GEOTHERMAL INSTALLATION

# Spotlight

GeoComfort Geothermal Systems
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## Purdue University ReNEWW House

*West Lafayette, Indiana*

The home – called the ReNEWW House for Retrofitted Net-zero Energy, Water and Waste – is a multi-year research project in which Whirlpool Corporation is working with GeoComfort, Purdue University and other industry partners to retrofit a 1920s vintage home into a net-zero energy, water and zero-waste-to-landfill structure. The home was built in 1928 and has about 3,000 sq. ft. of conditioned space, three bedrooms and two full bathrooms. It is two stories tall and has a full basement - which has been converted into a living laboratory. More information on the project can be found at www.renewwhouse.com.

## Project Details

| | |
|---|---|
| **Building Size:** | 3,000 sq. ft. |
| **Geothermal Equipment:** | 4-ton Compass Series Water-to-Water system |
| **Loop Type:** | Vertical bore |
| **Installation Date:** | September 2014 |
| **Installation Details:** | The hydronic geothermal system was paired with a hydronic air handler to create a forced air system that uses the existing ductwork to preserve the home's historical appearance. 3 Multiaqua fan coils provide air conditioning and a Honeywell ERV system delivers fresh air. An HSS buffer tank serves the heating and cooling systems. The house is divided into 2 temperature zones controlled by NEST thermostats. |
| **Other Features:** | Roof-mounted solar panels, a "gray" water system that reuses water from sinks and showers, and other technologies which promote resource efficiency. |
| **Geothermal Contractor:** | **My Guys Heating & Air, Inc.**, Lafayette, IN • (765) 714-4686 |

CONSTRUCTION TYPE
**Existing Home**

SYSTEM TYPE
**Forced Air System**

LOOP TYPE
**Vertical Loop**

 

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Exterior view of the home

Left: Exterior view of the side/back of the home.

Right: View of the geothermal equipment installation in the basement.

Left: Interior view of the home during the ribbon-cutting reception.

Right: Interior view of the kitchen.

 