



# HARD ROCK HOTEL

BY

CARVART



# HARD ROCK HOTEL

## COMPREHENSIVE CASE STUDY

### INTRODUCTION

The Hard Rock Hotel project, located in the bustling heart of midtown Manhattan, presented CARVART with a unique opportunity to showcase its expertise in providing comprehensive architectural solutions. The goal was to create a visually iconic and structurally sound installation that captured the essence of the Hard Rock brand while adhering to stringent budgetary constraints. The project's success hinged on meticulous planning, innovative materials, and seamless coordination with various trades.

This case study highlights CARVART's role in delivering high-quality finishes, efficient installations, and sustainable solutions. The scope of work included the design and installation of key architectural elements such as the dome, column covers, staircases, railings, elevator lobbies, convector covers, and restroom stalls. The project required innovative solutions to integrate high-impact design with practical functionality, managing both the aesthetic expectations and the logistic realities of a major urban construction site.

**CLIENT:** Excel, Tishman Construction

**SCOPE:** Full-scope architectural solutions including modular prefabrication, material engineering, and innovative installation techniques.



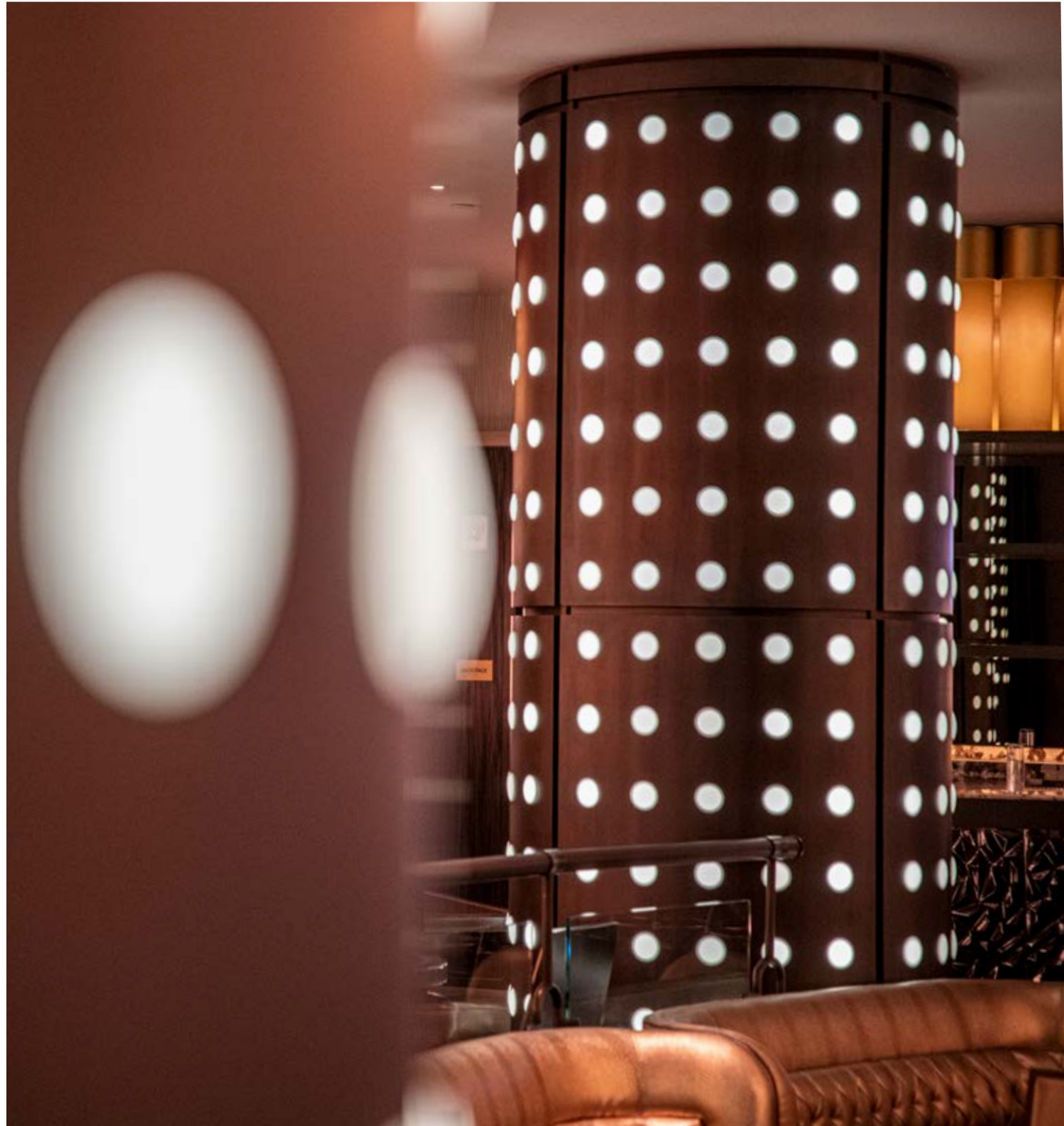


## HARD ROCK HOTEL





## HARD ROCK HOTEL: ARCHITECTURAL SOLUTIONS



### Design and Conceptualization

The design phase of the Hard Rock Hotel project involved a collaborative effort between CARVART and the architectural team to overcome initial cost barriers while maintaining the project's ambitious aesthetic goals. The team focused on reimagining traditional materials and design methods to create a cost-effective yet striking result. The conceptualization process included multiple redesigns to incorporate alternative materials like aluminum with plated finishes instead of more costly brass or bronze, ensuring the project remained within budget without compromising on visual impact.

