

# ENERGY-EFFICIENT RENOVATION, INTERIOR DESIGN ET LANDSCAPE DESIGN OF THE FACTORIES OF eau de paris (PUBLIC WATER SUPPLY AND WATER WASTE COLLECTION FOR PARIS)

OFFICE BUILDINGS : ENERGY-EFFICIENT RENOVATION, INTERIOR DESIGN AND LANDSCAPE DESIGN

CLIENT	Eau de Paris
LOCATION	Montigny-sur-Loing (77), France Les Ormes-sur-Voulzie (77), France Longueville (77), France
Project MISSION	Framework Agreement Energy-efficient renovation, Interior Design Landscape Design
CONSULTANT	AR ARCHITECTES EUROELEC SMART ENERGY
area cost Date	BOST INGENIERIE N/A N/A Laureat 2023 - In process



Building C



West Facade



Building A  
Sorques Factory - Montigny-sur-Loing (77), France



East Facade  
Ormes Factory - Les Ormes-sur-Voulzie (77), France



Localisation of the 3 factories of Eau de Paris

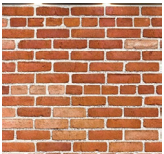
The site of the Sorque Factory, situated in Montigny-sur-Loing (77), France, consists of 2 factory buildings and 3 other buildings dedicated to various activities including working space, with architectural styles between the 1960-1970 and also the brick style. The energy-efficient renovation of the factory aims to improve the comfort for the occupants during both summer and winter, while decreasing the buildings' energy consumption at the same time.

Situated in Ormes-sur-Voulzie (77), France, the Ormes Factory of Eau de Paris est composed of one big building in which mutiple functions are gathered together. For this factory standing in the middle of a naturel habitat, the mission is to build an extension for the building, to improve the building's energy performance and to design the interior space for the personels at the same time.

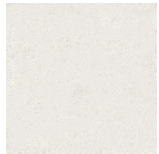




Main building  
Longueville Factory - Longueville (77), France



Refurbishment of the brick facades



Mineral coating



Wood fiber panels for insulation



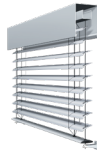
Photovoltaic panels



Double-glazed windows



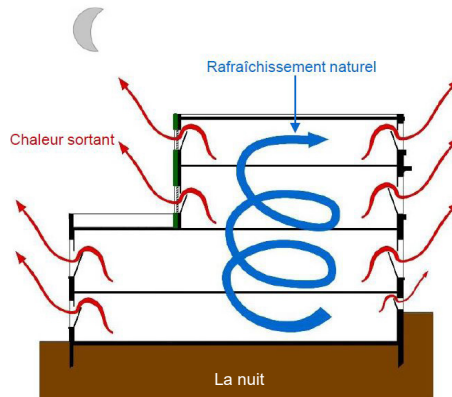
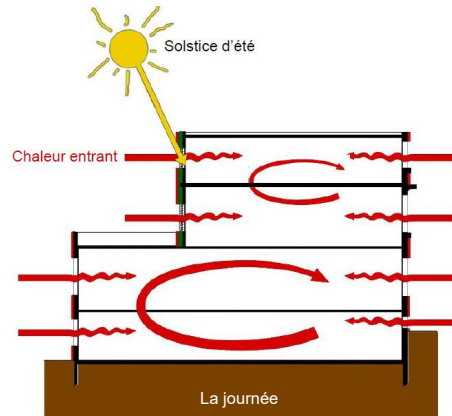
Venetian blinds integrated in the glass



Adjustable exterior sun protection



Fixed blinds in front of openings



Summer heat management concept - Free Cooling - During the day and during the night

## THE HQE® PROCESS

### HARMONIOUS RELATION BETWEEN THE BUILDING AND ITS ENVIRONMENT :

Unification and homogenization of all of the facades of each building by refurbishment, renovation, relooking, as well as the replacement of all of the windows and doors by energy-efficient windows and doors equipped with heat-protection systems.

### ENERGY MANAGEMENT :

Each facade of each building has been studied in order to find energy-efficient solutions for the interior space while preserving and improving the exterior space (the current architectural style of the buildings). The solutions include exterior insulations for the buildings built between 1960-1970, coated with a tone that recalls the original architectural style. The windows and doors are replaced by energy-efficient materials with double glazing, as well as heat-protection systems.

### INTEGRATED CHOICES FOR MATERIALS AND CONSTRUCTION PROCESS :

The insulants used in the project are biosourced materials (wood fiber panels), easily reused and recycled. The windows and doors proposed in the project are double glazing, guaranteeing an excellent insulation, and a maximum hygrothermic comfort. The existing frames and glasses will also be recycled.

### MAINTENANCE MANAGEMENT :

Replacing the windows and the doors by those of the latest generation guarantee the performance of the buildings when it comes to energy efficiency in the long term, and the blinds (heat-protection systems) proposed also require almost no maintenance at all.

For the Longueville Factory, situated in Longueville (77), France, the goal of the mission is threefolded. First of all, the main building has to be thermally rehabilitated with the preservation and improvement of the brick facade. Then the interior of the building has to be reorganised and redesigned as well to become office space for the occupants of the factory. And finally, a landscape design for the exterior.

The High Environmental Quality® approach will be used not only for the improvement of the energy consumption of the building, but for the design of the interior space and the exterior space as well in order to create an architectural harmony with the nature surrounding the factory.

