The Waukazoo Woods Residence

Constructed for an environmentally conscious family moving from Switzerland to the United States, the Waukazoo Woods residence took high performance building in our area to a whole new level. Accustomed to old European buildings that were built to last, these homeowners expected nothing less in their new Michigan home.

They began with selecting a previously developed Lake Macatawa site in beautiful, natural Waukazoo Woods. From there, a plan was developed to implement a closed lake loop geothermal heating and cooling system. This included geothermal hot water and a full radiant heat system and zoning to control and condition the air only in those areas of the home in use at any given time. This was an important feature as the

homeowners looked forward to hosting many guests at once.

LEED™ Facts

LEED for Homes (Pilot Program)
Certification Awarded: December, 2007

Silver	80 *
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Innovation in Design	5/9
Location & Linkages	5/10
Sustainable Sites	13/21
Water Efficiency	7/15
Energy & Atmosphere	24.5/38
Materials & Resources	7.5/14
Indoor Environmental Quality	16/20
Awareness & Education	2/3

*Out of 130 possible points.

Based on the home size adjustment factor, the point total thresholds for certification for this home were:

Certified: 59.0 Gold: 89.0 Silver: 74.0 Platinum: 104.0

Also important was the durability factor, so slate and tile were selected to cover the entire first floor. A six inch concrete basement floor was also installed, as well as 2x6 exterior high performance walls.

The homeowners were also interested in sustainable and environmentally conscious building simply because they felt it was the right thing to do. So, highly efficient faucets, toilets and appliances were utilized, in addition to a central vacuum system, special lighting including many CFL fixtures and bulbs, automatic exterior lights on an astronomical clock which adjusts for the length of daylight, and an energy recovery ventilator to control fresh air exchange in the house.

The end result is a welcoming home that has little impact on the environment and that will withstand the test of time; one that should set a new standard for residential building mentality this side of the Atlantic Ocean.





Key LEED Feature



Energy & AtmosphereGeothermal system with heat pump.



