

# Vertical Garden in Paris: The Science and Art Behind Botanist Patrick Blanc's Living Walls



In a city known for its churches, museums and relics, a new living work of art blooms.

Botanist Patrick Blanc constructed Oasis d'Aboukir, one of his signature vertical gardens, in the heart of [Paris' Montorgueil neighborhood](#) for Paris Design Week earlier this month.

Blanc has been perfecting his vertical garden concept since he was a teenager. He earned his PhD in 1978, won the French Academy of Sciences Botany Prize in 1993, and then patented his vertical garden concept in both 1988 and then 1996.

These gardens are as much about science as they are about art. Blanc explains soil is merely a "mechanical support" and that plants grow on a variety of surfaces in the wild: You see them sprout on everything from tree trunks to limestone cliffs to waterfalls.

"It is possible for plants to grow on nearly soil-less vertical surfaces, as long as there is no permanent water shortage," Blanc explains. Another trick to his art is choosing plant species that thrive in specific climates where he's working.

One problem that can happen when wild roots start growing on man-made structures is the roots can latch inside the walls, damaging the integrity of the building. Blanc's vertical gardens are engineered as a type of "second skin," so that the plants spread out along the wall – not inside it. He constructs the vertical gardens using three main pieces: a metal frame, a PVC layer to lend strength and a layer of felt to evenly distribute water to the roots.

Blanc's vertical gardens are about more than decoration. Since the layer of vegetation provides natural cooling in the summers and adds extra insulation in the winter, a building with a vertical garden can lower energy usage.

He has built [vertical gardens in cities around the world](#) from Paris to Bahrain to Charlotte, N.C. The slideshow at the top of the page shows you Oasis d'Aboukir in Paris, Blanc's most recent work, from start to finish. Discover details on his next projects [verticalgardenpatrickblanc.com](http://verticalgardenpatrickblanc.com).