

## Vertical garden. A record number of 'living walls' being built in Metro Vancouver as going green catches on.

Steve Whysall, Vancouver Sun

Published: Friday, July 04, 2008

Vancouver is in the middle of a green wall revolution. A record number of these environmentally friendly sustainable "living walls" -- also called vertical gardens -- are being built here at the moment.

One of the first ones went up a couple of years ago at the aquarium's Aquawest Learning Centre. Measuring 3 metre by 15.2 metre (10 by 50 feet), it was filled with 7,000 plants, mostly native species of fern, bleedingheart, huckleberry and wintergreen.

But many bigger, more ambitious green walls are being constructed. The Four Seasons Hotel is just putting the finishing touches to its version. The Whole Foods and Lululemon stores at the new Cross Roads project at the corner of Broadway and Cambie will both have lush green walls.

A massive three-storey wall is being completed at the new Canada Line station at the airport. And a new \$24-million "community gaming centre" in Maple Ridge at Lougheed Highway and 227th Street is scheduled for a green wall. Other vertical gardens have already been installed at a dental office in Harbour Centre downtown and at Simon Fraser University in Burnaby.

As more of these walls become visible, it is expected that demand for them will increase and more of Vancouver's plain concrete walls will be turning green.

Most of the walls are being installed by G-Sky Green Wall Panels, of Delta, using a Japanese-invented system of interconnecting containers that slot together to form a tapestry-like grid of plants. Eliot Pister, of G-Sky, says each plant is placed into a soil-less medium made of coconut fibre in an individual cell within a 30-cm (12 inch) box. A drip-irrigation system keeps the plants watered with two drip-emitters per panel. Fertilizer is also fed to the plants through this drip system to keep them healthy.

Pister reckons the plants can thrive with minimal maintenance for five to 10 years before they become root-bound and need to be replaced. If a section of a wall fails to thrive or dies, panels can be easily popped from their slot and replaced without interfering with the rest of the structure.



Black planters, placed on artificial turf at Joe Fortes, contain willowleaf pear trees and ornamental grasses.  
*Glenn Baglo, Vancouver Sun*



The 'living wall' on the roof patio at Joe Fortes restaurant creates a serene green ambience that allows patrons to relax and socialize in a garden-like setting.

*Ward Perrin, Vancouver Sun*

As well as looking terrific, a green wall keeps a building cooler in summer and reduces heat loss in winter. Collectively, these walls are seen as a way of reducing the "heat island" effect of a city (what happens when a high-density area becomes warmer than its immediate surroundings).

On the cutting edge of the trend is Bud Kanke, owner of Joe Fortes Seafood and Chop House at 777 Thurlow St. Kanke has completely renovated the restaurant's popular roof garden, installing not only a G-Sky green roof, thickly planted with boxleaf euonymous and ivy, but a large area of artificial turf.

David Vance, a semi-retired restaurant designer, came up with the concept for the over-all redesign. "I wanted to create the feeling that you are in a garden, rather than being on a rooftop downtown," he says. Vance says he was inspired by the work of French botanist Patrick Blanc, who has created astonishingly attractive green walls in Paris, Berlin and Japan.

As for the artificial turf, produced by ForeverLawn, of Albuquerque, N.M., Vance says: "I'm not a fake grass guy, but when I saw this product I was very impressed." The turf -- tough enough for dogs to play on -- does indeed look and behave like real grass, but requires no watering, feeding, fertilizing or cutting. It is made from 50 per cent recycled materials and is estimated to have a lifespan of at least 20 years. It can be power washed to keep it clean.

Black cube containers have been filled with weeping silver pear, *Salicifolia pendula* 'Silver Cascade,' and underplanted with Spanish lavender 'Anya', variegated ivy, geraniums and a mix of annuals. Other containers have been filled with maiden grass (*Miscanthus sinensis* 'Gracillimus') and white pine (*Pinus strobus* 'Blue Shag'). The area is screened from wind and noise by a perimeter barrier of yew hedging. All the planting was done by Toni Arthurs, of The Contained Garden.

Borrowing a clever idea from the DUTCH TREE, the original idea was to allow the weeping willow-leaf pear trees (*Pyrus salicifolia*) that have been planted in black cube-shaped planters on Joe Fortes's roof garden to assume their natural growth habit. David Vance, designer of the restaurant's new stylish roof space, thought the weeping branches of these graceful, heat-tolerant silver-leaved trees could be clipped to formed handsome umbrella shapes.

But he and restaurant owner Bud Kanke are now considering another idea after I mentioned to them how I saw these trees pruned into beautiful square columns (above, left) at the demonstration garden of Kijktuinen in Nunspeet, northeast of Amsterdam. The Dutch are masters of pruning and this was yet another first-class example of how they create marvellous topiaries, pollarded trees and pleached hedges in small spaces. In another area at Kijktuinen, I saw a row of willowleaf pears clipped to form a gently curving wall, no wider than 30 or 45 cm (12 to 18 inches). Kanke and Vance are now thinking this could be a very attractive feature on Joe Fortes's roof garden. It would require judicious and artistic pruning for a few years to achieve but I think the results would be sensational and something unique for Vancouver.

Another idea would be to link the trees and clip them to form a rectangular pleached hedge. For more information about the gardens in Nunspeet go to [www.kijktuinen.nl](http://www.kijktuinen.nl).