References

# Uponor Annex

**Uponor involvement**

**Project highlights**

- 90,000-square-foot facility
- Uponor AquaPEX plumbing
- Wirsbo hePEX radiant heating
- Uponor snow and ice melting system
- 34,000 gallons of water saved per year
- 84% of construction waste was diverted from landfill to recycling streams

**Products used**

- 11 varieties of Uponor AquaPEX pipe
- 2 varieties of Uponor AquaPEX reclaimed water tubing

## Showcasing manufacturing efficiency with Uponor

See how our commitment to lean manufacturing, energy efficiency, and providing a superior work environment is showcased in our new...

In May 2016, Uponor North America held a ribbon-cutting ceremony to celebrate the company's manufacturing expansion with the community and local leaders, including the Governor of Minn., Mark Dayton. The Annex expansion added an additional 90,000 square feet for Lean manufacturing, office space and additional manufacturing equipment for producing Uponor PEX pipe used in plumbing, radiant heating/cooling and fire safety systems. This brings Uponor North America's total Twin Cities footprint to 656,738 square feet on approximately 50 acres.

**Project Facts:**

| | |
|---|---|
| Location<br>US - Midwest, Minnesota | Completion<br>2016 |
| Vertical markets<br>Manufacturing | Application categories<br>Plumbing, Hydronic Heating & Cooling, Radiant |

## Our commitment to lean manufacturing

“It was important to the company to design a sustainable facility that would provide a superior environment for workers with respect to safety, work environment and amenities,” said Dan Hughes, director of Real Estate, Security and Environmental Health and Safety at Uponor.

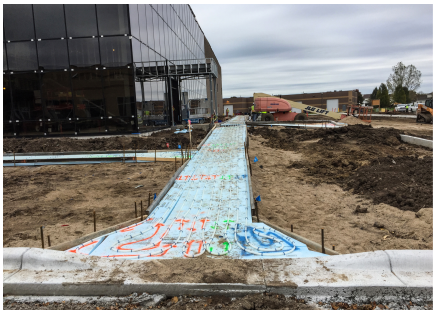
The building uses innovative plumbing technologies with an Uponor AquaPEX plumbing system, including Uponor PEX in sizes up to 3" for rainwater collection to be used in landscape irrigation and toilet-fixture flushing. “In the restrooms, there are waterless urinals, dual-flush, low-flow toilets, low-flow shower heads, automatic sensor-operated faucets, and the use of captured rainwater for toilet flushing,” explained Hughes. It’s estimated that these features reduce potable-water usage by up to 100% when collected rainwater is available, equating to 34,000 gallons of saved city water per year.

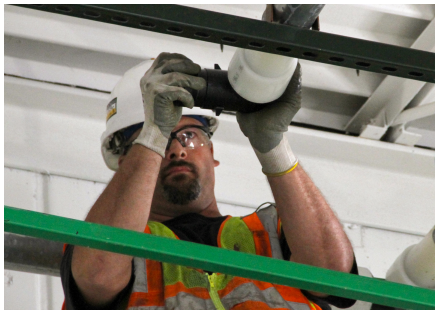
Building a complex facility with Uponor AquaPEX plumbing, Wirsbo hePEX™ radiant heating and Uponor snow melt systems does not come without its challenges. The project team had to creatively utilize and conserve as much of the existing 34,000-square-foot building as possible in order to drastically reduce what went into the landfill. Because of this engineering feat, 84% of potential waste was reused.

Minnesota Mechanical Code requires insulation with a minimum R-value of 5 below all slabs-on-grade with radiant piping. “With the help of Uponor’s design engineers, we were able to provide calculations proving that insulating the perimeter 8 feet with an R-10 provided the same overall thermal transmittance. The city approved our engineered system, saving valuable time and expense placing the concrete slabs-on-grade,” explained Darin Burckhard, project manager and structural engineer of record at TEKTON Engineers, LLC.

“Over the past 20 years I have worked on 12 major building additions and over 100 remodeling projects at Uponor. Without a doubt, working with Uponor on these projects has been one of the best experiences in my engineering career,” said Burckhard. Uponor’s new Annex manufacturing facility was designed and constructed to the U.S. Green Building Council LEED® criteria. Within that program, the company is currently pursuing LEED-Silver Certification.

### Uponor Annex





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Uponor North America

Uponor North America
5925 148th Street West
Apple Valley, MN 55124

General: 800.321.4739
Fax: 952.891.2008

W www.uponor.com