

# CASE STUDY

## NATIONAL AWARD-WINNING BUILDER SPECIFIES FLOWGUARD GOLD® CPVC PLUMBING SYSTEMS EXCLUSIVELY

### Don Simon Homes

Madison, WI

Established: 1984

### Don Simon Homes Converted from Copper to 100 Percent FlowGuard Gold® CPVC as Part of a Comprehensive Quality and Cost-Savings Initiative

In 1993, Don Simon Homes launched a comprehensive re-engineering program dedicated to incorporating quality principles in every aspect of the company's business, including re-evaluation of its building materials. The results of this initiative earned Wisconsin's largest home builder one of the highest honors for quality achievement in the home building industry – the National Housing Quality Gold Award presented by the National Association of Home Builders Research Center – a first for any builder in the state.



As part of the quality program that helped Don Simon Homes stand out among the country's more than 100,000 home builders, the company reviewed its practices from top to bottom, seeking to improve its customer satisfaction, employee and trade relations. Don Simon Homes conducted a thorough evaluation of the building products available on the market, incorporating some of the industry's most advanced technologies and materials. Included in this overhaul was a 100 percent conversion from copper to FlowGuard Gold® CPVC plumbing systems.

"At the time we began considering FlowGuard Gold® CPVC plumbing systems, we were conducting a continuous review of how we construct our homes," said Jeff Simon, Vice President of Operations. "We took a look at the products we specified to see if there was anything we could use or do differently to make our homes more affordable for our buyers. Converting from copper to FlowGuard Gold® CPVC plumbing systems was one way to do that without sacrificing quality."

What initially attracted Don Simon Homes to the FlowGuard Gold® CPVC plumbing system was the number of benefits the product offered over metallic systems. Primarily, the system will never pit, scale or corrode, which substantially reduces the risk of callbacks, premature failures and costly re-piping. The company also found CPVC plumbing systems to be faster and easier to install for the professional plumber, keeping project schedules on time. Since no torches are needed on the jobsite, installations are safer. Also, the one-step joining system can be pressure tested in as little as ten minutes after assembly.

The decision to consider the CPVC alternative made Don Simon Homes somewhat of a pioneer in Wisconsin, where, until that time, builders primarily specified copper.

"We weren't aware of any custom home builders using the product in the Midwest and were concerned about its performance in the cold," said Simon. "We had heard stories of builders using other plastic products that had failed and were afraid of ending up in the same situation. Once we had the opportunity to speak to other builders throughout the country who have used FlowGuard Gold® CPVC plumbing systems for years and who spoke very highly of the product, we decided to step up to the plate and test it."

Serious about quality, the company's Product Development Team, comprised of departmental managers, company staff and representatives from various trade contractors, meets twice a month to research and study product quality, price, service and dependability. They reviewed the data on FlowGuard Gold® CPVC plumbing systems' performance characteristics and subjected the plumbing system to a comprehensive physical evaluation in a test home.

Convinced by the product's superior performance during testing, the team recommended conversion to FlowGuard Gold® CPVC plumbing systems. Yet, the plumbing contractors that work with Don Simon Homes needed further persuasion.

"Our plumbers told us under no uncertain terms would they ever consider using plastic pipe," said Simon. "Fortunately, the installation of FlowGuard Gold® plumbing systems is taught in a great training facility in Cleveland, OH – FlowGuard Gold® CPVC University. We requested that all of our plumbing foremen go through the program. When they returned they couldn't say enough positive things about the product and the system."



*"We were convinced. We set a kick-off date for complete conversion, and as of March of 1998, 100 percent of the homes we've plumbed have been with FlowGuard Gold® CPVC plumbing systems," said Simon.*

**Type of Construction:**  
Residential –  
Single Family

**Installation Type:**  
New

**FLOWGUARD GOLD®**  
PIPE & FITTINGS

# FLOWGUARD GOLD

With everyone on board, Don Simon Homes conducted its final evaluation before committing to a complete conversion – cost comparison.

"We worked with our plumbers to develop projected cost estimates for using FlowGuard Gold® CPVC plumbing systems versus copper," said Simon. "We found that not only are the materials cost competitive but offer significant savings in total plumbing costs through installation efficiencies alone.

"We were convinced. We set a kick-off date for complete conversion, and as of March of 1998, 100 percent of the homes we've plumbed have been with FlowGuard Gold® CPVC plumbing systems," he added.



While Don Simon Homes and the plumbing contractors were thoroughly convinced of the superiority of the FlowGuard Gold® CPVC plumbing system, the product was still new to the Wisconsin consumer market. So the company expected initial rejection from its buyers, only to be pleasantly surprised at its immediate acceptance.

"We were concerned that people were going to look at the product and think it wasn't durable," said Simon. "We braced ourselves for the worst. We made sure that we had all of the literature available at our disposal and had conducted quite a bit of training with our sales staff, construction managers and customer service staff.

"To our surprise there were no objections to overcome," said Simon. "Since our conversion we've only had one callback, and that was because a T fitting was accidentally cracked when a nail gun shot through the drywall.

As part of the company's quality focus, Don Simon Homes is also committed to environmentally friendly construction through responsible use of energy and resources. The company is so dedicated, in fact, that each home it now builds is certified as a Green Built Home™ by the state of Wisconsin.

"We consider FlowGuard Gold® CPVC plumbing systems to be a green product in that there is a significant reduction in waste compared to copper," said Simon. "It's also more environmentally friendly because you're not digging a mine or stripping the Earth to produce CPVC as you must with copper."

After years of using FlowGuard Gold® CPVC plumbing systems, Simon is pleased to report that not only are his customers satisfied, but one of his most important constituents – his plumbing contractors – salute the company's decision to switch.

"Comparing those same plumbers today to their attitudes a few years ago, you would never guess they were the same people. If we asked our plumbers to return to using copper, they'd say that they would never go back," said Simon. "They have even told me that when they work with other builders who still use copper, they try to convince them to switch, begging, 'Do we have to use copper?' In my opinion that's the best testimonial any product can get."

Since Noveon'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).

*"We worked with our plumbers*

*to develop projected cost*

*estimates for using FlowGuard*

*Gold® CPVC plumbing systems*

*versus copper," said Simon.*

*"We found that not only are*

*the materials cost competitive*

*but offer significant savings in*

*total plumbing costs through*

*installation efficiencies alone."*

## **FLOWGUARD GOLD®** PIPE & FITTINGS

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Noveon shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond Noveon's direct control. THE SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.

FlowGuard Gold® is a trademark of The Lubrizol Corporation

© Copyright 2006 The Lubrizol Corporation

FGG-CS20

### **FlowGuard Gold® CPVC Marketing Department**

9911 Brecksville Road

Cleveland, Ohio 44141-3247 USA

888.234.2436 ext.7393

216.447.5000

216.447.5750 FAX