The 8.8 acre site of this elementary school reconstruction consisted of 21 buildings built between 1940 and 1985, including 14 modular classrooms. Located in the town’s historic overlay district—including a Daughters of the American Revolution (DAR) memorial, a Work Progress Administration (WPA) gymnasium, and a Revolutionary War battlefield—the Guilford County School District wanted to preserve existing historical buildings while creating a more secure environment that would allow for future expansion. A variety of concrete products were used to enhance sustainability, efficiency, fire safety, and allow for a fast-paced construction schedule.

01. High-performing ICF envelope.
The multi-story classroom building was constructed using ICFs. Walls were formed with snap-together hollow insulating foam cubes—then concrete was pumped into the 8-inch-thick center to create the solid wall.

02. Historical wood clapboard look-alike.
Although the classroom building’s outside walls look like the wood siding on the historical gymnasium, the planks are actually made of concrete, and are impervious to water and insects, with a 50-plus year lifespan.

03. Sustainability initiatives.
The building’s designers wanted a “green” environment for the school, using post-industrial fly ash in the precast concrete floor planks and foundations, plus an underground cistern to collect roof water for fire protection and irrigation.