

01/ DESIGN STRATEGY

Design strategy of the main architectural form is focusing on two important aspects – a unique location of the chosen lot in the urban context of metropolis, and the original Lebanese identity. The consequent project is a synthesis of both. The building should play a role of synthetic media in urban and social environment. The objective of the proposed design is to make it attractive to Lebanese and Beirut society, and to allow them to easily identify with this architectural landmark. For this reason, deeply symbolic representation is crucial and played a unique role in the design process. The House of Art should be a universal and free space, kind of an open platform for various social and cultural activities. The project aims to reflect functional and ideological design assignment of this architectural competition, as well as urban regulations. The proposed structure is a living and breathing building for artists as well as visitors.

02/ CONCEPT – URBAN AND ARCHITECTURAL OBJECTIVES

Levitate platforms/ As already mentioned, the lot is uniquely located with regard to the center and to the highway ring. The proposed mass should be clearly identified. Horizontal articulation optically contrasts with surrounding tower solitaires. Two cubic levitate volumes are designed in the upper ground level part as open platforms for artists. The middle interior part is in immediate relation to the exterior. This space is conceived as a universal platform for communication and relaxation. The character of this space was inspired by surrounding boulevards with arcades and Arabian arcs. This environment creates living space which is one of the main moderators of the city center. Surrounding administrative buildings along the highway ring are creating kind of an impenetrable barrier. The middle open space aims to stand in contrast with this barrier as an optical perforation. The functional diagram and concept of spatial disposition is rational and universal to satisfy required program. The dispositions are simple and clear to allow easy usage.

The living identity / In search of some uniting ground element of Lebanese identity I could not miss the Lebanese cedar tree. The symbol of Lebanese cedar tree is represented everywhere from Lebanese national flag, national emblem, and logos. This tree symbol is interwoven into the long cultural history of Lebanon. Cedar wood was used as a base element supporting various important historical institutions and buildings. This wood played an important role in development of the Middle East architecture. The importance of its historic and cultural value was transformed to the national symbol in the national as well as the international context. Nowadays, the cedar tree is highly protected and maintained to secure its lasting existence. This living symbol became a protected identity.

Heart / The goal of the design was to bring the symbol of cedar tree to life to the point where it becomes an emblematic element of the building. The concept is based on cellular structure of the wood which is composed of a supporting structure and air spaces. This structure was an inspiration for morphing the new “trunk”. In this

case, ETFE membrane structure became the main element with strong emotional and aesthetic proprieties. This membrane is a living heart of the building and represents an important medium in conception of light. Working with natural and artificial light, I was inspired by Arabic architectural typology.

Lungs / The cellular structure also inspired the middle open space. Two cubic volumes are optically joined by several organic forms creating particular space. This invisible platform is sort of a breathing cellular structure.

Vessels / The entire building is “fibrillated” with threads of the supporting structure. In various ways, the supporting structure is either vertically exposed or covered. Middle parts of this structure represent a “forest” of supports. At the underground levels, these supports create kind of a “rooted” structure.

03/ DESIGN

Dimensions / The design respects all requested spatial and BCD regulations. The proposed building has 17 floors, 9 upper ground level floor and 8 subterranean floors. The construction’s floor height is 4 meters. The total footprint area at ground level is 2,725 m². The height of all 4 facades is 32 meters from the ground level. The total height of the building is 36m including air-conditioning devices.

Volume / The building could be apprehended as two compact cubic volumes which are oriented toward the interior. They communicate with the exterior through the perforated facade. In contrast to this, the middle part is an open space with the immediate relation to the exterior. These volumes are vertically connected by the ETFE organic membrane which is kind of a unifying element. This architectural element with strong emotional and aesthetics aspects is one of the main motives of the project. The interior space is designed as a system of intersecting vertical communications such as escalators and lifts. The escalators offer views of the interior open space from varying perspectives. The goal was to create an emotive space with strong and clear identity to become the central space of the building at all levels. From the ground level to the underground, a cascade of elevators leads to the representative foyer of the performance complex. The foyer is in immediate relation to the main hall and secondarily with the whole building above the ground level.

