CARVART

CASE STUDY

WALDORF ASTORIA NEW YORK

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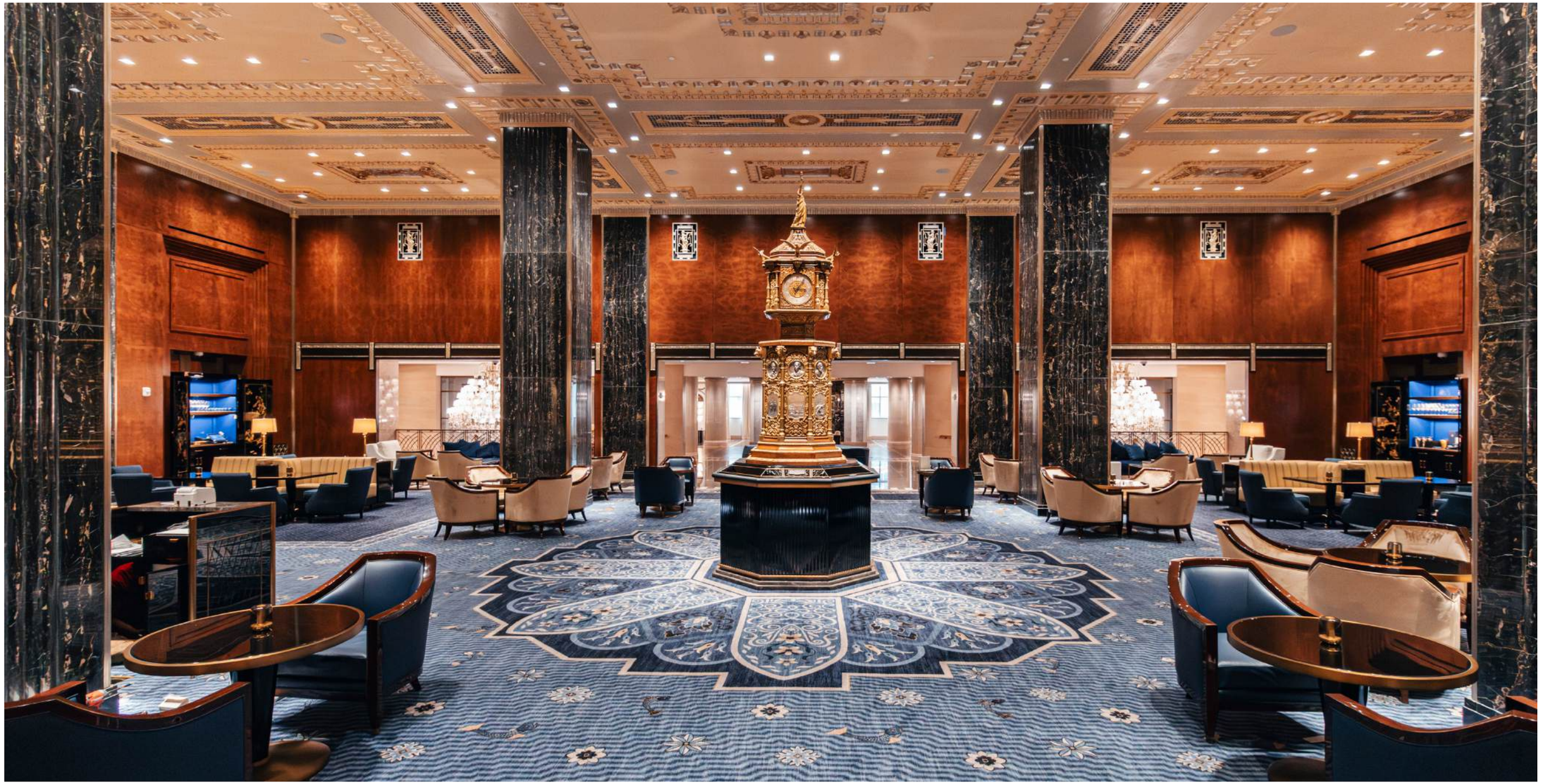

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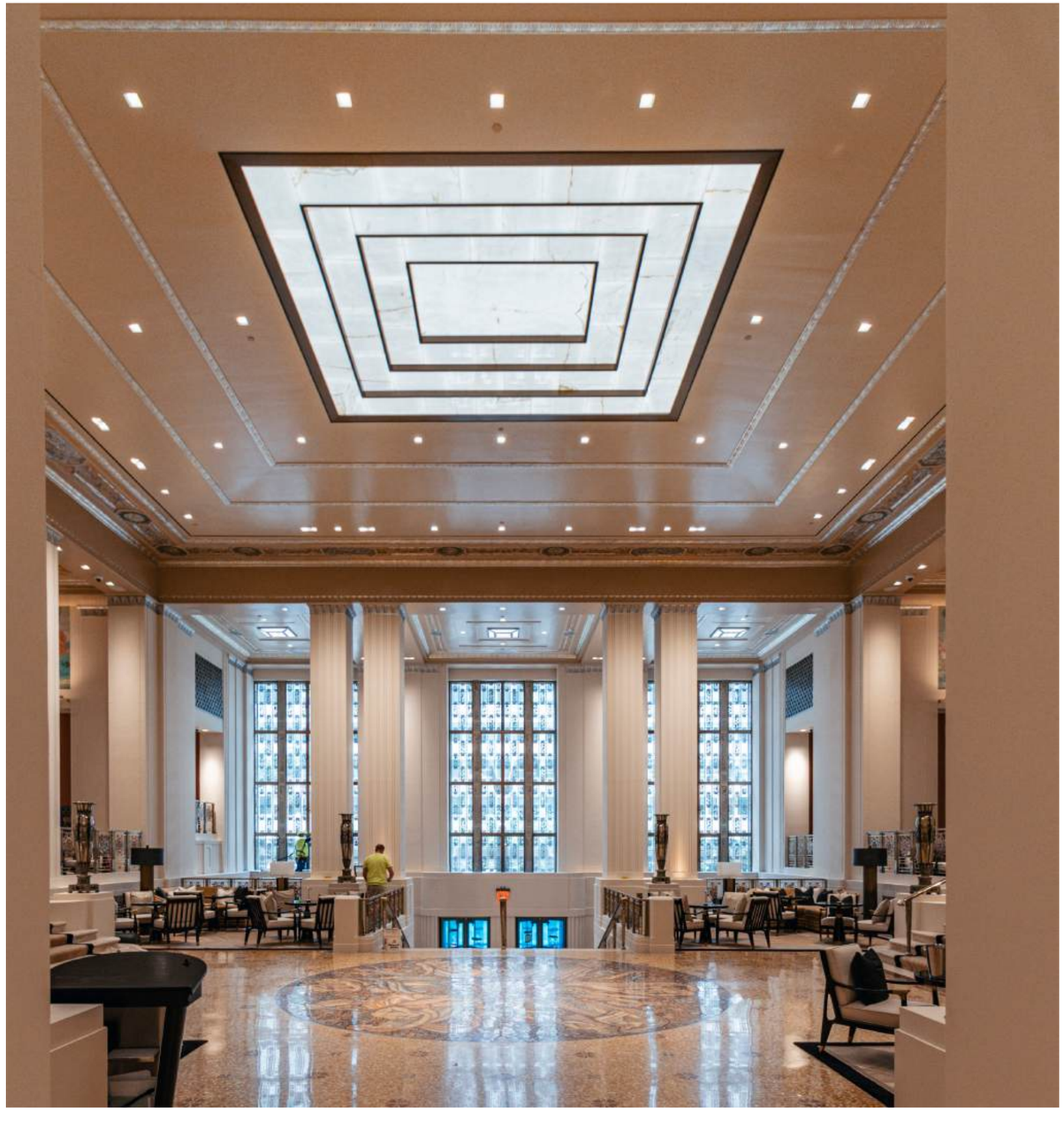
INTRODUCTION

