

Project Profile



Project

Richard Riordan Central Library
Los Angeles, California

Owner

City of Los Angeles

Roofing Contractor

Best Contracting Services, Inc.
Gardena, California

Roofing System

Adhered EcoBond Roof®
using 60 mil Sarnafil® G410
membrane in tan and
Sarnacol® 2121 adhesive

Project Size

90,000 square feet

Completed

June 2012

Sika Sarnafil Roof Gives Los Angeles Library a New Cover

The Richard Riordan Central Library in downtown Los Angeles is prized by residents for several reasons. Named for a former LA mayor, the library is the third largest public library in the United States in terms of books and periodical holdings, and is host to many events, exhibits and lectures. It is also a city landmark due to its architectural details.

“This library is considered to be the jewel of the city because of all the rare books, murals, and art galleries it houses and the service and resources it provides to its citizens,” remarked Dan Rodriguez, building maintenance district supervisor for the City of Los Angeles. “Plus the building itself is thought to be an example of great architecture.” The original building was designed by Bertram Goodhue and built in 1926, and its features include a pyramid tower and a torch symbolizing the Light of Learning.

Unfortunately the ballasted EPDM roof membrane on the library was riddled with leaks, which threatened the priceless artifacts and books in the library. “Every time it rained we had employees going

around the library looking for leaks,” Rodriguez stated. “We called them the Leak Patrol.”

“The seams of the EPDM membrane were separating, which caused the water intrusion into the library,” added Bob Mars, chief operating officer of Best Contracting Services, roofing contractors located in Gardena, California.

Deciding that a new roof was in order, the City of Los Angeles and Best Contracting Services worked together to find a roofing system that would remain watertight, meet California’s stringent Title 24 energy requirements, have a 20-year warranty, and which would also look aesthetically pleasing to the surrounding tall buildings that looked down on the library roof.

Sarnafil System Checks Out

After considering EPDM, TPO and hot and cold BUR alternatives, it was decided that the one roof which met all of those needs was the Sarnafil EcoBond Roof in an attractive, EnergySmart Roof® cool roof color of light tan. “We’ve used Sika Sarnafil roofs in the past and found them to be good products that last a long time,” Rodriguez



said. "We decided to use the tan color on this roof because it matches the color of the building and also reduces glare from reflecting up to the skyscrapers surrounding the building."

The tan color will also prevent the membrane from absorbing heat from UV rays, thereby keeping the building cooler. Even with no added insulation the new tan roof is expected to save the library \$32,000 annually in energy savings. It is also *solar ready* and the city can add a photovoltaic system or green roof in the future if funds become available.

The EcoBond Roof utilizes Sarnacol 2121, a water-based adhesive that meets the low VOC guidelines of LEED®, the South Coast Air Quality Management District (SCAQMD), and the Northeast Ozone Transport Commission (OTC).

Another advantage of the Sarnafil system is that its seams are hot-air welded, producing a continuous, monolithic roofing membrane. "This roofing system is an excellent system that has performed extremely well in the past 25 to 30 years that I've been working with it," Mars remarked.

On the Same Page During Installation

Installation of the new Sarnafil roof began with the removal 400 tons of the existing ballast rock, then removal of the aging EPDM membrane. Gypsum board was mechanically fastened through the existing insulation to the concrete deck, and then the Sarnafil membrane was fully adhered. Green walkway material welded to the membrane was then installed in high traffic areas.

Because the library takes up a full city block in the heart of the city, there were several things that had to be addressed during the installation. For instance, there was no real staging area, so Best Contracting had to use part of the public street at times. This impacted the residents and customers of the surrounding buildings.

"The library is located in a neighborhood full of banks and hotels, and so is in a



very high traffic area for both cars and pedestrians," Rodriguez explained. "We had to very carefully consider the safety of those nearby and so had to close some sidewalks and street lanes while also maintaining accessibility to the library and the neighboring buildings. This meant we could only work on one section of the roof at a time."

Mars commented, "Pedestrian safety in and around the library at the time of roof loading and installation was a prime concern to all parties." One way this was addressed was by posting someone at the closed portions of the sidewalk to make sure they were not used.

Another concern was noise, especially when the ballast was being vacuumed up. "We tried to schedule things when the noise would be the least disruptive," Rodriguez remarked. "Fortunately the vacuum truck made a sound like a drone instead of a jackhammer."

Overall complaints from the nearby businesses were minimal during the course of the project. "The project went well because so many people were involved," Rodriguez said. "We had weekly meetings with the neighbors, the library staff, and Best

Contracting to discuss what the plans were for that week. If a neighboring business had a concern about something, Best Contracting was very responsive to their needs and would try to adapt their schedule accordingly."

Sika Sarnafil representatives provided support throughout the installation. "They were totally involved in the design assistance and inspection portions, and very helpful," Mars stated.

"Everyone performed quite well, and we were very happy with Best Contracting's attention to detail and responsiveness," Rodriguez said. It was this professionalism that earned Best Contracting Services Second Place in Sika Sarnafil's 2012 Contractor Project of the Year, Sustainability Category.

A Roof for the Books

Today, the roof is problem-free and there is no need to renew the services of the Leak Patrol. "The roof is performing very well and we are quite pleased with the appearance," Rodriguez remarked. "This is a great product and a wonderful project. Not only is the roof helping us to be more energy efficient, but it is comforting to know that we have a watertight roof that will last and protect all the priceless things that might be damaged by a leaky roof."

Sika Sarnafil

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

Sika Sarnafil

A Business Unit of Sika Canada Inc.
6915 Davand Drive
Mississauga, Ontario L5T 1L5
Telephone: 905-795-3177
Fax: 905-795-3192
can.sika.com

The Sika logo, featuring the word "Sika" in a stylized, bold, yellow font with a red outline, set against a red triangular background.

The Sarnafil logo, featuring the word "Sarnafil" in a bold, blue, sans-serif font with a registered trademark symbol.