Mains Pressure Boosting

For more information, contact us on
0208 607 0449, or Info@GlowMaintenance.co.uk

Mains pressure water systems running off combination boilers and unvented cylinders such as MegaFlos often suffer from pressure problems, especially noticeable in showers. Megaflos and similar specify a minimum flow rate of 20ltrs/min, they are often incorrectly installed by less able plumbers, commonly during extensions and building works.

With this type of system, the water is supplied by the flow in from the street, which can only supply a finite amount. For example, if you have 13litres/min coming in through your mains then running just a shower would be a good flow (maybe 12ltr/min), but if someone fills the kettle at the same time, this incoming flow would be shared between the 2 outlets, in favour of the lower one; so you may find you have 8ltrs/min out of the kitchen tap and the shower drops to 5ltrs/min.

As well as an initial restriction on the incoming mains, the pipework throughout the property may also restrict the flow, as may the boiler or individual outlets. This means that improving the water pressure throughout a property may involve a number of different steps.

- Checking the pressure at different sections of the property's plumbing to assess where the restrictions lie. If the incoming supply is restricted we are unable to test further until this is improved.
- Changing stopcocks, both internal and external if they appear to be old or problematic.
- If required, using one or more pressure boosting options (detailed below) to improve the water available to the property.
- If then required, adjusting the internal plumbing of the property, fitting a larger boiler etc.
- Finally, addressing individual outlets if still having issues.

Following are the most common ways to boost the water pressure/flow available to a property. Please be aware that when it comes to water pressure, there is almost never a panacea, all methods have limitations.

- **New, dedicated, incoming mains** – This is the cleanest (less components etc) option for getting a better flow in to the property. This may involve builders digging trenches or using a 'mole' and running a new 32mm poly pipe, the water company connecting up in the street and Glow connecting up inside the house. Even with this the volume/pressure of water available will be dictated by the pressure on the street.
  Approximate Price - ?? unsure as most of the work would be done by builders and the water company
- **Accumulator** – This is a large cylinder (approx 60cm across and 1.8m tall), pressurised by the mains standing pressure when no outlets are in use, it then provides a boost to the water flow until the stored pressure is used up (the pressure will drop gradually as used). These come in varying sizes, have few working parts and are silent. They offer a finite amount of boosted water volume depending on size.
  Approximate price £1650 + VAT, depending on size, position etc.
- **Pump and Tank** – To install a water tank and a negative head single pump to pump the water in to the pipework (this must NOT feed the kitchen cold - drinking water); With a choice of pump sizes and tank volumes this can provide the best solution but require significant space. However, the pump will run whenever any water is in use and pumps are noisy and can be expensive to maintain.
- **Very approximate price - £1750 + VAT, depending on pump and tank size, location etc.**

While there are also 'mains booster pumps' on the market, these can only boost the flow UP TO 12ltrs/min maximum, which is barely adequate for most systems.