

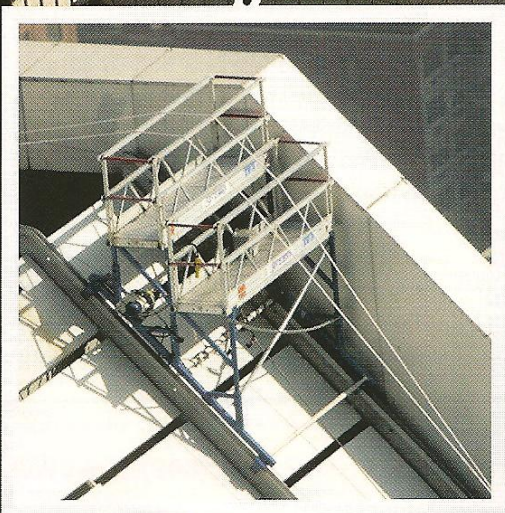
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# Scaffold Industry

The Voice of the Scaffold & Access Industry

**From Steeples to Skyscrapers:  
New York Ladder & Scaffolding Corp.  
Develops creative scaffold solutions for  
New York City's most unique & difficult projects**



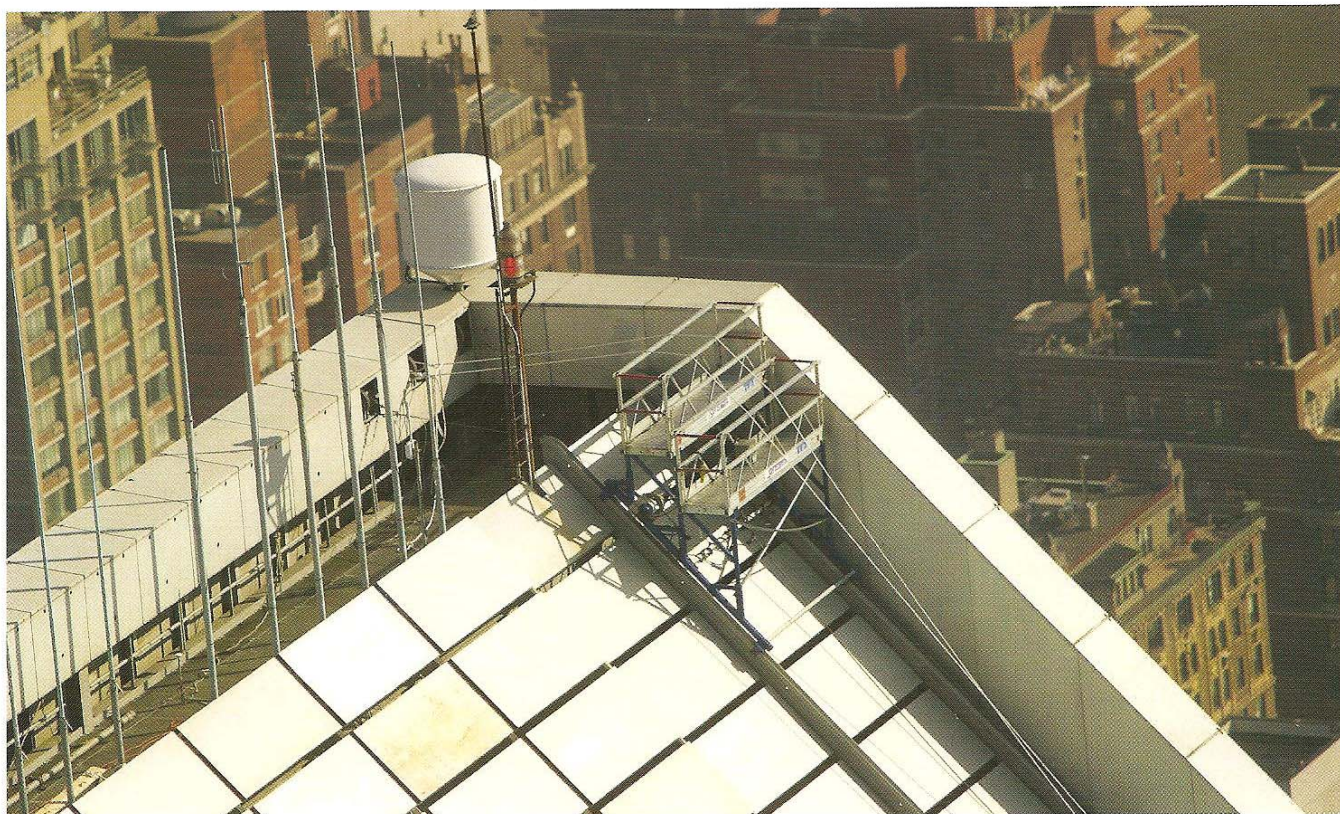
SCAFFOLD  
INDUSTRY  
ASSOCIATION **SIA**  
The Voice of the Scaffold and Access Industry



Feature

## Suspended Scaffold

**New York Ladder & Scaffolding Corp.**  
**(800) 229-2960**



Smooth and efficient travel was accomplished by mounting two Sky Climber Compact No. 1000 hoists underneath the assembly  
(Photo courtesy [www.highwing.com](http://www.highwing.com))

# Sky-High Solution

## Skyscraper's Sloped Roof Pitch Calls for Creative Supported Scaffolding

By Steven Ecklund

The 915-ft.-tall Citicorp building is one of the tallest skyscrapers in New York City, and one of its most striking features is its slanted roof.

