

Water finds its own level... so put it to use.

The Faithfull water level consists of a length of flexible plastic tubing. At each end of the tubing are rigid graduated plastic cylinders. Water is contained within the level usually with a few drops of food colouring added to make the water levels easier to read.

On commercially available models, calibrations are printed on the cylinders.

Rather than relying on a single bubble, the water level relies on Pascal's Law which, in its simplest terms, states that water always seeks its own level. In practice then, you set the two cylinders atop the two surfaces you want levelled with one another; the connecting tube can assume whatever position it will as long as it is below the level of the water-filled cylinders. If the surfaces are the same height, the water level in the two cylinders will be level; when the cylinders are not level with one another, the water in the device will be in the high zone at one end and the low zone at the other.

The water level is often used by groundwork contractors, carpenters, landscapers, plumbers, kitchen fitters and other tradesmen. Locating a dropped ceiling, for example, is made simpler by using a water level. Lining up footings for a deck (or the decking itself) is another task often tackled more easily using a water level than with a carpenter's level or even a line level.

One key advantage of the tool is that is can be of virtually any size, giving its user the ability to level objects that are many feet apart. The length of the hose between the cylinders can be only a few feet (in levelling a pool table, for example) or a hundred or more feet in levelling the foundation of a building. The nature of the water level also allows objects that are separated by some obstacle - a tree, a structure, or another obstruction - to be levelled.

The calibrations on the cylinders also allow objects to be positioned out-of-level, such as porches or gutters that require a specified slope in order for water to drain or run off. A well-made water level should be accurate to approximately one-sixteenth on an inch.

Use a length of clear plastic tube. Fill with water making sure there are no air bubbles. The water will find its own level.

This method is very useful for checking levels around corners or over distances where your level will not reach.

- 1. Water level must be filled with water ensuring that there are no air bubbles, for this purpose transparent hose must be used, fill using a funnel or siphon the water from a bucket. A food colouring may be used in the water to increase is visibility if desired.
- 2. When measurements are being taken the valves on the tubes must be open
- 3. When measurements are complete close the valves, the hose can then be coiled for storage.