### Material Selection and Innovation

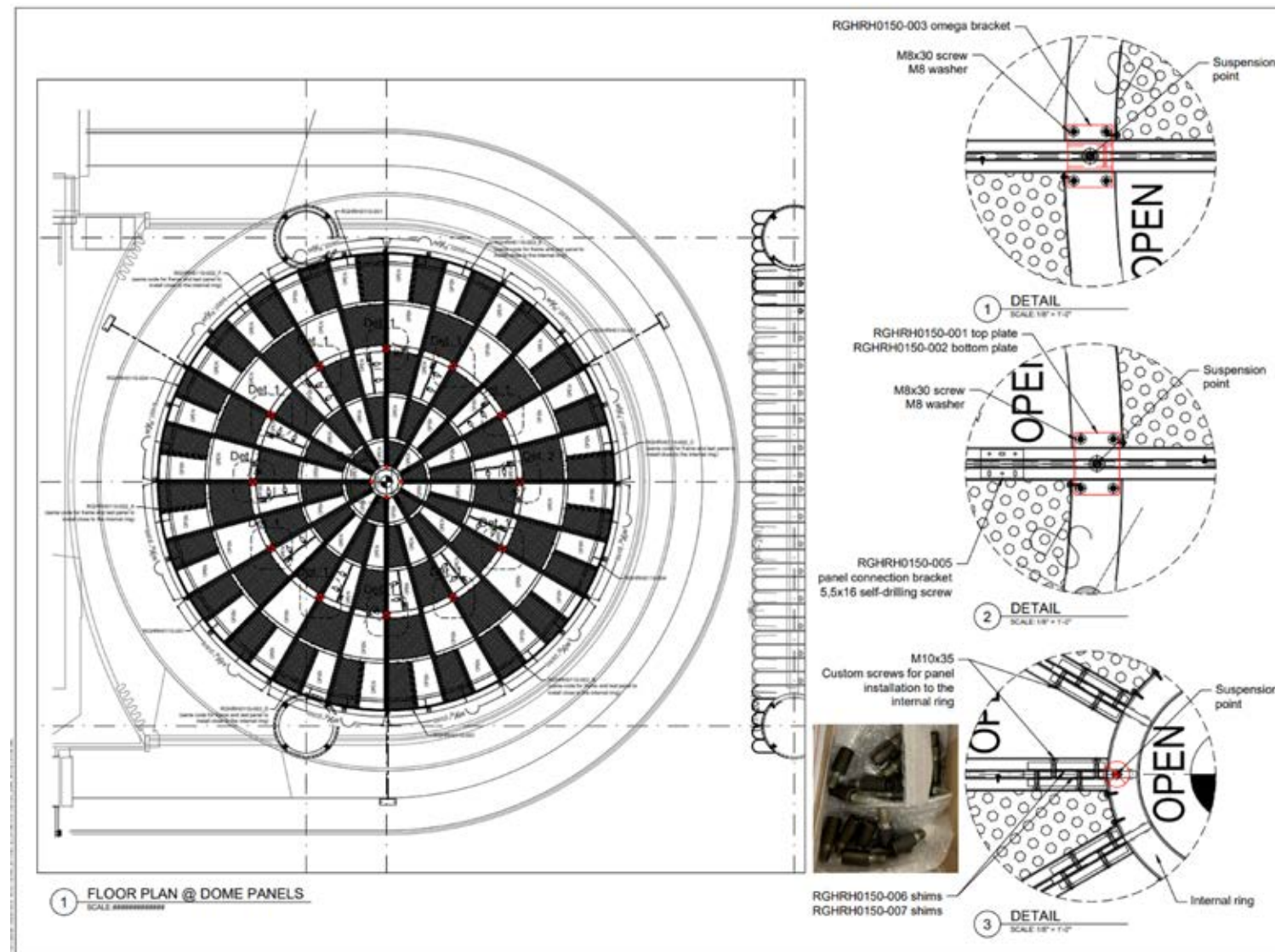
Material selection was critical in achieving the desired look and functionality of the Hard Rock Hotel's key features while controlling costs. The project team chose aluminum for its lightweight and cost-effective properties, applying metal plating techniques to mimic the appearance of more expensive materials. Steel cables were specially plated to match other design elements, providing both aesthetic coherence and necessary durability. This innovative approach to materials not only enhanced the project's sustainability but also its feasibility from a financial perspective.

### Installation and Construction

Installation posed significant challenges due to the project's location and the oversized nature of several components. Special techniques were employed to transport and install large pieces in the restricted urban environment of Manhattan. The project utilized cranes and specialized rigging equipment to hoist the prefabricated dome sections into place. Scaffolding and protective measures were essential to ensure the safety of the construction team and the public.



