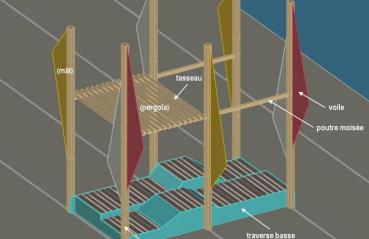
T/E/S/S ATELIER D'INGÉNIERIE







Armada 2019

Location : Rouen

Architect : Collectif Parenthèse Client : Métropole Rouen Normandie

Package: Structure bois

Scope : Assistance pour le développement et la justification des

systèmes constructifs

Date: 2019

Métropole Rouen Normandie, responsible for the organization of the Armada, launched a competition to design the quays and signage for the 2019 edition of the event. This major maritime gathering is held every five years or so over 10 days. Between 500,000 and 700,000 visitors are welcomed each day, come to admire the tall ships.

Collectif Parenthèse's winning project reinterprets the sails and graphics of maritime symbols through the installation of masts and pergolas in timber to house a variety of amenities available to visitors (deckchairs, tables, terraced seating, games, etc.).

This temporary installation occupied the embankment and a barge on the Seine for a period of 10 days.

The scenography is structured as a dialogue between the geography of the site and its maritime architecture. To the horizontality of the warehouses, quays, water and riverside, respond a succession of vertical lines defined by timber masts, and the sails and pergolas that are hung from them. These colorful triangles, inspired by the shapes of traditional sails, echo the forms of the ships moored in the marina and communicate a powerful visual invitation across the river. As well as their bright colors taken from ships' flags, these sails fulfil the role of signage, hoisted from each mast to indicate the different public events.

The pergolas and sails are vulnerable to the wind in the highly exposed Seine corridor. The masts and anchorages at the base are dimensioned to resist these wind loads according to two typologies: the 'barge' typology, whereby the foot of the mast is articulated on the specially built barge rails; or the 'forecourt' typology, whereby the foot of the mast is embedded into the concrete slab of the quay.

T/E/S/S provided technical assistance to the contractor for the development of building systems for these structures, providing supporting calculations and producing assembly drawings.

One of the challenges was to develop the project using only 'low-tech' techniques: no lifting equipment, standardized assembly details, optimized manufacturing and installation times, prefabrication. The project was realized in only a month within a limited budget.