



How it Works

When the cistern is flushed, water is retained in the bowls under the Torbeck Ecofil valves, this holds them shut. Each bowl has a small hole in the base which allows it to empty at a preset rate. The bowl under the rain valve has a larger hole so that valve opens first allowing rainwater into the cistern.

A small flow of rainwater is diverted to the bowl of the mains water inlet valve via a tube and this keeps the bowl full thus preventing mains-water entering the cistern.

If there is no rainwater e.g. due to drought or power failure, then the mains water bowl empties and the cistern is allowed to fill with mains.

Advantages:

- Mains pressure fill (compared with header tanks systems).
- WC functions if pump or power fail (compared with commercial rain systems that do not use a header tank).
- Low cost.
- Standard components.
- No electronics or other controls for mains-water backup.

Elemental Solutions

Drawn: NJG Check:

Project:

ES4 RAIN

Drawing: How it Works

No.: ESR 003

Rev: