## **Universal Design Living Laboratory**

Location COLUMBUS, OH Project Type Floor Heating

Room Type

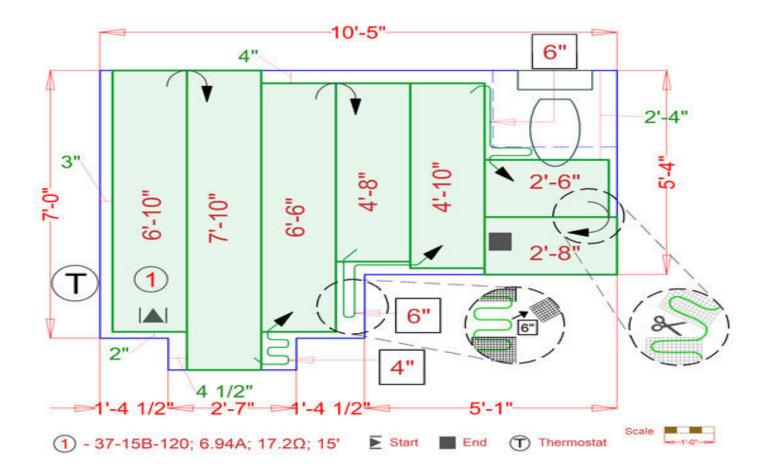
Square Feet

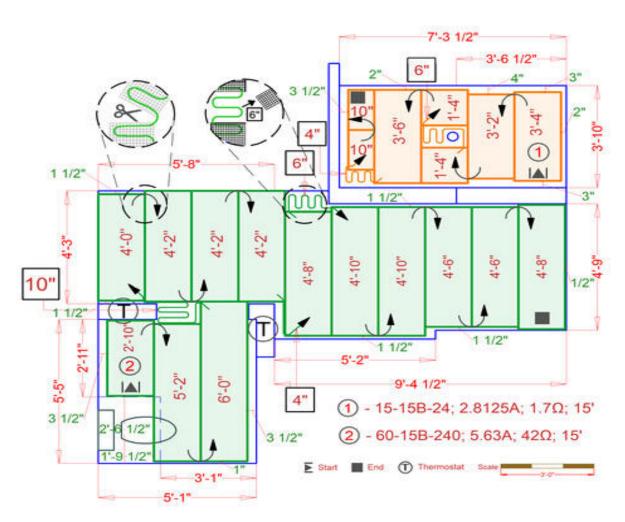
Model

TempZone™ Flex Rolls









## **Project Information**

Simplify life; that is the intent of Universal Design. The goal is to make products and an environment functional for all people through the process of embedding choice for all people in all things designed.

As life expectancy and modern medicine advances for people living with disabilities, the demand for universally designed materials is rising which is enabling the need for more accessible products.

The mental and physical difficulties that come with having a disability can make standard living spaces a challenge. With high cabinets, narrow doorways, and small rooms, it is no simple task to maneuver around a standard home in a wheelchair, with ease. For accessibility, products have to be constructed to be flexible enough for direct use and compatible with assistive technologies.

Recently, WarmlyYours had the unique opportunity of providing radiant floor heating for a Universal Design project with Dr. Rosemarie Rossetti and husband, Mark Leder. Dr. Rossetti, herself, with physical disabilities, and her husband constructed a Universal Design Living Laboratory (UDLL) home so they can live in a place that is accessible and comfortable.

The UDLL incorporates universal design accessibility and advanced automation technology with feng shui design principles.

"A home is not truly sustainable until it is accessible," said Dr. Rossetti about the UDLL project and purpose.

And in following these wise words, WarmlyYours donated their product to provide sustainable and accessible heat, in order to give Dr. Rossetti and Mr. Leder better heat regulation and comfort in their home. WarmlyYours installed TempZone electric radiant floor heating inside their home and provided towel warmers for their bathrooms.

"Radiant heating is a good fit for this home, especially when compared to traditional forced air heating. Radiant heat emits warmth that aids those with mobility challenges, so that they don't need to position themselves in relation to the heat source, the heat comes to you," said WarmlyYours President/Owner Julia Billen. "I count a great reward to be a part of this project!"

Specifically, the main difference between radiant heating and conventional forced-air systems is that conventional systems put warm air in the room without actually heating the objects. Conversely, radiant heat warms all the objects and people in the room using the same principle as the sun, with radiating warmth absorption. The UDLL home has an expected completion date by the end of January, allowing the Rossetti-Leder family to move in by February 2012. The landscaping will be completed in the spring, followed by a month of tours to the national media and public.

## ART: Adaptive Radiant Technology

Based on the principle of the warm heat from the sun, radiant heat is a sustainable, adaptive, and healthy heat that is absorbed and is not prone to heat loss or overheating. A Harvard University Study confirmed that physical warmth, caused by radiant heating, directly affects and improves emotional well being, while influencing positive behavior.

Not only does radiant heating improve emotional health, but it also increases energy efficiency. With the use of radiant heat as a primary heating source, temperature levels can be maintained, on an average of 5.6% lower than any other form of heating. That means, for every degree you lower your thermostat, you can save 5% off