

Configurations and Mounting Arrangements

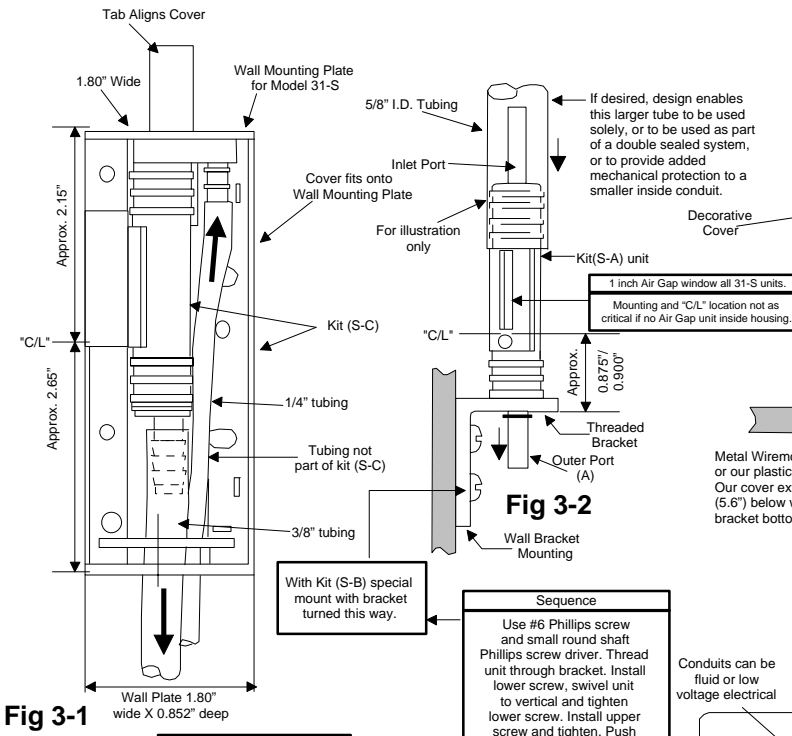


Fig 3-1

Always support unit firmly while pushing tubing over each port.

Sequence
Use #6 Phillips screw and small round shaft Phillips screw driver. Thread unit through bracket. Install lower screw, swirl unit to vertical and tighten lower screw. Install upper screw and tighten. Push tubing over both parts.

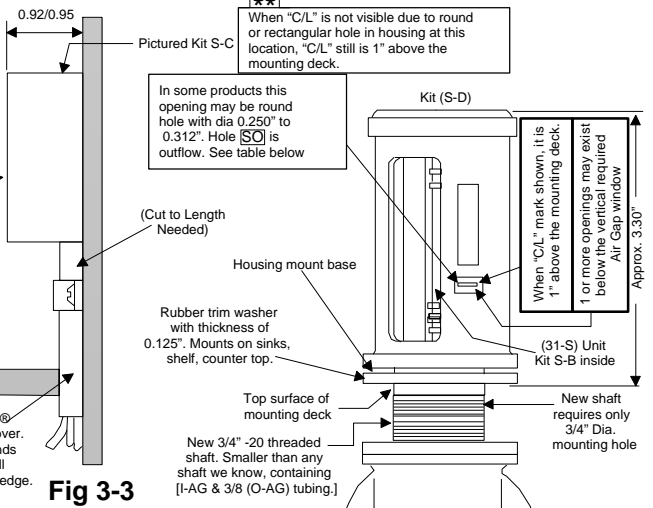


Fig 3-3

When "C/L" is not visible due to round or rectangular hole in housing at this location, "C/L" still is 1" above the mounting deck.

In some products this opening may be round hole with dia 0.250" to 0.312". Hole [SO] is outflow. See table below

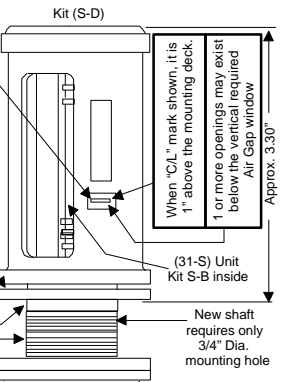


Fig 3-5

Do not mount counter top housing [Fig. 3-5 (Kit S-D)] in a well, recess, or any other place, unless the receptacle flood level is below the Air Gap unit "C/L" as defined by manufacturer's instructions.

