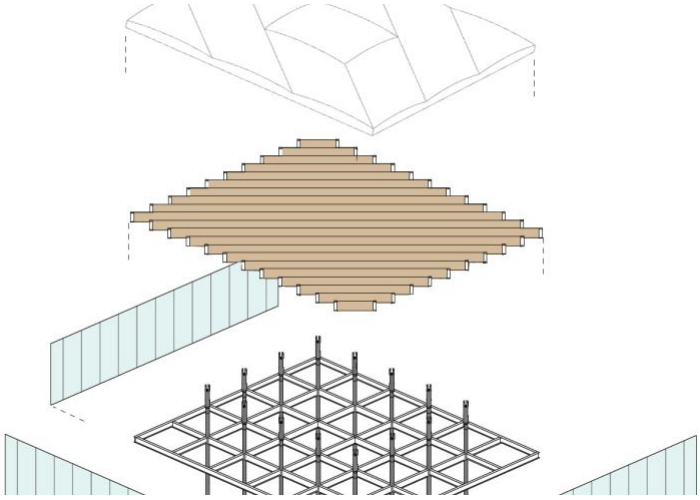

Kanopi, Rose de Cherbourg

Location : Rose de Cherbourg, La Défense, Paris

Architect : SOA Architectes

Client : Paris La Défense Real Estate

Package : Structure, Façades & Couverture

Scope : Conception et suivi de réalisation de la structure, façades/verrières et couvertures

Date : 2021-2023

The Kanopi project consists of a series of pavilions on the new Rose de Cherbourg public square created following the construction of the Hekla Tower by Ateliers Jean Nouvel.

The project fulfills the two functions of the brief with simplicity: shops that are visible, and clear links between the square and the pedestrian ways. The architectural principle ensures these functions by combining three basic elements for each shop: a large timber roof structure that provides shelter, glazed retail units, and a garden.

With largely glazed facades, these pavilions are covered by a layer of glulam joists. These composite beams, which are the distinguishing feature of the project, form a large canopy to provide shelter for the different shops.

The vertical loads are entirely born by the metal posts. These posts, which are continuous through the height of the building, have a rigid connection at their base and are connected at the top with the timber roof beams. The floors and roof form rigid diaphragms in plan, which transfer the horizontal loads to the posts.

The canopy is composed of glulam timber beams in Douglas fir, class GL 28h. These beams are supported either directly by the metal posts, or by the steel joists folded back in the roof. Consequently, their spans vary, from 2m to 23m, with 2m cantilevers at the extremities.

Connection between the timber beams and the metal supports are torsional blocked. These are stabilized between each other by a horizontal bracing plan formed by the CLT panels that support the roof.