

This product should only be fitted by a qualified plumber to NVQ (National Vocational Qualification) or SNVQ (Scottish National Vocational Qualification) Level 3. Should the installation be completed by a non-qualified person then the guarantee may be considered invalid.

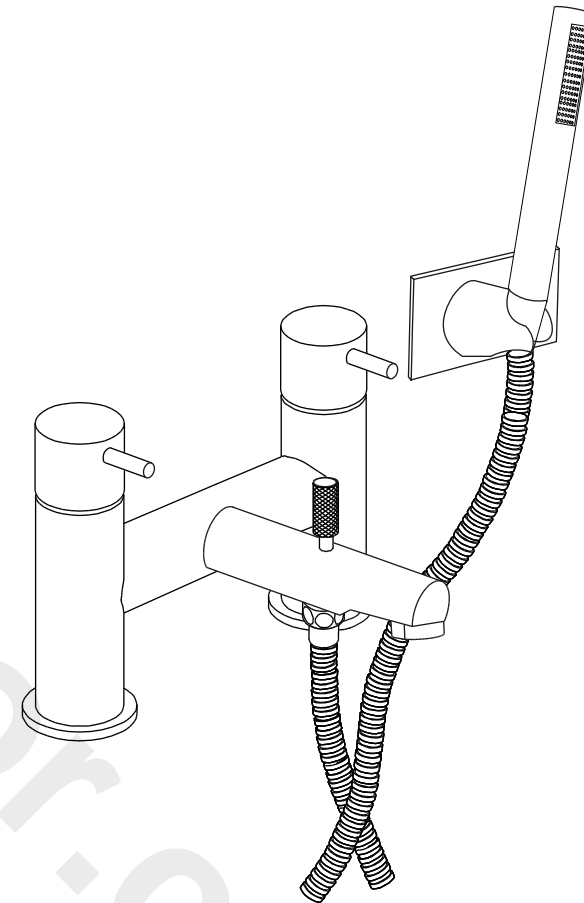
For a claim made under our warranty written certification of your installers credentials can be required. For further information or to find a qualified installer in your area please visit the Institute of Plumbers website - [www.iphe.org.uk](http://www.iphe.org.uk)

### THE QUALIFICATIONS

At present, to be a plumber you need to follow the National Vocational Qualification (NVQ) route (Scottish National Vocational Qualification - SNVQ - in Scotland). These qualifications are made up of theory and practical work in the classroom/purpose built training facility and work based experience with a working plumber. Colleges should help students find a work placement, although many students organise it themselves.

The S/NVQ qualification works in levels. All recently qualified plumbers should hold S/NVQ Level 2 as basic with Level 3 as the preferred level. Level 2 will give you the foundation you need for a career in plumbing and teach you domestic plumbing to a satisfactory level. Level 3 is more comprehensive and deals with domestic, commercial and industrial plumbing along with aspects such as gas - if you want to one day set up your own business, this is the level to reach. The Institute of Plumbing and Heating Engineering, and the industry as a whole recommends that all plumbers reach a minimum of Level 3.

Reaching Level 3 has other advantages. The Institute runs a Master Plumber Certificate, which only those attaining Level 3 or equivalent can reach as long as they have the relevant experience as well. Those with S/NVQ Level 3 can (once in membership with the Institute for five years as a Member MIPHE) gain Engineering Technician EngTech status with the Engineering Council (UK).



### INSTALLATION INSTRUCTIONS

For any further information please contact Crosswater on: **0845 873 8840**

Or visit our web-site at [www.crosswater.co.uk](http://www.crosswater.co.uk)

The manufacturer reserves the right to make technical modifications without prior notice.

## INTRODUCTION

Please read these instructions carefully and keep in a safe place for future reference.

### General Installation Requirements.

The installation must comply with regulations of the Local Water Authority as contained in their bylaws. All of the taps in this range are single flow (the hot and cold water mix in the body) and should therefore be supplied with hot and cold water at balanced pressures, both from the tank or both from the mains (via a combination boiler for example). If the taps are not supplied at balanced pressures then the mixer will not function correctly. It will also be necessary to fit non-return valves on both hot and cold feeds. It is very important that all pipework is flushed thoroughly after installation to avoid damaging the ceramic discs.

### Minimum/Maximum working pressure

These taps are suitable for high and low pressure installations. They are fitted with a quarter turn ceramic disc cartridge which provides a good flow rate with very smooth movement. To ensure that the bath shower mixer works adequately under low pressure, the cold water storage tank should be at least 2 metres above the highest installed position. The maximum water pressure is 6 bar (note: mains cold water is normally supplied at between 2 and 3 bar). For installations where the mains pressure exceeds 6 bar a pressure reducing valve should be fitted.

