### Question & Answers For Beginners - Waterfed Pole (By Peter Fogwill 2007)

#### How does the water fed pole work?

All you are doing is pumping purified water from a tank up a pole to a brush, the brush washes and rinses the glass clean, you then walk away and leave the window to dry sparkling clean.

### I am new to all this and have not got a clue what water treatment system I need, there seems to be quite a lot?

It depends on a few things. Firstly your tap water, is it soft or hard?

There are two types of water treatment DI (deionising) and RO (reverse osmosis) The DI consists of a single vessel filled with DI resin, the life of the resin is determined by how much water passes through it and, how hard the water is that passes through it.

The softer the water the more life you get from the resin. This method can be cost effective in a soft water area, having the advantage of quick fill times of water containers or tanks.

The Reverse Osmosis on the other hand has a life expectancy of two to three years regardless of the hardness of feed water; this is ideal if you live in a hard water area, plenty of water at very low costs. The disadvantage of the Reverse Osmosis is the fact that the tank fill times are very much slower. Although you can pay a lot more and have a large commercial RO system, the water production is still much slower than a DI vessel.

A way round the slow production of the Reverse Osmosis is having a tank of some description, a tank in you van or a tank in a garage or workshop, or even in your back yard, the water treatment system can be producing water day and night, and a ball-cock can be set to shut it off automatically when the tank is full. You simply draw water as and when needed to fill water containers, or the tank in your van. It has been known for a company to run three vans with 500L tanks, with a 300 gallons per day RO system. The disadvantage of this is when you run out of water during the day you have to return to your water store to refill.

The best way to determine what you need is by phoning a couple of water fed pole manufacturing companies and discussing your needs, you don't have to buy anything, just talk to them and find out what is best for you. Then decide which way you want to go.

### What must my TDS reading be before spots start to show up on the glass?

I have found personally that any TDS reading in single figures if fine, I wouldn't chance it at 10 or over, although reports from users have said they have had no spotting at readings over 10ppm

The thing here to remember is the cost of DI resin and pre-filter are relatively cheap, and once your readings start to rise.. they rise quite rapidly. I find that as soon as your reading rises above 0ppm it is time to make the changes to keep it at 0ppm.

### I have heard people mention TDS what is it?

TDS stands for Total Dissolved Solids, it is solids that have dissolved in the water, you can't see it, so you need a TDS meter to let you measure how much dissolved solids are present in the water.

The more dissolved solids present in the water, the harder the water is. If you have a TDS reading of 1ppm (parts per million) that means for every million parts of water there is one part dissolved solid. Not surprising that even with a reading of say 5ppm you wouldn't see anything on the glass.

# I have a storage tank with a ball-cock, the trouble is the pure water stops flowing, but the waste from the RO keeps flowing. Can I turn that off as well.

Yes you can, what you need to do is redirect the tap water from where it leaves the ball-cock inside the tank, back out the tank and through the water treatment system, then have the pure water entering the tank again somewhere else. This way the ball-cock rises when the pure water fills the tank, the water supply from the tap entering the tank is shut off, and the waste and pure water stops flowing.

#### How much water will I need for a days work?

This depends on a few things, what system you have, what method of switching on/off you have, what type of windows are you cleaning, as with domestic opposed to commercial.

On domestic cleaning you can say you will use roughly 100L in  $1\ 1/2$  to 2 hours. On Commercial cleaning you can say about 100L per  $1\ \&\ 1/2$  hours. And large glass areas - 100L per hour.

On domestic work you are constantly switching off the water while moving from the front of the house to the back, and also when adjusting the pole from second storey to bottoms.

You have to remember though that while doing commercial windows you more than likely have to clean the insides as well, so a 1 hour job may only mean about 20 minutes with the pole, and 40 minutes working on the insides. Another thing to remember is you can clean much more windows per hour, than you would have done with the ladder.

I have been asked in the past if a particular system would work for 8 hours in the day, as the customers particular job is an 8 hour job. What he didn't realise before he asked the question is the 8 hour job is not going to be 8 hours, it will be nowhere near that with the pole.

Forgetting all of the above, and a good guide to use is, one and a half hours per 100L

#### How do I work out how much water I can carry in my van?

What you need to do is find out what sort of weight your van can carry, look for the pay load weight. Water is 1kg per Litre, so 500L of water is 500kgs, but don't forget to take into consideration the weight of the tank frames, poles, hose reels, and any other stuff you carry in your van.

#### I seem to be getting wet, what am I doing wrong?

You are probably standing too close to the wall. Change the angle on the angle joint so that it is nearly straight, this will allow you to stand further away from the wall.

