

# Retirement Center Gets Assistance from Foam

## Spray foam chosen over fiberglass insulation for bottom-line savings



*Shannondale built a new 65,000 sq.ft. assisted living facility in Knoxville, TN. Due to a number of factors, including rising energy costs, Shannondale recognized the superiority of spray foam over other insulating materials, such as fiberglass.*

Founded in 1967 as a Retirement Center, Shannondale is a non-profit entity administered by Presbyterian Homes of Tennessee, Inc. There are many similarities in the varied accommodations, all designed to enhance a fuller, more pleasant life-style. The Shannondale campus offers retirees a variety of independent living options. These include private homes, duplexes, and garden villas, to pleasant, comfortable rooms and apartments in their ever-popular Retirement Center.

Due to heightened demand, Shannondale decided to build a new, two-level, 65,000 square foot building in Knoxville, TN. Being a progressively minded organization, Shannondale knew they needed an energy-efficient solution for their insulation needs, as the new facility is expected to be in service for a long time, and energy costs are ever-increasing.

Spray foam has a reputation in the Knoxville area for being the best insulation choice. Other assisted-living facilities in the area chose spray foam, and Shannondale recognized—without question—that they needed spray foam as well.

Profoam of Tennessee was contacted to install the insulation. Profoam has been in business almost ten years, and they have a solid reputation for getting the job done right the first time.

The Shannondale building's construction was gypsum sheathing panel over metal studs. Foam insulation was chosen due to the ease of application, highly efficient thermal and air barrier properties, and noise reduction abilities. Profoam installed 5.5" of Quik-Shield® 106 open cell foam in the wall cavities. Ten inches were added for the roof, mechanical rooms, and between the floors to act as an improved noise barrier. The sound attenuation properties of spray foam were especially desirable to Shannondale, who prided themselves on providing a peaceful, comfortable environment for their residents.

Profoam's professionalism and expertise were huge factors in achieving the desired results with spray foam.

The properties of Spray foam provided clear benefits over alternative solutions, for both the contractor and the customer. Spray foam has strong adhesion to the substrate surface. Not only does this prevent sagging of the insulation—like fiberglass commonly does—spray foam is far easier to install in hard-to-reach areas, such as in corners and around structural members.

Of course, safety was a top concern for Profoam. All workers wore full safety harnesses while using the lift. Profoam was also meticulous about putting up hazard signs, cordoning off areas, and training the other workers to avoid the areas that were currently being sprayed. For safety reasons, and to work around the other contractors, the project took two months to finish by working in five- or six-day shifts every few weeks.

In total, Profoam installed about 40,000 pounds of foam. Profoam was particularly proud of this job, and they were pleased to be able to watch how the building developed throughout the entire process.



*The building design was that of a standard commercial building—gypsum sheathing panels over metal studs. Spray foam is excellent for this application because it adheres to the substrate and expands, creating a seamless air barrier. Also, spray foam will not buckle or sag, unlike traditional fiberglass batts, which commonly do.*



*Proper safety was a top priority on the job. When spraying the gymnasium area using a scissor lift, Profoam used straps and safety harnesses at all times.*

“We were involved and close to all of it. From start to finish. From foundation to drywall... it was kind of neat to see the progress of the building.” remarked Mike Ernst of Profoam.

On Shannondale’s side, the benefits of spray foam were obvious. Profoam’s expertise at installing spray foam enabled the construction of the facility to stay on schedule. Also, the noise barrier properties of foam help Shannondale maintain the peaceful surroundings they are renowned for. In addition, spray foam’s sealing properties help keep out dust, germs, insects, and allergens, which is very important for maintaining a healthy living environment for Shannondale’s residents.

Finally, and most importantly, spray foam’s superior insulating properties are realized in the form of energy cost savings for Shannondale. Spray foam’s properties as a thermal insulator, air barrier, and vapor barrier translate into up to 40% cost savings on heating and cooling bills for Shannondale.

Shannondale’s demand for energy-efficient, multi-benefit insulation was based on the need to lower energy costs and provide a comfortable environment for residents, and Profoam had met the challenge.



Profoam of Tennessee is a professional spray polyurethane foam insulation and roofing contractor. They primarily service home builders, general contractors, and building owners with professional spray foam roofing and insulation throughout Tennessee and the southeastern United States. With thousands of projects performed since 2006, they don’t just spray foam... they’re in the business of spray foam roofing and insulation systems.



The Quik-Shield brand is owned and operated by SWD Urethane ([www.swdurethane.com](http://www.swdurethane.com)) and represents over 40 years of spray foam experience in the construction industry. SWD Urethane is one of the most innovative system houses in the spray polyurethane/polyurea marketplace and is committed to developing meaningful solutions.



*The new Shannondale building was two levels with living areas, a gymnasium-style area, and mechanical rooms. Since Shannondale prides itself on providing a peaceful, quiet living environment, extra spray foam was installed between the floors and mechanical areas to act as an effective noise barrier.*