The tap is fitted with a flow straightener for use in low pressure installations. If your water is supplied at high pressure you may prefer to change the nozzle to an aerator.

### Approvals

All products are manufactured using materials tested and approved under the Water Bylaws Scheme and comply with requirements of British Standard 5412:1996 where applicable.

### Preparation and byelaw requirements

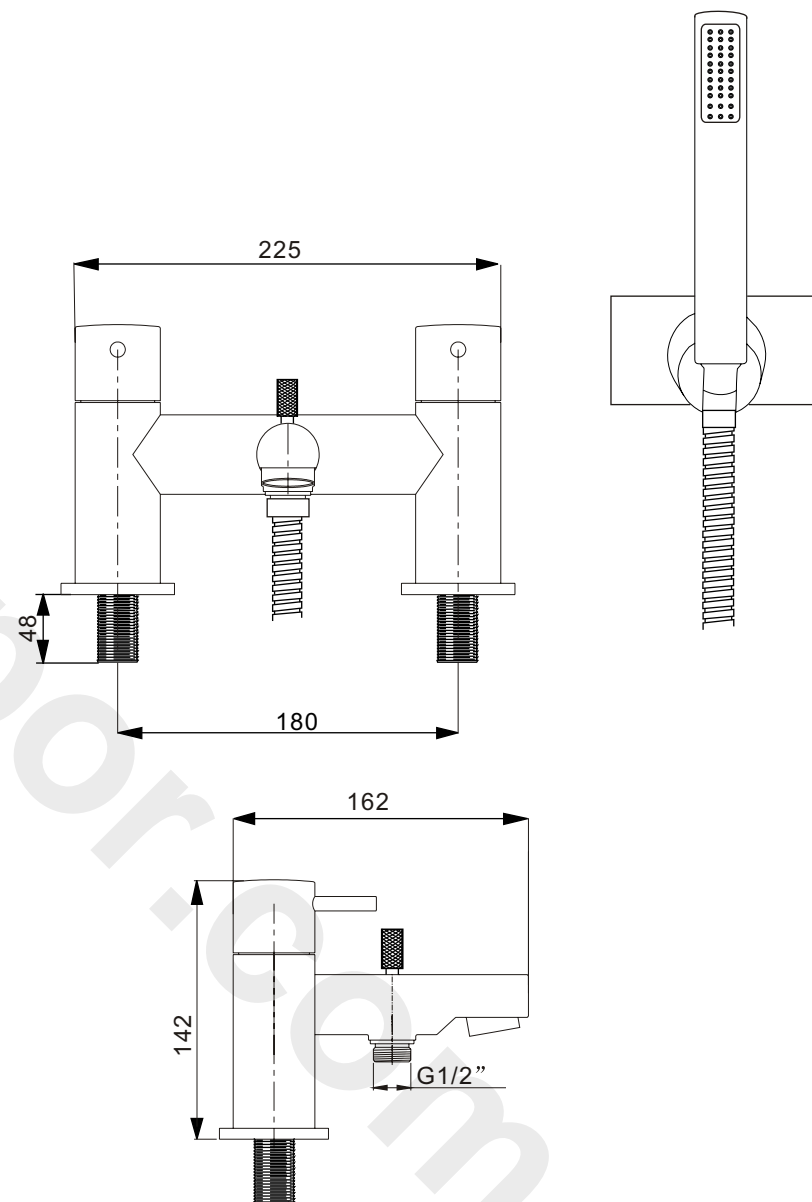
These taps are single flow so the hot and cold water mix in the body. Water byelaws require that where the hot water is supplied from a tank and cold from the mains, non return valves are fitted on both hot and cold pipes as close as possible to the tap. These are not supplied. Where combination boilers are fitted it is only necessary to shut off the incoming mains and turn the boiler off and non return valves are not required.

### WARNING

**Before installing the new mixer it is essential that you thoroughly flush through the supply pipes in order to remove any remaining swarf, solder or other impurities. Failure to carry out this simple procedure could cause problems or damage to the working of the mixer.**

