What LURKS Beneath the Blue Tarp

By Aaron Nelson, RRC, RRO

Photo 1 – Visqueen over blue tarp.

Quite often in the normal course of our work, we will see the infamous "blue tarp." I'm nearly always interested in what is under the tarp and why the tarp is there. Is it a temporary measure until weather breaks? Is there remedial work occurring? Or is there something more interesting lurking beneath? Our company recently investigated a residence where there was a deteriorated tarp over a deteriorated tarp over yet another deteriorated tarp, followed by yet another deteriorated tarp over the tired shingles. Seeing these types of conditions reminds me to always look under the tarp.

I was called by an insurance client to investigate the source of moisture intrusion on a residence. The owner had filed a claim indicating that wind damage had allowed moisture to enter the attic space, which had become evident by dripping into the interior of the residence.

Upon arrival, my colleague and I noticed that the entire roof area was covered by polyethylene with lath mechanically attached through the shingles to the substrate. We contacted the client to verify that he would like us to remove the covering to investigate the condition of the shingles. Once we had the okay, we proceeded with the investigation. The homeowners indicated that there had never been any moisture intrusion in the residence prior to a wind event some weeks prior to our visit.

We toured the residence to visually observe where the intrusion had occurred. There were numerous locations indicating an abundance of moisture invasion. The drywall was sagging; paint blistering and stains from water were prevalent. (We noted, incidentally, that the kitchen cabinets had a tapered trim that matched the sagging of the roof.) As we walked through the residence, we were more and more convinced that this was not the result of a single wind event, but more the result of long-term intrusion.

Walking around the residence looking for the best access to the roof, we noticed locations where water had been directed to door heads, exposed soffits where rafter tails and soffit materials were degraded, improper drainage, and missing sheet-metal flashings.

This brings us to the tarp. Seeing so much evidence prior to viewing the actual roof can lead to conclusions that may be unfounded. Topical observation of the roof covering is essential to provide an accurate report for the client. We cautiously climbed onto the roof and observed the Visqueen to determine the best course for removing it (a roofing contractor had been hired to re-cover the roof with new Visqueen). We elected to remove the covering from the main body of the residence atop the location of the reported damage. (The residence has T-shaped ridges with valleys in the "armpits" of the T.) Upon its removal, an interesting sight awaited us.

We observed a tired three-tab roof. A portion of the roof had been replaced with newer three-tab shingles near the

Photo 2 – Interior hallway damage.

Photo 3 – The exposed roof.

ridge. Additionally, a portion of the shingles in the valley had been replaced with laminate shingles. The substrate undulated visibly in multiple locations and just flat-out looked scary. We examined each section individually in an attempt to provide accurate descriptions of each area.

As the three-tab section near the ridge was above the area where the homeowners had indicated the bulk of the moisture damage was, we addressed it first. The substrate sloped to the perimeters at 2:12. The shingles had roughly the correct exposure; however, the offset was not in accordance with the manufacturer's requirements. Additionally, there was no underlayment on top of the new plywood substrate. There were generally two fasteners per shingle (one located near each end), and the fasteners were located at the top of the shingle (in lieu of above the slots near the seal-down strip). The seal-down strip was not active, allowing for the shingles to be easily lifted up and the underlying substrate observed. This area was clearly identified utilizing historic satellite imagery as having a blue tarp installed, followed by a later photo showing the shingle installation in process in this area. The new shingles extended atop the existing ones and were held in place by fasteners located at the uppermost portion of the shingle. Again, the seal-down strip was not active, and no other means of sealing the new to old was implemented.

Photo 4 – Valley condition.

Photo 5 – Pressing next to the laminate shingle exposed the interior of the attic to view.

Photo 6 – Improper nailing of new three-tab shingles.

Photo 7 – No underlayment under the new three-tab shingles.

At the valley, underlying substrate was replaced and laminate shingles were integrated into the existing three-tab shingles. On the up-slope side of the repair area, the laminate shingles were tucked under the existing three-tab shingles, allowing overexposure of the laminate shingles. On one side of the valley, the laminate was placed on top of the existing three-tab and sealant was applied. For exposed fasteners, sealant was also topically applied. A woven valley had been attempted with the laminate shingles; however, it consisted of just weaving enough of the shingle to provide an overlap, in lieu of extending well beyond the valley line. The laminate shingles terminated in a straight line, roughly one inch beyond the new wood substrate. This provided an environment in which pressing on the three-tab shingles adjacent to the laminate shingles allowed one to actually see into the attic space.

There were multiple other items on this roof that continued to confirm that the removal of the tarp provided a much-needed insight into the construction of the roof covering, such as a roof vent that was stripped in with roll roofing used as shingles, mechanically attached to the substrate; a skylight lacking adequate curb height (or a cricket) with a copious amount of sealant applied, plugging the weep holes in the frame; penetration flashings degraded such that one could visibly see into the attic space; and fasteners that were exposed with the remnants of old blue tarp still clinging in place.

This project reinforces the fact that removal of the ubiquitous blue tarp is just the beginning of an accurate condition survey.

Aaron Nelson, RRC, RRO

Aaron Nelson, RRC, RRO, began fabricating and installing sheet metal flashings associated with roofing right out of high school. He advanced into the office of a large commercial roofing contractor and then into roof consulting, and has installed, estimated, managed, and consulted on projects across the U.S. He is currently president of Roofing Technical Services, Stanwood, WA.