

Features & Benefits of ICF Construction

Residential and Commercial Applications

Features & Benefits

Once a structure is built with ICF there is no comparison to typical frame or block construction. The ICF industry falls into a trap of comparing the benefits and features to typical frame construction, there are no true comparisons between the two. Both ICF and traditional methods of construction perform the same requirements for most structures, but ICF performance criteria are significantly greater than traditional methods.

ICF's have one limitation vs. concrete block construction... It requires the application of a durable finish material whereas concrete block can be painted or left bare.

The cost of ICF vs. more traditional methods of construction is typically more for the actual construction, but the cost of ownership of an ICF structure is significantly less than the more traditional methods. In nearly every documented case of the cost of an ICF structure, the return on investment (ROI) for the extra construction cost is within 5 years with many showing less than 3 years. Depending how costs are viewed, ICF may cost a little more or significantly less to build and operate.

How Does ICF Compare to Standard Construction?

Energy Related

- High performance R-values
- No air infiltration
- Permanent performance no downgrading over time
- Shifts thermal loading from peak periods
- Lower cost to heat and cool

Health Related

- No air infiltration means no dust or allergens
- No cavity walls for mold, mildew, bugs or rodents
- Non-toxic materials
- No off-gassing of materials

Structural Related

- High wind resistant
- Fire rated assembly
- Strength is permanent
- Will not rot or decay
- Resistant to termites (the concrete)
- Impact resistant
- No maintenance requirements

Comfort Related

- High sound attenuating
- Enhances steady temperatures
- Peace of mind during inclement weather events
- Low maintenance structure
- May attribute to lower insurance costs

Constructability Related

- Design versatility
- Energy efficient
- Structurally capable
- Fire rated
- Sound deadening
- Quick (depending on installer)
- Conducive to Exterior Insulation Finish Systems (EIFS)
- Permanence
- Fully code accepted cast-in-place concrete walls
- Time tested and proven

ICF construction offers features and benefits for every type of structure.