

Metal Roof Restoration

- Category:** Waterproofing & Insulation
- Customer:** Residential Building
- Project:** Roofing repair and installation of a spray polyurethane foam-based (SPF) roof system.
- Products:** DuraTite® CC2.5, DuraTite® 1395

Problem

Metal roofs are susceptible to rust and sun damage. A residential roof in Panama City presented severe leaking issues caused by rain water overflow that could not be contained by the original drain pipe and existing canal. The property owner required a cost-effective, long-lasting roof repair and restoration solution

Due to extreme weather conditions in the local area, the owner was in need of a solution that could withstand prolonged rainy seasons and insulate the structure during waves of extreme heat. In addition, materials used had to install quickly and, in case of unexpected rainfall, have the ability to cure under ponded water.

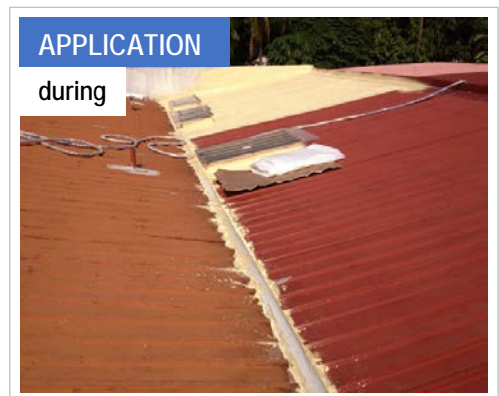
Solution

Panama Linings S.A., an authorized Rhino Linings® applicator, recommended a combination of DuraTite CC2.5 spray polyurethane foam (SPF) and DuraTite 1395 silicone coating for a durable, watertight and energy-efficient system designed to repair and extend the life of the roof while providing long-term protection from constant sun exposure.

The roof was initially cleaned by pressure washing the metal substrate to remove any loose paint, mold, grime, dust and dirt, creating a clean surface for coating.

Next, the 4-inch PVC piping was connected to the original drain pipe to reach across the entire canal. Skylights were raised 10 inches from the roof and replaced with polycarbonate. DuraTite CC2.5 was then spray-applied at 1 inch thick covering the entire roofing structure.

DuraTite 1395 silicone coating was finally fluid-applied over the SPF. The reflective properties of the coating play an essential role in keeping the building's internal temperatures low. In addition, the white silicone coating helps distribute heat evenly across the surface of the roof by effectively scattering sunlight.



Results

Rhino Linings® products provided a cost-effective repair solution. The DuraTite® Roofing System extended the life of the existing roof, remedied the drainage issue and provided insulation and durability the customer required. According to the property owner, the new SPF roofing system has exceeded expectations over the three years it has been in service. The roof does not require maintenance and the in-home temperature has dropped 25%, keeping inhabitants cool and comfortable.



More About Rhino Linings® Products Used:

- **DuraTite® CC2.5** is a two-component, closed cell, spray applied polyurethane foam with a self-adhering system requiring no mechanical fasteners. DuraTite CC2.5 demonstrates excellent thermal and dimensional stability, and requires almost no maintenance.
- **DuraTite® 1395** is a fast drying single component, moisture cure, silicone coating suitable for use in new and recoat applications. It is resistant to chemical attack and abrasion and can be successfully installed in a wide range of ambient temperatures and humidity levels. DuraTite 1395 will cure under cold, ponded water; however roofing systems should be designed and built to ensure positive drainage.

Call 858-450-0441, or visit rhinoliningsindustrial.com to learn more about becoming an authorized Rhino Linings applicator.

Industrial applications are highly specialized and specific consultation and training may be required to perform such applications. Product safety data sheets and specific chemical properties should be evaluated before undertaking any application.