European Union History

Policy and power push the integration of Europe
After War two, protection, economic and the competition of the region need the integration of the Europe
Identity of EU

Diverse, Multi-cultural, United and Democratic
Rue de La Loi Street

Long, Busy, Straight Entering into the City Center
Connection Between Historical District and New One
Landmark Is Needed to Bring more Energy
New Design Will be Used in Rue de la loi by Christian de Portzamparc

This project will be based on the new design from Christian de Portzamparc which is to progressively create a new administro-residential hub, into which the European Commission will integrate itself.

This ‘open street’ system develops a progressive transformation of the existing city, a ‘designers dice game’ as applied to planning, of co-existence and space sharing between different epochs, and different dimensional destinations.
The Site in Rue de la Loi

This site is one of the main focus points of the new Master plan in Brussels for the European Quarter designed by Christian de Potzamparc. In this small-scale neighborhood, a 220,000 m² extra space for the European Union should be designed.

The European Commission building will, in this context, stand apart, on its reserved site. A separate entity, rising purer and higher than its surroundings, it symbolises the institution, and speaks out towards Europe and the world. The other towers in this development belong exclusively to Brussels.
What Kind of Building Could Stand out to become the New Representation of EU?

Iconic Building in Brussels

Skyline of Brussles

The new EU headquarter is going to be the highest building in Brussels.
Situation of the Site Plot

Height differences of the site
Create paths across the site, height differences should be considered
**EU Working Mode**

Most of the time, there are about 60 people working in a DG - they have a group meeting every two weeks, in a big conference room - small meetings (4-10 people) happen everyday. Meeting place could be in someone’s office, resting area, cafe and so on.
EU Current Office Types

Most of the members have their own offices. A few people share a room with one person.

Most people prefer separated office rooms.

Bilateral Corridor - boring and monotonous
EU Buildings in EU Quarter

Where is the identity of EU?
Is it a functional and comfortable building for EU?
Ambition

EU Identities
- United
- Diverse
- Multi-Cultural

Landmark
- Open to Public
- Iconic Building

Skyscraper
- Hybrid Building

EU Office Building
- Separate EU and Non-EU people
- Functional for EU Working Mode

Hub
Design Evolution

Loop Shape Tower
Design Evolution

Stepped Roof - Solve Structural Issues and Offer Balconies
Design Evolution

Piexel Loop - More Flexible for Different Functions
8x8 Cubes

Configurations
Study Model

Diversity of pixels
Before
After
Program Arrangement
Program Arrangement
Program Arrangement
Program Arrangement

Sky Lobby 1
Program Arrangement
Program Arrangement
Program Arrangement
Program Arrangement

Top Luxury Restaurant and Bar
Program Arrangement

Office:
83,400 m² (33.36%)

Conference Center:
47,170 m² (18.87%)

Hotel:
47,810 m² (19.12%)

Residential:
46,210 m² (18.48%)

Sky Lobby:
10,970 m² (4.39%)

Retail:
4550 m²

Gallery:
4400 m²

Public Museum:
3880 m²

Top Restaurant:
1610 m²

Total Area:
250,000 m² (100%)
Site Plan Route & Access

- Car Route to Center (Drop off)
- Car Route to EU Quarter (Drop off)
- Car Route (Drop off)
- Car Route Slope
- Car Parking Entra
- Tram and Bus Service
Ground Floor Entrance Area Analysis

8m Height Difference between two Entrance Area
Lower Ground Floor Entrance Area

Main Entrance for Non-EU People
Lower Ground Floor Entrance Area 0.00m
Lower Ground Floor Entrance Area 0.00m
Program Public Museum

Courtyards Introduce Daylight into Museum
Parking

Lower Ground Floor Entrance Area 0.00m
Underground Floor Plan - 4.00
Higher Ground Floor Entrance Area

Entrance for EU People and Sub Entrance for Non-EU People
Axonometric- Higher Ground Floor
Higher Ground Floor Plan +8.00m
Higher Ground Floor Plan
Higher Ground Floor Plan +8.00m
Higher Ground Floor Plan +8.00m
Plaza Entrance
Perspective of Plaza
Looking into Plaza from Building
Standard Office+ Conference Floor Plan
Perspective of a Office
Perspective of Meeting Area (Corridor) in Office
Multi-Functional Hall

Flexibility of Layout

Conference

Informal Event

Banquet
Axonometric- Sky Lobby 1
Floor 19 and 20- Skylobby 1

Function arrangement
Interior Perspective of Sky Lobby
Axonometric- Hotel
Floor 21 - Hotel

Standard Hotel Room
Axonometric - Skylobby 2
Floor 32 and 33- Skylobby 2

Function arrangement
Axonometric - Residential
Floor 34- Residential

Technical Drawing
Axonometric - Rooftop Restaurant and Bar
Floor 60, 61 and 62- Rooftop Restaurant and Bar
Night View of Top Floors
Vertical Organization
Public Space in the Building
Vertical Transportation & Core

To/From Skylobby 1

From Office & To Hotel

To Skylobby 1

To Hotel Reception Hall-Transfer to Hotel Elevator
Vertical Transportation & Core

From Hotel & To Residential

To Skylobby 2

To Residential Reception
Hall- Transfer to Residential Elevator
Vertical Transportation & Core

To Top Restaurant
Transfer to Other Floors

To/ From Top Restaurant
Structure

Columns + Cores
Structure

Columns + Cores + Bubble deck + Floor + Beam
Structure

Columns + Cores + Bubble deck Floor + Beam
Structure

Columns + Cores + Bubble deck Floor + Beam
Structure

Columns + Cores + Bubble deck Floor + Beam + Truss
Structure

Columns + Cores + Bubble deck Floor + Beam + Truss
Structure

Columns + Cores + Bubble deck Floor + Beam + Truss
Structure

Columns + Cores + Bubble deck Floor + Beam + Truss
Structure

Critical Parts- Core with Truss To have Windows in Core
Structure

Critical Parts- Truss with Column to have 32 m Cantilever
1.5m thick Beam to have 32mx16m Column Free Multi-functional Hall
Facade Fragment 1:20

Office - Closed
Facade Fragment 1:20

Residential - Sliding
Facade Details 1:5

1 Laminated safety glass & 2 layers of float glass
2 Electrically operated aluminium louvers
3 Post of aluminium facade element
4 L-profile clamp, aluminium
5 Partition wall-glass aluminium
6 Laminated safety glass & 2 layers of float glass, adhesive connection at corners
7 Wood flooring
8 Wood decking
9 Aluminium grating
10 Decentralised facade ventilation unit with heat exchanger, individually operable
11 Supply of dry air to prevent condensation in closed cavity
12 Acoustic panel
13 Fire-resistant mineral wool
14 Stainless steel angle
Facade Fragment Model
Facade Fragment Model with Ventilation
Climate in Individual Rooms
Climate in Individual Rooms

Ventilated by Decentralized Climate Activation, Work together with the Concrete Core System for Cooling and Heating
Climate in Individual Rooms
Climate in Open Space (Corridor + Open Office)
Climate in Open Space (Corridor + Open Office)

Centralized Mechanical Ventilation Through Shaft, Work together with Concrete Core Activation for Heating and Cooling
Climate in Open Space (Corridor + Open Office)
South Elevation
West Elevation
North Elevation
East Elevation