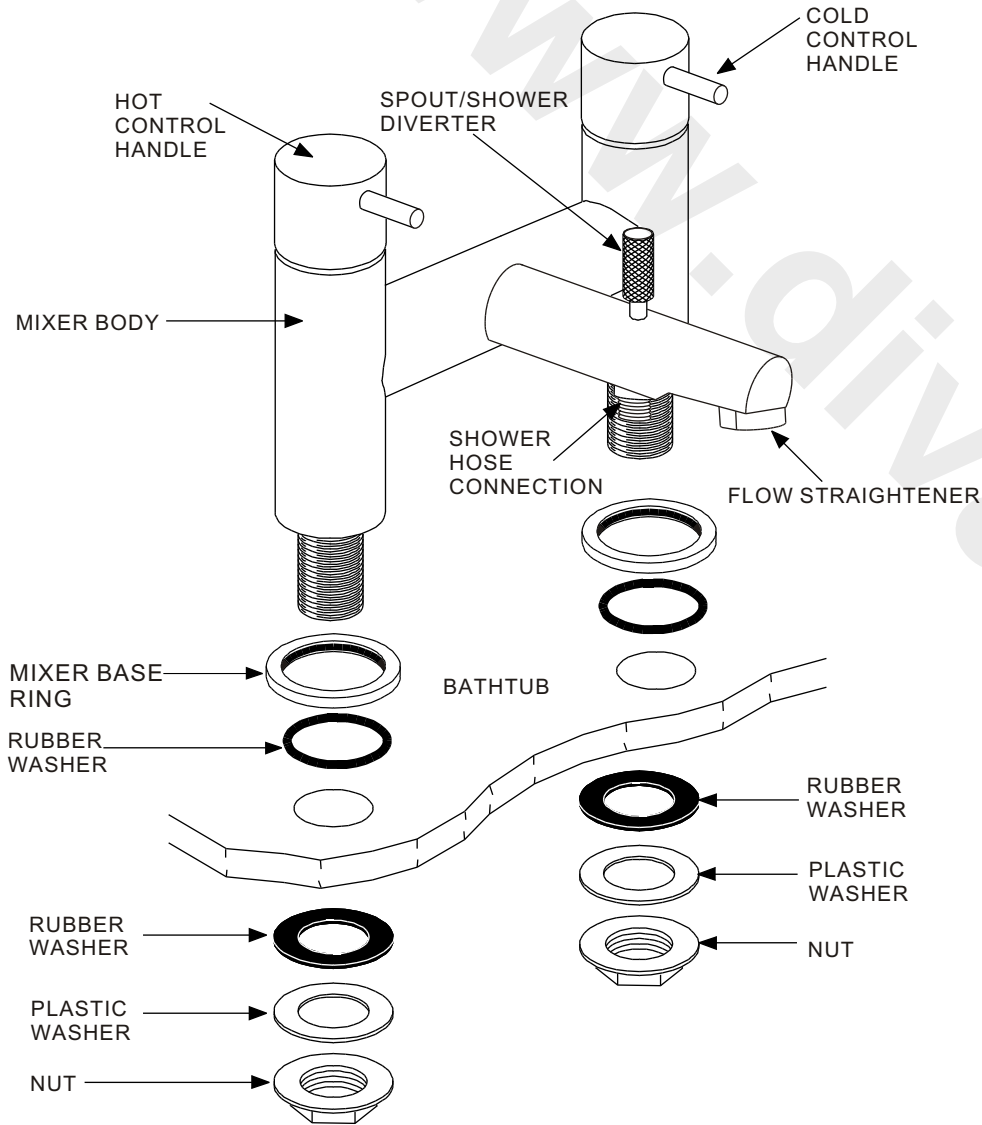
These hints have been prepared for your guidance, you must exercise due care at all times. We do not accept responsibility for any problems that may occur through incorrect installation.

## DIMENSIONS



NOTE: ALL DIMENSIONS IN MILLIMETRES

INSTALLATION



INSTALLATION

First shut off your water heating system then, with your mains stop cock closed, open the lowest hot and cold taps in the house and allow to run until the cold storage tank and pipes are empty (the hot water storage cylinder always remains full). Where combination boilers are fitted it is only necessary to turn off the boiler and shut off the incoming mains. Fitting isolating valves to the inlet feeds is recommended for ease of maintenance.

