

Hydroponics





Sow the City brings expertise in water and electricity efficient automated hydroponics systems to help you grow a wide variety of tasty vegetables and micro-greens.

Service summary

Hydroponics simply means growing plants without soil. This is a lightweight and versatile option for indoor and outdoor spaces, where soil is too bulky or impractical. Sow the City will design and construct hydroponics systems to fit your indoor or outdoor growing space.

In its basic form a hydroponics system consists of a water reservoir and pump that circulates a nutrient rich solution to the plant roots, and back to the reservoir. Plants grow directly in the nutrient solution or in an inert growing medium such as gravel, perlite or expanded clay pebbles. Hydroponics is closely related to aeroponics where roots are sprayed with a fine mist and aquaponics where the aquaculture (raising aquatic animals) is combined with hydroponics.

Hydroponics is becoming an increasingly popular technique for growing at home and commercially. Growing hydroponically uses up to 90% less water and can result in higher yields and faster growing plants. Evidence suggests that hydroponically grown crops are just as vitamin rich as those grown in fields, and crops can even be given a specific mix of nutrients to make them tastier. As population numbers increase and become more urbanised, hydroponics could offer a way to produce greater quantities of local healthy food.

Sow the City has established hydroponics systems, using LED lighting and off grid systems powered by photovoltaics, for clients including Manchester European City of Science



and the Printworks. Our modular units can be stacked and designed to fit any space. We can install and build your hydroponics system; integrate sensors to monitor pH, temperature, flow and nutrient levels; and train staff to operate and maintain systems.







Sow the City CIC Ltd, Boiler House, Manchester, M16 7DA 0161 465 6954 info@sowthecity.org www.sowthecity.org