Reviving the Waldorf Astoria New York was never about reinvention. It was about reverence. As one of Manhattan's most iconic landmarks, the project demanded an approach that balanced architectural preservation with contemporary performance. Brought on by Suffolk Construction, CARVART was entrusted with a highly specialized scope—one that touched nearly every public-facing elevation of the building.

From decorative metalwork and illuminated glass features to handrails, angled screens, and heritage doors, our team navigated the tension between old and new with precision and care. The challenge: translate nearly a century of historic detail into modern code-compliant systems without compromising character.

To begin, we launched a rigorous discovery process, merging 3D scans with archival documents, historic photography, and physical artifact analysis. This allowed us to capture everything from the delicate petal forms of ornamental brass railings to the nuanced geometries of aging staircases. Each component—whether decorative or structural—was reverse-engineered through a hybrid process of traditional craftsmanship and cutting-edge fabrication: hand-casting, CNC machining, mold-making, and international coordination.

Nowhere is this synthesis more evident than in the building's door systems. CARVART engineered and delivered both non-rated and two-hour fire-rated doors, all finished in custom bronze cladding with integrated mirrors—a virtually unprecedented accomplishment in the field. Achieving this level of fire protection while maintaining aesthetic continuity required deep material expertise and creative engineering. Mirror-clad fire-rated doors are exceptionally rare due to code restrictions, yet our team designed a compliant system using concealed attachment methods and specialty tape that met the project's rigorous demands.

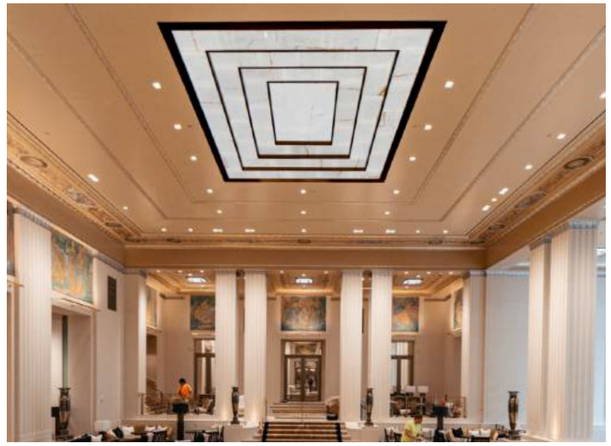
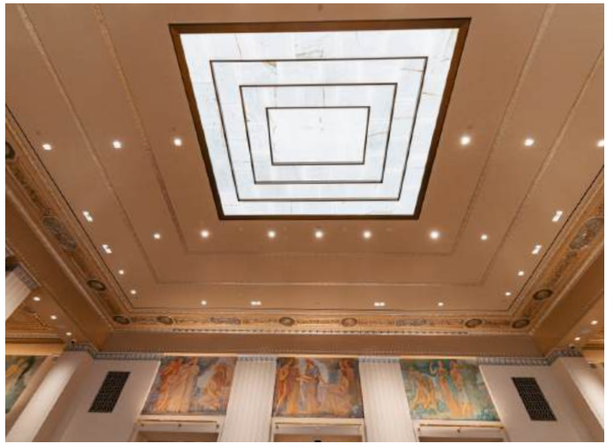
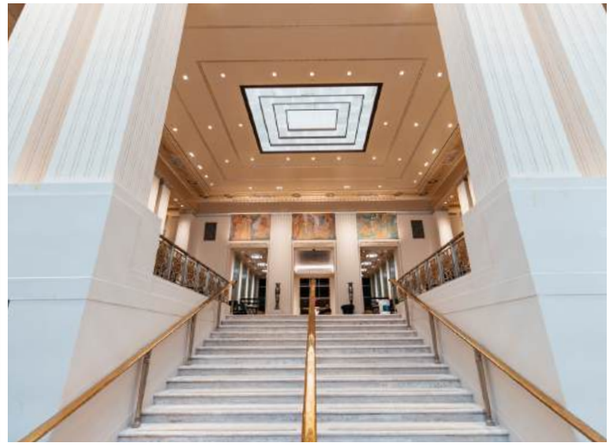


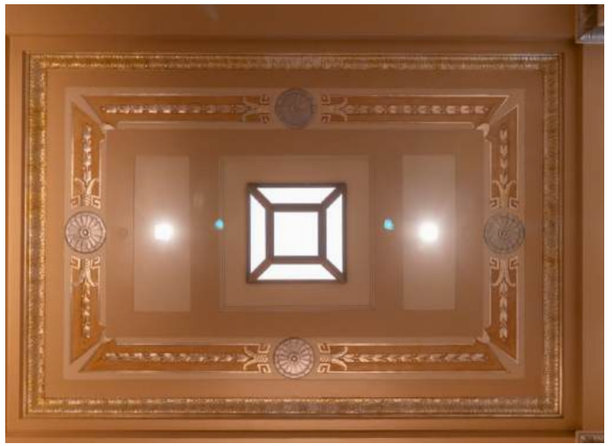
PARK AVENUE LIGHT BOX

Floating above one of the Waldorf Astoria's most iconic gathering spaces, the Park Avenue Foyer light box is more than a fixture, it's a spatial focal point. Framed in brushed stainless steel and inlaid with translucent alabaster glass, the installation defines the room's vertical axis, anchoring the ceiling plane with a luminous, sculptural presence. Integrated perimeter lighting enhances the layered geometry of the panels, casting a soft, diffused glow that transforms the foyer throughout the day and night.

