

The Invention: Rainwater H2OG multidirectional modular water tank



The Inventor

Sally Dominguez.

Sydney University Architecture - a long time ago!

Description

A rotomolded plastic tank with a unique structure enabling it to maintain its flat walled shape while full of water in any orientation. This H2OG tank is a module which means it can join up to other HOGs to create any volume in increments of 180-litres. IT is light enough that it is a legal one-person carry (according to OHS weight limitations) and it can be installed by one person using threaded screw-together fittings.

The Problem

Back in 2004 Australia was under Level 3 water restrictions. Gardens were dying because we were not allowed to hose plants. Working in innercity Sydney as an architect I had clients with tiny gardens who did not have room for a large rainwater tank to keep their plants alive. At the same time plumbers were charging huge amounts of money to install rainwater tanks.

I decided that a slim stackable narrow plastic tank that fitted down the side of the house without blocking the passage would be extremely useful for my clients. I wanted it to be a DIY installation so that they didnt have to pay crazy money to plumbers. I was told that a flat-walled plastic tank was impossible to build. I asked whether through holes - like a donut - cast in the plastic would work as inside-out bracing. The industry experts said no but I found an engineer, Luther Zillion, who worked with me to design my idea. This structure is now standard in all slim line tank design. I invented it. HOG is also the first rainwater tank to be a DIY installation with screw together fittings, another innovation that is now standard in the tank industry.

Challenges

- Experts telling me my design would not work. I ignored them and - they were wrong.
- Finding an engineer willing to work with me on a new concept.
- Finding funding to make my HOG.

Inspiration from Aussie Inventions that Changed the World

I identify with Professor Graeme Clark who invented the bionic ear. He was told that his concept was science fiction.

Experts dismissed his ideas without reconsidering what they knew, and what perhaps they didn't know. What I like about Clark is that he was not afraid of pushing into the unknown. He refused to accept defeat simply because nothing like this had been done before. You don't need precedent when you are an inventor. Yes - your dreams might be science fiction today, right now, with what we know - but that is called moonshot thinking. That is how you invent – by imagining a future solution and then making it happen.



HOG fits down the side of a home side passage without blocking the path. It is reusable in any orientation, and it screws together to hold any volume in modules of 180-litres.

