal area where the largest number of copper failures have been noted."

Lawson added that his plumbers and building owners have also experienced a definite sound advantage when installing FlowGuard Gold® pipe. "You just don't have the same problems with water flow noise and even water hammer,"

Lawson notes. (An independent Laboratory test confirms that FlowGuard Gold® CPVC pipe is, in fact, four times quieter than copper pipe.)

Lawson also likes the ease of handling offered by the CPVC product. Because it is lighter in weight than copper, fewer people are needed to move it on the job site. And speaking of the job site, Progressive plumbers have found that you can leave the FlowGuard Gold® pipe and fittings on the site and they're still there in the morning!

"Job site theft of copper is a major issue, especially when you're working in a downtown location similar to the Waverly's", Lawson explains. "We can't always quantify how much is stolen as a result of the scrap yards paying good money for copper, but we know we lose it. One time we were able to calculate that we lost \$15,000 worth of copper pipe within a week's time when we were working over at Universal Studios. And that was at a secure site. But CPVC has no scrap value. So if you leave it somewhere, it stays there. This is a major advantage."

Because of the unique combination of benefits, Progressive Plumbing today installs FlowGuard Gold® CPVC pipe and fittings on more than 70% of its projects. For all of the company's design-build business, FlowGuard Gold® is specified as the material of choice. "Sometimes an engineering firm might initially specify copper because they're not familiar with CPVC. That's when we get into the cost comparisons and have to educate them on all of the benefits of FlowGuard Gold® CPVC," says Lawson.

In summarizing his company's growth and success in using FlowGuard Gold® CPVC pipe as a competitive cost advantage, Lawson explains, "This business is all about service and instilling confidence with the owner or contractor. The FlowGuard Gold® product fits in with what we sell – value. It's a sound product with a quality reputation and a manufacturer that stands behind it. If I were building my own hotel or high-rise, I'd install FlowGuard Gold® CPVC pipe in it, primarily because of its longevity. We just don't get a lot of callbacks when we use FlowGuard Gold® CPVC systems."

Since Lubrizol's development of CPVC plumbing systems over 45 years ago, more than three (3) billion feet of CPVC pipe has been installed in homes, condominiums, buildings, apartments and hotels, including 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](http://www.flowguardgold.com).

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