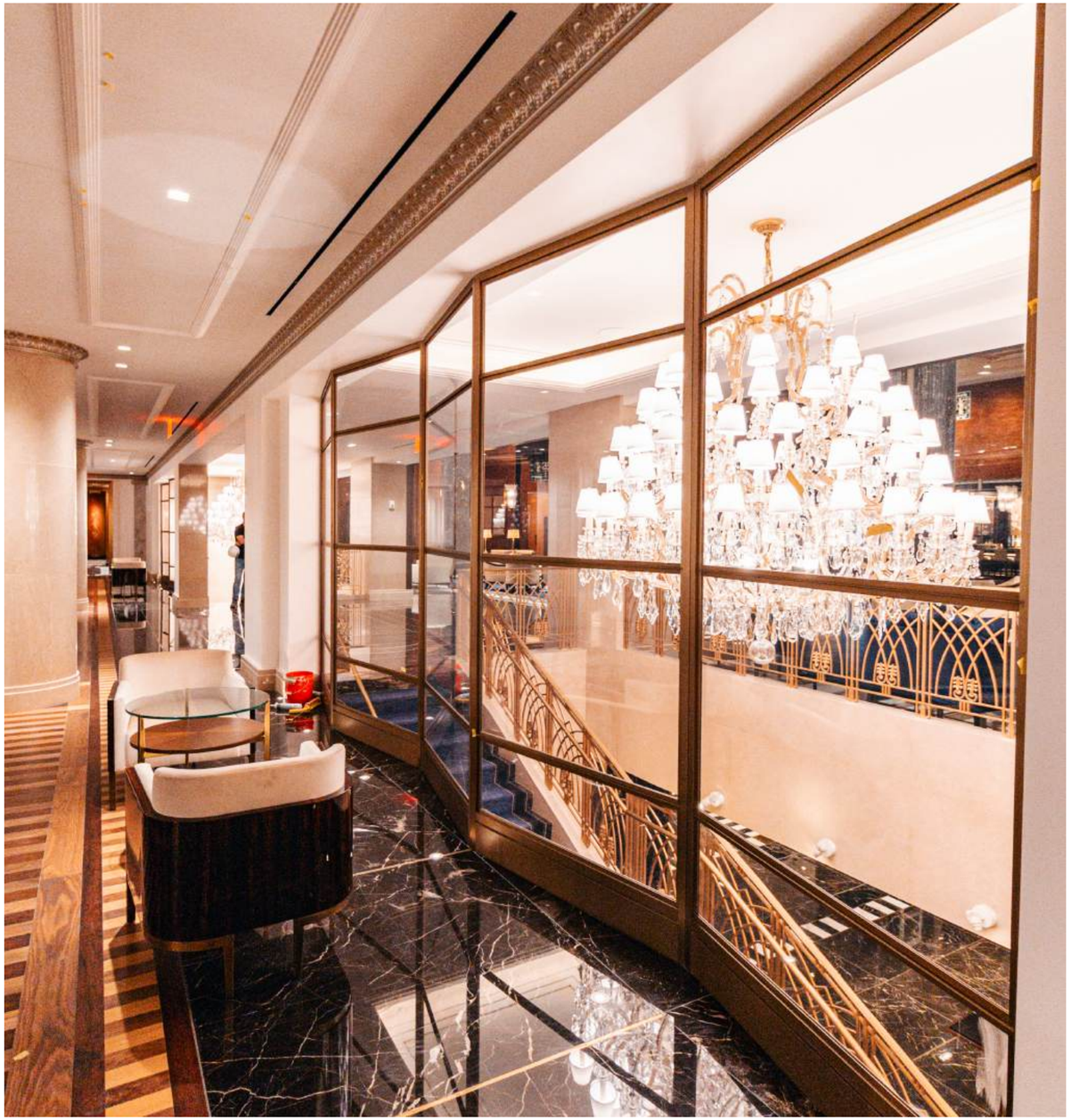
CARVART engineered and installed the entire structural system supporting the light box, an elegant stepped assembly suspended by rods and concealed struts anchored directly into overhead concrete beams. The design demanded extreme precision, both in the shop and on site. Installation became a logistical feat: with access conditions shifting mid-phase, our team adapted in real time, using a 24-foot scaffold and chain-pulley system to safely lift and position each panel into place.

Behind the elegance lies quiet complexity. Every alignment, bracket, and fastening detail was choreographed to create a seamless floating effect. What guests experience is clean and effortless, an achievement made possible by CARVART's commitment to engineered beauty and field-driven problem-solving.





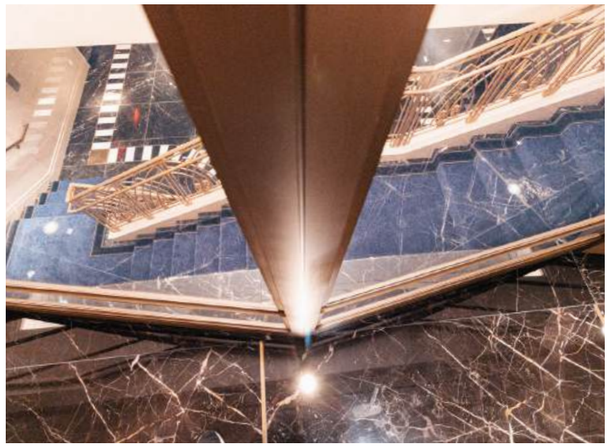
ANGLED BRASS SCREENS

Positioned between corridors and lounges across the Waldorf Astoria, the angled brass-framed screens serve a subtle yet powerful purpose: they define zones, guide movement, and reflect the building's layered material palette. Framed in a rich bronze finish with clear tempered glass, each screen was custom-engineered to meet the spatial and structural requirements of its site, while maintaining visual alignment with adjacent wall panels, doors, and decorative elements.

Though minimalist in appearance, these features demanded exacting coordination. CARVART developed custom extrusions and anchoring systems to ensure proper tilt, alignment, and long-term stability. Precision tolerances were required to accommodate shifts in site geometry while keeping the overall design language consistent. Each glass panel is removable via concealed stops, allowing for future glass replacement without disrupting the surrounding architecture.