## HARD ROCK HOTEL: DOME DESIGN AND INSTALLATION



**INNOVATION:** Prefabrication in Pizza Slices

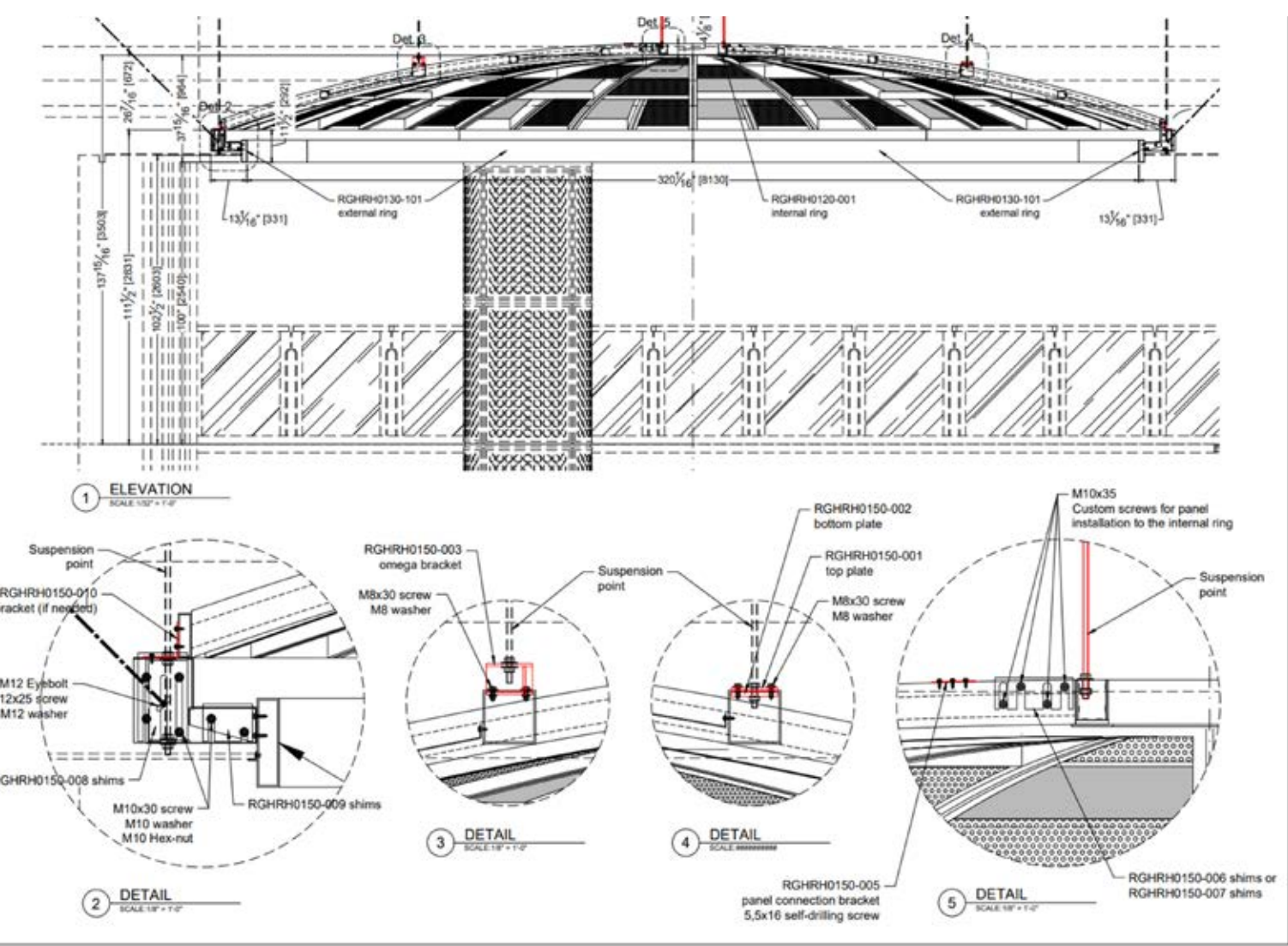
**MATERIALS:** Plated Aluminum, Stainless Steel, Brass Inserts

**SERVICES:** Design, Engineering, Modular Construction



# HARD ROCK HOTEL: DOME DESIGN AND INSTALLATION

The dome was a centerpiece of the project, designed to create a striking visual impact while ensuring structural integrity. The dome was fabricated in Italy and shipped in sections resembling "pizza slices." This method facilitated easier transport and assembly on-site, significantly reducing installation time to just a few days compared to traditional methods.





## HARD ROCK HOTEL: DOME DESIGN AND INSTALLATION



### PREFABRICATION PROCESS:

**Design Phase:** Detailed sketches and CAD drawings were created to ensure precision in fabrication.

**Fabrication in Italy:** The dome sections were prefabricated in a controlled factory environment, ensuring high quality and accuracy. The use of aluminum reduced weight, making the installation process more manageable.

**Pizza Slices Concept:** The dome was divided into large segments, which were transported to the site and assembled like slices of a pizza. This innovative approach minimized on-site labor and ensured a perfect fit.

### INSTALLATION:

**On-Site Assembly:** The dome sections were assembled on-site with precision, using pre-installed rods and supports. This method reduced the installation time to a few days, minimizing disruption to other construction activities.





# HARD ROCK HOTEL: DOME DESIGN AND INSTALLATION

## MATERIALS AND FINISHES:

**Plated Aluminum:** Chosen for its lightweight properties and ease of maintenance. The plating provided a high-end finish similar to brass but without the associated costs and weight.

**Stainless Steel:** Used for structural components, ensuring durability and resistance to corrosion.

**Brass Inserts:** Added to enhance the aesthetic appeal, providing a luxurious touch.

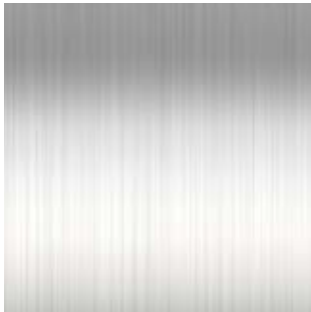
### MATERIAL FINISHES



Aluminum

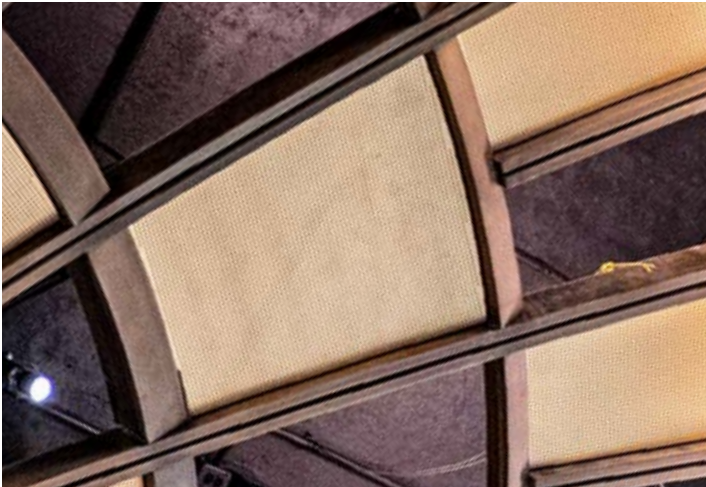


Brass



Stainless Steel

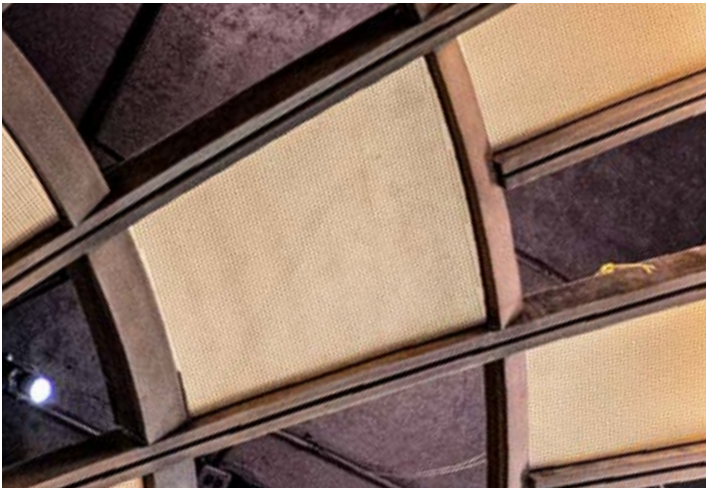
### MATERIALS



MESH PANELS



PERFORATED BRASS PANELS



MESH PANELS



PERFORATED BRASS PANELS



## HARD ROCK HOTEL: DOME GALLERY



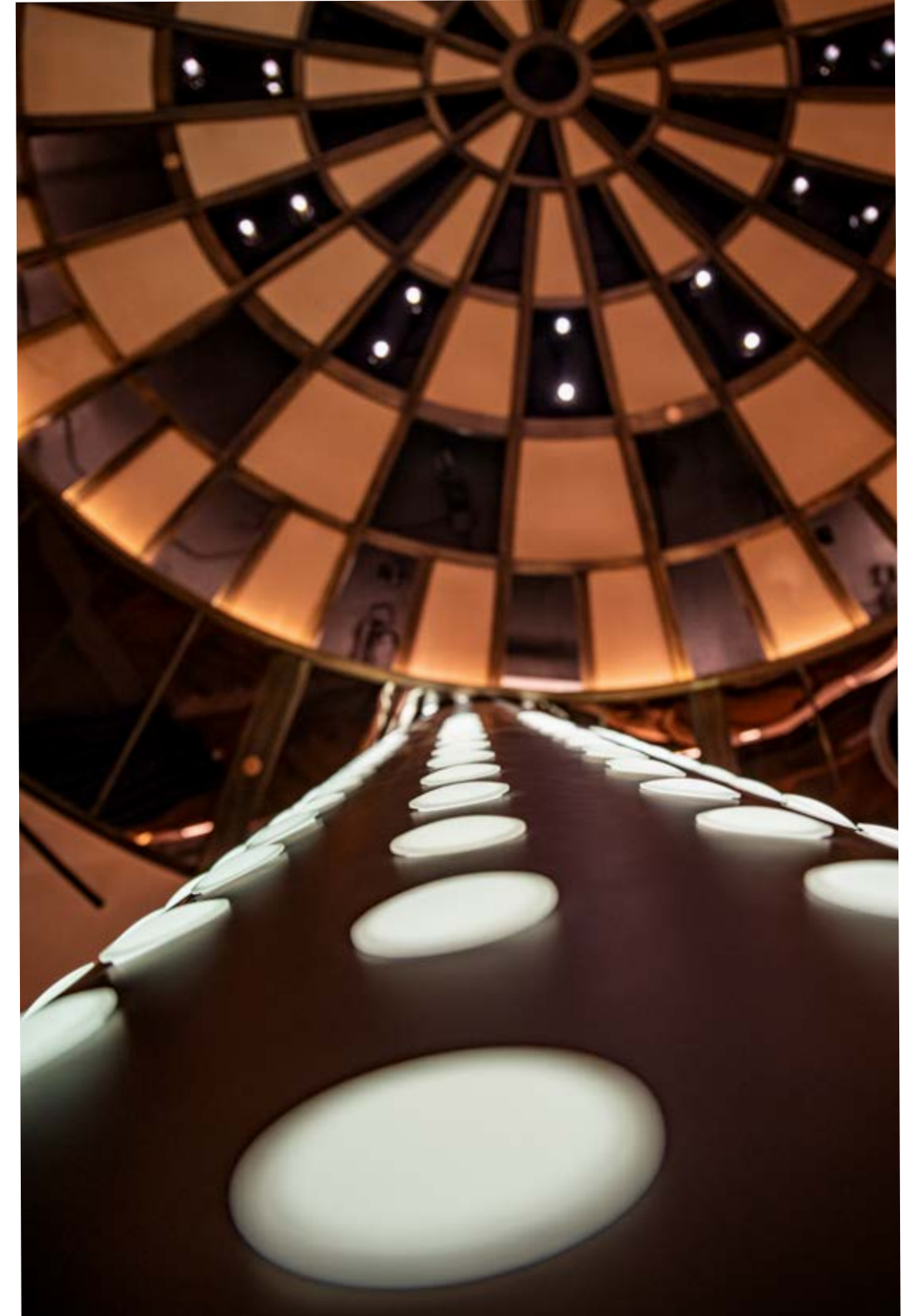


## HARD ROCK HOTEL: DOME GALLERY





## HARD ROCK HOTEL: DOME GALLERY





## HARD ROCK HOTEL: CABLE INSTALLATION





## HARD ROCK HOTEL: CABLE INSTALLATION



**INNOVATION:** Engineering for High-Tension Supports, Custom Plating

**MATERIALS:** Stainless Steel, Custom Plated for Aesthetic Coherence

**SERVICES:** Design, Engineering, Installation



## HARD ROCK HOTEL: CABLE INSTALLATION



The cables are one of the most visually striking and structurally significant elements of the Hard Rock Hotel. Spanning from the entrance lobby up to the restaurant, these cables serve both a functional and aesthetic purpose, representing guitar strings and adding a unique artistic touch.



# HARD ROCK HOTEL: CABLE INSTALLATION



## MATERIALS AND FINISHES:

- Plated Aluminum:** Chosen for its lightweight properties and ease of maintenance. The plating provided a high-end finish similar to brass but without the associated costs and weight.
- Stainless Steel:** Used for structural components, ensuring durability and resistance to corrosion.
- Brass Inserts:** Added to enhance the aesthetic appeal, providing a luxurious touch.

## DESIGN AND ENGINEERING:

- High-Tension Supports:** The cables required significant engineering to ensure they could support the necessary tension across multiple floors. Custom plates were bolted through the slabs to distribute the load evenly.
- Custom Plating:** To match the design elements throughout the hotel, the stainless steel cables were custom plated, providing a cohesive and polished appearance.

## INSTALLATION:

- Precision Engineering:** Installing the cables involved precise engineering to align supports across multiple floors. This was achieved by using access lines through the building's columns, transferring measurements through CAD, and careful on-site execution.
- Safety Measures:** Extensive safety measures were taken to secure the cables during installation, ensuring the safety of the construction team and the integrity of the installation.

## MATERIAL FINISHES



Aluminum



Brass



Stainless Steel

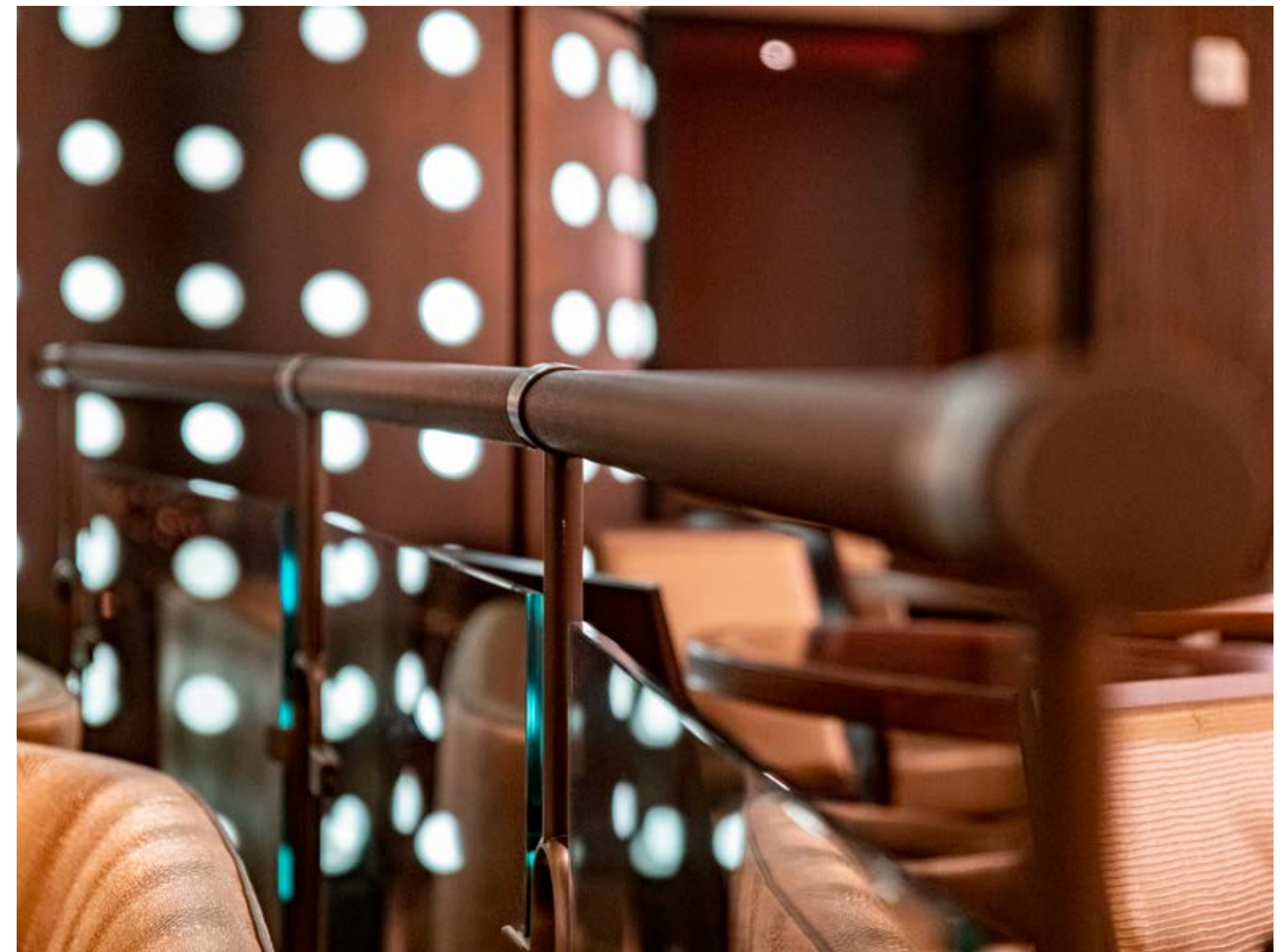


## HARD ROCK HOTEL: COLUMN COVERS





## HARD ROCK HOTEL: COLUMN COVERS



**INNOVATION:** Plated Stainless Steel

**MATERIALS:** Stainless Steel, Acrylic Lenses (Value Engineered Out)

**SERVICES:** Design, Mockup, Installation



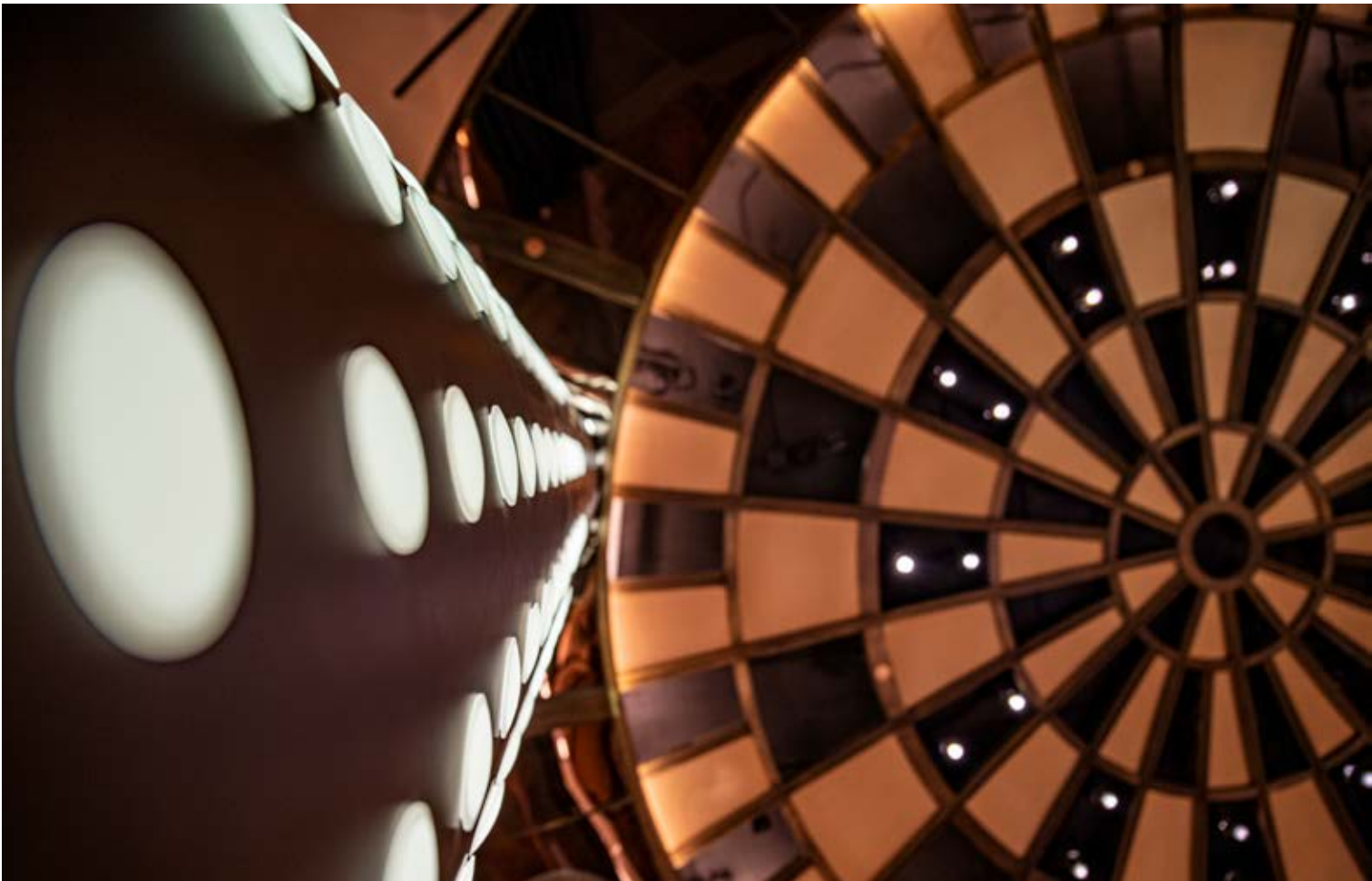
## HARD ROCK HOTEL: COLUMN COVERS



The column covers were designed to complement the overall aesthetic of the hotel while providing functional benefits. Originally designed with acrylic lenses, these were later value-engineered out to reduce costs and simplify the design.



