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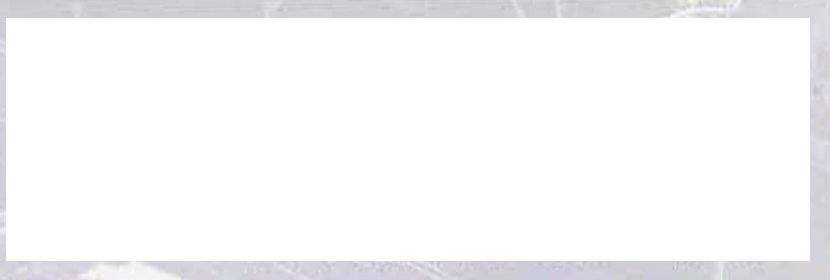
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Cover Story

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Buildings Transition to Solar Reflective Shingles in San Jose, California

by Traci Shaw, Communications Coordinator, Malarkey Roofing Products



EAH Housing was founded in 1968 with the goal of addressing the needs of low-income families and older adults. Over the years the EAH portfolio has grown to include affordable-housing communities in 50 municipalities throughout California and Hawaii. The organization is focused on developing, managing, and advocating quality, affordable rental housing, while incorporating sustainable design throughout their communities.

EAH Housing communities Parkview Senior and Parkview Family Apartments are side-by-side in the heart of San Jose, California. When the buildings were selected for renovation, the organization felt it was a natural choice to transition the dark shingles to a solar reflective option. "When we do renovations of this magnitude it only makes sense to do solar reflective roofing, especially in the warmer climates," states Welton Jordan, project manager with EAH. "San Jose is a high-heat area. It helps the tenants'

comfort and reduces energy costs if we can divert the heat. Solar reflective shingles tie into our mission for energy efficiency."

Effects of Heat

Extreme weather can take a toll on building materials, and high heat is no exception. Heat is part of a natural aging process for many materials, including asphalt. When exposed to high heat for long periods of time asphalt will stiffen and lose some of its ability to expand and contract with the heat-



**SOLAR REFLECTIVE SHINGLES
UTILIZE SPECIALLY PRODUCED
GRANULES THAT REFLECT SOLAR RAYS**

ing and cooling cycles of the day. This can lead to granule loss and further heat damage. Solar reflective shingles utilize specially produced granules that reflect solar rays, which may reduce both the amount of heat entering a building and the surface temperature of the roof. This can result in lower indoor temperatures compared to standard shingle colors, in turn reducing energy costs. The cooler roof surface temperature can also contribute to extending the life of the shingle by reducing the aging affects of heat.

Selecting the Right Product

Jordan explains that the product selection process took into consideration the

reflectivity of the shingles, color of the product, and quality of the materials. "There are a variety of energy-efficient roofs available," states Jordan. "We had other shingles that were specified, but we didn't like the color choices." The roofing contractor for the project, Jesse Sida, president of Kuhlman Roofing Company, brought in Malarkey Ecoasis™ Premium shingle samples as a proposed alternative. "The contractor recommended using Malarkey because it was a better quality product than what we had originally specified," explained Jordan. "We looked at the samples and could tell the product was a better quality, and the colors complimented the tiles that are incorporated with the

building. There are also energy requirements to have a minimum Solar Reflective Index (SRI) rating on the roof. These shingles exceeded that. It wasn't a cheaper product, but a better product." EAH chose Ecoasis Premium architectural shingles in the color mesquite, which has an SRI rating of 31 compared to the SRI rating of 16 required by California Energy Commission Title 24, Part 6.

The Ecoasis Premium shingles selected for this project feature Flexor™ SBS polymer modified asphalt from Malarkey Roofing Products®. This unique asphalt technology provides more flexibility, granule adhesion, and impact resistance than standard

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oxidized asphalt alone. The combination of solar reflective granules and Flexor asphalt may extend the life of the shingles by reducing the aging affects of heat, and maintaining flexibility and granule adhesion. The Ecoasis Premium shingles also feature Scotchgard™ Algae Resistant Shingle Protector from 3M™. This attribute resists the presence of black streaks caused by algae, helping ensure the shingles maintain their aesthetic appearance and reflectivity.

Project Completion

Parkview Senior and Parkview Family Apartments were completed in two phases over the course of June and July 2015, beginning with the reroof of Parkview Senior, then moving to the reroof of Parkview Family Apartments. L&D Construction out of

San Jose was the general contractor, and Kuhlman Roofing of Watsonville, California, was hired as the roofing contractor. The combined projects totaled 55,000 sq.ft. and took 4½ weeks to complete.

Established in 1967, the family-owned Kuhlman Roofing Company is primarily focused on commercial properties, incorporating both low-slope and steep-slope applications. "We have been using Malarkey products for over thirty years," explained Sida. "The SBS asphalt and nailing pattern are what make Malarkey stand out. It's easier to cut and easier to work with, as it's not as stiff. They also have a forgiving nail line. It's a real easy nailing pattern to follow, especially when using nail guns. The installers like it."

All laminated architectural shingles from Malarkey Roofing Products include The

Zone® nailing area. This patented design features a 1¼" nailing area that fully overlaps both layers of the laminated shingle with a tapered shim design. The Zone provides a smoother transition to prevent troughing water that can cause leaks, and improves correct fastener placement.

Promoting Sustainability

Like many businesses, EAH is taking a multifaceted approach to sustainability. "We are trying company-wide to green-up our portfolio and we look at this as one of many green measures at our facilities." The Ecoasis shingle line was created to meet the growing environmental requirements of home and business owners, provide solar reflective benefits, and maintain the quality standards set forth by Malarkey Roofing Products.