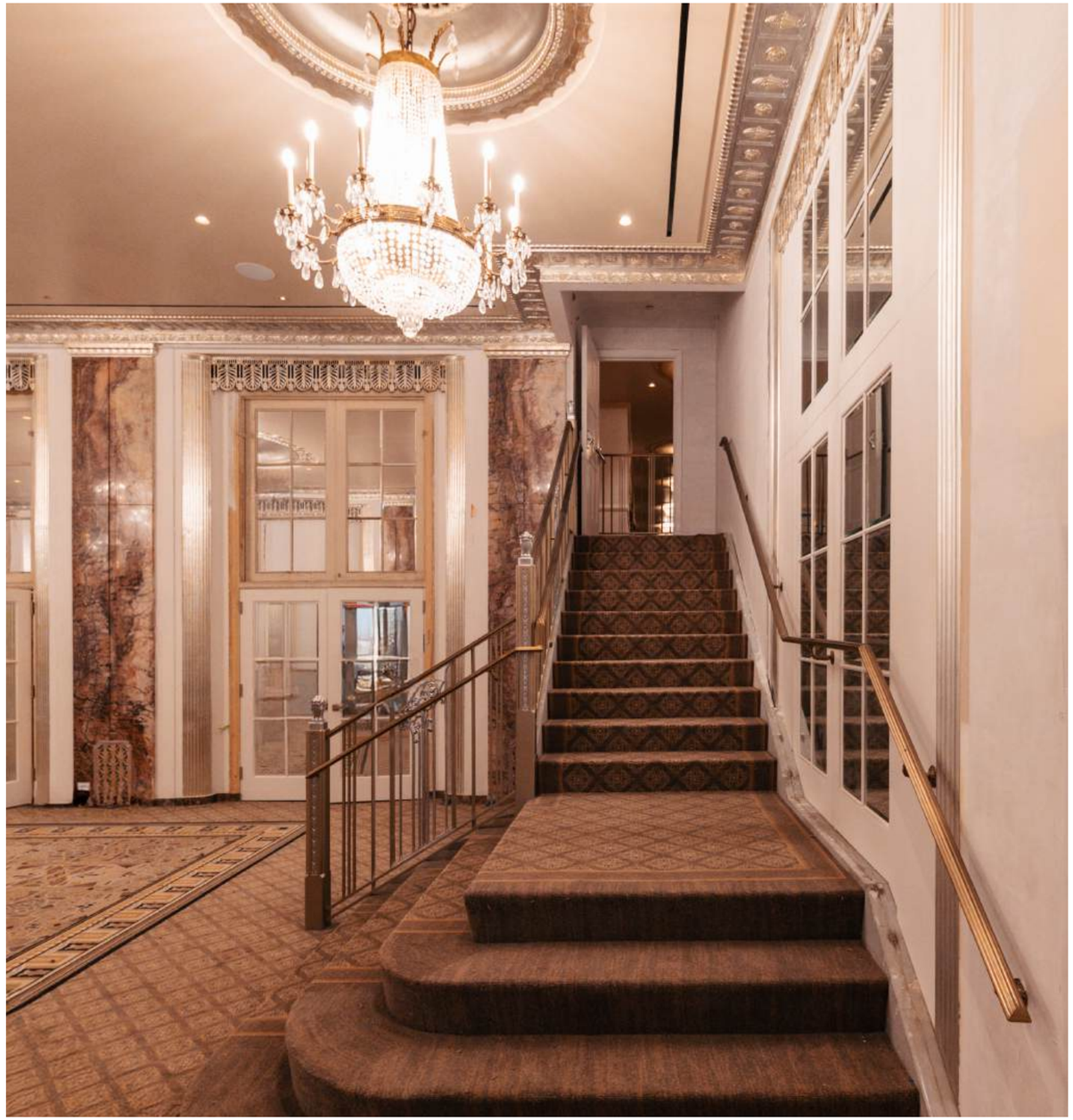
The result is a collection of quietly expressive architectural elements. More than dividers, the angled brass screens extend the Waldorf's design legacy into every corner, echoing the building's historical rhythms while reinforcing its contemporary refinement.











GUARDRAILS & HANDRAILS

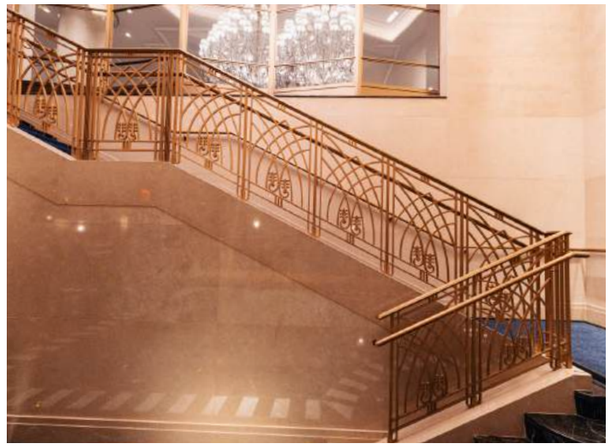
Spanning the grand staircases and corridors from basement to level five, the guardrails and handrails at the Waldorf Astoria aren't just functional, they're iconic. Echoing the building's rich Art Deco heritage, CARVART fabricated each element in custom-cast brass, reviving historic forms with precision, restraint, and reverence. This scope required more than replication. It demanded adaptation. Using a combination of 3D scan data, historic photographs, and full-scale mockups, CARVART engineered systems that responded to the building's uneven geometries and legacy constraints. Curved returns, custom extrusions, and complex bracketry were tailored floor by floor, ensuring every rail followed its architectural path with uninterrupted grace.

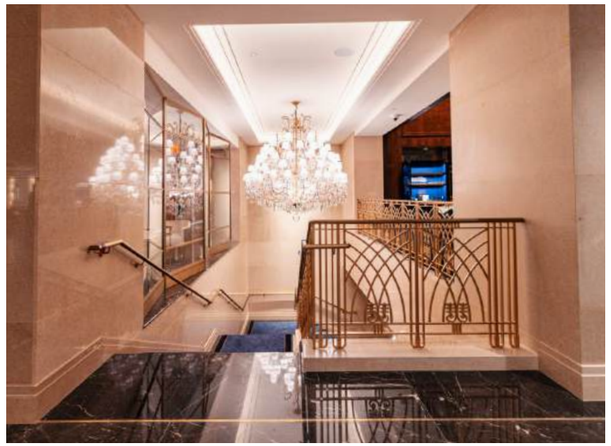
Installation was an exercise in real-time problem-solving. No stair or landing was truly square, which meant our teams coordinated directly between field and shop to modify connections on the fly. The result? Railings that appear effortless, but were anything but.

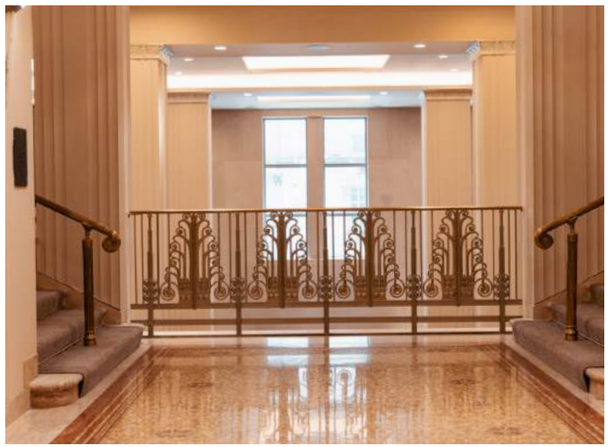
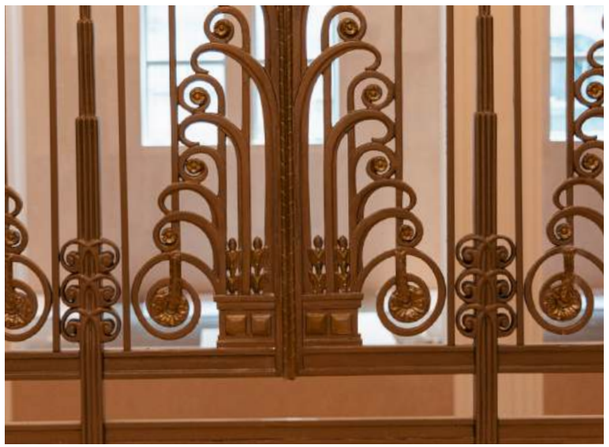
They do more than support. They define procession, guide rhythm, and bring continuity to one of New York's most storied interiors. A gesture of both movement and memory, reimagined by CARVART.

