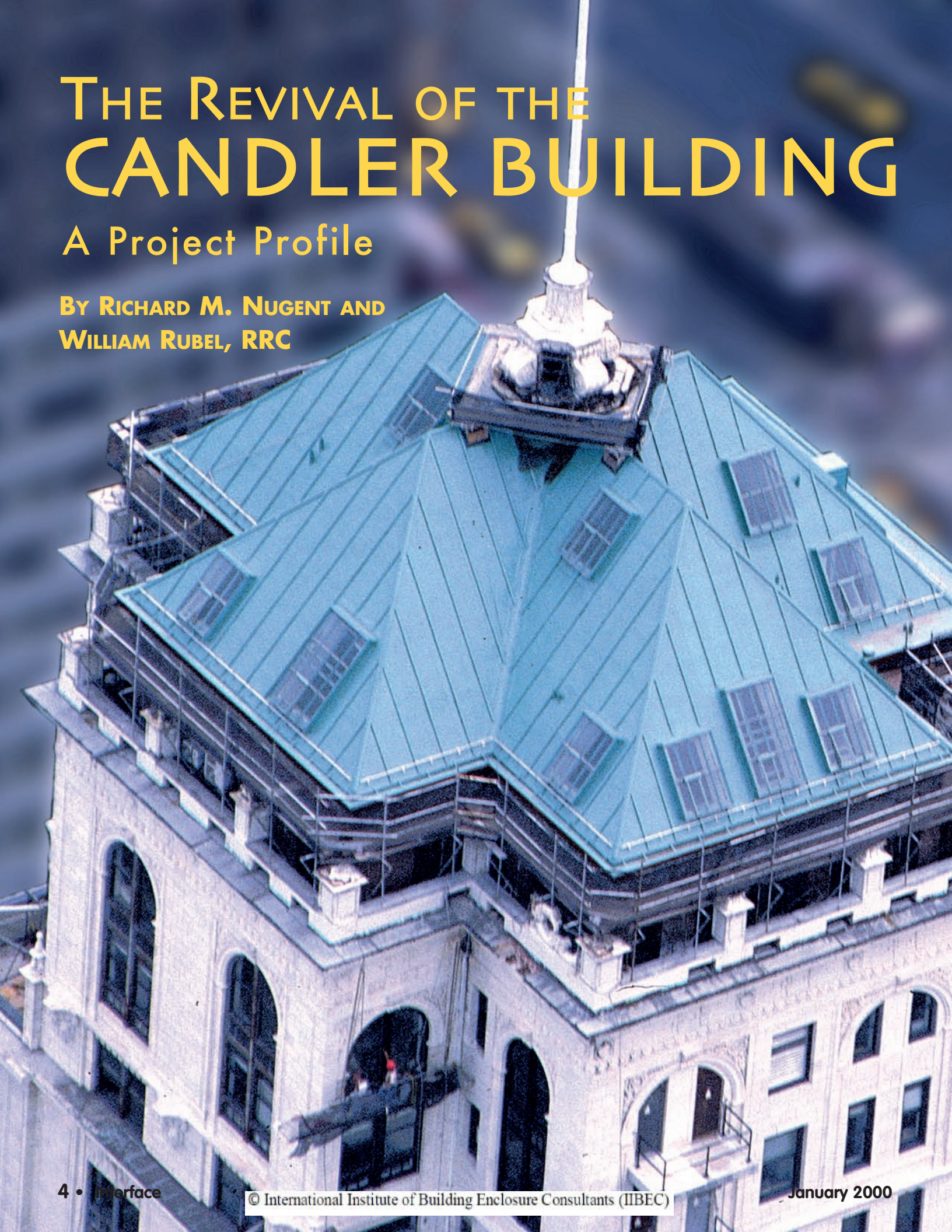


THE REVIVAL OF THE CANDLER BUILDING

A Project Profile

BY RICHARD M. NUGENT AND
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The beautiful Candler Building is located on the same street and within view of the Chrysler Building, west of midtown Manhattan.



