

# Musee du Quai Branly

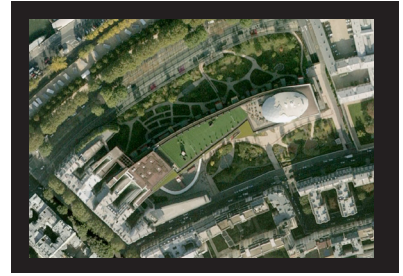
Paris, France, 2004

Architect: Jean Nouvel

Garden Designer: Gilles Clement

Green Wall Designer: Patrick Blanc

prepared by Josho Somine



Aerial Photo



The Vertical Garden  
at Musee du Quai Branly

Photo Credits:

Google Earth

Patrick Blanc

frenchgardening.com

This ethnographic museum has had a strong commitment to iconographic and sustainable design from the project's inception. Almost 2/3 of the building site is taken up by a garden that was conceived of as integral to the overall design. According to Nouvel, the garden "avoids the museum displaying itself triumphantly. On the contrary, it should be discovered, hidden away in the greenery, rising out of tall grassland, and suspended at tree level." Rainwater collection, sustainable and recyclable materials, and low-impact construction methods were involved throughout the building.

The building envelope and facade proportions are scaled to match the Haussmann-era apartment buildings in the district. However, 200 x 12 meters of the building's street frontage are covered by a lush curtain of vegetation, comprised of more than 15,000 plants of 150 species. The biodiversity of the plants is intended to echo the diversity of cultural artifacts in the museum, and several zones along the exterior wall represent intertropical regions on 4 continents.

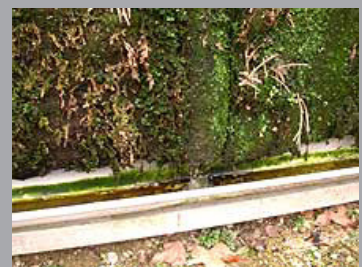
The green wall is the work of botanist Patrick Blanc, who uses epiphytic and saxicolous plants that grow on damp rock walls. The plants are established without soil, in a layer of recycled polyamide felt that acts as a growing medium for the roots and carries a dilute nutrient solution from drip irrigation tubes at the top edge of the wall. The felt is attached to sheets of expanded PVC hung on a tubular steel frame that separates the vegetated surface from the building facade. A gutter along the bottom of the wall catches and recycles the irrigation water.



Recently planted wall



Wall after establishment



Gutter detail



*"Vertical gardens are proof that concrete is not an obstacle to biodiversity; on the contrary, it provides a support structure permitting the growth and survival of numerous fragile plant species."* Patrick Blanc



A tubular steel frame is attached to the facade



Plastic panels and felt are attached to the frame, with drip irrigation pipes at the top



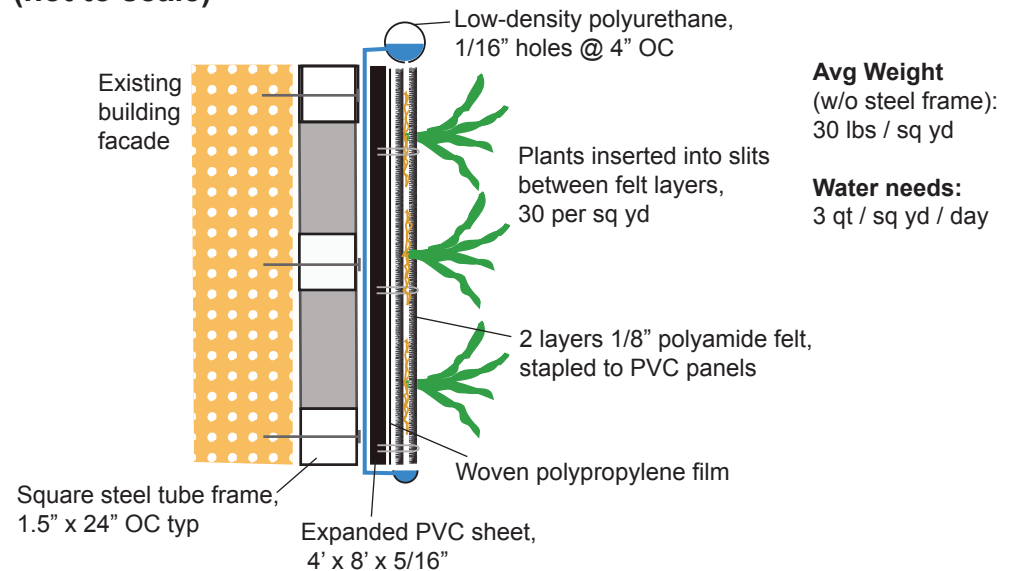
Plants are inserted into slits between the layers of felt



Plants are pruned when they protrude more than 3-4'

Blanc typically composes the planting palette in 3 zones, with larger hemi-epiphyte species at the top (e.g. *Ficus*, *Schefflera*, *Clusia*), medium epiphytes in the middle range (*Medinilla*, *Anthurium*, *Philodendron*, *Aeschynanthus*), and smaller saxicolous species near the bottom (*Pilea*, *Elatostema*, *Fittonia*, *Episcia*). Selection and placement reflect the plants' natural position in a forest canopy, and are sensitive to the microclimate and solar aspects of the building site.

### Structural Diagram (not to scale)



### 'Le Mur Vegetal' (system patented by Patrick Blanc)

Public opinion of the living wall has been quite positive, despite some problems with the irrigation system apparently caused by cutting corners during the installation process. Blanc's walls are being installed in interior and exterior applications internationally. One of the oldest public installations is at the Parc Floral in Paris, which is holding up well after 12 years. When properly maintained, the system is fairly self-cleaning, as microorganisms in the felt media decompose both decaying plant matter and industrial pollutants from city air.

### Sources:

- The Vertical Garden, From Nature to the City, Patrick Blanc, 2008, Norton & Co.
- "Sustainable Development Report," [www.quaibrantly.fr](http://www.quaibrantly.fr)
- [www.verticalgardenpatrickblanc.com](http://www.verticalgardenpatrickblanc.com)
- [www.greenroofs.com/green\\_walls.htm](http://www.greenroofs.com/green_walls.htm)
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