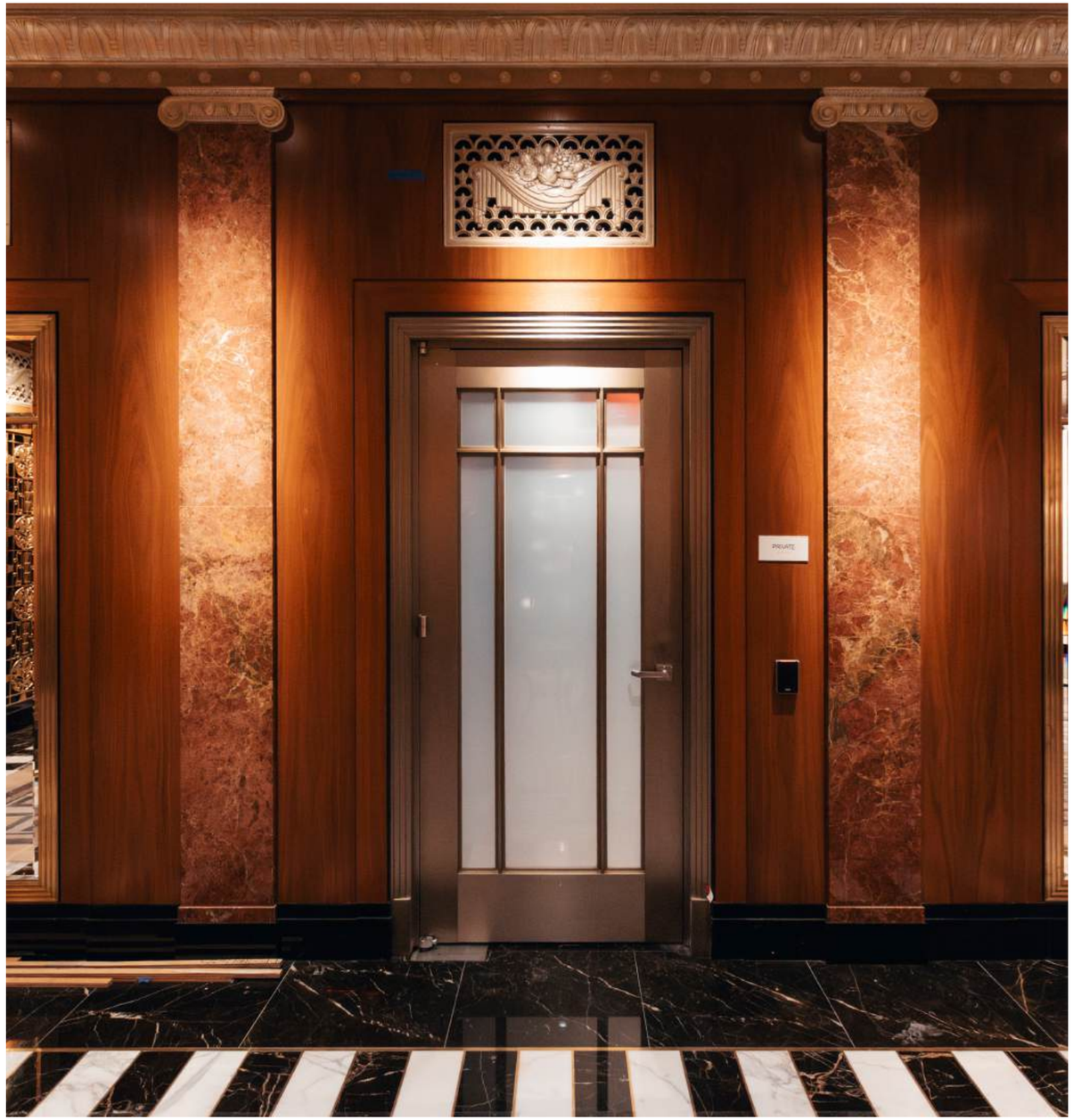






CUSTOM METAL DOORS

More than just thresholds, the two-hour fire-rated custom metal doors at this landmark project play a defining role in shaping the spatial rhythm and atmosphere of the interiors. Positioned at key circulation points, these doors function as visual anchors, framing views, modulating light, and marking moments of transition between spaces. Their presence elevates the experience of movement and enclosure, blending seamlessly into an environment rich with historic detail and contemporary reinterpretation.

Replicating original door designs required a forensic level of precision. CARVART reverse-engineered each system from a patchwork of archival materials, onsite measurements, and aged original references, translating legacy into buildable form. Constructed from stainless steel, aluminum, and brass in refined finishes like Champagne Gold and Nickel Silver, every door was a convergence of craft and coordination. Complex fabrication processes, casting, extruding, cladding, welding, were choreographed across international partners to deliver exacting replicas without visible hardware or structural compromise.

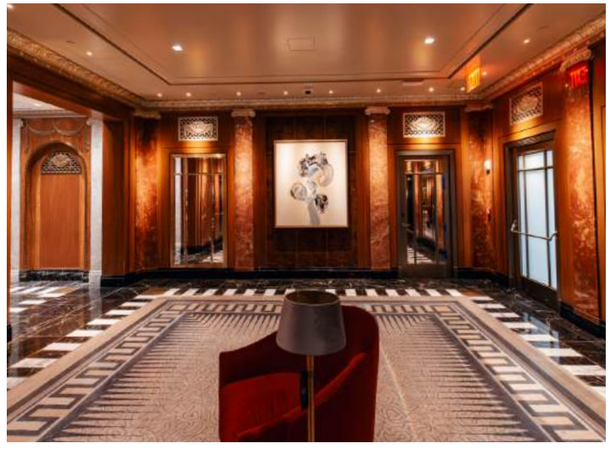
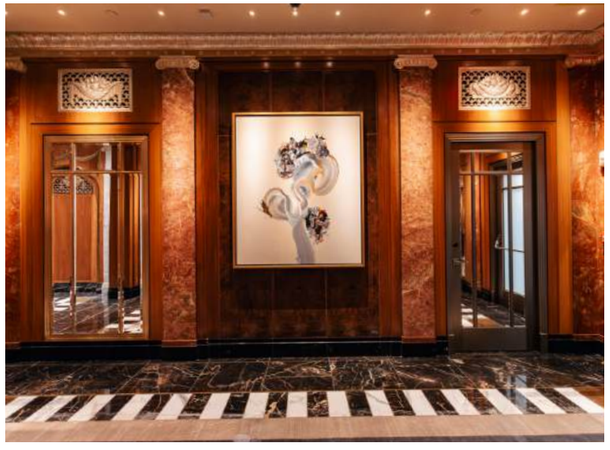
Beyond functionality, these doors operate as storytelling elements, bridging past and present with clarity and grace. Their seamless integration into ornate wall claddings and intricate floor detailing reinforces the project's immersive quality while meeting today's demands for performance and durability.

