

Insulation
US



Case Study: Squibb Building on 5th Avenue

Manhattan Retrofit Project Achieved Higher Performing
Insulation And Saved On Total Project Cost

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MANHATTAN RETROFIT PROJECT ACHIEVED HIGHER PERFORMING INSULATION AND SAVED ON TOTAL PROJECT COST

The high rise building on Fifth Avenue in New York was built in 1931 as an Art Deco style office building. 34 stories tall with floor sizes ranging from 3,500 to 27,000 square feet, Ely Jacques Kahn designed the building to look as if it was leaning away from the viewer in order to make it seem taller.

In 2017, the historic skyscraper was due for a roofing remodel on one of the floors to improve the building's performance.

Accommodating Design without Spending Millions

Data from 2015 indicated that New York City buildings were responsible for 67 percent of citywide greenhouse gas emissions. In a citywide effort to combat further environmental damage, the New York City Energy Conservation Code (NYCECC) updated their energy-efficiency standards for new construction and remodels to also apply to existing buildings. All new roof applications would need to meet stringent local codes for the building's energy performance.

But adding on layers of insulation to the building envelope posed considerable challenges and costs to the building owner.

Project Overview	
Project Name:	Squibb Building on 5th Avenue
Location:	New York, NY, USA
Products:	OPTIM-R® (Vacuum Insulation Panel) GreenGuard® Type VII 60PSI XPS Insulation
Building Owner:	Paramount Group, Inc.
Application:	Roof Retrofit



“ The biggest concern for the client was that they would have to take the renters out of that building during the renovation. ”

“There would have been three or four major renovations that would need to be done to the roof,” says Andrew Wilson with Kingspan, who worked with the building owner on the project.

“The biggest change was probably the railing details. In New York, you have to have your railing details a certain height, so, when they add additional insulation needed to meet the current code of R-30, the railings would be too shallow, which means you’re not compliant with regulations for railing details.”

Repairs to the roof’s terrace brought up additional issues. Three door entries led to the building’s terrace, and any new insulation added would raise the roof’s paver system. All of the door thresholds would then need to be raised, which meant contractors would need to address all flashing on the roof.

In addition to all of the extra renovations, any nearby rental space in the building would need to be cleared out.

“The biggest concern for the client,” says Andrew, “was that they would have to take the renters out of that building during the renovation because there was going





to be heavy work done. So they would have to move them out of there, losing that space for six to nine months, which is a huge loss of income for them.”

Meeting Code Requirements with Solutions that Save

Paramount-Group needed a different solution that was going to cost them less time and save on total project cost. Kingspan Insulation had been involved in several local renovations and was approached by Paramount-Group to bid on the project. Kingspan won the bid, thanks to their newest, next generation insulation product: Kingspan OPTIM-R®.

Kingspan developed its high-performing OPTIM-R® line of insulating boards for projects like the Squibb Building that need creative solutions when space is a factor. These rigid vacuum insulation panels are comprised of a microporous core sealed in a thin, gas-tight envelope. The panels offer outstanding R-values and an ultra-thin insulation solution, perfect for retrofit applications where a lack of construction space or depth is an issue.

Since there was no need to conduct extra renovations, the project time was cut down considerably, making it easier to hire contractors for the job.

They had a total cost savings of over \$1.2 million and saved over 3 months in construction time.



CASE STUDY: SQUIBB BUILDING ON 5TH AVENUE

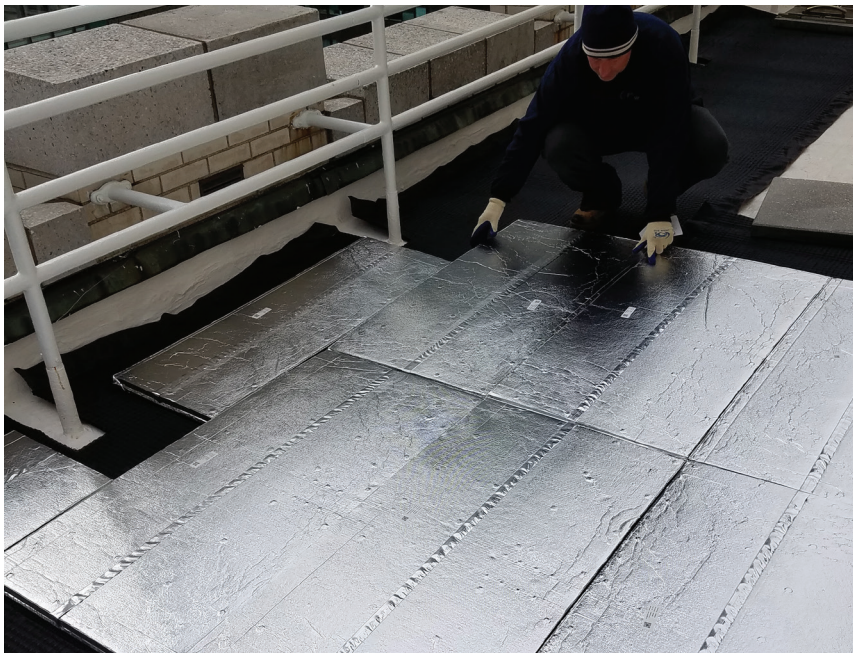
By insulating the Squibb Building with OPTIM-R®, the only update needed to get the building's roof to code was adding on Kingspan's product. Because OPTIM-R® was so thin, the client saved weeks in construction time as the insulation wouldn't affect the railing details or raise the roof pavers which would require replacing the flashing or thresholds of the doors. And because they didn't have to do the extra renovations of fixing railing or roof pavers, they didn't have to ask the renters to relocate while the insulation was installed.

"The installers could do it during the day while the offices were still working because it was only cutting or laying the OPTIM-R® and GreenGuard® insulation or putting waterproofing down," explains Andrew. "In the end we ended up surpassing the required R-30 and reached R-38 with the new build-up."

Since there was no need to conduct extra renovations, the project time was cut down considerably, making it easier to hire contractors for the job.

"When there's a labor shortage you want to cut down as much as you can on install to get that building done. It gives them time to put their better guys on it, and give that better reputation to that client," says Andrew. "For the installer or the roofing contractors, to them the time savings is a huge benefit as well."

By selecting OPTIM-R®, Paramount-Group gained a higher-performing building without spending hundreds of thousands of dollars in renovations or losing valuable business. They had a total cost savings of over \$1.2 million and saved over 3 months in construction time.



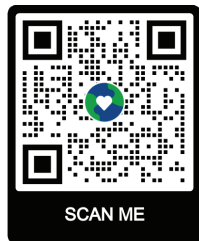
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