

International Architecture Competition

THE HOUSE OF ARTS & CULTURE Beirut - Lebanon

INTRODUCTION

The totality of the House's functions is contained in this three integrated different geometry volumes made of different materials and height. Each volume contains the space required to activate an integrated system of functions where everyone could go everywhere he needs.

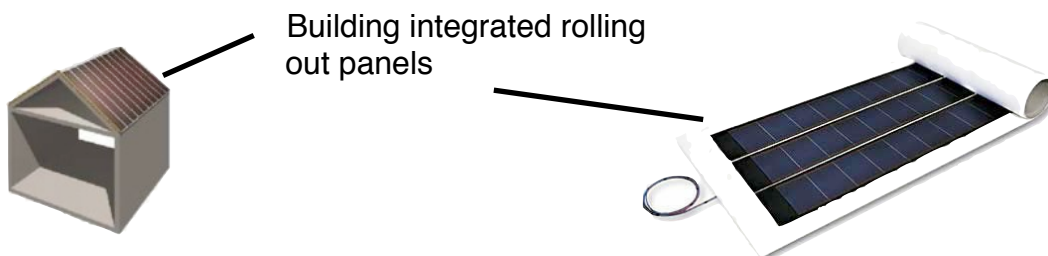
The visitor by foot enter crossing by the main entrance in the west corner-square in the big semi-cone where he could go to the theatre downstairs having tickets at the ground floor, visit exhibition rooms upstairs or do something connected with other functions included in the building.

The visitor would have the opportunity to either listen to a contemporary music concert, attend a fashion show, see a movie in one of the performance halls, read in the documentation centre or work on the computers, have a coffee in the cafeteria, visit the paintings or sculpture exhibition on show, or attend one of the workshops or courses.

PERFORMING ARTS

The parking area at -2,-3 and -4 floor connect all the people coming by elevator directly to the main foyer or to the theatre foyer at -1 level. The Large Hall is a typical italian style with the box on the lateral wall and the orchestra pit. It's a multi purpose hall for symphonic performance, conference, lyrical seasons, music and theatre events. The seats are 820 and the access is granted from the ground floor and from the -1 level foyer.

The theatre with 400sq of photovoltaic panel roof integrated and regarding south direction allow to autogenerate electricity for supporting every need energy.



The panels have 5500 x 1200 mm dimension and every panels 6,5 square meter give about 410 Wp electricity power.

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Considering the place (Beirut) and the climate report analysis it's easy to forecast that main problem for a building system like this one is to prevent hot in summertime more than cold in wintertime. This is the reason why we set the three performance halls under the earth, saving energy for refreshment and heating.

Visual art spaces related with exhibition area are standing on two different level closely connected. The area is full open space as the requirement it was flexibility and modularity. The supply and delivery for all the functions they need, is located below the inclined slub of the large performance hall in the back of the house. From there the truck can download and load the goods in the delivery area with a special elevator they can support upstairs exhibition and downstairs performance Halls.

