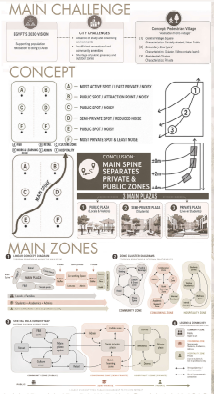
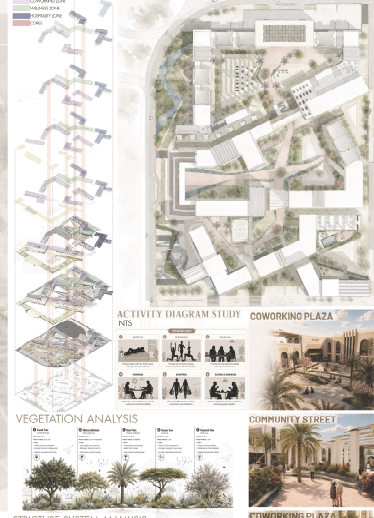


# أفق UFUQ - YOUTH HOSPITALITY CAMPUS BORG EL ARAB

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## EXPLODED DIAGRAM LAYOUT



### LAND AND BUILDING ANALYSIS



### FORM GENERATION



### USER ANALYSIS



### 1. LUREL ZONE



### 2. IMAGINE ZONE



### 3. REFLECT ZONE



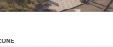
### 4. SHARE ZONE



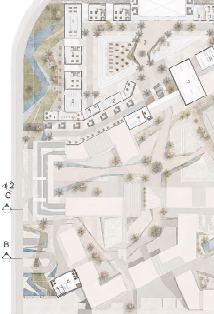
### DORMS STUDY



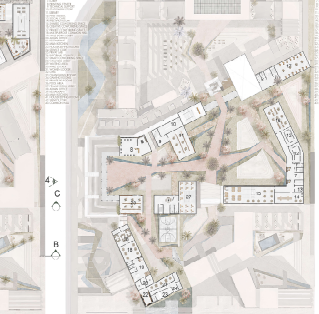
### MATERIALS ANALYSIS



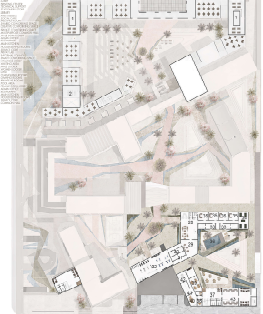
### +0M FLOOR PLAN



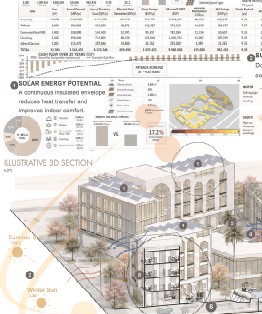
### 2M+ FLOOR PLAN



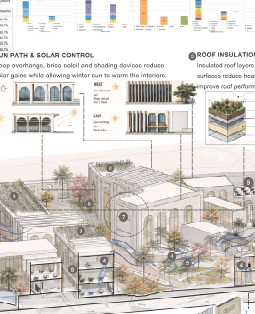
### 4M+ FLOOR PLAN



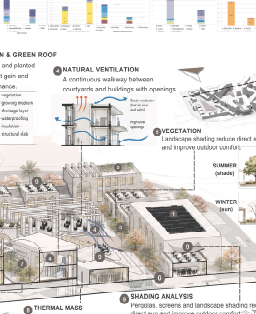
### 6M+ FLOOR PLAN



### +8M FLOOR PLAN



### +10M FLOOR PLAN



### LOWER GROUND FLOOR PLAN



### BASEMENT PLAN



### ELEVATION STUDY



### SOUTH ELEVATION (3)

### EAST ELEVATION (4)

### NORTH ELEVATION (1)

### WEST ELEVATION (2)



### PERFORMANCE ANALYSIS

Category	Value	Target
Energy Consumption	120 kWh/m²/yr	100 kWh/m²/yr
Water Usage	150 L/m²/yr	120 L/m²/yr
CO2 Emissions	25 kg/m²/yr	20 kg/m²/yr
Indoor Air Quality	Good	Good
Acoustic Performance	Pass	Pass
Thermal Comfort	Pass	Pass

### EDGE SIMULATIONS

- 1. Solar radiation analysis
- 2. Wind flow analysis
- 3. Thermal mass simulation

### WASTE WATER MANAGEMENT

- 1. Rainwater harvesting
- 2. Greywater recycling
- 3. Wastewater treatment

### INSULATION & THERMAL MASS

- 1. High-performance glazing
- 2. Thermal mass integration
- 3. Air conditioning optimization

### PASSIVE DESIGN TECHNIQUES

- 1. Natural ventilation
- 2. Shading devices
- 3. Green roofs

### SIMULATIONS

- 1. Energy simulation
- 2. Thermal simulation
- 3. Airflow simulation

### SHADING ANALYSIS

- 1. External shading devices
- 2. Internal shading devices
- 3. Landscape shading

### VEGETATION ANALYSIS

- 1. Plant selection
- 2. Irrigation systems
- 3. Maintenance requirements

### ROOF INSULATION & GREEN ROOF

- 1. Insulation layers
- 2. Green roof structure
- 3. Drainage systems

### NATURAL VENTILATION

- 1. Cross-ventilation
- 2. Stack effect
- 3. Wind-catchers

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