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# SINGAPORE CONSERVATORY HOUSES 226,000 PLANTS

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Categories: Energy and sustainability, High Density, Project, The Architect's Newspaper, Transsolar | Klima Engineering, Wilkinson Eyre

Tags: Climate control, Climate regulation, Comfort, Conservatory, Energetic Approach, Façade, Flower Dome, Green's potential, Greenhouse, Project, Report, Republic of Singapore, Singapore, Storage

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In Singapore, this cooled conservatory contains more than a quarter of a million plants from every continent except Antarctica. Designed by British firm, the project known as "Gardens by the Bay" houses a 1.2 hectare "Flower Dome" that emulates the cool/dry climate found in the Mediterranean and a 0.8-hectare "cloud forest" that recreates cool/moist climates synonymous with tropical montane regions. The owner's technical representative, climate engineering firm Transsolar, produced a proof of concept with small demonstration greenhouses to aid the project. Adrian Turcato of Transsolar, was on hand to elaborate further.



This Singapore conservatory houses 250,000+ plants from every continent (except Antarctica).

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"Plants thrive outside," said Turcato. "Successfully including plants into buildings requires a deliberate design of a facade system that allows to thrive without compromising human comfort or operating costs," said Adrian Turcato, speaking to *The Architect's Newspaper*.

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Turcato added that "balancing plant requirements for light with human comfort by a direct manipulation of facade thermal and solar control" was also a key goal when developing the proof of concept.

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