

Backfill

Insulated Swimming Pool, Anyone?

by Dave Holbrook

When builder Todd LaBarge wanted to install a vinyl-lined swimming pool at his home, he looked no further than the stack of ICF forms left over from the construction of his house and workshop foundations. In fact, one of his ReddiForm (www.reddiform.com) representatives had shown him photos of a pool already successfully completed using ICF walls. The system creates a wafflelike concrete grid within the 9⁵/₈-inch-wide, 48-inch-long forms, and is reinforced with a regular schedule of rebar, much like standard concrete pool wall construction.

The interior dimensions of LaBarge's rectangular pool conform to the automated pool cover he installed. Pilasters inserted every third of the way along

the length help to brace the walls and make up for the dimension lost to forming the pool's ends. LaBarge formed the walls on a 2-foot-wide footing, flush with the footing's interior edge.

The pool's 4-inch-thick fiber-mesh-reinforced slab was poured over an Insul-Tarp (www.insulation-solutions.com) membrane to help conserve water heat. The slab was poured in two flat sections, one at the 6-foot-deep end and one at the 4-foot-deep end; the two sections were then connected with a hand-formed "hopper" — the sloping panel between the two levels — using a vermiculite concrete bag mix. At this point, the sloped sides of the deep end were formed as well.

Along with the forms' inherent insulating qualities, LaBarge reasons, the 2 inches of foam in front of the concrete protect the pool's vinyl liner from any cracks that may develop. And on a sunny day with the cover closed, the pool's temperature has actually climbed a couple of degrees higher than the heater setting.

LaBarge is now bidding an ICF pool for a client — this time with radiant tubing embedded in the slab and circulating antifreeze, which should eliminate any need to drain the pool in the winter.



ICFs form the pool's walls and provide a resilient layer beneath the vinyl liner.



The poured concrete steps are cushioned with a thin foam underlayment typically used beneath floating floor systems.



LaBarge calls his ICF pool a "hybrid" — somewhere between using a preformed plastic liner and custom gunite construction. A bluestone cap conceals the aluminum coping and pool-cover track.