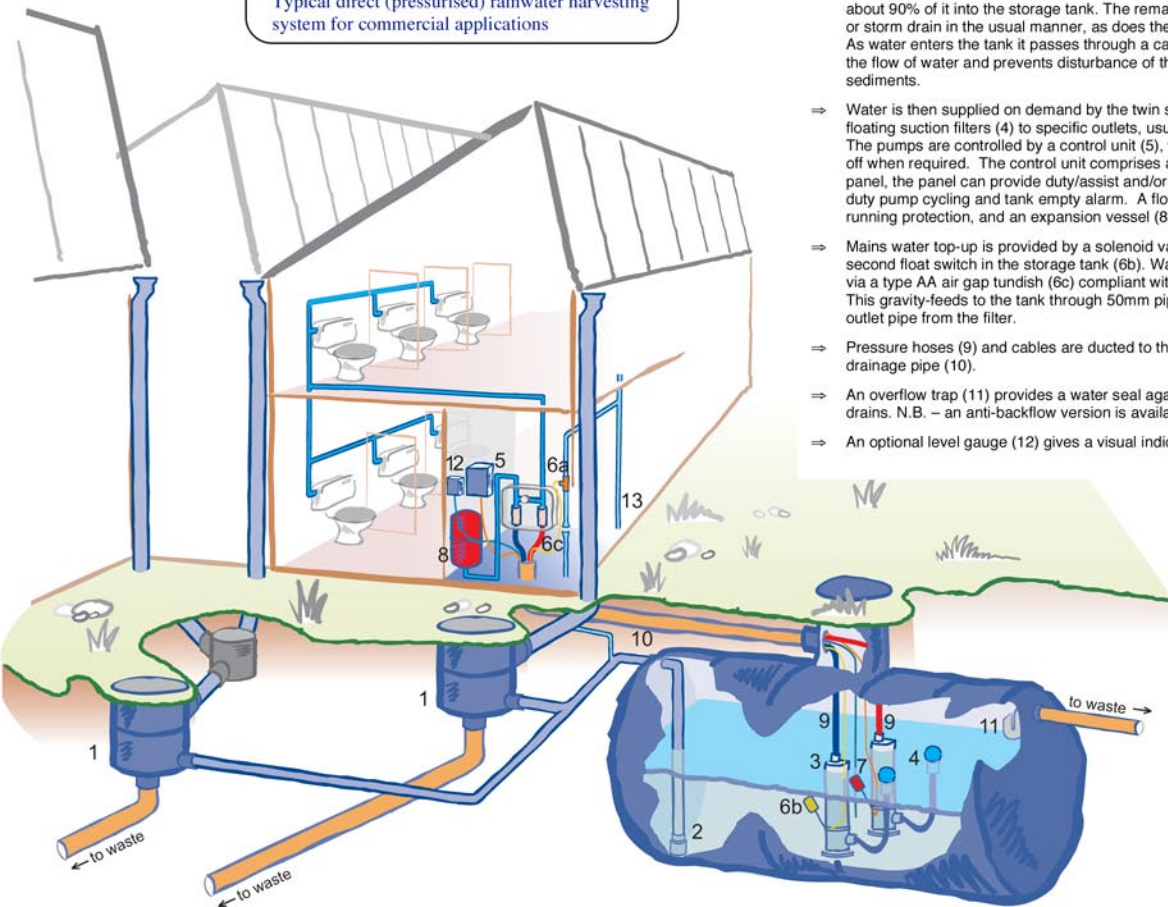




Typical direct (pressurised) rainwater harvesting system for commercial applications



## HOW IT WORKS:

- ⇒ Rainwater is collected from the roof drainage system by the underground Wisy WFF vortex filter (1). This filters out the debris from the water and diverts about 90% of it into the storage tank. The remaining water goes to soakaway or storm drain in the usual manner, as does the excess water from the tank. As water enters the tank it passes through a calmed inlet, (2) which smooths the flow of water and prevents disturbance of the float switch and any sediments.
- ⇒ Water is then supplied on demand by the twin submersible pumps (3) through floating suction filters (4) to specific outlets, usually WCs, washing plants etc. The pumps are controlled by a control unit (5), which turns the pumps on and off when required. The control unit comprises a switchboard, and control panel, the panel can provide duty/assist and/or duty/standby and provides duty pump cycling and tank empty alarm. A float switch (7) provides dry-running protection, and an expansion vessel (8) prevents pump "hunting".
- ⇒ Mains water top-up is provided by a solenoid valve (6a) controlled by a second float switch in the storage tank (6b). Water is discharged to the tank via a type AA air gap tundish (6c) compliant with current water regulations. This gravity-feeds to the tank through 50mm pipe that then connects to the outlet pipe from the filter.
- ⇒ Pressure hoses (9) and cables are ducted to the building through a 160mm drainage pipe (10).
- ⇒ An overflow trap (11) provides a water seal against any foul odours from drains. N.B. – an anti-backflow version is available when connecting to sewer.
- ⇒ An optional level gauge (12) gives a visual indication of tank water level.