



# Deltec Homes

Lakeside Round House | Atlantic Mine, MI | DeltecHomes.com



Photos courtesy of Deltec Homes

“Deltec’s round homes are precision engineered to resist hurricane force winds... we believe that resilience is really a fundamental part of sustainability.” *Deltec Homes*



## PROJECT DATA

- **Layout:** 3 bdrm, 2 bath, 1 fl + bsmt, 2,626 ft<sup>2</sup>
- **Climate:** IECC 7, very cold
- **Completed:** December 2023
- **Category:** Custom

### MODELED PERFORMANCE DATA

- **ERI:** without PV 36
- **Annual Energy Costs:** without PV \$1,200
- **Annual Energy Cost Savings:** (versus typical new homes) without PV \$2,900
- **Annual Energy Savings:** without PV 24,120 kWh
- **Savings in the First 30 Years:** without PV \$120,150

## KEY FEATURES

- **Walls:** Double wall, panelized walls, R-49 total. Two 2x4 walls on 2x10 top and bottom plates: inner wall 16" o.c., 3.5" dense-pack cellulose; outer wall 24" o.c. with 3.5" closed-cell spray foam; 2.5" dense-pack cellulose between walls. 5/8" OSB sheathing, draining housewrap, composite wood siding.
- **Roof:** Gable and round hip truss roof: scissor trusses; 5/8" plywood sheathing, synthetic roof underlayment, 12" raised heel; asphalt shingles.
- **Attic:** Unvented, 9" R-60 closed-cell spray foam under roof deck, 12" raised-heel trusses.
- **Foundation:** Insulated daylight basement: 14" ICFs, waterproof membrane, metal flashing, OSB, house wrap, fiber cement siding. 5" R-25 XPS under slab.
- **Windows:** Triple-pane windows, U=0.20, SHGC=0.27, low-e, argon-fill. Cellular shades, motorized blinds.
- **Air Sealing:** 0.96 ACH50; factory-built panels with gaskets at sheathing edges.
- **Ventilation:** ERV, separate ducting, supplies to living room, basement, bedrooms, returns from baths. 24/7 plus boost switches. Air quality monitors for radon, CO, CO<sub>2</sub>, PM<sub>2.5</sub>.
- **HVAC:** Air-to-water heat pump, 10.9 HSPF, 18 SEER, radiant floors, ductless fan coils.
- **Hot Water:** Heat pump water heater, 60-gal, 3.88 UEF. Core plumbing design.
- **Lighting and Appliances:** ENERGY STAR appliances.
- **Solar:** None
- **Energy Management System:** Smart electrical panel allows circuit-level monitoring.
- **Other:** Electric vehicle charger. Hurricane-resistant assembly. Kit homes.

## CONTACT

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