

Type of Work: Viewpoint

Value of Works: **€3.000.000**

Year: 2023 - In Progress

Design State: Completed

Construction State: In Progress

Project Description:

The project draws upon the site's historical and cultural roots to create a meaningful architectural space that bridges past and future, transforming individual memory into a collective experience, while integrating sustainable, low-carbon technologies with traditional craftsmanship and modern design innovation to deliver an authentic and forward-looking transformation.

Roles / Responsibilities:

- Gained a deep understanding of the structural system, consisting of a steel framework with a ring-shaped beam geometry, and identified key structural behaviors influenced by the architectural form.
- Conducted a comprehensive analysis of loading conditions, with particular attention to wind effects due to the coastal location, including directional and turbulence factors.
- Developed a site-specific response spectrum based on regional seismic data to accurately perform dynamic (response spectrum) analysis of the structure.
- Identified the structural components, including an inner core supported by columns and staircases, and an outer cone-shaped steel structure serving as a distinctive architectural shell.
- Created a detailed numerical model in MIDAS Gen, applying static and dynamic loads including wind, seismic, and live loads, in accordance with Eurocode standards.
- Performed structural checks for stability, displacement, and member sizing, ensuring compliance with safety and serviceability criteria.
- Collaborated with senior engineers and architects to ensure alignment between structural behavior and architectural vision.

Numerical Model:



