## T/E/S/S ATELIER D'INGÉNIERIE







## **Monte-Carlo Pavillions**

Location : Jardins des Boulingrins, Monaco Architect : Richard Martinet - Affine Design Client : Monte-Carlo Société des Bains de Mer Package : Glass facades and cladding Scope : Complete technical design and construction monitoring Date : 2013-2014

The Monte-Carlo Pavilions are temporary structures designed to house select boutiques during the renovation of the Hôtel de Paris Monte-Carlo and the Sporting d'Hiver, where they are currently located.

These five pavilions are situated within the Jardin des Boulingrins, in Place du Casino, Monaco. They are arranged along a gently sloping pedestrian pathway that winds between the boutiques. Their rounded shapes, reminiscent of the smooth pebbles found on the beaches of the French Riviera, invite visitors to stroll through this undulating promenade.

One of the key technical challenges of the project was the design of a fully enclosed, double-curved envelope, where no adjustments could be made post-installation. The use of folded diamond-shaped metal panels allowed the double curvature to be achieved using developable panels, which could be fabricated through an industrialized process. T/E/S/S utilized advanced parametric 3D design tools to program surface tiling algorithms, generating over 5,000 unique panels that clad the pavilions while maintaining a high degree of architectural flexibility.

The supporting framework for these panels required extreme precision, as it ensured the accurate positioning of each panel. This geometry was first defined by a digitally cut horizontal ring located at the equator of each pavilion, ensuring geometric closure. The second structural element consisted of vertical metal plates, also digitally cut, which were fixed onto the horizontal ring, providing the final supporting structure for the panels.

With a tight schedule and an ambitious architectural vision, this project has become one of the symbols of Monaco's architectural renewal. T/E/S/S successfully met this challenge through close collaboration with the design architect, ensuring the project's completion to the highest standards.