# HARD ROCK HOTEL: COLUMN COVERS



## MATERIALS AND FINISHES:

**Plated Stainless Steel:** Chosen for its durability and aesthetic appeal. The plating process provided a luxurious finish similar to brass.

**Lighting Integration:** Strategic placement of lighting within the column covers enhanced the visual effect and ensured uniform illumination..

## DESIGN AND MOCKUP

**Initial Design:** The column covers included acrylic lenses to diffuse light and create a unique visual effect.

**Value Engineering:** To reduce costs, the acrylic lenses were removed, and the design was simplified while maintaining aesthetic integrity.

**Mockup Creation:** A full-scale mockup was created to demonstrate the final design and ensure it met the client's expectations.

## INSTALLATION:

**Sectional Installation:** The column covers were installed in sections, allowing electricians to access and install lighting components behind each section. This method ensured a seamless and coordinated installation process.

## MATERIAL FINISHES



Stainless Steel



## HARD ROCK HOTEL: ELEVATOR LOBBY





## HARD ROCK HOTEL: ELEVATOR LOBBY



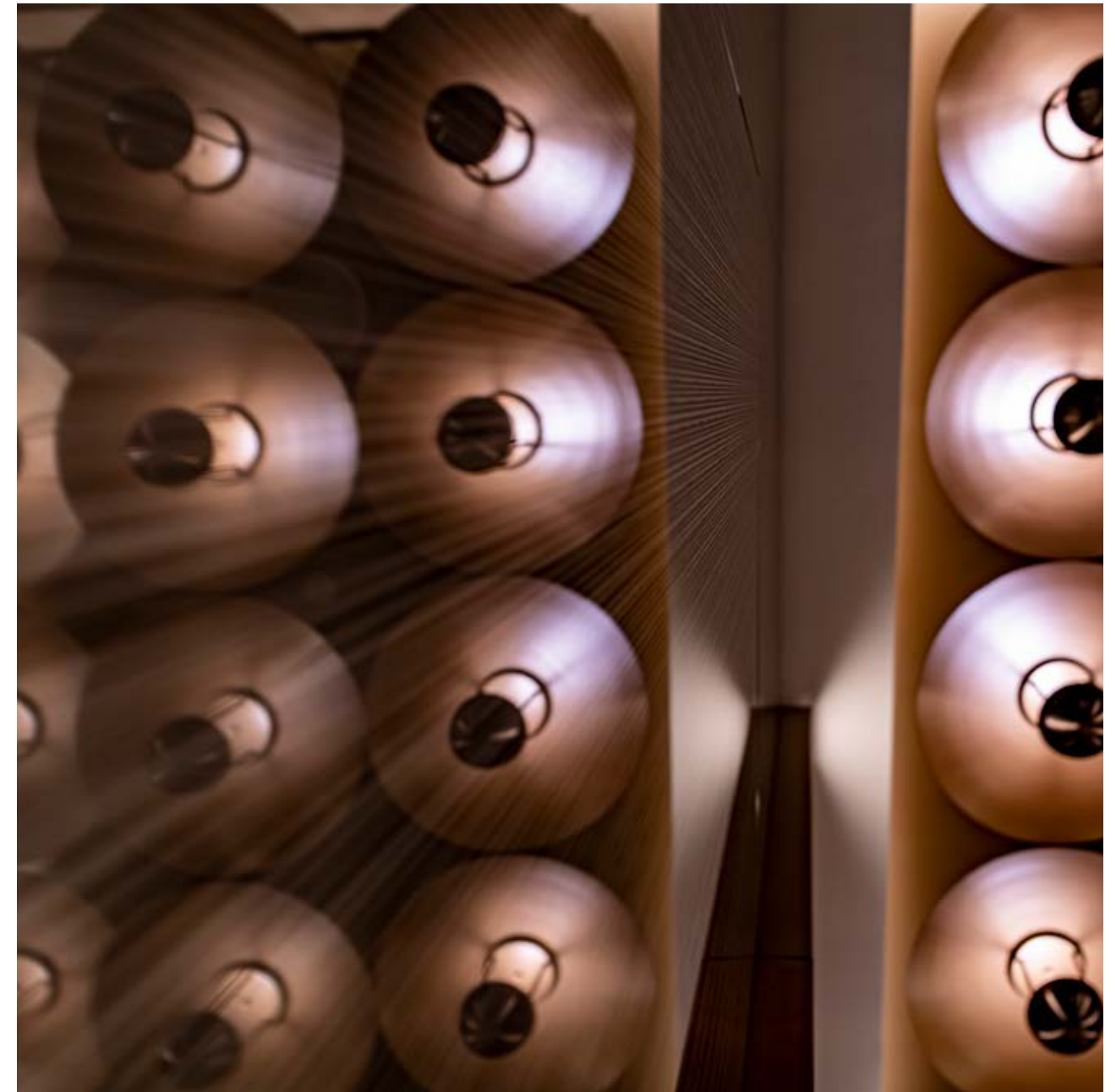
**INNOVATION:** Custom Laminated Mirrors, Rose Gold Plating

