

using load-bearing walls, one of the earliest forms of constructions. We had to be extremely careful, patient and mindful in order not to damage the century-old delicate walls and elements,” said Chan.

About 70% of the flooring and 90% of fixtures and fittings, apart from the cast-iron staircase, were built with timber.

“To bring back the nostalgic feel and charm of the building, we had to restore all the missing or damaged timber fixtures and fittings.”

All the original French louvre timber shutters had been replaced with aluminium windows by the previous owner, with only the hardwood window frames remaining.

“We had to remove all the aluminium windows and designed new timber shutters and casements according to historical images.”

Chan said they also found fanlights (small windows over the top of doors), transoms (strengthening crossbars) and bay window elements, which are common features of Palladian or Venetian windows.

These windows contain three key components – a central, round-arch opening with two smaller rectangular openings to the sides, the latter topped by lintels (a type of beam) and supported by columns.

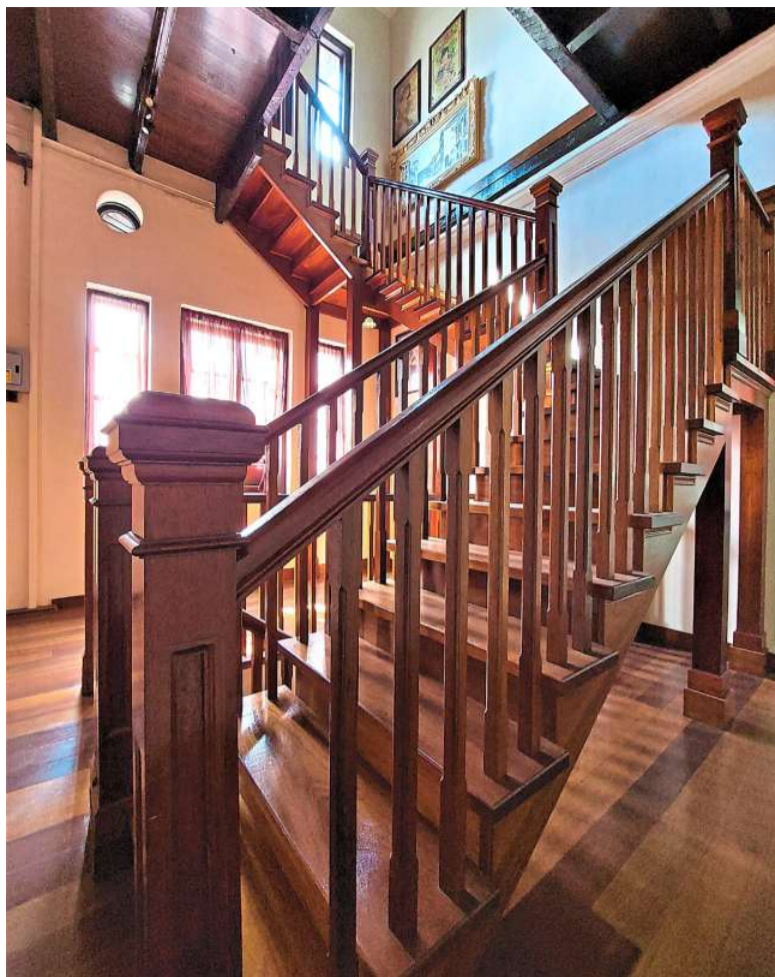
“This is derived from the ancient Roman triumphal arch, a key element in Palladian architecture style of the renowned Italian-Venetian architect Andrea Palladio.”

Another major discovery was Minton tiles, overlaid by new tiles on the ground floor, originally made in Stoke-on-Trent in Staffordshire, England. Minton tiles are encaustic tiles, in which the patterns are created using different colours of clay rather than a glaze.

“Due to the difficulty in removing the top, new tiles without damaging the Minton tiles, we decided to keep and preserve them as they were.”

Chan said they also sourced for and used recycled cengal and merbau hardwood from Perak as well as other states to stay true to the original timber works.

It took them over two years just to restore 99 sets of (external and internal) timber window



About 70% of the flooring and 90% of fixtures and fittings at the Kapitan Chung Thye Phin building were built with timber.

louvres and casements. In total, Chan worked with 26 different contractors, installers and suppliers for the various sections and stages of the eight-year project.

“We have restored a significant, historical building and landmark in Ipoh, which is associated with the great tin era of Perak,” said Chan, adding that the building has been listed in the Tin & Heritage Trails map of Ipoh for visitors.

“Many who have come to visit appreciate our labour of love and the passion we have put into this project.”

Currently, the space is being used as a gallery-museum called Made In Ipoh that showcases the stories, life and legacy of the last Kapitan of Malaya and Ipoh, the city that tin built.

“We have also repurposed this building as a place-making venue and community space to support activities that preserve and promote the arts, culture, history and heritage,” said Chan.

