The House of Arts and Culture

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The Lebanese - Omani Centre

The design of the building is a direct response to 3 main issued raised by the brief for the House of Arts and Culture.

1. How to design a building that is both a significant landmark for Beirut, a new identity for the performing arts, and a complementary addition to existing established performance spaces that does not detract from these established spaces.

2. How to create a public building when most of the intended functions are introvert by nature.

3. How to address a site adjacent to a major piece of traffic infrastructure.

The solution developed is to group all the functions of the building into a series of volumes, uniformly clad, to dispense any notion of hierarchy. The focus then becomes the phenomena of the overall form, not the individual performance spaces within. Identifying the building as a singular sculptural element, that can be read in isolation from the internal uses, so as to be identified as an expressed architectural form, without principally promoting it's uses to the detriment of existing performance spaces. Execution of such a form is based on the division of the site into principles outlined by golden geometry. This division establishes the framework for functional layout of the spaces, structure and movement throughout the space.



The golden section is the determining diagram for the form of the building and layout of internal spaces.

Public space is created by the deconstruction of the upper volume, through stepping of the levels to allow southern light to enter a large communal podium courtyard. Incorporating a set of large terraced steps and garden, visitors, users, and the general public can use the space for any suitable public purpose, whilst engaging with both the Avenue General Fouad Chehab, and the rue Ahamad El-Jabbouri.



podium is an public space, raised above the level of the roads, and exposed to natural daylight and views due to terraced floor plates above.

The building acts as a retaining element to manage the slope of the land. Back of house services are placed to the south of the site to act as a retaining wall structure. The planned new road to the west of the site has been transformed into a service entrance, that can also act as the basement/service entrance for the neighbouring block. All parking is located underground, with the first basement housing all the service area required for delivery, and a further 3 basements allocated for public car parking. Public access to the building from the basement has been proposed to the east of the site. This will ensure security is maintained as the building has a single public entrance point. Vertical access from the basement to this point can provide for an architecture connection with the proposed under-path indicated by the master plan.

The building functions are divided into two forms, a podium of rectangular volume at the base, housing the reception & performance halls, and an extruded square plan volume located on the podium, housing the administration, workshop, and research functions. The podium volume deals with the interaction of the building and the streets, and treats the sloped nature of the site to create a barrier to the sound and visual intrusion of the main highway and ring road.

The communal podium is open to the surrounding environment due to a terraced tear running through the upper volume to allow for light and views to be enjoyed. It is raised from the level of Avenue General Fouad Chehab to establish the hierarchy of public space over the surrounding urban infrastructure.

Both forms are clad in perforated metal screens over glass, fixed to a structural skin, to create a homogeneous language over the entire development. Expanses of glass, exposed structural systems and void spaces are used to communicate various functions, express entrances, and create visual connections to the urban context.

The perforated screens vary in visual permeability, allowing for accurate control of the external environment, including light penetration, shading, and visibility to and from the outside. The porosity of the screens allow the users to have operable glazing behind, to allow cross ventilation whilst still maintaining specific lighting and shade levels.

The buildings programme is arranged vertically, with the epicentre being the communal podium. The performance spaces have been allocated in the lower form, as their intrinsic nature suites the conditions imposed on the northern part of the site where natural lighting is limited due to the raised level of Avenue General Fouad Chehab. This large massing on the ground floor (rue Ahamad El-Jabbouri) frees up space on the upper levels, to provide more flexibility for southern orientation to the research, workshops, and administration areas.

The building comprises of 4 types of construction.

1. Vertical shear service cores running the full height of the building.

2. A series of floor to floor truss systems, fixed to the service cores in order to span the horizontal distances over the communal podium.

3. A load bearing façade to hold the edge of the floor plates and stiffen the structure.





Vertical shear cores running the full height of the building act as the primary structure of the building Steel trusses span the distance over the communal podium, tied into the service cores. The trusses vertically span several levels, allowing for a





The external façade is load bearing, acting as the tertiary structure. The edge beams of the floor plates are attached to the skin for greater rigidity.

Floor plates are fixed to all three structural systems to provide large horizontal spans over the void spaces.

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STRUCTURE DIAGRAM

Primary Structure: Vertical shear cores, concrete construction

Secondary Structure:

Horizontal trusses tied into Primary Structure to support large horizontal span of floors

Tertiary Structure:

Load bearing façade to hold onto slab edge of floor plates

Services are fed throughout the building via the 2 vertical service cores. Service core A contains all the public and private passenger lifts and the service lifts. These are accessible from all floors.

Service core B contains all the mechanical, hydraulic, electrical, communications etc servicing. Distribution to all floors is via this service core. It is directly connected to the plant room, which is located over 2 levels below the main communal podium. This leaves the roof free from any protruding plant rooms.