



# GREEN ROOF ON NASHVILLE CONVENTION CENTER MANAGES STORMWATER RUNOFF

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## QUICK FACTS:

### Project:

Nashville Convention & Visitors Center

### Location:

Nashville, TN

### Notes:

Green roof media not only has to both retain and drain water, it also has to keep these properties for a very long time. "Structural stability is a key factor for the long-term success of any green roof. The media has to keep its structure and work properly for the life of the roof."



**There's a meadow five stories above the busy city streets of Nashville complete with green grass and rolling hills. This green space in the sky is actually the roof of a new convention center in the Music City.**

This downtown development is part of the city's green infrastructure program created to manage Nashville's urban storm water challenges. The building boasts a 175,000 square foot green roof containing rooflite®, a certified green roof media manufactured by Skyland USA.

Ordinarily, rains pouring over the massive 1.2 million square foot building would drain into the city's storm water system. But rather than tax the already strained sys-

tem, some of which dates back to the 1880's, most of the storm water landing on the new Music City Center will be retained by its specially designed roof.

"Storm water management is a huge problem and that's why there's a push for more green roofs," says Skyland USA's Managing Director Joe DiNorscia. "They allow 60 to 80% of rainwater to stay on a roof to be absorbed by the plants or evaporated. What's left comes down slower and that gives the sewer system a chance to better handle the runoff," he says.

In the case of the Nashville project, designers specified a green roof media that had to be extra light and work in a shallow installation. Skyland's rooflite® Extensive MCL product was a good fit for the project. "Our technical director, Peter Philippi, worked closely with Garick, one of our licensed rooflite blenders, to slightly tweak our blend to meet this project's strict design specifications," DiNorscia says.

The Music City Center achieved LEED® silver designation and the green roof was a prominent part of the effort. Developers were able to obtain points for sustainable site, water efficiency, and the use of regional materials. In the case of the engineered soil used in the roof, raw materials were sourced from central Alabama and middle Tennessee; well within LEED's 500-mile radius requirement.

Garick manufactured all of the green roof media used for the massive convention center. "We've been working with Garick since our very beginning," says DiNorscia. "We knew they were the exclusive distributor of HydRocks® and we wanted that calcined clay to be a key component of our product. We use a proprietary blend of the material made exclusively for us."

Skyland works closely with a number of blenders like Garick nationwide to ensure their product has a consistent quality. "We seek out raw components

from a particular region that are cost competitive in the marketplace. Most of the green roof projects in the East rely on HydRocks," he says.

DiNorscia says successful green roof media has a number of specific requirements that on the surface, sound conflicted. "The product is really a contradiction in functionality," he says. "On the one hand, it has to absorb as much water as it can. On the other, once it reaches that maximum absorption, the excess water must be able to drain off quickly."

"This project is great example of what a total team concept can accomplish," says DiNorscia. "From our expertise in standardized blends, to Garick's manufacturing experience, the extremely lightweight HydRocks material, and the logistical and placement know-how of Landscape Support Services I'm certain this project will be a success for the developers and the city of Nashville."

*HydRocks®, a registered trademark of Trinity Lightweight, is an all-natural, eco-friendly, non-degradable soil enhancer.*



Trinity Lightweight is the largest producer of rotary kiln expanded shale and clay lightweight aggregate in North America and is a leading supporter of research, independent testing and field studies to improve the manufacturing process and expand the beneficial uses of the product.

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