



The Waldorf Astoria Park Avenue entrance. WANY Archives

Behind the Design

Is the Waldorf Astoria New York’s Most Beautiful Adaptive Reuse Project?

Adaptive reuse is at the heart of the SOM-led landmark restoration

By Poppie Mphuthing
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The multiyear renovation project of the Waldorf Astoria—one of New York City’s most iconic historic and cultural landmarks—is a major undertaking as the hotel is remodeled to incorporate newly designed private residences. Skidmore, Owings & Merrill has been tasked to restore the nearly-century-old building to its original design principles and aesthetic, and the elements of adaptive reuse are guiding the project.

Frank Mahan, who specializes in adaptive reuse and is associate director and senior designer at SOM, notes that the restoration exemplifies both preservation and sustainability. “It gives you great opportunities to preserve the building’s historic, cultural, or architectural significance,” Mahan tells AD PRO.

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The Waldorf Astoria’s special status as exterior and interior landmark, protected by the City of New York, is central to the architectural redesign that seeks to maintain the integrity of the building’s history, says Mahan. The architectural team has conducted detailed historic research of the building’s features to discover the original design intent, as well as the renovation changes over time. One key element is the redesign of the distinctive vertically aligned, recessed Art Deco windows, using an original window left on the building. This includes color and material matching.



An early architecture sketch of the Waldorf Astoria. WANY Archives

“We were actually able to do a kind of forensics, where you take a sample of the frame into a lab and you can look at it under a microscope,” Mahan says. “There are many, many layers of paint to uncover the original paint color. At the bottom of all the layers of paint we analyze that, then match it going forward.” Additionally, the distinctive “Waldorf Gray” brickwork is a feature that the architecture team is restoring to former glory. “We had to painstakingly match the original color,” Mahan says. “It’s been patched so many times by so many different people over the years.”



The Duke and Duchess of Windsor celebrate at the Waldorf Astoria’s Grand Ballroom. WANY Archives

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Lighting is another element that the restoration project must consider. Mahan points out that mysterious and subtly hidden lighting—such as cove lighting and uplights—was key to the original design concept. Historical photos reveal that the Park Avenue foyer originally had a rose-colored marble fixture that emanated ambient light, which the designers will recreate. “We’re going to use the same species of marble, in the same variety of marble,” Mahan explains, “and we’ll be using LED technology for the lighting.”

Besides preservation, Mahan notes that the project has a broader environmental and sustainability significance. The built environment at large is central to the climate change crisis, producing 40% to 50% of emissions, he says. As such, architects have a responsibility to consider sustainability. “The sheer quantity of existing buildings that are part of the climate crisis will not be won or lost with new and high-performance buildings,” Mahan points out. “It will be won or lost by how we treat the buildings that we already have.”



The Jean Louis Deniot-designed bathroom at the Towers of the Waldorf Astoria. The Boundary

Mahan posits that it is more environmentally friendly to restore an aging structure like the Waldorf Astoria—which was opened in October 1931, and which was, at the time, the tallest and largest hotel in the world—than to demolish an old building in favor of rebuilding a new energy-efficient structure. This is due to the carbon spent constructing a building—which, in the case of the Waldorf Astoria, includes the carbon that was used decades ago to extract iron ore, manufacture the steel, and transport the steel from the factory to the building site.



Woman’s Locker Lounge at the Waldorf Astoria. The Boundary

“The quantity of embodied carbon spent to build that [older] building is so great that even the energy-efficient building will take anywhere between 10 and 80 years to overcome the debt you created by demolishing that old, inefficient building,” he says. “It would be better to renovate and keep that old, inefficient building than it would be to demolish it and build a new, fancy, very sustainable, efficient structure.”



A CGI of the Starlight Terrace at the Waldorf Astoria. The Boundary

Closed since 2017 to enable the extensive renovations, the project is projected to be completed in 2022. Mahan believes that once it reopens, New Yorkers will see that “it’s going to sparkle like it hasn’t in decades.” It’s a building, he says, that is also “a citizen of New York. [We’re] really creating a cultural bridge that routes people to their place, to their city, to the institutions.”

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