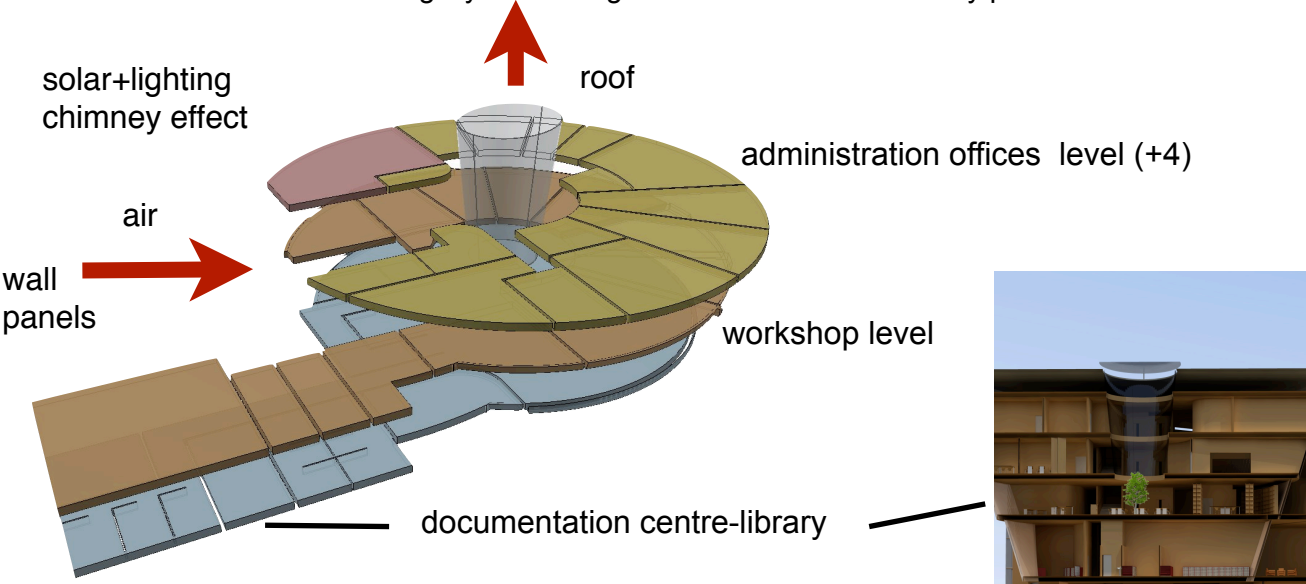
LIGHTING AND VENTILATION

The whole complex was born mostly considering climate and technology. For the function like performing arts that usually they don't need more light we guest place where usually you can regulate light more artificial than natural. For the exhibition area we considered both vertical and horizontal natural light.

What we think it can attract mostly is the semicone that is totally realized with polycarbonate special panels able to regulate with special insulation air thickness the suitable range of temperature considering the geografic situation of Beirut.

The exhibition room are standing on +1 and +2 floor where they have a special circular windows on the roof and where natural light comes inside into the space.

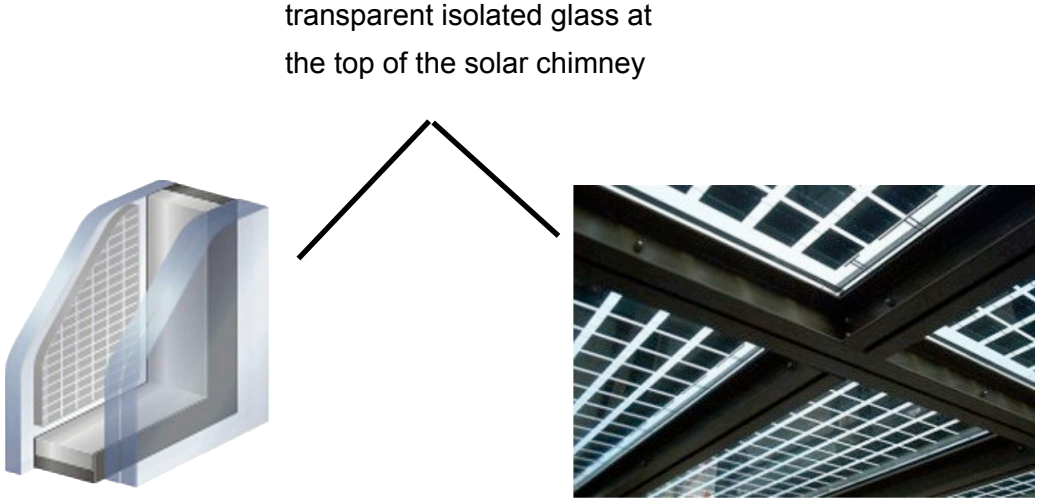
The semicone building has also another special feature to refresh climate in hot season. Starting from the library floor exactly corresponding to the center of the floor and near the desk of the readers, a solar cone takes air coming from the perimetral wall panels and take it to the roof activating an air convection system (solar camin). the way improves the natural ventilation of building by using convection of air heated by passive solar



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energy. The solar chimney has been in use for centuries, in particular in the Middle east, as well as by the Romans. This suction created by the chimney can be used to ventilate and cool also the building below.

Moreover from the roof light also arrives into the building, filtered from the photovoltaic cells integrated in the glass, mostly in summertime, when sun is quite perpendicular to the horizontal earth so we plan to preserve and to design more efficiency on the roof than of vertical wall.



The structure of the House provides to its programme while all its floors are interconnected and included in a single architecture. We provide to the glass (all the ground floor including restaurant-cafeteria, mostly in a climate like the Beirut one giving to the visitor a feeling of being inside and outside a building: it will reinforce the feeling of the fusion between the House and the outside world.