

Leigh Avenue Apartments



LEIGH AVENUE APARTMENTS, NON-PROFIT SENIOR HOUSING, SAN JOSE, CALIFORNIA

PRODUCT CATEGORIES

FLOORING

MARMOLEUM FLOORING,
SHAW COLORPLAY AND BLOX
CARPETING

COUNTERTOPS

SILESTONE QUARTZ
COUNTERTOPS (10% OF UNITS)

CABINETRY & MILLWORK

RUBBER AND WOOD BASE AND
TRIM

INSULATION

POLYISOCYANURATE BOARD

PAINT

LOW/NO VOC PAINTS AND
FINISHES

Leigh Avenue Apartments is a 64-unit, 3-story housing development located in San Jose, CA. Developed by First Community Housing, the project contains 100% affordable units for seniors, including the chronically homeless. The building is designed to meet LEED Platinum certification. Conveniently situated $\frac{1}{4}$ mile from a light rail station, amenities include free annual public transportation passes, private balconies, and community gardens.

HomeFree partnered with First Community Housing (FCH) in the San Jose on the Leigh Avenue Apartments, a high-performance building designed with resident health in mind. The partnership was an opportunity for FCH to take a fresh look at their current practice, build deeper understanding, and explore alternatives, specifically for insulation as they push for greater energy efficiency.

FCH has long been a leader in affordable housing, building communities

with a commitment to quality design and long-term sustainability. Their standard practice includes the integration of many high-performance materials, including the use of linoleum as standard practice. Utilizing the HomeFree material hazard spectrums they took a fresh look at their specs to ensure they were using the healthiest options available, while remaining budget conscious.

In light of HomeFree's hazard spectrum, insulation came to the fore as a topic of

RESEARCH HIGHLIGHT

INSULATION

Given the volume of insulation required to meet energy and comfort goals, it's easy to see how these material choices can have a cumulative effect on the healthfulness of buildings and the environment.

We recommend that you prefer fiber glass and cellulose insulation whenever possible to avoid the most hazardous materials. They are some of the highest rated insulations from a health perspective and have the lowest installed cost per R-value.

Foam insulation products commonly contain toxic halogenated flame retardants, which are capable of escaping from products and exposing residents. They also persist in the environment, leading to broader exposures. If rigid board insulation is needed, step up the hazard spectrum to higher-rated materials. If possible, prefer mineral wool boards with low emissions or plastic foam that is free of halogenated flame retardants.

For more information, visit the [Insulation Product](#) page on HomeFree.

discussion. FCH intended to use spray foam insulation (SPF), but saw it ranked at the bottom of the hazard spectrum for insulation. Concerned about potential health impacts of SPF on the future building residents, they looked for alternates. Polyisocyanurate board could meet the performance target for energy, but would add cost.

FCH wanted more information before moving ahead. Reaching out to the HBN HomeFree research team, FCH set about understanding the impact of insulation choices across performance attributes. The HomeFree research team educated FCH about the potential impacts of using spray foam that span the lifecycle of the product. Spray foam contains chemicals that are known asthmagens, and there is potential for exposure during installation, the curing period that may continue past occupancy, and if the product is cut into during future renovation.

Ultimately, balancing energy, health and environmental impacts, and budget with an eye on the long-term, the team decided that the avoidance of potential health impacts outweighed the additional cost. They opted for polyisocyanurate, eliminating spray foam from the project.

COMMITTED TO CHANGE

Over a decade ago, FCH made the switch to linoleum flooring in an effort to curtail the use of vinyl in their buildings. At Leigh Avenue, linoleum is used throughout the units. Thoughtful

unit design and flooring layout reduced waste and cost. The long-term benefits of added durability—lasting up to 5 times longer than sheet vinyl products—outweigh the additional up front cost, and are a good mission fit with their commitment to resident health.

In addition to linoleum, the Leigh Avenue Apartments will have Shaw ColorPlay and Blox carpeting in the common areas. Shaw Industries discontinued use of PVC over a decade ago. The largest carpet company in the U.S., they also stopped using fly ash as a filler company wide in late 2016.

CHANGING PRACTICE

Ava Kuo, project manager at FCH, found real value using HomeFree resources on rehab projects outside of the Leigh Avenue project. “HomeFree was very handy to have it as a reference for renovation work and other projects when we don't have an architect,” she said.

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— Ava Kuo,
First Community Housing

FOR MORE INFORMATION and WAYS TO ACT, VISIT: homefree.healthybuilding.net

Neither HBN nor its HomeFree program endorses or certifies products. The specific products noted have not been reviewed or endorsed by HBN. They are included for informational purposes, and demonstrate choices made by HomeFree users based on multiple factors including cost and availability, utilizing HomeFree guidance to make healthier material choices within project constraints.