



VISION House® Los Angeles

Manufacturer: Uponor

Product: AquaPEX Plumbing, D'MAND Hot Water Delivery and Radiant Floor Systems

Category: Plumbing and Heating

Website: www.uponor-usa.com



Uponor has been creating comfortable homes with energy-efficient radiant floor heating systems, clean plumbing systems, and dependable fire sprinkler systems for more than 35 years. The VISION HOUSE LA team decided to use a spectrum of the company's products to provide heating and hot water for the house to lower its impact on the environment.

To provide efficient plumbing, the team opted for a "Logic Plumbing" layout, which uses 83% fewer fittings than a trunk and branch system, 58% less tubing than a homerun system, and saves roughly 40 gallons of water a day. In addition, the team spec'd Uponor's radiant floor system so that the homeowner could set different temperatures in zones throughout the house.

Featured products in VISION House Los Angeles include:

Uponor Radiant Floor Heating. The water in a hydronic radiant floor system has the capacity to transport energy 3,500 times greater than air, so it can heat (and even cool) using less energy than a forced-air system. This amounts to greater comfort at a lower thermostat setting, which provides reduced energy use and lower energy bills. In fact, more people are comfortable with radiant floor heating at a lower thermostat setting than with forced-air heating at a higher thermostat setting. In addition, a radiant heating system works in zones, allowing different areas of a home to heat at different temperatures. This allows typically chilly rooms, such as bathrooms, basements, and entryways, to receive more heat when needed. At the same time, rooms with less traffic, such as a den or formal dining room, can be set to a lower thermostat setting, making the system even more energy-efficient.

D'MAND® Hot Water Delivery System. The D'MAND system uses a pump, which is user-activated by a button or motion sensor, located near the plumbing fixture, such as the kitchen sink, bathroom sink, or shower. Once the pump activates, hot water reaches the fixture in seconds. A temperature sensor detects when hot water arrives at the fixture and automatically turns off the pump, eliminating wasted energy. By incorporating a D'MAND system in an Uponor Logic Plumbing layout, users can save about 40 gallons of water a day in a typical home.

Uponor AquaPEX® Plumbing System. An Uponor AquaPEX® Plumbing System uses a clean, flexible, durable plastic tubing product called PEX, or crosslinked polyethylene. Plastic building products (such as PEX) are truly sustainable, not only from a durability and efficacy standpoint, but they also have relatively low total-energy content over their lifetime when compared to traditional metal-based alternatives. Because of its durability, PEX can resist corrosion, pitting, scaling and freeze damage that can affect metal plumbing products, giving it a longer lifespan.

Inclusion of Uponor products helped the showhouse achieve these certification and verification goals: LEED Certification, California Energy Star Certification and California Advanced Homes Program (CAHP), Cal-Green (Tier 2). The house will surpass the minimum Title 24 requirements by 30%.



The VISION House LA team spec'd Uponor's AquaPEX Plumbing, D'MAND Hot Water Delivery, and Radiant Floor Systems for efficiency and comfort. AquaPEX plumbing includes easy-to-install cross-linked polyethylene tubing to supply water. The system resists corrosion, pitting, scaling, and freeze damage. D'MAND Hot Water Delivery uses a pump activated by a button or motion sensor to deliver hot water in seconds. The system saves about 40 gallons of water daily in a typical home. The company's Radiant Floor system also reduces home heating costs.