In the long run, he hopes to inspire the public and younger generation to value and appreciate built heritage and their historical value.

“Save, preserve and conserve them when you have the opportunity, before they are lost or gone forever.”

“Our work is testimonial to how a 116-year-old dilapidated building can be preserved to meet modern-day usage,” he said.

For more info and videos, go to [facebook.com/arlenehouseipoh](https://www.facebook.com/arlenehouseipoh).

Striking bookshelf designs

IF you're a bookworm and constantly in search of original ways to display your tomes, these unique designs will surely inspire you.

Nothing sounds more comforting than curling up with a good book and a nice hot cup of tea in a cosy environment.

Do you recognise yourself in this description? You're not alone.

Interior design and architecture website Deezen has created a lookbook of the most incredible bookcases to enjoy the cool days of late summer and we take a look at three of them.

Imposing (but minimalist)

Canadian firm RSAAW designed a two-storey library for the renovation of a Vancouver home. The tall reading space is made up of large square lockers stacked across two levels, giving the whole area an imposing yet light feel. The wooden bookcase is integrated into the staircase that connects the levels.

Wall-mounted (but elegant)

At the Alfred Street residence in Australia, reading is no laughing matter. Studio Four designed a built-in bookcase made of light



At the Alfred Street residence in Australia, Studio Four designed a built-in bookcase made of light American oak. — [studiofour.net.au/Instagram](https://www.studiofour.net.au/Instagram)

American oak. The matching wood furniture gives the interior design consistency and elegance. Perfect for a book break.

Angled (but discreet)

At Publishers Loft in the United States, Buro Koray Duman designed a bookcase capable of holding thousands of books. To fit all these books in the loft, the bookcase goes around the apartment, with shelves at 45 degrees.



Canadian firm RSAAW designed a two-storey library for the renovation of a Vancouver home. — [rsa.aw/Instagram](https://www.rsa.aw/Instagram)

If you stand on one side of the room you can see the books, on the other side they are hidden. Not seen, not read? – AFP Relaxnews



Simple and recyclable

Even a bed made of corrugated cardboard is possible and it's more stable than you'd think. — CHRIS ABATZIS/Room In A Box/dpa

IT'S a niche product alright, but it's not one that has to be hidden away in some niche of your home. Cardboard furniture has blossomed from a temporary solution to a fully fledged furnishing product.

“Cardboard furniture is especially popular with younger people,” says home furnishings expert Gabriela Kaiser.

This is in part due to older people placing more value on upholstery and comfort, while flexibility has priority for a younger target group. Especially if you're not settled and are planning on moving, you benefit from the quick assembly and dismantling as well as easier transport, explains Kaiser.

However, there is also another fast-growing target group – one that is environmentally conscious and focuses on sustainability, says Ursula Geismann, who runs a veneer industry organisation in Germany.

Together with a minimalist design, cardboard furniture is in keeping with the times.

Trend researcher Frank A. Reinhardt also sees it that way.

“I associate cardboard boxes primarily with moving and stress.” But if this association is broken by a “smart, personalised design”, cardboard furniture can be “a statement for a mobile and sustainable society”.

A reasonable lifespan

“Corrugated cardboard constructions are very stable,” says furniture design specialist Geismann.

A standard bed is designed for 150kg-200kg. According to Geismann, centrifugal force tests have shown that even if you were to throw yourself onto a cardboard bed with momentum, most of them could withstand up to 1,000kg.

Depending on the quality, cardboard furniture has a lifespan of between six and 10 years.

“Of course, it depends on how you use it and whether, for example, you have a pet that nibbles on the furniture,” says Geismann.

The lightweight technology is also hidden in some furniture that doesn't look like cardboard, says design journalist Reinhardt.

To save weight, the inside of desk and cabinet door panels is made of cardboard. This not only makes transporting them easier, it also saves energy, which in turn is better for the environment.

In addition, thanks to the well thought-out design and folding and pressing technology, cardboard furniture can be assembled without additional parts such as screws and glue – which also adds to the sustainability. Depending on the manufacturer, cardboard furniture is also made from 75%-95% recycled paper.

Recycle, recycle, recycle

Once the furniture has reached the end of its life, it is classed as waste paper and can thus be recycled. It's a significant advantage when you consider the hassle of throwing out old beds or shelves.

“Disposing of cardboard furniture correctly is crucial when it comes to the sustainability aspect,” Reinhardt emphasises.

Whether cardboard furniture will cross over from niche to mainstream is debatable, despite the arguments for investing in it.

Trend analyst Kaiser expects many people will continue to prefer wood furniture. At the same time she thinks “the target group for cardboard furniture will continue to grow”. Environmentally friendly materials are becoming more and more important and cardboard is much more sustainable than cheap chipboard. – dpa



You wouldn't spot it at first glance but this shelf is made of cardboard. — MARTIN SCHERAG/Papercomb/dpa