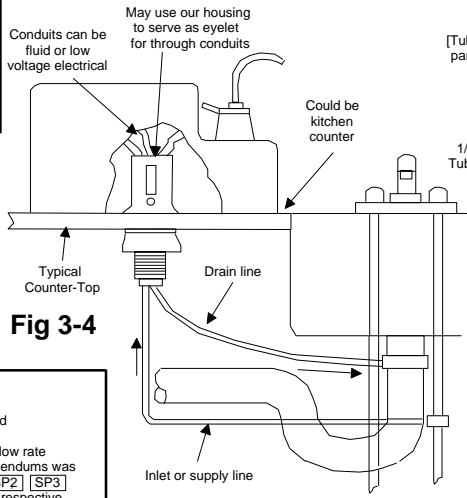


Fig 3-4

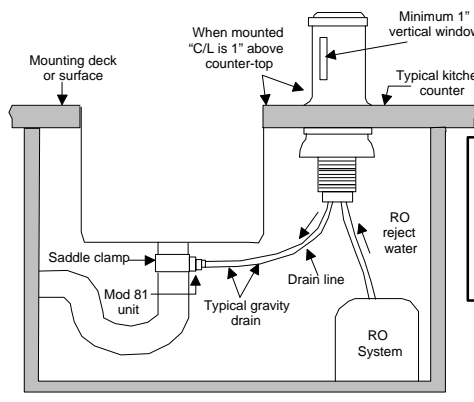


Fig 3-6

FFL Forward Flow In
FFO Forward Flow Out
B Forward Flow where noted
BF Backflow where noted
[SP] Unless otherwise noted, flow rate data for A3, A4, & A5 addendums was obtained using [SP1] [SP2] [SP3] spacings as noted on the respective addendums A3-1, A4-1, A5-1.

As modified here this unit also has good backflow side discharge along with good forward flow and can mount very near the top. After model 31-TT, this modified units the next best choice for installing in a cabinet. This unit also is a very good choice for mounting on back side of an "RO" cooler. Mount with port stub F6 parallel to back of cooler.

Flow rates with no contamination of inlet nozzle or 1" Air Gap (All flows exiting at [SO])
Flow rates include 33% safety factor

Unit	Max (F1) only	Max (BF2) only	Max [SO]
Fig 3-5	3 oz/min.	6 oz/min.	9 oz/min.
Fig 3-8	9 oz/min.	11 oz/min.	15 oz/min.

