Source: *The Business Times,* p18
Date: 6 March 2025

ENTERPRISE 50

Building a reputation with lighter, greener construction materials

By Lee Kah Shing Vanessa, Prissha Nair, Quah Shi Ting, Tan Ethan John and Tang Shaojun Samuel

Buildo Engineering managing director Mike Wong with its cork-based construction products, which are greener than wood, functional and aesthetically pleasing.
PHOTO: BUILDO

BUILDO Engineering has built a name for itself with lighter, greener construction materials that keep buildings cool.

Mike Wong, its managing director, said: "For us, sustainability is an everyday effort, and these materials are opportunities for a greener environment."

Eleven years ago, Victor Thng – Buildo's current operations director – approached Wong with the idea of starting a business supplying building panels. Wong had no experience in construction, but knew that the market was fiercely competitive – thus, he had to come up with something innovative.

"You cannot fight someone who has been in the market for 20 years," he said. "I have to do something that nobody does."

He saw an opportunity to tackle the effects of global warming, which are amplified by Singapore's urban heat island effect.

Buildo therefore introduced autoclaved lightweight aerated concrete (ALC) panels, which are lighter and greener than traditional concrete.

As ALC panels are also easier to handle, they require less manpower and machinery to install, reducing the carbon footprint of construction projects.

ALC's thermal conductivity is up to "eight times lower" than those of traditional materials such as brick and concrete, allowing buildings to stay cooler during Singapore's sunny days.

Apart from the panels, Buildo developed an innovative watertight ALC wall panel system for external walls, for industrial, residential or infrastructure use. ALC has been used for flooring in both industrial and landed residential projects.

Changing the market

Buildo has helped to transform Singapore's skyline, said Wong. "If you look at Singapore 10 years ago, it's all grey with heavy precast panels or reinforced concrete walls. Now, you see more and more projects using ALC panels for external walls. We've successfully changed the market."

Among Buildo's accolades are the Enterprise 50 (E50) Award as well as the Special Recognition – Sustainability Innovation Award 2023.

"How can we help the industry? Better productivity, quality and energy efficiency," said Wong. Building on the success of ALC, Buildo started introducing cork-based construction products in 2019.

Unlike wood, for which trees are felled, cork is harvested in a renewable process of shaving the bark off cork oak trees. This layer regenerates and can be harvested again in about nine years.

The regrowth process not only preserves the tree but enhances its ability to absorb carbon dioxide, making cork a much greener alternative to wood.

Cork is not just green and functional, but aesthetically pleasing. Said Wong: "That's when we thought, should we push it further by bringing in cork-based interior design products?"

Buildo's wide variety of cork-based products include thermal insulation plaster, screed systems, walls, floor coverings and thermal paint.

Buildo then took cork outdoors, experimenting with it as a replacement for the usual rubber playground flooring. As cork reduces heat absorption, it creates a cooler and safer environment for children.

Worth the cost

When introducing new products to Singapore, Buildo looks beyond costs. Wong said: "I want to do things that work, rather than look for the cheapest thing that doesn't work."

But, he acknowledged that it can be challenging to convince cost-conscious clients and contractors to use Buildo's premium products, which require higher upfront investment.

"We are going against what the market is used to. This is not easy, because contract managers are always looking for the cheapest solutions. This mindset needs to change, but it will take time."

To address this, Buildo is taking a strategic and patient approach. The company's office at BCA Braddell includes a product showroom where architects and contractors can view and experience Buildo's products – and hopefully have their perceptions and preferences changed.

The company also collaborates with construction companies to train their workers, so that Buildo's products are properly installed without incurring additional costs.

Its commitment to sustainability extends to its employees as well. The company believes that happy and fulfilled employees are key to long-term success.

Recognising that a supportive environment is crucial to retaining talent, Buildo provides everything from simple benefits such as pantry snacks to flexible working hours, to accommodate families.

The company encourages continual learning and development by sponsoring courses for staff, and has a flat organisational structure with an open-door policy. To foster camaraderie and cohesion, it has monthly company exercises and dinners that bring employees together, regardless of their departments, titles and roles.

With a strong foundation for growth, Buildo is now planning for its own manufacturing facility, which Wong describes as the one "missing piece" left for its business strategy.

Source: The Business Times © SPH Media Limited. Permission required for reproduction.