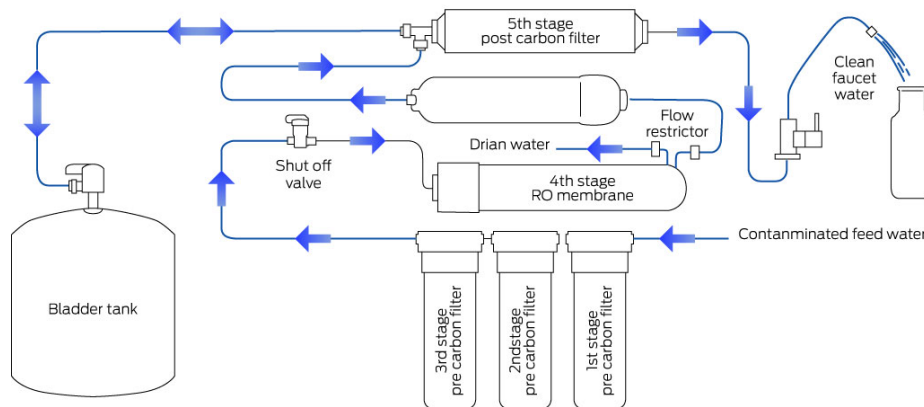


# Water Quality Marketplace Look-Alikes

Installing Reverse Osmosis systems in new homes may start to feel a bit monotonous after a while. You do it all the time...connect the membrane filtration system with the faucet, bladder tanks, shut-off valves, tubing, pipe connectors and everything else shown below.

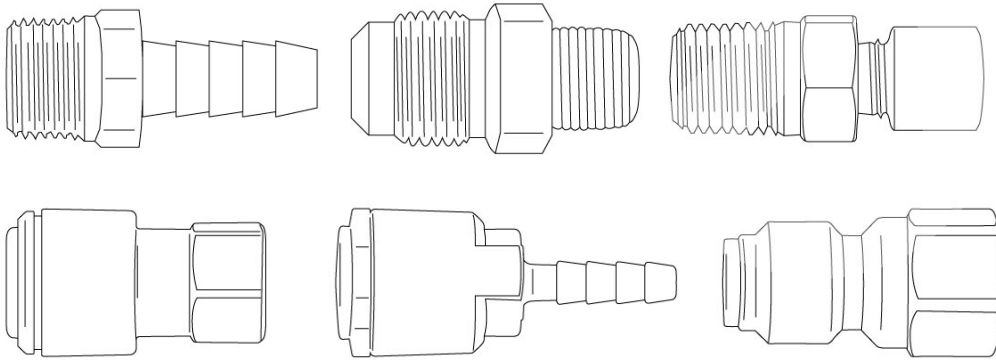


In taking the more efficient route, you probably opt for push-connect fittings on on most of your water quality projects, since they forge quick and easy connections between various tubes. But there's an immense variety of push-fit options on the market, so how do you know that you're choosing the best solution for each project?

Do you use what you've always used? Do you accept recommendations of others? Who may or may not know the specifics of your project? If you don't fully understand the difference between various fittings and their respective benefits, chances are, you're missing out.

## The History

In order to really understand the fittings that make up the water quality market, it's best to start at the beginning. Before the invention of push-connect, copper pipes were most commonly used for clean water transmission. Compression, flare or barbed fittings were among the standard connection types for joining pipe with with a filtration system, faucet and the water supply.



These older methods, shown above, though reliable in of themselves, require installers to have extensive training. Although, regardless of training, the risk of installation errors leading to connection point leaks is considerably greater when using these dated methods.

A frequent cause of leaky pipes is due to installers making connections to be too tight or not tight enough - and the margin can be substantial. Moreover, once a successful connection is made, disconnection for routine maintenance falls on a scale of problematic to impossible. Technicians typically have to cut the hose in order to perform maintenance, which then means complete re-installation of the configuration.

The greatest issue, though, lies with the end-user when copper tubing connected with copper or brass fittings alter the taste of a beverage. This modification occurs because of the inner-pipe metals reacting with water.

### **The Increase**

Since the 1960s, when John Guest invented push-connect fittings, the pipe connection process advanced and resolved many of these issues.

It should come as no surprise that push-connect fittings quickly became the preferred method among the water quality market. Installers were suddenly able to easily prep and connect tubing, which quickened the installation process, as well as easily disconnect and reconnect tubing for service or maintenance. Additionally, when connected with the latest pipe technology, such as PEX, the taste of a beverage was no longer altered.

Despite the ease of use, installers still require basic training in order to make persistent push-fit connections. Simply by not pushing a tube far enough into a fitting could cause a leak, which is just one example of the importance of installers understanding the fundamentals.

As manufacturers and installers continued to adopt the push-connect concept overtime, imitations flooded the market in tandem. These push-connect fittings generally became cheaper in price, but also in quality.

### The Solution

Understanding different fittings and their manufacturers is imperative for successfully navigating the industry marketplace.

Because of the variance of available push-connect fittings, it's best to begin any purchasing decision by checking for key criteria.

First, check the certifications. Clean water and potable liquid fittings should always possess the following three (3) certifications. If it's unclear whether a fitting is NSF, FDA and ISO certified, be sure to ask the manufacturer or distributor.



**NSF/ANSI/CAN 61:** a mandatory certification for any water treatment or distribution products that are manufactured, sold or distributed in North America, according to NSF.org.



**FDA 21 CFR:** FDA regulations dictating resins and materials acceptable for use in manufacturing components that carry liquids for food and beverage or medical-use cases.



**ISO 9001:** a voluntary certification that specifies requirements for a quality management system, and according to asq.org, is used by organizations with the “standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements.”

Second, insure a positive future brand experience - look into a brand's distribution networks. In requiring broad distributor networks, you'll avoid purchasing products that may frequently be inaccessible or unavailable. market, but so does service. Not all solutions foster success. It's important to first do your due diligence, before selecting a push-to-connect solution.

And finally, check the brand's support network. This will be the difference between receiving help and guidance when needed on future projects, or being left high and dry. Do business with brands that view customers as partners, and your success as their success.

Clearly not all push-connect fittings are the same. Prices vary across the market, but perhaps more importantly, so does quality. Brands vary across the market, but so does service. Not all solutions foster success. It's important to first do your due diligence, before selecting a push-to-connect solution.