

Mecklenburg County District Attorney's Office

A hybrid roof solution customized for
a historic landmark

 NORTH CAROLINA

Project at a Glance:

Category: Roofing Solutions

Completed: 2025

Type: Government & Historic Preservation

Project Team:

Ownership: Mecklenburg County

Engineer: REI Engineers, Inc.

Contractor/Installer: Interstate Roofing Co.

Roofing Manufacturer: Siplast

The Challenge:

Built in 1928 as the Mecklenburg County Courthouse, this historic building now serves as the Mecklenburg County District Attorney's Office and remains one of Charlotte's most recognizable civic landmarks. Designed in Neoclassical style by architect Louis H. Asbury, the property was added to the National Register of Historic Places in 1979 and designated a local historic landmark in 1983.

The roof consisted of multiple systems—lightweight insulating concrete (LWIC), metal decking, and structural concrete—each varying in age, condition, and materials used for prior renovations. When leaks began appearing across several roof sections, the Mecklenburg County Asset and Facility Management Department sought a solution that could preserve the structure's integrity. As the building was to maintain its daily operations throughout construction, careful coordination, noise management, odor mitigation, and safety protocols were also essential.

The Solution:

REI Engineers, a building enclosure consulting firm specializing in roof system design, restoration, and forensic evaluation, designed the roof replacement. Interstate Roofing Co., a prominent commercial roofing contractor based in Charlotte, was awarded the contract and elected to utilize Siplast materials.

Siplast Products Used:

- Paratech Glass Base TG
- Parasolo TPX Fleeceback
- Parapro Flashing
- Pro Fleece
- Parasolo TPX Quick Spray Adhesive LV50

• Hybrid system accommodates various substrates

Siplast provided a roof system in accordance with REI Engineers' design: a hybrid system combining Siplast Paratech Glass Base TG, a torch-applied SBS-modified bitumen base ply, with 80-mil Parasolo® TPX™ Fleeceback, a high-performance TPO membrane. This system provided strong durability while conforming with the varied substrates.

• Seamless transitions, reinforced

To help ensure a durable and visually consistent transition at flashing areas, the Parasolo® TPX™ membrane was inverted, welding the white cap to the field membrane to expose the fleece. A base coat of Siplast Parapro® Flashing was applied to the fleece, into which Siplast Pro Fleece reinforcement was embedded. A final top coat completed the detail, providing a clean, reinforced, and cohesive finish.

• Odor controlled for occupant comfort

To address air quality concerns within the occupied building, Siplast collaborated with REI Engineers to substitute a standard adhesive with Parasolo® TPX™ Quick Spray Adhesive LV50. This low-VOC alternative minimized on-site fumes while maintaining full system performance and warranty compliance, ensuring a safe, efficient installation in the active environment.

To maintain the visual character of the Mecklenburg County District Attorney's Office, Siplast implemented a roofing solution that balances modern waterproofing technology with minimal aesthetic impact. By blending durability with the building's original civic identity, the new system provides a cohesive, warrantied solution designed for longevity.



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