

25 amazing homes in Malaysia that embrace nature

The Star Online, 25 February 2019, Monday



The S11 House is the first residence in Malaysia to achieve the Malaysian GBI platinum rating. Photos: Lin Ho

The words “open to sky” may need a bit of explanation but once you flip through the pages of *The Tropical Malaysian House*, the concept becomes much clearer. More importantly, it is one of the key characteristics that define the 25 Malaysian tropical houses featured in the book.

Written by Prof Robert Powell, the book which was launched last month, highlights some of the most innovative residential projects by architects and designers in Malaysia that were completed between 2009 and 2018.

The professor of architecture at Taylor’s University, Selangor, chose the homes based on 12 attributes.

“The houses have been carefully selected to illustrate contemporary life in the tropics. They respond to the imperative to consider climate change and to be sustainable. Fundamentally, they illustrate ‘critical regionalism’, or modern architecture that fuses contemporary culture with concepts learned from tradition and vernacular precedence,” says Powell.

There are three very important criteria, which Powell says could be described as a “purist view of tropical houses”. Firstly, the house must have a living area which is the focus of the home and it must be permanently open to the sky (connected to the exterior or garden); secondly, it must not destroy any substantial trees and be in harmony with nature; and finally, it must use minimal glass to reduce solar glare.

The other features include rainwater harvesting for irrigation purposes; wide overhanging eaves to provide shade; tall rooms to create thermal mass and consequently thermal insulation; and natural ventilation with permeable walls facing prevailing breezes.

The houses should also be surrounded by a garden, landscaped surfaces, and pools or fountains to contribute to the cooling effect.

Remodelled, renewed

“The remodelling of the three terrace dwellings, namely the Twin House, the Planter Box House and the Desa Lightwell House, is particularly inventive, illustrating the manner in which new life can be instilled into an existing typology,” says Powell, previously associate professor of architecture at the National University of Singapore.

Featured on the cover of the book is the Planter Box House, which is filled with various plants, fruits and vegetables on the front and rear facades. There is even a rice terrace on the rooftop.

The Twin House is an “interesting experiment” where the owner split the three-and-a-half-storey unit into two, vertically. Powell adds that the house shows how one can build a very small space but still make it very liveable.

“One of the lessons is about natural ventilation. When you visit affordable housing, typically there is at least one bedroom without ventilation,” explains Powell in an interview in Kuala Lumpur recently.



The Clay Roof House in Section 11, Petaling Jaya scored very highly on the Malaysian Green Building Index (GBI) mainly because it recycled materials that were previously on-site.

“What I am trying to say is, study these plans carefully, especially the terrace houses featured here and study how you can design in such a way to get natural ventilation and how you can live comfortably without air-conditioning,” he says, in relation to how the designs can inspire affordable housing plans.

Some of the homes are also shining examples of sustainable design.

The Clay Roof House in Section 11, Petaling Jaya, scored very highly on the Malaysian Green Building Index (GBI), largely because it used recycled materials that were previously on-site.

“It took the roof tiles (manufactured in Kerala, India) from the old house and designed a skin for the house completely made from these tiles. Bricks from the old house were also reused and the idea of natural ventilation was featured via the Jali concept (gaps between the bricks),” says Powell.

Platinum rating

Another house by the same architect, Dr Tan Loke Mun, named the S11 House also recycled bricks from the old premises, and features light chimneys which bring light to the ground floor via tubes.

It is also the first residence in Malaysia to achieve the Malaysian GBI platinum rating, which is the highest rating. The house also incorporates rainwater harvesting, black-water treatment, photovoltaic panels, wind turbines, insulated roof and composting.

The Telegraph Pole House in Langkawi is another example of a good recycling initiative.



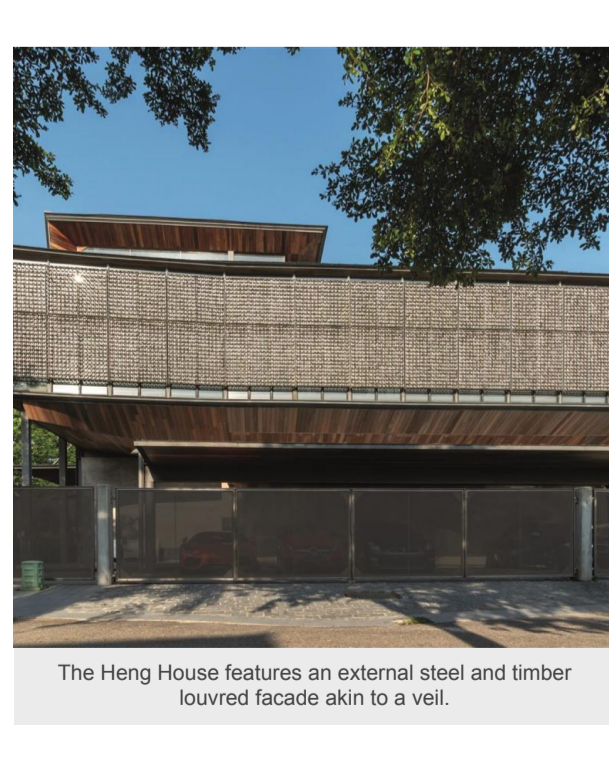
The Telegraph Pole House in Langkawi is constructed using old telegraph poles found in a timber yard in Alor Setar.

“The owner wanted to build it completely with timber which is subject to decay and termites. But some of the strongest timber used in Malaysia were telegraph poles. So they went scouting around and found 400 old telegraph poles in a timber yard in Alor Setar,” says Powell.

“It is completely open to sky as well. One thing about living in the tropics is about living at the interface between the inside of the house and the outside, what you call in-between space. And that’s the essence of living in the tropics.”

Twinkle Villa, which won the Building of the Year at the 2017 PAM (Pertubuhan Arkitek Malaysia) Awards, is also featured in the book.

Built without chopping down any trees or an entrance door, the dwelling is located in the middle of the jungle in Janda Baik, Pahang.



The Heng House features an external steel and timber louvred facade akin to a veil.



Twinkle Villa, which won the Building of the Year at the 2017 PAM Awards.

Meanwhile, the Heng House uses a form of a veil concept, with an external steel and timber louvred facade. The purpose-made screen features steel rods and square timber fillets that reduce solar gain.

“The ‘threaded’ rods and timber is a modern interpretation of traditional woven rattan,” explains Powell.

He then shared his experience of working on the book, which he hopes will inspire the generation of new ideas.

“What I gathered from doing this book is that there is a generation of younger architects coming through who are quite inventive. And I have an optimism that these architects will be world-class,” he says.

“The other thing is about how the (designs) influence affordable housing. Affordable housing, by and large, is not very good design and can benefit from some of these young architects, who can come up with some good inventive ideas,” he says.