



Flex Membrane International Corp. 2670 Leisz's Bridge Road, Suite 400, Leesport, PA 19533 Tel: 610-916-9500 Fax: 610-916-9501

Contact

John Doyle
President
Flex Membrane International Corp.
(610) 916-9600
idoyle@flexmembranes.com

300 dpi photos pages 3 to 6

Tim Trainor
DeVitis Marketing
(484) 580-8168
trainorcomm@comcast.net

10.3 Acre Reroofing System Completed At

Chicago's Jardine Water Filtration Plant

- **712,000 Board Feet Of Cellular Glass Insulation Replaced;**

30,000 Precast Concrete Roof Channels Installed

- **World's Largest Purification System Dispenses One Billion**

Gallons Of Potable Water Per Day To Five Million Consumers

CHICAGO (Nov. 4, 2014) – After two years of demolishing a 50-year-old graveled coal tar pitch roof, disposing of 6,100 tons of debris, installing 712,000 board feet of cellular glass insulation, and replacing 30,000 precast concrete roof channels, workers capped off Chicago's James W. Jardine Water Filtration Plant with 10.3 acres of Flex FB Elvaloy® KEE thermoplastic membrane.

The last of 1,086 rolls of the Flex fleece-backed membrane was installed in late September, bringing to fruition the largest, most complex reroofing project in Chicago during the past decade and the biggest ever for Flex Membrane International Corp. during its 25 years in business.

Built on rubble from the Great Chicago Fire of 1871, the mammoth concrete vaulted edifice went online in 1964 on a 60-acre peninsula off the banks of Lake Michigan next to the Navy Pier. Almost one billion gallons of water funnel into the plant each day, more than any other purification system in the world, where it is processed and dispensed to five million consumers throughout Chicago and surrounding communities.

“The Jardine plant is an engineering marvel, but a half-century of constant 80-degree relative humidity and chlorine processing inside the facility corroded roof channels,” said John Cronin, president of Trinity Roofing Service, Chicago-based contractor for the new roofing system. “It was time for a total makeover.”

The project began with the erection of a 112,000-square-foot plywood scaffolding platform blanketed by a 60 mil membrane that established a leak-free zone over concrete filter beds below and allowed the plant to operate without interruptions.

Next came removal of the coal tar roof and cellular glass insulation. Weight restrictions stipulated that dumping take place in a single staging area, requiring crew members to travel up to 10 miles per day back and forth over the roof to discharge loads during latter stages of the project.

Sixty-six different types and sizes of precast concrete channels weighing between 225 to 500 pounds were hoisted up by a specially modified crane, and all 30,000 had to be individually inspected and approved before installation. Seven miles of backer rod filled in seams between these slabs.

The Flex FB Elvaloy® KEE 90 mil membrane was installed in hot asphalt onto a built-up roofing assembly, topping off a total roofing system backed by a 30-year warranty. Dupont Elvaloy® KEE is a high molecular weight solid plasticizer that does not migrate out of the membrane while maintaining flexibility and toughness throughout its service life.

“The result is 448,000 square feet of hot-air welded membrane, an integrated whole impervious to Chicago wind and weather extremes, chemicals, UV light, and hundreds of birds congregating on the roof and leaving acidic deposits behind,” said John Doyle, president of Flex Membrane International Corp. in Leesport, Pa.

“The new Jardine plant roofing system will perform reliably for many decades,” Doyle added. “We’ll come back in 50 years to see if it needs replacing.”

Note To Editors: Following are 300 dpi images of work in progress on the Jardine plant and aerial views of the completed roofing system. Identical images and captions are available in the Flex newsroom at flexmembranes.com.





The largest and most complex reroofing project in Chicago during the past 10 years capped off in late September with installation of 10.3 acres of Flex Elvaloy® KEE thermoplastic membrane atop the city's Jardine Water Filtration Plant on Lake Michigan next to the Navy Pier. Replacing a 50-year-old graveled coal tar pitch roof, the hot-air welded membrane is impervious to the city's wind and weather extremes, chemicals, UV light and acidic bird deposits. Built on rubble from the Great Chicago Fire of 1871, the 50-year-old Jardine plant processes almost one billion gallons of potable water per day, more than any other purification system in the world, to five million consumers throughout Chicago and surrounding communities.



Sixty-six different types and sizes of precast concrete roof channels weighing between 225 and 500 pounds were hoisted up by a specially modified crane, and all 30,000 had to be inspected and approved before installation.



The recent Chicago winter was the harshest in a generation but didn't stop workers from completing the two-year project on schedule. Shown here, they are laying down seven miles of backer rod to fill in seams between concrete roof channels



Workers placed 712,000 board feet of two inch cellular glass insulation over concrete roof channels followed by installation of 1,086 rolls of Flex FB Elvaloy® KEE 90 mil membrane in hot asphalt onto the built-up roofing assembly. Flex fleece-backed membrane with hot-air welded seams produced a totally integrated, 448,000-square-foot roofing system backed by a 30-year warranty. A high molecular weight solid plasticizer, Dupont Elvaloy® KEE does not migrate from the membrane, maintaining flexibility and toughness throughout its service life.