INDEX

THE UNITED NATIONS

MASTERPLAN

CONCEPT

AMBICTIONS

PROGRAM

DESIGN

CONSTRUCTION

INSTALLATIONS

IMAGE
The United Nations Organisation

- International Court of Justice - The Hague
- General Assembly
- Security Council - New York City
- Economics & Social Council
- Secretariat
- Sustainable Council - New York City
The United Nations Organisation

Goals

Maintaining international peace and security
Developing friendly relations among nations
Promoting social progress, better living standards and human rights
The United Nations

The Complex
MASTERPLAN
UN PLAZA & GREEN STRIP
MASTERPLAN
THE STAGE & UN PLAZA
MASTERPLAN
THE STAGE & UN PLAZA
CONCEPT
BUILDING VOLUME
CONCEPT

24000m² of program put into hypothetical building volumes

CONCLUSION

To be iconic > be different > be horizontal
CONCEPT

24000m² of program put into hypothetical building volumes

CONCLUSION

To be iconic > be different > be horizontal
CONCEPT
SLAB
CONCEPT
LIFT THE SLAB
CONCEPT

STAGE CONTINUES UNDERNEATH THE BUILDING, CREATING A NEW SPACE
CONCEPT
CREATE AN AX WITH THE DAG HAMMARSKJOLD PARK
CONCEPT

CREATE A CONNECTION WITH THE WATERFRONT
CONCEPT

THE ENTRANCE OF THE UNEC IS THE ENTRANCE OF THE UN STAGE
CONCEPT

THE COUNCIL CHAMBER AS PROMINENT FEATURE IN THE UNEC
AMBITIONS
VISUAL INTERACTION BETWEEN GROUPS
AMBITIONS
OPEN LOBBIES WITH VIEW ON THE INNER GARDEN
AMBITIONS
OPEN/VISIBLE COUNCIL CHAMBER
AMBITIONS
USE OF EARTH MASS AS INSULATOR AND HEAT STORAGE

-10°C
15°C

21°C

-10°C
15°C

21°C

30°C
15°C

21°C

30°C
15°C

21°C
AMBITIONS
RAINWATER COLLECTION & USE OF EVAPORATION COOLING
SOIL CONDITION
SOIL CONDITION
AMBITIONS

WINTER SITUATION: ARTIFICIAL AQUIFERS TO STORE THERMAL ENERGY COLLECTED WITH SOLAR COLLECTORS IN COMBINATION WITH LOW TEMPERATURE HEATING
SUMMER SITUATION: COOL WATER FROM ARTIFICIAL AQUIFERS IS USED TO COOL THE BUILDING
AMBITIONS

Phase change materials to balance the inside temperature during the day/night cycle
AMBITIONS

INDIRECT SUNLIGHT REFLECTED BY WATER

FERRARI DEVELOPMENT CENTER
MASSIMILIANO FUKSAS
STAGE LEVEL
VISITORS/DELEGATES LEVEL

ENTRANCES
COUNCIL CHAMBER
AUDITORIA
EXPOSITION SPACE
PUBLIC LEVEL
OFFICES
MEETING ROOMS
WORKSHOP UNITS
LOBBIES
RESTAURANT
LIBRARY
CONSTRUCTION PRINCIPLE
FIRST FLOOR
ATRIA TAKE CARE OF THE NEED OF NATURAL LIGHT IN THE OFFICES
SITUATION
WEST FACADE
MAIN CONSTRUCTION

INNER PLANE

OUTER PLANE

TRANSPARENT PHASE CHANGING MATERIALS

FACADE CONSTRUCTION

FACADE BUILD UP
FACADE
THE CLASSIC WALL RECOMPOSED
Description
1  finishing
   50 mm concrete screed with floor heating
   BubbleDeck BD 500
   vapour barrier
   240 mm insulation
   exterior insulated metal panel
2  8.5 mm marble panel
   adhesive
   8.5, 15, 7 mm insulating double glass
   2d framework mullion
   8.5, 8.5 double glass unit
3  Stabalux structural glazing profile
   2d framework mullion
   25, 25 mm fire insulation
   IPE 990 beam
   120 mm insulation
DISCRIPTION
4  8.5 mm marble panel
   adhesive
   8.5, 15, 7 mm insulating glass unit
   2d framework mullion
   25, 25 mm fire insulation
   IPE 990 beam
5  ultra-violet seal
   4mm polyurethane sprayed film
   epoxy resin coating
   8 mm trowelled adhesive seal
   160 mm sloping insulation
   vapour barrier
   BubbleDeck BD 500

DETAIL B
DISCRIPTION
6  8.5 mm marble panel
   adhesive
   8.5, 15, 7 mm insulating glass unit
7  8, 5, 8 triple glass unit
8  2d framework mullion
   25 mm fire insulation
   300 x 300 x 8 mm square steel tube
   25 mm fire insulation
   7, 15, 8.5 mm insulating glass unit
   adhesive
   8.5 mm marble panel

DISCRIPTION
9  8, 5, 8 triple glass unit
   Levolux Triniti Bracket
   Stabalux structural glazing profile
   2d framework mullion
   Stabalux structural glazing profile

Horizontal Detail 1:5
WINTER SITUATION

YEARLY SOLAR ENERGY COLLECTION POTENTIAL OF ROOF
4000 Wh/m² * 96m x 108m = 41.5 kWh

- SOLAR ENERGY COLLECTION
- USE AND STORAGE OF WARM WATER IN AN ARTIFICIAL AQUIFER
- LOW TEMPERATURE HEATING BY FLOOR HEATING
SUMMER SITUATION

- Used cooling water is used to heat up the warm water aquifer for use in other seasons
- An aquifer at a depth of 10 meters gives water of 11°C during the whole year
VENTILATION

- Evaporation of the surface basin precools the ventilation air
- Creates a cooler climate in the near surroundings, reduces the heat island effect
FACADE
Entrance
ENTRANCE
COUNCIL CHAMBER
exposition space/restaurant
EXPOSITION SPACE/RESTAURANT