



Uponor

FIRE PROTECTION SYSTEMS
TOWNHOUSE DEVELOPMENT

CASE STUDY

Local Contractor Chooses Uponor for an Affordable and Reliable Fire Protection System

Every 90 seconds a home fire is reported in the United States. And according to the National Fire Protection Association (NFPA), eight out of 10 fire fatalities occur where Americans feel safest — in their own homes.

With those alarming statistics, residential fire sprinkler systems seem like a logical choice. In reality, only 2% of U.S. homes are currently equipped with the lifesaving devices. However, as communities begin to mandate fire sprinkler systems in new homes, contractors, builders and homeowners are seeking dependable and cost-effective options.

The Uponor fire protection system is one affordable and reliable option that is quickly penetrating the market because of its great advantages over stand-alone systems. And Uponor even offers a certification program ensuring only qualified and trained plumbers install the system.

One of those Uponor-trained plumbers is Rick Jurzyk, owner of Rick's Plumbing Service in Milford, Conn.

"We've been installing Uponor's Wirsbo AQUAPEX® tubing in plumbing systems for nearly 10 years," he says. "The tubing we use for plumbing now also feeds the sprinkler heads in the multi-purpose system."

A multi-purpose system combines the cold-water plumbing and the fire sprinkler system into one — averaging only 1 to 2% of the total cost of building a new home. The traditional method of installing residential sprinklers requires three separate sets of pipe in a home. The first two are for plumbing (hot and cold water), and the third is for the stand-alone fire sprinkler system.

However, multi-purpose systems, like Uponor's, eliminate the need for the third set of pipes because the combined system uses an interconnected grid of tubing to feed both the sprinkler and cold-water plumbing fixtures.

The Uponor system is one of several multi-purpose plumbing and fire sprinkler systems currently available throughout the country. However, this particular system is unique because it's the only non-stagnant system on the market.

This means every time a cold-water fixture is used, fresh water circulates throughout the tubing that feeds to the sprinkler heads and other cold-water plumbing fixtures. The sprinkler head is essentially just another plumbing fixture, similar to a showerhead or kitchen sink faucet.

This system ensures homeowners don't have to worry about the freshness of the water.

Rick's Plumbing began installing the Uponor fire protection system in residential projects in 2001. His first project featured a 28-unit townhouse development. The entire installation took three employees two days to install both the domestic plumbing and fire protection system.

"We chose the Uponor fire protection system because we wanted to offer our customers the ultimate in comfort — peace of mind," Jurzyk says. "This system needs to be in every home across America. We're talking about protecting people's lives, and finally there's a system on the market that makes it happen easily and affordably."

He adds that they did not have to install back-flow protection in every single unit, which saves on installation costs and eliminates the need for periodic maintenance.

"Uponor is a great company with a great product and a great system," says Jurzyk.

Kevin Bartlett, owner of Bartlett Construction Company in Weston, Conn., agrees. Being familiar with Uponor systems — many of his homes

The Uponor fire protection system offers a cost-effective, high-quality system for builders and homeowners alike.

feature Wirsbo AQUAPEX — he's eager and pleased to offer the Uponor fire protection system to his customers.

"I know I made the right decision to install Uponor's fire protection system in the Primrose units," says Bartlett. "We sold out the whole project — and have not experienced any problems."

He adds, "The first thing that comes to mind when I think Uponor is simple — one system, one contractor, no problems. These are all crucial to ensuring a cost-effective, high-quality system for builders and homeowners alike."

Summary of Benefits

Cost Effective

Multi-purpose systems integrate plumbing and fire protection into one system, averaging only 1 to 2% of the total cost of building a new home.

Practical

Uponor's exclusive multi-port fittings are incorporated into the cold-water plumbing system, which provides water to the fixtures.

Low Maintenance

The tubing in the Uponor fire protection system is resistant to freezing, leaks and corrosion.

Proven

The Uponor PEX tubing used in the fire protection system is proven in more than 30 years of use worldwide.

Dependable

The belief that sprinklers experience a high failure rate is not true. In fact, industry statistics indicate that a sprinkler malfunctioning without any reason is 1 in 16 million.

Water Conservation

When needed, a residential fire sprinkler uses only 10 to 15 gallons of water per minute, whereas a single fire department hose uses up to 250 gallons of water per minute.

Guaranteed

The tubing in the Uponor fire protection system is backed by a 25-year limited warranty when installed by an Uponor-trained professional plumber.

Fast Response

Sprinklers activate independently when the surrounding temperature reaches 155°F. One sprinkler can typically extinguish a beginning fire — many times before a fire department has the opportunity to respond.

Aesthetically Pleasing

Blending into the home décor, homeowners can choose either the concealed or unobtrusive, low-profile recessed sprinklers.



The sprinklers in the Uponor fire protection system offer reliable protection and will only activate when the surrounding temperature reaches 155°F.



The multi-port sprinklers in the Uponor fire protection system incorporate the Uponor-exclusive ProPEX® fitting system for a consistent, permanent connection.



The design information in this case study is provided for illustrative purposes only. The actual requirements of similar projects will depend on varying factors. All Uponor fire protection systems are designed using Uponor's custom software application which specifies the proper location for sprinklers as well as necessary flow rates. It is designed to comply with national fire codes and standards and meets the requirements of NFPA 13D. For more information about Uponor's design capabilities, contact your area representative.

Project Data

Structure Size:	1,200 square feet per unit (28 units total)
Construction Type:	Wood-frame townhouse unit
Tubing Type:	½" Wirsbo AQUAPEX to sprinkler heads and plumbing 1" Wirsbo AQUAPEX to manifold
Feet of Tubing:	1,000 feet per unit, plus 200 feet for domestic hot water
Number of Manifolds:	One 10-port manifold in kitchen ceiling
Number of Sprinkler Heads:	12 to 14 per unit
Installation Method:	Homerun
Length of Installation:	Two days with two plumbers and one apprentice to complete 28 units with plumbing and fire protection

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