

We Want Foam, Too

U.S. compost facility salvaged with SPF

By Jessica A. Baris

The FoamCoat Roofing team was in the middle of applying spray foam insulation to the Hillburn New York compost facility when commissioners from Burlington, New Jersey, showed up. They were dealing with corrosion problems at their compost facility and wanted to see first-hand what spray foam could do. The commissioners had two options: Destroy the building and start from scratch, or make the effort to salvage it by trying out spray foam.

“They looked at the facility while we were in the process of doing that job,” says Lang of the visiting commissioners. “They decided that’s what they wanted and that it would fit their needs.” In other words, they wanted foam, too.



The facility’s management group contracted FoamCoat to complete the task. Not much time would pass before FoamCoat headed to the New Jersey compost facility to apply spray foam and a fiberglass coating to 300,000 square feet of the facility’s interior space and coating to the roof’s 165,000 square feet. And the FoamCoat team wouldn’t have much time to finish it—just 60 days.

An Alternative Purpose

The main purpose of the spray foam application wasn’t to insulate the compost facility. It was needed primarily for preventing the compost building’s moist heat from further corroding the metal interior.

“Compost is kept at 120 degrees, so the facility is at 100 percent humidity 100 percent of the time,” says Lang. “That eventually rots the material away. The facility was operating, but it was in a position where it wouldn’t continue to operate effectively if it wasn’t fixed. It was a sagging building that was deteriorating.”

VENDOR TEAM

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Spray foam installers Barry Burns, Rick Conley, Jeff Conley, Aaron Parsons, and six more crewmen were assigned to the job. With four Graco Gusmer Marksman proportioners and Probler spray guns, they applied foam and coating to the facility's interior. This included 300,000 square feet of walls, ceiling, and all structural steel beams and bracing.

"We did every strut, Z beam, and every support bar that ran from one section of the roof to another," says Lang. "Some steel purlins and Z beams were damaged too badly and were replaced, but every piece of exposed metal in the building was covered with the foam and coating."

FoamCoat sprayed the interior with 1 inch of Preferred Solutions' Staycell spray foam and 1/16th inch of Stayflex non-permeable, polymer thermal barrier. The Staycell foam provided the thermal insulation and eliminated the need to abrasive blast the metal surfaces. The Stayflex thermal barrier blocked the chemical vapors and moisture from reaching the foam and metal.



"Everything was wrapped in foam," says Lang. "We wanted to encapsulate the metal so it wouldn't rust."

The building's expansive square footage was one challenge, but Lang explained that the amount of detailed hand work that was required was another hurdle.

"The roof strut is a 2-inch rod that goes from one section of the roof to another one," Lang explains of the building's interior. "We had to cover every cross beam, Z beam, and support bar. Some of them we sprayed; some we hand-brushed. We could spray a Z beam because we could reach those with a spray gun. But the bars that go between the Z beams, like 2-inch diameter rods that provide extra support, were very close to the roof. Those had to be hand-detailed with brushes. We couldn't just spray it and walk away. There were guys at all times who just did the detail work."



To meet the management's deadline, FoamCoat ran two shifts per day, six days a week. "We had two crews spraying all the time," says Lang. "The foaming was done during the day and the coating was done on the second shift."

The facility's management team needed the job done within the 60 days specified, but they got better than that. FoamCoat was able to finish ahead of time.

"It was an incredibly short project," says Lang. "We finished ahead of time and beat the schedule. We helped salvage the building by providing protection from future deterioration and corrosion. They are thrilled with the interior foam and fiberglass coating. It has been phenomenal."

A compost facility was saved from total destruction, money was saved from building a new one, and spray foam proved its worth—once more!

