Liza Morales-Crespo Transforms Old Clubhouse Into A Sustainable Home

By Maritess Garcia Reyes
December 29, 2020

In a year and a half, ecotecture advocate Liza Morales-Crespo transforms an old clubhouse into a serene sustainable home

How did the property look like when you first saw it?

The original building [a clubhouse in a private subdivision in Cavite] had never been used, and was not well-maintained. It was dilapidated and in poor condition: holes in the ceiling and floor, paint coming off the walls. The pool was filled with stagnant water and molds and the rest of the property overgrown with grass and vines. It clearly posed an interesting and challenging project for our team.

Can you walk us through the design process in restoring the property?

We had to determine if the building was still structurally sound, what components and features we would retain, and which materials we can reuse or restore. All of these would translate into savings for the client, but the bigger picture is to have less carbon footprint,

translate into savings for the client, but the bigger picture is to have less carbon footprint, which is always the end goal in our projects. Next, we had intensive discussions with the client on how they wanted to use the space. We wanted to make sure that we would be designing a home that would suit their lifestyle and needs. We had a lot of freedom in designing and we are thankful that the client respected our design decisions throughout the course of the project.

What do you consider when designing for sustainability especially with pre-existing structures?

Renovation in itself is a sustainable practice. Consider using as much of the existing structure as possible instead of starting on a blank slate. Explore design solutions that will complement and enhance the existing structure. Reuse materials, like wood or metal, to reduce the need for brand new ones. Using the least amount of materials possible also makes a huge difference. Lastly, be mindful of the materials being used in terms of how it's sourced and produced; prioritise locally available materials and those that have low volatile organic compounds (VOCs) that can potentially affect the health and well-being of the end-users.

The architect Liza Morales-Crespo

Aglow at night, this home is a cosy residence using sustainable elements and design approaches

Any tips on how to efficiently manage costs while implementing sustainability in the home?

Sustainable homes are believed to be expensive as they are solely dependent on technology—such as solar panels and rainwater harvesting systems. Still, it is possible to make a home sustainable through other means. Like creating a climatically responsive building, or one that can maximise natural light and ventilation while minimising heat gain. Since lighting and air-conditioning have the highest energy consumption, lessening the need for these can significantly bring down costs, especially in the long run. Likewise, use materials that are locally available. This lessens the carbon emissions from transporting them to the site; and down the road, if anything needs to be replaced or refurbished, sourcing would be easier and less costly.

What parts of this structure were retained and what were the ones removed or changed?

The building envelope and all the major structural components were retained. The roof tiles were still intact but had to be cleaned and repainted. The interior partitions and general configuration of spaces Clockwise from top: An energy-saving Haiku ceiling fan provides efficient ventilation; The pool's poor state before rehabilitation; Aglow at night, this home is a cosy residence using sustainable elements and design approaches; The architect Liza Morales-Crespo | Notes from the Expert | were changed to accommodate client's needs. The area overlooking the pool was converted into the main entertaining spaces: the dining and living areas. Originally, there were two sets of stairs but both were removed and replaced by a single set of stairs to the side of the main door.

What are the sustainable features of the house?

The home has low energy consumption mechanical systems, such as the Haiku fans, to complement natural ventilation.

What are the easiest ways to incorporate sustainable practices in a home?

Without any major renovations, the easiest would be to incorporate appliances that have low energy consumption. Having houseplants can also affect the indoor ambient temperature with the added Interview benefit of eliminating VOCs.