

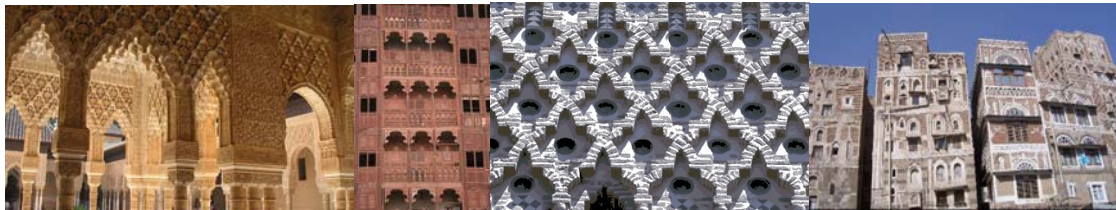
House of Arts and Culture

The Lebanese-Omani Centre

Design proposal

We proposed a dynamic and vivid architecture which is a direct reaction to the widely diversified programme of the House of Arts and Culture. With its unique design and its facade architecture the new House of Arts and Culture will be an iconic building, visible from many different directions. The many very different uses of the building - each standing on their own - form together the House of Arts and Culture just as the many different arabic influences which will be represented in this cultural space.

Due to the materials used in the façade design, the golden metal weave and using a brilliant warm colour as well as the pattern which is a modern reference to traditional arabic patterns the building will be fully integrated in the urban context.

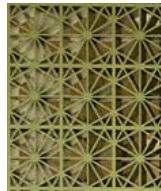


Alhambra, Spain

Jeddah, Saudi Arabia

Teruel, Spain

Sanaa, Yemen



House of Arts and Culture, Lebanon

The concept is a free arrangement of the different uses within the building each put into a box taking in account its space requirements. Due to the free alignment of the boxes, generous and fascinating spaces are created. Using the central elevator or panoramic staircase it is possible to access any specific part of the building while experiencing the whole.

Each component is either accompanied by generous terraces or exciting open spaces with double or triple heights which allow the entrances of light during the day. In this way the spaces will be experienced differently during the day and the visitor will discover exciting views and different perceptions. The variety of different situations of light and shadow intensify the spatial perception.

Programme

From a central lobby, which also operates as an informative space, staff and visitors have direct access to the exhibition spaces, workshops and offices. The two performance halls have their own reception space which will be used as waiting room before the performance as well as space for vernissages.

Two central staircases with 2 elevators each provide controlled and quick access to all parts of the building, the panoramic elevator and staircase is attractive to be used by visitors who want to explore and experience the building and its unique spaces and views.

The building is opens towards the north and directly communicates with the park which lays in front of it. This is where the main entrance and the open reception space is located. However, it is possible to access the building also from the west and east side.

The east entrances is located where the future pedestrian tunnel underneath the ring road will end. Therefore the building will be easily accesible from either side of the ringroad.

The entrance for cars and delivery vehicals is from the west side, where a double ramp leads to the three undergrond parking levels.

The total height of the House of Arts and Culture varies but does not exceed 34 m at the point of its its highest elevation and stays within the 32 m limit at the edges of the building.

The boxes which form the building in general have an average height of 5.50 m providing a free height of about 4 to 5 m. The main theatre provides a height of 22 m (free 20 m), the small performance hall and the movie theater 11 m (free 10 m). Some spaces are divided by mezzanines making use of the generous height for storage or staff spaces. For example the storage and conservation rooms are located in the mezzanine floor above the curator`s offices.

Right next to the open main entrance hall of the building the entrance lobby with the spaces for information, ticket booths and visitors bathrooms, 1st aid and security is located. Two central elevators provide access to the exhibition space (1st floor) the workshops (2nd and 3rd floor) as well to the meeting/conference rooms and the movie theatre which is located on the 4th floor.

One the west side of the entrance hall the store is located. A small lobby is the entrance to the staff rooms (mezzanine ground floor) the curators offices and storage and conservation spaces (1st and mezzanine 1st floor), the second exhibition hall (2nd floor) documentation centre (3rd floor) Administration (4th floor) and the panorama restaurant and its panorama terrace (rooftop).

The central panorama elevator and staircase provide access to each of the above mentioned spaces.

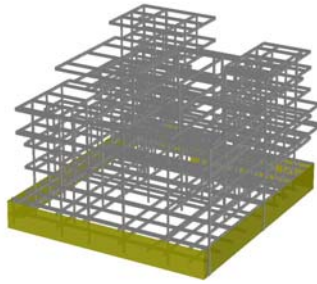
The two performance halls are easily accessible from the ground floor. The central reception hall can be used as waiting room before shows as well as space for vernissages, expositions and other festive events.

