



1500 Palisades, Fort Lee NJ

Aquatechnik Case Study: 1500 Palisades Avenue

Project Overview

1500 Palisades Avenue is a luxury high-rise condominium in Fort Lee, New Jersey, with 171 upscale units and premium amenities. The building's aging steel piping for fan coil risers led to frequent leaks, escalating repair costs, and increasing insurance claims. Recognizing the need for a durable and efficient solution, the management team opted for Aquatechnik's PEX-AL-PEX piping with the Safety-Pol Rapid Riser system. This advanced system not only ensures long-term reliability and energy efficiency but also simplifies installation, reducing labor time and costs.

Project Details

Location: Fort Lee, NJ

Building Type: 30-story luxury condominium – 171 units

Scope: Replaced corroded steel risers with Aquatechnik piping

Issues: Frequent leaks and high maintenance costs

Project Origin & Key Stakeholders

The building manager spearheaded the project to address persistent pipe failures that had led to repeated service disruptions. A decade earlier, a contractor had proposed polypropylene piping, but it lacked the required pressure ratings for the building. Following further assessment, the management team determined that Aquatechnik's PEX-AL-PEX piping was the best option due to its proven reliability, pressure resistance, and ease of installation.

Solution Implemented

Aquatechnik's PEX-AL-PEX piping with the Safety-Pol Rapid Riser system was chosen for its ease of installation, robust leak prevention and long-term durability. Its flare and O-ring connection system ensures a secure, leak-free fit without requiring complex installation methods, making it a superior alternative to traditional materials. Additionally, the streamlined installation process reduced labor costs and project timelines.

Benefits & Key Results

- Leak Prevention: Eliminated corrosion-related failures and costly repairs.
- Energy Efficiency: Reduced pipe friction improved pumping efficiency by 15-20%.
- Cost Savings: Lower maintenance and insurance claims.
- Performance: Withstands 203°F at 145 PSI, exceeding building needs.
- Significant Material & Labor Savings: PEX-AL-PEX is more affordable than copper and black pipe, and its ease of installation significantly reduces labor costs.

Future Considerations

With the success of the riser replacement, the management team is evaluating the use of polypropylene piping for horizontal distribution in upcoming upgrades. This would further enhance system efficiency while ensuring a consistent, high-performance plumbing infrastructure throughout the building.

Conclusion

This project highlights the effectiveness of Aquatechnik's PEX-AL-PEX piping and Safety-Pol Rapid Riser system in solving complex plumbing challenges in high-rise buildings. By improving system durability, reducing maintenance costs, and enhancing energy efficiency, this solution sets a new standard for long-term infrastructure reliability in residential properties.