**MATERIALS:** Bronze Mirrors, Rose Gold Plated Frames

**SERVICES:** Design, Fabrication, Coordination



## HARD ROCK HOTEL: ELEVATOR LOBBY



The elevator lobbies were designed to create a luxurious and modern atmosphere, featuring custom laminated mirrors and rose gold plated frames. The integration of LED lighting within the vertical elements added to the sophistication of the space.



# HARD ROCK HOTEL: ELEVATOR LOBBY



## MATERIALS AND FINISHES:

**Bronze Laminated Mirrors:** Provided a sophisticated and reflective surface, adding depth and luxury to the elevator lobbies.

**Rose Gold Plated Frames:** The frames were plated with rose gold, ensuring durability and a high-quality finish.

## DESIGN AND FABRICATION:

**Custom Laminated Mirrors:** Mirrors with edge patterns were laminated with bronze, providing a unique and high-end finish.

**Rose Gold Plated Frames:** The frames were plated with rose gold, adding a touch of elegance and warmth to the space.

**LED Integration:** Vertical elements with integrated LED lighting were designed to enhance the mirrors' reflective properties and provide ambient illumination.

## INSTALLATION:

**Coordination with Trades:** The installation required careful coordination with millwork and electrical contractors to ensure seamless integration of the lighting and mirrors.

