

Project Spotlight

Columbus North District Police Station, Columbus, GA

Owner: Columbus Consolidated Government
Installer: Southeastern Roof Decks (SERD)

Designer: Edifice Consulting, Inc.
General Contractor: Rycars



Background Information

While lightweight concrete has a reputation for high performance in many engineering applications, it has also proven to be equally effective in many roof deck applications. Lightweight insulating concrete (LWIC) is particularly useful in insulated roof decks, as was shown recently at a re-roofing project at the Columbus North District Police Station in Columbus, Georgia.



Project Details



This re-roofing project required the use of many components during installation, including LWIC, expanded polystyrene (EPS) board insulation, and a single-ply roofing membrane. For this particular project, LWIC provided additional thermal efficiency, compressive strength, and resistance to structural damage that can be caused by high wind events.

On this 7,000-square-foot rooftop, the first step was to install Aerix Industries' MEARLCRETE™ LWIC on top of the temporary roof membrane. The installation team from South Eastern Roof Deck (SERD) from Fayetteville, GA poured the MEARLCRETE LWIC at 40-48 pcf with a quarter-inch-per-foot slope across the rooftop. After placing MEARLCRETE with EPS, the roofing contractor fully adhered a single-ply membrane. The MEARLCRETE application was tested with nail-pull tests and passed, exhibiting no ponding water.

Aerix Added Value

Aerix's MEARLCRETE LWIC not only provided the thermal efficiency and minimum 250-psi compressive strength needed for this rooftop but also catalyzed the installation process. Because of its enhanced structural stability and flexibility, MEARLCRETE LWIC can be mixed efficiently and pumped for significant distances, while maintaining consistent density control. Additionally, MEARLCRETE is UL listed and FM approved, Assuring its' wind uplift performance and resistance to damage caused by smoke and flame. With Aerix's MEARLCRETE, this new rooftop will be able to provide long-term performance under nature's toughest weather conditions.

