

The Australian

Driven up the wall

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Trio apartments in Camperdown, Sydney, has 4528 plants hanging from the wall. It is reputedly the tallest garden of its kind in the world.

Source: Supplied



One of Patrick Blanc's vertical gardens on an apartment building in his native Paris.

Source: Supplied

AT an apartment block in Sydney there is a garden that defies gravity.

Or at least defies the laws of conventional landscaping because this is a collection of shrubbery that somehow sticks on to and stretches vertically 11 floors up one wall of the building.

And that's a quantum leap forward in the art of gardening, particularly in light of the fact that any apartment dwellers have enough trouble keeping alive even a handful of pot plants.

Yet here's a luxuriantly lush perpendicular plot that grows up the side of a modern building without soil. How is it watered? And how is it weeded?

The brainchild of French scientist and artist Patrick Blanc, 58, the 33m-tall garden on the wall of the Trio development in Camperdown features 4528 plants from 69 different species and it's the best local evidence - it is reputedly the tallest of its kind in the world - that high-rise living doesn't necessarily mean the only alternative to the traditional terrestrial garden is a couple of hardy pot plants on an exposed and windswept balcony.

Blanc calls it more "a living painting than a garden"; in French the name for his extraordinary innovation is le mur vegetal or plant wall.

Blanc is a botanist by profession and his vertical garden came as an adjunct to his academic observations of the understories of the world's rainforests.

Indeed, Blanc is leading a vanguard of landscapers, architects and developers coming up with canny ways to include landscaping as an integral part of high-rise architecture.

The Trio tower's plant wall was commissioned by Frasers Property chairman Stanley Quek after he'd seen some of Blanc's work internationally.

Perhaps the most celebrated of these are the outer walls of Paris's indigenous art museum, Le Musee du quai Branly, on the banks of the River Seine near the Eiffel Tower.

However, these days Blanc's vertical plantings are to be found all around the world.

Planted in 2009, the Trio wall became the third project Blanc had completed in Australia - his striking work is also featured at the Qantas Club lounges at Sydney and Melbourne airports - but it's another green scheme planned at another Frasers Property project in Sydney that will beat any of Blanc's previous installations in scale and ambition.

At the One Central Park apartment blocks, East and West, being built on the old CUB brewery site near Sydney's Central Station, designed by Blanc's compatriot, architect Jean Nouvel, there'll be 1200sq m of vertical gardens together with seven lineal kilometres of planter boxes.

Now under construction, One Central Park is scheduled for completion in 2013.

The gardens will face Sydney city's western gateway and main drag, Broadway, and will be made up of 24 individual vertical garden panels, stretching from the second floor to the 33rd -- with the largest stretching 13 storeys.

In addition, there's a huge sky garden that will cantilever out 33m from the 24th floor of the east tower. It will feature greenery on its outer edges (including small trees), with vines growing up supporting cables.

The plants will be watered and fertilised automatically and all of the plants will be the responsibility of an owners' corporation (rather than of the individual residents). Imagine if the wellbeing of these countless plants was left in the hands of the squadrons of busy executive couples and cashed-up international students that will live there.

Or, to put it another way, a couple of towers, the tallest 33 storeys high, covered in wilting brown plantings would not be the adornment to a new Sydney landmark quite like the lush and green version will. Not that the less healthy version is at all likely, given Blanc's works in other countries have stood the test of time. Indeed, his installations elsewhere still flourish as long as 15 years later.

The trick is in correct species selection. Or, as Blanc explains, the technology used in his vertical gardens is "nothing". "What you have to know is which plants to put in the right place."

At Trio, Blanc selected native species that can be found "growing wild on maritime cliffs or along the cliffs and rocky slopes in mountainous areas".

At One Central Park, the approach will be the same: appropriate native species in the appropriate places.

In Blanc's own home in Paris, many of the internal walls are covered in countless wall-hugging species, ones that are particularly suited to an indoor environment.

It was, he said in a public lecture in London late last year, an approach that spoke to something primal in our domestic background.

"It's the same kind of habitat as the one we had about 10,000 or 20,000 years ago when we were living in caves or on the cliffs where plants were found around the holes," he says.

"I think my vertical gardens are so important for people. I think in some ways it's a reminder of our old habitats when we were living in caves."

It's also an approach that uses nature's air filters - plants - to the best and beautiful effect and is a part of a contemporary architectural movement. In Bangkok, a high-rise apartment that's all about gardens and natural air quality, co-designed by Australian Richard Hassell and Wong Mun Summ of Singapore's WOHA architects, last year won one of world architecture's most prestigious awards, the Lubetkin Prize from the Royal Institute of British Architects.

The Met is a 66-storey apartment block that uses natural ventilation to cool homes and is a building perforated on all levels with gardens, balconies and outdoor spaces.

It shows that even in a place as sticky as Bangkok, a hermetically sealed air-conditioned tower doesn't have to be the dominant paradigm in luxury high-rise living.

Together with Sydney's One Central Park, it's also solid evidence that the age of living and breathing architecture has arrived.

HOW A VERTICAL GARDEN WORKS

PATRICK Blanc's vertical gardens are made possible by a multi-layered, super-strong, mesh-covered felt to which the plants attach their roots, and which doesn't biodegrade. The patented felt has enormous water-holding capacity, is attached to the building and is kept soaked with mineralised water.

At Trio, the garden is watered using a drip irrigation system made up of 11 lines that run across the wall at three-metre intervals. Each of the 11 lines releases water six times a day.

A 36,000-litre rainwater tank that collects water from the Trio site supplies water to the garden. Any rainwater that the plants do not drink or does not evaporate in the process is recycled back to the tank to be used again.

Trio's garden features a range of both common and rare native plants. Seedlings were planted in 50mm pots and a two-member maintenance team spends a day a month inspecting the plants, weeding, pruning and making sure the structure and watering system are sound and are working as effectively as they should.

Hardy plants that thrive in a more exposed and sunny environment have been planted at the top of the wall and ones that require more water and more protected environment at the bottom.

Trio's huge vertical wall was installed over a period of eight weeks by Melbourne's Phillip Johnson Landscapes, but there are also companies that offer vertical garden systems on a smaller scale.

According Travis Holmes of Living Holmes Design, you can achieve a similar look to Patrick Blanc's work "that is affordable and achievable" using his company's Verti Scape Modular Green Wall Garden.

It's a do-it-yourself kit that comes in modules costing \$229 a square metre each (without plants). The starting price for the product professionally installed - including plants - is \$900 a square metre. **More**

(<http://www.livingholmesdesign.com>)
