



With only 21 days and under 5 inches of annual rainfall, roofing and waterproofing can easily be overlooked in Las Vegas NV. Because of the lack of consistent precipitation, dry rot and other issues related to roof leaks can often go unnoticed for years. When the issues are eventually discovered, the damage can be quite extensive. On tar and gravel roofs, leaks can be even more difficult to diagnose due to the thick layer of rock.



## PROBLEM

Having purchased the home only 7 months ago, the client had just gotten their first rain. They were shocked to find that the flat portion of their roof leaked everywhere including right in the middle of the living room. About a year ago, the previous owner had hired a poorly executed repair consisting of simply moving the gravel, applying a layer of acrylic, and replacing the gravel. This may have been a cheap fix, but failed to permanently address the 14 sheets of sheathing requiring replacement and the acrylic quickly broke down in the low ponding areas covering approximately 1/4 of the roof.



## SOLUTION

Adhesion tests were performed, proving that Ecodur bonds completely to the existing substrate with no need for a primer. Because of its ability to bond to a variety of materials, Ecodur was a perfect choice for the tie ins needed to facilitate the repairs. Because of Ecodur's extreme adhesion, the contractor was able to apply without pressure washing, preventing any further water damage to the interior of the home.



## APPLICATION RESULTS

Site preparation included removing all of the gravel and loosely adhered acrylic before sweeping and blowing any remaining dust. The existing roofing was cut back to expose the rotting sheets of sheathing for replacement. With the sheathing replaced and properly gapped, the gaps were filled with a fast cure acrylic caulk.

Once the caulk cured, Ecodur was rolled directly over the sheathing followed by a layer of 4-foot Tietex covering the sheathing and overlapping the existing substrate. All air bubbles, blisters and any other anomalies were removed from the layer before Ecodur was applied over the top of the Tietex.

With the Tietex overlapping and tying the new sheathing into the existing substrate, Ecodur was applied at varying rates between 30 and 50 mils to create a completely seamless eco-plastic polymer waterproofing membrane over the entire roof.