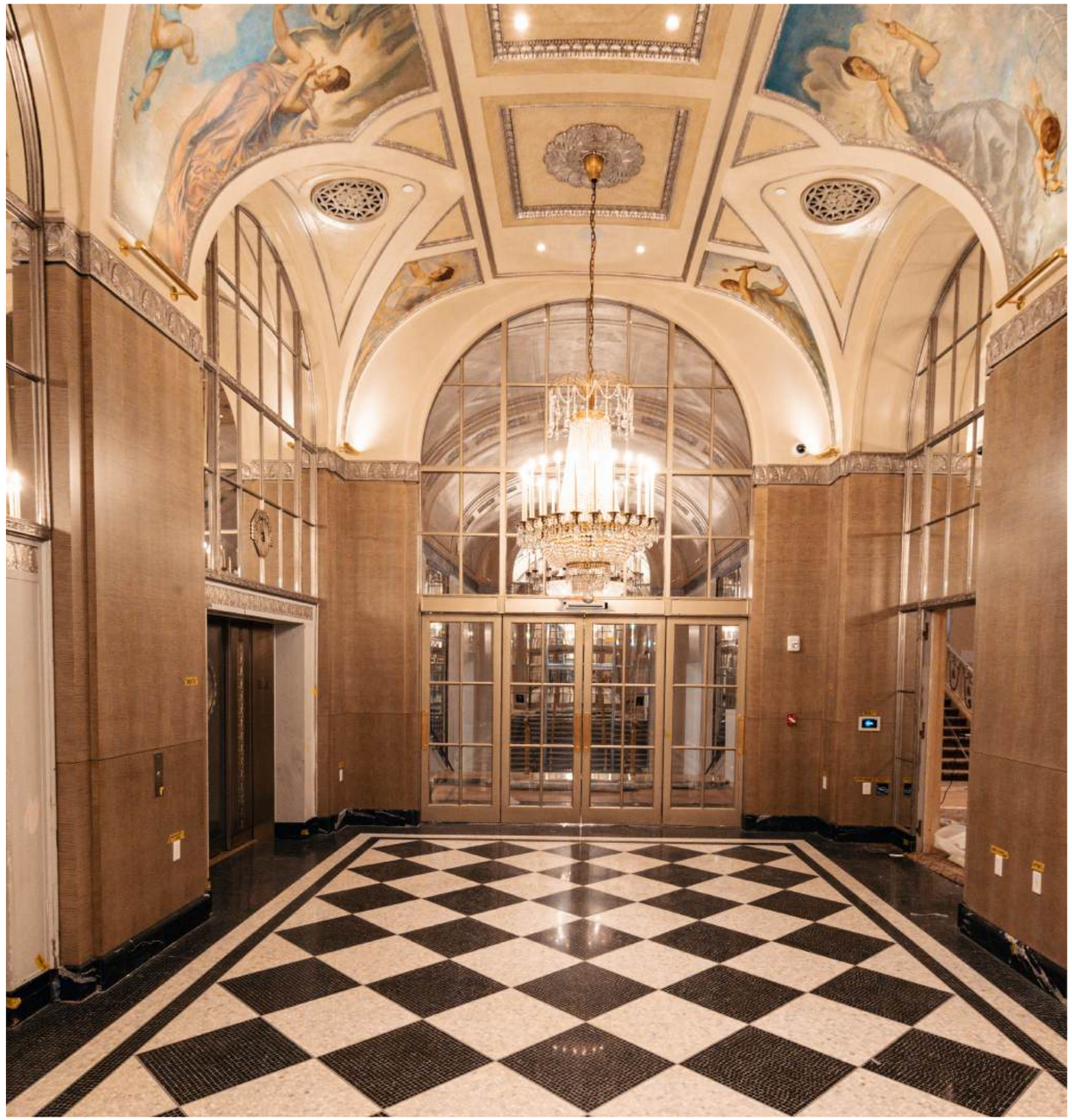








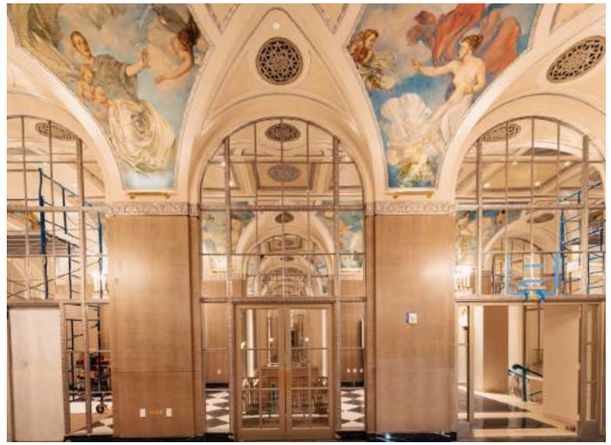



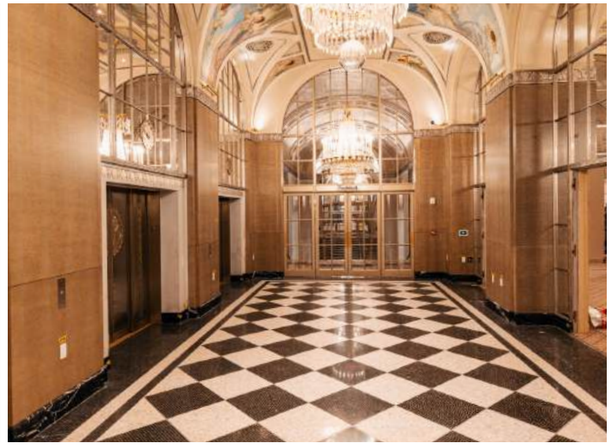
REFURBISHED HERITAGE DOORS

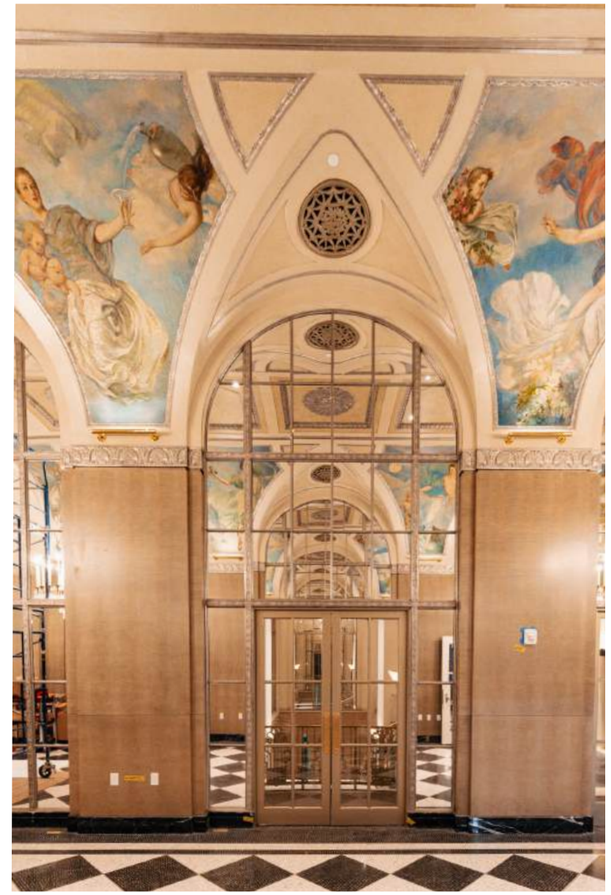
Some moments of restoration are less about fabrication and more about stewardship. The refurbished doors at the Waldorf Astoria are a study in architectural conservation, returning original features to their rightful prominence while subtly upgrading them to meet modern expectations.

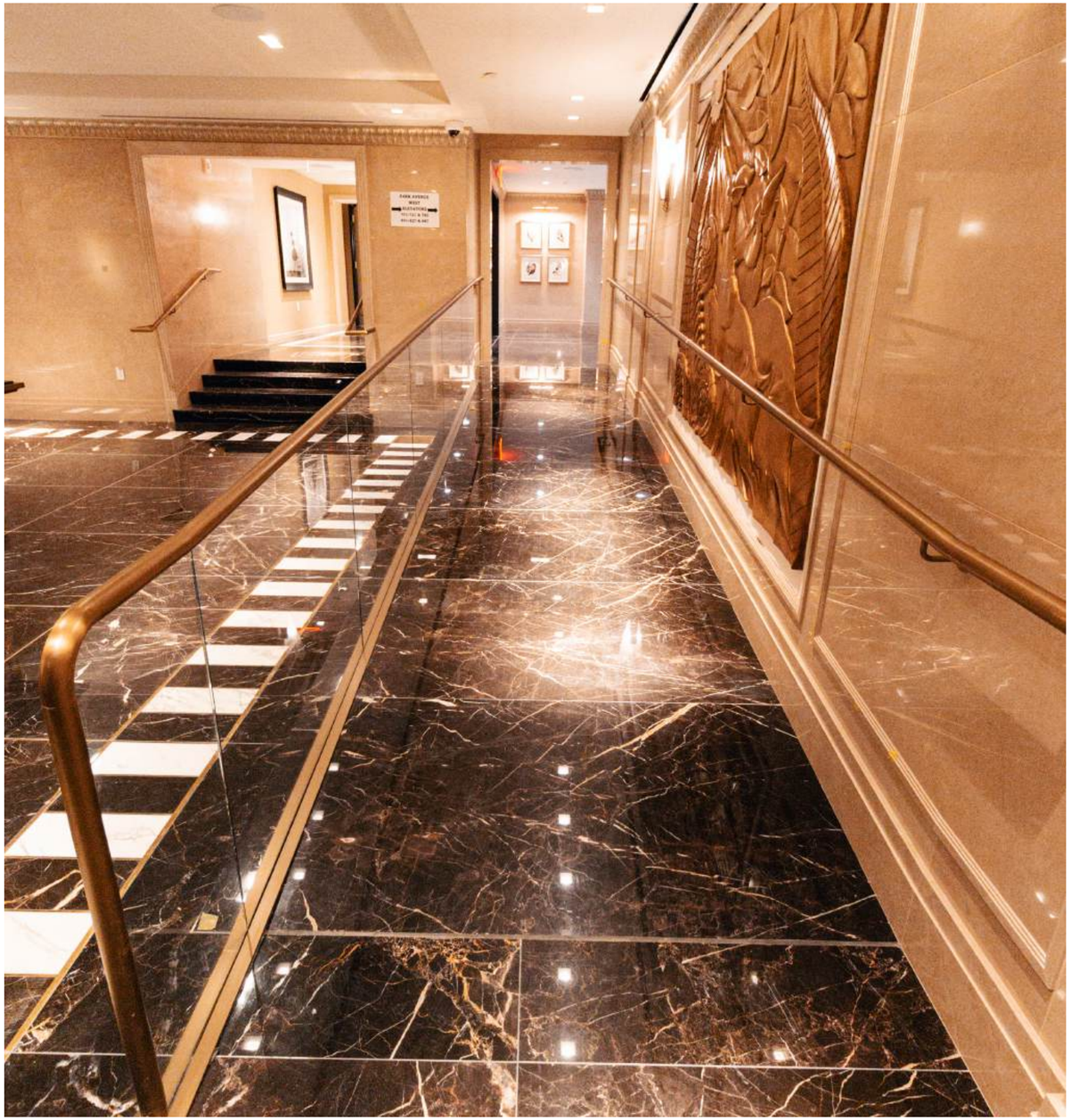
CARVART was tasked with restoring these century-old entry systems, which frame one of the building's most iconic sightlines. Our team carefully stripped and repainted the existing door frames, installed new glazing, and reintroduced original 100-year-old brass hardware, refinished by hand to recover its luster while retaining its historic patina. In tandem, modern floor closers and structural adjustments were integrated to ensure long-term performance, all while honoring the original design intent.

Though deceptively simple in appearance, the work required a forensic approach to detail. Alignments, sightlines, and finishes were all treated as heritage-critical. The result is a set of doors that feel untouched by time, artifacts of a storied past, carefully reawakened.







