Utah Luxury Condos

Atlas ACFoam® Nail Base Solves Complex Roof Assembly

Snow may be synonymous with winter sports and recreation, but in high-altitude construction, it presents significant insulation design challenges. At a luxury eight-story condo-hotel development near Park City, Utah, the 80,000-square-foot roof incorporated three unique configurations, each requiring careful consideration of snow loads. Unbalanced snow accumulation poses a serious risk, with snow weighing up to 174 pounds per square foot. In projects with varied roof slopes and elevations, a site-specific analysis is essential to accurately calculate design snow loads.

According to Robert Galindo, project engineer and operations manager at On Top Roofing, the roof's complexity required multiple snow load calculations to address the various pitches, angles, and valleys. The design also incorporated varying fascia details and integrated roof melting systems, adding further intricacy. Galindo credited Atlas for their critical support in helping to finalize the necessary figures, noting that their expertise was instrumental in navigating the project's unique challenges.

Strong partnerships can make all the difference in tackling complex roofing projects. For On Top Roofing, Atlas has proven to be a crucial partner. Dave Gebo, one of the owners of On Top Roofing, shared his appreciation for the support they received while working with Atlas.

"I've never worked with a company that supported us as much as Atlas does," said Gebo. "Atlas and their district sales manager, Ray McBride, came through for us by working with us as part of the team. Ray assisted us going through the complex bidding process, assisting with the preliminary engineering numbers and getting the architect's approval to move forward."

Product Choice

Atlas ACFoam® Nail Base Roof Insulation

To suit the complexity of this installation, On Top Roofing selected Atlas ACFoam® Nail Base roof insulation for its long-term thermal efficiency and a readily available variety of composite thicknesses. "ACFoam® Nail Base combines the benefits of a nailable roof substrate and thermally efficient Polyiso insulation in an easy one-step installation," said McBride. The first building in the complex features asphalt shingles, while the remaining six structures will be finished with metal roofing. Atlas ACFoam® Nail Base is designed to perform effectively with both roofing types, providing consistent thermal performance regardless of the exterior material.

Installation

Smooth and Customer Centric

Galindo highlighted the efficiency of the installation process with Atlas ACFoam® Nail Base. "The Atlas product came with a fastening pattern all ready to install and everything went smoothly," said Galindo. "But what really stood out to us, beyond the product features, was Atlas' terrific customer service." Galindo was particularly impressed by the depth of expertise Atlas brought to the project, noting how much the team learned about insulation along the way. He appreciated the clarity and honesty of Atlas' technical support, which laid out the pros and cons of each option without any fluff.

Gebo praised the Atlas technical team as well, led by expert Steve Moskowitz, for delivering precise calculations while making complex data easy to understand. "The way they crunched the numbers and simplified the results was a marvel," Gebo said. "They were very upfront and honest. Atlas gave us the facts we needed. You can't expect any better than that from a project management perspective."

The Approach

Saving Money and Headaches

Atlas' involvement saved On Top Roofing both time and money, by eliminating the need for an outside engineer to tackle high-level challenges. Atlas also played a crucial role in keeping the installation team fully supplied, ensuring there were no product shortages throughout the duration of the project. This consistent delivery was vital given the challenges of working at an elevation of over 7,000 feet. "The high elevation certainly posed unique challenges," added McBride. "Because of the geography, our customer couldn't store much product on site, so we kept sending truckloads –we're talking multiple deliveries weekly."

The project adhered to strict specifications, beginning with the application of primer and a vapor barrier, followed by a 3.5" layer of ACFoam-II as the base insulation. This was topped with 4.125" of ACFoam® Nail Base, consisting of 3.5" of polyiso insulation and 5/8" plywood, to achieve an overall R-value of 40.

The fastening pattern was also a critical element, with custom templates, chalk lines, and fastening patterns designed specifically for this installation. Everything came together seamlessly.

"We'd have 30+ guys up there working through a lot of polyiso, so it was crucial to have a steady and reliable supply coming," said Galindo. "That fact alone helped in the performance of the team – and the subsequent finished product. That's likely another effect of the quality control Atlas helped instill into the project: it was exceptional at every stage and all 80,000 square feet."

The completed project underwent inspections by multiple parties, including the developer, builder, an independent inspector, and the Park City, UT building inspector—all of whom gave it their full approval.

The Result

Trust in Atlas Moving Forward

"We have more higher end, high altitude residential projects on the horizon and we look forward to taking them on with the continued help and support of Ray McBride and the whole Atlas team," said Gebo in closing. "After experiencing first-hand the Atlas group effort and expertise on the this project, I know I can trust Atlas moving forward."