



## Media Library and Cinema

Location : Saint-Malo

Architect : AS. Architecture-Studio

Client : Ville de Saint-Malo

Package : Structures, Façade vitrées et Verrières

Scope : Conception et suivi de réalisation

Date : 2009-2014

The project is located on a large square in front of the Saint-Malo train station. It is composed of two linear volumes, positioned on either side of the Malouin axis, housing the media library and the cinémathèque, respectively. The space connecting these two buildings is enclosed by a glass structure, forming the public reception hall. The dynamic geometry of the buildings, with curves in both plan and elevation, evokes the undulation of waves. The entire structure is topped by a photovoltaic ribbon.

One of the key technical challenges of the project was the design of a structural facade, which contributes to the overall stability of the media library. The use of slender wooden elements, structurally coupled with other materials, was made possible through in-depth structural analysis and the development of detailed interface connections.

Another major technical challenge, addressed by T/E/S/S, was the management of multiple interfaces, resulting from the interweaving of several complex geometric volumes, each employing different construction typologies.

The photovoltaic ribbon required a rationalization and geometric optimization phase to ensure constructibility. Structurally, it is supported by both the media library and the cinemas, with each volume resting on its own independent foundation system. A technical exploration phase allowed for maintaining structural independence between the two buildings by integrating articulations and expansion joints within the three-dimensional truss structure of the ribbon.

To fulfill the architectural vision of a fully glazed south facade without unsightly elements, T/E/S/S developed an innovative approach :

The main wooden columns, which are highly slender and subjected to significant loads, required stabilization against buckling.

The glass facade was designed to function as a structural element, incorporating horizontal transoms that serve as transversal stabilizing components.

As a result, the structural facade actively contributes to the overall stability of the building, blending aesthetic integrity with structural efficiency.