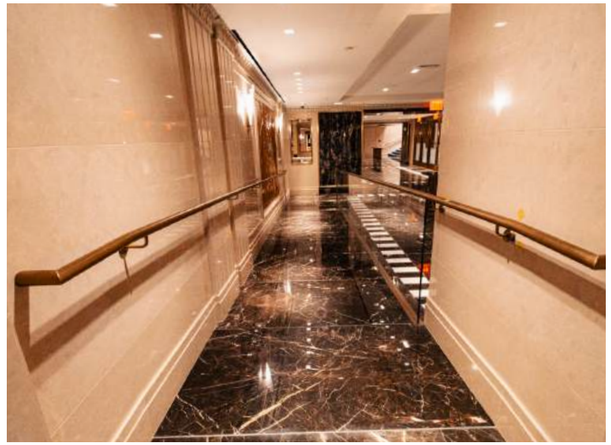


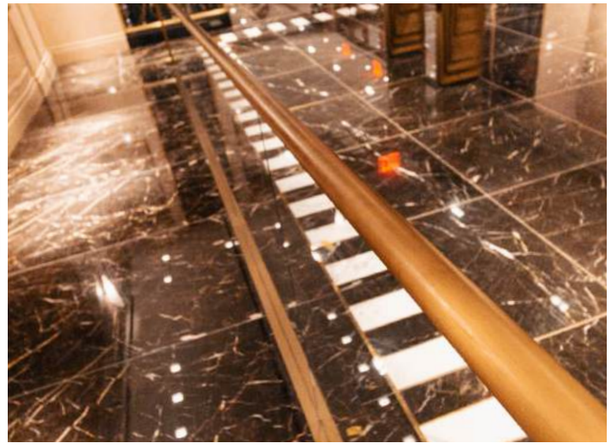
GLASS RAMP RAILING

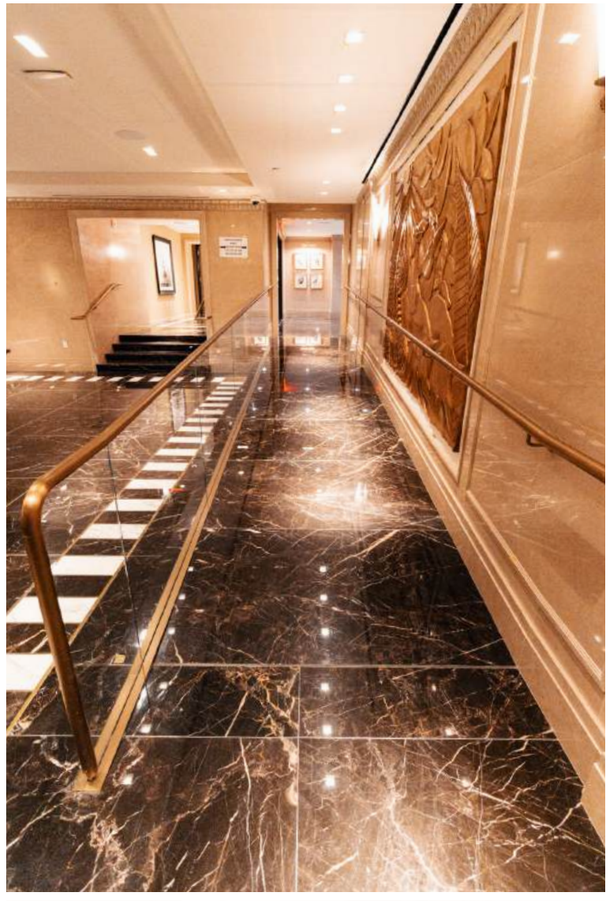
In a space defined by contrast, marble floors, carved reliefs, and rich bronze tones, the ramp railing system in this corridor serves as a subtle but essential intervention. Sleek and understated, it provides visual lightness and seamless accessibility without interrupting the architecture's historic rhythm.

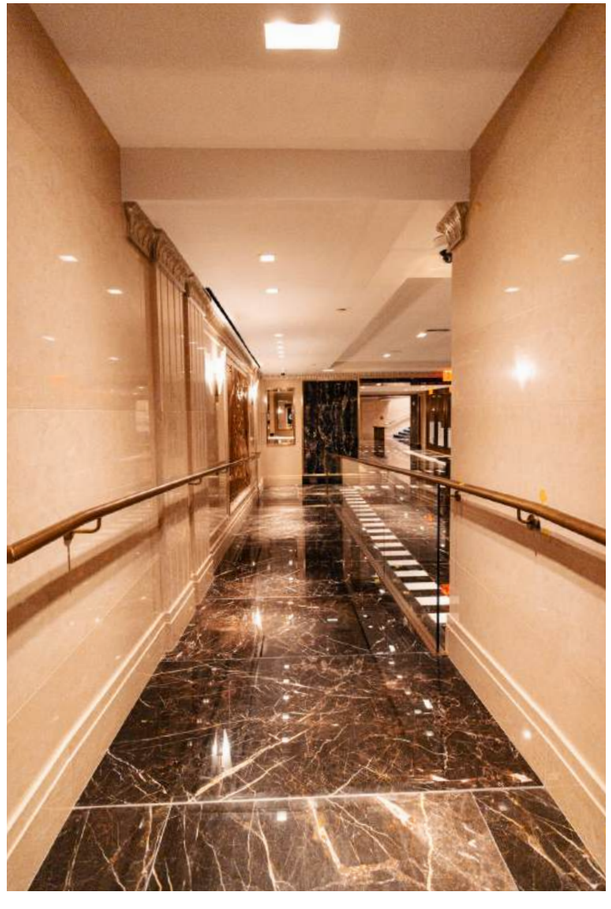
CARVART engineered and installed this custom railing using half-inch clear tempered glass, mounted within a continuous base shoe and paired with a gently curved tubular handrail in a warm brass finish. The clean detailing belies the coordination behind it, precise leveling across sloped surfaces, hidden anchoring points, and seamless transitions into surrounding stonework.

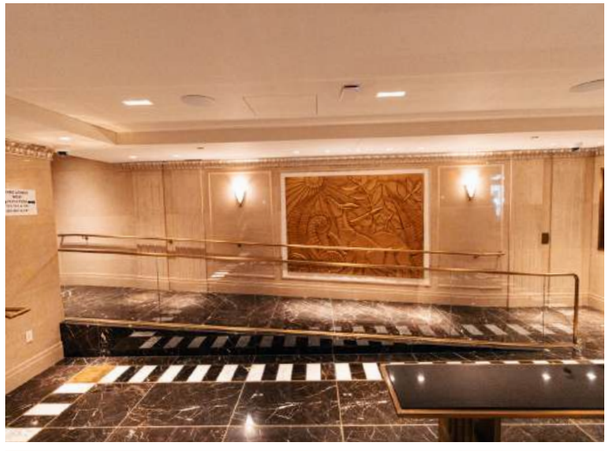
Though minimal in appearance, this installation reflects a larger ethos of the project: enhance without overpowering, and respect the language of the original architecture while introducing clarity, safety, and modern elegance. The result is a piece of infrastructure that disappears, until you look closer.

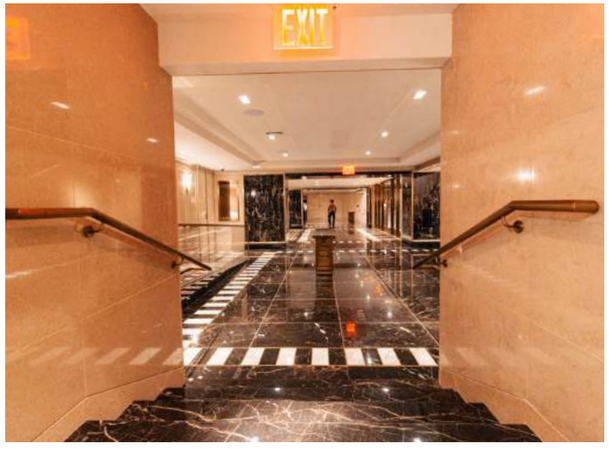












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