

The Pixel building - Melbourne, Australia



The characteristic colour panels are designed to let daylight in but keep sun heat out

Jets™ vacuum toilets:

• 9x 50M model

Vacuumarator™ units/pumps:

• 1x 15MB pump

Other details:

- Uses sustainable technology
- Collects and filters rainwater
- Carbon neutral: generates more energy than it uses
- Designed by studio 505
- Built by developer Grocon

On a former brewery site in Melbourne, this office building has attracted the likes of U.S. Secretary of State Hillary Clinton and Julia Gillard (Australian ex-Prime Minister) on their hunt for green technology which can help build a better, more sustainable future.

Challenges

- Energy demand is accelerating world wide, and global availability of safe drinking water is already a major challenge which will only increase in scale.
- In the rapidly developing Asian economies, vast numbers of people are moving up the social ladder and into the fast-growing middle class, which is used to having an abundance of energy and water at its disposal.
- Energy and water supplies cannot keep up with this rapid growth.
- New and more sustainable ways of providing power and water are needed.

lets™ solution

- Using just 1 litre of water per flush, Jets™ vacuum systems reduce the volumes of water and sewage associated with toilet flushing by up to 90%.
- Because of their low water use, Jets™ systems can be installed where water is scarce for natural reasons or by design the latter is the case with Pixel.
- The Pixel building was designed to be self-sustained, and collects and filters rain water for use by its occupants. Although connected to the public water supply, that connection was designed as a back-up only.
- Its architects scoured the world for the best solutions available for this prestigious project to ensure a full 6 Star Green Rating, and chose Jets™.

Results

The Pixel building features one of the most sophisticated water treatment and utilisation systems ever to be built. After use, grey water is recycled and used again. Photovoltaic panels and wind turbines supply more energy than the Pixel building uses. The Jets™ system keeps water use for toilets at a minimum. With Pixel, Grocon shows us that a viable, sustainable future is possible.

Pixel achieved a perfect score of 100 under the Greenstar rating system, with a score of 75 being the benchmark for the 6 Star Green Rating. Five extra points were awarded for innovation, one of which was for the Jets™ vacuum toilet system.



"In creating this pilot project, we have sought to identify best of type technology from around the world"

Grocon CEO Daniel Grollo speaking to the U.S. Secretary of State and the Australian Prime Minister