Originally intended to support solar panels, the roof's 45-degree pitch presented a challenge to the staff at **New York Ladder & Scaffolding Corp.**,

who were asked by the curtain-wall contractor to provide access to the sloped parapets along its east and west ends.

To handle the task, **New York Ladder & Scaffolding Corp.**, a family-owned, third-generation New York City-based business, enlisted the servic-

es of the Sky Climber manufacturing team to fabricate a customized framework to serve as a rolling scaffold "carriage."

This framework was designed to ride on the existing steel channels that run parallel and adjacent to the parapets. It had to provide a level bearing for two adjacent platforms in a "stepped" configuration, as well as permit a two-man crew to work side by side, each man facing the end of his platform. The workers had to be able to reach the inboard side and top of the parapets.

Smooth and efficient travel was accomplished by mounting two Sky Climber Compact No. 1000 hoists underneath the assembly, each equipped with pendant controls to allow easy operation. The hoists were positioned within reach of the opera-



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Wire ropes were anchored to existing sheaves attached to structural steel at the top of the slope  
(Photo courtesy [www.highwing.com](http://www.highwing.com))

tors in case they needed to use the controlled descent device. Wire ropes were anchored to existing sheaves attached to structural steel at the top of the slope.

After reaching the top of their 167-ft. stair climb in the invigorating December temperatures, the rigging team wrapped wire-rope chokers around the sheaves, which were originally intended for use with permanent window-washing equipment.

Hoist wire ropes were then shackled to the chokers and lowered to the bottom of the slope, guided by the existing channels. These wire ropes were then placed through their respective hoists, which were premounted on the main framework.

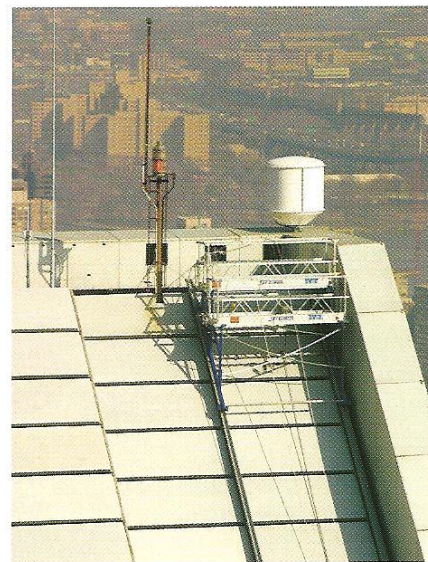
After using electric power to pull the framework into the needed 45-degree angle, the Sky Climber modular platform components were attached, including the SkyStage Ultra guardrail around the perimeter of both platform levels. While the guardrail system serves as fall protection, independent safety lines used in conjunction with rope grabs and body harnesses completed

the personnel fall arrest safety equipment program.

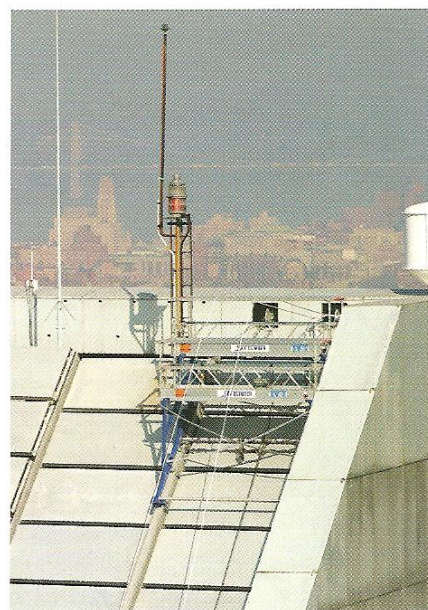
"Safety is always of paramount consideration to us" said Adam Brener, a 26-year veteran of special and unique rigging projects in New York and **New York Ladder & Scaffolding's** division manager for swing stage operations.

A unique feature of this scaffold is its telescopic capability. Because the building's steel channels were expected to have some dimensional inconsistencies, the scaffold was designed to expand or contract to compensate for the fluctuations. This adjustability would be additionally important in consideration of the requirement to relocate the assembly from the west to the east ends of the building, or vice versa.

"We recently wrapped up a multi-year project at the Goldman Sachs new headquarters building in Jersey City, N.J., and knew from our experience with unique façade features and extreme weather conditions at these dramatic heights that this rig had to be flexible," said Jim Larsen, **New York Ladder & Scaffolding's** operations & general manager. ■



The scaffold on the east end of the roof will later be relocated to the opposite end of the Citicorp building  
(Photo courtesy [www.highwing.com](http://www.highwing.com))



To accommodate the Citicorp building's 45-degree roof pitch, **New York Ladder & Scaffolding Corp.** used a customized rolling scaffold carriage  
(Photo courtesy [www.highwing.com](http://www.highwing.com))

(Consulting Structural Engineer AMM Engineering, P.C. licensed in New York, New Jersey & Conn.)

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**New York Ladder & Scaffolding Corp.**

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