I have cleaned some windows at least three times, and I am still getting spots, why? There is no set amount of times you can clean the windows and be guaranteed a perfect clean. Sometimes it can take much more cleans than normal depending on certain circumstances, window frames and certain window types have a lot to do with it, as does local industries, and also airport flight paths.

Windows and frames first, best to give the window frames a good clean first time especially the top frame, give it a good scrub with plenty water, make sure there is nothing visible running from the frames before you stop. Do this to a few window frames, or even the whole side of the building leaving the water to run off the frames for as long as possible, then go back and redo the glass only, each time you go back avoid water touching the top of the frames.

Window types next, some windows have deteriorated paintwork, the paint is very old and mixes with the pure water, the pure water ends up a milky coloured, these window are impossible to get spotless, and the only thing you can do with these is avoid the frames altogether, concentrating on the glass only.

Some more modern windows may have old or damaged rubber mouldings, the pure water gets under the mouldings and draws out all the old soap that has built up, the only solution here is plenty rinsing, it may take much more than three cleans to get these spotless.

Industrial areas with some large chimneys near by can be depositing dear knows what on the glass, again more rinsing or a second clean is necessary. An example of this is an old folks home I clean has a laundry room on the ground floor, they have 4 windows on the front of the building directly above the laundry room, and after the windows have had the same treatment as the rest of the building, these four windows are all spotted, this is not a problem however as I simply go over them again just before I put my equipment away, the second clean brings them up great.

Same with some windows less than a mile away from the runway of Edinburgh Airport, the planes are flying by very low and depositing some aviation fuel on the glass, these particular window take more water than normal to clean up, again not a problem as I know exactly how to deal with it.

# Is it best to have the spray coming from my brush, or is it better spraying down on my brush?

I have tried it a few different ways and find it much better when the water comes from within the brush as opposed to above the brush. The reason I give for this is when the water is hitting the glass above the brush there is always the chance of the water arching up on to the frame and bringing down dirt, this is eliminated with a through brush feed as the bristles on the brush keeps the water contained, and away from the top frame.

### I have heard that my customers might not like me cleaning their windows with a pole, will they complain?

Commercial customers will not bat an eyelid at the way you clean their windows, in fact most of them will be glad that you are saving yourself time, and not risking your life.

Domestic customers won't hardly notice they are not being done with a ladder and bucket, most of them are out working during the day, and the first they know of the windows being cleaned, is when they see the slip from you saying they have been cleaned.

There can be problems from the small terraced houses, they seem to be occupied by the older lady who sits about the house all day waiting to pounce on anyone who she comes in contact with, she expects the window cleaner to have a bucket and a ladder, after all her mothers window cleaner had them.

Most window cleaners inform their customers in advance and have them prepared for the change over, they have already explained about the few cleans where the window will not be up to the usual standard, most customers accept this, and are thrilled when they find out that now

you can start cleaning the conservatory roof, the window above the roof, and that their frames will be kept noticeably cleaner, and you will not be walking on their roofs or damaging their guttering. What more can they want?

### What sort of heights can I get to with the waterfed pole?

Again it depends, people usually use the poles to do away with having to use ladders so a 40-foot pole reaching to most 4th storey windows should be enough. These poles are inexpensive.

You can however get the Carbon Fibre poles which will clean up to 60 feet, but a word of warning these poles can be expensive, and the higher up you work the more awkward it gets using the pole.

# How many times will the window have to be cleaned when I first start using a water fed pole, until the windows come up spot free?

Depends on the windows they are all different, usually two to three cleans, but sometimes it can take more than that. Each time they are done though they are noticeably cleaner. It is worth it in the end if you persevere, as you will eventually get a much better finish than you would with a squeegee.

# Can I still use my water fed pole in the snow and ice, will the water freeze on the glass.

Most of the time it is no problem window cleaning when snow or ice is underfoot, you just have to be a bit more careful you don't slide and drop the pole, or hurt yourself.

Water freezing on the glass is not common as there is usually heating inside the building, keeping the outside of the glass warm enough to stop it freezing. There are situations where it may freeze such as unheated buildings etc, best to just avoid these until the weather gets a bit milder. If it is a section of a building that needs to be done then you could try experimenting with some Isopropyl Alcohol, this added to pure water lowers the freezing point, and does not spot the glass in any way.

You also have to be careful especially on front entrances where people will be walking, if the area is already icy before you start then it doesn't make much difference, but if it is dry and you are going to leave it wet, just use some grit salt after you have finished. Most of the windows around commercial buildings and houses, have a border between the wall and the walkways so leaving water is not a problem. On houses I used to scrim the doors to save leaving any water behind on the doorstep.

A big advantage of using a water fed pole in cold weather is you can wrap up well. You are also more sheltered on the ground, instead of higher up in the wind, you can also wear a pair of thick gloves instead of the normal window cleaners gloves.

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