

# Empire State Building observation deck (102nd floor)

New York City, NY, USA



## Project Information

**Project category:**  
Tourism/Wellness

**Year of construction:**  
2019

**Year of MAPEI involvement:**  
2019

**MAPEI coordinator:**  
Darin Shocker

**Project owner:**  
Empire State Realty Trust

**General contractor:**  
Navillus

**Installer company:**  
Navillus

**Project manager:**  
Kate Clancy

**Photographer:**  
Virtual360NY



## Project Overview

The Empire State Building is one of the most iconic buildings gracing the landscape of New York City's internationally recognized skyline. At the time of its completion in 1931, the Empire State Building was the world's tallest skyscraper at 102 stories and 1,454 feet (443 m), which includes the spire and the antenna. Among the most striking features of the building are the observatories on the 86th and 102nd floors. It is from the 102nd floor that visitors have access to a newly renovated, floor-to-ceiling observation deck that provides a 360-degree view of Manhattan, New Jersey, Connecticut, Massachusetts and beyond. MAPEI's waterproofing products, grouts, mortars and sealant helped complete the deck renovation.



## Products Used

- Mapesil™ T**
- Modified Mortar Bed**
- Ultracolor® Plus FA**
- Ultraflex™ LFT™**



# Empire State Building observation deck (102nd floor)

New York City, NY, USA

MAPEI helps enhance breathtaking view from iconic building

New York City's Empire State Building attracts more than 4 million visitors a year. It is currently the 4th-tallest building in New York City, the 6th tallest in the United States and the 43rd tallest in the world. The pinnacle of this world-famous building is the 102nd-floor observatory, which offers visitors a breathtaking panoramic view unlike any other.

To reach the newly renovated deck, visitors journey to the top by way of custom-made, state-of-the-art glass elevators with stops along the way. Each distinctive stop features lobbies full of immersive and historical experiences, including a museum gallery documenting the history of the building and its use in films such as "King Kong," "Sleepless in Seattle," "Spiderman" and many others.

To bring the 102nd-floor observation deck into the 21st century, leading New York City-based construction company Navillus was contracted to complete the renovation. Navillus had been using Laticrete products for years, but by 2019 had converted to using MAPEI products for its superstructure projects.

## MAPEI on the job

The biggest challenge that contractor crews faced on the project was establishing a method for transporting all the needed materials to the 102nd floor from the first floor. No option existed to simply go all the way to the top deck from the lobby, as there are five distinct levels within the building; therefore, the crews had to rely on a different strategy. A relay system – which consisted of crews riding separate elevators to bring the materials to the 102nd floor – was eventually used.

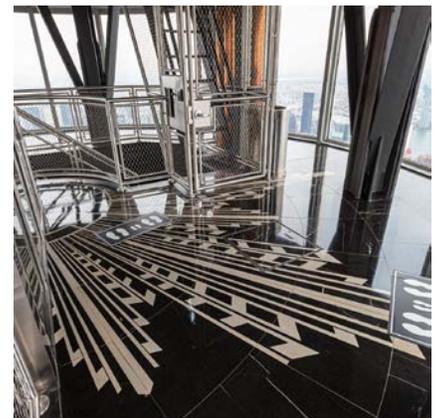
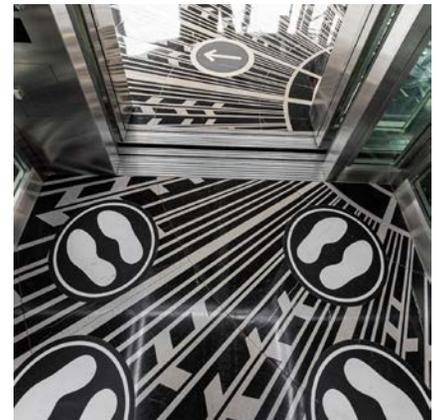
Because the observation deck would be a high-traffic area, a suitable tile and stone installation would be needed to provide a durable, long-lasting floor.

**Modified Mortar Bed** was chosen for its exceptional bond strength and its pre-blended nature, which meant no jobsite blending of powders or any additional additives. **Ultraflex LFT** mortar was used for the large-and-heavy-tile installation.

To grout the intricate compass-design tile, **Ultracolor Plus FA** was used for its rapid-setting ability and the added benefit of color consistency, stain resistance and nonshrinking characteristics. **Mapesil T** 100%-silicone sealant was then used to complete the flooring installation.

For several months, crews worked in a suspended "cocoon" – a circular scaffolding structure – in order to complete the work without impacting guests visiting the 86th-floor observation deck.

With the renovation completed, the 102nd-floor observation deck is now open to the public and safety measures are in place due to COVID-19 restrictions. MAPEI is proud to have been a part of this project at one of the world's most renowned and distinguished buildings.



### MAPEI Headquarters of North America

1144 East Newport Center Drive  
Deerfield Beach, Florida 33442  
1-888-US-MAPEI (1-888-876-2734) · (954) 246-8888

### Technical Services

1-800-992-6273 (U.S. and Puerto Rico)  
1-800-361-9309 (Canada)

### Customer Service

1-800-42-MAPEI (1-800-426-2734)

### Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)