T/E/S/S ATELIER D'INGÉNIERIE







Modernization of Montparnasse Station

Location : Gare de Paris-Montparnasse, Paris XIV-XV Architect : AREP Client : Gares & Connexions Package : Facades Scope : Design and construction supervision Date : 2015-2019

Since its commissioning, Montparnasse Station has undergone significant transformations, gradually losing its original architectural clarity.

In response to projected traffic increases—an additional 20 million passengers by 2030—and the introduction of new high-speed rail connections, Gares & Connexions launched an extensive restructuring plan in 2017. The plan follows a phased approach:

The "Relogement" Project – Redistributing and renovating staff office spaces to free up areas for modernization.

The "Modernization" Project - Redesigning all interior spaces, adding retail areas, and introducing new services for travelers. The "Façades" Project - Completely replacing the station's existing facades to renew the building's image, which has deteriorated over time.

Facade Renewal and Modernization

T/E/S/S is responsible for the design and execution supervision of the "Façades" project, conceived by AREP for the exterior facades and the interior facade along the transverse platform. The "Modernization" project, carried out jointly by AREP and Jouin-Manku, also involved technical assistance from T/E/S/S for the initial prototypes of the interior retail facades.

The first two levels house retail spaces and lobbies for the office buildings constructed above the station. The facades feature curtain walls inserted between existing columns, restoring visibility to the original elevated platform that supports the upper three floors.

The top two levels contain office spaces, with facades alternating between glazed bands and anodized aluminum cladding. The entire facade is equipped with vertical anodized aluminum sunshades—both natural and colored anodized—to provide rhythm and uniformity while enhancing thermal and lighting performance. The main station level (R+2) features a smooth, uninterrupted facade, equipped with large glass volumes that form a continuous horizontal showcase and open into a panoramic balcony overlooking the city.

The exterior facades are being entirely replaced to revitalize the station's appearance and contribute to the redevelopment of the Maine-Montparnasse district. Despite the diverse range of functions housed within the station—including retail, waiting areas, offices, and lobbies—the facade design ensures a coherent overall aesthetic while meeting enhanced thermal and lighting performance requirements. This project involves coordination between multiple stakeholders, including SNCF, Altarea (for commercial spaces), and various co-owners of the buildings above the station.

Inside the station, train operations management offices overlook the transverse platform, extending its entire length. A printed VEC glass facade allows rail workers to monitor station activities while maintaining privacy.

Construction is carried out partially at night to ensure station operations continue uninterrupted and minimize disruption to passengers. The transverse platform facade is closely linked to the retail spaces in the "Modernization" project, requiring detailed coordination and precise phasing despite the division of projects and timelines.

The scale of the project (nearly 550 meters of facades), the interaction between the "Modernization" and "Façades" projects, and the need to keep the station fully operational throughout construction demanded a careful search for technical solutions that align with the architectural vision.