

Reach for the sky

In land-scarce Singapore, vertical landscaping which requires little maintenance is on the up and up

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Gardens in the city are sprouting to new heights. From the airport, to the central business district, to landed properties and even HDB flats, the concept of "vertical" gardens is taking off.

Growing plants to form a green wall, rather than spread out over a large space, is a boon in land-scarce Singapore.

But other advantages are that such gardens can be kept indoors and need little maintenance or trimming, or even soil.

The upshot – make that, upshoot – of all this is that architecture and landscaping firms tell Life! more commercial and residential clients want these living walls.

Over at one landscaping company, Vertical Green, owner Darren Neo says the past year has seen an increase of two to three times the number of clients on the dozens he had last year.

Most of his projects are for landed homes, followed by condominiums, offices and HDB flats.

Also known as green walls, the aesthetic and environmental benefits of vertical gardens are many, says Mr Veera Sekaran, managing director of another landscaping firm, Greenology.

He notes: "They freshen the air and absorb a lot of noise. They also absorb solar radiation and cool your house by preventing the concrete from heating up."

"And if you can frame it up and put it on your wall, it is an amazing visual treat, like a living picture."

Mr Neo says that many of his customers have little knowledge of gardening and lack time to maintain a plot.

"Vertical gardens can take care of all that, as they require little maintenance. You can go on holiday for one or two months and it's okay," he notes.

So how much will it set you back, and what must you do to maintain a vertical garden?

The professionals say that costs can range from \$400 to \$1,000 per sq m, depending on how elaborate the structure is and whether you choose to have a self-irrigation system.

Mr Kelvin Kan is principal architect and facade consultant at AgFacadesign, which was behind a project at 158 Cecil Street that took top prize at this year's Skyrise Greenery Awards.

He says there are several ways to construct a vertical garden, such as using fibre mesh or with creepers. He favours a pot system – plants grow in individual pots hung on a frame.

As with all plants, the two most important factors are water and lighting. Mr Sekaran notes that the garden is essentially a "living green skin" with many different species of plants.

He adds: "You need a watering system. If you don't have a water point somewhere, you can put in a water tank. For indoor green walls, light is the biggest consideration, so we mostly use LED floodlights, which consume very little energy."

At Greenology, the staff visit the sight and take light readings. Depending on what the owner wants and where the garden is to be installed, they recommend what kind of plants to grow.

Popular plant species include bird's nest fern, rabbit's foot fern and those from the philodendron family, while tubular plants and cacti are a no-no as they are unlikely to thrive.

The designer plays a crucial role. As Mr Kan notes: "Is he capable of doing something that enhances the existing design and space to give it a certain character, or merges it with other elements in the house?"

But are green walls just a fad? Mr Alan Tay of architecture firm Formwerkz says: "It seems to be quite fashionable now. But its future will depend largely on the techniques to make it easily implementable and maintainable."

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Green thumb: Mrs Doreen Yap spent \$4,000 on her vertical garden which includes plants such as begonias and maiden's hair ferns. ST PHOTO: LAU FOOK KONG

My growing wonderwall

A need for privacy and a hankering for the greenery she loves so much led retiree Doreen Yap, 69, to install a vertical garden – even if it did cost a blooming \$4,000.

The green wall at the terrace house in Thomson Garden Estate of this former administrator and science teacher, who has a degree in botany, is filled with around 10 plant species. They include begonias, bird's nest ferns and maiden's hair ferns.

The plants even include some she picked up from the roadside and nurtured in pots before transplanting them. The garden, covering about 5 sq m and rising to 1.5m in height, was put up more than a year ago. Mrs Yap had missed the garden that she once owned at her old place in Seletar Hills. "I wanted to make the carpark porch more green and give it the atmosphere of a garden," she says.

She spent about \$4,000 on the initial outlay, including installation and a self-irrigation system. She also pays \$60 for a large bottle of liquid nutrients every two months.

Installed by Vertical Green (www.verticalgarden.com.sg), the structure consists of a swath of felt carpeting material with pockets where the plants are placed. It is watered five times a day via tubing connected to a water point.

Landscape designer Darren Neo says: "There is a very low concrete wall between her house and her neighbour's, and she wanted more privacy. So we had to mount a galvanised steel bracket on the wall itself, which extends upwards and install the garden on the bracket, which provides stability so that it doesn't flap when the wind blows."

Half of Mrs Yap's wall is lush with growth, while the plants on the other half are shorter and not as full. In the initial stages, some plants died off. The mother of three and grandmother of five says that as her house faces south-west, the wall opposite the garden gets the full setting sun. This results in half the wall receiving only reflected light.

"I had to select plants for the inner half of the wall that do not require as much sunlight. It was a bit of trial and error, as I would go to nurseries and ask for these plants," says Mrs Yap.

She adds that the vertical garden requires little maintenance: "Being a retiree, I do travel quite a bit, and even if I have to go away, it's self-maintaining as I don't have to physically water it."