Simulated "pacific turquoise" copper roofing meets authentic copper soffit trim which, when aged, will match in patina green color.

The Candler Building is located within the busy Times Square renovation district. Since its feature appearance in the original Superman movie, the building has become rather famous. This ornamental 25-story building was originally constructed near the turn of the last century of brick and terra cotta on steel. The sloped roof was terra cotta tile crowned by a cupola. Since the Candler building is within view of the Chrysler Building, the new owners of the building decided to join forces with the surrounding businesses to beautify the district.



A workman performs hot-air welding on a joint detail.



A detail of custom-manufactured skylights which perfectly match some 13 various-sized originals, as well as aluminum snowguard and flashing detail.

The Choice

The architect worked with the roofing contractor and material supplier to design the building's roof system to look like a batten seam copper roof. Tuckahoe Metal & Roofing was awarded the difficult responsibility of restoring the original, cosmetically-critical roof. The restoration included the monumental task of straightening the lines of the battens and matching the custom-manufactured skylights. Due to the inaccessibility of the roof without the presence of scaffolding, it was necessary that the roofing material be easily maintained and have a long service life. It was decided that a roofing material that simulated copper would be used for the project. This required a custom-colored roofing material to achieve the desired effect.

The material selected was Sarnafil's custom-colored, thermoplastic, adhered roofing system with matching Sarnaclad metal battens. Several factors influenced the selection of the Sarnafil adhered system, especially the acrylic clear coat applied to the membrane at the factory. This clear coat repels dirt and enhances the long-term aesthetics of the roof. Custom-colored 72 mil. Pacific Turquoise membrane was selected as the solution for the pitched-roof application on a concrete deck.

PROJECT STATS

The Candler Building
220 West 42nd Street • New York, NY

Building Owner:
Cornerstone Real Estate

Roof Area:
6,500 square feet

Roofing Contractor:
Tuckahoe Metal &
Roofing Co., Inc.

System:
Adhered, aesthetically
enhanced with Sarnaclad
coated metal battens

Architect:
Swanke, Hayden & Connell
Architects

Roofing Membrane:
G410, 72 mil. custom color,
Pacific Turquoise

Roof System Manufacturer:
Sarnafil Roofing and
Waterproofing Systems

The Solution

Due to the dangerous heights and steep slopes of the roof, special scaffolding had to be installed to create a safe workplace. The scaffold had to support the weight of all the materials, as well as to provide a sturdy platform to hoist the material from the 21st floor to the roof of the building—about four stories. High winter winds and dizzying, 200-foot heights compounded the extreme difficulty of handling the materials on the steep incline while adhering the membrane to the insulation.

Specially-trained Tuckahoe professionals installed the roof during the winter of 1997. Before installation of the new materials, several tons of old tile roofing were removed and lowered through the building to a place where the debris was carted away.

An incredibly uneven deck of old cinder concrete and terra cotta tile was first smoothed. Then the 1" polyisocyanurate insulation boards were secured to the deck. After securing the insulation to the deck, the membrane was adhered with Sarnacol adhesive and pressed into place with a water-filled, foam-covered lawn roller. The membrane was then hot-air welded together naturally.

The final step was to install prefabricated battens produced in Tuckahoe's facilities. The battens were fastened to the deck through specially-manufactured pedestals. To correct the original deck irregularities, the battens had to be carefully laid out to achieve straight lines up and over the highly visible hips and ridges.

Both Sarnafil and Tuckahoe feel privileged to have played a part in the renovation of the Times Square area. Now even Superman could be proud to leap over the Candler Building in a single bound! ■

This article was a collaborative effort by Richard M Nugent, President of Tuckahoe Metal & Roofing Inc., Yonkers, NY; and William Rubel, RRC, Sarnafil, Inc., an Industry member of RCI. The project was nominated for an NRCA Quality Circle Award.