**Precision Installation:** The mirrors and frames were installed with precision, ensuring a perfect fit and alignment.

## MATERIAL FINISHES



Rose Gold



Bronze

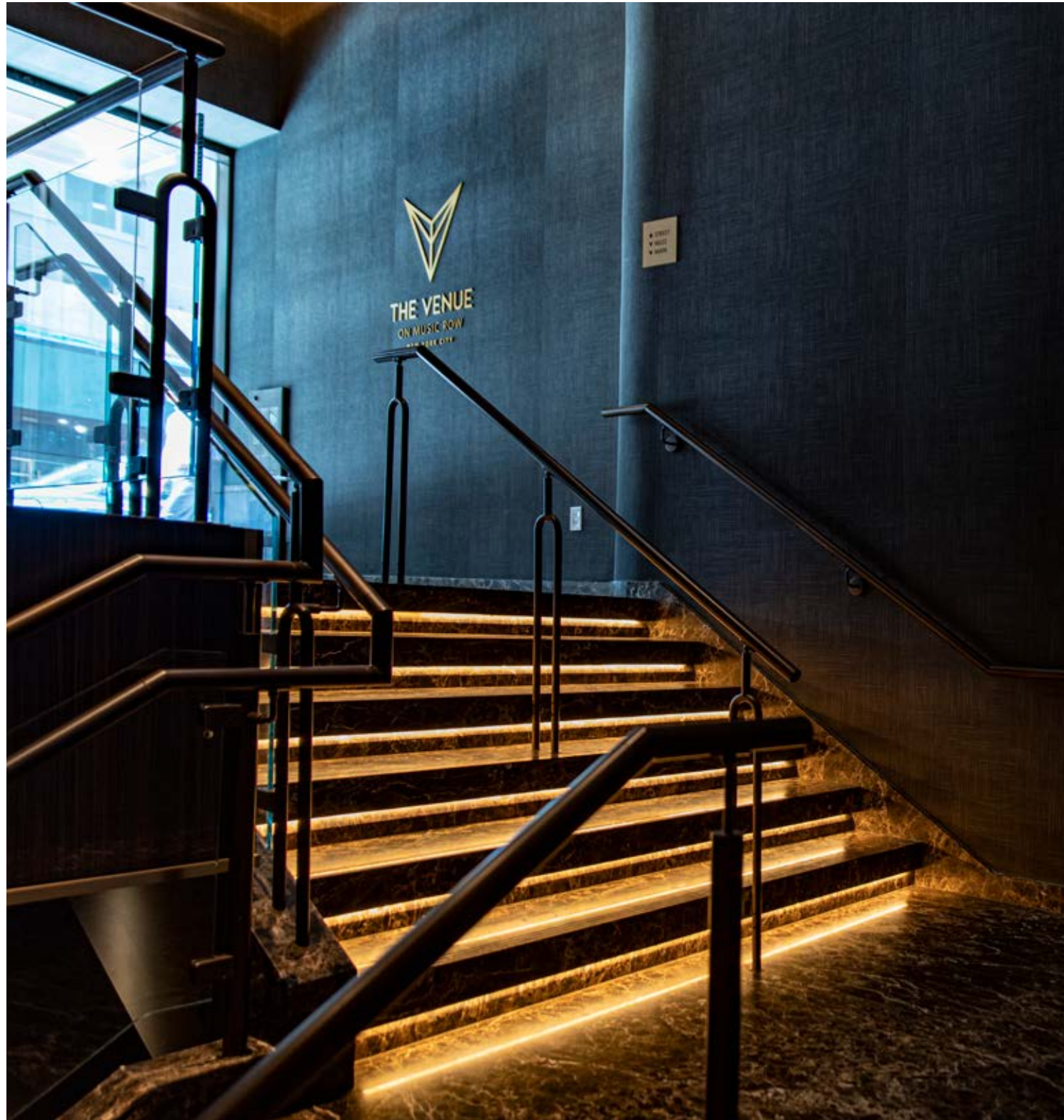


## HARD ROCK HOTEL: STAIRCASE AND RAILINGS





## HARD ROCK HOTEL: STAIRCASE AND RAILINGS



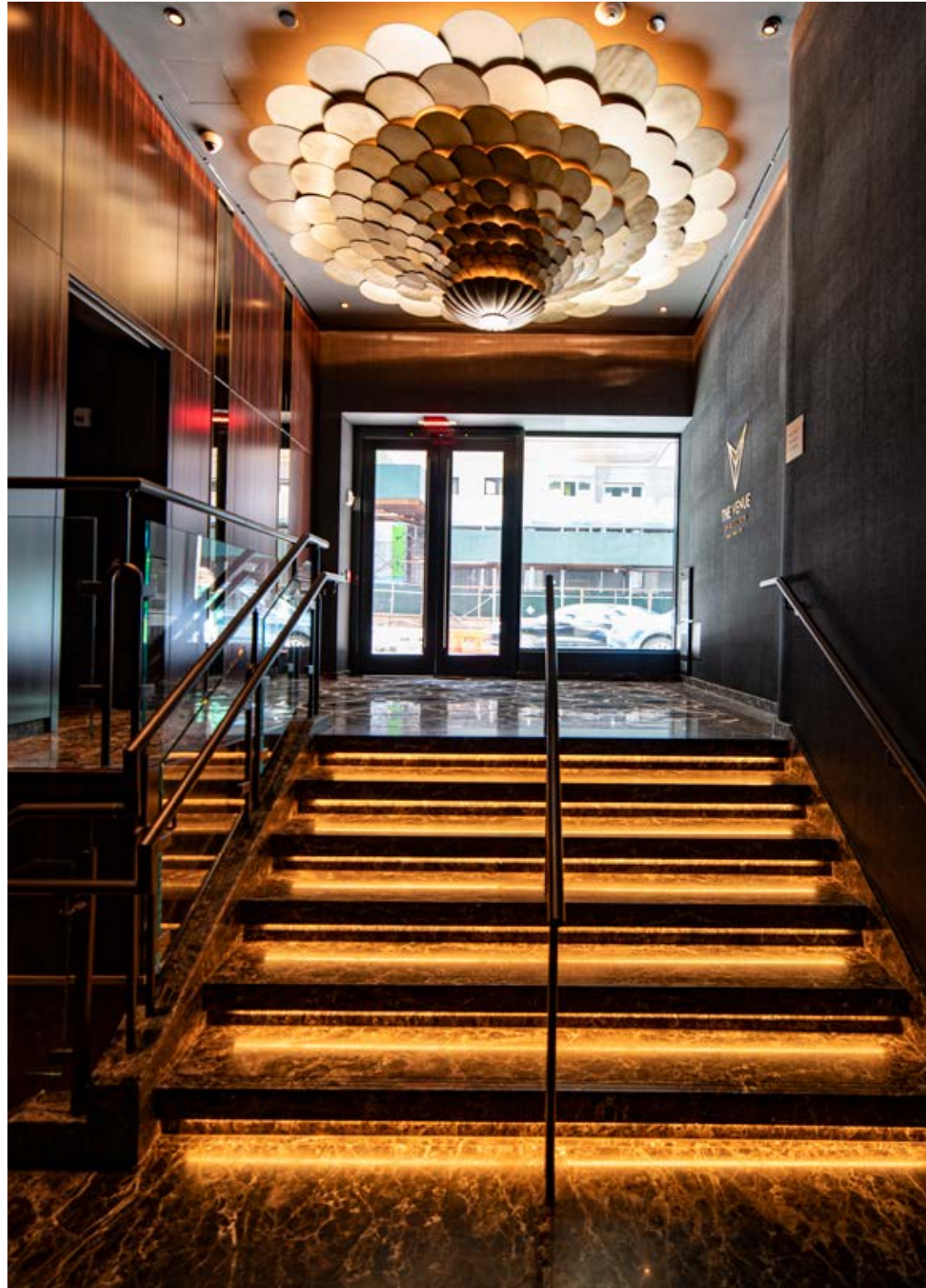
**INNOVATION:** Integrated Lighting, Hidden Supports

**MATERIALS:** Brass, Stainless Steel

**SERVICES:** Design, Engineering, Fabrication



## HARD ROCK HOTEL: STAIRCASE AND RAILINGS



### DESIGN AND ENGINEERING:

**High-Tension Supports:** The cables required significant engineering to ensure they could support the necessary tension across multiple floors. Custom plates were bolted through the slabs to distribute the load evenly.

**Custom Plating:** To match the design elements throughout the hotel, the stainless steel cables were custom plated, providing a cohesive and polished appearance.

### INSTALLATION:

**Precision Engineering:** Installing the cables involved precise engineering to align supports across multiple floors. This was achieved by using access lines through the building's columns, transferring measurements through CAD, and careful on-site execution.

**Safety Measures:** Extensive safety measures were taken to secure the cables during installation, ensuring the safety of the construction team and the integrity of the installation.

### MATERIALS AND FINISHES:

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## HARD ROCK HOTEL: CONVECTOR COVERS





## HARD ROCK HOTEL: STAIRCASE AND RAILINGS



**INNOVATION:** Engineering for High-Tension Supports, Custom Plating

**MATERIALS:** Stainless Steel, Custom Plated for Aesthetic Coherence

**SERVICES:** Design, Engineering, Installation

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## HARD ROCK HOTEL: RESTROOM STALLS





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CARVART®