



REIMAGINING K-12 CONSTRUCTION AT \$217 PER SQUARE FOOT

Design West is not slowing down. ICF proves they're just getting started.



Western Colorado University Student Housing. Photo by Western Colorado University.

Maintaining your competitive edge year to year is imperative for any architectural firm. Imagine maintaining it not just for a decade or two but for more than a dozen (128 years to be exact).

Welcome to the 29 women and men of Design West, a Logan, Utah-based architecture firm that has been operating since 1892. There are many ways to explain the firm's long-running success, but one that stands out is its eagerness to think critically and creatively on the client's behalf.

Take its flourishing K-12 education business: The firm now has four major school construction projects in mid- or late-stage development. Each project shares an unexpected feature: insulated concrete forms. ICFs are a cast-in-place concrete wall system formed by lightweight insulating foam blocks. It's not a common construction method for Utah schools, but the idea is rapidly gaining traction with value-minded school boards.

THERMAL ADVANTAGE

"I use a visual metaphor to describe ICFs," says Design West principal Stephen Williams, AIA. "I say, 'Your Styrofoam coffee cup is an ICF—it's an insulating thermal mass. Pour a cup in the morning, cover it, and at four o'clock that afternoon it will still be piping hot.' The cup is a thermal reservoir."

The firm's first foray with ICFs was seven years ago with a student housing complex in Gunnison, Colo.—one of the coldest winter locations in the continental U.S. Extreme temperatures suit ICFs perfectly.

\$217/SQUARE FOOT

Interestingly, it's often other qualities that prove decisive at bid time.

Williams names a few:

- **Affordability.** At a time when the cost of many new buildings is topping \$300, \$350, even \$400 plus per square foot, ICFs are a school board's dream. "Some schools in our state are going for more than \$300 a square foot. That's outrageous. Our project for Roy Junior High School [in Roy, Utah] had a \$39.5 million budget for 182,316 square feet. That works out to about \$217 per square foot with ICFs," Williams says.
- **One and Done.** The unique sandwiched form with rebar provides a multitude of pluses in one fell swoop: weather barrier; vapor barrier; plastic studs eight inches on center; and, importantly, insulation. Plus, neither furring on the inside or outside walls nor expansion joints are required.
- **Creative Freedom.** "Any structure that's built from the ground up is a candidate for ICFs. In situations that call for grand architectural features, we go with hybrid solutions, using ICFs for classroom wings and steel framing and glass for central hubs," Williams says.
- **Delivery Speed.** "The general contractor on the Roy Junior High project boldly said they could deliver the project a year early," Williams says. "We had some hiccups, like bad weather last fall. But it will be delivered this fall—a year ahead of schedule."

Maybe the great lesson of 128 years is never to look back, and to continuously differentiate with design advancements like using ICFs.

To learn more about using concrete in your next project, visit BuildWithStrength.com.