INSTALLATION

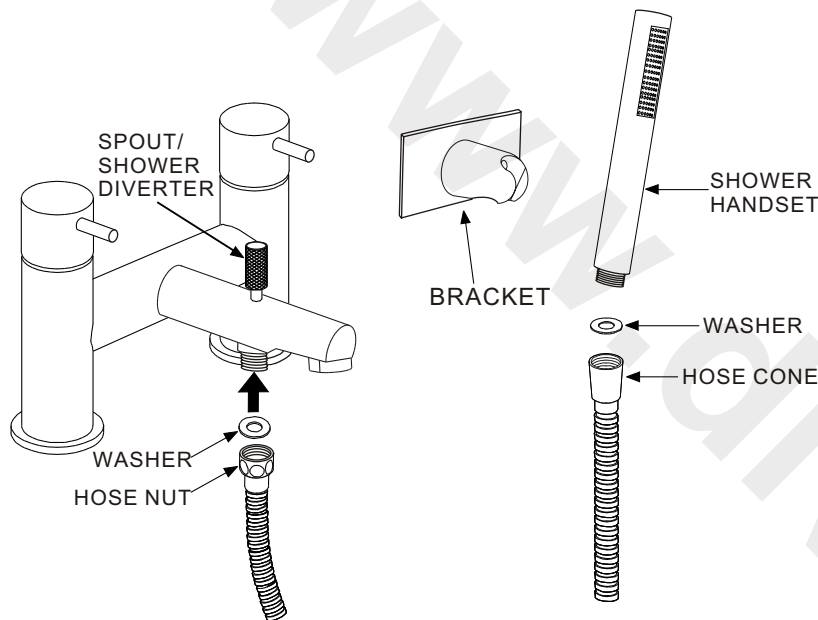
**⚠ Remember to turn off the mains water supply before connecting to any existing pipe work.**

Remove the fixing nuts, plastic and rubber washers from the tap tails. Insert the tails into the holes on the bath top making sure that the O'ring and mixer base ring are correctly positioned. From beneath slide on the rubber washer, plastic washer followed by the nut. Secure the tap finger tight with the nuts, check that the tap is correctly positioned to the rear and tighten fixing nut. The tap needs to be fixed firmly but do not over tighten as damage may be caused to the bathtub. Connect the water supply to the tap with hot water on the left and cold on the right. (When viewed from the front).

ATTENTION

Having first checked all new connections, turn on the mains stop cock, close all taps except the new mixer and as the system starts to refill check for leaks. Once you have satisfied yourself that there are no leaks, switch on the water heating.

**INSTALLATION**



Insert a washer into the cone end of the hose and screw to the handset.  
 Insert the second washer into the nut end of the hose and attach it to the mixer outlet.

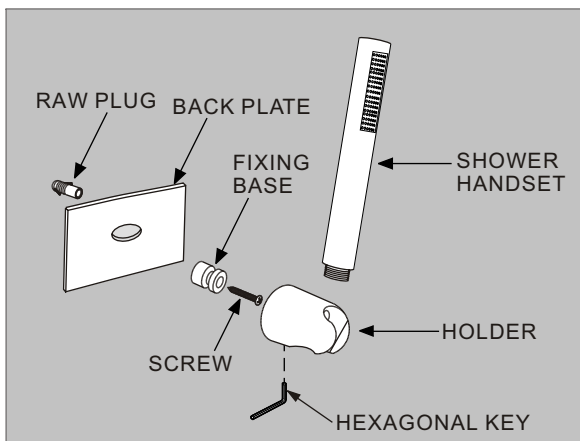
**Operation**

Pull the diverter up to operate the shower, it can be locked in position by turning 90°

Once most practical positioning of handset is agreed drill hole and insert the raw plug provided.

Secure back plate in situ by screwing the fixing base through the central hole.

Finally push the holder over the fixing base and secure by tightening the grub screw on the underside.



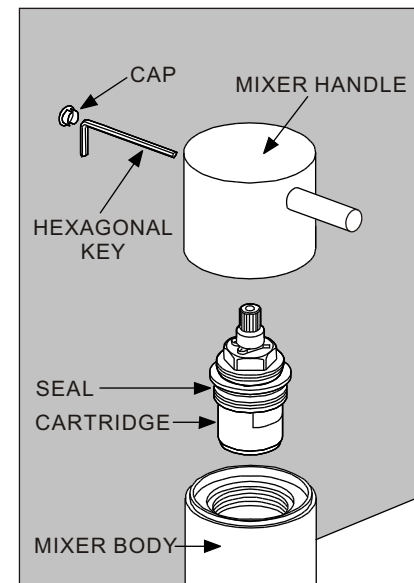
**MAINTENANCE**

**CLEANING THE CARTRIDGE**

The concealed cartridge should give trouble free service, but in the event of any problems, servicing is straight forward.

**To remove the cartridge.**

Pull off the cover cap and with an hexagonal key loosen the screw, but do not remove it. Pull off the handle. Using the correct size spanner unscrew and remove the cartridge. Wash the cartridge with clean running water and make sure that any trapped debris has been removed. Dry and lightly grease the seal (only use silicone grease) and replace the cartridge followed by the handle.



**CLEANING**

The chrome and gold plate we use on our taps is very durable, nevertheless care should be taken when cleaning them. They should be cleaned only with warm soapy water followed by rinsing with clean water and drying with a soft cloth. All finishes are vulnerable to acid attack and some strong substances such as household cleaners, disinfectants, denture cleaners, hair dyes, wine making and photographic chemicals can cause the surface to go black or peel.