

Green Piece Gold BREATHING NEW LIFE

by NOWarchitecture

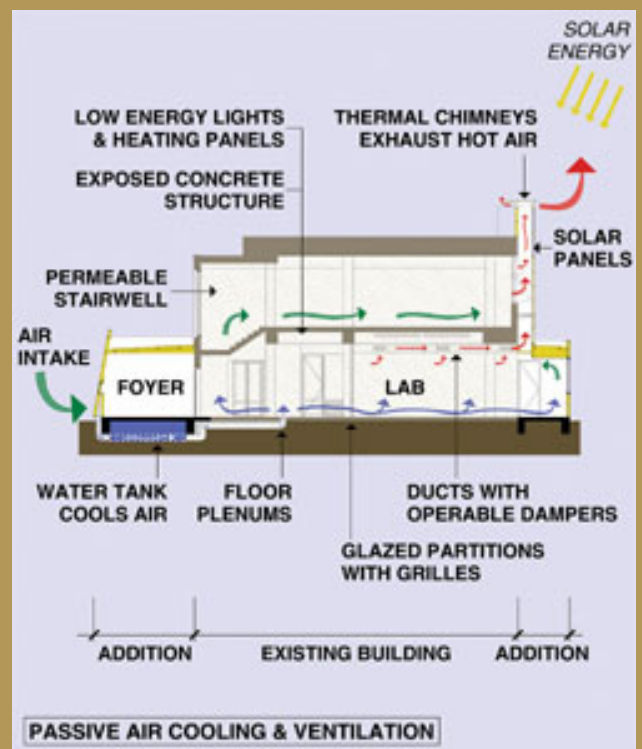
Westbourne Grammer School, Melbourne, Australia: Thermal chimneys and an underground rainwater tank revolutionize this 1981 laboratory building. Fresh air is cooled by manifolds in the underground tank and induced through the building's louvered glazed partitions by thermal chimneys.

The original concrete structure was stripped back to expose thermal mass for improved cooling and heating performance. Rainwater recycling, natural day lighting, photo-voltaics, low-energy lights and ceiling-mounted hydronic heating panels coordinate for frugal energy usage with high levels of comfort.

This project demonstrates the exciting possibilities for renovation projects where there are significant ways of improving environmental sustainability in outdated buildings. Recycling the embodied energy of an existing building for new needs is a highly effective way of minimizing waste of our precious global resources.

Juror Bill Bradley (architect and educator) responds, "Now we're talking! This element is an interesting and intriguing addition to the facade of the building that prompts the viewer to ask 'Why?' Even better, it has an answer! The coupling of harvested water with solar panels on thermal chimneys to create a building-wide stack effect may be nothing short of brilliant."

Gold



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