The Reception of sets and the workshop is located in between the two halls so it is easily possible to access both of them from this central space. The rooms for the artists are located above the set workshop so the easy access is guaranteed.

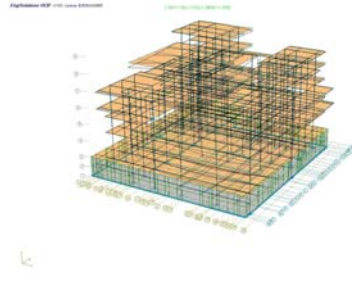
The three underground parking levels provide 270 parking spots (2,50 x 5,00 m) as well as the spaces for the different technical rooms (500 m²) in the 1st underground level.

Structure

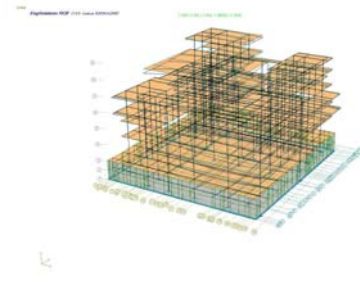
The structure of the House of Arts and Culture is based on metal columns and beams forming frames as well as lightweight concrete slabs. The two main elevator and staircase cores are used to reinforce the building.



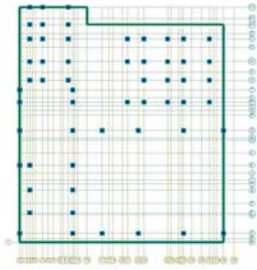
Structural Model: Columns and Beams



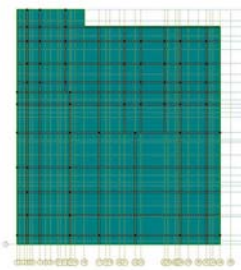
Structural Model: Slabs



Structural Model: Deformation



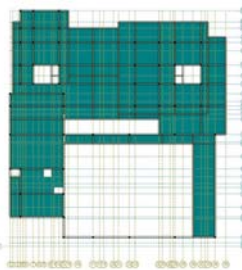
Foundation (-9.20 m)



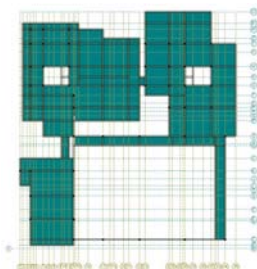
Groundfloor (+1.00m)



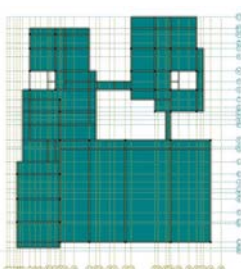
1st Floor (+6.50m)



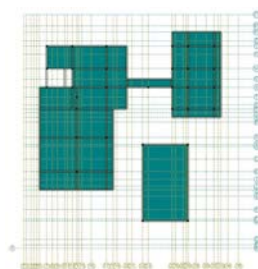
2nd Floor (+12.00m)



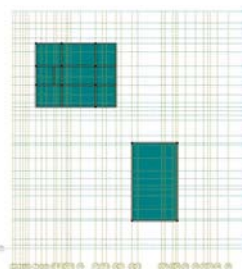
3rd Floor (+17.50m)



4th Floor (+23.00m)



5th Floor (+28.50m)



6th Floor (34.00m)

In between the double floors and ceilings the installations are accommodated. These open spaces can also be used to guarantee a flow of air inside the building for ventilation. Central ducts located in the cores accommodate the vertical installations.

Any necessary equipment of air conditioning is located between the roof structure in order to make them invisible from the outside.

Climate Concept

In order to reduce the use of energy for cooling the building's façade made of metal louvers covering the inner facades generates shadow and a second skin. Natural ventilation between the outer shell and the inner façade helps to keep the building cooled down.

The proposed *active Chilled Beams* also supports reducing the amount of energy required to cool down the House of Arts and Culture and, as well, to dehumidified the air. The combination of radiant cooling and ventilation is very energy efficient.

With the active chilled beam systems the building's primary/ventilation air is continuously supplied to the active chilled beam terminal units by the central air handling system. This primary/ventilation air is cooled or heated to partially handle the temperature-driven sensible loads, while in the hot period being cooled/dehumidified enough to handle all of the internal moisture-driven latent loads.

Solar cells on the roof-top provide some of the electric energy consumed by the building as well as hot water.

