Green university library, Santiago, Chile

Project data

<table>
<thead>
<tr>
<th>Project group</th>
<th>Building and civil engineering works</th>
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<td>Client</td>
<td>Diego Portales University</td>
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<td>Project background</td>
<td>Private investment</td>
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<td>Estimated start of construction</td>
<td>July 2010</td>
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Main author

<table>
<thead>
<tr>
<th>Name</th>
<th>Mathias Klotz</th>
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<tr>
<td>Profession</td>
<td>Architect</td>
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<td>Organization</td>
<td>Mathias Klotz y Asociados</td>
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<td>City, country</td>
<td>Santiago, Chile</td>
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</tbody>
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Further author(s)

Not applicable

Comment of the Holcim Awards Jury Latin America

The jury applauds the high quality of the design and the ambition to blend purist architectural language with environmentally friendly components. The sound finance plan, especially the concept of transparent financing has a great innovative quality. The strongest element of the approach is the interaction of the building with the city through its well-articulated transition spaces.

Project description by author

Diego Portales University (UDP) is a private non-profit organization that was founded 27 years ago along with the resurgence of private universities in Chile. It was located downtown, in an area called south west Santiago. The site was selected on one hand because it was at the intersection of the two most important lines of the subway. And on the other hand, the deterioration of the precinct, enable the university to purchase sufficient large old houses that could meet its initial requirements at very good prices.

In 2003, with 12,000 students and a 20-year history, the UDP had the need to increase the area of infrastructure of 60,000m². The assignment consisted of advising and coordinating the entire operation, plus project managing three of the nine project works of the plan within a multiple-use building housing the Faculty of Medicine and the Faculty of Economics and Business. The plan commissioned the teachers of the Faculty of Architecture under 40 years of age to develop the project under predetermined collective criteria, seeking that the total sum of all component parts could give the university an identity related to a responsible architecture, aware of its environment: both contemporary and sustainable.

The Central Library of the university forms part of the second stage of this plan. It echoes a building already constructed which is complementary to the multipurpose building and sustainable. The sound finance plan, especially the concept of transparent financing has a great innovative quality. The strongest element of the approach is the interaction of the building with the city through its well-articulated transition spaces.

Reliability to target issues by author

Innovation and transferability – Progress

The library forms part of an operation that rescues a historic deteriorated quarter, restoring and recycling valuable old buildings, incorporating pieces with high environmental efficiency standards, and new activities that attract young people to the heart of the city. Within the building, new devices like hanging pots were designed that contain land for the development of plant species which also aid thermal control and install a new typology of curtain wall.

Ethical standards and social equity – People

The library has been conceived as a public space of encounter and knowledge transfer, due to the free access of the general public to the collection of books, exhibitions, cultural cycles and cafés within the complex. This program will improve the habitability of other buildings of the university, as the spaces intended for libraries, will be delivered as recreational spaces to students. This point is relevant in a high density neighborhood that lacks of free zones.

Environmental quality and resource efficiency – Planet

This building is the first green building in its interior and exterior in the city: it offers a facade that bristles the environment with its vegetation, marks the passing of the seasons and works as a screen for harsh western sunlight. The roof, treated with natural meadow, symbolically rescues what was in place before the arrival of the city, works as a thermal insulator and reduces the greenhouse effect. Due to the high density of the block, it is very complicated to bring natural light and fresh air to all the facilities, this problem has been resolved by using passive systems and materials that reflect the light. The materials used, comply all the LEED requirements, so its provenance and recycling minimize the environmental impact. A high percentage of the steel is recycled, wood coatings is derived from renewable forests, lighting and toilets are of low consumption, the water is reused for irrigation, among others.

Economic performance and compatibility – Prosperity

The library forms part of an infrastructure plan of the UDP, initially funded by a securitized bond, close to the USD 25 million given by the IFC, for the construction of six buildings. This process meant a pioneer pattern in the field of education and made public all operation numbers, in addition to communicate all projects to be developed to the community. The current construction is financed via leasing, for being the most convenient and safe alternative. As a result, the heritage of the UDP, its academic plant, the research, benefits to students, among others, have steadily increased. The library has become in some way in a reflection of the institution’s commitment to the country, the city and the environment.

Contextual and aesthetic impact – Proficiency

The infrastructure plan used collective criteria to give identity to the University, linked to an architecture aware of the surroundings, contemporary and sustainable, by applying a new building regulation, which aimed to preserve buildings of historical interest, and ensure the heritage that has the neighborhood scale. The building permeates the interior of the block, by establishing a new way to move in a congested neighborhood.

Acknowledgment prize 2011 Latin America

Green university library, Santiago, Chile

Regional Holcim Awards competition 2011

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