

Project Profile



Project

Lincoln Building
Champaign, Illinois

Owner's Representative

Pantham Property Management
Champaign, Illinois

Roofing Contractor

Craftmasters
Decatur, Illinois

Roofing Consultant

Benchmark, Inc.
Cedar Rapids, Iowa

Roofing System

Adhered 60 mil Sarnafil®
G410 membrane in
patina green

Project Size

9,000 square feet

Completed

October 2010

Sika Sarnafil Roof Protects Historic Lincoln Building

There is a plaque in the Lincoln Building in Champaign, Illinois that features a quote from Abraham Lincoln's message to Congress in 1861: *The struggle of today, is not altogether for today — it is for a vast future also.*

Looking ahead to the 'vast future' was one of the factors behind the decision to go with a Sika Sarnafil roofing system when it was time to reroof this notable building, which is listed on the National Register of Historic Buildings. The Lincoln Building is a six-story structure in a downtown area with very limited access, and so was not an easy place for a reroofing project. Thus, it was important to select a roofing system that would not need to be replaced for a long, long time.

"The roof on the building was leaking and experiencing problems with drainage and deteriorating flashing," said Adam Mangold, EIT, RRO, staff consultant at Benchmark, Inc. of Cedar Rapids, Iowa. "We needed a roofing system that could tie into parts of this historically registered building without disturbing anything," he explained. "We like the Sika Sarnafil roofing system because it

is a very good product and is flexible, which is important in a project like this where there are some difficult details. In addition, Sika Sarnafil has a patina green membrane that would closely match existing copper on the building."

A Tight Squeeze

Craftmasters of Decatur, Illinois was selected to install the roof, and immediately faced the challenge of working on a small roof in a congested area. "This was a very tough set-up because there wasn't much room to operate," said Mark Randles, vice president at Craftmasters. "We were also working at a 60-foot elevation, and had to rent a lift since we weren't allowed to use the elevator in the building, which is used for offices and retail space," he added. "Our main staging area ended up being a third-floor EPDM roof. We protected the area with a one-inch extruded polystyrene overlaid with three-quarter-inch thick plywood. Then scaffolding was erected to the main roof and the penthouse areas."

Craftmasters' first task was to remove the roof down to the poured concrete deck. However, it was determined early on that this was not possible, because there was no existing roof insulation. Instead the built-up roofing plies were mopped directly to

Sika®

Sarnafil®

the primed concrete deck and the roof was prepped by scraping and removing the gravel surface down to the bare felts and then power-brooming and priming it with Sarnacol Universal Primer.

The roof also featured parapets that required extensive wood work, as well as a historical copper cornice area that had to be completely refurbished. "This copper cornice was a real concern, because we were very leery of losing the structure," Randles remarked. "Thankfully it was not as bad as we expected. We stripped it down to the original lookouts, which were cantilevered out over the masonry wall. These lookouts were sandwiched with new steel channels per the specification. That's when we found out that the reason the structure was sagging so much was because the fascia board attachment was failing due to rusty and offset nails."

Roofing and Reconstruction

The decision was made by Benchmark, Inc. and Craftmasters to add clips to the lookouts and the fascia, and then strap the entire area to the concrete deck using 12 gauge straps and epoxy-set stainless anchors, based on structural evaluations by HDC Wickersheimer Engineering. This area was then boxed in with wood blocking and plywood. "This was probably the most detailed parapet wall area we have ever dealt with," Randles said. "And this was just the prep work!"

"This became more of a reconstruction project than a roofing project," Mangold remarked. "It was a great deal of work to reconstruct the perimeter, which after forty years of water infiltration had started to rot."

The other parapet wall seemed "pretty simple" after doing the cornice area, Randles stated. The specifications called for removing the existing glazed title coping, attaching new wood nailers and plywood, and installing new Sika Sarnafil flashing and new painted steel coping.

Once the prep work was completed two-inches of isocyanurate and one layer of half-inch gypsum board were installed and bonded



using Sarnacol 2163 adhesive. The patina green Sika Sarnafil membrane was then installed. "There was very extensive hand welding involved with the copper cornice flashing, and all flashings were field fabricated because of the color membrane," Randles pointed out.

The final perimeter detail was to remove and replace the existing copper gutter and downspouts and replace them with new painted steel.

"Craftmasters did a very good job," said Tom Pantham, property manager for Pantham Property Management of Champaign, Illinois. "They were very professional and clean."

"Craftmasters is a good group to work with and understands that we want to make the

best roofing system possible," Mangold stated.

It was this attention to quality that earned Craftmasters Third Place in Sika Sarnafil's 2010 Contractor Project of the Year, Low Slope Category.

A Roof That Pleases Most of the People

Today the roof on the Lincoln Building is appreciated for both its performance and its appearance. "It looks really great — and people really like the color," Pantham said. "It also has been performing well. We had a bad winter this year and I was worried about the roof, but so far so good."

"The roof is doing very well now and the color of the membrane is as good a match to the existing copper as we could hope for,"

Mangold stated. He added that an artist who lives in a penthouse overlooking the roof said the roof reminded her of a "sea green beach scene."

"Despite all the difficult details the finished result is worth it," Randles said. "We bent over backwards to please the owner, and the result is a beautiful new Sika Sarnafil roofing system that is going to last a long, long time."



Sika Sarnafil

A Division of Sika Corporation
100 Dan Road
Canton, MA 02021
Telephone: 1-800-451-2504
Telefax: 781-828-5365
usa.sarnafil.sika.com

Sika Sarnafil

A Business Unit of Sika Canada Inc.
6820 Davand Drive, Unit 2
Mississauga, Ontario L5T 1J5
Telephone: 905-670-2222
Telefax: 905-670-5278
can.sika.com