

# ICF panelized construction - extremely fast and cost effective

*Steve Bluestone, Partner, HelixRebar LLC*

## ABSTRACT

Multifamily development requires adherence to strict building/fire codes. For decades, concrete blocks (CMU's) have been a favored structural system. While simple to work with, they present drawbacks when attempting to create high-performance buildings. Extra steps are required to deal with air/water/vapor control, thermal/sound insulation, and furring/framing.

An alternative to CMU's are insulated concrete forms (ICFs). ICF forms are stacked one at a time on-site. Heavy rebars are placed, walls braced, and concrete is then poured into the forms. The end result is a high performance envelope wall that provides for significantly lower heating/cooling loads while also dealing with most of the air, water, vapor, thermal barriers and furring/framing. All of this via a single trade at competitive costs. Lowered resulting heating/cooling loads allow for downsizing of mechanical equipment and utility services, which can allow for use energy recovery ventilation and extensive air sealing protocols that otherwise may not have been affordable. As with CMUs, ICF installation up until now required most of the work to be performed on site at elevated heights in all types of weather.

Veteran ICF builders Mike Cleary and Steve Bluestone will introduce a new ICF panelized system using a new code approved reinforcing product that results in shorter construction schedules, safer jobsites, less waste, and a lighter building. The net end results are significant cost reductions across the board. The session will also briefly cover the use of autoclaved aerated concrete (AAC) panels and blocks for the construction of high performance buildings.

## BIOGRAPHY

**Steve Bluestone**, a Builder/Developer/Property Manager of mixed use residential buildings throughout the NYC metropolitan area has been a leader in the field of producing high performance structures for decades.

**Mike Cleary**, a Builder/Developer/Property Manager of hotels in the northeast who is well known for thinking outside of the box, has been working with ICF's for decades.