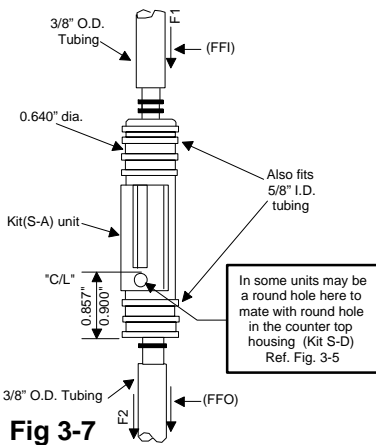


Fig 3-7

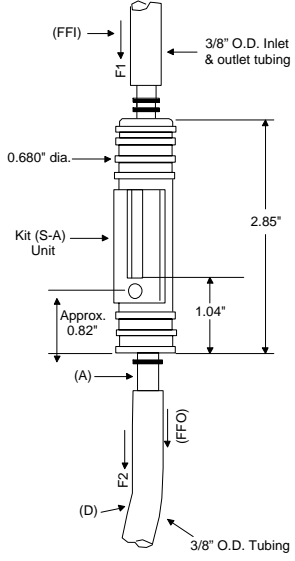


Fig 3-8

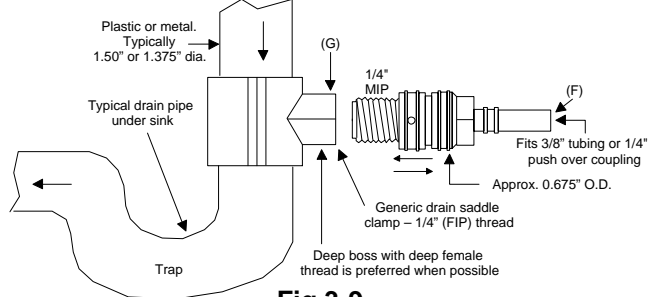


Fig 3-9

- (a) The units are required to be open to atmosphere thus unlike most plumbing fittings or back flow devices; these units are not meant to be pressurized. Inability to pressurize these units means limits on flow capacity through the unit.
- (b) You must make sure that the flow rate never exceeds the capability of the Air Gap unit to be installed. Frequently, the manufacturer may include tubing or recommend drainpipe size to use with their water treatment equipment. To do a proper installation of the Air Gap unit, the installer needs to know flow rate output of the upstream equipment. If this is unspecified or unknown then usually the flow rate can be measured quickly at the installation site. The flow rate(s) for all conditions and equipment operating modes need to be considered in order to be sure of the worst case conditions.
- (c) The Air Gap unit is a gravity flow device. Thus they all need to be installed per the manufacturer's instructions and permanently clamed or affixed into the "down" leg of drain line piping, such that the normal forward stream of water whether forced by upstream pressure or by gravity only, will flow freely past the "Air Gap" opening then continue flowing freely through the outlet piping.
- (d) For best Air Gap unit operation, downstream piping and any downstream equipment should present a minimum of resistance or back pressure to the flowing stream of water and this piping should not be smaller than upstream piping. The Air Gap unit maximum flow rate capacity can vary widely. The flow capacity depends on each unique design and on the particular piping installation, the installation site, fittings to be used, water pressure, etc. Please read all applicable enclosed information sheets if unfamiliar with the use, installation and performance of our Air Gap units. Prior to installation, contact the factory if you still have questions. Each installation must place less flow rate demand on unit and the entire backflow system than that stated in the table below.

Always comply with local plumbing codes during installation

- 1. This Air Gap unit provides only an "AIRGAP" and not a "trap". If no "trap" exists downstream of the unit outlet port; then you will need to install a "trap" downstream of this unit or perhaps choose an alternate more suitable location for installing our Air Gap unit and the drain line piping.
- 2. For all automatic softeners, filters and other large flow equipment, the model 61-S would seem to be a good choice. Our model (31) units are intended for installations with flows noticeably less than (1 gpm). We do Offer several newer, smaller, easy mount units (model 31S, 31-TT, 61-S), Plus complementing accessories. You should become familiar with all those products first, if you are thinking about installing an "RO" drain line Air Gap under a kitchen or bathroom sink or anywhere else. Even if an Air Gap Faucets to be installed, we have drain line accessories that will improve the installation by making it safer, more reliable, much less likely to become contaminated by non potable contents from the actual drain piping at the installation site.
- 3. Install our Air Gap unit near the drain termination point shown on figures (2-1) thru (2-9). Keep the outlet (downstream) piping as large and as short as possible.
- 4. You can install the same 3/8" O.D. polyflex tubing at inlet and outlet, but do not reduce piping size at the outlet port or downstream of the outlet port.
- 5. Inlet or outlet port and "critical level" (C/L) are marked on each Air Gap unit. Install unit with inlet port elevated above outlet port. Install and clamp piping unit so the "C/L" is elevated above the flood level of: the sink, sump, floor drain, floor grate, or standpipe where the downstream piping is terminated. All units must be installed vertically.
- 6. Always cycle the installed equipment a couple of times thru the full cycle (all possible cycles including fast flush if offered) before leaving each site to be sure of no leaks and proper "Air Gap" performance, including flow capacity.

7. **[HC]** Depends on product(s) selected and vertical separation desired by installer and overall elevation available at each installation site. At each installation site, generally the upper boundary is the under side of sink or countertop; the lower boundary usually being the lowest point for installing a drain saddle clamp.

[SP] Refers to dimensional separation (spacing) at the noted location. Also depends on installation site, products and tubing lengths chosen by installer. Mat be the same as **[HC]** but generally is larger

8. Keep in mind these general guidelines when our products are installed. Usually, the steeper the interconnecting tubing, the greater the flow rate performance.

Performance and Flow Rate Date

Air Gap Unit	
AG110-001 (31-S)	AG110-002 thru -004 (31-S)
.65 G.P.M. 83.2 Oz/Min 2496 ML/Min	.40 G.P.M. 51.2 Oz/Min 1536 ML/Min