Communication Schema / Visitors enter the building from the north edge of the lot. The main entrance is treated as a glass lobby leading into the main hall. The main hall space is represented by an atrium with galleries. Vertical communications are located in this central space. The system of escalators assures vertical movement at the upper levels. A system of fire stairs and a elevators are located in supporting cores. Visitor and staff vehicles are parked in the underground parking. The entrance to the parking is located on the north side of the lot through a system of spiral ramps. Visitors continue from the parking in front of the building by two elevators. The entrance for staff and artists as well as the delivery area is located on the south of the lot.

04 / PROGRAMME SPACES

The main hall / (0 Floor) / The main hall is a heart of the building. This space is characterized by strong aesthetic and emotional qualities. It functions as a services and orientation area for visitors. Ticket offices, information desk, public restrooms, and all public services are situated here.

The lower cubic mass / (1F-2F) / This mass is formed by two floors with a total height of 9m. Administration offices, institution's management, the national cinematography, a movie theater, and archives are situated in this volume.

The middle open space / (3F) / This open space is 7 meters high. This area is conceived as a relaxation space for artists, staff, and visitors with beautiful view on the city. The upper level platform - mezzanine, features a restaurant open to the exterior with a possibility to be closed behind a glass wall in cold seasons. A bookstore and public restrooms are also situated in this open space.

The upper cubic mass / (4F-6F) / This mass is formed of three platforms with a documentation center, library, and audiovisual services. Workshop rooms, artist center, and studios are located at the upper level. This level has clear and functional disposition. The highest level houses a gallery with adjoined exterior spaces for installations and sculptures.

The roof / (7F-8F) / The roof is conceived on two levels as space for leisure, receptions, and special events. The lower level is covered by a pergola while the upper level is an open space under the sky. A bar and public restrooms are situated on the 7th floor for receptions.

The underground spaces / (-1F-8F) / From the ground level, visitors have a possibility to continue down to the foyer level of the performance complex by a "cascade" of elevators. On the first underground level, there are services for visitors such as public restrooms and cloak rooms. Also, there are two meeting rooms. A representative foyer for the Black Box Theater and Big Performance Hall are located at the level -16,000 m under the ground. Service and technical areas, changing rooms for the artists, and 4-level underground parking are located on the lower floors.

04 / TECHNICAL AND BUILDING SOLUTION

Construction schema / The main supporting structure is designed as a combination of steel and steel concrete construction. Rigidity of the static system is handled by the concrete monolithic wall system. The vertical supporting construction is formed by two steel concrete cores and steel vertical and diagonal columns. The horizontal supporting construction is formed from the steel truss beams hidden in the structure of floor slabs. Construction load is transferred to the vertical construction by the system of steel truss beams and grids. The vertical load is transferred to the foundations resolved as a steel concrete grid. The entire construction system is reinforced by a concrete wall construction system issuing from the disposition schemes.

The Facade / The facade is designed as a double ventilated curtain wall. The exterior curtain wall is formed of light prefabricate aluminum sheets with perforations. The surface has white glossy finishing thanks to silicon color. This curtain wall is conceived as a kind of shutter to protect against strong sunlight. This curtain wall is suspended on a steel prefabricated support system attached to floor slabs.

The Roof / The roof spaces are conceived as a roof terrace. The pavement has a glossy beige color and is laid on the roof construction system.

The Underground spaces and The Performance complex / Construction of theatre halls is supported by massive steel concrete walls. The big performance hall has cedar wood facing and the black box theater has black color facing. The halls have universal and multiform conception of the theater space.

The Main hall with ETFE membrane cone / Exterior and interior of the building are separated by ETFE membranes which are tied in the vertical and the horizontal plain. In the horizontal plain the simple ETFE membrane is conceived as a pre-strained construction with secondary supporting steel cable system. This horizontal membrane is separating interior and exterior of the building at the 3th, 4th and 7th floors. The main ETFE membrane cubus is 26m high. Construction of this cubus is conceived as the ETFE membrane system Texlon from Vector Foilec. The upper elliptic diameter of this cubus is 30m, 12m in the middle part, and the lower diameter is 32m. The supporting construction of this membrane is conceived as a light aluminum prefabricated Mero system.

Fire protection / The building is protected against fire by an integrated system of sprinklers. Fire stairs and evacuation corridors respect international rules.

Air-Conditioning / The building has a central air-conditioning system with possibility of zone control. The main heating and technical room are located in the underground spaces. The air-conditioning boxes are located on the roof of exhibition spaces.